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BRYOPHYTES

ADELANTHACEAE
AMBLYSTEGIACEAE
ANEURACEAE
ANOMODONTACEAE
ANTHOCEROTACEAE
ARCHIDIACEAE
AULACOMNIACEAE
AYTONIACEAE
BARTRAMIACEAE
BRACHYTHECIACEAE
BRUCHIACEAE
BRYACEAE
CALYMPERACEAE
CALYPOGEIACEAE
CEPHALOZIACEAE
CEPHALOZIELLACEAE
CONOCEPHALACEAE
CRYPHAEACEAE
DICRANACEAE
DITRICHACEAE
DUMORTIERACEAE
ENTODONTACEAE
EPHEMERACEAE
ERPODIACEAE
FISSIDENTACEAE
FONTINALACEAE
FOSSOMBRONIACEAE
FRULLANIACEAE
FUNARIACEAE
GEOCALYCACEAE
GRIMMIACEAE
HEDWIGIACEAE
HYPNACEAE
JUNGERMANNIACEAE
LEJEUNEACEAE
LEPIDOZIACEAE
LEPTODONTACEAE
LESKEACEAE
LEUCOBRYACEAE
LEUCODONTACEAE
LEUCOPHANACEAE
MARCHANTIACEAE
MEESIACEAE
METEORIACEAE
METZGERIACEAE
MNIACEAE
NECKERACEAE
NOTOTHYLADACEAE
ORTHOTRICHACEAE
PALLAVICINIACEAE
PILOTRICHACEAE
PLAGIOCHILACEAE
POLYTRICHACEAE
PORELLACEAE
POTTIACEAE
PTEROBRYACEAE
PTILIDIACEAE
PTYCHOMITRIACEAE
RACOPILACEAE
RADULACEAE
RHIZOGONIACEAE
RICCIACEAE
RUTENBERGIACEAE
SCAPANIACEAE
SEMATOPHYLLACEAE
SPHAEROCARPACEAE
SPHAGNACEAE
SPLACHNACEAE
SPLACHNOBRYACEAE
STEREOPHYLLACEAE
THELIACEAE
THUIDIACEAE
TRICHOCOLEACEAE

LYCOPODS

ISOETACEAE
LYCOPODIACEAE
SELAGINELLACEAE

FERNS

ASPLENIACEAE
ATHYRIACEAE
AZOLLACEAE
BLECHNACEAE
CYATHEACEAE
CYSTOPTERIDACEAE
DAVALLIACEAE
DENNSTAEDTIACEAE
DRYOPTERIDACEAE
EQUISETACEAE
GLEICHENIACEAE
HYMENOPHYLLACEAE
LOMARIOPSIDACEAE
MARSILEACEAE
NEPHROLEPIDACEAE
ONOCLEACEAE
OPHIOGLOSSACEAE
OSMUNDACEAE
POLYPODIACEAE
PSILOTACEAE
PTERIDACEAE
SALVINIACEAE
SCHIZAEACEAE
TECTARIACEAE
THELYPTERIDACEAE
WOODSIACEAE

GYMNOSPERMS

ARAUCARIACEAE
CUPRESSACEAE
CYCADACEAE
PINACEAE
PODOCARPACEAE
TAXACEAE
ZAMIACEAE

MONOCOTS

AGAVACEAE
ALISMATACEAE
ALLIACEAE
ALSTROEMERIACEAE
AMARYLLIDACEAE
ARACEAE
ARECACEAE
ASPARAGACEAE
ASPHODELACEAE
BROMELIACEAE
BURMANNIACEAE
CANNACEAE
COLCHICACEAE
COMMELINACEAE
COSTACEAE
CYMODOCEACEAE
CYPERACEAE
DIOSCOREACEAE
ERIOCAULACEAE
HAEMODORACEAE
HELICONIACEAE
HEMEROCALLIDACEAE
HYACINTHACEAE
HYDROCHARITACEAE
HYPOXIDACEAE
IRIDACEAE
JUNCACEAE
JUNCAGINACEAE
LILIACEAE
MARANTACEAE
MAYACACEAE
MELANTHIACEAE
MUSACEAE
NARTHECIACEAE
ORCHIDACEAE
PANDANACEAE
POACEAE
PONTEDERIACEAE
POTAMOGETONACEAE
RUPPIACEAE
RUSCACEAE
SMILACACEAE
STEMONACEAE
TOFIELDIACEAE
TYPHACEAE
XYRIDACEAE
ZINGIBERACEAE
ZOSTERACEAE

DICOTS
ACANTHACEAE
AGDESTIDACEAE
AIZOACEAE
ALTINGIACEAE
AMARANTHACEAE
ANACARDIACEAE
ANNONACEAE
APIACEAE
APOCYNACEAE
AQUIFOLIACEAE
ARALIACEAE
ARISTOLOCHIACEAE
ASTERACEAE
BALSAMINACEAE
BASELLACEAE
BATACEAE
BEGONIACEAE
BERBERIDACEAE
BETULACEAE
BIGNONIACEAE
BORAGINACEAE
BRASSICACEAE
BURSERACEAE
BUXACEAE
CABOMBACEAE
CACTACEAE
CALYCANTHACEAE
CALYCERACEAE
CAMPANULACEAE
CANELLACEAE
CANNABACEAE
CAPPARACEAE
CAPRIFOLIACEAE
CARICACEAE
CARYOPHYLLACEAE
CASUARINACEAE
CELASTRACEAE
CERATOPHYLLACEAE
CHLORANTHACEAE
CHRYSOBALANACEAE
CISTACEAE
CLEOMACEAE
CLETHRACEAE
CLUSIACEAE
COMBRETACEAE
CONVOLVULACEAE
CORNACEAE
CRASSULACEAE
CUCURBITACEAE
CYRILLACEAE
DIPSACACEAE
DROSERACEAE
EBENACEAE
ELAEAGNACEAE
ERICACEAE
ERYTHROXYLACEAE
EUPHORBIACEAE
FABACEAE
FAGACEAE
GELSEMIACEAE
GENTIANACEAE
GERANIACEAE
GESNERIACEAE
GISEKIACEAE
GOODENIACEAE
GROSSULARIACEAE
HALORAGACEAE
HAMAMELIDACEAE
HYDRANGEACEAE
HYDROLEACEAE
HYDROPHYLLACEAE
HYPERICACEAE
ITEACEAE
JUGLANDACEAE
KRAMERIACEAE
LAMIACEAE
LARDIZABALACEAE
LAURACEAE
LENTIBULARIACEAE
LINACEAE
LINDERNIACEAE
LOASACEAE
LOGANIACEAE
LYTHRACEAE
MAGNOLIACEAE
MALPIGHIACEAE
MALVACEAE
MARTYNIACEAE
MAZACEAE
MELASTOMATACEAE
MELIACEAE
MENISPERMACEAE
MENYANTHACEAE
MOLLUGINACEAE
MORACEAE
MORINGACEAE
MUNTINGIACEAE
MYRICACEAE
MYRTACEAE
NELUMBONACEAE
NYCTAGINACEAE
NYMPHAEACEAE
NYSSACEAE
OCHNACEAE
OLEACEAE
ONAGRACEAE
OROBANCHACEAE
OXALIDACEAE
PAPAVERACEAE
PARNASSIACEAE
PASSIFLORACEAE
PAULOWNIACEAE
PEDALIACEAE
PENTAPHYLACACEAE
PENTHORACEAE
PETIVERIACEAE
PHRYMACEAE
PHYLLANTHACEAE
PHYTOLACCACEAE
PICRAMNIACEAE
PIPERACEAE
PITTOSPORACEAE
PLANTAGINACEAE
PLATANACEAE
PLUMBAGINACEAE
POLEMONIACEAE
POLYGALACEAE
POLYGONACEAE
PORTULACACEAE
PRIMULACEAE
PROTEACEAE
PUNICACEAE
PUTRANJIVACEAE
RANUNCULACEAE
RHAMNACEAE
RHIZOPHORACEAE
RORIDULACEAE
ROSACEAE
RUBIACEAE
RUTACEAE
SALICACEAE
SANTALACEAE
SAPINDACEAE
SAPOTACEAE
SARRACENIACEAE
SAURURACEAE
SAXIFRAGACEAE
SCHISANDRACEAE
SCHOEPFIACEAE
SCROPHULARIACEAE
SIMAROUBACEAE
SOLANACEAE
SPHENOCLEACEAE
STAPHYLEACEAE
STYRACACEAE
SURIANACEAE
SYMPLOCACEAE
TALINACEAE
TAMARICACEAE
TETRACHONDRACEAE
THEACEAE
THYMELAEACEAE
TOVARIACEAE
TROPAEOLACEAE
TURNERACEAE
ULMACEAE
URTICACEAE
VERBENACEAE
VIBURNACEAE
VIOLACEAE
VISCACEAE
VITACEAE
XIMENIACEAE
ZYGOPHYLLACEAE

Preface. Brief History of Florida, its Environment, Humans, and Botany (herbarium acronyms follow Thiers 2025).

Approximately 700–450 million years ago (mya), the basement rocks underlying the Florida platform were located in the Gondwana continent in the southern latitudes, during which time the so-called Cambrian explosion occurred (~530 mya). Around 350–500 mya, many major terrestrial lineages arose or diversified, including embryophytes (land plants), dikarya, hexapods, arachnids, and tetrapods, at a time when atmospheric O_2 levels were probably <20% by volume (Mills et al. 2023). The amalgamation of Baltica, Laurentia, and Gondwana formed Pangea ~320–400 mya (Wu et al. 2021). Atmospheric O_2 levels were probably >30% (Mills et al. 2023), just before the Permian-Triassic extinction event (~250 mya). The Florida basement moved northward through the equator ~200–300 mya and detached from the Africa and South America landmasses to reach its current position as a peninsula ~100–200 mya (Veevers 2004; Hine et al. 2017). The Turonian period, ~90–94 mya, marked the highest sea level (~+150–200 m) and hottest temperatures of the past 500 million years (Miller et al. 2011; Judd et al. 2024). The large asteroid impact at Chicxulub, ~66 mya, caused a mass extinction event (Morgan et al. 2022). A sea level highstand as much as +100 m or more probably completely submerged all parts of the Florida platform ~50 mya (Miller et al. 2011). At least some parts of the Florida platform have probably remained emergent since the past 10–40 million years. Continued depositions of carbonates, evaporites, and siliciclastics formed the modern terrestrial land (Bostick 2018; Upchurch 2019). Modern humans (*Homo sapiens*) arose roughly 300,000–800,000 years ago in Africa, perhaps also partly in Eurasia (Bergström et al. 2021). The most recent sea level highstand at +6 m was ~120,000 years ago (Georgiou et al. 2024), submerging much of the southern Florida peninsula. Indelible, artistic depictions of animals were made by humans as early as 50,000 years ago in Indonesia (Brumm et al. 2021; Oktaviana et al. 2024). The last glacial maximum ~20,000–26,000 years ago had sea levels -120 m, exposing much more of the Florida platform, and the emergence of Beringia allowed humans to colonize North America (Bennett et al. 2021), during the coolest global temperatures in the past 500 million years (Judd et al. 2024).

Knowledge of the Florida flora began in the panhandle as early as 15,000 years ago, when humans occupied the Aucilla River region (Brown 1994; Halligan et al. 2016; Smith 2018; Faught & Pevny 2019) and the Florida landmass was significantly larger, with sea levels of -80 m. Pollen of *Corylus* and *Picea* was present (Watts et al. 1992; Carr 2012). Shortly after humans arrived, numerous large animals went extinct or were extirpated (e.g. American lion, armadillo, bison, camelids, carcara, dire wolf, ground sloth, horse, jaguar, mammoth, mastodon, peccary, saber-toothed tiger, spectacled bear, tapir; Webb 1974). Sea level rose rapidly, reaching ca. -10 m ~7,000 years ago. Around this time or shortly thereafter, shell mound architecture may have started in Florida (Marquardt 2010; Saunders & Russo 2011). About 5,000–6,000 years ago, some of the earliest extant illustrations of plant species appeared in Eurasia (e.g. Chogha Cheshmeh pottery, Battlefield Palette, Abydos tombs). Some of the earliest extant botanical texts (or herbals) are traced to Assyrian and Babylonian cuneiform, ~4,500 years ago (Thompson 1924; Borchardt 2002), and later examples include the Ebers Papyrus (~3,500 years ago) and The Hippocratic Corpus (~2,500 years ago).

Humans reached the Florida Keys by 2,500 years ago (LeFebvre et al. 2022). By the early 1500s, hundreds of thousands of peoples probably inhabited Florida across 100s of villages and towns, subsisting from wild foods and cultivated crops in some areas, including beans, corn, and cucurbits. Modern names for peoples historically inhabiting Florida include the Ais, Apalachi, Calusa, Chacato, Hobe, Jaega, Jororo, Mayaca, Mayaimi, Matecumbe, Pansacola, Tequesta, Timucua, and Tocobaga (Romans 1775; Hrdlička 1922; Smith 1933; Milanich 2017; Liebmann 2021).

A fleet of three ships led by Ponce de León (including peoples from Spain, Africa, and the Caribbean) landed in 1513 (3 April–24 June, 3 July–17 July), introducing the moniker 'La Florida' and marking the first known human visitation from across the Atlantic Ocean and Florida Straits, whereupon they encountered and skirmished with indigenous peoples, a few of which were taken aboard (Murga Sanz 1959: 105; Palencia-Roth in Williams & Lewis 1993; Feder 1994; Fuson 2000; Seidemann 2001; Peck 2003; Turner 2013). From this and subsequent landings, Spain made a claim to the land. Further visits to Florida included the mainly Spanish entourages of Miruelo in 1516, de Cordova in 1517, Pineda in 1519, de León again in 1521, Narvaez in 1527, de Soto in 1539, and de Luna y Arellano in 1559, as well as the French entourage of Ribault in 1564. During this same period, the art of preserving plants as herbarium specimens began in Italy (Baldini et al. 2022).

The Spanish founding of St. Augustine in 1565 and Pensacola in 1698 (Griffen 1959) along with their associated missions throughout Florida (Boyd 1939; Hann 1990), and the British founding of Charles Town (South Carolina) in 1670, precipitated the most severe demographic change of indigenous peoples of present-day Florida and adjacent states, concomitant and followed by increased migration of peoples from across the Atlantic Ocean, Gulf of Mexico, Florida Straits, and adjacent regions over the ensuing years (Andrews 1943; Williams, Jr. 1949; Smith 1951; Sturtevant 1953; Neyland 1965; Ellsworth & Dysart 1981; Hann 1989; Johnson 1989; Friedson 1994; Fishman 1995; Riordan 1996; Eltis 2001; Palmer 2002; Worth 2003; Sturtevant & Cattelino 2004; Wasserman 2010; Weatherford 2015; Broadwell 2021; Broadwell & Dubcovsky 2023; Bassi 2024; FSU 2024; Miccosukee Tribe Tribe 2024; Poarch Creek Indians 2024; Schneider et al. 2024; Seminole Tribe 2024). These early maritime travels introduced hogs, cattle (Arnade 1961; Yarlett 1985; Delsol et al. 2023), horses (Conant et al. 2011), and citrus as well as weeds to Florida e.g. through stone ballast (Gifford 2014), while the American lineage of domestic dogs virtually disappeared (Zimmer 2007; Leathlobhair et al. 2018; Manin et al. 2025). The bison may have expanded its range into Florida during this time, seemingly absent or perhaps sparse until the late 1600s (Rostlund 1960).

The Latin binomial system for naming plant species was established by Linnaeus in 1753. Through the study of material outside of Florida (e.g. Carolinas, Jamaica, etc.), from 1753–1771, Linnaeus coined the epithets of ~677 plant species that are also native to Florida. Linnaeus's access to any material from present-day Florida was negligible. In the late 1700s–early 1800s, several other authors formally published around 500 accepted Latin binomials that were later applied to Florida native plants, mainly Aiton, Gmelin, Kunth, Jacquin, Miller, Muhlenberg, Poiret, Pursh, Swartz, Walter, and Willdenow. The works of Linnaeus and the preceding authors applied Latin binomials to ~1/3 of Florida's native plant species, practically without studying any Florida material.

In 1763, Spain ceded its claim of sovereignty over Florida to the British (Arnade 1955), and herbarium studies in Florida were soon initiated with the collection of specimens as early as 1765. The first plant species given a Latin binomial based on Florida material was *Illicium floridanum* in 1770, from Pensacola material sent by W. Clifton to J. Ellis (Franck 2018). Some specimens from the Plukenet herbarium (predating Clifton) bear "Florida" as their provenance (Dandy 1958) but the taxa involved suggest these were collected outside of present-day Florida and that this early usage of "Florida" referred to a more loosely defined, larger geographic region ("Spanish Florida") in the eastern USA (Schenk 1710; Sturtevant 1962; Boniface 1971).

In the 1760s–1770s, William Bartram made trips to Florida and later published his accounts (Bartram 1791). He is the author of ~15 species epithets of plants native to Florida, four described by him based on observations in Florida, three credited to him by other authors, and the rest described by him from observations outside of Florida. Some Bartram specimens from Florida sent to Barclay and Fothergill reside at BM (Ewan 1968); any Florida specimens collected by John

Bartram and sent to Collinson remain unaccounted for (J.T. Fry, pers. comm.; Stafleu and Cowan 1976; Berkeley and Berkeley 1992: 673–674).

At the end of the Revolutionary War (1775–1783), the 1783 Treaty of Paris ceded Florida to Spain. That year, Lamarck described *Vaccinium myrsinites*, from material (at P) collected near St. Augustine, and he also described *Asclepias floridana* (=*A. tuberosa*). *Sesbania vesicaria* was described by Jacquin in 1787 from plants in Vienna that were sent from Florida. In 1789, Linnaeus filius authored *Zamia integrifolia* based on material supplied by Ellis in 1768. In the same year, Aiton (1789) referenced Florida for the distribution of several species in cultivation at Kew, also describing *Ilex vomitoria*. In 1791, Lamarck named Florida as part of the distribution of two more names he authored: *Ilex floridana* (=*I. vomitoria*) and *Schoenus corniculatus* (=*Rhynchospora corniculata*).

In 1788, Andre Michaux visited and studied in northeastern Florida (Taylor and Norman 2004). From Florida material (primarily at P), Michaux named ~10–15 accepted binomials in 1803 (Stafleu and Cowan 1976) and about another 10 synonyms were described (Uttal 1984), one published in 1792, *Ipomoea erecta* (=*Ipomopsis rubra*). Based on material outside of Florida, another ~170 epithets of accepted species were coined by Michaux and subsequently applied to Florida natives. In 1797, *Hypericum tetrapetalum* was described from Florida material (at P) (Adams 1957). Based on material supplied by Michaux (at G), in 1799 Ventenat described the Florida endemic *Illicium parviflorum* (Franck 2018).

Early Florida herbarium material was sent to Europe, with some of the duplicates later sent back to US institutions. However, influence from the USA was increasing in north Florida during the second Spanish territorial claim (Stagg 2007). Specimens were collected in northeastern Florida by William Baldwin in the 1810s (Darlington 1843) as well as by Nathaniel Ware (Stuckey 1971), primarily deposited at PH. Their Florida material formed the basis of around 15 or so accepted species published by Nuttall, Elliott, Gray, and Torrey from 1818–1841. In 1817, Rafinesque published the name *Sarracenia leucophylla* based solely on Robin's (1807a: 48, 1807b: 332) written accounts from his time in Pensacola. Also in 1817 was the start of the Seminole War, generally a continuation of ongoing conflicts (Porter 1952; Cusick 2003; Howard 2013; Clavin 2019).

After Spain ceded Florida to the USA in 1821, the human population was ~20,000 around 1825 (Morse 1822: 306-311; Dodd 1943). Nuttall (1822) published a local plant list for East Florida, listing 247 species based on two months of Ware's collections (at PH). Similarly, Williams (1827: 39–62) listed over 500 species from West Florida, though no herbarium specimens are known to exist. There are relatively few extant herbarium specimens collected from Florida before the 1830s.

Thousands of plant specimens were collected in the 1830s and 1840s from Florida, chiefly by Bennett, Blodgett, Chapman, Croom, Drummond, Hulse, Leavenworth, Nuttall, and Rugel (Wunderlin et al. 2020). Rafinesque (1832) made the guess that there were at least 2,000 plant species in peninsular Florida, supposing half to be shared with other southern states and the other half either new or tropical. Hardy B. Croom (1834) published an account of the flowering times of about 150 species just outside of Tallahassee, and described the Florida endemic *Baptisia simplicifolia*. Alvan W. Chapman began collecting specimens outside of Florida around 1830, before relocating to Quincy, Florida in 1835–1847 (and briefly Marianna, Florida in 1837) (Chapman 1835–1851: 10 Sep 1835; Mohr 1899; Trelease 1899, 1903; Kimball 1921). Around this time long-distance travel was aided by boats (e.g. steamboats, Mueller 1962) or horses and mules (e.g. stagecoaches). The first railroad was completed in 1836 (Tallahassee to Port Leon) but railroad service remained rather sparse (Pettengill, Jr. 1952). Croom, a botanical colleague of Chapman, was eager to explore the Florida flora and had made several discoveries in the

panhandle (e.g. *Croomia*, *Torreya*); his family perished when the steamboat *Home* was wrecked amidst the Racer's hurricane on 9 October 1837 near Ocracoke Island (Howland 1840).

Around 20–25 accepted epithets were published by Torrey and Gray between 1838–1843 based on Florida material collected by Chapman, Hulse, and Leavenworth; Rafinesque (1836-1838, 1837 [:13, assumed average speciation was every "30-100" years], 1838, 1840) also published a multitude of species, some considered synonyms, some remaining unplaced (few of his herbarium specimens remain extant). This was concurrent with the conflict referred to as the Second Seminole War, when 1000s were removed, many routed from Tampa to New Orleans and onto present-day Oklahoma, several hundred remaining in south Florida (Ann. Rep. Comm. Indian Affairs 1841: no. 1, 247; Mulroy 1984). In its wake, Ferdinand Rugel collected more than 2,300 specimens (including duplicates) throughout the state, in 1843 visiting the eastern panhandle, 1845 the Manatee Co. area, 1846 Key West, and 1848 in northeast Florida (Geiser 1948), the main sets ending up at BM and NA, with many duplicates redistributed to other herbaria. From Rugel's specimens, Shuttleworth invalidly introduced many new epithets printed in lists (Anonymous 1844, 1845) or on labels (Dudley 1974; Nelson and Ward 2005), about 15 being accepted Florida species later validated by others, some several decades later.

Chapman (1845) published an exhaustive local floristic inventory, listing 1,219 species and eight infraspecies of vascular plants from the Quincy, Gadsden Co. area. In 1847, he moved to Apalachicola, where his residence would remain. By 1850, Florida's human population was ~85,000, almost half of whom were enslaved, and ~95% of the total was north of present-day Orlando (Harper 1927). Shortly after the end of the Seminole War (1858), Chapman published the first edition of his flora for the southeastern USA (Chapman 1860), which was followed by the Civil War (1861–1865). Chapman produced two more editions of his flora (1883, 1897).

Over 100 accepted species epithets of Florida native plants are credited to Chapman and/or bear his specimen as type. Many of Chapman's specimens first went to the Columbia College herbarium (Britton 1887), which eventually formed part of the NY herbarium (Holmgren et al. 1996). Later, a different assortment of Chapman's specimens was sent to the Biltmore herbarium, which was said to have "upward of 100,000 specimens". The herbarium was mostly ruined by flooding in July 1916. Of the ~ 25,000 that were saved (now at US), many were from Chapman (Rathbun 1918: 46; Troyer 2006). Chapman arranged for his remaining personal herbarium to be gifted to MO (Trelease 1899, 1903), and 3,536 sheets of Chapman were reported at MO in 1912 (Trelease 1912: 18). In the mid-1900s, 900 mounted specimens of Chapman already incorporated into MO, from Florida and Georgia, were offered on exchange and a further 10,000 Florida specimens of his "all numbered, but unlabelled or poorly labelled" were discarded at MO (Solomon 1998).

From the 1880s–1930s, railroads, steamboats, and highways (e.g. Dixie Highway system) allowed the Florida population to reach nearly 1.5 million by 1930, spread throughout the state (Dovell 1956; Drapeau 1994; Rivers 2001; Montagno 2013; Knight 2014; Conlin 2018; Sheridan 2020; Barnes 2022). The first institutionally supported Florida herbarium (FLAS) was founded in late 1891 at Florida Agricultural College (later becoming part of the University of Florida) through the efforts of Peter Rolfs. His 1894 specimen yielded one of the first type specimens collected by staff at FLAS, a syntype of *Dioscorea floridana*, described in 1910. Hitchcock (1899, 1901) listed about 1,750 vascular species known to him from Florida, aided by travel via the railroad system (Harper 1949, 1950). Several lines of conservation lands became established, e.g. the Pelican Island National Wildlife Refuge in 1903, Ocala National Forest in 1908, Royal Palm State Park (now Everglades National Park) in 1915, and Pine Log State Forest in 1936. All modern Florida counties were established by 1925, with Mosquito (1824–1845), Benton (1844–1850), and St. Lucia (1844–1855) being the only county names discontinued (Utley 1908; Mayo 1935: 5–6).

John Kunkel Small began fieldwork in Florida in 1901, extending to 1936, including thru World War I (1914–1918). He produced hundreds of publications, much of it focusing on Florida (Austin et al. 1987), producing three versions of a flora for the southeastern USA, including all of Florida (Small 1903, 1913, 1933). He authored 100s of accepted names and synonyms (e.g. Weatherby 1934; Long et al. 1969; Howard 1975; Avery and Loope 1980). During his time, populations of numerous animal taxa were severely diminished, eventually becoming extinct (Caribbean monk seal, Carolina parakeet, Chadwick beach mouse, Goff's pocket gopher, ivory-billed woodpecker, and passenger pigeon) or extiprated (Caribbean flamingo, red wolf [Sherman 1937: 112], and whooping crane). By the late 1920s, construction of several canals (e.g. Caloosahatchee, Hillsboro, Indian Prairie, Miami, New River, St. Lucie) and the Okeechobee dike controlled water levels and allowed for increased agriculture in south Florida (Stephan 1944), and virgin timber was nearly vanquished (Larson 1952; Clubbs 1959; Shofner 1972, 1975; Eisterhold 1973).

Around the time of World War II (1939–1945), malaria was nearly eradicated from Florida and rest of the USA (Russell 1968), facilitating continued population expansion. The Florida State University herbarium (FSU) was founded in 1940 and the Archbold Biological Station herbarium (ARCH) in 1941. Checklists of the hornworts and liverworts (McFarlin 1940) and mosses (Schornherst 1943) of the state were published. For vascular plants, the works of Chapman and Small would remain the primary floristic references, though none made a definitive list of native and naturalized vascular plant species for the state (Harper 1950; Shinners 1969). Hume (1937, 1943) stated that there were more than 3,500 angiosperm species native to Florida based on an analysis of Small's prior works; however, this number was misleading since it included non-native species and gymnosperms (Haile 1935). Moldenke (1944) listed around 1,300 mostly wild, but some cultivated, vascular species. Harper (1950) estimated around 2,500 angiosperm species were then known in Florida. Commercial pressurized, passenger airliners took off in the 1950s (esp. with jet engines in the late 1950s), greatly increasing human movements and potential plant introductions. In 1958, the University of South Florida herbarium (USF) was founded.

Shinners (1964) figured the native vascular flora of Florida could be nearly three times that of the ca. 1,500 native species in the British Isles. The same year the Florida Department of Agriculture and Consumers Services, Division of Plant Industry herbarium (PIHG) was founded. Lakela and Craighead (1965) produced a checklist of vascular plants for south Florida. Ward (1968) completed a checklist of lycopods, ferns, gymnosperms, and monocots for the state, which was about the same time the Fairchild Tropical Botanic Garden herbarium (FTG) was initiated. According to Long et al. (1969), West gave an estimate of 3,000 total vascular plant species. A regional flora was published for south Florida (Long & Lakela 1971), and in the same year the proposed Cross Florida Barge Canal was halted (Noll & Tegeder 2003). The Marie Selby Botanical Garden herbarium (SEL) was founded in 1973 and the University of West Florida herbarium (UWFP) in 1974.

Subsequent publications included one on the ferns of the state (Lakela and Long 1976), vascular checklist of east-central Florida (Poppleton et al. 1977), and wetland plants of the southeastern USA (Godfrey and Wooten 1979, 1981). By this time, traffic to Florida was greatly aided by interstates (e.g. I-10, I-75, I-95) and the Florida Turnpike. A guide to the plants of central Florida was soon published (Wunderlin 1982), and subsequently one for the panhandle (Wilhelm 1984, Clewell 1985). Godfrey (1988) produced a book on the woody plants of north Florida. Ward (1989) tabulated 2,523 native vascular plant species and 925 naturalized species for the state.

A state-wide vascular floristic guide was deployed online in 1995 (Wunderlin et al. 1995), as a CD-ROM (Wunderlin et al. 1996), and book (Wunderlin 1998; Wunderlin & Hansen 2003, 2011). A checklist of hornworts and liverworts was published (Dauphin et al. 2011) and, along with mosses, bryophytes were included in the *Atlas of Florida Plants*. As the human population grew (nearly 13 million in 1990, over 22 million in 2024) (Mormino 2002), the introduction of species

into Florida accelerated, plants as well as arthropods (Frank & Thomas 2004), birds (Pranty & Ponzo 2017), amphibians, and reptiles (Krysko et al. 2011).

Presently, conservation land, private timber, and agriculture each comprise roughly 25% of Florida, with the remaining being developed or open water (Franck & Farid 2020). Natural areas are dominated mostly by oaks and pines. Mangroves and other tropical species have recently migrated northward. By area, the largest crops are sweet oranges, sugarcane, peanuts, cotton, corn, grapefruit, potatoes, tomatoes, beans, cucumbers, watermelons, rice, soy, and peppers (Franck & Farid 2020). Major natural disturbances are fire and hurricanes. Temperatures are trending warmer (Irizarry-Ortiz et al. 2013) and rates of sea level rise are faster now than other times in the past 5,000 years (Khan et al. 2022; Hamlington et al. 2024).

Florida is a vital component of the North American Coastal Plain biodiversity hotspot (places with high endemicity and high habitat degradation) (Stein et al. 2000; Estill & Cruzan 2001; Sorrie & Weakley 2011; Jenkins et al. 2015; Noss et al. 2015), and south Florida lies at the fringe of the Caribbean Islands biodiversity hotspot (CEPF 2010; Patiño & Vanderpoorten 2018). At least 300 plant taxa are endemic to Florida, a few of which are globally extinct (Knapp et al. 2020). As many as 30 taxa are extirpated. About 62 plant taxa are federally endangerd or threatened, and ~600 are state listed. Anent trees, Florida harbors ~300 native tree species, more than any other state in the continental USA (Little 1978, 1979).

The understanding of the plant diversity of any large region such as Florida requires an abundance of efforts supported by innumerable persons. By 2024, nearly 1 million herbarium specimens (~15–20% as duplicates) of embryophytes (land plants) have been collected from Florida by ~10,000 collectors to document the >5,000 taxa of native, naturalized, and cultivated plants. Probably ~95% of collections are from wild plants, and ~5% from cultivated instances. Since its inception, the Atlas of Florida Plants has tracked county-level distributions of native and naturalized taxa, with a current total of ~80,000 county records. On average from 2001 until 2025, each county has added ~235 county-level records, with the most additions from Calhoun (~559 new records) and the least changes in Walton (~74).

Most vascular plant collections occurred in thes 1960s–2000s and the months of Mar–Nov (esp. Apr, May, Nov). Much fewer collections were made Dec–Feb. Most bryophyte collections were made in the 1930s, 1950s, and 1980s, and the months of Dec–Apr (Appendix C).

About 23 herbaria have >4,500 Florida specimens (the top six being FLAS, USF, FSU, FTG, US, and NY). Monroe County Keys and Alachua County have the most specimens collected per unit area, while Hendry has the least. For bryophytes, it is Seminole and Leon cos. with the most, and numerous other counties are very poorly collected (Appendix C). Persons collecting over 5,000 Florida specimens include, ~chronologically, A.W. Chapman (some lost, see Solomon 1998), A.H. Curtiss, J.K. Small, R.K. Godfrey, G.R. Cooley, D.B. Ward, O.K. Lakela, D.S. Correll, R. Kral, R.P. Wunderlin, L.C. Anderson, A.K. Gholson, J.R. Burkhalter, B.F. Hansen, S.L. Orzell, E.L. Bridges, J.R. Abbott, and G.J. Wilder. Persons collecting over 1,000 Florida bryophytes are S. Rapp, R.O.S. Breen (formerly R.O. Schornherst), D.A. Breil, D. Griffin, III, J.K. Small, J.B. McFarlin, R.M. Schuster, P.L. Redfearn, L.E. Anderson, A.J. Grout, W.R. Buck, and R. & J. Lassiter.

Florida has more native plant families than any other US state, ~251 vascular plant families and ~74 bryophyte families. The Asteraceae, Poaceae, Cyperaceae, and Fabaceae represent the largest set of specimens, and for genera they are *Rhynchospora*, *Cyperus*, *Carex*, *Quercus*, and *Hypericum*. The most collected species are *Crotalaria rotundifolia* s.lat., *Lyonia lucida*, *Ilex cassine* s.str., *Paspalum setaceum* s.lat., *Morella cerifera* s.lat., and *Cyperus polystachyos* s.lat. The most collected non-native species is *Schinus terebinthifolia*. For bryophytes, the top families are Lejeuneaceae, Sphagnaceae, and Calymperaceae, and the genera are *Sphagnum*, *Lejeunea*, *Syrrhopodon*, *Fissidens*, and *Frullania*. The most-collected bryophyte species are

Syrrohopodon incompletus, *Isopterygium tenerum*, *Haplocladium microphyllum*, *Leucobryum albidum*, *Octoblepharum albidum*, and *Weissia controversa* (see Appendix C).

Somewhere around ~30% of the type specimens of native Florida plant species are from Florida, followed by South Carolina, Virginia, Georgia, rest of continental USA, Caribbean Islands, South America, Old World, Mexico, Canada, and Central America. Most non-native taxa have their type specimen provenance from Asia, followed by South America (esp. Brazil), Africa, Caribbean Islands (esp. Jamaica), Mexico, continental USA (esp. Texas), Europe, Australia, and Central America. About 35-40% of accepted names have been reclassified (i.e. have a basionym that has been recombined into another genus). Of the >5,000 taxa in Florida, there are about ~50,000 synonyms apart from the currently accepted name, and ~75% of these are heterotypic synonyms. The most common authors of accepted names for native vascular taxa of Florida are, in descending order, Michx. (~190 accepted taxa), Walter (135), Small (105), Chapm. (103), Nutt. (91), A. Gray (89), Torr. (82), Elliott (62), Sw. (60), Willd. (56), Jacq. (50), Lam. (49), Raf. (46), Pursh (37), Mill. (37), Muhl. (35), Poir. (31), Aiton (29), DC. (28), Nash (26), Kunth (25), Britton (25), J.F. Gmel. (25), and Engelm. (23). The most common authors of accepted combinations for native species are Small (~50 combinations), Britton (43), A. Gray (34), DC. (33), Torr. (23), and Raf. (20). For the accepted names of non-native species, the most common authors were L. (557), Lam. (34), Thunb. (33), Jacq. (30), Sw. (29), Kunth (29), Willd. (28), DC. (27), Mill. (24), Cav. (21). The most common authors of combinations for non-native species were DC. (24), Kuntze (19), R. Br. (13), Benth. (12), and Merr. (10). The most common bryophyte authors are Hedwig, Bridel, Nees, Evans, Sullivant, Austin, and Linnaeus.

Figure: Estimated cumulative number of validly described, accepted native vascular plant taxa (predominantly species) in Florida from 1753–2018, based on the earliest valid description of each taxon as recognized in the Atlas of Florida plants in 2020 (i.e. the date of the basionym or the date of valid publication for names remaining in the same genus and rank; new combinations, or comb. nov., were excluded). Authors credited with more than 20 taxa are indicated by the earliest year they were credited for a native Florida vascular plant taxon. The sum total of taxa between the labeled years is given in bold between the x-axis labels (figure created with the assistance of A. Farid).

About

The task of revising floristic knowledge and identification keys by the author commenced around fall 2015, and, in February 2020, keys began to be posted on the *Atlas of Florida Plants* (through the assistance of K. Bornhorst) as groups were intermittenly worked on. The primary goal was to improve the keys to make them as widely useful as possible (e.g. vegetative IDs when possible), by reviewing specimens and field observations, reviewing literature, and incorporating additions of native, naturalized, and frequently cultivated taxa. The most heavily used herbaria by the author physically and digitially were FLAS, FTG, and USF. Other Florida herbaria utilized digitally were FSU, FTU, SEL, TTRS, UWFP; however, a plethora of herbaria throughout were used (esp. thru SERNEC and GBIF). Some characters were gathered from the literature without much change (esp. bryophytes). An initial pdf version of this work was placed online on 31 Oct 2024, with nearly all vascular plant keys revised (except key to genera for asters and grasses lacking) and a checklist of bryophytes. Since then, continual, assiduous updates are made.

Invaluable to this work was access to herbaria (digitized and physical specimens), libraries (digitized and physical literature), iNaturalist, and nature. The utmost appreciation is owed to land stewards, wanderers, investigators, field assistants, collectors, authors, and the staff of herbaria, libraries, and various other groups and institutions.

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Introduction

SCOPE: All species of native, naturalized, and frequently cultivated plants known to occur in Florida, USA are intended to be included. It is impossible to include all cultivated species and there is no intention here to do so (see Franck & Farid 2020).

PURPOSE: Humans thrive from information; this document is a rich source of information on the plants of Florida. Knowledge of the flora is essential for the management of resources, including air, water, and soil quality, agriculture, mining, construction, restoration, recreation, and conservation. The complex functions and immeasurable benefits of biodiversity (Gascon et al. 2015; Strayer 2017) derive from a continuum of rare to common species (Mouillot et al. 2013; González-del-Pliego et al. 2024).

CATEGORIES (see Essl et al. 2018; Pereyra 2019; Warren 2021).

Native species are those occurring in Florida due to natural (non-anthropogenic) dispersal or diversification. These are listed in bold italics.

•A bullet point indicates a taxon endemic (precinctive) to Florida. This definition of 'endemic' put forth by Darwin (1859: 105) discussed further by Frank & McCoy (1990).

[X]A superscript-X denotes taxa extirpated from Florida (see Gann et al. 2002, 2024), but presumed extant outside of Florida.

[XX]A superscript double-X denotes globally extinct taxa (see Gann et al. 2002, 2024).

*Asterisks denote naturalized taxa (typically capable of continuing to form new populations) introduced to Florida via anthropogenic means (deliberately or inadvertently transported or established by humans). These are in bold italics.

[++]A superscript double-plus symbol indicates taxa of ambiguous nativity, i.e. they may have recently dispersed naturally, were introduced by humans long ago, or, perhaps, anthropogenic influence was minor or indirect relative to natural vectors. These are in bold italics.

^Carets denote cultivated taxa introduced to Florida (occasionally sparingly, locally naturalized but usually not spreading to form new populations) and these are in non-bold italics.

FE=federally endangered, FT=federally threatened, SE=state-endangered, ST=state-threatened, CE=commercially exploited.

EXAMPLE FORMAT

Genus species Authority {*Atlas of Florida Plants* hyperlink} — Distribution in Florida (distribution outside Florida). Habitat. Endangered status. Notes.

IDENTIFICATION KEYS: Characters of identification keys usually proceed in this order (but sometimes vary): habit, sexual system, subterranean to aerial, outer to inner, vegetative to reproductive structures. The keys are optimized for Florida and not necessarily as useful outside this area.

SYNOPSIS of Embryophytes (numbers should viewed as best estimate)

335 families (2 hornworts, 25 liverworts, 48 mosses, 3 lycopods, 27 ferns, 10 gymnosperms, 4 basal angiosperms, 50 monocots, 8 magnoliids, 158 eudicots).

3529 Native taxa (~12% bryophytes, 0.5% lycopods, 4% ferns, 0.5% gymnosperms, 0.5% basal angiosperms, 26% monocots, 1% magnoliids, 55% eudicots), including:
311 •endemic taxa.
34 [X]extirpated taxa (not counting globally extinct taxa).
5 [XX]Globally extinct taxa (all endemic).

1168 *Naturalized taxa (anthropogenically introduced) (0% bryophytes, 0.1% lycopods, 3% ferns, 0.5% gymnosperms, 0.5% basal angiosperms, %26 monocots, 0.5% magnoliids, 70% eudicots).

32 [++]Taxa of ambiguous nativity.

811 ^Cultivated, introduced taxa (not naturalized or only very sparingly so).

5540 TOTAL species+infraspecies+named hybrids (includes ~100 subp. and 200 var.).

Comments are welcome: francka@ufl.edu.

EMBRYOPHYTES of Florida

(Land Plants)

Possessing a waxy cuticle and usually sporophytic stomata, sporophytic zygote enveloped in gametophytic tissue, spores or pollen with sporopollenin [ASCL-type], mycorrhizal or mycorrhizal-like symbioses of fungi usually present in thalli, rhizoids, or roots.

Figure: Estimated phylogeny of extant Emybrophytes, see analyses by: Puttick et al. 2018 (nuclear), Gitzendanner et al. 2018 (plastid), Sousa et al. 2020 (mitochondrial).

<u>Key to major groups of Embryophytes</u>

1. Plants small, prostrate or erect to 10(70) cm tall, non-vascular or vascularity limited (of hydroids or perforate cells and leptoids or leptoid-like cells, lacking lignin), sometimes with rhizoids (lacking roots); dominant photosynthetic tissue gametophytic (haploid); sporophytic (diploid) tissue arising from the gametophyte and often non-photosynthetic, unbranched; dispersing by haploid spores; sperm cell with 2 flagella..... Bryophyta
1. Plants tiny (a minute frond) to gigantic trees, to 30 m tall, with vascular roots (endodermis of lignified Casparian strip) and vascular stems (xylem of lignified tracheids and phloem of sieve elements, lignin sometimes present in other tissues); dominant photosynthetic tissue sporophytic (diploid), often branching or dividing; dispersing by haploid spores or diploid

seeds; sperm cell with numerous flagella (rarely 2, some lycopods) or without flagella .....Tracheophyta

BRYOPHYTA
(bryophytes)

Key to major groups of Bryophytes

1. Gametophyte thalloid, irregularly lobed, often with slime cavities hosting cyanobacteria, thallus often hosting mycorrhizal or mycorrhizal-like symbioses with fungi; sporophyte photosynthetic, from basal meristem covered by an involucre, lacking setae, often with stomata, dehiscing apically by 2 slits; spore maturation gradual; cells with 1(-2) plastids (hornworts).....Anthocerotopsida
1. Gametophyte thalloid and usually dichotomously branching or gametophyte leafy, thallus or rhizoids sometimes hosting mycorrhizal or mycorrhizal-like symbioses with fungi; sporophyte photosynthetic or not, with intercalary meristem (at least partly or somewhat) without involucre, with setae (capsule stalk); spore maturation synchronous; cells with several plastids (Setaphyta).....[2]
    2. Gametophyte thalloid or leafy, usually dichotomously branching, if present leaves 2-(3-)ranked and sometimes abaxially with underleaves, non-vascular, with membrane-bound complex oil bodies, trigones sometimes present; rhizoids unicellular; leaves (if present) lacking midrib or costa; sporophyte covered by calyptra and protective organs (e.g. perianth), stomata absent (air pores present), seta fragile and ephemeral and elongating after spore maturation; capsule usually dehiscing by (1-)4 valves, elaters present, columella and peristome absent; protonema thalloid, producing 1 gametophyte; thallus or rhizoids often hosting mycorrhizal or mycorrhizal-like symbioses with fungi (liverworts) .....Marchantiopsida
    2. Gametophyte leafy, branching usually lateral or sympodial, leaves usually spirally arranged, (infrequently 2-ranked), infrequently vascularized (hydroids, leptoids); rhizoids multicellular; leaves with or without midrib or costa, trigones usually absent; sporophyte covered by calyptra when young, stomata often present; seta rigid and elongating before spore maturation; capsule usually dehiscing by an operculum, elaters absent, columella and peristome usually present; protonema filamentous, producing multiple gametophytes; thallus and rhizoids lacking mycorrhizal symbioses (mosses) ..... Bryopsida

ANTHOCEROTOPSIDA
(hornworts, Anthocerotophyta)

Key to orders of Hornworts

1. Sporophytes erect, more than 5 mm long, exserted from involucre and thallus with internal schizogenous horizontal mucilage-containing cavities; spores dark brown, brownish black, gray-black, to black ..... Anthocerotales
1. Sporophytes horizontal on the thallus, less than 5 mm long, enclosed in involucre or scarcely exserted, or sporophytes erect, more than 5 mm long, exserted from involucre and thallus smooth and solid, non-cavernous (absence of internal schizogenous cavities); spores yellow to yellowish brown.....Notothyladales

ANTHOCEROTALES

ANTHOCEROTACEAE

Anthoceros L.

1. Spores spheroidal, 70-100 µm wide, with reduced trilete marks, the proximal and distal connate-cristate surfaces indistinct; pseudoelaters usually <40 µm, squarish to ovoid..... *A. adscendens*
1. Spores tetrahedral, <65 µm wide, with a conspicuous trilete mark separating the triangular areas, well delimited at the equatorial region from the distal surface, often by a border free of ornamentations, ornamentation spinose, punctate, baculate, jagged, or lamellate; pseudoelaters usually >40 µm, elongate.....[2]
   2. Thallus thickness of 10-20(30) cells, dorsal lamellae none to few; antheridial dimensions 100-150 um long, 60-85 um wide; sporophyte 20-100 mm long, 0.4-0.8 mm wide; spore distal face ornamentation of 15-18 spines and tubercles united at their base to form incomplete alveoli (perhaps non-native and possibly historically misapplied in some cases) .....*A. punctatus*
   2. Thallus thickness of 6-12(18) cells, dorsal lamella frequent, antheridial dimensions 56-88 um long, 45-56 um wide; sporophyte 8-20(30) mm long, 0.25-0.5 mm wide; spore distal face ornamentation with 7-12 spines.....[3]
      3. Spore distal face ornamentation of 8-12 spines with irregularly curved tips, coarsely reticulate and unlike below .....*A. agrestis*
      3. Spore distal surface without reticulum, depressed areoles 3 um high, 7-9 groups of 2-4-fid spines 3 um high per diameter/spore; proximal trilete mark with aristae 2 um high without margin; triangular areas with depressions, without warts; distal reticulum with areolas smaller than 4 um .....*A. scariosus*

Anthoceros adscendens Lehm. & Lindenb. {AFP} —
Anthoceros agrestis Paton {AFP} —
Anthoceros punctatus L. {AFP} —
Anthoceros scariosus Austin {AFP} —

NOTOTHYLADALES

NOTOTHYLADACEAE

1. Thallus cavernous; sporophytes lateral or nearly horizontal on the thallus, less than 5 mm long ... *Notothylas orbicularis*
1. Thallus smooth and solid, non-cavernous (absence of internal schizogenous cavities); sporophytes erect, more than 5 mm long ... *Phaeoceros carolinianus*

Notothylas

Notothylas orbicularis (Schwein.) Sull. {AFP} —

Phaeoceros

Phaeoceros carolinianus (Michx.) Prosk. {AFP} —

MARCHANTIOPSIDA
(liverworts, Marchantiophyta)

Figure: Estimated phylogeny of extant liverworts, see analyses by: Bechteler et al. 2023 (nuclear), Li et al. 2024 (plastid). Black font=contains taxa native to Florida; Gray font=not native, not included.

Key to groups (see Kurz & Little 1933; Dauphin et al. 2011; Stotler & Crandall-Stotler 2017; Vitt 2024).

1. Plant thallose, without leaves or these irregular … Key A
1. Plant leafy … Key B

Key A

1. Thallus typically obscured by crowded involucres of included sporophytes … Sphaerocarpaceae
1. Thallus conspicuous, sporophytes exserted or embedded [2]
2. Thallus with irregular, undulate leaf-like lobes … Fossombronia
2. Thallus without leaves [3]
3. Sporophytes embedded in thallus … Ricciaceae
3. Sporophytes exserted [4]

4. Thallus with a distinct medial line or midrib [5]
4. Thallus lacking a midrib or the medial region poorly differentiated [6]
5. Thallus margin with hairs … Metzgeriaceae
5. Thallus margin lacking hairs … Pallaviciniaceae
6. Thallus undifferentiated; sporophytes lateral … Aneuraceae
6. Thallus differentiated into distinct layers; sporophytes dorsal and erect or ventral [7]
7. Thallus pores absent, air chambers represented only by low lamellae … Dumortieraceae
7. Thallus with pores and air chambers [8]
8. Gemmae in cups (gemmae absent in some species outside the flora) … Marchantiaceae
8. Gemmae absent [9]
9. Thallus generally lacking odor; air chambers subdivided by secondary walls; ventral scale appendages subulate, lanceolate, to circular … Aytoniaceae
9. Thallus often odorous; air chambers not subdidived; ventral scale appendage reniform … Conocephalaceae

Key B

MARCHANTIALES

AYTONIACEAE : Key adapted from Whittemore & Hicks (2023).
1. Carpocephalum dorsal on thallus; disk small, involucres spreading horizontally. Secondary walls of air chambers, if present, reaching epidermis, connected by perforations, thus secondary areoles complete and closed. Appendages of ventral scales subulate to circular … Plagiochasma
1. Carpocephalum terminal on thallus (sometimes appearing lateral); disk moderate to large, involucres descending. Secondary walls of air chambers various. Appendages of ventral scales subulate to lanceolate … Reboulia

Plagiochasma
Plagiochasma crenulatum Gottsche — Reported for Alachua & Gilchrist cos.

Reboulia
Reboulia hemisphaerica (L.) Raddi {AFP} —

CONOCEPHALACEAE
Conocephalum
Conocephalum salebrosum Szweyk. et al. {AFP} —

DUMORTIERACEAE
Dumortiera
Dumortiera hirsuta (Sw.) Nees subsp. ***hirsuta*** {AFP} — Probably subsp. *nepalensis* was misapplied in the flora (Zander 2024).

MARCHANTIACEAE: Key adapted from Zander (2023).
1. Female receptacles with 9 or more papillose tubular lobes, thallus with intramarginal scales present, pores surrounded by 4 rings of cells … M. polymorpha

1. Female receptacles with 5-9 smooth flat lobes, thallus intramarginal scales absent, pores surrounded by 5-7 rings of cells [2]
2. Pores not stellate, ventral scales closely denticulate or ciliate, gemma cups not lobed, margins dentate to ciliate … M. inflexa
2. Pores stellate, ventral scales entire or dentate, gemma cups with dentate triangular lobes … M. paleacea

Marchantia
Marchantia inflexa Nees & Mont. {AFP} —
Marchantia paleacea Bertol. {AFP} —
Marchantia polymorpha L. subsp. ***ruderalis*** Bischl. & Boissel.-Dub. —

RICCIACEAE
Key adapted from Zander (2023)
1. Epidermis without visible pores or these simple openings among epidermal cells where species have polygonal air chambers; ventral scales in one row, with age splitting into two rows, nearly round, entire; oil cells absent (except in *R. campbelliana*); prostrate or submersed … Riccia
1. Epidermis with small, scattered, distinct pores; ventral scales in multiple rows, lanceolate, rarely ligulate, dentate; oil cells present; usually floating, sometimes stranded and prostrate … Ricciocarpos

Riccia : Excluded name *R. howei*.

Key adapted from Zander (2023)
1. Thallus thin, 2-3 cells thick, translucent, ventral scales absent … R. membranacea
1. Thallus thick, 4-10 cells thick medially, opaque to semi-translucent, ventral scales present or absent [2]
2. Thallus spongy, with air chambers and air spaces, ventral scales absent, evanescent or in1or 2 rows, pores present, conspicuous, surrounded by a ring of cells or opening irregularly [3]
2. Thallus compact, air chambers absent excepting as narrow channels, ventral scales in 2 rows; pores lacking or inconspicuous, not surrounded by a ring of cells [7]
3. Mature spores united in tetrads; heterothallic, male plants smaller than female, ventral scales absent [4]
3. Mature spores separating, not disbursed in tetrads; homothallic or heterothallic, male plants commonly same size as female, ventral scales in 1 or rarely 2 rows [5]
4. Plants in distinct rosettes, shortly dichotomous, male plants becoming red or purple, female remaining green; spores with blunt, crowded tubercles on a fine reticulum, spores 70-80(90) µm wide … R. curtisii
4. Plants in elongated rosettes or irregularly crowded, male and female plants green; spores with blunt, conic spines not arising from a reticulum, spores 60-70(75) µm wide … R. leptothallus
5. Mature sporangia protruding from dorsal surface of thallus, spores not fully areolate or with vermiform ridges … R. cavernosa
5. Mature sporangia protruding from ventral surface of thallus, spores regularly and distinctly areolate on distal face [6]
6. Terrestrial or aquatic plants, often sterile, spores when present 80-100 µm wide; dorsal epidermis smooth … R. fluitans

6. Terrestrial plants, commonly sporangiate, spores 50-80 µm wide; dorsal epidermis often lacunose when old … R. huebeneriana
7. Dioicous; thallus unbranched or with only 1-2 dichotomies, segments (3)5-7 mm in wide, with thin wings, tubers forming at thallus apices; spores black, usually lacking winged margins … R. gougetiana
7. Monoicous; thallus branching with usually 1-4 dichotomies, segments 1-4 mm in wide, without wings, tubers absent; spores variously colored, with or without winged margin [8]
8. Thallus usually with a deep groove centrally, margins acute and not ciliate … R. sorocarpa
8. Thallus medially sharply grooved near the apex or not at all, margins rounded and ciliate [9]
9. Plants large, segments 1.5-2.5(3) mm in width, dorsal groove shallow, broadening, 0.3-0.7 of segment width; thallus margins often blackened … R. beyrichiana
9. Plants small, segments 0.5-2 mm in width, dorsal groove narrow, not broadening, usually 0.3 or less of segment width; thallus margins often purple-green … R. hirta

Riccia beyrichiana Hampe {AFP} —
Riccia cavernosa Hoffm. {AFP} —
Riccia curtisii (Austin) Austin {AFP} —
Riccia fluitans L. {AFP} —
Riccia gougetiana Durieu & Mont. {AFP} —
Riccia hirta (Austin) Underw. {AFP} —
Riccia huebeneriana Lindenb. subsp. ***sullivantii*** (Austin) R.M. Schust. {AFP} —
Riccia leptothallus R.M. Schust. {AFP} —
Riccia membranacea Gottsche et al. {AFP} —
Riccia sorocarpa Bisch. {AFP} —
Riccia stenophylla Spruce {AFP} —

Ricciocarpos
Ricciocarpos natans (L.) Corda {AFP} —

SPHAEROCARPALES

SPHAEROCARPACEAE
Sphaerocarpos

See Anonymous (2017)
1. Spores separating at maturity … S. donnellii
1. Spores persistently united in tetrads … S. texanus

Sphaerocarpos donnellii Austin {AFP} —
Sphaerocarpos texanus Austin {AFP} —

FOSSOMBRONIALES

FOSSOMBRONIACEAE
Fossombronia : Probably, *F. foveolata* and *F. wondraczekii* were misapplied in the flora.

Key adapted from Crandall-Stotler & Bray, Jr. (2019)
1. Stems never forming tubers; antheridia and archegonia intermixed; perigonial scales absent; elaters with 3-5 spiral thickening bands … F. porphyrorhiza

1. Stems sometimes forming apical and/or ventral tubers; protandrous, with antheridia and archegonia spatially separated; large, persistent perigonial scales present; elaters with 2-3 spiral thickening bands … F. salina

Fossombronia porphyrorhiza (Nees) Prosk. {AFP} —
Fossombronia salina Lindb. ex Evans {AFP} —

PALLAVICINIALES

PALLAVICINIACEAE

Pallavicinia

Pallavicinia lyellii (Hook.) A. Gray {AFP} —

METZGERIALES

ANEURACEAE

Key adapted from Faubert (2015)
1. Thallus simple or irregularly pinnate, segments 2-8(10) mm wide, branches short and irregular; oil-bodies 2-4(6) µm wide, colorless, 5-55 per cell … Aneura
1. Thallus 1-3-pinnate, segments 0.2-2 mm wide, branches generally elongate; oil-bodies 6-18 µm wide, at least those of the hypodermal cells opaque, 1-10(15) per cell, or absent in most cells … Riccardia

Aneura

Key adapted from Faubert (2015)
1. Thallus thin, herbaceous, multistratose in the central part, 1-stratose at margins, the thallus thus presenting a prominent, thick costal region bordered by strongly undulate wings 2--32 cells wide … A. maxima
1. Thallus turgid, opaque, multistratose throughout, costal region not prominent, margins flat to slightly undulate (narrow wings may be present in specimens from very damp habitats) … A. pinguis

Aneura maxima (Schiffn.) Steph. {AFP} —
Aneura pinguis (L.) Dumort. {AFP} —

Riccardia

Key adapted from Faubert (2015)
1. Epidermal and hypodermal cells with 3-10 oil-bodies … R. stricta
1. Epidermal or hypodermal cells with 1-2(3) oil-bodies [2]
2. Oil-bodies 1-2 in most epidermal and marginal cells … R. chamedryfolia
2. Oil-bodies absent from most epidermal and marginal cells (abundant or rare in hypodermal cells) [3]
3. Thallus segments lacking distinct hyaline wings, branches and main axis with 1-stratose margins 1(2) cell wide; oil-bodies rare or absent in hypodermal cells [4]
3. Thallus segments with distinct hyaline wings, branches with 1-stratose margins 2-5 cells wide, main axis with 1-stratose margins 1-2(3) cells wide; oil-bodies abundant in hypodermal cells [5]
4. Monoicous; epidermal cells 35-55 µm wide, with their main axes obliquely pointing toward the margins … R. latifrons

4. Dioicous; epidermal cells 20-30 µm wide, with their main axes parallel to the branch margins … R. palmata
5. Autoicous; ultimate segments (3)4 cells thick medially; 1-stratose margins 2-3(4) cells wide … R. multifida subsp. multifida
5. Synoicous; ultimate segments 3 cells thick medially; 1-stratose margins 4-5 cells wide … R. multifida subsp. synoica

Riccardia chamedryfolia (With.) Grolle {AFP} —
Riccardia latifrons Lindb. subsp. ***latifrons***
Riccardia multifida (L.) Gray subsp. ***multifida*** {AFP} —
Riccardia multifida (L.) Gray subsp. ***synoica*** R.M. Schust. {AFP} —
Riccardia palmata (Hedw.) Carruth. {AFP} —
•***Riccardia stricta*** R.M. Schust. {AFP} —

METZGERIACEAE
Metzgeria
Key adapted from Bakalain (2019)
1. Marginal thallus hairs falcate or hooked, costa 2(3) cells wide ventrally … M. uncigera
1. Marginal thallus hairs straight, costa 2-6 cells wide ventrally [2]
2. Marginal thallus hairs always solitary … M. furcata
2. Marginal thallus hairs straight, costa 2-6 cells wide ventrally … M. myriopoda

Metzgeria furcata (L.) Dumort. {AFP} —
Metzgeria myriopoda Lindb. {AFP} —
Metzgeria uncigera A. Evans {AFP} —

PTILIDIALES
PTILIDIACEAE
Ptilidium
Ptilidium pulcherrimum (Weber) Hampe {AFP} —

PORELLALES
PORELLACEAE
Porella
Key adapted from Bakalain (2019)
1. Underleaves flat to concave, to 0.25 of stem width; IKI reaction negative … P. pinnata
1. Underleaves convex, widely ovate, 1.4-1.8 of stem width; IKI reaction positive … P. platyphylloidea

Porella pinnata L. forma ***involuta*** (Hampe)R.M.Schust. {AFP} —
Porella platyphylloidea (Schwein.) Lindb. {AFP} — Probably the similar *P. platyphylla* is rare to absent from the flora.

RADULALES
RADULACEAE
Radula
Key adapted from Krayesky et al. (2018)

1. Plants epiphyllous; with a tendency to possess slender triradiate trigones; gemmae often present (large, 1/3--3/4 the size of the dorsal lobe of the leaf) … R. flaccida
1. Plants terricolous, epicortic, epixylic, or epilithic; slender triradiate trigones never present; gemmae rare to copious (less than 1/5 the size of the dorsal lobe of the leaf) [2]
2. Dorsal lobes with a strong tendency to be caducous [3]
2. Dorsal lobes never caducous [5]
3. Thallus lacking or containing a few leaves with a falcate leaf stance; rhizoids often abundant; heteroicous … R. obconica
3. Thallus containing many leaves with a falcate leaf stance; rhizoids absent to sporadic; dioicous [4]
4. Lobule subquadrate; androecia terminal; plants never yellow-green; plants occasionally with a brownish cast … R. floridana
4. Lobule triangulate; androecia intercalary; plants sometimes yellow-green; plants never with a brownish cast … R. sullivantii
5. Mature stems hidden in postical (ventral) view by lobules (ventral lobes) of thallus … R. quadrata
5. Mature stems not hidden in postical (ventral) view by lobules (ventral lobes) of thallus [6]
6. Dioicous; thallus occasionally with a bronze to brownish cast … R. australis
6. Monicous (paroicous); thallus without a bronze or brownish cast … R. complanata

Radula australis Austin {AFP} —
Radula compalanta (L.) Dumort. {AFP} —
Radula flaccida Lindenb. & Gottsche {AFP} —
Radula floridana Castle{AFP} — (*R. javanica*, misapplied).
Radula obconica Sull. {AFP} —
Radula quadrata Gottsche {AFP} —
Radula sullivantii Austin {AFP} —

FRULLANIALES

FRULLANIACEAE
Frullania

Key adapted from Atwood (2017)
1. Dorsal lobes with ocelli in a conspicuous median line, scattered, or confined to basal cells … F. cobrensis
1. Dorsal lobes lacking ocelli or ocelli inconspicuous [2]
2. Inflated lobule wide-spreading, separated from the stem by a distance greater than its width, the lobule mouth oriented towards stem … F. taxodiocola
2. Inflated lobule erect or obliquely spreading, contiguous or approximate with stem, separated by a distance that is less than or nearly equal to its width, the lobule mouth oriented towards shoot base or slightly toward or away from stem; or lobule frequently explanate [3]
3. Lobule with inflated distal portion and a ligulate proximal portion that extends to or beyond the basal lobe margin and is connected to the dorsal lobe by a keel that is parallel or sub-parallel to the stem; free lobule margin sinuous … F. riojaneirensis
3. Proximal lobule portion triangular or not noticeably expanded, forming a short keel with dorsal lobe that is perpendicular or obliquely spreading from stem; free lobule margin plane; or lobule frequently explanate [4]

4. Inflated lobule cylindric or sac-shaped, about two or more times longer than wide, not beaked on the external margin; or explanate lobule with strongly deflexed margins; ornamentation of perianth smooth [5]
4. Inflated lobule cap or helmet-shaped, about as long as wide, sometimes beaked on the external margin; or explanate lobule with plane or slightly decurved margins; ornamentation of perianth often tuberculate, sometimes smooth [7]
5. Ventral leaf margins reflexed, sometimes only at or above the sinuses ... F. cucullata
5. Ventral leaf margins plane, slightly recurved or contorted [6]
6. Lobules separated from the stem by a distance that is less than or nearly equal to its width; gynoecial bracts and bracteole dentate ... F. donnellii
6. Lobules mostly superimposed or contiguous with stem; gynoecial bracts and bracteole entire ... F. kunzei
7. Plants dioicous, androecia spicate, though sometimes abbreviated, or unknown
7. Plants autoicous or paroicous, androecia mostly capitate, occasionally short spicate [10]
8. Leaves deflexed and somewhat rolled around the stem when dry; squarrose when moist; gynoecia terminal on short lateral branches with no subfloral innovations ... F. ericoides
8. Leaves imbricate when dry; flattened, spreading, or wide-spreading when moist; gynoecia terminal on stem or main branch [9]
9. Shoots 1.0-1.2 mm wide; stylus lanceolate, 5-8 cells long and 2-3 cells wide; gynoecial bracts spreading; innermost bracteole free from bract; perianth beak elongate F. brittoniae
9. Shoots 0.7-0.9 mm wide; stylus filiform or subulate, 4-5 cells long and 1-2 cells wide; gynoecial bracts squarrose; innermost bracteole connate on one side with bract; perianth beak short ... F. virginica
10. Ventral leaf bases cuneate to slightly decurrent ... F. gibbosa
10. Ventral leaf bases cuneate to slightly decurrent
11. Tips of shoot spreading; dorsal face of perianth flattened or concave, beak lacking; gynoecial bracts often single, replaced by innovations ... F. sabaliana
11. Tips of shoots prostrate; dorsal face of perianth weakly to distinctly keeled, acuminating in a beak; gynoecial bracts multiple, not replaced by innovations [12]
12. Innermost gynoecial bracteole free from bract ... F. inflata
12. Innermost gynoecial bracteole connate with bract on one or sometimes both sides ... F. rappii

Frullania brittoniae A. Evans {AFP} —
Frullania caulisequa (Nees) Nees {AFP} —
Frullania cobrensis Gottsche ex Steph. {AFP} —
Frullania cucullata Lindenb. & Gottsche {AFP} —
Frullania donellii Austin {AFP} —
Frullania ericoides (Nees) Mont. {AFP} —
Frullania gibbosa Nees {AFP} —
Frullania inflata Gottsche {AFP} —
Frullania kunzei (Lehm. & Lindenb.) Lehm. & Lindenb. {AFP} —
Frullania rappii A.EVans {AFP} —
Frullania riojaneirensis (Raddi) Spruce {AFP} —
- ***Frullania sabaliana*** R.M. Schust. {AFP} — Hillsborough Co. River margins, on trees just above the mean water level.
- ***Frullania taxodiocola*** R.M. Schust. {AFP} —

Frullania virginica Gottsche {AFP} —

LEJEUNEALES

LEJEUNEACEAE

Acrolejeunea

Acrolejeunea heterophylla (A. Evans) Grolle & Gradst. {AFP} —

Caudalejeunea

Caudalejeunea lehmanniana (Gottsche) A. Evans {AFP} —

Ceratolejeunea

Key from Thiers (2016)
1. Ocelli forming a line extending from base to leaf midportion … C. ceratantha
1. Ocelli basal or absent [2]
2. Perianth keels forming terete horns; plants autoicous or dioicous; leaf margins entire or irregularly dentate near leaf apex; utriculate lobules often present at branch bases, asexual reproduction absent … C. cubensis
2. Perianth keels forming crests (rather than distinct horns); plants usually dioicous; leaf margins entire; utriculate lobules absent; asexual reproduction by regeneration from leaf margin or by dehiscent leaf lobes sometimes present … C. laetefusca

Ceratolejeunea ceratantha (Nees & Mont.)Schiffner {AFP} — (*C. rubiginosa*, misapplied).
Ceratolejeunea cubensis (Mont.) Schiffn. {AFP} —
Ceratolejeunea laetefusca (Austin) R.M. Schust. {AFP} — (*C. guianensis*, misapplied).

Cheilolejeunea : Expanded to include *Leucolejeunea* (Ye et al. 2015).

Cheilolejeunea adnata (Kunze ex Lehm.) Grolle {AFP} —
Cheilolejeunea clausa (Nees & Mont.) R.M. Schust. {AFP} — (*C. trifaria*, misapplied?).
Cheilolejeunea clypeata (Schwein.)W.Ye & R.L.Zhu {AFP} —
Cheilolejeunea conchifolia (A.Evans)R.M. Schust. {AFP} —
Cheilolejeunea discoidea (Lehm. & Lindenb.) Kachroo & R.M. Schust. {AFP} —
•***Cheilolejeunea polyantha*** A. Evans var. **polyantha** {AFP} —
Cheilolejeunea polyantha A. Evans var. **caduciloba** R.M. Schust. {AFP} —
Cheilolejeunea rigidula (Nees & Mont.) R.M. Schust. {AFP} —
Cheilolejeunea unciloba (Lindenb.)Malombe {AFP} —
Cheilolejeunea xanthocarpa (Lehm. & Lindenb.)Malombe {AFP} —

Cololejeunea : Excluded: *C. sicaefolia*.

Cololejeunea cardiocarpa (Mont.) Steph. {AFP} —
Cololejeunea clavatopapillata Steph. {AFP} —
Cololejeunea contractiloba A. Evans {AFP} —
Cololejeunea cornutissima (R.M. Schust.) Stotler & Crand.-Stotl. {AFP} —
Cololejeunea diaphana A. Evans {AFP} —
Cololejeunea minuscula Pócs {AFP} —
Cololejeunea minutissima (Sm.) Schiffn. subsp. ***minutissima*** {AFP} —
Cololejeunea minutissima (Sm.) Schiffn. subsp. ***myriocarpa*** (Nees & Mont.) R.M. Schust. {AFP} —

Cololejeunea ornata A. Evans {AFP} —
Cololejeunea setiloba A. Evans {AFP} —
Cololejeunea sintenisii (Steph.) Pócs {AFP} —
•***Cololejeunea subcristata*** A. Evans {AFP} —

Diplasiolejeunea
Diplasiolejeunea unidentata (Lehm. & Lindenb.)Schiffn. {AFP} — (*D. rudolphiana* Steph., syn.).

Drepanolejeunea
Drepanolejeunea sabaliana R.M.Schust. {AFP} — (*D. mosenii*, misapplied).

Frullanoides
Frullanoides bahamensis (A. Evans) Slageren {AFP} —
Frullanoides corticalis (Lehm. & Lindenb.) Slageren {AFP} —

Harpalejeunea
Harpalejeunea molleri (Steph.) Grolle {AFP} — (*H. ovata*, misapplied).
Harpalejeunea stricta (Lindenb. & Gottsche) Steph. {AFP} —

Lejeunea
Lejeunea adpressa Nees {AFP} —
Lejeunea aphanes Spruce {AFP} —
Lejeunea bermudiana (A. Evans) R.M. Schust. {AFP} —
Lejeunea calcicola R.M. Schust. {AFP} —
Lejeunea cancellata Nees & Mont. {AFP} —
Lejeunea cladogyna A. Evans {AFP} —
Lejeunea deplanata (A. Evans)He
Lejeunea flava (Sw.) Nees {AFP} —
Lejeunea floridana A. Evans {AFP} —
Lejeunea glaucescens Gottsche {AFP} —
Lejeunea laetevirens Nees & Mont. {AFP} —
Lejeunea minutiloba A. Evans {AFP} — (syn. var. *heterogyna*)
Lejeunea monimiae (Steph.)Steph. {AFP} — (*L. phyllobola*, misapplied)
Lejeunea obtusangula Spruce {AFP} —
Lejeunea phyllobola Nees & Mont. {AFP} — (*L. brittoniae*, syn.)
Lejeunea spiniloba Lindenb. & Gottsche {AFP} —
Lejeunea trinitensis Lindenb. {AFP} —

Leptolejeunea
Leptolejeunea elliptica (Lehm. & Lindenb.) Schiffn. {AFP} — Plants have a strong anise-like odor.

Lopholejeunea
Lopholejeunea nigricans (Lindenb.) Schiffn. {AFP} —
Lopholejeunea subfusca (Nees) Schiffn. {AFP} —

Mastigolejeunea
Mastigolejeunea auriculata (Wilson & Hook.) Schiffn. {AFP} —

Microlejeunea
Microlejeunea epiphylla Bischl. {AFP} —
Microlejeunea globosa (Spruce) Steph. {AFP} —
Microlejeunea ruthii A. Evans {AFP} —
Microlejeunea ulicina (T.Taylor)Steph. subsp. ***bullata*** (Taylor)R.M.Schust. {AFP} —
Microlejeunea ulicina (T.Taylor)Steph. subsp. ***ulicina*** {AFP} —

Neurolejeunea
Neurolejeunea breutelii (Gottsche) A. Evans {AFP} —

Rectolejeunea
Rectolejeunea berteroana (Gottsche) A. Evans {AFP} —

LOPHOZIALES

ADELANTHACEAE
Syzygiella
Syzygiella autumnalis (DC.) K. Feldberg et al. {AFP} —

CEPHALOZIACEAE
Cephalozia: All species (except *C. bicuspidata*) fall into the group sometimes segregated as *Fuscocephaloziopsis*, which Feldberg et al. (2016) state "the separation of *Cephalozia* and *Fuscocephaloziopsis* is far less clear-cut."

Key from Zander & McIntosh (2020)

Cephalozia bicuspidata (L.)Dumort.— Part of *Cephalozia* s.str. Not reported for Florida by Zander & McIntosh (2020).
Cephalozia catenulata (Huebener) Lindb. {AFP} —
Cephalozia connivens (Dicks.) Lindb. {AFP} —
Cephalozia lunulifolia (Dumort.) Dumort. {AFP} —
Cephalozia macrostachya Kaalaas. —

Odontoschisma
Odontoschisma denudatum (Nees) Dumort. {AFP} —
Odontoschisma sphagni (Dicks.)Dum. {AFP} — (syn. *O. prostratum*).

CEPHALOZIELLACEAE
Cephaloziella

Key from Wagner

Cephaloziella hyalina Douin {AFP} —
Cephaloziella spinigera (Lindb.)Jørg. {AFP} —

Chonecolea
Chonecolea doellingeri (Nees) Grolle {AFP} —

Cylindrocolea
Cylindrocolea planifolia (Steph.)R.M. Schust. {AFP} — Dauphin et al. (2011) retained use of *C. obliqua*, doubting Gradstein & Costa (2003) who placed it in synonymy. (syn. *C. obliqua*).
Cylindrocolea rhizantha (Mont.) R.M. Schust. {AFP} —

SCAPANIACEAE
Scapania

Key adapted from Whittemore (2020)
Scapania mucronata Buch —
Scapania nemorea (L.) Dumort. {AFP} —

Schistochilopsis
Schistochilopsis capitata (Hook.) Konstant. {AFP} —

JUNGERMANNIALES

CALYPOGEIACEAE
Asperifolia
Asperifolia sullivantii (Austin)A.V.Troitsky {AFP} —

Calypogeia
Calypogeia neesiana (C.Mass. & Carestia)Müll.
Calypogeia neogaea (R.M. Schust.) Bakalin {AFP} —
Calypogeia peruviana Nees & Mont. {AFP} —

SOLENOSTOMATACEAE
Solenostoma
Solenostoma gracillimum (Sm.) R.M. Schust. {AFP} —

LEPIDOZIALES

LEPIDOZIACEAE
Bazzania
Bazzania trilobata (L.) Gray {AFP} —

Kurzia
Kurzia makinoana (Steph.) Grolle {AFP} — According to Dauphin et al. (2011), the specimen *McFarlin 39* is a valid record of *K. setacea* in Florida, although much doubt seems to remain. (syn. *K. sylvatica*; *K. setacea*, misapplied)

Telaranea
Telaranea nematodes (Gottsche ex Austin)M.A.Howe {AFP} — (*T. longifolia*, misapplied)

LOPHOCOLEACEAE
Chiloscyphus
Chiloscyphus apalachicolus (R.M. Schust.) J.J. Engel & R.M. Schust. {AFP} —

Chiloscyphus profundus (Nees) J.J. Engel & R.M. Schust. {AFP} — (syn. subsp. *cladogyna*)

Cryptolophocolea
Cryptolophocolea martiana (Nees)L.Söderstr. {AFP} —

PLAGIOCHILACEAE
Plagiochila
Key adapted from Zander (2022).
1. Leaves or distal portions caducous or fragmenting, at least in some plants; cells medium-sized 18-25 µm wide … P. sullivantii
1. Leaves all persistent, not fragmenting; asexual reproduction by propagula or absent [2]
2. Median and apical cells averaging 25-40 µm wide; leaves entire or with 4-35 teeth, teeth short and fine to ciliate or spinose, always slender-based; branches normally all intercalary (arising from leaf axils, with a basal collar); asexual reproduction absent [3]
2. Median and apical cells averaging (17)18-25(28) µm wide; margins with a limited number (5-16) of coarse teeth, these sometimes vestigial and never finely spinose, the larger (at least) broad-based; branches terminal or intercalary, asexual propagules present or absent [4]
3. Median cells small, 18-32(36) µm … P. asplenioides
3. Median cells large, 33-42 µm wide … P. columbiana
4. Leaves approximate to laxly imbricate, rectangular to ovate; postical bases not densely shingled (leaving the stem conspicuously exposed in postical view), short-decurrent, the decurrent strip flat or at most narrowly erect; underleaves minute or obsolete, never of laciniae or lamellae [5]
4. Leaves imbricate, the strongly broadened postical bases shingled, +/- completely hiding stem in postical aspect; dilated postical leaf bases long- or short-decurrent but always +/- erect, collectively forming an erect crest or convolute and forming water-sacs; underleaves distinct to comparatively large [8]
5. Leaves short- to quadrate-rectangular, broadly subtruncate at apex, 1.1-1.3 times as long as wide, with small irregular teeth confined to near apex; cells +/- equally thick-walled and trigones minute … P. aspleniformis
5. Leaves either ovate (and widest just above base) or narrowly rectangular, usually at least 1.3 times as long as wide; marginal teeth large, distinct; cells collenchymatous (except in shade forms), median cells always with thin walls (unless the bulging trigones are confluent) [6]
6. Leaves lingulate-rectangular, 2-2.5(3) x as long as wide, parallel-sided, the postical base neither dilated nor arched; leaves distinctly bordered with 1-2 rows of elongate cells (whose tangential walls are strongly thick to form a border), distant; leaves spreading at 65-75 °., in drying tubular-involute; teeth of leaves few and low, largely at the rounded, truncate apex; propagula on postical leaf surface only … P. laetevirens
6. Leaves +/- ovate, 1-1.3 x as long as wide; postical base slightly to strongly dilated and arched; greatest width of flattened leaf thus subbasal; leaves not distinctly bordered (the marginal cells not set off as a border, rarely extremely elongate); leaves typically slightly imbricate to approximate, not involute in drying; propagule position various [7]
7. Mature, robust stems with rectangular leaves; postical leaf bases not or hardly broadened, and postical margins above leaf bases clearly erect-spreading; leaves always sharply, often spinose-dentate; perianth mouth with crowded cilia or narrow laciniae … P. floridana
7. Mature, robust stems with somewhat ovate leaves whose postical bases are somewhat broadened; postical leaf margins, above broadened base, nearly (but usually not quite) at right

angles to stem; leaves with teeth small to weakly spinose; perianth mouth with usually relatively low, inconspicuous teeth … P. patula
8. Leaves short-decurrent postically; whole postical leaf margin sharply spinose-dentate, including the somewhat cristate basal region; underleaf essentially a ciliate-margined lamella … P. montagnei
8. Leaves long-decurrent postically; either basal or distal portions virtually or quite edentate; underleaf deeply divided into laciniae or cilia [9]
9. Postical leaf margin of sterile shoots strongly crispate-undulate; otherwise leaf margins entire or virtually so (except for 1-several low teeth near apex); propagula rare or absent … P. undata
9. Postical leaf margin of sterile shoots not or obscurely undulate, usually distinctly spinose-dentate (either near leaf apex or near base or both); almost always with propagula [10]
10. Postical leaf bases dilated, reflexed and convolute, forming a tubular water-sac of thick-walled, scarcely elongated cells, usually bearing 2-6 spinose teeth; leaf apices entire to weakly dentate; antical keel of perianth 2-4-dentate; underleaves of 2-several linear, largely 1-seriate cilia … P. miradorensis
10. Postical leaf bases narrow, erect, forming a crista, edentate (rarely with 1-2 teeth); leaf apices dentate; antical keel of perianth edentate; underleaves of 2-several slender laciniae or lanceolate lobes [11]
11. Leaves (of mature shoot sectors) subentire or entire, usually with 2-4 low, obtuse teeth at apex; postical margins entire or obsoletely 1-2-dentate; trigones often weak … P. invisa
11. Leaves (of mature shoot sectors) +/- sharply spinose-dentate, usually with 2-3(5) coarse apical teeth; postical margins usually with 5-10 less coarse teeth; trigones generally strongly bulging … P. raddiana

Plagiochila aspleniformis R.M. Schust. {AFP} —
Plagiochila columbiana A.Evans
Plagiochila floridana A. Evans {AFP} —
•***Plagiochila invisa*** (R.M. Schust.)R.M. Schust. {AFP} —
Plagiochila laetevirens Lindenb. {AFP} — Following Gradstein (2015), *P. micropteryx* is a synonym.
Plagiochila miradorensis Gottsche {AFP} —
Plagiochila montagnei Nees {AFP} —
Plagiochila patula (Sw.) Lindenb. {AFP} —
Plagiochila raddiana Lindenb. {AFP} —
Plagiochila sullivantii Gottsche ex A.Evans
Plagiochila undata Sull. {AFP} —

TRICHOCOLEACEAE
Trichocolea
Trichocolea tomentella (Ehrh.) Dumort. {AFP} —

BRYOPSIDA

mosses

Figure: Estimated phylogeny of extant mosses, see analyses by: Bechteler et al. 2023 (nuclear), Li et al. 2024 (plastid). Black font=contains taxa native to Florida; Asterisk=non-native, naturalized; Gray font=not native, not included.

Key to groups (see Vitt & Buck 1992)

SPHAGNALES

SPHAGNACEAE

Sphagnum Key adapted from McQueen & Andrus (2007).

1. Outer stem cortical cell walls reinforced with spiral fibrils (sect. *Sphagnum*) … Key A
1. Outer stem cortical cell walls smooth [2]
2. Outer cortical cells of branches nearly all porose at distal end; branch leaves with denticulate margins and bordered with resorption furrow (sect. *Rigida*) … Key B
2. Outer cortical cells of branches of two kinds, smaller aporose cells and larger retort-shaped cells with pore at apical end; branch leaf margins usually entire [3]
3. Branch leaf hyaline cells efibrillose (sect. *Isocladus*) … Key C
3. Branch leaf hyaline cells fibrillose [4]

4. Branch and stem leaves isophyllous; branches in fascicles of 2-3, spreading and pendent branches similar, or plants may have single or no branches; hyaline cells of branch leaves usually with numerous pores along the commissures, giving a bead-like appearance; chlorophyllous cells of branch leaves in transverse section barrel-shaped, truncate-elliptic to trapezoidal, exposed equally on both surfaces or slightly broader on the convex surface (sect. *Subsecunda*) … Key D
4. Branch and stem leaves usually anisophyllous; 3-6 branches per fascicle, spreading branches clearly differentiated from pendent branches; hyaline cells of branch leaves with scattered pores along the commissures or free; chlorophyllous cells of branch leaves in transverse section triangular, truncate-trapezoidal to elliptical and may be more broadly exposed on either surface [5]
5. Branch leaf chlorophyllous cells lenticular, truncate-elliptic to trapezoidal; exposed more or less equally on both surfaces or slightly more broadly on convex surface (sect. *Subsecunda*) … Key D
5. Branch leaf chlorophyllous cells triangular to trapezoidal, exposed much more broadly on concave or convex surface [6]
6. Chlorophyllous cells of branch leaves triangular to trapezoidal in transverse section, more broadly exposed on the concave surface; in plants with stellate capitula, the branches between the rays of the capitulum single; stem leaves upright on the stem (sect. *Acutifolia*) … Key E
6. Chlorophyllous cells of branch leaves triangular to trapezoidal in transverse section, more broadly exposed on the convex surface; in plants with stellate capitula, the branches between the rays of the capitulum occur in pairs; stem leaves often hanging downward on the stem (sect. *Cuspidata*) … Key F

Key A: sect. *Sphagnum*
1. Branch leaf chlorophyllous cells in transverse section ± equilateral-triangular, often with conspicuous vertically oriented comb-fibrils on the hyaline cells where overlying chlorophyllous cells [2]
1. Branch leaf chlorophyllous cells in transverse section narrowly triangular, trapezoidal, truncate-elliptic, elliptic or lenticular; comb-fibrils if present horizontally oriented [3]
2. Branch cortical cells with flat end walls or with weak funnel-like projections extending less than halfway into the next cell; branches not clavate or if clavate, with pointed ends S. affine
2. Branch cortical cells with funnel-like projections often extending halfway or more into the next cell; branches strongly clavate and blunt … S. portoricense
3. Branch leaf chlorophyllous cells in transverse section short-elliptic, and enclosed on both surfaces; plants purplish red when pigmented … S. magniae
3. Branch leaf chlorophyllous cells in transverse section narrowly triangular, rectangular to truncate-elliptic, exposed equally on both surfaces or more broadly on the convex surface [4]
4. Superficial stem cortical cells with fibrils weak or lacking; chlorophyllous cells rectangular to truncate-elliptic, exposed equally on both surfaces … S. perichaetiale
4. Superficial stem cortical cells with strong fibrils; chlorophyllous cells triangular, exposed more broadly on concave surface [5]
5. Branch leaf hyaline cells where overlying chlorophyllous cells often with irregular worm-like ridges, especially at the leaf base; pores on the convex surface numerous, small and round to elliptic … S. henryense
5. Branch leaf hyaline cells smooth throughout; pores on the convex surface elliptic to flattened-elliptic, not numerous … S. palustre

Key B: sect. *Rigida*

1. Chlorophyllous cells of branch leaves elliptic in transverse section and completely enclosed on both surfaces, adjacent hyaline cell walls smooth; stem leaves lingulate to oblong-triangular … S. compactum
1. Chlorophyllous cells of branch leaves elongate-triangular to ovate-triangular, enclosed on the adaxial surface and exposed on the convex surface, adjacent hyaline cell walls minutely papillose; stem leaves bluntly deltoid … S. strictum

Key C: sect. *Isocladus*
1. Branch leaves with 20-40 pores, each less than 0.25 width of cell, mostly in 2 rows, branch leaves ovate-ligulate with a broad, rounded, truncate apex … S. cribrosum
1. Branch leaves with 8-12 pores, each more than 0.25 width of cell, mostly in 1 row, branch leaves lanceolate to linear-lanceolate with a narrow tubular apex … S. macrophyllum

Key D: sect. *Subsecunda*
1. Stem cortex undifferentiated, superficial layer composed of small thick-walled cells … S. microcarpum
1. Stem cortex differentiated with one or more superficial layers of enlarged thin-walled cells [2]
2. Stem cortex of more than 1 superficial layer of enlarged, thin-walled cells … S. carolinianum
2. Stem cortex 1 superficial layer of enlarged, thin-walled cells [3]
3. Stem simple without branches … S. cyclophyllum
3. Stems with branches arranged in fascicles … S. lescurii

Key E: sect. *Acutifolia*
1. Branch leaves with denticulate margin along a resorption furrow … S. molle
1. Branch leaf margins plain and bordered without a resorption furrow [2]
2. Branch leaves 5-ranked … S. bartlettianum
2. Branch leaves unranked … S. tenerum

Key F: sect. *Cuspidata*
1. Branch leaves with serrulate margins [2]
1. Branch leaves entire along margins [3]
2. Branch leaves with broad, rounded apex … S. fitzgeraldii
2. Branch leaves with pointed involute apex … S. trinitense
3. Stem leaves triangular to triangular-lingulate, acute to obtuse but rarely erose … S. cuspidatum
3. Stem leaves lingulate to triangular-lingulate with more or less erose apex … S. recurvum

Sphagnum affine Renauld & Cardot {AFP} —
Sphagnum bartlettianum Warnst. {AFP} —
Sphagnum carolinianum R. E. Andrus {AFP} —
Sphagnum compactum Lam. and DC. {AFP} —
Sphagnum cribrosum Lindb. {AFP} —
Sphagnum cuspidatum Hoffm. {AFP} —
Sphagnum cyclophyllum Sull. {AFP} —
Sphagnum fitzgeraldii Lesq. & James {AFP} —
Sphagnum henryense Warnst. {AFP} —
Sphagnum lescurii Sull. {AFP} —
Sphagnum macrophyllum Brid. {AFP} —

Sphagnum magniae A.J. Shaw, Aguero, & Nieto-Lugilde {AFP} — Formerly known as the misapplied *S. magellanicum*.
Sphagnum microcarpum Warnst. {AFP} —
Sphagnum molle Sull. {AFP} —
Sphagnum palustre L. {AFP} —
Sphagnum perichaetiale Hampe {AFP} —
Sphagnum portoricense Hampe {AFP} —
Sphagnum recurvum P. Beauv. {AFP} —
Sphagnum strictum Sull. {AFP} —
Sphagnum trinitense Müll. Hal. {AFP} —
Sphagnum tenerum Sull. {AFP} —

TETRAPHIDALES

TETRAPHIDACEAE

Tetraphis pellucida Hedw. —

POLYTRICHALES

POLYTRICHACEAE

1. Lamellae 0-10(12), confined to median portion of blade, often loosely spreading and wavy … Atrichum
1. Lamellae 11-40 occupying most of the leaf width, compact and straight [2]
2. Stems 0.2-6 cm long; leaves 1.5-4 mm long … Pogonatum
2. Stems (2)5-10(70) cm long; leaves 6-12 mm long … Polytrichum

Atrichum

Key adapted from Smith Merrill (2007).
1. Leaves narrow, less than 1 mm wide at midleaf; median leaf cells 8-17(19) µm wide, bulging-mammillose on adaxial surface, often distinctly papillose; lamellae 6-9(12), widely spreading, to 10(-15) cells high … A. angustatum
1. Leaves broader, mostly 1.5-2 mm wide; median leaf cells 18-24 µm wide or more, merely convex, smooth or finely striate papillose; lamellae 0-2(6), ~straight, 0-6(9) cells high [2]
2. Median leaf cells as much as 40(-52) µm in longest dimension … A. crispum
2. Median leaf cells averaging 24 µm, rarely exceeding 27 µm in longest dimension … A. cylindricum

Atrichum angustatum (Brid.) Bruch & Schimp. {AFP} —
Atrichum crispum (James) Sull. {AFP} —
Atrichum cylindricum (F. Weber) G.L. Sm. {AFP} —

Pogonatum

Key adapted from Smith Merrill (2007).
1. Lamellae 25-40, compact, the leaf appearing thick and fleshy; leaf margins entire … P. brachyphyllum
1. Lamellae 11-16, the leaf membranous; leaf margins irregularly notched … P. pensilvanicum

Pogonatum brachyphyllum (Michx.) P. Beauv. {AFP} —
Pogonatum pensilvanicum (Hedw.) P. Beauv. {AFP} —

Polytrichum

Polytrichum perigoniale Michx. {AFP} — The widely used name *P. commune* is probably restricted to northern latitudes or high elevations, potentially excluded from Florida (and this species has inner perichaetial leaves or the perichaetial leaves surrounding the base of the seta strongly tapering and toothed above, the lamellar end-cells in stem leaf transverse section showing deeply grooved or U-shaped lamellar end-cells with thick walls and sometimes ornamented with papillae; vs. in *P. perigoniale* the inner perichaetial leaves surrounding the base of the seta are longer than the stem leaves and forming a irregularly twisted, ribbon-like, hyaline arista at the apex, the lamellar end-cells of stem leaves irregularly furrowed, flattened or oblique without thick walls and papillae) (Kariyawasam 2021).

FUNARIALES

FUNARIACEAE

Key adapted from McIntosh (2007).
1. Capsules immersed … Aphanorrhegma
1. Capsules emergent or long-exserted [2]
2. Capsules inclined and asymmetric; peristome double, endostome well developed to somewhat rudimentary … Funaria
2. Capsules erect and more or less symmetric; peristome either single, rudimentary, or absent [3]
3. Capsules sub-cylindric to narrowly pyriform; most exothecial cells oblong to oblong-linear, rarely isodiametric; calyptra cucullate … Entosthodon
3. Capsules urn-shaped, broadly pyriform, to cupulate; operculum rostrate; most exothecial cells irregularly hexagonal, ± isodiametric; calyptra mitrate to irregularly mitrate, sometimes appearing cucullate … Physcomitrium

Aphanorrhegma

Aphanorrhegma serratum (Wilson & Hook.) Sull. {AFP} —

Entosthodon

Entosthodon drummondii Sull. {AFP} —

Funaria

Key adapted from Miller & Miller (2007).
1. Annulus absent … F. serrata
1. Annulus large, revoluble [2]
2. Endostome segments narrow, less than 1/2 the length of the exostome teeth, or rudimentary … F. flavicans
2. Endostome segments lanceolate, slender pointed, at least 2/3 the length of the exostome teeth … F. hygrometrica

Funaria flavicans Michx. {AFP} —
Funaria hygrometrica Hedw. {AFP} —
Funaria serrata Brid. {AFP} —

Physcomitrium

Key adapted from McIntosh (2007).

1. Stems 2-4(5) mm long; leaves 1.2-2 mm long; seta 2-3 mm long; capsules often shallow and wide-mouthed when dry; suboral cells weakly differentiated, usually consisting of 2-6 rows of irregularly isodiametric cells, spores less than 40 µm … P. collenchymatum
1. Stems 3-15(25) mm long; leaves 2-5 mm long; seta mostly 4-14 mm long; capsules deeper, rarely wide-mouthed when dry; suboral cells strongly differentiated, consisting of 7-12 rows of transverse-elongate cells, spores typically greater than 40 µm … P. pyriforme

Physcomitrium collenchymatum Gier {AFP} —
Physcomitrium pyriforme (Hedw.) Hampe {AFP} —

'DICRANIDS'

GRIMMIALES

GRIMMIACEAE

Grimmia

Grimmia laevigata (Brid.) Brid. {AFP} —

PTYCHOMITRIACEAE

Key adapted from Reese (2007).
1. Plants dull, mostly corticolous; leaves straight or slightly contorted but not crispate when dry, margins mostly obscurely serrulate distally … P. drummondii
1. Plants glossy, mostly on rock; leaves crispate when dry, margins entire … P. incurvum

Ptychomitrium

Ptychomitrium drummondii (Wilson) Sull. {AFP} —
Ptychomitrium incurvum (Schwägr.) Spruce {AFP} —

ARCHIDIALES

ARCHIDIACEAE

Archidium

Key adapted from Spence (2007).
1. Plants ephemeral, minute, stems mostly smaller than 3 mm, not branched by sterile innovations; leaves oblong to lanceolate, apex acute, costa weak in perichaetial and distal leaves, not reaching apex, sometimes absent; synoicous … A. minus
1. Plants perennial, larger, stems 2-20 mm, commonly branched by sterile innovations; leaves ovate-lanceolate to ovate, apex mostly acuminate; costa strong, percurrent to excurrent; autoicous or paroicous [2]
2. Autoicous; antheridia in leafy axillary buds; sporophytes terminal or lateral [3]
2. Paroicous; antheridia typically naked in axes of perichaetial leaves or distal stem leaves below perichaetium, or sometimes 1-2 small bracts present; sporophytes terminal [4]
3. Median cells of perichaetial leaves wide (15-28 µm), distal leaf margins of distal and perichaetial leaves recurved … A. hallii
3. Median cells of perichaetial leaves narrow (9-15 µm), distal leaf margins of distal and perichaetial leaves plane … A. ohioense
4. Perichaetial leaves mostly erect, plane, with serrulate distal margins, median laminal cells narrow (8-13 µm), elongate-rhomboidal, 6-10:1 … A. alternifolium
4. Perichaetial leaves often spreading, plane to recurved, with smooth distal margins, median laminal cells wide (15-35 µm), short-rhomboidal, 3-5:1 … A. tenerrimum

Archidium alternifolium (Dicks. ex Hedw.)Mitt. {AFP} —
Archidium hallii Austin {AFP} —
Archidium minus Renauld & Cardot)Snider {AFP} —
Archidium ohioense Müll. Hal. {AFP} —
Archidium tenerrimum Mitt. {AFP} —

DICRANALES

CALYMPERACEAE

Key adapted from Reese (2007).
1. Leaf margins without elongate hyaline cells; teniolae present (absent in C. tenerum but leaves 1-3 mm long; margins entire and 1- to 2-stratose distally; gemmae borne circling apex of excurrent costa); calyptra persistent, enclosing the capsule and clasping the seta proximally, with vertical fissures ... Calymperes
1. Leaf margins with elongate hyaline cells (without in S. incompletus but leaves 3-8 mm long, margins coarsely toothed and multistratose distally; gemmae adaxial on leaf apex); teniolae absent (rarely present); calyptra deciduous, cucullate, not clasping the seta, without vertical fissures ... Syrrhopodon

Calymperes

Calymperes afzelii Sw. {AFP} —
Calymperes erosum Müll. Hal. {AFP} —
Calymperes palisotii Schwaegr. {AFP} —
Calymperes pallidum Mitt. {AFP} —
Calymperes tenerum Müll. Hal. {AFP} —

Syrrhopodon

Syrrhopodon gaudichaudii Mont. {AFP} —
Syrrhopodon incompletus Schwaegr. {AFP} —
Syrrhopodon ligulatus Mont. {AFP} —
Syrrhopodon parasticus (Brid.) Besch. {AFP} —
Syrrhopodon prolifer Schwägr. {AFP} —
Syrrhopodon texanus Sull. {AFP} —

DICRANACEAE

Key adapted from Ireland, Jr. (2007).
1. Costa broad, occupying 1/3 or more of leaf base [2]
1. Costa narrow, occupying less than 1/3 of leaf base [3]
2. Costa often without stereid cells above the guide cells; leaves acute or with a hyaline awn, the apex entire to serrate ... Campylopus
2. Costa always with stereid cells above and below the guide cells, smooth or nearly so; leaves narrowed to a long-setaceous, often serrulate apex ... Dicranodontium
3. Alar cells not differentiated, or if so, then 1-stratose ... Dicranella
3. Alar cells differentiated, inflated, hyaline or sometimes brown, often 2-stratose ... Dicranum

Campylopus

Campylopus angustiretis (Austin) Lesq. & James {AFP} —
Campylopus arctocarpus (Hornschuck) Mitt. {AFP} —

Campylopus carolinae Grout {AFP} —
Campylopus pyriformis (Schultz) Brid. {AFP} —
Campylopus surinamensis Müll. Hal. {AFP} —

Dicranella
Dicranella heteromalla (Hedw.) Schimp. {AFP} —
Dicranella hilariana (Montagne) Mitt. {AFP} —
Dicranella lindigiana (Hampe) Mitt. {AFP} —
Dicranella varia (Hedw.) Schimp. {AFP} —

Dicranodontium
Dicranodontium denudatum (Brid.) E. Britton {AFP} —

Dicranum
Dicranum condensatum Hedw. {AFP} —
Dicranum flagellare Hedw. {AFP} —
Dicranum scoparium Hedw. {AFP} —

FISSIDENTACEAE
Fissidens
Key adapted from Pursell (2007).
1. Leaves elimbate … Key A
1. Leaves limbate [2]
2. Limbidium on all laminae … Key B
2. Limbidium confined to vaginant laminae [3]
3. Laminal cells smooth, plane, sometimes bulging … Key C
3. Laminal cells mammillose or pluripapillose … Key D

Key A
1. Laminal cells mammillose or papillose [2]
1. Laminal cells smooth, often bulging but not mammillose [5]
2. Laminal cells mammillose or 1-papillose [3]
2. Laminal cells pluripapillose (best seen on vaginant laminae) [4]
3. Mammillae or papillae on all laminae … F. serratus
3. Mammillae present, ± restricted to vaginant laminae … F. taxifolius
4. Papillae restricted to corners of vaginant laminal cells, inconspicuous (best seen in transverse section of leaf) … F. bushii
4. Papillae over lumina of cells, not restricted to vaginant laminae, conspicuous … F. elegans
5. Leaves often 10 or more times as long as wide, fragile when dry; plants feathery in appearance, most often profusely branched; plants usually in quiet waters [6]
5. Leaves usually less than 10 times as long as wide, not fragile when dry; plants not feathery in appearance, unbranched to moderately branched; plants on various terrestrial substrates [7]
6. Costa ending 15-35 cells before leaf apex; sporophytes 1-5, axillary; capsules emergent; peristome teeth reduced, usually truncate … F. fontanus
6. Costa ending 5-15 cells before leaf apex; sporophytes 1-2, terminal; capsules exserted; peristome teeth complete, undivided or divided … F. hallianus
7. Distal part of costae obscured by overlying chlorophyllose cells … F. subbasilaris
7. Costae conspicuous throughout length, not covered by overlying chlorophyllose cells [8]

8. Leaves in transverse section showing an oblongifolius-type of costa in proximal half of leaf … F. santa-clarensis
8. Leaves in transverse section showing either a taxifolius-, bryoides-type or reduced costa in proximal half of leaf [9]
9. Plants 10-50 mm; costa taxifolius-type [10]
9. Plants smaller, 0.6-4.5 mm.; costa bryoides-type or reduced [11]
10. Laminal cells commonly 2-stratose in patches; leaf apex unevenly serrate … F. dubius
10. Laminal cells 1-stratose, rarely 2-stratose in patches; leaf apex regularly crenulate to serrulate to ± denticulate … F. polypodioides
11. Leaf apex rounded to obtuse … F. obtusifolius
11. Leaf apex acute, obtuse-apiculate or obtuse-mucronate [12]
12. Juxtacostal cells in proximal parts of vaginant laminae enlarged, oblong, pellucid … F. amoenus
12. Juxtacostal cells in proximal parts of vaginant laminae not greatly enlarged, oblong, nor pellucid … F. pellucidus

Key B
1. Leaf apex obtuse to rounded, not apiculate, ovate to oblong … F. obtusifolius
1. Leaf apex acute to apiculate (rarely obtuse), leaves mostly lanceolate to oblong [2]
2. Laminal cells small, 6-11 µm, bulging, ± obscure … F. minutulus
2. Laminal cells 6-18 µm, ± plane, distinct … F. zollingeri

Key C
1. Plants usually floating in quiet waters; leaves sometimes 10 times longer than wide … F. hallianus
1. Plants usually not aquatic, but sometimes inunduated by fluctuating water levels; leaves <10 times as long as wide [2]
2. Juxtacostal cells in proximal part of vaginant laminae conspicuously enlarged, ± oblong, pellucid … F. amoenus
2. Juxtacostal cells in proximal part of vaginant laminae not conspicuously enlarged nor pellucid … F. bryoides

Key D
1. Laminal cells mammillose or 1-papillose [2]
1. Laminal cells pluripapillose [3]
2. Limbidium on most leaves; leaf margin, other than limbate parts, crenulate-serrulate to serrulate … F. leptophyllus
2. Limbidium confined to perichaetial leaves; leaf margin, other than limbate parts, serrate, often coarsely so on vaginant laminae … F. serratus
3. Leaf apex ending in a clear sharp cell … F. elegans
3. Leaf apex not ending in a clear sharp cell … F. pallidinervis

Fissidens amoenus Müll. Hal. {AFP} —
Fissidens bryoides Hedw. {AFP} —
Fissidens bushii (Cardot & Thér.) Cardot & Thér. {AFP} —
Fissidens dubius P. Beauv. {AFP} —
Fissidens elegans Brid. {AFP} —
Fissidens fontanus (Bach. Pyl.) Steudl. {AFP} —
Fissidens hallianus (Sull. & Lesq.) Mitt. {AFP} —

Fissidens leptophyllus Mont. {AFP} —
Fissidens minutulus Sull. {AFP} —
Fissidens obtusifolius Wilson {AFP} —
Fissidens pallidinervis Mitt. {AFP} —
Fissidens pellucidus Hornsch. {AFP} —
Fissidens polypodioides Hedw. {AFP} —
Fissidens santa-clarensis Thér. {AFP} — Sometimes conflated with *F. radicans*.
Fissidens serratus Müll. Hal. {AFP} —
Fissidens subbasilaris Hedw. {AFP} —
Fissidens taxifolius Hedw. {AFP} —
Fissidens adianthoides Hedw. {AFP} —
Fissidens zollingeri Mont. {AFP} —

LEUCOBRYACEAE
Leucobryum
Key adapted from Redfearn, Jr. (2007).
1. Plants in low, compact cushions or turfs; stems <1 cm (rarely to 4.5 cm); leaves 2-4(6) mm long, limb subtubulose, erect to wide-spreading, straight, shorter than (rarely equal to) length of sheath … L. albidum
1. Plants in tall, compact cushions or turfs; stems mostly 1-12.5 cm (rarely shorter); leaves mostly 3-9 mm long, limb concave to subtubulose, erect-spreading, sometimes falcate-secund, 1-2(3) times length of sheath … L. glaucum

Leucobryum albidum (P. Beauv.) Lindb. {AFP} —
Leucobryum glaucum (Hedw.) Ångström {AFP} —

OCTOBLEPHARACEAE: Sister to Calymperaceae (Santos & Stech 2017).
Octoblepharum
Octoblepharum albidum Hedw. {AFP} — Peninsula, parts of the panhandle (pantropical). Most common on *Sabal* trunks.

BRUCHIALES
BRUCHIACEAE
Bruchia
Key adapted from Zander (2007).
1. Calyptra papillose [2]
2. Calyptra smooth [3]
2. Spores pitted … B. carolinae
2. Spores reticulate … B. ravenelii
3. Spores reticulate … B. drummondii
3. Spores spinose … B. flexuosa

Bruchia drummondii Hampe ex E. Britton {AFP} —
Bruchia flexuosa (Schwägr.) Müll. Hal. {AFP} —
Bruchia ravenelii Wilson ex Sull. {AFP} —
Bruchia carolinae Austin {AFP} —

Trematodon

Trematodon longicollis Michx. {AFP} —

ERPODIALES

ERPODIACEAE

Key adapted from Pursell & Allen (2007).
1. Leaves arranged in more than 4 rows, ±monomorphic … Erpodium
1. Leaves arranged in 4 rows, distinctly dimorphic, dorsal leaves larger than ventral leaves … Solmsiella

Erpodium

++***Erpodium domingense*** (Spreng.) Müll. Hal. {AFP} — Miami-Dade Co. (Texas, Neotropics). Known only from trunks of *Phoenix*.

Solmsiella

Solmsiella biseriata (Austin) Steere {AFP} — Jefferson Co.

DITRICHALES

DITRICHACEAE

Key adapted from Seppelt (2007).
1. Stems generally elongate, 0.5-4 cm or sometimes longer; capsule, when present, peristomate [2]
2. Leaves lanceolate, ovate-lanceolate or triangular-ovate to obovate, margins recurved; seta reddish purple to yellowish orange, capsule erect to inclined, strongly sulcate when dry … Ceratodon
2. Leaves lanceolate to subulate, margins mostly plane, occasionally weakly recurved; seta pale yellow to yellow to orange to reddish brown, capsule erect to suberect, not sulcate when dry … Ditrichum
3. Leaves loosely erect, subulate-acuminate from a lanceolate base, margins sharply serrate distal to the shoulders, costa excurrent, filling subula; seta stout, arcuate; capsule laterally emergent, pendulous … Eccremidium
3. Leaves erect-spreading or appressed or reflexed-recurved, oblong to lanceolate or subulate, margins plane, serrulate towards apex, costa subpercurrent to excurrent; seta short, erect to curved, not arcuate; capsule erect to inclined, not pendulous … Pleuridium

Ceratodon

Ceratodon purpureus (Hedw.) Brid. {AFP} —

Ditrichum

Key adapted from Seppelt et al. (2007).
1. Leaves long-subulate from a short-ovoid sheathing base; seta to 2.5 cm; in cross section, distal leaf lamina 2-stratose from costa to margins; peristome teeth 300-800 µm … D. pallidum
1. Leaves lanceolate to linear-lanceolate, gradually acuminate; in cross section, distal leaf lamina partially 1-stratose with 2-stratose margins; peristome teeth 200-250 µm … D. pusillum

Ditrichum pallidum (Hedw.) Hampe {AFP} —
Ditrichum pusillum (Hedw.) Hampe {AFP} —

Eccremidium
Eccremidium floridanum H. A. Crum {AFP} — Panhandle.

Pleuridium
Key adapted from Leung Yip (2007).
1. Fertile plants capitate, julaceous proximal to abruptly enlarged and spreading perichaetial leaves; sterile plants julaceous throughout, bearing short, appressed, blunt leaves; cells at shoulder of perichaetial leaves rhombic; costa in transverse section showing a single extensive abaxial stereid band and adaxial guide cells … P. sullivantii
1. Fertile plants erect-patent proximal to gradually differentiated perichaetial leaves; sterile plants with leaves erect-patent, erect to flexuose-spreading; cells at shoulder of perichaetial leaves linear; costa in transverse section with a wider abaxial stereid band, a narrow adaxial stereid band, and central guide cells [2]
2. Perichaetial leaf lamina in transverse section at least partly 2-stratose at shoulder; plants paroicous, antheridia in axils of stem leaves naked or subtended by a membranous bract … P. ravenelii
2. Perichaetial leaf lamina in transverse section uniformly 1-stratose at shoulder; plants autoicous, antheridia enclosed in leafy buds in axils of stem leaves … P. subulatum

Pleuridium subulatum (Hedw.) Rabenh. {AFP} —
Pleuridium ravenelii Austin {AFP} —
Pleuridium sullivantii Austin {AFP} — Known from one collection from 1876.

POTTIALES

EPHEMERACEAE
Ephemerum
Key adapted from Bryan (2007).
1. Distal laminal cells spinulose or spinose … E. spinulosum
1. Distal laminal cells smooth or papillose [2]
2. Distal laminal cells smooth, in mostly diagonal rows … E. cohaerens
2. Distal laminal cells papillose in mostly vertical rows … E. spinulosum

Ephemerum crassinervium (Schwaegr.) Hampe {AFP} —
Ephemerum cohaerens (Hedw.) Hampe {AFP} —
Ephemerum spinulosum Bruch & Schimp. {AFP} —

Micromitrium
Key adapted from Bryan (2007).
1. Capsules cleistocarpous or rarely dehiscent by a ring of differentiated cells distal to the equator; exothecial cells in 2 layers, stomata present; spores 50-84 × 37-67 µm … M. megalosporum
1. Capsules dehiscent by a ring of differentiated cells at or distal to the equator; exothecial cells in 1 layer; stomata absent; spores 28-45 × 20-37 µm [2]
2. Stems (0.2)0.7-2.2(3.7) mm long; leaves erect, lanceolate, margins usually ± incurved distal to the middle; entire or nearly so … M. synoicum
2. Stems usually absent, sometimes to 1 mm long; proximal leaves spreading, distal erect, lanceolate to ligulate, margins plane, usually serrulate distal by protruding cell apices, or almost entire … M. tenerum

Micromitrium megalosporum Austin {AFP} —
Micromitrium synoicum (James) Austin {AFP} —
Micromitrium tenerum (Bruch & Schimp.) Crosby {AFP} —

POTTIACEAE

Acaulon

Acaulon muticum (Hedw.) Müll. Hal. {AFP} —

Ardeuma

Ardeuma aurantiacum (Mitt.) R.H. Zander & Hedd. {AFP} —

Barbula

Key adapted from Zander (2007).
1. Abaxial costa surface cells doubly prorate (i.e., with both ends of rectangular superficial cells protruding) near apex, often with coarse mammillae in rows across the costa; leaf base widened but not sheathing … Hydrogonium
1. Abaxial costa surface cells with crowded, simple or occasionally 2-fid, hollow or solid papillae or smooth, seldom distinctly prorate near apex (and if so then papillae scattered); leaf base weakly sheathing [2]
2. Costa percurrent or ending before the apex; leaf apex entire or apiculate by a smooth or weakly papillose conical cell; specialized asexual reproduction when present by tubers on proximal rhizoids, or if by axillary gemmae then gemmae large and single in the axils; perigoniophores very short-stemmed … Streblotrichum convoluta
2. Costa short-excurrent as a mucro or if percurrent, then leaf acuminate; specialized asexual reproduction when present by multiple axillary gemmae; antheridiate plants long-stemmed … B. unguiculata

Barbula unguiculata Hedw. {AFP} —

Didymodon

Didymodon rigidulus Hedw. {AFP} —

Eucladium

Eucladium verticillatum (Brid.) Bruch & Schimp. {AFP} —

Gymnostomiella

Gymnostomiella orcuttii E.B. Bartram {AFP} —

Hyophila

Hyophila involuta (Hook.) A. Jaeger {AFP} —

Hydrogonium

Hydrogonium consanguineum (Thwaites & Mitt.)Hilp. var. ***cancellatum*** (Müll.Hal.)Jan Kučera {AFP} — (*Barbula indica*, misapplied)
Hydrogonium cruegeri (Sond. ex Müll.Hal.)Jan Kučera {AFP} —

Hyophiladelphus
Hyophiladelphus agrarius (Hedw.) R.H. Zander {AFP} —

Luisierella
Luisierella barbula (Schwägr.) Steere {AFP} —

Plaubelia
Plaubelia sprengelii (Schwegrichen) R. H. Zander {AFP} —

Pleurochaete
Pleurochaete luteola (Besch.) Thér. {AFP} —

Streblotrichum
Streblotrichum convolutum (Hedw.)P.Beauv. {AFP} —

Tortella
Key adapted from Eckel (2007).
1. Dioicous, seldom fruiting; distal margins incurved to subcucullate at the apex, apex obtuse; distal leaf cells 7-11(-14) µm; central strand present or absent; cells on adaxial surface of the costa quadrate and papillose throughout most of their length or mostly or entirely elongate and smooth; stems elongate; plants loosely foliose … T. flavovirens
1. Autoicous, nearly always fruiting; distal margins plane to erect, apex broadly acute; distal leaf cells about 6-7 µm; central strand present; cells on adaxial surface of the costa quadrate and papillose throughout most of its length; stems short; plants typically rosulate, densely foliose … T. humilis

Tortella flavovirens (Bruch.) Broth. {AFP} —
Tortella humilis (Hedw.) Jenn. {AFP} —

Tortula
Key adapted from Zander & Eckel (2007).
1. Sporophytes immersed, capsules cleistocarpic … T. acaulon
1. Sporophytes exserted, capsules stegocarpic [2]
Peristome teeth twisted, very long, filamentous … T. muralis
2. Peristome teeth erect or slightly inclined, irregular, perforated or ± divided into 2 cohering divisions … T. plinthobia

Tortula acaulon (With.)R.H. Zander
Tortula muralis Hedw. {AFP} —
Tortula plinthobia (Sull. & Lesq.) Broth. {AFP} —

Trichostomum
Trichostomum crispulum Bruch

Tuerckheimia
Tuerckheimia svihlae (E. B. Bartram) R.H. Zander {AFP} —

Weissia
Key adapted from Zander (2007).
1. Leaves cucullate, base usually abruptly broadened, with prominent shoulders; costa with adaxial stereid band almost as large as or larger than the abaxial … W. jamaicensis
1. Leaves with channeled or plane apex, base weakly or gradually broadened, lacking distinct shoulders; costa with adaxial stereid band clearly smaller than the abaxial [2]
2. Capsule stegocarpic, operculum falling, peristome present, often rudimentary, or absent … W. controversa
2. Capsule cleistocarpic or at least indehiscent (operculum persistent), rarely fragments of peristome visible in transmitted light [3]
3. Seta usually 0.08-0.15 cm, rhizautoicous, capsule with stomates … W. ludoviciana
3. Seta less than 0.05 cm, cladautoicous, capsule lacking stomates … W. muehlenbergiana

Weissia controversa Hedw. {AFP} —
Weissia jamaicensis (Mitt.) Grout {AFP} —
Weissia ludoviciana (Sull.) W.D. Reese & B.A.E. Lemmon {AFP} —
Weissia muhlenbergiana Swartz) W.D. Reese & B.A.E. Lemmon {AFP} —

SPLACHNOBRYACEAE
Splachnobryum
Splachnobryum obtusum (Brid.) Müll. Hal. {AFP} —

'HYPNIDS'
BARTRAMIALES

BARTRAMIACEAE
Philonotis
Key adatped from Griffin, III (2014).
1. Laminal cells prorulose at proximal end or sometimes at either end on adaxial side … P. fontana
1. Laminal cells prorulose at distal end throughout or sometimes at both ends on abaxial side [2]
2. Laminal cells elongate, 5-20 times longer than wide [3]
2. Laminal cells quadrate to rectangular, <5 times longer than wide [4]
3. Leaves narrowly triangular-lanceolate; laminal cells long, narrow, more than 9:1; prorulae pointed, projecting at extreme distal end of cell; sexual condition autoicous … P. longiseta
3. Leaves triangular- to slightly ovate-lanceolate; laminal cells rectangular, less than 9:1; prorulae rounded, near distal ends or sometimes both ends on abaxial side of cells; sexual condition dioicous … P. marchica
4. Prorulae not conspicuous, sometimes obscure, few; leaf margins plane to revolute, bluntly serrulate; costae percurrent to short-excurrent, distal abaxial surface rough … P. uncinata
4. Prorulae conspicuous, many; leaf margins strongly revolute, sharply serrulate; costae long-excurrent, distal abaxial surface scabrous … P. sphaerocarpa

Philonotis gracillima Ångstr. {AFP} —
Philonotis longiseta (Michx.) E. Britton {AFP} —
Philonotis marchica (Hedw.) Brid. {AFP} —
Philonotis sphaerocarpa (Hedw.) Brid. {AFP} —
Philonotis fontana (Hedw.) Brid. {AFP} —

Philonotis uncinata (Schwägr.) Brid. {AFP} —

HEDWIGIALES

HEDWIGIACEAE

Hedwigia

Hedwigia ciliata (Hedw.) P. Beauv. {AFP} —

SPLACHNALES

MEESIACEAE

Leptobryum

Leptobryum pyriforme (Hedw.) Wilson {AFP} —

SPLACHNACEAE

Splachnum

Splachnum pensylvanicum (Brid.) Grout ex H. A. Crum {AFP} —

BRYALES

BRYACEAE

Key adapted from Spence (2014).

1. Stems usually shorter than 1 cm, julaceous or sometimes gemmiform; leaves usually shorter than 1(-1.5) mm; distal laminal cells (1)3-10 times as long as wide; proximal cells quadrate or short-rectangular; specialized asexual reproduction by bulbils or absent; sexual condition dioicous … Bryum
1. Stems 0.1-6(12) cm, rarely julaceous; leaves 0.2-10 mm; distal laminal cells usually 2-6 times as long as wide; proximal cells quadrate or short- to long-rectangular; specialized asexual reproduction of all types may be present or absent; sexual condition dioicous, synoicous, autoicous, or polyoicous [2]
2. Proximal laminal cells rectangular, 2-4 times as long as wide; filiform leaf axil gemmae sometimes present; capsules nutant to inclined; endostome well developed … Rosulabryum
2. Proximal laminal cells quadrate to short-rectangular, 1-2 times as long as wide; filiform leaf axil gemmae present or absent; capsules erect to suberect; endostome well developed or reduced [3]
3. Stems rosulate; leaves broadly ovate; margins usually serrate distally; filiform leaf axil gemmae absent; endostome reduced … Brachymenium
3. Stems gemmiform to evenly foliate; leaves ovate, ovate-lanceolate, or triangular; margins entire to serrulate distally; filiform leaf axil gemmae sometimes present; endostome well developed or reduced … Gemmabryum

Brachymenium

Brachymenium macrocarpum Cardot {AFP} —

Bryum

Bryum argenteum Hedw. {AFP} —

Gemmabryum

Key adapted from Spence (2014).

1. Specialized asexual reproduction by rhizoidal tubers; stems evenly foliate; leaves imbricate to loosely set, usually slightly twisted when dry … G. apiculatum
1. Specialized asexual reproduction by leaf axil bulbils or brood branchlets, rarely by rhizoidal tubers; stems gemmiform or evenly foliate, often in 2 or more clumps along stem; leaves imbricate [2]
2. Specialized asexual reproduction by leaf axil bulbils, not by rhizoidal tubers; stems gemmiform to evenly foliate, not stringlike when dry; leaves not folded along costa … G. coronatum
2. Specialized asexual reproduction by leaf axil bulbils and rhizoidal tubers; stems slender, stringlike when dry; leaves folded along costa when dry … G. exile

Gemmabryum apiculatum (Schwägr.) J.R. Spence & H.P. Ramsay {AFP} —
Gemmabryum coronatum (Schwägr.) J.R. Spence & H.P. Ramsay {AFP} —
Gemmabryum exile (Dozy & Molk.) J.R. Spence & H.P. Ramsay {AFP} —

Leptostomopsis
Leptostomopsis systylia (Müll.Hal.)J.R. Spence {AFP} — Panhandle, northern peninsula.

Rosulabryum
Key adapted from Spence (2014).
1. Filiform gemmae absent or very rare; rhizoidal tubers red-brown, concolorous with rhizoids … R. capillare
1. Filiform gemmae present in distal leaf axils; rhizoidal tubers, orange, red, or pink, brighter than rhizoids … R. pseudocapillare

Rosulabryum capillare (Hedw.) J.R. Spence {AFP} —
Rosulabryum pseudocapillare (Besch.) Ochyra {AFP} —

MIELCHHOFERIACEAE
Pohlia
Pohlia nutans (Hedw.)Lindb. —

MNIACEAE
Mnium
In FNA (vol. 28), *M. hornum* was reported by McIntosh & Newmaster, but no specimens are known.
Mnium thomsonii Schimp. {AFP} —

Plagiomnium
Plagiomnium ciliare (Müll. Hal.)T.J. Kop. {AFP} —
Plagiomnium cuspidatum (Hedw.) T.J. Kop. {AFP} —
Plagiomnium floridanum R. E. Wyatt & Odrzyk. {AFP} —

RHIZOGONIALES
RHIZOGONIACEAE
Pyrrhobryum
Pyrrhobryum spiniforme (Hedw.) Mitt. {AFP} —

ORTHOTRICHALES

ORTHOTRICHACEAE

Groutiella

Groutiella tomentosa (Hornschuck) Wijk & Margad. {AFP} —
Groutiella tumidula (Mitt.) Vitt. {AFP} —

Macromitrium

Macromitrium richardii Schwägr. {AFP} —

Orthotrichum

Orthotrichum ohioense Sull. & Lesq. — Panhandle, rare.
Orthotrichum pusillum Mitt. — Reported from three collections, rare.

Schlotheimia

Schlotheimia rugifolia (Hook.) Schwaegr. {AFP} —

AULOCOMNIALES

AULACOMNIACEAE

Arrhenopterum

Arrhenopterum heterostichum Hedw. {AFP} —

Aulacomnium

Aulacomnium palustre (Hedw.)Schwägr. {AFP} —

HYPNODENDRALES

RACOPILACEAE

Racopilum

Racopilum tomentosum (Hedw.)Brid. {AFP} —

HYPOPTERYGIALES

HYPOPTERYGIACEAE

Hypopterygium

[x]***Hypopterygium tamarisci*** (Sw.)Brid. ex Müll.Hal. — Alachua Co. (Neotropics). Lime sink. Not documented since 1940s.

HOOKERIALES

PILOTRICHACEAE: The leaves have two divergent costae.

Callicostella

Callicostella pallida (Hornsch.)Ångstr. {AFP} — Peninsula.

Cyclodictyon

Cyclodictyon varians (Sull.)Kuntze {AFP} — Panhandle, N peninsula.

HYPNALES

Figure: Estimated phylogeny of extant Hypnales, see analyses by: Bechteler et al. 2023 (nuclear), Li et al. 2024 (plastid). Black font=contains taxa native to Florida; Gray font=not native, not included.

RUTENBERGIACEAE : Possibly sister to the rest of Hypnales (Bechteler et al. 2023).
Pseudocryphaea
Pseudocryphaea domingensis (Sprengel) W. R. Buck {AFP} —

STEREOPHYLLACEAE
Entodontopsis
Entodontopsis leucostega (Brid.) W. R. Buck {AFP} —

Stereophyllum
Stereophyllum radiculosum (Hook.) Mitt. {AFP} —

FONTINALACEAE
Brachelyma
Brachelyma subulata (P.Beauv.)Cardot {AFP} —

Dichelyma

Dichelyma capillaceum (With.) Myrin {AFP} —

Fontinalis
Fontinalis novae-angliae Sull. {AFP} —
Fontinalis sphagnifolia (Müll. Hal.)Wijk & Margad. {AFP} —
Fontinalis sullivantii Lindb. {AFP} —

PTEROBRYACEAE
Key from Newton (2014)
1. Stem leaf margins revolute; alar cells oblate, well differentiated, regions large, conspicuous; medial laminal cells 1-papillose or rarely smooth … Henicodium
1. Stem leaf margins plane; alar cells quadrate or rectangular, little differentiated, indistinct, or regions in several rows along margin; medial laminal cells smooth or prorate [2]
2. Stems simple or sparsely branched; stem leaves broadly ovate-orbicular, spreading to recurved or squarrose; costae double and short, or single to mid leaf or longer … Jaegerina
2. Stems simple or irregularly pinnate; stem leaves broadly ovate-acuminate or ovate-lanceolate, erect or spreading; costae single, short in proximal leaves, percurrent or short-excurrent in distal leaves … Pireela

Henicodium
Henicodium geniculatum (Mitt.)W.R.Buck {AFP} —

Jaegerina
Jaegerina scariosa (Lorentz)Arzeni {AFP} —

Pireella
1. Stems simple or sparsely branched; branch leaves strongly seriate; distal stipe leaf bases not auriculate or rounded, decurrent; alar cells in 7-14 rows of 2-23 cells, quadrate or short-rectangular, into decurrent wing and along margin … P. cymbifolia
1. Stems branched; branch leaves weakly seriate; distal stipe leaf bases often auriculate, weakly to strongly rounded, not decurrent; alar cells indistinct or (especially in auriculate plants) in 1 or 2 rows of few cells, irregular-quadrate, not reaching margin … P. pohlii

Pireella cymbifolia (Sull.)Cardot {AFP} —
Pireella pohlii (Schwägr.)Cardot {AFP} —

CRYPHAEACEAE
Key adapted from Reese & Zander (2014)
1. Perichaetia lateral; peristome double … Cryphaea
1. Perichaetia terminal; peristome single … Schoenobryum

Cryphaea
Key adapted from Reese (2014)
1. Leaf costae percurrent or nearly so; apices acuminate C. nervosa
1. Leaf costae not percurrent; apices acute to short-acuminate [2]
2. Inner perichaetial leaves 2.5-2.8 mm, awns 1/2 length expanded portion of leaf; leaf costae tip not 2-fid … C. filiformis

2. Inner perichaetial leaves 1.6-1.9 mm, awns 1/5 -1/4 length expanded portion of leaf; leaf costae tip ± 2-fid … C. glomerata

Cryphaea filiformis (Hedw.) Brid. {AFP} —
Cryphaea glomerata Schimp. ex Sull. {AFP} —
Cryphaea nervosa (Hook. & Wilson) Müll. Hal. {AFP} —

Schoenobryum
Schoenobryum concavifolium (Griff.) Gangulee {AFP} —

LEUCODONTACEAE
Leucodon
Leucodon julaceus (Hedw.) Sull. {AFP} —

TAXIPHYLLACEAE: Once placed in the Hypnaceae (Li et al. 2024).
Taxiphyllum
Key adapted from Ireland, Jr. (2014).
1. Stems julaceous to subjulaceous; alar cells 5-12 in marginal row … T. cuspidifolium
1. Stems complanate-foliate; alar cells 1-8 in marginal row [2]
2. Leaves ovate to broadly ovate-lanceolate, 0.8-1.6 mm wide; apices often acuminate and twisted; margins plane or rarely recurved; laminal cells smooth … T. alternans
2. Leaves ovate, oblong-lanceolate, or rarely narrowly ovate, 0.3-0.6 mm wide; apices acute to acuminate, rarely subobtuse, not twisted; margins narrowly recurved almost to apex; laminal cells smooth or sometimes prorulose at distal ends on abaxial surface … T. taxirameum

Taxiphyllum alternans (Cardot)Z. Iwats. {AFP} —
Taxiphyllum cuspidifolium (Cardot)Z. Iwats. {AFP} —
Taxiphyllum taxirameum (Mitt.) M. Fleisch. {AFP} —

ANOMODONTACEAE
Anomodon
Key adapted from Granzow-de la Cerda (2014).
1. Branch leaves long-lanceolate; apices ending in hair-point or subulalike … A. rostratus
1. Branch leaves ligulate; apices rounded, obtuse, acute, or apiculate, not ending in hair-point or subula-like [2]
2. Plants small; stems less than 1 mm thick when dry; branch leaves less than 2.1 mm; apices often broken off; costa ending much before apex, obscured by laminal cells distally A. tristis
2. Plants small to large; stems usually more than 0.8 mm thick when dry; branch leaves sometimes greater than 2 mm; apices intact; costa ending near apex, not or rarely obscured by laminal cells distally [3]
3. Stems irregularly pinnate, secondary branches attenuate at apices; perichaetia never present beyond distalmost branching points; leaves slightly narrowed mid leaf; apices acute, sometimes obtuse or slightly apiculate; margins sometimes denticulate at apex; abaxial costa cells smooth … A. attenuatus
3. Stems not pinnate, secondary branches not attenuate, often slightly clavate at apices; perichaetia on terminal branches, beyond distalmost branching points; leaves abruptly narrowed mid leaf; apices rounded; margins entire at apex; abaxial costa cells with rounded-simple papillae in rows … A. minor

Anomodon attenuatus (Hedw.) Huebener {AFP} —
Anomodon minor (Hedw.) Lindb. {AFP} —
Anomodon rostratus (Hedw.) Schimp. {AFP} —
Anomodon tristis (Ces.) Sull. & Lesq. Ex Sull. {AFP} —

NECKERACEAE : Leptodontaceae was subsumed into Neckeraceae (Enroth et al. 2022).
1. Stem leaves appressed to imbricate when dry … Forsstroemia
1. Stem leaves spreading when dry … Neckeropsis

Forsstroemia
Forsstroemia trichomitria (Hedw.) Lindb. {AFP} —

Neckeropsis
Key from Sastre-De Jesús (2014).
1. Leaves spreading, flat when moist; bases not auriculate … N. disticha
1. Leaves spreading to squarrose, undulate when moist; bases strongly auriculate … N. undulata

Neckeropsis disticha (Hedw.) Kindb. {AFP} —
Neckeropsis undulata (Hedw.) Reichardt {AFP} —

BRACHYTHECIACEAE
Key adapted from Ignatov (2014).
1. Epiphytes on trees, rarely epilithic; opercula rostrate [2]
1. Terrestrial or epilithic, rarely on trees; opercula rostrate to conic [4]
2. Stems creeping and pendent flexuose; leaves erect-spreading to squarrose … Zelometeorium
2. Stems creeping, ascending, erect, or arching; leaves appressed, erect, patent, spreading, or rarely squarrose [3]
3. Leaves 0.4-0.7 mm long, appressed when dry, spreading when moist; laminal cells 1.5-3 times as long as wide … Clasmatodon
3. Leaves 0.7-1.3 mm long; laminal cells 8-12 times as long as wide … Homalotheciella
4. Operculum conic to short-rostrate [5]
4. Operculum rostrate [6]
5. Autoicous or dioicous; mostly light green, yellowish, brownish, to whitish; leaf margins serrate to serrulate, occasionally entire; setae smooth (sometimes rough outside of FL) … Brachythecium
5. Autoicous; deep green, brownish, to reddish; leaf margins coarsely serrate, serrate distally, to subentire; setae rough … Sciuro-hypnum
6. Setae smooth [7]
6. Setae rough [8]
7. Stems usually julaceous; leaves ± imbricate when dry or moist … Bryoandersonia
7. Stems not julaceous; leaves spreading to erect, at least when moist … Rhynchostegium
8. Branch leaf laminal cells strongly prorate; stem leaves ovate … Bryhnia
8. Branch leaf laminal cells not or occasionally prorate; stem leaves broadly triangular or ovate to ovate-lanceolate … Oxyrrhynchium

Brachythecium
Brachythecium acuminatum (Hedw.) Austin {AFP} —

Brachythecium laetum (Brid.) Schimp. {AFP} —
Brachythecium rotaeanum De Not. {AFP} —

Bryhnia
Bryhnia graminicolor (Brid.) Grout {AFP} —

Bryoandersonia
Bryoandersonia illecebra (Hedw.) H. Rob. {AFP} —

Clasmatodon
Clasmatodon parvulus (Hampe) Sull. {AFP} —

Homalotheciella
Homalotheciella subcapillata (Hedw.) Broth. {AFP} —

Oxyrrhynchium
Oxyrrhynchium hians (Hedw.) Loeske {AFP} —

Rhynchostegium
Rhynchostegium serrulatum (Hedw.)A. Jaeger {AFP} —

Sciuro-hypnum
Sciuro-hypnum plumosum (Hedw.)Ignatov & Huttunen {AFP} —

Zelometeorium
Zelometeorium patulum (Hedw.)Manuel {AFP} —

METEORIACEAE
Meteorium
Meteorium nigrescens (Hedw.)Dozy & Molk. {AFP} — Previously placed in (and the type species of) *Papillaria*, which has since been conserved with a different type species..

HYPNACEAE
Chryso-hypnum
Chryso-hypnum diminutivum (Hampe)W.R. Buck {AFP} —

Hypnum
Hypnum imponens Hedw. {AFP} —
Hypnum lindbergii Mitt. {AFP} —

Isopterygium
Isopterygium tenerum (Sw.)Mitt. {AFP} —

Platygyrium
Platygyrium repens (Brid.)Schimp. {AFP} —

Pylaisia
Pylaisia intricata (Hedw.)Schimp. {AFP} —
Pylaisia selwynii Kindb. {AFP} —

Vesicularia
Vesicularia vesicularis (Schwagrichen) Broth. {AFP} —

SEMATOPHYLLACEAE
Key adapted from Schofield (2014).
1. Laminal cells 1-seriate multipapillose ... Taxithelium
1. Laminal cells smooth or rarely 1-papillose [2]
2. Alar region in 1 row, supra-alar cells not apparently differentiated Acroporium
2. Alar region in 1-several rows; supra-alar cells differentiated [3]
3. Capsules erect to suberect ... Donnellia
3. Capsules usually inclined ... Sematophyllum

Acroporium
Acroporium smallii (R. S. Williams) H. A. Crum & L. E. Anderson {AFP} —

Brittonodoxa
Brittonodoxa subpinnatum (Brid.) W.R. Buck et al. {AFP} —

Donnellia
Donnellia commutata (Müll. Hal.) W. R. Buck {AFP} —

Sematophyllum
Sematophyllum adnatum (Michx.) E. Britton {AFP} —
Sematophyllum demissum (Wilson) Mitt. {AFP} —

Taxithelium
Taxithelium planum (Brid.) Mitt. {AFP} —

INCERTAE SEDIS
Schwetschkeopsis : Near *Lescuraea* and *Anomodon* (Bechteler et al. 2023).
Schwetschkeopsis fabronia (Schwägr.) Broth.. {AFP} —

HYLOCOMIACEAE
Climacium : Embedded in Hylocomiaceae, and once placed in its own family (Li et al. 2024).
Climacium americanum Brid. {AFP} —

Thelia
Thelia asprella (Schimp.) Sull. & Lesq {AFP} —
Thelia hirtella (Hedw.) Sull. & Lesq. {AFP} —
Thelia lescurii Sull. {AFP} —

HERPETINEURACEAE : Previously included in Anomodontaceae, but closer to Symphyodontaceae (Li et al. 2024).

Herpetineuron
Herpetineuron toccoae (Sull. & Lesq. ex Sull.) Card. {AFP} —

AMBLYSTEGIACEAE
Key adapted from Hedenäs (2014)
1. Limbidia usually conspicuous … Platylomella
1. Limbidia absent [2]
2. Stem leaves recurved, wide-spreading, or squarrose, at least along some shoot portions; acumina when differentiated distinctly furrowed [3]
2. Stem leaves not recurved, wide-spreading, or squarrose; acumina plane or almost so [5]
3. Stem leaf costae usually double, short, terminal abaxial spine often present; distal laminal cells usually prorate distally on dorsal side … Campylophyllum
3. Stem leaf costae single, long, sometimes double and shorter in some (rarely all) leaves, terminal abaxial spine absent; distal laminal cells smooth [4]
4. Widest alar cells 10-18(21) µm wide; paraphyllia absent; sexual condition dioicous; endostome cilia nodose or partially appendiculate … Campyliadelphus
4. Widest alar cells 14-25 µm wide; paraphyllia often present; sexual condition autoicous; endostome cilia nodose … Pseudocampylium
5. Stem leaves to 1 mm [6]
5. Stem leaves longer than 1 mm [7]
6. Capsules arcuate, inclined to horizontal; exostome teeth well developed, external surface cross striolate basally; endostome basal membranes present, cilia usually well developed; growing on soil, rock, or wood … Amblystegium
6. Capsules straight, erect; exostome teeth short, papillose throughout; endostome basal membranes absent, cilia absent; usually epiphytes on trees, sometimes rotten wood … Anacamptodon
7. Stem leaf alar regions distinctly delimited … Drepanocladus
7. Stem leaf alar regions indistinctly or gradually delimited [8]
8. Stem leaf 1-2 mm long, ascending, costae usually ending in distal acumen to percurrent; medial laminal cells (9)13-65(67) µm long … Hygroambylstegium
8. Stem leaf 2.5-6 mm long, spreading, costae to 3/5 -3/4 leaf length; medial laminal cells 42-117 µm long … Leptodictyum

Amblystegium
Amblystegium serpens (Hedw.) Schimp. {AFP} —

Anacamptodon
Anacamptodon splachnoidea (Froel. ex Brid.) Brid. {AFP} —

Campyliadelphus
Campyliadelphus chrosphyllus (Brid.) Kanda {AFP} —

Campylophyllum
Campylophyllum hispidulum (Brid.) Hedenäs {AFP} —

Drepanocladus
Drepanocladus polygamus (Schimp.) Hedenäs {AFP} —

Hygroamblystegium
Hygroamblystegium varium (Hedw.) Mönk. {AFP} —

Leptodictyum
Leptodictyum riparium (Hedw.) Warnst. {AFP} —

Platylomella
Platylomella lescurii (Sull.) A. L. Andrews {AFP} —

Pseudocampylium
Pseudocampylium radicale (P. Beauv.) Vanderp. & Hedenäs {AFP} —

ENTODONTACEAE
Entodon
Key adapted from Buck (2014)
1. Branches terete-foliate … E. seductrix
1. Branches complanate-foliate [2]
2. Setae yellow … E. macropodus
2. Setae reddish [3]
3. Leaf apices broadly acute; margins entire to subentire or with 1 or 2 teeth at extreme apex … E. challengeri
3. Leaf apices gradually acute; margins serrulate and often notched distally … E. cladorrhizans

Entodon challengeri (Paris) Cardot {AFP} —
Entodon cladorrhizans (Hedw.) Müll. Hal. {AFP} —
Entodon macropodus (Hedw.) Müll. Hal. {AFP} —
Entodon seductrix (Hedw.) Müll. Hal. {AFP} —

THUIDIACEAE : *Leskea* and *Haplocladium* are probably best placed in an expanded Thuidiaceae (Li et al. 2024).

Haplocladium
Key from Magill (2014)
1. Stem leaves 2-plicate basally; paraphyllia filamentous, infrequently branched; branch leaves somewhat distant … H. microphyllum
1. Stem leaves not plicate; paraphyllia filamentous to subfoliose, frequently branched; branch leaves crowded … H. virginianum

Haplocladium microphyllum (Hedw.) Broth. {AFP} —
Haplocladium virginianum (Brid.) Broth. {AFP} —

Leskea
Key from Redfearn, Jr. (2014)
1. Branch leaves 0.2-0.5 mm; distal laminal cells 4-7 µm … L. australis
1. Branch leaves 0.4-0.8 mm; distal laminal cells 6-11 µm [2]

2. Branches ± tightly foliate; leaf apices acute or sometimes narrowly blunt; leaves ± 2-plicate; margins irregularly revolute proximally, especially when dry; endostome segments as long as exostome teeth; operculum ± pointed … L. gracilescens
Branches loosely foliate; leaf apices rounded-obtuse to sometimes acute or acuminate; leaves not plicate (stem leaves occasionally slightly plicate); margins not revolute; endostome segments less than 1/3 exostome teeth length; operculum blunt … L. obscura

Leskea australis Sharp {AFP} —
Leskea gracilescens Hedw. {AFP} —
Leskea obscura Hedw. {AFP} —

Pelekium: *Cyrto-hypnum* is subsumed under *Pelekium*.
Key adapted from Buck (2014)
1. Stems 1-pinnate; branch leaves 0.5 mm long, strongly incurved when dry … P. involvens
1. Stems 2-pinnate (sometimes inconspicuous); branch leaves 0.1-0.3 mm long, erect to somewhat incurved when dry [2]
2. Stems and branches papillose … P. pygmaeum
2. Stems and branches smooth [3]
3. Stems weakly and irregularly 2-pinnate; paraphyllia cells 2:1; setae smooth; perichaetial leaf margins serrulate distally … P. minutulum
3. Stems regularly 2-pinnate; paraphyllia cells 1:1; setae papillose; perichaetial leaf margins ciliate … P. schistocalyx

Pelekium involvens (Hedw.)Touw {AFP} —
Pelekium minutulum (Hedw.)Touw {AFP} —
Pelekium pygmaeum (Schimp.)Touw {AFP} —
Pelekium schistocalyx (Müll. Hal.)Touw {AFP} —

Thuidium
Key adapted from Crum (2014)
1. Stem leaf apices short-pointed, margins plane or sometimes reflexed basally; distal laminal cells appearing 1-3-papillose because papillae 2-fid … T. alleniorum
1. Stem leaf apices acuminate, margins revolute throughout; laminal cells coarsely 1-papillose, not appearing multipapillose, papillae sometimes 2-fid … T. delicatulum

Thuidium alleniorum Austin {AFP} —
Thuidium delicatulum (Hedw.) Schimp. {AFP} —

TRACHEOPHYTES

1. Stems with microphylls, with a singular vascular trace or vein, rarely branching, lacking a leaf gap … Lycopods
1. Stems with megaphylls, with branched veins, with a leaf gap … Euphyllophytes

LYCOPODIOPSIDA

1. Leaves all basal, linear, lax, 10-50 cm long; sperm cells with ~10-30 flagella; heterosporous (female megaspores larger than male microspores) … Isoetaceae
1. Leaves cauline, often scale-like, stiff, 0.1-2 cm long; sperm cells with 2 flagella; heterosporous or homosporous [2]
2. Homosporous; leaf without a ligule; strobili terete … Lycopodiaceae
2. Heterosporous, megaspores 200-1200 µm wide, microspores 20-60 µm wide; leaf with a small ligule at the base on the adaxial side; strobile usually 4-angled or flattened … Selaginellaceae

LYCOPODIALES

LYCOPODIACEAE

1. Terrestrial; horizontal stems present; upright shoot systems alternating along rhizome; roots originating and emerging at same place; sporangia borne in axils of highly modified, reduced sporophylls aggregated into upright or nodding or pendent strobili; spores reticulate or rugulate … Lycopodiella
1. Epiphytic; horizontal stems absent; upright parts of shoots clustered; roots traveling in stem cortex some distance before emerging; sporangia borne in axils of unmodified leaves; spores pitted to small-grooved … Phlegmariurus dichotomus

Lycopodiella

1. Upright shoots with numerous branches; leaves linear to needlelike; strobili 4-10 mm long, nodding or pendent at lateral shoot tips (Palhinhaea) … L. cernua
1. Upright shoots unbranched or sparingly branched; leaves linear-lanceolate to lanceolate; strobili 10-90 mm long, erect on upright shoots [2]
2. Horizontal stems with lateral leaves larger than median leaves and lying flat on substrate, the leaves entire; peduncles with scattered, scalelike leaves, rachis clearly visible; sporophylls shorter than leaves of peduncles (Pseudolycopodiella) … L. caroliniana
2. Horizontal stems with monomorphic, supine, or arching leaves, the leaves entire or with marginal ciliate teeth; peduncles leafy with crowded unmodified leaves, rachis hidden; sporophylls subequal or longer than leaves of peduncles (Lycopodiella s.str.) [3]
3. Horizontal stem leaves with marginal teeth absent or sparse; peduncular leaves mostly strict to appressed; strobilus 3-4(5) mm wide, 0-2 mm thicker than upright shoot … L. appressa
3. Horizontal stem leaves commonly with marginal teeth; peduncular leaves mostly spreading to ascending; strobilus (5)6-26 mm wide, 3-6 mm thicker than upright shoot [4]
4. Horizontal stems (excluding leaves) (1.5)2.2-4.5 mm wide; peduncle (2.1)2.4-3.7 mm wide; largest leaves 0.5-0.7(1.2) mm wide [5]
4. Horizontal stems (excluding leaves) 0.8-2.2(2.7) mm wide, prostrate to weakly arching; peduncle 1-2(2.3) mm wide; largest leaves 0.8-1.8 mm wide [6]
5. Horizontal stems strongly arching; peduncle erect; sporophylls spreading; strobilus (8)10-18 mm wide … L. alopecuroides
5. Horizontal stems weakly arching; peduncle lax; sporophylls ascending; strobilus 4-11(15) mm wide … L. ×copelandii
6. Sporophylls ascending; strobilus 5-10(12) mm wide … L. ×brucei
6. Sporophylls divergent to spreading; strobilus (11)13-26 mm wide [7]
7. Horizontal stems prostrate; peduncles 1(2), stiffly erect; aerenchyma absent in stems … L. prostrata
7. Horizontal stems somewhat arching; peduncles (1)2-3(4), flexible; aerenchyma well developed in stems … L. alopecuroides × L. prostrata

Lycopodiella alopecuroides (L.)Cranfill {AFP} —
Lycopodiella appressa (Chapm.)Cranfill {AFP} —
Lycopodiella* ×*brucei Cranfill (*L. appressa* × *L. prostrata*) {AFP} —
Lycopodiella caroliniana (L.)Pic.Serm. {AFP} —
Lycopodiella cernua (L.)Pic.Serm. {AFP} — CE.
Lycopodiella* ×*copelandii (Eiger)Cranfill (*L. alopecuroides* × *L. appressa*) {AFP} —
Lycopodiella prostrata (R.M.Harper)Cranfill {AFP} —

Phlegmariurus
[x]***Phlegmariurus dichotomus*** (Jacq.)W.H.Wagner {AFP} — SE. Collier Co. Canopied sloughs.

ISOETALES

ISOETACEAE
Isoetes
1. Megaspores of variable size, shape, and ornamentation; sterile hybrids … Isoetes hybrids
1. Megaspores of uniform size, shape, and ornamentation; fertile species [2]
2. Velum covering 80-100 percent of sporangium; megaspores 250-500 um wide, with low, broad tubercles or ridges, girdle smooth; 2n=22 [3]
2. Velum covering 10-30(50) percent of sporangium; megaspores 400-610 um wide, cristate to reticulate with thin ridges, girdle obscure; 2n=44 or 66 [4]
3. Leaves 1.25-1.5 mm wide; megaspores ca. 500 um wide, with dense ornamentation pattern of small tubercles … I. flaccida var. chapmanii
3. Leaves ca. 1.0 mm wide; megaspores 250-450 um wide, with coarse ornamentation pattern of broad tubercles or loosely interconnected vermiform mounds … I. flaccida var. flaccida
4. Megaspores (460)575-610 um wide, cristate to reticulate with thick-walled reticulate ornamentation; 2n=66 … I. boomii
4. Megaspores 400-580 um wide, distinctly reticulate with dense pattern of tall, short-crested, almost echinate muri; 2n=44 [5]
5. Leaves 1-2.5 mm wide at mid-length, dark green to bright green or dull olive-green with whitish to pale brownish green bases; megaspore ornamentation moderately to evenly reticulate with few or no stand-alone short muri or tubercles, usually with equatorial band absent or a plain band with few spines … I. appalachiana
5. Leaves 0.5-1.5 mm wide at mid-length, blackish-green to olive green in age or upon drying; megaspore ornamentation broken-reticulate to almost spiny with numerous tubercles often with short, mostly stand-alone muri or with broken ridges, usually with an equatorial band of numerous spines … I. hyemalis

Isoetes appalachiana D.F.Brunt. & D.M.Britton {AFP} — SE.
Isoetes boomii Luebke {AFP} — SE.
Isoetes flaccida Shuttlew. ex A.Braun {AFP} —
Isoetes hyemalis D.F.Brunt. {AFP} — SE.

SELAGINALES

SELAGINELLACEAE
Selaginella
1. Leaves on aerial stems monomorphic, not in distinct ranks, axillary leaves absent at branching points (Bryodemsa or sect. Homoeophyllae or subgenus Tetragonostachys) [2]

1. Leaves on aerial stems dimorphic, arranged in 4 ranks (2 median, 2 lateral), axillary leaves present at branching points [3]
2. Underground (rhizomatous) stem leaves not scalelike; rhizophores mostly aerial; sporophyll base pubescent; leaf and sporophyll apices often puberulent … S. arenicola var. acanthonota
2. Underground (rhizomatous) stem leaves scalelike; rhizophores mostly subterranean; sporophyll base glabrous; leaf and sporophyll apices glabrous … S. arenicola var. arenicola
3. Stems and branches generally stiff; megaspores tuberculate to verrucate, often interconnected, or smooth; microspores verrucate, blunt-spiny, cristate, and lamellate; non-native, escaped from cultivation (Didiclis or ser. Sarmentosae) [4]
3. Stems and branches generally weak, lax; megaspores Stachygynandrum-type of more or less open and irregular meshes or few tuberculate on surface; microspores baculate, blunte spiny, verrucate, papillate, or coarse etc.; native species (Selaginella s.str.) [6]
4. Stems covered with stiff hairs; base of lateral leaves truncate or rounded; median leaves long-acuminate to bristled … S. braunii
4. Stems glabrous; base of lateral leaves with auricles; median leaves obtuse to acuminate [5]
5. Plants with rather short-branched, prostrate or creeping stems; median leaves 2.2-3.5 mm long, 1.2-1.8 mm wide, apex acuminate … S. uncinata
5. Plants with large aerial, erect, vinelike (high climbing) stems; median leaves 2.4-2.7 mm long, 0.9-1.3 mm wide, apex rounded or obtuse … S. willdenowii
6. Plant forming a mat usually <6 cm wide; lateral leaves 1-1.5 mm long, 0.5-0.9 mm wide; median leaves linear or narrowly lanceolate, 0.7-1.2 mm long, 0.3-0.4 mm wide; apex long-bristled … S. eatonii
6. Plant forming a mat usually >6 cm wide; lateral leaves 1.3-2.3 mm long, 0.7-1.6 mm wide; median leaves ovate to ovate-lanceolate, 1-2 mm, 0.4-0.8 mm wide; apex acute to acuminate; [7]
7. Leaf margins undifferentiated in color or with 1(2) rows of slightly paler cells; stomates of lateral leaves scattered over adaxial surface; lateral branches usually prostrate; microspores verrucose … S. apoda
7. Leaf margins with 3-5 rows of transparent cells; stomates of lateral leaves confined to midrib region on adaxial surface; lateral branches usually ascending to erect; microspores smooth … S. ludoviciana

Selaginella apoda (L.)C.Morren var. ***apoda*** {AFP} —
Selaginella arenicola Underw. var. ***acanthonota*** (Underw.)Waterfall — Sometimes treated as a subspecies or species, but "In less extreme condition [*acanthonota* and *arenicola*] seem to intergrade imperceptibly and to be poorly differentiated" (Clausen 1946).
Selaginella arenicola Underw. var. ***arenicola*** {AFP} —
Selaginella eatonii Hieron. ex Small {AFP} — Accepted as a species by Buck (1978); sometimes treated as a variety of *S. armata*. SE.
Selaginella ludoviciana A.Braun {AFP} — Hybrids with *S. apoda* very rarely form apparently and these have a high proportion of aborted spores (Somers & Buck 1975; Buck & Lucansky 1976); sometimes treated as a variety of *S. apoda*.
^*Selaginella uncinata* (Desv. ex Poir.)Spring {AFP} —
^*Selaginella willdenowii* (Desv. ex Poir.)Baker {AFP} —

EUPHYLLOPHYTES

1. Dispersing by haploid spores (homosporous, or heterosporous in Salviniales) that germinate into tiny, free-living, usually photosynthetic gametophyes; chloroplasts in epidermal cells; bluish anthocyanins lacking; sperm cells with ~20-100 flagella … Ferns
1. Dispersing primarily by seeds with diploid embryos that germinate into free-living, usually photosynthetic sporophytes; heterosporous; maternal spore retained on plant, paternal spore dispersed as pollen; epidermal chloroplasts restricted to guard cells; bluish anthocyanins present; sperm cells without flagella in most, or with >100 flagella in some gymnosperms; … Spermatophytes

POLYPODIOPSIDA

(ferns, Monilophyta, Pteridopsida)

Many ferns have highly divided leaves. The pinnae are the first division (analogous to the leaflet of a pinnately compound leaf). Pinnae can be subdivided into pinnules (leaflets of bipinnatetly compound leaf). Pinnules can be subdivided into pinnulets. Pinnulets may be further dissected or divided.

Figure: Estimated phylogeny of extant ferns, see analyses by: Nitta et al. 2022. Black font=contains taxa native to Florida; Asterisk=introduced to Florida; Gray font=not native, not included.

EQUISETALES

EQUISETACEAE

Equisetum

1. Erect stem usually unbranched; leaf sheath ridges not convex; stomata in 1 line … E. praealtum
1. Erect stem usually with 2-6 branches per node; leaf sheath ridges convex; stomata in (1)2(3) lines … E. ramosissimum

Equisetum praealtum Raf. {AFP} — Often treated as an infraspecific (as *affine*) of *E. hyemale*. Phylogeny available with a few samples utilizing 3 plastid loci (Christenhusz et al. 2019).
****Equisetum ramosissimum*** Desf. {AFP} —

OPHIOGLOSSALES

OPHIOGLOSSACEAE

1. Leaves mostly pinnately divided or lobed, veins free, margins entire to dentate or lacerate; sporangial clusters pinnately branched, sporangia sessile or terminating short stalks … Botrychium
1. Leaves undivided or palmately lobed, veins anastomosing, margins entire; sporangial clusters with sporangia embedded in compact linear spikes … Ophioglossum

Botrychium: The trophophore is the sterile, green, mainly photosynthetic part of the leaf, and the sporophore is the sporulating part of the leaf.

1. Petiole of fertile leaf long-exserted from the ground, the sterile green branches subsessile and attached at the base of the rachis of the fertile blades; leaves generally finely dissected with the pinnules mostly lanceolate; leaves present mostly Mar-Oct (Botrypus) … B. virginianum
1. Petiole of fertile leaf short, the rachis of the sterile green blade long and forking distant from where the base of the rachis of the fertile blade; leaves moderately dissected with the pinnules mostly suborbicular, elliptic, or rounded; leaves present year-round or present mostly Oct-Apr (Sceptridium) [2]
2. Roots pale or yellowish, up 30 main roots; leaves prostrate or nearly so, present mostly Oct-Apr, commonly 2 per plant; sporophore stalks and midrib broadly flattened, fleshy; leaves … B. lunarioides
2. Roots dark or brownish, up to 15 main roots; leaves erect to ascending, present year-round, commonly 1-2 per plants; sporophore stalks and midrib only slightly flattened, not fleshy [3]
3. Basal pinnae remotely alternate; pinnule venation nearly like ribs of fan but with short midrib; blades dull gray-green … B. jenmanii
3. Basal pinnae mostly subopposite; pinnule venation pinnate, with strong midrib; blades bluish green or green to dark green [4]
4. Trophophore usually 2-3-pinnate, herbaceous, green in winter, pinnae to 7 pairs, horizontal, pinnules elongate and nearly parallel-sided, obliquely lanceolate to narrowly lanceolate; sporophores 1-2-pinnate, 2-3 times as long as trophophore … B. biternatum
4. Trophophore usually 3-4-pinnate, leathery, green to bronze in winter, pinnae to 10 pairs, slightly ascending, pinnules usually obliquely angular–trowel-shaped to widely trowel-shaped to obliquely round-lanceolate to ovate and pointed, margins denticulate to lacerate to coarsely cut; sporophores 2-3-pinnate, 15.-2.5 times as long as trophophore … B. dissectum

Botrychium biternatum (Savigny)Underw. {AFP} — In the ISSR analyses by Cao & Hauk (2022), all samples of *B. dissectum* were from North Carolina northward and those of *B.*

biternatum were from further south (including Florida); the two Florida samples formed a separate clade and were implicated as a possible distinct taxon ("bayou").

Botrychium dissectum Spreng. — Said to be often sympatric with *B. biternatum*. Sometimes subsumed under *B. biternatum*.

Botrychium jenmanii Underw. {AFP} —

Botrychium lunarioides (Michx.)Sw. {AFP} —

Botrychium virginianum (L.)Sw. {AFP} —

Ophioglossum

1. Epiphyte, lax or pendent; sterile leaf simple or palmately lobed [2]
1. Terrestrial, erect; sterile [3]
2. Sterile blade palmately lobed (young leaves sometimes unlobed) (Cheiroglossa) ... O. palmatum
2. Sterile blade linear, sometimes forked (Ophioderma) ... O. pendulum
3. Stems spheric, cormlike, fleshy, 3-12 mm wide; leaves arising from deep cavity in top of stem; sterile blades usually lying flat on ground, deltate to cordate ... O. crotalophoroides
3. Stems upright, 1-5(10) mm wide; leaves arising at top of stem; sterile blades erect to spreading, mostly ovate to lanceolate [4]
4. Sterile blade veins forming only branching or nonbranching, free, included veinlets within larger areoles ... O. petiolatum
4. Sterile blade veins in larger leaves forming small areoles within larger areoles [5]
5. Roots 0.5-1.5 mm wide; sterile blades often folded, ovate to ovate-lanceolate, to 10 cm long, to 4.5 cm wide; sporophore (including stalk) 1.3-2.5 times as long as sterile blade; dried blades uniformly green without pale central band ... O. engelmannii
5. Roots 0.2-0.8 mm wide; sterile blades plane, ovate to lanceolate, to 4.5 cm long, to 1.7 cm wide; sporophore (including stalk) 2-6 times length of sterile blade; dried blades commonly with pale central band ... O. nudicaule

Ophioglossum crotalophoroides Walter {AFP} —

Ophioglossum engelmannii Prantl {AFP} —

Ophioglossum nudicaule L.f. {AFP} —

Ophioglossum palmatum L. {AFP} — SE.

****Ophioglossum pendulum*** L. {AFP} —

Ophioglossum petiolatum Hook. {AFP} —

PSILOTALES

PSILOTACEAE

Psilotum

Psilotum nudum (L.)P.Beauv. {AFP} —

POLYPODIIDAE

(Leptosporangiates)

OSMUNDALES

OSMUNDACEAE

1. Sterile leaves 2-pinnate, nearly all pinnules unlobed, abaxially without tufts of hairs near base; fertile leaves similar to sterile leaves except the terminal pinnae completely covered in sporangia … Osmunda spectabilis
1. Sterile leaves 1-pinnate, the pinnae deeply lobed, abaxially with tufts of hairs near base; fertile leaves completely covered in sporangia, lacking green blades … Osmundastrum cinnamomeum

Osmunda
Osmunda spectabilis Willd. {AFP} — CE.

Osmundastrum
Osmundastrum cinnamomeum (L.)C.Presl {AFP} — CE.

GLEICHENIALES

GLEICHENIACEAE
Dicranopteris
[++]***Dicranopteris flexuosa*** (Schrad.)Underw. {AFP} — The earliest Florida records appear in the 1950s.

HYMENOPHYLLALES

HYMENOPHYLLACEAE
Trichomanes: Divided into multiple genera by Ebihara et al. (2006, 2007).
1. Roots present; leaves cespitose, clustered; leaf margin without stellate or branched hairs (Trichomanes s.str.) [2]
1. Roots absent or with root-like shoots only; leaves separated along a long-creeping rhizome; leaf margins with dark, stellate hairs (Didymoglossum) [3]
2. Petiole usually unwinged or winged distally to 1 mm on each side; blade 3.5-8(18) cm long, mostly with 9-28 lateral pinnae or lobes, indumentum uniformly sparse, margin with simple hairs (the hairs elongate and single-celled atop a bulbous basal cell, these sometimes darkened, rarely clavate); involucre apex scarcely flared … T. galeottii
2. Petiole usually winged to 0.5-1 mm at mid-petiole; blade 1.3-6.4 cm long, mostly with 5-10 lateral pinnae or lobes, indumentum sparse but often more abundant abaxially on basal part of midrib, margin usually without hairs (hairs minute and single-celled or 2-celled with clavate distal cell, or 3-4-celled and cells all similar); involucre apex flared … T. holopterum
3. Leaves pinnately lobed, with strong pinnate venation … T. krausii
3. Leaves entire to irregularly palmately lobed, with weak pinnate venation or veins repeatedly forking from the base [4]
4. Midrib extending to apex of blade; venation weakly pinnate; indusium margin indistinct from blade surface … T. petersii
4. Midrib absent or not extending past middle of blade; venation repeatedly forking from base; indusium margin dark, distinct from the blade surface [5]
5. Veins widening at their apex; indusium not flared at mouth … T. lineolatum
5. Veins of uniform width; indusium flared at mouth … T. punctatum subsp. floridanum

Trichomanes holopterum Kunze {AFP} — SE.
Trichomanes krausii Hook. & Grev. {AFP} — SE.
[X]***Trichomanes lineolatum*** (Bosch)Hooker {AFP} — Miami-Dade Co. (Neotropics). Rockland hammocks. SE.
Trichomanes petersii A.Gray {AFP} —

• ***Trichomanes punctatum*** Poir. subsp. ***floridanum*** Wess. Boer {AFP} — FE. SE. Wessels Boer (1962) recognized four subsp. in *T. punctatum*.

SCHIZAEALES

SCHIZAEACEAE

1. Vines or vine-like, each leaf extremely long, 1+ m long, indeterminate, and the rachis appearing like a vining stem (the actual stem subterranean) ... Lygodium
1. Not vines, each leaf <1 m long, determinate [2]
2. Leaf blade segments linear ... Actinostachys pennula
2. Leaf blade segments generally ovate ... Anemia

Actinostachys

Actinostachys pennula (Sw.)Hook. {AFP} — SE.

Anemia

1. Leaves 3-pinnate; fertile leaf with the basalmost pinnae spore-bearing, the distal pinnae with green blade tissue; sterile leaves 17-60 cm long ... A. adiantifolia
1. Leaves 2-pinnate; fertile pinnae lacking green blade tissue; sterile leaves 4-15 cm long ... A. wrightii

Anemia adiantifolia (L.)Sw. {AFP} —
Anemia wrightii Baker {AFP} — SE.

Lygodium: *Lygodium palmatum* has been attributed to the state (Chapman 1883) perhaps based on a W.W. Calkins collection (NY), lacking a date and specific locality. An anonymous collection hails from Lemon City (Miami-Dade Co.), likely cultivated. Florida is long disjunct from its native distribution. It is very doubtful the species was naturally present in recent time. The species is formally excluded as was done by Nauman (1987), but still included in the key below.

1. Sterile pinnules palmately lobed; fertile pinnules with the spore-bearing tissue exceeding in area the minimal sterile, green tissue; leaves 1-4 cm apart along the subterranean stem ... L. palmatum
1. Sterile pinnules pinnately divided, irregularly palmately lobed, or simple; fertile pinnules with the sterile, green tissue abundant and exceeding in area the spore-bearing tissue; leaves 0-0.5 cm apart along the subterranean stem [2]
2. Ultimate blade segments mostly short-lobed at the base and the central lobe elongate, the blade decurrent along the rachis, blade segments not articulate, blade tissue glabrate or sparsely to moderately pubescent abaxially ... L. japonicum
2. Ulimate blade segments mostly ovate to lanceolate and truncate to cordate at the base, the blade not decurrent along the rachis, blade segments articulate and leaving a naked rachis point when detached, blade tissue glabrous abaxially ... L. microphyllum

****Lygodium japonicum*** (Thunb.)Sw. {AFP} — Widely cultivated in the 1920s and 1930s, and naturalized by the 1930s.
****Lygodium microphyllum*** (Cav.)R.Br. {AFP} — Cultivated as early as 1958, and naturalized by 1965 (Beckner 1968).

CYATHEALES

CYATHEACEAE

Sphaeropteris

*****Sphaeropteris cooperi*** (Hook. ex F.Muell.)R.M.Tryon {AFP} —

SALVINIALES

AZOLLACEAE

Azolla

1. Branching subdichotomous, the main branches not much markedly longer at the plant base, the plant subradiate or irregular in shape; lamina trichomes mostly suborbicular to deltate, scarcely if at all longer than wide; microsporangial mass with barbed trichomes; megasporangium with 3 floats ... A. caroliniana
1. Branching pinnate, the main branches markedly longer towards the plant base, the plant roughly triangular in shape; lamina trichomes oblong, conspicuously longer than wide; microsporangial mass lacking barbed trichomes; megasporangium with 9 floats (row of 3 and row of 6) ... A. pinnata

Azolla caroliniana Willd. {AFP} — Sometimes included in *A. filiculoides*.
****Azolla pinnata*** R.Br. {AFP} —

SALVINIACEAE

Salvinia

1. Laminae oblong, 20-45 mm long, 10-20 mm wide, ca. 3 times longer than wide; each papilla with two hairs ... S. oblongifolia
1. Laminae orbicular to sub-orbicular, or bilobed, length and width subequal; each papilla with four hairs [2]
2. Lamina 6-13 mm long, 5-10 mm wide, each papilla with four free hairs ... S. minima
2. Lamina 17-25 mm long, 34-45 mm wide, each papilla with four hairs joined at the apex ... S. molesta

****Salvinia minima*** Baker {AFP} —
****Salvinia molesta*** D.S.Mitch. {AFP} —
****Salvinia oblongifolia*** Mart. {AFP} —

MARSILEACEAE

Marsilea

1. Leaflets variegated, with a lighter splotch in basal portion; sporocarps without a raphe or teeth ... M. mutica
1. Leaflets uniformly green; sporocarps with a raphe, the teeth somewhat prominent [2]
2. Stem with 1-3 adventitious roots along the internodes; leaflets of emergent leaves irregularly crenate ... M. minuta
2. Stem internodes without adventitious roots; leaflets of emergent leaves entire to sinuate or obscurely crenulate [3]
3. Distal tooth of sporocarps 0.4-1.2 mm long, sharply acute to pointed, the tip often recurved ... M. vestita
3. Distal tooth of sporocarps 0-0.4 mm long, obtuse to subacute, tip not recurved [4]

4. Sporocarps suborbicular to nearly elliptic, the distal tooth 0.1-0.4 mm long, shallowly deltate or tapering to a deltate peak … M. ancylopoda
4. Sporocarps subquadrangular, the distal tooth absent or very shallowly triangular [5]
5. Sporocarps 3-5 mm long, hatchet-shaped with the upper margin slightly indented, descending and solitary on strongly deflexed to upright, unbranched peduncles, peduncles 1.5–6 mm long; proximal tooth 0.2-0.4 mm long, rounded and not appearing as a tooth … M. hirsuta
5. Sporocarps 6-9 mm long, elliptical to quadrate, strongly ascending on erect, frequently branching peduncles, peduncle 8-17 mm long; proximal tooth 0.4-0.5 mm long, distinctly appearing as a blunt tooth … M. macropoda

Marsilea ancylopoda A.Braun {AFP} — ST.
****Marsilea hirsuta*** R.Br. {AFP} —
****Marsilea macropoda*** Engelm. ex A.Braun {AFP} —
****Marsilea minuta*** L. {AFP} —
****Marsilea mutica*** Mett. {AFP} —
****Marsilea vestita*** Hook. & Grev. {AFP} —

POLYPODIALES

Figure: Estimated phylogeny of extant Polypodiales, see analyses by: Nitta et al. 2022. Black font=contains taxa native to Florida; Asterisk=introduced to Florida; Gray font=not native, not included.

LINDSAEACEAE

Sphenomeris

Sphenomeris clavata (L.)Maxon {AFP} — SE. Not part of the *Odontosoria* genus according to plastid data (Lehtonen et al. 2010).

PTERIDACEAE

1. Leaves linear, simple … Vittaria lineata
1. Leaves pinnately divided [2]
2. Annuals, floating or loosely rooted in flooded or extremely saturated soils … Ceratopteris
2. Perennials, firmly rooted in xeric to saturated soils or rocky areas [3]
3. Sporangia borne directly on reflexed marginal lobes of ultimate segments, lobes separate and distinct; veins of ultimate blade segments prominent, dichotomously branched, essentially parallel distally … Adiantum
3. Sporangia borne on abaxial leaf surface or, if seemingly attached to marginal lobes of ultimate segments, lobes confluent and poorly defined; veins of ultimate blade segments obscure or, if prominent, then pinnately branched and more divergent distally [2]

4. Blade lower surface with white or yellow farina (this sometimes lost in heat-treated specimens); sporangia following veins for most of length ... Pityrogramma
4. Blade lower surface without white or yellow farina; sporangia submarginal or completely covering surface [4]
5. Leaves usually more than 1 m; veins strongly anastomosing throughout, forming several rows of areoles between costa and margin; sporangia covering entire abaxial surface on fertile pinnae ... Acrostichum
5. Leaves <1 m long in most species (>1 m in Pteris tripartita); veins free or rarely anastomosing, not forming several rows of areoles between costa and margin; sporangia confined to marginal sori [5]
5. Petioles longitudinally with 2-3 grooves ... Pteris
5. Petioles longitudinally with 1 groove or terete [6]
6. Blade lower surface hairy, scaly, or glandular ... Myriopteris
6. Blade lower surface glabrous to glabrate ... Pellaea

Acrostichum

1. Pinnae (leaflets) usually distant and not overlapping adjacent pinnae; fertile (spore-bearing) leaf with only the upper 5 or fewer pairs of pinnae fertile; costal (midrib) areoles usually narrow, ≥3 times longer than wide; paraphyses (sterile hairs among sporangia) terminating in a roughly rotund or isodiametric, irregularly lobed cell ... A. aureum
1. Pinnae (leaflets) usually closely spaced and overlapping or nearly so with adjacent ones; fertile (spore-bearing) leaf with most pinnae fertile; costal (midrib) areoles usually broad, <3 times longer than wide; paraphyses (sterile hairs among sporangia) terminating in an elongate, smooth or few-lobed cell ... A. danaeifolium

Acrostichum aureum L. {AFP} — ST.
Acrostichum danaeifolium Langsd. & Fisch. {AFP} —

Adiantum

1. Leaves 1-pinnate, tip of some leaves prolonged with reduced pinnae and a proliferous bud ... A. caudatum
1. Leaves usually 2-pinnate, the tip not prolonged, not proliferous [2]
2. Ultimate pinnules 2.5-6 cm long, 1.5-6 cm wide [3]
2. Ultimate pinnules 0.5-2.5 cm long, 0.5-2.5 cm wide [4]
3. Ultimate pinnules subentire with sinuses to 1 mm deep, the lateral pinnules generally broadly ovate, suborbicular, or quandrangular ... A. anceps
3. Ulimate pinnules usually conspicuously incised with sinuses to 5 mm deep, the lateral pinnules generally rectangular ... A. trapeziforme
4. Petiolule or ultimate pinnule stalk 1-5 mm long, often appearing centrally attached to the blade segment; ultimate pinnule usually with some deep sinuses 1/3 or more the length of the segment, [5]
4. Petiolule or ultimate pinnule stalk 0-1 mm long, mostly appearing to be attached to the basal side of the ultimate pinnule; ultimate pinnule lacking sinuses or these <1/5 of the segment length or width [6]
5. Dark color of petiolule or ultimate pinnule stalks extending into base of pinnules, not forming an articulate, cup-like swelling ... A. capillus-veneris

5. Dark color of petiolule or ultimate pinnule stalks not extending into base of pinnules, petiolule or pinnule stalks terminating in an articulated, cup-like swelling at base of blade segments ... A. tenerum
6. Basal pair of pinnae 1-pinnate; ultimate pinnules 12-25 mm long ... A. villosum
6. Basal pair of pinnae 1- to 4-pinnate; ultimate pinnules 5-12 mm long [7]
7. Rachis hispid; ultimate pinnules with scattered multicellular hairs; false indusia generally round ... A. hispidulum
7. Rachis strigose; ultimate pinnules glabrous; false indusia crescent-shaped ... A. melanoleucum

****Adiantum anceps*** Maxon & C.V.Morton {AFP} —
Adiantum capillus-veneris L. {AFP} —
****Adiantum caudatum*** L. {AFP} —
****Adiantum hispidulum*** Sw. {AFP} —
Adiantum melanoleucum Willd. {AFP} — SE.
Adiantum tenerum Sw. {AFP} — SE.
****Adiantum trapeziforme*** L. {AFP} —
[x]***Adiantum villosum*** L. {AFP} —

Ceratopteris

1. Spores 16 per sporangium ... C. richardii
1. Spores 32 per sporangium [2]
2. Petiole (1)10-11(19) mm wide, usually inflated; sterile leaves usually simple and palmately or pinnately lobed, sometimes 2- to 4-pinnate; basal pinnae or veins of lobes usually opposite; fertile leaves usually deltate to cordate or reniform; sporangia lacking annulus or annulus well-developed, indurate cells 0-10(40) ... C. pteridoides
2. Petiole (0.7)2-6(8) mm wide, not inflated; sterile leaves (1)2- to 3-pinnate; basal pinnae usually alternate; fertle leaves lanceolate, ovate, deltate, to cordate; sporangia with well-developed annulus, indurate cells 13-71 ... C. thalictroides

Ceratopteris pteridoides (Hook.)Hieron. {AFP} —
****Ceratopteris thalictroides*** (L.)Brongn. {AFP} — The very similar *C. richardii* is sometimes recognized but *C. richardii* apparently is not found in Florida.

Myriopteris

1. Petiole and rachis villous-hispidulous with septate hairs; ultimate segment upper and lower surface with whitish or tan, septate hairs to 0.8 mm long ... M. lanosa
1. Petiole and rachis glabrous to finely pubescent, abaxially the hairs sparse, long, divergent, adaxially the hairs denser, tortuous, appressed; ultimate segment upper andn lower surface with hairs to 0.2 mm long or glabrate [2]
2. Stems mostly 4-7 mm wide, short-creeping to compact, the leaves more or less cespitose or clustered; leaves 2-pinnate to 2-pinnate-pinnatifid at base; basal pair of pinnae often slightly smaller than adjacent pair; costae green adaxially for most of length; most sporangia containing 32 spores ... M. alabamensis
2. Stems 1-3 mm wide, long-creeping, the leaves somewhat distant; leaves 2-pinnate-pinnatifid to 3-pinnate at base; basal pair of pinnae subequal to slightly larger than adjacent pair; costae black adaxially for most of length; most sporangia containing 64 spores ... M. microphylla

Myriopteris alabamensis (Buckley)Grusz & Windham {AFP} —

Myriopteris lanosa (Michx.)Grusz & Windham {AFP} —
Myriopteris microphylla (Sw.)Grusz & Windham {AFP} — SE.

Pellaea

1. Petiole and rachis pubescent, dark reddish brown to brownish black, the upper side not grooved … P. atropurpurea
1. Petiole and rachis glabrate, red-brown to purplish, the upper side grooved … P. viridis

Pellaea atropurpurea (L.)Link {AFP} — SE.
****Pellaea viridis*** (Forssk.)Prantl {AFP} —

Pityrogramma

1. Pinnules mostly uniformly ovate to lanceolate, the proximal pinnules and distal pinnae moderately to deeply lobed or toothed … P. calomelanos
1. Pinnae and pinnules mostly uniformly linear and entire to serrulate … P. trifoliata

****Pityrogramma calomelanos*** (L.)Link ex Britton & Millsp. {AFP} —
Pityrogramma trifoliata (L.)R.M.Tryon {AFP} —

Pteris

1. Leaves regularly 1-pinnate [2]
1. Leaves 2-3-pinnate or irregularly pinnate with the proximal pinnae forked, divided, or pinnatifid [5]
2. Pinnae 1-5 cm wide, the veins usually partly anastomosing … P. grandifolia
2. Pinnae 0.1-1.1 cm wide, the veins free, not anastomosing [3]
3. Spores malformed, of different sizes and shapes … P. ×delchampsii
3. Spores of uniform shape and size [4]
4. Petioles often sparsely scaly, scales dark brown to nearly black, scales absent or few on rachises, the costae abaxially with or without hairs; lateral pinnae mostly green to light green, 1-6 mm wide, appearing articulate to rachis, apices rounded to obtuse … P. bahamensis
4. Petioles and often rachises densely scaly, scales light to reddish, often grading into hairs on abaxial costae; lateral pinnae mostly green to dark green, 5-11 mm wide, appearing not articulate to rachis, apices long-attenuate to sharply acute … P. vittata
5. Leaf blade pinnae or pinnules regularly deeply lobed, with 5-25 pairs of subequal lobes [6]
5. Leaf blade pinnae or pinnules unlobed or irregularly lobed with unequal and few lobes [7]
6. Leaves 0.3-1 m long, 2-pinnate at the basalmost pinnae with usually 2 pinnules, veins free and not anastomosing … P. quadriaurita
6. Leaves 1-2 m long, 2- or 3-pinnate, the basalmost pinnae with more than 2 pinnules, veins anastomosing … P. tripartita
7. Central rachis usually not winged; costae abaxially with few scattered linear scales … P. cretica
7. Central rachis usually distally winged; costae abaxially without scales [8]
8. Leaf segment apices attenuate to long-acuminate, the segments all uniformly linear or nearly so … P. multifida
8. Leaf segments apices rounded on sterile ones and acute to acuminate on fertile ones, the steriles ones usually elliptic, ovate, lanceolate, or linear, the fertiles ones more linear … P. ensiformis

Pteris bahamensis (J.Agardh)Fée {AFP} — ST.

*__Pteris cretica__ L. {AFP} —
__Pteris ×delchampsii__ W.H.Wagner & Nauman (*P. bahamensis* × *P. vittata*) {AFP} — Miami-Dade Co., Monroe keys (Bahamas). Disturbed rocklands.
*__Pteris ensiformis__ Burm.f. {AFP} —
*__Pteris grandifolia__ L. {AFP} —
*__Pteris multifida__ Poir. {AFP} —
[x]__Pteris quadriaurita__ Retz. {AFP} —
*__Pteris tripartita__ Sw. {AFP} —
*__Pteris vittata__ L. {AFP} —

Vittaria
__Vittaria lineata__ (L.)Sm. {AFP} —

DENNSTAEDTIACEAE
1. Ultimate blade segments entire; leaf nectaries present, largest at base of proximal pinnae; sori in continuous lines
1. Ultimate blade segments toothed usually toothed on the distal margins; leaf nectaries absent; sori distinct, round to elliptic [2]
2. Petiole and rachis without prickles; ultimate blade segments (pinnulets) often asymmetric with more tissue on the distal side, often tapered, cuneate, or narrowed at the base; inner indusium present, outer indusium (blade tissue) fused with inner one to form circular or valvate cup over sori … Dennstaedtia bipinnata
2. Petiole and rachis sometimes with prickles; ultimate blade segments (pinnulets) mostly symmetric, truncate to rounded at the base; inner indusium absent, outer indusium (blade tissue) recurved or revolute over sori … Hypolepis barringtonii

Dennstaedtia
__Dennstaedtia bipinnata__ (Cav.)Maxon {AFP} — SE.

Hypolepis
•__Hypolepis barringtonii__ Schwartsb. {AFP} — Segregated from *H. repens* (L.)C. Presl s.str. (Schwartsburd 2018), while relationships in the *H. repens* clade were poorly resolved (Schwartsburd et al. 2020).

Pteridium
1. Plants to ca. 2.5 m tall; ultimate leaf segments mostly 5-24 times longer than wide, 1-4(6.5) mm wide, often appearing widely spaced … P. caudatum
1. Plants to ca. 1 m tall; ultimate leaf segments mostly 2-8.5 times longer than wide, mostly 3-8 mm wide, mostly appearing closely spaced [2]
2. Leaf segment margins sparsely to densely pubescent … P. latiusculum
2. Leaf segment margins glabrous, rarely sparsely pilose … P. pseudocaudatum

__Pteridium caudatum__ (L.)Maxon {AFP} —
__Pteridium latiusculum__ (Desv.)Hieron. {AFP} —
__Pteridium pseudocaudatum__ (Clute)Christenh. {AFP} —

POLYPODIINEAE
Eupolypods

DRYOPTERIDACEAE

1. Veins areolate or anastomosing … Cyrtomium falcatum
1. Veins free or sparingly anastomosing [2]
2. Indusium round, peltate [3]
2. Indusium reniform to suborbicular, attached laterally at sinus [4]
3. Leaves 1-pinnate … Polystichum
3. Leaves primarily 2-pinnate … Rumohra adiantiformis
4. Costae rounded or flat adaxially, with dense, multicellular hairs with reddish crosswalls … Ctenitis
4. Costae grooved adaxially, lacking hairs [5]
5. Stems moderately long-creeping; overall leaf shape pentagonal or deltate-hastate, basal pinnae usually branched at their base … Arachniodes simplicior
5. Stems short-creeping, erect or nearly so; overall leaf shape lanceolate to ovate, basal pinnae unbranched … Dryopteris

Arachniodes

****Arachniodes simplicior*** (Makino)Ohwi {AFP} —

Ctenitis

1. Leaves 2-4-pinnate-pinnatifid, the basal pinnae inequilateral, elongate basiscopically … C. sloanei
1. Leaves 1-pinnate-pinnatifid, the basal pinnae equilateral … C. submarginalis

Ctenitis sloanei (Poepp. ex Spreng.)C.V.Morton {AFP} — SE.
Ctenitis submarginalis (Langsd. & Fisch.)Ching {AFP} — SE.

Cyrtomium

****Cyrtomium falcatum*** (L.f.)C.Presl {AFP} —

Dryopteris: For an excellent overview of cultivated (and potential escaped) taxa in the USA, see Hoshizaki & Wilson (1999). Infrageneric taxonomy was revised by Fraser-Jenkins (1986).

1. Petiole and rachis scales at base of petiole blackish to dark brown, 0.5-3(4) mm wide at petiole base, linear-lanceolate; pinnae costa underside scales saccate or inflated at the base, abruptly narrowed-acuminate at apex, quite different from petiole and rachis scales; proximal and distal pinnae similar, fertile, mostly fully divided into pinnulets … D. erythrosora
1. Petiole and rachis scales at base of petiole light brown to brownish hyaline, 2.5-6 mm wide at petiole base, lanceolate to deltate-lanceolate; pinnae costa underside scales lanceolate to deltate-lanceolate, similar to petiole and rachis scales; proximal pinnae sterile, mostly simple and pinnatifid, distal pinnae fertile and larger ones fully divided into pinnulets … D. ludoviciana

****Dryopteris erythrosora*** (D.C. Eaton)Kuntze —
Dryopteris ludoviciana (Kunze)Small {AFP} —

Polystichum

1. Leaves 1-pinnate, the pinnae simple … P. acrostichoides
1. Leaves 1- or 2-pinnate, the pinnae deeply lobed or pinnately divided … P. luctuosum

Polystichum acrostichoides (Michx.)Schott {AFP} —
^*Polystichum luctuosum* (Kunze)T. Moore {AFP} —

Rumohra
****Rumohra adiantiformis*** (G.Forst.)Ching {AFP} —

LOMARIOPSIDACEAE
Lomariopsis
Lomariopsis kunzeana (Underw.)Holttum {AFP} — SE.

NEPHROLEPIDACEAE
Nephrolepis: For key to all known species, see Hovenkamp & Miyamoto (2005).
1. Rachis and costa adaxially with dense covering of reddish or brown-red hairs (pinnae sometimes irregularly pinnatifid) … N. hirsutula
1. Rachis and costa adaxially glabrous, pubescent, or scaly (pinnae not irregulalry pinnatifid or rarely so) [2]
2. Costa adaxially pubescent with short erect hairs (if glabrous, then marginal glands present on scales at base of petiole) [3]
2. Costa adaxially glabrous (scales at base of petiole without marginal glands) [5]
3. Base of petioles with appressed, stiff, dark brown scales, without marginal glands … N. brownii
3. Base of petioles with loose, soft, reddish or light brown scales, with small marginal glands [4]
4. Pinnae mostly falcate; costa sparsely hairy, hairs ca. 0.5 mm long … N. ×averyi
4. Pinnae mostly straight or nearly so; costa moderately to densely hairy, hairs 0.2-0.4 mm long … N. biserrata
5. Pinnae falcate, long-acute to acuminate at the tip, sometimes dichotomously forked … N. falcata
5. Pinnae simple (or sometimes pinnae pinnately divided), generally obtuse to rounded at the tip, not dichotomously forking [6]
6. Tubers often present; rachis adaxially with bicolored scales, the central part strongly darker; pinnae glabrous; indusium lunate to deltate-rounded, attached by a broad base … N. cordifolia
6. Tubers absent; rachis adaxially with the scales uniformly colored or only slightly paler towards the margins; pinnae with a few scales near costae; indusium reniform or horseshoe-shaped, attached by a narrow sinus … N. exaltata

- ***Nephrolepis ×averyi*** Nauman (*N. biserrata* × *N. exaltata*) {AFP} — Central and south peninsula. Hammocks, swamps. Known only from Florida but possibly found elsewhere where the parent taxa may co-occur.

Nephrolepis biserrata (Sw.)Schott {AFP} — ST.
****Nephrolepis brownii*** (Desv.)Hovenkamp & Miyam. {AFP} —
****Nephrolepis cordifolia*** (L.)C.Presl {AFP} —
Nephrolepis exaltata (L.)Schott {AFP} —
****Nephrolepis falcata*** (Cav.)C.Chr. {AFP} —
****Nephrolepis hirsutula*** (G.Forst.)C.Presl {AFP} —

DAVALLIACEAE
Davallia
^*Davallia trichomanoides* Blume {AFP} —

POLYPODIACEAE

1. Plant base with sterile shield or nest leaves which become brown and persistent [2]
1. Plant base without shield or nest leaves [3]
2. Fertile leaves pinnately lobed … Drynaria quercifolia
2. Fertile leaves distally lobed … Platycerium bifurcatum
3. Leaves simple [4]
3. Leaves pinnately lobed or divided or 1-pinnate [8]
4. Leaf blade underside with scales … P. astrolepis
4. Leaf blade underside glabrous or glabrate [5]
5. Sporangia in marginal bands … P. marginata
5. Sporangia in discrete rounded sori [6]
6. Leaves densely clustered, nearly cespitose on short-creeping stem … Campyloneurum
6. Leaves well separated, along a long-creeping stem [7]
7. Leaf blade apex rounded to obtuse … Microgramma
7. Leaf blade apex acute to long-acuminate … Microsorum
8. Leaves 1-pinnate, the rachis naked between the pinnae … Serpocaulon triseriale
8. Leaves pinnately deeply lobed or divided [9]
9. Leaf blade segments 1-7 mm wide, the lower surface glabrate or with scales [10]
9. Leaf blade segments 15-60 mm wide, the lower surface glabrous or glabrate [11]
10. Leaf blade lower surface glabrate or sparsely covered in basifixed scales; segments in 5-20 pairs per leaf … Pecluma
10. Leaf blade lower surface densely covered in peltate scales; segments in 20-50 pairs per leaf … Pleopeltis
11. Stem sparsely to moderately covered with appressed to spreading scales; leaf blade cuneate or acute at base, sori not apparent from the upper surface … Microsorum
11. Stem densely villous with reddish or orangish scales; leaf blade truncate to cordate at base, sori often visibly apparent and forming tubercles on the upper surface … Phlebodium aureum

Campyloneurum

1. Leaves (2)4.5-8 cm wide, lateral veins conspicuous and discolorous from the rest of the blade surface … C. phyllitidis
1. Leaves 0.2-4.5 cm wide, lateral veins obscure and mostly concolorous with the rest of the blade surface [2]
2. Leaves 0.2-1.1 cm wide, 20-150 times longer than wide, lacking a distinct petiole, margins revolute … C. angustifolium
2. Leaves 2-4.5 cm wide, 5-14 times longer than wide, often with a distinct naked petiole, margins undulate to entire, sometimes slightly revolute … C. costatum

Campyloneurum angustifolium (Sw.)Fée {AFP} — SE.
Campyloneurum costatum (Kunze)C.Presl {AFP} — SE.
Campyloneurum phyllitidis (L.)C.Presl {AFP} —

Drynaria

^*Drynaria quercifolia* (L.)J.Sm. {AFP} —

Microgramma

1. Stem 0.5-3 mm wide, covered in brownish or reddish scales; leaves 5-12 mm wide … M. heterophylla

1. Stem 3-6 mm wide, densely covered in silvery or whitish hairs and brownish or reddish scales; leaves 12-30 mm wide ... M. nitida

Microgramma heterophylla (L.)Wherry {AFP} — SE.
^*Microgramma nitida* (J.Sm.)A.R.Sm. {AFP} —

Microsorum

1. Leaf blade with lateral lobes [2]
1. Leaf blade simple (sometimes apically bifurcating in cultivated forms) [3]
2. Rhizomes ca. 5 mm wide; the apex of the rhizome scales light brown with a hyaline margin; leaf blade usually with more than 5 pairs of lobes and may have a sweet smell when fresh ... M. grossum
2. Rhizomes ca. 2-3 mm wide; the apex of the rhizome scales dark brown; leaf blade usually with 1-5 pairs of lobes and lacking a sweet smell when fresh ... M. scolopendria
3. Leaf blade with strongly conspicuous secondary and tertiary venation; sori present in the costal areoles ... M. musifolium
3. Leaf blade with obscure venation (except for the midrib); sori absent in the costal areoles ... M. punctatum

****Microsorum grossum*** (Langsd. & Fisch.)S.B.Andrews {AFP} —
^*Microsorum musifolium* (Blume)Copel. —
^*Microsorum punctatum* (L.)Copel. —
****Microsorum scolopendria*** (Burm.f.)Copel. {AFP} —

Pecluma

1. Petiole and rachis scales filiform and inconspicuous or absent; basal segments usually gradually reduced to numerous short auricles; veins mostly 2-3-forked ... P. ptilota var. bourgeauana
1. Petiole and rachis scales cordate and appearing inflated or hastate and flat; basal segments mostly fully formed, the basalmost abruptly reduced to only a few auricles; veins mostly 1- or 2-forked [2]
2. Petiole scales hastate, ciliate-lacerate; segments linear-lanceolate to linear-elliptic, basal ones sometimes slightly deflexed; veins mostly 2-forked; spores 32 per sporangium, mostly spherical ... P. dispersa
2. Petiole scales ovate-deltate to cordate, bullate, mostly entire or irregularly toothed; segments linear, basal ones not deflexed; veins mostly 1-forked; spores 64 per sporangium, mostly reniform ... P. plumula

Pecluma dispersa (A.M.Evans)M.G.Price {AFP} — SE.
Pecluma plumula (Humb. & Bonpl. ex Willd.)M.G.Price {AFP} — SE.
Pecluma ptilota (Kunze)M.G.Price var. bourgeauana (E.Fourn.)A.R.Sm. {AFP} — SE.

Phlebodium

Phlebodium aureum (L.)J.Sm. {AFP} — *Phlebodium pseudoaureum* (sometimes reported for Florida, but so far not conclusively documented) has sori in one row on each side of the midvein of the pinnae, whereas in *P. aureum* the pinnae have more than one row of sori, at least in some part of the leaf.

Platycerium

^*Platycerium bifurcatum* (Cav.)C.Chr. {AFP} — Sparingly naturalized.

Pleopeltis
1. Leaf blade unlobed [2]
1. Leaf blade pinnately lobed [3]
2. Leaf blade with peltate scales on the underside; sporangia in discrete, round to oblong or slightly elongate sori on abaxial surface, not in marginal bands … P. astrolepis
2. Leaf blade glabrous; sporangia confined to marginal or nearly marginal bands in distal 1/2 of blade … P. marginata
3. Glands inconspicuous, on the proximal acroscopic side of the basal pinnae; adaxial scales absent or essentially so; abaxial laminar scales margins undulate, entire, orbicular scales present and readily visible; abaxial rachis scale margins entire … P. michauxiana
3. Glands conspicuous, round to elliptic, rather swollen with a central depression, on a small auricle within the sinus near the acroscopic side of the basal pinna segments; adaxial scales scattered, subulate, 0.52-1.50 mm long, 0.15-0.70 mm wide, base pectinate-stellate, apex long caudate, margin weakly erose; abaxial laminar scale margins ciliate, orbicular scales present, not readily visible; abaxial rachis scale margins ciliate … P. polypodioides

Pleopeltis astrolepis (Liebm.)E.Fourn. {AFP} — SE.
[x]***Pleopeltis marginata*** A.R.Sm. & Tejero {AFP} — SE.
Pleopeltis michauxiana (Weath.)Hickey & Sprunt {AFP} —
Pleopeltis polypodioides (L.)E.G.Andrews & Windham {AFP} —

Serpocaulon
[x]***Serpocaulon triseriale*** (Sw.)A.R.Sm. {AFP} —

TECTARIACEAE
Tectaria
1. Blade 15-60 cm long, 10-60 cm wide (smaller immature blades usually unlobed or nearly so); areoles with included veinlets [2]
1. Blade 5-15 cm long, 3-10 cm wide; areoles rarely with included veinlets [3]
2. Primary pinnae or lobes mostly ovate to narrowly ovate, lower pinnae cordate to subcordate at the base; rachis and midvein glabrous on the lower side; indusium peltate … T. heracleifolia
2. Primary pinnae or lobes mostly lanceolate; lower pinnae asymmetric, not cordate at the base; rachis and midvein puberulent on the lower side; indusium attached at the sinus … T. incisa
3. Pinnae of 1-8 pairs, sometimes with proliferous buds in axils; petiole shorter than or rarely equaling blade, pubescent on both surfaces; indusia round-reniform, attached at sinus … T. coriandrifolia
3. Pinnae of 0-2 pairs, without proliferous buds in axils; petiole 1-3 times length of blade, pubescent adaxially, lacking hairs abaxially; indusia peltate, attached centrally [4]
4. Pinnae of 1-2 pairs, the rachis 1.5-4 cm long between the basalmost pinnae and proceeding blade portion; spores malformed, of different sizes and shapes … T. ×amesiana
4. Pinnae of 0-1(2) pairs, the rachis 0-2 cm long between the basalmost pinnae and proceeding blade portion; spores of uniform shape and size … T. fimbriata

[xx]•***Tectaria ×amesiana*** A.A.Eaton (*T. coriandrifolia* × *T. fimbriata*) {AFP} — Miami-Dade Co. Rockland hammocks. Last specimens perhaps from the 1930s (*St. John 170*, NY; *St. John*

s.n., GA) or 1940s (*Irving s.n.*, TAES). Currently known only from Florida, but possibly occurs elsewhere where the two parent taxa co-occur.
[x]***Tectaria coriandrifolia*** (Sw.)Underw. {AFP} —
Tectaria fimbriata (Willd.)Proctor & Lourteig {AFP} — SE.
Tectaria heracleifolia (Willd.)Underw. {AFP} — ST.
*****Tectaria incisa*** Cav. {AFP} —

ASPLENIINEAE

CYSTOPTERIDACEAE

Cystopteris

Cystopteris protrusa (Weath.)Blasdell {AFP} —

THELYPTERIDACEAE

1. Blades 1-pinnate to deeply pinnate-pinnatifid; rachis grooved adaxially; veins meeting margin at or above sinus or united below sinus … Thelypteris
1. Blades 2-pinnatifid or 2-pinnate-pinnatifid; rachis not grooved adaxially; veins commonly meeting margin above sinus [2]
2. Blades 2-pinnate to 2-pinnate-pinnatifid; pinnae free, rachis not winged; rachis hairs septate, many >0.5 mm long; indusia present, <0.3 mm wide … Macrothelypteris torresiana
2. Blades 2-pinnatifid; pinnae mostly connected by wings along the rachis; rachis hairs not septate, <0.5 mm long; indusia absent … Phegopteris hexagonoptera

Macrothelypteris

*****Macrothelypteris torresiana*** (Gaudich.)Ching {AFP} —

Phegopteris

Phegopteris hexagonoptera (Michx.)Fée {AFP} —

Thelypteris: Once construed as a large genus (provisionally retained here), it has been split into multiple genera with *Thelypteris* s.str. constrained to two species. Problems remain with the generic taxonomy, such as the putative intergeneric hybrid *T. kunthii* (=*Pelazoneuron kunthii*).

Key to segregate genera
1. Pinnae unlobed; veins forming several areoles between the margin and main vein; sori elongate … Meniscium
1. Pinnae lobed to deeply pinnatifid; veins free or united at or below sinus [2]
2. Plant with forked or stellate trichomes, especially on scales of stem apices, the rachis, and other parts of blade … Goniopteris
2. Plant with simple trichomes only or glabrous [3]
3. Blade lower surface with spherical, sessile or subsessile reddish brown or yellowish glands [4]
3. Blade lower surface eglandular or the glands inconspicuous [5]
4. Rhizome short-creeping; glands sulphur-yellow, subsessile … Amblovenatum opulenta
4. Rhizome erect; glands orangish to reddish brown, sessile … Amauropelta
5. Veins often forked; leaves winter-deciduous (Thelypteris s.str.) … T. palustris var. pubescens
5. Veins not forked; leaves usually not winter-deciduous [6]
6. Veins free or united at the sinus (or just below the sinus), not forming a single vein to the sinus … Pelazoneuron

6. Veins (at least some) uniting below the sinus and forming a single vein to the sinus [7]
7. Rhizome black, long-creeping, leaves appearing distant; petiole base black; sori in a nearly continuous sinuous line appearing to connect from pinnule to pinnule … Cyclosorus interrupta
7. Rhizome brown, short-creeping, leaves appearing clustered; petiole base brown; sori not in a nearly continuous line … Christella

Key to Amauropelta
1. Leaves 20-70(80) cm long; pinnae pinnatifid; petiole 2-5 mm wide … T. resinifera
1. Leaves 10-30(40) cm long; pinnae at least partly 1-pinnate; petiole 0.5-1.5 mm wide … T. sancta

Key to Christella
1. Petiole usually brownish purple above base; leaves with usually more than 2 pairs of greatly reduced proximal pinnae; blade lower surface with trichomes <0.2 mm long, except a few along veins sometimes 0.3-0.5 mm long; excurrent veins mostly >2 mm long … T. dentata
1. Petiole usually pale yellowish above base; leaves with 0-2 pairs of slightly reduced proximal pinnae; blade lower surface mostly with trichomes 0.3-0.7 mm long; excurrent veins <2 mm long … T. hispidula var. versicolor

Key to Goniopteris
1. Leaf 15-25 cm wide, abruptly narrowed to the apex, the apical pinna subtended by a naked rachis and somewhat similar to the lateral pinnae … T. tetragona
1. Leaf to 10 cm wide, gradually narrowed to the apex, the apical pinna pinnatifid and dissimilar to the lateral pinnae [2]
2. Leaves monomorphic and erect, not rooting at the apex; lateral pinnae dentate … T. sclerophylla
2. Leaves somewhat dimorphic, the sterile ones shorter and spreading or prostrate, the mature fronds erect, ascending, or spreading, sometimes rooting at the apex; lateral pinnae entire, crenulate, or lobed but not as above [3]
3. Mature leaves erect, the blade simple-pinnatifid for 3/4 the length with 1-4 pairs of free basal pinnae … T. guadalupensis
3. Mature leaves spreading to ascending, the blade pinnate with the terminal pinna simple-pinnatifid, but this <1/2 the length of the blade … T. reptans

Key to Meniscium
1. Pinnae entire, undulate, to subtly crenulate, 2-6 cm wide … T. reticulata
1. Pinnae serrate (at least toward apex), 2-3.5(4.5) cm wide … T. serrata

Key to Pelazoneuron
1. Leaves to 3 m long; basal pinnae with its basal lobes reduced and shorter than the proceeding lobes … T. grandis
1. Leaves (0.1)0.3-1.4(1.6) m long; basal pinnae with its basal lobes subequal to longer than the proceeding lobes [2]
2. Rhizome erect; scales at base of petioles ovate, glabrous; basal lobes of pinnae acuminate, often rather straight, longer than the proceeding and more ascending to curved lobes … T. patens
2. Rhizome creeping; scales at base of petioles lanceolate, usually hairy; basal lobes of pinnae acute, slightly longer than to subequal and rather similar to the proceeding lobes [3]
3. Blade upper surface copiously pubescent … T. kunthii

3. Blade upper surface glabrous to sparingly pubescent [4]
4. Blades coriaceous; scales of costa abaxially often numerous; terminal portion of blade with unlobed pinnae usually at least 5 times longer than wide, 10-20 cm long; basal pinnae 7-15 mm wide, sinuses 0.5-0.7 of the lobe length … T. augescens
4. Blades chartaceous to subcoriaceous; scales of costa abaxially sparse to absent; terminal portion of blade with unlobed pinnae usually <5 times as long as wide, 6-12 cm long; basal pinnae (8)12-22 mm wide, sinuses 0.6-0.9 of the lobe length … T. ovata

Thelypteris augescens (Link)Munz & I.M.Johnst. {AFP} — ST. May hybridize with *T. kunthii* which is somewhat concerning.
****Thelypteris dentata*** (Forssk.)E.P.St.John {AFP} —
Thelypteris grandis A.R.Sm. {AFP} — SE.
Thelypteris guadalupensis (Wikstr.)Proctor {AFP} —
Thelypteris hispidula (Decne.)C.F.Reed var. ***versicolor*** (R.P.St.John)Lellinger {AFP} —
Thelypteris interrupta (Willd.)K.Iwats. {AFP} —
Thelypteris kunthii (Desv.)C.V.Morton {AFP} —
****Thelypteris opulenta*** (Kaulf.)Fosberg {AFP} —
Thelypteris ovata R.P.St.John {AFP} —
Thelypteris palustris Schott var. ***pubescens*** (G.Lawson)Fernald {AFP} —
Thelypteris patens (Sw.)Small ex R.P.St.John {AFP} — SE.
Thelypteris reptans (J.F.Gmel.)C.V.Morton {AFP} — SE.
Thelypteris resinifera (Desv.)Proctor {AFP} —
Thelypteris reticulata (L.)Proctor {AFP} — SE.
Thelypteris sancta (L.)Ching {AFP} —
Thelypteris sclerophylla (Poepp. ex Spreng.)C.V.Morton {AFP} — SE.
Thelypteris serrata (Cav.)Alston {AFP} — SE.
Thelypteris tetragona (Sw.)Small ex R.P.St.John {AFP} —

WOODSIACEAE
Woodsia
Woodsia obtusa (Spreng.)Torr. {AFP} —

ATHYRIACEAE
1. Costae with multicellular hairs, costal grooves shallow and not decurrent into rachis groove … Deparia petersenii
1. Costae without multicellular hairs, costal grooves deep and decurrent into rachis groove [2]
2. Leaf nearly entirely 2- or more pinnate; pinnules mostly oblong-elliptic; sori J-shaped … Athyrium filix-femina subsp. asplenioides
2. Leaf usually pinnate or partly pinnate and partly 2- or more pinnate; pinnules mostly lanceolate; sori linear to slightly falcate … Diplazium esculentum

Athyrium
Athyrium filix-femina (L.)Roth ex Mert. subsp. ***asplenioides*** (Michx.)Hultén {AFP} — ST.

Deparia
****Deparia petersenii*** (Kunze)M.Kato {AFP} —

Diplazium

*__Diplazium esculentum__ (Retz.)Sw. {AFP} —

BLECHNACEAE

1. Sori acrostichoid or coenosoric; venation mostly straight and parallel [2]
1. Sori discrete, oblong; venation branching or anastomosing [4]
2. Pinnae more or less entire, generally upcurved at least at the tip, distal pinnae becoming confluent ... Blechnum occidentale var. minor
2. Pinnae serrulate (at least the sterile ones), generally straight, all or nearly all pinnae distinct [3]
3. Terrestrial, climbing, or epiphytic; sterile leaves pinnate with the pinnae attenuate or long-acuminate at the tip, fertile leaves 2-pinnate with linear pinnules ... Stenochlaena tenuifolia
3. Terrestrial; sterile and fertile leaves similar, pinnate, the pinnae obtuse to subacute at the tip ... Telmatoblechnum serrulatum
4. Sterile leaves pinnatifid, fertile leaves pinnatifid to pinnate with linear pinnae nearly completely covered in sori (Lorinseria) ... Woodwardia areolata
4. Sterile and fertile leaves similar, pinnate with pinnatifid pinnae, the pinnae not completely covered with sori [5]
5. Leaf apex lacking a bulblet; pinnae with 1 row of areoles adjacent to costa and the veins then free to the margin, margins subentire to obscurely crenulate (Anchistea) ... Woodwardia virginica
5. Leaf apex sometimes with a proliferous bulblet; pinnae with 2-4 rows of areolae between costa and margin, margins sharply denticulate at least in some places ... Woodwardia radicans

Blechnum

__Blechnum occidentale__ L. var. __minor__ Hook. {AFP} — SE.

Stenochlaena

*__Stenochlaena tenuifolia__ (Desv.)T.Moore {AFP} —

Telmatoblechnum

__Telmatoblechnum serrulatum__ (Rich.)Perrie et al. {AFP} —

Woodwardia

1. Sterile leaves pinnatifid, fertile leaves pinnatifid to pinnate with linear pinnae nearly completely covered in sori (Lorinseria) ... Woodwardia areolata
1. Sterile and fertile leaves similar, pinnate with pinnatifid pinnae, the pinnae not completely covered with sori [2]
2. Leaf apex lacking a bulblet; pinnae with 1 row of areoles adjacent to costa and the veins then free to the margin, margins subentire to obscurely crenulate (Anchistea) ... Woodwardia virginica
2. Leaf apex sometimes with a proliferous bulblet; pinnae with 2-4 rows of areolae between costa and margin, margins sharply denticulate at least in some places ... Woodwardia radicans

__Woodwardia areolata__ (L.)T.Moore {AFP} —
^*Woodwardia radicans* (L.)Sm. {AFP} — Reported for Miami-Dade Co. (FLAS), but doubtfully naturalized.
__Woodwardia virginica__ (L.)Sm. {AFP} —

ONOCLEACEAE

Onoclea

__Onoclea sensibilis__ L. {AFP} —

ASPLENIACEAE

Asplenium

1. Leaves simple, the petiole indistinct from the blade … A. serratum
1. Leaves 1- to 3-pinnate, with a distinct, naked petiole [2]
2. Leaves 2- or 3-pinnate (at least some leaves, the pinnae rachis sometimes winged) [3]
2. Leaves 1-pinnate [7]
3. Spores of uniform shape and size [4]
3. Spores malformed, of different sizes and shapes [4]
4. Leaves 1- to 2-pinnate, the pinnae shallowly divided with little space between the blade tissue, the pinnules mostly coarsely dentate … A. cristatum
4. Leaves 2- to 3-pinnate, the pinnae deeply divided with wide spaces between the blade tissue the pinnules mostly oblong-elliptic to deeply lobed … A. verecundum
5. Overall leaf shape linear-lanceolate, the pinnae to 2 cm long … A. ×biscaynianum
5. Overall leaf shape lanceolate, the pinnae to 6 cm long [6]
6. Medial pinnae pinnately divided throughout … A. ×curtissii
6. Medial pinnae pinnately divided only in the proximal part, lobed or toothed distally … A. ×plenum
7. Overall leaf blade shape broadly deltoid, with 1-2(4) pairs of pinnae, the veins with fine eglandular hairs … A. pumilum
7. Overall leaf blade shape linear-oblong to lanceolate, with 5-35 pairs of pinnae, the veins usually with hair-like scales or glandular hairs or glabrous [8]
8. Leaves with 4-8(12) pairs of pinnae [9]
8. Leaves with (10)15-40 pairs of pinnae [10]
9. Overall leaf blade shape deltate; pinnae 30-70 mm long (at least larger ones) … A. abscissum
9. Overall leaf blade shape linear-oblong; pinnae 2-11 mm long … A. dentatum
10. Blade tissue at base of pinnae overlapping the primary rachis … A. platyneuron
10. Blade tissue at base of pinnae not overlapping the primary rachis [11]
11. Pinnae with 1-2(3) sori, these along the distal, proximal margin and perpendicular to the primary rachis … A. monanthes
11. Pinnae with (1)4-10 sori, these mostly evenly distributed along the pinnae along lateral veins [12]
12. Medial pinnae 2-6(9) cm long (at least on larger leaves); epiphyte on trees … A. auritum
12. Medial pinnae 0.2-2 cm long; mostly on rocks or in rocky areas [13]
13. Pinnae 2-9 mm long, 1-1.5(2) times longer than wide … A. trichomanes
13. Pinnae (5)6-20 mm long, 1.5-2.5(3) times longer than wide [14]
14. Pinnae margins subentire, undulate, or obscurely crenate-dentate; sori supramedial; spores 32 … A. resiliens
14. Pinnae margins distinctly crenate or dentate; sori medial to inframedial; spores 32 or 64 per sporangium [15]
15. Pinnae margins dentate to crenate, a basal auricle lacking or obscure, the veins conspicuous; spores 64 per sporangium … A. heterochroum
15. Pinnae margins shallowly crenulate, with a basal auricle, the veins obscure; spores 32 per sporangium … A. ×heteroresiliens

Asplenium abscissum Willd. {AFP} —
•***Asplenium*** ×***biscaynianum*** (D.C.Eaton)A.A.Eaton (*dentatum* × *verecundum*) {AFP} —

Asplenium auritum Sw. {AFP} — SE. An accepted proposal by Testo (2019) allowed restoration of the use of *A. auritum* to its more popular usage (Weatherby 1936; Proctor 1985), to avoid the synonymization of *A. auritum* and *A. erosum* caused by Underwood's early lectotypification.
Asplenium cristatum Lam. {AFP} —
•***Asplenium*** ×***curtissii*** Underw. (*abscissum* × *verecundum*) {AFP} —
Asplenium dentatum L. {AFP} — SE.
Asplenium heterochroum Kunze {AFP} —
Asplenium ×***heteroresiliens*** W.H.Wagner (*heterochroum* × *resiliens*) {AFP} —
Asplenium monanthes L. {AFP} — SE.
^*Asplenium nidus* L. —
Asplenium platyneuron (L.)Britton et al. {AFP} —
•***Asplenium*** ×***plenum*** E.P.St.John ex Small (*abscissum* × *curtissii*) {AFP} —
Asplenium pumilum Sw. {AFP} — SE.
Asplenium resiliens Kunze {AFP} —
Asplenium serratum L. {AFP} — SE.
Asplenium trichomanes L. {AFP} — Included in the flora based solely on two records putatively collected in 1857 from Amelia Island (Moran 1981).
Asplenium verecundum Chapm. ex Underw. {AFP} — SE.

SPERMATOPHYTES

1. Ovule naked; ovules and pollen produced in separate structures (cones); leaves usually with only a conspicuous midrib or none; plants woody … Gymnosperms
1. Ovule contained in an ovary; ovules and pollen usually produced in the same flower, occasionally in separate flowers; pollen germinating on stigma, vegetative cell elongating to form pollen tube and carry 2 sperm cells; endosperm usually triploid (diploid in basal lineages); leaves often with numerous conspicuous veins; plants herbaceous or woody … Angiosperms

ACROGYMNOSPERMAE

not "Flowering plants" (see Lindley 1836: 310).

Figure: Estimated phylogeny of extant gymnosperms, see Yang et al. (2022). Black font=contains taxa native to Florida; Asterisk=introduced to Florida; Gray font=not native, not included.

Key to Gymnosperm orders
1. Sperm with ~1,000-50,000 flagella; fertilization zoogamous [2]
1. Sperm without flagella; fertilization siphongamous [3]
2. Trees, with numerous branches; coralloid roots absent; leaves simple, the blade fan-sahped … Ginkgoales (Ginkgoaceae)
2. Mostly herbs to shrubs, unbranched or sparingly branched; coralloid roots present hosting N-fixing cyanobacteria; leaves pinnately compound; sperm with flagella … Cycadales
3. Leaves 2, indeterminate … Welwitschiales (Welwitschiaceae)
3. Leaves numerous, determinate … [4]
4. Leaves opposite, the blade chartaceous, mostly ovate to lanceolate, with reticulate venation … Gnetales (Gnetaceae)
4. Leaves fascicled, alternate, or oppposite, the blade coriaceous, linear to elliptic usually, with a parallel venation [6]
5. Leaves in fascicles of 2-5 (Pinus) … Pinales (Pinaceae)
6. Leaves solitary [7]
7. Leaves opposite or whorled, often scale-like and 0.1-0.3 cm long on mature stems (often needle-like on immature stems), or alternate, the branchlet shed as a unit; cones fleshy or small and woody … Cupressales (Cupressaceae)

7. Leaves alternate, or opposite and the leaves >0.5 cm long, the branchlet not usually shed as a unit; cones fleshy or large and woody [8]
8. Leaves 1-3(4) cm long, 0.1-0.4 cm wide, pseudodistichous; cone with a fleshy aril … Cupressales (Taxaceae)
8. Leaves (2.5)3.5-15 cm long, 0.4-3 cm wide, or 0.5-2.5 cm long, 0.1-0.4 mm wide and scale-like, imbricate; cone woody or with a fleshy epimatium … Araucariales

GINKGOALES

GINKGOACEAE

Ginkgo

^*Ginkgo biloba* L. — Sparingly cultivated.

CYCADALES

(coralloid roots hosting cyanobacteria near the soil surface)

The Montgomery Botanical Center in Miami-Dade Co. specializes in cycad research and cultivates a large number of taxa. The World List of Cycads (cycadlist.org) is an excellent resource detailing all species. Only *Zamia* is native to Florida.

Key to cycad families
1. Leaflets with a midrib only, without secondary veins; megasporophyll leaf-like, loose … Cycadaceae
1. Leaflets with multiple veins, with or without a distinct midrib; megasporophyll a valvate or imbricate strobilus with 2 reflexed ovules … Zamiaceae

CYCADACEAE

Cycas

^*Cycas revoluta* Thunb. {AFP} —

ZAMIACEAE

Key to all known genera of Zamiaceae
1. Leaves bipinnate … Bowenia
1. Leaves 1-pinnate [2]
2. Leaflets with a prominent midrib [3]
2. Leaflets without a prominent midrib [4]
3. Leaflet lateral veins nearly perpendicular to the midrib to slightly ascending … Stangeria
3. Leaflet lateral veins ascending … Zamia
4. Leaflets arising from rachis midline … Lepidozamia
4. Leaflets arising from margins of rachis [5]
5. Leaflet base strongly discolorous and callous; sporophylls with a sharp upturned spine … Macrozamia
5. Leaflet base not strongly discolorous; sporophyllys mostly without spines [6]
6. Leaflet base not narrowed … Dioon
6. Leaflet base usually narrowed into attachment to rachis [7]
7. Leaf bases often persistent on trunk; leaflets not articulate, the margins sometimes with stout spines or spinose-tipped lobes; sporophylls imbricate … Encephalartos

7. Leaf base completely deciduous from trunk or persistent; leaflets articulate at base, the margins mostly entire to toothed; sporophylls valvate [8]
8. Above-ground trunk well-developed; leaf base and cataphylls persistent; hairs unbranched; sporophylls 2-horned apically … Ceratozamia
8. Above-ground trunk absent or developed; leaf base and cataphylls usually deciduous; hairs branched or unbranched; sporophylls obtuse to truncate [9]
9. Trunk well-developed; stipules absent … Microcycas
9. Trunk absent, rarely developed; stipules present … Zamia

Zamia
1. Leaves pubescent to glabrate; petiole and rachis prickly; leaflets mostly 2-4 cm wide; peduncle subequal to the seed cone … Z. furfuracea
1. Leaves glabrous; petiole and rachis without prickles; leaflets 0.2-1.8 cm wide; peduncle much shorter than the seed cone … Z. integrifolia [2]
2. Plants usually with many stems; leaves dark green, to 1.5 m long; leaflets usually with slightly protruding vein-tips (teeth or callous bumps) on and near a mostly rounded apex, median leaflets 12-16 mm wide (ca. 8 times as long as wide); NE Florida ('Palatka Giant') … Z. integrifolia var. umbrosa
2. Plants with 1-many stems; leaves medium green, to 1.0 m long; leaflets without protruding vein-tips on an acute to obtuse apex, median leaflets 10-24 times as long as wide [3]
3. Plants usually with 1 stem; leaves generally erect; median leaflets linear, 5-8 mm wide (ca. 18 times as long as wide); northern peninsula … Z. integrifolia var. broomei
3. Plants usually with many stems; leaves generally spreading; median leaflets narrowly oblong to spatulate, 8-16 mm wide [4]
4. Median leaflets 14-18 cm long, 12-16 mm wide (ca. 10 times as long as wide); NW peninsula … Z. integrifolia var. silvicola
4. Median leaflets 8-12 cm long, 8-14 mm wide (ca. 12 times as long as wide) [5]
5. Female cones 8-18 cm long; NW peninsula … Z. integrifolia var. floridana
5. Female strobili 4-8 cm long; peninsula, common in cultivation … Z. integrifolia var. integrifolia

****Zamia furfuracea*** L.f. ex Aiton {AFP} — Peninsula, infrequent in panhandle (native to Veracruz, Mexico). Cultivated frequently.
•***Zamia integrifolia*** L.f. var. ***broomei*** D.B. Ward — Alachua Co.
•***Zamia integrifolia*** L.f. var. ***floridana*** (A.DC.)D.B.Ward — NW and west-central peninsula
Zamia integrifolia L.f. var. ***integrifolia*** {AFP} — Peninsula (SE GA, Bahamas). Open uplands. CE. Naturalized sparingly in panhandle. Widely cultivated. The name *Z. pumila* was historically used in a wider species concept (Eckenwalder 1980) but that species is endemic to the West Indies (Stevenson 1987; Salas-Leiva et al. 2013; Ward 2016). Two varieties of this species in Florida were recognized by Griffith et al. (2021) and five were recognized by Ward (2016). The starchy subterranean stem has been used a food source (MacCauley 1888; Clevenger 1921; Hann 1986; Austin 2004). The plant also contains the toxic azoxy glycoside cycasin (Castillo-Guevara & Rico-Gray 2003), and food from *Zamia* must be properly prepared to remove this toxin. The starch was once a significant industry around Miami from around the 1840s–1920s, where as much as 2 tons of starch per day was produced during World War I (Dieterich 1984). The butterfly *Eumaeus atala* (once thought extirpated around 1965, rediscovered on Key Biscayne in 1979) accumulates cycasin as it feeds on *Zamia* (Rothschild et al. 1986; Hammer 1995) BMAA is a neurodegenerative toxic amino acid that is

potentially found in this species (Schneider et al. 2002), probably produced by the plant and not cyanobacteria (Solonenka 2023).

- ***Zamia integrifolia*** L.f. var. ***silvicola*** (Small)D.B. Ward — NW peninsula, applied by Small in Miami-Dade Co. but perhaps dubious.
- ***Zamia integrifolia*** L.f. var. ***umbrosa*** (Small)D.B. Ward — NE peninsula.

GNETALES

GNETACEAE

Gnetum

^*Gnetum gnemon* L. — Cultivated in south Florida (native to SE Asia, Australia).

WELWITSCHIALES

WELWITSCHIACEAE

Welwitschia

^*Welwitschia mirabilis* Hook.f. — Cultivated in containers primarily (native to SW Africa).

PINALES

PINACEAE

Pinus: Pines are immensely important for innumerable species of wildlife, and in many habitats pines are the dominant tree, especially in pyrogenic communities. Human uses include its pine bark (Duryea 2000), pine straw (Duryea 2000; Minogue et al. 2007), oleoresin (naval stores; Grissino-Mayer et al. 2001), and timber (Hall & Maxwell 1911). Oleoresin is rich in terpenes and can be separated into turpentine (volatile) and rosin. Oleoresin was historically tapped from living trees (Drobney 1994; Shofner 1981), but often now turpentine, rosins, and other products are refined from the processing of pulp or stumps (Gamble 1921; Howard & Westby 2013; Susaeta et al. 2014). The applications of pine terpenes are very diverse (Zinkel 1981; Rodrigues-Corrêa et al. 2012).

1. Leaf sheath mostly 0.3-1 cm long; leaves usually in fascicles of 2; leaves mostly 5-11 cm long [2]
1. Leaf sheath mostly 1-2.5 cm long; leaves in fascicles of 2-3; leaves mostly 12-45 cm long [4]
2. Twigs roughened and cracking or flaky below leafy portion; bark plates often with evident dimple-like resin pockets … P. echinata
2. Twigs smoothish below leafy portion, not flaky; bark plates without dimple-like resin pockets [3]
3. Bark orangish to reddish brown and gray, on lower trunk coarsely fissured, the vertical fissures breaking up bark into rectangular plates, upper part of trunk and main branches platy; upper surface of female cone scale with dark red-brown, purple, or purple-gray border at the apex, sharply contrasting with the rest of the scale; female cone scale umbo usually with a strong prickle; of xeric habitats … P. clausa
3. Bark gray, on lower trunk finely fissured, the vertical fissures close-set breaking the bark into narrowly elongate sections, upper part of trunk and main branches generally smooth; upper surface of female cone scale with an inconspicuous light-colored band at the apex, not contrasting sharply with the rest of the scale; female cone scale umbo unarmed or with a weak prickle; mostly of mesic to hydric habitats … P. glabra

4. Bark generally gray to brownish gray, moderately adherent and somewhat flaky or chipping, vertical and horizontal furrows well defined and sunken; leaves mostly under 20 cm long; male cones yellowish to brownish; females cones 5-12 cm long, mostly gray [5]
4. Bark generally orangish to orange-brown and gray, moderately flaky (easily flaked by hand), furrows rather shallow and less defined; leaves 15-45 cm long; male cones purplish; females cones 9-25 cm long, usually brown when fresh, eventually weathering to gray [6]
5. Lower half of mature plant often with leafy, fertile branches or adventitious trunk shoots, or sometimes lacking branches; leaves drying slightly yellowish to light green; female cones variably serotinous, long-persistent, opened ones 0.8-1.5 times as long as wide; female cone scale umbo with short, weak prickle or none; adaxial surface of seed-cone scales with dark red-brown border distally … P. serotina
5. Lower half of mature plant usually without branches or adventitious trunk shoots; leaves drying olive, slightly grayish, to middle green; female cones not serotinous, not persistent, 1.5-2.3 times as long as wide; female cone scale umbo with a stout prickle; adaxial surface of seed-cone scales lacking dark border distally … P. taeda
6. Leafy stems mostly >12 mm thick, with the leaf fascicles in dense pom-pom-like tufts; terminal buds ovoid, silvery white, 3-4 cm long; fascicles of 3 leaves; leaves 20-45 cm long; female cones 15-25 cm, apophyses dull; seedlings with "grass-stage" (dense tuft of leaves near ground surface, delayed stem elongation for up to 10 years) … P. palustris
6. Leafy stems mostly <12.1 mm thick, with the leaf fascicles spicate and bottlebrush-like along the stem; terminal buds cylindric, silvery brown, 1.5-2 cm long; fascicles of 2-3 leaves; leaves mostly 15-20 cm long; mature female cones mostly 9-18 cm long, apophyses lustrous; seedlings lacking a "grass-stage" (stems usually apparent, although sometimes short and slow-growing, and sometimes with leaves near ground as well as distally) [7]
7. Seedlings with thick shortened stems and clustered buds; leaves almost all in fascicles of 2s, or in 2s and 3s; 3-9 resin canals per needle; leaf hypoderm (2)3-4(5) cells thick; opened female cones 8-13 cm long, usually with rounded bottom … P. elliottii var. densa
7. Seedlings with slender stems and scattered buds; leaves in fascicles of 2s and 3s on same tree; 3-5 resin canals per needle; leaf hypoderm 2(3) cells thick; opened female cones 10-15 cm long, usually with flattened bottom … P. elliottii var. elliottii

Pinus clausa (Chapm. ex Engelm.)Vasey ex Sarg. {AFP} — Nearly throughout (southern AL, GA, MS). Scrub.
Pinus echinata Mill. {AFP} — Panhandle, NW peninsula (eastern US).
• ***Pinus elliottii*** Engelm. var. ***densa*** Little & K.W.Dorman {AFP} — Levy, Polk, Osceola, and Volusia cos. south to FL Keys. Sometimes treated as a species. Adequate comparisons of DNA sequence data with *P. elliottii* s.str. and *P. caribea* are lacking to yield taxonomic conclusions (see Schmidtling & Hipkins 2001; Gernandt et al. 2018; Cruz-Nicolás et al. 2024); Cruz-Nicolás & Gernandt 2025). Sometimes considered to have a "grass-stage" because some needles are close to the ground, but stem elongation is generally apparent with distal leaves as well (Pile et al. 2017; M. Ross, pers. comm.) unlike *P. palustris*. Gaussen (1960) recognized it as a species but did not cite the full reference of the basionym (Art. 41.5), which was later corrected (Silba 1984). Silba (1990) named a variety, *P. densa* var. *austrokeysensis*, from Big Pine Key, but the allegedly short cones and long leaves described do not seem to match known specimens from the area.
Pinus elliottii Engelm. var. ***elliottii*** {AFP} — Panhandle thru central peninsula (SE US). Hybrids with *P. caribaea* var. *hondurensis* have been developed in international plantations.
Pinus glabra Walter {AFP} — Panhandle, north peninsula (SE US).

Pinus palustris Mill. {AFP} — Panhandle thru Lee Co. (SE US). Pyrogenic, open, xeric to mesic-xeric sites. This species is characteristic of fire-maintained uplands in central and northern Florida, supporting a uniquely diverse ecosystem. The species was probably adapted to fire in Florida long, long ago (Noss 2018). Historically, the tree was widely used for naval stores and logging. Over 90% of the original stands of longleaf pine in Florida (and elsewhere) are gone, most of it lost by the 1970s (Smith et al. 2000; Frost 2006; Hanberry et al. 2023). Many of these areas were planted with loblolly, slash, or sand pine. Efforts have been made to restore some longleaf pine habitats. Though a primarily upland species, in 1768, Miller was informed the species inhabited swamps and thus gave the epithet 'palustris' (Ward 1974), which Croom remarked "is so great a misnomer that it ought to be superseded by Michaux's more appropriate *P. australis*" (letter to Torrey, 10 Feb 1836).

Pinus serotina Michx. {AFP} — Panhandle thru central peninsula (SE US). Putatively hybridizes with *P. taeda*.

^*Pinus ×sondereggeri* H.H.Chapm. ex Sudw. (*palustris* × *taeda*) — Probably occurs in Florida, but so far not documented in the wild. It was allegedly planted in Olustee (Kraus 1963). See Shoemaker (2024).

Pinus taeda L. {AFP} — Panhandle thru central peninsula (SE US). Primarily of mesic to hydric sites, often mixed with broadleaf trees. Widely commercially cultivated (Schultz 1999). Putatively may hybridize with *P. elliottii*, *P. palustris* (*P. ×sondereggeri*), and *P. serotina*, but documentation is generally lacking in Florida.

ARAUCARIALES

1. Cones woody, the seeds multiple and subtended by cone scales; pollen without saccae; leaves opposite with a rounded terminal bud, or leaves scale-like, or leaves acuminately sharp-pointed … Araucariaceae
1. Cones fleshy with a fleshy epimatium, the seed usually solitary; pollen usually with 2-3 saccae; leaves opposite with an acute terminal bud, or leaves alternate and linear to oblong with a rounded or obtuse tip, sometimes with a short mucro … Podocarpaceae

ARAUCARIACEAE: See Flora of Australia (Hill 1998).

Araucaria

1. Leaves >1 cm long, flat, bifacial, often spreading … A. bidwillii
1. Leaves <1 cm long, acicular or scale-like, often imbricate or tightly ascending [2]
2. Ultimate branchlets lax, drooping; adult leaves <4 mm long … A. columnaris
2. Ultimate branchlets rigidly erect; adult leaves >4 mm long … A. heterophylla

^*Araucaria bidwillii* Hook. —
^*Araucaria columnaris* (G.Forst.)Hook. —
^*Araucaria heterophylla* (Salisb.)Franco {AFP} —

PODOCARPACEAE

1. Leaves opposite to subopposite; leaf blade ovate to lanceolate … Nageia nagi
1. Leaves alternate to pseudowhorled; leaf blade linear-oblong … Podocarpus macrophyllus

Nageia

^*Nageia nagi* (Thunb.)Kuntze —

Podocarpus

*__Podocarpus macrophyllus__ (Thunb.)D.Don {AFP} —

CUPRESSALES

CUPRESSACEAE

1. Leaves alternate, deciduous and shed as a unit consisting of the branchlet and its leaves … Taxodium
1. Leaves opposite or whorled, evergreen [2]
2. Plant dioecious; branchlets bushy, not aligned in one plane; mature female cone fleshy and berry-like, indehiscent … Juniperus
2. Plants monoecious; branchlets bushy or branchlets aligned in one plane; mature female cone dry and dehiscent [3]
3. Branchlets bushy, not aligned in one plane; terminal branchlets commonly 1.2-7 cm long without branching; leaves in whorls of 3 … Callitris glaucophylla
3. Branchlets mostly aligned in a horizontal or vertical plane; terminal branchlets usually <1.5 cm long without branching (rarely longer); leaves opposite and decussate [4]
4. Branchlets mostly aligned in a horizontal plane; leaf apex acute; pollen cones dark brown … Chamaecyparis thyoides
4. Branchlets mostly aligned in a vertical plane; leaf apex bluntly acute to obtuse; pollen cones yellow-green … Platycladus orientalis

Callitris

*__Callitris glaucophylla__ JoyThomps. & L.A.S.Johnson {AFP} —

Chamaecyparis

__Chamaecyparis thyoides__ (L.)Britton et al. {AFP} —

Juniperus

1. Bark cinnamom reddish; crown flattened; scale-like leaf apices bluntly obtuse to acute; pollen cones 4-5 mm long; seed cones 3-4 mm long … J. virginiana var. silicicola
1. Bark reddish brown; crown narrowly erect to conic or rounded; scale-like leaf apices acute; pollen cones 3-4 mm long; seed cones 4-6(7) mm long … J. virginiana var. virginiana

^*Juniperus chinensis* L. —
^*Juniperus horizontalis* Moench —
^*Juniperus squamata* D.Don —
__Juniperus virginiana__ L. var. __silicicola__ (Small)E.Murray {AFP} — Central peninsula thru panhandle (southeastern USA). Woodlands. Weak morphological and chemical differentiation led Adams (1986) to view this taxon as a variety. Some interesting results from DNA studies (with admittedly few samples) place var. *silicicola* apart from var. *virginiana* (Adams & Schwarzbach 2012; Balkenbush 2023), although sampling is inadequate to understand local dynamics. Trees were historically harvested around Cedar Key for the manufacture of pencils (e.g. Eberhard Faber Pencil Factory), but dwindling supply led to use of other woods (e.g. *Calocedrus* of western USA, et al.).
__Juniperus virginiana__ L. var. __virginiana__ — North FL (central and eastern USA; Mexico).

Platycladus

^*Platycladus orientalis* (L.)Franco {AFP} —

Taxodium

1. Leafy branchlets vertically ascending; leaves subulate, appressed to ascending, spirally arranged, not twisted basally ... T. ascendens
1. Leafy branchlets spreading; leaves linear, spreading to ascending, appearing distichous, basally twisted ... T. distichum

Taxodium ascendens Brongn. {AFP} —
Taxodium distichum (L.)Rich. {AFP} —

TAXACEAE

1. Branching alternate, sometimes subopposite or pseudowhorled; leaves flexible, without resin canal, aroma not unpleasant when crushed, apex mucronate and soft-pointed, midvein often apparent and somewhat raised; aril red to orange-red, soft, mucilaginous, thick, cup-shaped, open at apex, exposing hard seed coat ... Taxus floridana
1. Branching opposite or whorled; leaves rigid, stiff, with central resin canal, malodorous when crushed, apex acute and spine-tipped, midvein typically unapparent or obscure; aril green or green with purple streaks, leathery, resinous, thin, completely enclosing hard seed coat ... Torreya taxifolia

Taxus

• ***Taxus floridana*** Nutt. ex Chapm. {AFP} — Gadsden & Liberty cos. SE.

Torreya

Torreya taxifolia Arn. {AFP} — Gadsden, Jackson, & Liberty cos. (Decatur Co., GA). FE. SE. The peculiar aroma of the wood and bark gave rise to the moniker 'Stinking Cedar' (Torrey in Arnott 1838). Asa Gray (1875) gives an account of his search for plants in Florida.

ANGIOSPERMS

also "Flowering plants" (see Lindley 1821: 11).

Figure: Estimated phylogeny of extant angiosperms, see Zuntini et al. (2024). Black font=contains taxa native to Florida; Asterisk=introduced to Florida; Gray font=not native, not included.

BASAL ANGIOSPERMS

NYMPHAEALES

CABOMBACEAE

1. Leaves all floating or emergent, peltate (3.5-12 cm long); perianth dull purple; stamens 12 or more … Brasenia schreberi
1. Submersed leaves numerous and deeply dissected (when present, floating leaves peltate and 0.5-3 cm long); perianth white to bluish, sometimes with violet markings; stamens 3-6 … Cabomba

Brasenia

Brasenia schreberi J.F.Gmel. {AFP} —

Cabomba

1. Inner tepals without violet basal margins, 2-5 mm wide; stamens 6; carpels usually 3; seeds with short, straight thick papillae … C. caroliniana

1. Inner tepals with violet basal margins, ca. 2 mm wide; stamens 3; carpels usually 1; seeds with long, curved slender papillae … C. palaeformis

Cabomba caroliniana A.Gray {AFP} —
*****Cabomba palaeformis*** Fassett {AFP} —

NYMPHAEACEAE

1. Major veins of leaf blade pinnate along the midvein; mature perianth globose or incurved; sepals 5-9(-12), green to yellow; petals less conspicuous and stamen-like; stigmatic disk with margin entire to crenate or dentate, appendages absent … Nuphar
1. Major veins of leaf blade palmate from the blade base (only a few usually less pronounced ones along the midvein); perianth spreading at anthesis; stigmatic disk with prominent, distinct, upwardly incurved appendages around margin … Nymphaea

Nuphar

1. Leaf blade ca. 2.5 times as long as wide, the sinus <¼ the blade length; stigmatic rays elliptic, terminating within 1 mm of the margin … N. advena subsp. ulvacea
1. Leaf blade 1-2 times as long as wide, the sinus >¼ the blade length; stigmatic rays linear to lanceolate, terminating 1-3 mm from the margin [2]
2. Leaf blade generally ovoid, glabrous to slightly pubescent on the lower surface … N. advena subsp. advena
2. Leaf blade generally orbicular, densely pubescent on the lower surface … N. advena subsp. orbiculata

Nuphar advena (Aiton)W.T.Aiton subsp. ***advena*** {AFP} —
Nuphar advena (Aiton)W.T.Aiton subsp. ***orbiculata*** (Small)Padgett {AFP} —
Nuphar advena (Aiton)W.T.Aiton subsp. ***ulvacea*** (G.S.Mill. & Standl.)Padgett {AFP} —

Nymphaea

1. Leaf blade margins strongly sinuate-dentate [2]
1. Leaf blade margins entire or nearly so [4]
2. Plant pubescent; flowers opening at night (closing around noon) [3]
2. Plant glabrate; flowers opening during the day [4]
3. Petiole light green; leaf blade underside pinkish brown, venation lightly contrasting with surface; tepals white to light pink; stamens and stigmatic surface yellow … N. lotus/N. pubescens
3. Petiole reddish; leaf blade underside dark purplish, venation strongly contrasting with surface; tepals moderate to dark pink to pinkish red; stamens (at least distal half) and stigmatic surface dark pink to reddish … N. rubra
4. Leaf blade underside with pronounced nearly straight cross veins between the main veins near the petiole; sepals with conspicuous short darkened lines on the outer surface (apart from the veins); petals white … N. ampla
4. Leaf blade underside without pronounced cross veins, or these somewhat reticulate; sepals uniformly colored, without darkened lines or these inconspicuous (veins sometimes darker); petals blue to purple … N. nouchali var. zanzibariensis
5. Leaf blade underside with pronounced cross veins between the main veins, especially near the petiole; flowers opening at night (closing around noon) … N. jamesoniana
5. Leaf blade underside without cross veins or with subtle cross veins between the main veins; flowers opening during the day [6]

6. Petals violet to nearly white; sepals with conspicuous short darkened lines on the outer surface … N. elegans
6. Petals yellow to white; sepals uniformly colored, without darkened lines or these inconspicuous (veins sometimes darker) [7]
7. Plant stoloniferous and rhizomatous; leaf blades usually 7-12 cm wide, the petiole often nearer the basal lobes; petals yellow … N. mexicana
7. Plant only rhizomatous, not stoloniferous; leaf blades usually 9-25(45) cm wide, the petiole nearly central; petals white or mostly so … N. odorata

Nymphaea ampla (Salisb.)DC. {AFP} —
****Nymphaea* ×*daubenyana*** W.T.Baxter ex Daubeny (*N. caerulea* × *N. micrantha*) {AFP} — Similar to *N. elegans*. Petals blue, leaves entire and the upper surface with a proliferous mound of tissue near petiole.
Nymphaea elegans Hook. {AFP} —
Nymphaea jamesoniana Planch. {AFP} — SE. Western peninsula. First collected by E.P. St. John in 1940 in Citrus County. Possibly introduced.
****Nymphaea lotus*** L. {AFP} — It is unclear how *N. lotus* (African) and *N. pubescens* (Asian) can be unequivocally distinguished; possibly *N. pubescens* has pinker petals more often (Hooker 1875; Wiersema 1982; Verdcourt 1989; Sharma et al. 1993; La-ongsri et al. 2009; Dkhar et al. 2010, 2013; Guruge et al. 2016).
Nymphaea mexicana Zucc. {AFP} —
****Nymphaea nouchali*** Burm.f. var. ***zanzibariensis*** (Casp.)Verdc. {AFP} — Referred to as *N. caerulea* by Wiersema & Hellquist in FNA, vol. 3.
Nymphaea odorata Aiton {AFP} —
****Nymphaea rubra*** Roxb. ex Salisb. —
Nymphaea* ×*thiona D.B.Ward (*N. mexicana* × *N. odorata*) {AFP} — See Ward 1977.

AUSTROBAILEYALES

SCHISANDRACEAE

1. Shrub to tree; venation of leaf blades mostly obscure … Illicium
1. Vine; venation of leaf blades conspicuous … Schisandra glabra

Illicium

1. Leaf tip acuminate; flowers 2.5-5 cm in diameter; tepals 21-33, the inner tepals ligulate, 10-20 mm long, maroon to white; stamens 25-50; flowering February-April … I. floridanum
1. Leaf tip obtuse to shortly acuminate; flowers 0.8-1.2 cm in diameter; tepals 11-16, the inner tepals orbiculate-obovate, 2-4 mm long, yellowish; stamens 6-7; flowering May-July(Oct) … I. parviflorum

Illicium floridanum J.Ellis {AFP} — The first plant species named via Latin binomial nomenclature that was based on specimens from Florida (Franck 2018).
•***Illicium parviflorum*** Michx. ex Vent. {AFP} — SE.

Schisandra

Schisandra glabra (Brickell)Rehder {AFP} — SE.

CERATOPHYLLALES

CERATOPHYLLACEAE

Ceratophyllum

1. Forking of largest leaves 1st or 2nd order (rarely 3rd order); leaves coarse-textured, marginal denticles usually strongly raised on broad base of green tissue; achene margin wingless, with 2 basal spines or tubercles, without marginal spines ... C. demersum
1. Forking of largest leaves 3rd or 4th order; leaves fine-textured, marginal denticles not raised on broad base of green tissue, sometimes nearly absent; achene margin winged, with 2 basal spines (rarely absent), with (0)2-20 marginal spines [2]
2. First leaves of plumule simple; achene body (excluding terminal spine) 3-4.5 mm ... C. australe
2. First leaves of plumule forked; achene body (excluding terminal spine) 4.5-6 mm ... C. echinatum

Ceratophyllum australe Griseb. {AFP} —
Ceratophyllum demersum L. {AFP} —
Ceratophyllum echinatum A.Gray {AFP} —

MONOCOTYLEDONAE

Figure: Estimated phylogeny of extant monocots. Black font=contains taxa native to Florida; Asterisk=introduced to Florida; Gray font=not native, not included.

ALISMATALES

TOFIELDIACEAE

1. Inflorescences 1-flowered; braceteoles of epicalyx distinct; tepals yellow; anthers with appendages; ovary and fruits conspicuously and densely tuberculate; seeds yellowish … Harperocallis flava
1. Inflorescences racemose or thyrsate; bracteoles of epicalyx connate; tepals white to anthers without appendages; ovary and fruits glabrous or with minute, scattered tubercles; seeds reddish brown to brown [2]
2. Stems and rachis glabrous; flowers subtended by a sheathing bract; anthers 9(10) … Pleea tenuifolia
2. Stems and rachis stipitate-glandular; flowers subtended by 3 minute bracts; anthers 6 … Triantha racemosa

Harperocallis

•***Harperocallis flava*** McDaniel {AFP} — FE. SE.

Pleea

Pleea tenuifolia Michx. {AFP} —

Triantha

Triantha racemosa (Walter)Small {AFP} —

ARACEAE

1. Fronds or leaves minute, floating, mostly solitary or budding, 0.3-6 mm long (Lemnoideae) … Key A
1. Fronds or leaves not minute, terrestrial or floating, several, 10-1000+ mm long [2]
2. Plant floating or stranded, leaves forming a rosette … Pistia stratiotes
2. Plant terrestrial or aquatic, not floating, rooted in substrate, leaves not forming a rosette [3]
3. Vines, vine-like, epiphytic, creeping or climbing, or free-standing and shrubby, the stems elongate with adventitious roots nearly throughout (some taxa only fertile when climbing, immature plants sometimes terrestrial and creeping and not climbing) … Key B
3. Erect or epiphytic herb, any adventitious roots generally confined to the base of the stem or the stem not much elongate [4]
4. Leaves compound … Key C
4. Leaves simple … Key D

Key A: Lemnoideae

1. Roots absent; frond without veins; daughter fronds from single terminal pouch or cavity [2]
1. Roots 1-21 per frond; fronds with 1-21 veins (often obscure); daughter fronds and flowers from 2 lateral pouches at frond base [3]
2. Fronds 3-dimensional (globular, ovoid, or boat-shaped), without air spaces; daughter fronds from terminal conic pouch or cavity at mother-frond base; flower in cavity on median line of upper frond surface … Wolffia
2. Fronds flat (linear, ribbon-, sabre-, or tongue-shaped, or ovate), with air spaces; daughter fronds from terminal flat pouch at mother-frond base; flower(s) in cavity at side of median line of upper frond surface … Wolffiella

3. Roots 1 per frond; fronds with 1-5(7) veins, without scale at base; pigment cells absent (red pigmentation present in some species) … Lemna
3. Roots (1)2-21 per frond; fronds with (3)5-16(21) veins, surrounded at base by small scale covering point of attachment of roots; pigment cells present (visible in dead fronds as brown dots) [4]
4. Fronds 1.5-2 times as long as wide, with (3)5-7 veins, and with (1)2-7(12) roots, all perforating scale … Landoltia punctata
4. Fronds 1-1.5 times as long as wide, with 7-16(21) veins, and with 7-21 roots, 1-2 perforating scale … Spirodela polyrhiza

Key B
1. Leaves monomorphic [2]
1. Leaves dimorphic, the immature stems near ground with simple or few-lobed leaves, the fertile climbing stems with larger, often more divided or lobed leaves [3]
2. Vine or vine-like, stems weak (some taxa only fertile when climbing, immature plants sometimes terrestrial and creeping and not climbing) … Philodendron
2. Free-standing to scarcely vining (roots sometimes wrapping around trees), the stem stout and trunk-like … Thaumatophyllum
3. Juvenile leaves with the base sagittate or hastate, mature leaf blades pedately divided … Syngonium
3. Juvenile leaf blade bases cordate to rounded, mature leaf blades pinnatifid or perforate [4]
4. Leaves not developing holes and perforations or these minute; ovary unilocular or incompletely bilocular, with a single intrusive placenta bearing 2-4(6) ovules at its base; seeds curved, 3-7 mm long, 1.5-4 mm wide, testa hard, endosperm present … Epipremnum
4. Leaves usually developing holes and perforations; ovary 2-locular, the septum perforate at its base, 2 basal ovules per loculus; seeds globose to oblong, 5-22 mm long, 4-12 mm wide, testa soft, endosperm absent … Monstera

Key C
1. Leaves pinnate … Zamioculcas
1. Leaves 3-foliolate, palmately compound, pedately compound, or 2- or more-pinnately compound [2]
2. Leaves 3-foliolate, palmately compound, or pedately compound, leaves present when flowering … Arisaema
2. Leaves 2- or more compound, leaves sometimes absent during flowering [3]
3. Leaves tripartite, usually dividing into 3 equal parts at the petiole apex … Amorphophallus
3. Leaves 2- or more pinnately compound with a central dominant axis … Gonatopus boivinii

Key D
1. Leaves and peduncles with numerous prickles … Lasia spinosa
1. Leaves and peduncles lacking prickles [2]
2. Leaf blades rounded, acute, truncate, to shallowly cordate at the base [3]
2. Leaf blades strongly sagittate, hastate, or peltate at the base [8]
3. Aquatic herbs with leaves frequently submersed … Cryptocoryne
3. Aquatic or terrestrial herbs, the leaves emergent or floating [4]
4. Leaves with obscure, longitudinal parallel venation; spathe small and restricted to the very base of the scape … Orontium aquaticum
4. Leaves with evident lateral or secondary veins; spathe larger, fully enclosing the spadix or nearly so [5]

5. Leaves usually variegated white or red and green; flowers unisexual; spathe enclosing the spadix at maturity [6]
5. Leaves usually uniformly green; flowers bisexual; spathe expanded or lax, not enclosing spadix at maturity [7]
6. Leaves variegated red and green or white and green; female part of spadix free from the spathe ... Aglaonema commutatum var. maculatum
6. Leaves variegated white and green, or not variegated; female part of spadix adnate to the spathe and tightly concealed by the spathe ... Dieffenbachia seguine
7. Spathe purple, red, green, rarely white; spadix rather smooth, the flowers embedded; pollen sulcate ... Anthurium
7. Spathe white; spadix tuberculate, with protruding flowers; pollen striate ... Spathiphyllum wallisii
8. Leaves variegated and usually 1-2 per stem ... Caladium
8. Leaves not variegated, 1-several per stem [9]
9. Spathe often brightly colored, purple, red, pink, white, sometimes green, often expanded or lax and not tightly enclosing the spadix; flowers bisexual ... Anthurium
9. Spathe green to white, sometimes enclosing the spadix; flowers unisexual [10]
10. Leaf blade peltate [11]
10. Leaf blade sagittate or hastate [12]
11. Leaf blade margins often undulate, the lateral veins prominently raised ... Alocasia
11. Leaf blade margins plane to weakly undulate, the lateral veins plane with the surface ... Colocasia esculenta
12. Petiole to 0.6 m long; leaf blades to 50 cm long, to 25 cm wide, the lateral veins mostly uniform and parallel except near the margin ... Peltandra
12. Petiole to 2 m long; leaf blades to 90+ cm long or wide, the lateral veins differentiating into thickened secondary and smaller anastomosing tertiary ones [13]
13. Leaf blade erect to ascending, the lobes and apex obtuse to rounded ... Alocasia
13. Leaf blade reflexed, the lobes and apex acute ... Xanthosoma

Aglaonema
^*Aglaonema commutatum* Schott var. *maculatum* (Hook.f.)Nicolson {AFP} —

Alocasia
1. Mature leaves not peltate, juvenile leaves sometimes slightly peltate, leaves and spathe not glaucescent; spathe 13-35 cm long, subequal to the spadix, often lax and falling away and not enclosing the spadix at maturity ... A. macrorrhizos
1. Mature and juvenile leaves peltate, leaves and spathe often glaucescent; spathe 10-25 cm, longer than the spadix, hooded and enclosing the spadix at maturity ... A. odora

^*Alocasia macrorrhizos* (L.)G.Don {AFP} —
^*Alocasia odora* (G.Lodd.)Spach {AFP} —

Anthurium
^*Anthurium schlechtendalii* Kunth {AFP} —

Arisaema
1. Leaflets (5)7-13(-21); spadix tapering apically, longer than spathe ... A. dracontium
1. Leaflets 3-5; spadix blunt apically, shorter than spathe [2]

2. Leaflets (3)5, lower surface usually glaucous; spathe blade apex obtuse to abruptly apiculate; spadix terminal sterile appendix 1-2 mm wide, usually slightly angled or curved away from the blade … A. quinatum
2. Leaflets 3, lower surface glaucous or not; spathe blade apex aucte to acuminate; spadix terminal sterile appendix 2-10 mm wide, generally straight [3]
3. Spathe blade internally usually wholly dark purple with few to no pale lines, uncommonly wholly green or green with white stripes; spathe tube flange (deflexed portion of tube apex) 1-3 mm broad, usually revolute; spadix terminal sterile appendix 2-5 mm wide; fruits 4-5(7) mm wide … A. pusillum
3. Spathe blade internally not wholly dark purple; spathe tube flange (deflexed portion of tube apex) 2-7 mm broad, revolute to nearly plane; spadix terminal sterile appendix 4-10 mm wide; fruits (6)8-12 mm wide [4]
4. Spathe blade internally usually green with white stripes, uncommonly dark purple with pale stripes, 2-3 times as long as wide, apex long-acuminate; spadix terminal sterile appendix width even throughout its length or slightly widened near the apex … A. acuminatum
4. Spathe blade internally usually dark purple with green stripes, sometimes green with white stripes, 1-2 times as long as wide, the apex acute to short-acuminate; spadix terminal sterile appendix distinctly widened at the apex … A. triphyllum

Arisaema dracontium (L.)Schott {AFP} —
Arisaema quinatum (Nutt.)Schott {AFP} —
Arisaema triphyllum (L.)Schott {AFP} —

Colocasia
****Colocasia esculenta*** (L.)Schott {AFP} — Promoted as an agricultural crop in the early 1900s, as 'dasheen' (Petterson 1977).

Cryptocoryne
^*Cryptocoryne walkeri* Schott {AFP} —

Dieffenbachia
^*Dieffenbachia seguine* (Jacq.)Schott {AFP} —

Epipremnum
****Epipremnum aureum*** (Linden & André)Bunting {AFP} —
****Epipremnum pinnatum*** (L.)Engl. {AFP} —

Gonatopus
****Gonatopus boivinii*** (Decne.)Engl. {AFP} —

Lemna: Visualising veins typically requires clearing the pigments, e.g. preserving some fronds in ethanol, boiling in lactophenol, or boiling in ethanol and placing in dilute bleach.

1. Frond with 1 vein (sometimes obscure or subtle), without reddish color (no anthocyanin) [2]
1. Frond with 3-5(-7) veins (sometimes obscure or subtle), with or without reddish color (no anthocyanin) [3]
2. Frond 1-2 times longer than wide, midvein not longer than ⅔ the distance from the node to the apex; seed with 12-15 indistinct ribs … L. minuta

2. Frond 1.3-3 times longer than wide, midvein at least ¾ of distance from the node (point of root attachment) to the apex; seed with 15-29 indistinct ribs … L. valdiviana
3. Root sheath winged at base; root tip usually sharp pointed; roots to 3(-3.5) cm; fronds 1-3 times longer than wide, without reddish color or spots (no anthocyanin), mostly with 1 very distinct papilla near apex on upper surface … L. aequinoctialis
3. Root sheath not winged; root tip mostly rounded; roots often longer than 3 cm; fronds 1-2 times longer than wide, often with reddish tinge or spots (anthocyanin), with or without distinct papillae near apex on upper surface [4]
4. Fronds 1.3-2 times longer than wide, not reddish on the lower surface (or at least much less so than on upper); greatest distance between lateral veins near or proximal to middle … L. minor
4. Fronds 1-1.5 times longer than wide, often reddish on the lower surface (more intensely so than on upper); greatest distance between lateral veins near or distal to middle … L. obscura

Lemna aequinoctialis Welw. {AFP} —
Lemna minor L. {AFP} —
Lemna minuta Kunth {AFP} —
Lemna obscura (Austin)Daubs {AFP} —
Lemna valdiviana Phil. {AFP} —

Landoltia
*****Landoltia punctata*** (G.Mey.)Les & D.J.Crawford {AFP} —

Lasia
^*Lasia spinosa* (L.)Thwaites {AFP} —

Monstera
1. Leaf blade entire, or with few lacerations … Monstera adansonii
1. Leaf blade regularly pinnatifid … Monstera deliciosa

^*Monstera adansonii* Schott —
^*Monstera deliciosa* Liebm. {AFP} —

Orontium
Orontium aquaticum L. {AFP} —

Peltandra
1. Leaf blade lateral veins of similar thickness; spadix ca. 1/2 as long as spathe; spathe blade white and usually broadly expanded, scarcely enclosing the spadix; fruits red … P. sagittifolia
1. Leaf blade with at least a few conspicuously thicker lateral veins; spadix usually >1/2 as long as spathe; spathe blade green and paler along the margin, usually tightly enclosing the spadix; fruits green to purplish green … P. virginica

Peltandra sagittifolia (Michx.)Morong {AFP} —
Peltandra virginica (L.)Schott {AFP} —

Philodendron
1. Free-standing to scarcely vining (roots sometimes wrapping around trees), the stem stout and trunk-like (Thaumatophyllum) [2]

1. Vine or vine-like, stems weak (some taxa only fertile when climbing, immature plants sometimes terrestrial and creeping and not climbing) (Philodendron s.str.) [3]
2. Leaf blade with well developed basal (posterior) pinnatifid lobes, the medial (anterior) blade pinnatifid with lateral lobes themselves often lobed, blade 50-150 cm long, 40-90 cm wide, the margins usually laxly undulate ... Thaumatophyllum bipinnatifidum
2. Leaf blade pinnatifid, the basal (posterior) lobes absent or poorly developed, the medial (anterior) blade pinnatifid with the lateral lobes lacking additional lobing, blade 10-25(40) cm long, 5-15(20) cm wide, the margins usually stiffly plane ... Thaumatophyllum xanadu
3. Leaf blade divided [4]
3. Leaf undivided [5]
4. Leaf blade pinnately lobed, the sinuses reaching ca. 1/2 distance to midrib ... P. lacerum
4. Leaf blade deeply pinnatifid or bipinnatifid, the sinuses nearly reaching the midrib ... P. radiatum
4. Leaf blade ovate, the midrib 1-1.4 times as long as the blade width ... P. hederaceum
4. Leaf blade ovate-lanceolate to deltate-ovate, the midrib 1.4-2 times as long as the blade width [5]
5. Cataphyll and petiole usually purplish or reddish ... P. erubescens
5. Cataphyll and petiole green ... P. sagittifolium

^*Philodendron erubescens* K.Koch & Augustin —
^*Philodendron hederaceum* (Jacq.)Schott var. *oxycardium* (Schott)Croat {AFP} —
^*Philodendron radiatum* Schott —
^*Philodendron sagittifolium* Liebm. —

Pistia
Pistia stratiotes L. {AFP} —

Spirodela
Spirodela polyrhiza (L.)Schleiden {AFP} —

Syngonium
1. Stems not glaucous, sometimes with numerous rough emergences; petioles subterete, usually with a sharp medial rib; on fertile portion of stem, leaf segments narrowly lanceolate to ovate-lanceolate, mostly with a prolonged narrowly deltate apex; rachis usually gradually curved, not angular between each segment; staminate flowers deeply retuse at the apex and completely fused into a synandarium, showing no indication of the line of fusion ... S. angustatum
1. Stems glaucous or not, smooth, lacking any emergences; petioles subterete or with only an obtuse medial rib; on fertile portion of stem, leaf segments ovate to obovate, mostly with a short broadly deltate to abruptly-short acuminate apex; staminate flowers truncate at the apex and partially to completely fused into a synandrium, usually with an indication of the line of fusion ... S. podophyllum

*****Syngonium angustatum*** Schott {AFP} —
*****Syngonium podophyllum*** Schott {AFP} —

Thaumatophyllum

1. Leaf blade with well developed basal (posterior) pinnatifid lobes, the medial (anterior) blade pinnatifid with lateral lobes themselves often lobed, blade 50-150 cm long, 40-90 cm wide, the margins usually laxly undulate ... Thaumatophyllum bipinnatifidum
1. Leaf blade pinnatifid, the basal (posterior) lobes absent or poorly developed, the medial (anterior) blade pinnatifid with the lateral lobes lacking additional lobing, blade 10-25(40) cm long, 5-15(20) cm wide, the margins usually stiffly plane ... Thaumatophyllum xanadu

^*Thaumatophyllum bipinnatifidum* (Schott ex Endl.)Sakur et al. —
^*Thaumatophyllum xanadu* (Croat et al.)Sakur. et al. —

Wolffia
1. Fronds boat-shaped, 0.3-0.7 times as deep as wide, 1–1.5 times as long as wide, with a conical papilla in center of upper surface, usually brown punctate (esp. apparent in dead leaves) ... W. brasiliensis
1. Fronds globular to ovoid, 1-1.5 times as deep as wide, 1-2 times as long as wide, lacking a a conical papilla, not brown punctate
2. Fronds 1-1.3 times as long as wide, 0.4-1.2 mm wide ... W. columbiana
2. Fronds 1.3-2 times as long as wide, 0.3-0.5 mm wide ... W. globosa

Wolffia brasiliensis Wedd. {AFP} —
Wolffia columbiana H.Karst. {AFP} —
****Wolffia globosa*** (Roxb.)Hartog & Plas {AFP} —

Wolffiella
1. Fronds (4)6-15(-20) times as long as wide; angle of pouch 25°-50° ... W. gladiata
1. Fronds 1.5-8 times as long as wide; angle of pouch 45°-120° [2]
2. Angle of pouch 70°-120°; tract of elongated cells running between median line and edge of lower wall of pouch; area of air spaces within frond rarely longer than wide ... W. lingulata
2. Angle of pouch 45°-90°; tract of elongated cells running along or close to edge of lower wall of pouch; area of air spaces within frond mostly longer than wide ... W. oblonga

Wolffiella gladiata (Hegelm.)Hegelm. {AFP} —
Wolffiella lingulata (Hegelm.)Hegelm. {AFP} —
Wolffiella oblonga (Phil.)Hegelm. {AFP} —

Xanthosoma
1. Above-ground stem absent or scarcely developed to 40 cm long; leaf blade midrib of basal lobe (posterior rib) without blade tissue (naked) along the basal 1.5-2.0 cm along the sinus or proximal side ... Xanthosoma robustum
1. Above-ground stem sometimes robust, to 1 m long, sometimes not apparent; leaf blade midrib of basal lobe (posterior rib) with blade tissue throughout along the sinus or proximal side, sometimes shortly naked (<1 cm) on larger leaves ... Xanthosoma sagittifolium

****Xanthosoma robustum*** Schott —
****Xanthosoma sagittifolium*** (L.)Schott {AFP} — Leaves and corms sometimes eaten (e.g. malanga) (Petterson 1977).

ALISMATACEAE

1. Leaves mostly floating, stranded, emergent, petiolate, the blade mostly broadly elliptic to orbicular, cordate; inflorescence usually of a solitary flower; pistils 5-8; sepals 13-29 mm long; petals pale yellow, sometimes white distally, 3.5-4.3 cm wide … Hydrocleys
1. Leaves varied but generally not orbicular; inflorescence a raceme, panicle, or umbel; pistils 2-250+; sepals 1-10 mm long; petals white, 1-10 mm wide [2]
2. Leaves petiolate, the blade broadly ovate to lance-ovate, the base cordate, truncate, to broadly rounded, basal lobes (if present) rounded; inflorescence racemes or panicles; fruit plump or terete, with glands … Echinodorus
2. Leaves varied, bladeless phyllodia or petiolate with blades; inflorescence racemes, panicles, or umbels; fruit compressed to flattened, with or without glands [3]
3. Plant 1-15(25) cm tall or long; leaves petiolate with blades; petiole to 9.5 cm long; leaf blade mostly distinct, narrowly ovate to narrowly lanceolate blade, the blade 1-7.5 cm long, 0.5 cm wide; inflorescence an umbel; flowers bisexual; fruit witout wings, eglandular … Helanthium
3. Plant 4-250 cm tall or long; leaves bladeless phyllodia or petiolate with blades; petioles (if present) usually 10-50 cm long; leaf blade (if present) varied, the base cuneate, or blade elliptic and base rounded, or base sagittate to cordate with acute to acuminate basal lobes, 1-35 cm long, 0.3-17 cm wide; inflorescence racemes or panicles; flowers unisexual, the distal flowers male, the proximal flowers female (sometimes with sterile stamens); fruit often with a curved lateral wing, often with glands … Sagittaria

Echinodorus: Christenhusz et al. (2018) proposed restricting *Echinodorus* to only include *E. berteroi* and placing all other taxa in the genus *Aquarius*.

1. Inflorescence prostrate, decumbent, to arching, the main axis not much wider proximally; veins of the sepals papillose-ridged; achene with a pair of elongate glands near the middle … E. cordifolius
1. Inflorescence erect, the main axis distinctly wider proximally; veins of the sepals smooth; achene with elongate glands just below the beak [2]
2. Leaves glabrous; stamens 9-15; fruit beak 1 mm long or longer … E. berteroi
2. Leaves usually with stellate trichomes near the junction of the petiole and leaf blade; stamens usually 21; fruit beak ca. 0.5 mm long … E. grandiflorus

Echinodorus berteroi (Spreng.)Fassett {AFP} —
Echinodorus cordifolius (L.) Griseb. {AFP} —
****Echinodorus grandiflorus*** (Cham. & Schltdl.)Micheli {AFP} — Escambia, Hillsborough Cos. (native to South America). Hydric sites. Plants of Escambia Co. were once thought to be an endemic species as *E. floridanus* (Lehtonen 2006, 2009; Lehtonen & Myllys 2007).

Helanthium
Helanthium tenellum (Mart. ex Schult. & Schult.f.)Britton ex J.G.Sm. {AFP} —

Hydrocleys
****Hydrocleys nymphoides*** (Humb. & Bonpl. ex Willd.)Buchenau {AFP} —

Sagittaria
1. Blade base of emergent leaves uniformly cordate, sagittate, to hastate [2]
1. Blade base of emergent leaves rounded to acute (rarely a few cordate, sagittate, to hastate) or leaves bladeless phyllodia [5]

2. Rhizomatous and stoloniferous; fruiting pedicels recurved (rarely spreading); pistillate sepals mostly erect and closely enclosing flower or fruiting head, occasionally spreading to recurved; petals with a purple to greenish spot at the base … S. montevidensis
2. Stoloniferous only; fruiting pedicels spreading to ascending or absent; pistillate sepals mostly spreading to recurved, not enclosing flower; petals white [3]
3. Leaves and bracts glabrous or pubescent; nodal bracts 3-8 mm long, connate at least ¼ total length; achene face without wings, with (0)1(2) glands, beak horizontal and 1-2 mm long … S. latifolia
3. Leaves and bracts glabrous or papillate; nodal bracts 5-13(30) mm long, distinct or connate much less than ¼ total length; achene face with 0-2 wings, 0 glands, beak ascending to recurved and 1-17 mm long [4]
4. Inflorescence of 5-12 whorls; nodal bracts 7-13(30) mm long; achene face with 0-2 wings, 0 glands, beak ascending to recurved and 4-17 mm long … S. australis
4. Inflorescence of 2-4 whorls; nodal bracts 5-13(25) mm long; achene face with 1-3 wings, 1-2 glands, beak ascending to recurved and 1-2 mm long … S. engelmanniana
5. Filaments glabrous; pistillate sepals mostly erect and closely enclosing flower or fruiting head, occasionally spreading to recurved; fruiting pedicels recurved (rarely spreading), usually thicker than staminate pedicels [6]
5. Filaments pubescent; pistillate sepals mostly spreading to recurved, not enclosing flower; fruiting pedicels spreading to ascending or absent [9]
6. Leaves with distinct blades to 6 cm wide; filaments pubescent … S. platyphylla
6. Leaves bladeless or the blades to 3 cm wide; filaments glabrous [7]
7. Plant usually <11 cm tall or long; leaves 1-5 mm wide, phyllodia lenticular in cross section; fruiting pedicels 0.2-1.1 cm long; mostly brackish waters … S. subulata
7. Plant usually >9 cm tall or long; leaves (1.4)2-25 mm wide, phyllodia flattened in cross section; fruiting pedicels 1.5-6.5 cm long; mostly fresh waters [8]
8. Plant submersed to emergent or stranded; leaves 5-50 cm long (rarely 100+ cm long), usually some lateral or cross venation evident, all phyllodia or some with floating or emergent, ovate to elliptic blades … S. filiformis
8. Plant submersed (rarely stranded); leaves 30-200(250) cm long, lateral or cross venation obscure, all phyllodia and bladeless … S. kurziana
9. Rhizomes lacking, stolons and corms present; phyllodia or blades 1-5 mm wide (sheath at base to 10 mm wide), lateral or cross venation obscure; inflorescence of 1-5 whorls; bracts to 4 mm long; filaments dilated at base … S. isoetiformis
9. Rhizomes coarse, stolons and corms lacking; phyllodia or blades 2-250 mm wide (sheath at base 4-50 mm wide), usually some lateral or cross venation evident; inflorescence of 1-13 whorls; bracts 3-10(50) mm long; filaments dilated or not at base [10]
10. Leaves 1-25 cm wide; bracts and sepals papillose or not; filaments longer than anthers, cylindric, not dilated at base [11]
10. Leaves 0.5-4 cm wide; bracts and sepals not papillose; filaments shorter than to subequal to anthers, dilated at base [12]
11. Bracts and sepals striate to ribbed … S. lancifolia subsp. lancifolia
11. Bracts and sepals papillose … S. lancifolia subsp. media
12. Bracts free or connate <1/4 of length, tips acuminate; inflorescence usually paniculate, branching at the proximal nodes … S. chapmanii
12. Bracts connate at least 1/4 of length, tips obtuse to acute; inflorescence usually racemose, not branching at the proximal nodes [13]
13. Phyllodia 0.2-1.3 cm wide; pistillate pedicels 0.5-3 cm long … S. graminea var. graminea
13. Phyllodia 1-2.5 cm wide; pistillate pedicels 2.1-5 cm long … S. graminea var. weatherbiana

Sagittaria australis (J.G.Sm.)Small {AFP} —
Sagittaria chapmanii (J.G.Sm.)C. Mohr {AFP} —
Sagittaria filiformis J.G.Sm. {AFP} —
Sagittaria graminea Michx. var. ***graminea*** {AFP} —
Sagittaria graminea Michx. var. ***weatherbiana*** (Fernald)Bogin {AFP} —
Sagittaria isoetiformis J.G.Sm. {AFP} —
•***Sagittaria kurziana*** Glück {AFP} —
Sagittaria lancifolia L. subsp. ***lancifolia*** {AFP} —
Sagittaria lancifolia L. subsp. ***media*** (Micheli)Bogin {AFP} —
Sagittaria latifolia Willd. {AFP} —
*****Sagittaria montevidensis*** Cham. & Schltdl. {AFP} —
Sagittaria platyphylla (Engelm.)J.G.Sm. {AFP} —
Sagittaria subulata (L.)Buchenau {AFP} —

HYDROCHARITACEAE

1. Leaves petiolate or in a pseudowhorl terminating an elongate naked erect stem, the blade generally oblong to narrowly elliptic or ovate [2]
1. Leaves sessile (not pseudowhorled and terminating an elongate naked stem), generally linear, linear-lanceolate, to oblong [4]
2. Leaf blades oblong to narrowly elliptic, 0.6-8 mm wide; brackish to marine … Halophila
2. Leaf blades generally ovate, 15-150 mm wide; freshwater [3]
3. Leaf blades 1-10 cm long, usually strongly cordate at base, some with aerenchyma on lower surface … Limnobium spongia
3. Leaf blades 7-20 cm long, mostly truncate, cuneate, to subcordate at base, without aerenchyma on lower surface … Ottelia alismoides
4. Leaves basal, 6-100 cm long [5]
4. Leaves on an elongate stem, 0.4-3 cm long [6]
5. Rhizome scaly or fibrous, stout, with short internodes; leaves 2-ranked and flattened together at base, entire or subtly serrulate distally, without lacunae; fruits spheric, echinate; brackish to marine … Thalassia testudinum
5. Stolons naked, slender, elongate; leaves spirally arranged, serrulate to entire, fruits cylindric to ellipsoid, ridged; freshwater to brackish … Vallisneria
6. Leaves 0.1-2.5(4) mm wide, opposite (sometimes crowded and pseudowhorled) … Najas
6. Leaves 2-4(5) mm wide, whorled at most nodes [7]
7. Leaf lower side midvein entire, margins with or without teeth; intravaginal scales squamules entire or fringed with clear marginal hairs … Elodea
7. Leaf margins and the lower side midvein serrulate or prickly; intravaginal squamules fringed with orange-brown hairs … Hydrilla verticillata

Elodea

1. Leaves 5-15(20) mm long, 2-8 per node … Elodea canadensis
1. Leaves 10-40 mm long, (2)5-8(10) per node … Elodea densa

Elodea canadensis Michx. {AFP} —
*****Elodea densa*** (Planch.)Casp. {AFP} — Once placed in *Egeria*, a genus found to be nested in *Elodea* (Bernardini & Lucchese 2018).

Halophila

1. Plant dioecious; leaves 4-8 in a pseudowhorl at the terminus of an erect stem … H. engelmannii
1. Plant dioecious or monoecious; leaves usually 2 and petiolate, directly attached to rhizome [2]
2. Leaf blade 0.6-4 mm wide, margin entire, glabrous; only pistillate flowers produced, staminate flowers absent or unknown in Florida … H. ovalis
2. Leaf blade 3-8 mm wide, margin finely serrulate, pubescent to glabrous; staminate and pistillate flowers produced [3]
3. Plant monoecious; transparent scales 4-8 mm long; petiole filiform, 0.2-0.7 mm wide at mid-length; leaf blade 10-20(25) mm long, 2.5-4 times as long as wide … H. decipiens
3. Plant dioecious; transparent scales 12-17 mm long; petiole ligulate, 0.8-1.5 mm wide at mid-length; leaf blade (20)25-50(60) mm long, 5-8 times as long as wide … H. stipulacea

Halophila decipiens Ostenf. {AFP} —
Halophila engelmannii Asch. {AFP} — A similar species, *H. ballonis* Asch., differs by its petioles 3-5 mm long and leaf blades with 3-5 cross-veins and rounded to obtuse tips (vs. petioles 0-1 mm long, leaf blades with 6-8 pairs of cross-veins and acute tips in *H. engelmannii*) (den Hartog 1959).
++***Halophila ovalis*** (R.Br.)Hook.f. {AFP} — Formerly considered an endemic, as *H. johnsonii.* Results of genomic analyses find *H. johnsonii* is a synonym of *H. ovalis*, and possibly the Florida material dispersed from East Africa or Antigua (Waycott et al. 2021). FT. SE.
****Halophila stipulacea*** (Forssk.)Asch. — Miami-Dade Co., discovered Sep 2024 (Campbell et al. 2024).

Hydrilla

****Hydrilla verticillata*** (L.f.)Royle {AFP} —

Limnobium

Limnobium spongia (Bosc)Rich. ex Steud. {AFP} —

Najas

1. Internodes usually with prickles; leaf midrib with prickles; testa pitted, 10-15 cell layers thick … N. marina
1. Internodes and leaf midrib without prickles; testa smooth or pitted, 3 cell layers thick [2]
2. Leaf margins minutely serrulate, usually >15 teeth per side, the teeth unicellular … N. guadalupensis
2. Leaf margins conspicuously serrulate, usually <16 teeth per side, the teeth multicellular [3]
3. Leaves spreading to ascending with age; seeds not recurved … N. wrightiana
3. Leaves usually becoming recurved with age; seeds recurved [4]
4. Leaves becoming laxly stiff, with 5-9 teeth per side; seeds strongly recurved, greenish brown, the areoles regularly arranged in ca. 20 longitudinal rows, not ladderlike, 4-angled, longer than broad, end walls raised … N. filifolia
4. Leaves stiff, with 7-15 teeth per side; seeds slightly recurved, purplish, testa dull, 3 cell layers thick, pitted, the areoles regularly arranged in ca. 15 longitudinal rows, ladderlike, 4-angled, broader than long, end walls not raised … N. minor

Najas filifolia R.R.Haynes {AFP} — ST.
Najas guadalupensis (Spreng.)Magnus {AFP} —
Najas marina L. {AFP} —

*****Najas minor*** All. {AFP} —
Najas wrightiana A.Braun {AFP} —

Ottelia
*****Ottelia alismoides*** (L.)Pers. {AFP} —

Thalassia
Thalassia testudinum K.D.Koenig {AFP} —

Vallisneria: Lacunae refer to the vertical rows of cells adjacent to the midvein that are usualy hyaline and aerated.

1. Vertical stem (with leaves) partially lignified, with short internodes, often just above soil (elongate leafless stolons horizontal); leaves green to light green, stiff, often erect, tip rounded to obtuse, often with a bright green lacunal band running up midvein to leaf tip; pistillate flowers only detected so far … V. pseudorosulata
1. Vertical stem (with leaves) not lignified, soft, lacking discernible internodes (elongate leafless stolons horizontal); leaves green and usually suffused dark green to reddish, flaccid, tip rounded to rounded-obtuse, ; pistillate and staminates flowers present [2]
2. Leaves usually green, generally without darkened cross-septae and darkened longitudinal lines or these only faintly darkened, with a light green broad lacunal band much lighter than the dark green margins, 5-10(15) mm wide, margins entire or with widely spaced, small teeth (<150 µm long, 2 teeth per 1-10 mm); sepals 2-3 mm long; stigma split <1/2 of its length, the lobes at an acute angle … V. americana
2. Leaves usually suffused reddish, usually with darkened cross-septae and/or longitudinal lines, without a conspicuous broad lacunal band or this not much lighter than the leaf margins, 15-20 mm wide, margins usually with teeth (~150 µm long, ~2 teeth per 1 mm); sepals 4-5.5 mm long; stigmas split for 2/3 of its length, the lobes divergent … V. neotropicalis

Vallisneria neotropicalis Vict. {AFP} — Whether or not *V. americana* Michx. (type from Mississippi River, Illinois) and *V. neotropicalis* (type from western Cuba) are distinct is presently unclear (Lowden 1982). When *V. neotropicalis* was originally described by Victorin from western Cuba and Florida, he also tentatively applied the name *V. americana* to plants of central Cuba and Hispaniola. Populations of *Vallisneria* are concentrated in the Great Lakes region, Gulf Coast, and Pacific Northwest, with scattered occurrences between them. DNA sequences of ITS loci have shown that two taxa form a monophyletic clade (Les et al. 2008; Martin & Mort 2023). Within this clade, samples of northern *V. americana* (from Connecticut, Minnesota, and New Jersey) formed a group sister to a weakly supported group of putative *V. neotropicalis* (from Florida and cultivation of unknown provenance, and an unidentified umbellate specimen from Texas) (Les et al. 2008; Martin & Mort 2023).
Vallisneria* ×*pseudorosulata S. Fujii & M. Maki — Recently detected hybrid in the SE USA, including Florida (Gorham et al. 2021; Martin & Mort 2023; Gebhart et al. 2025), first described from Japan (Wasekura et al. 2015).

JUNCAGINACEAE
Triglochin
Triglochin striata Ruiz & Pav. {AFP} —

CYMODOCEACEAE

1. Leaf blades flat, the tip truncate-dentate; flowers solitary; style simple; anthers attached at different levels on axis … Halodule wrightii
1. Leaf blades cylindric, the tip rounded to truncate with marginal extensions; flowers in cymes; style divided into 2 stigmas; anthers attached at same point on axis … Syringodium filiforme

Seagrass key
1. Leaf blades 0.3-2 mm wide, linear, without a distinct petiole [2]
1. Leaf blades 0.6-12 mm wide, if <2 mm wide then usually petiolate and narrowly elliptic to linear-elliptic (Hydrocharitaceae) [4]
2. Leaf blade tapered to a finely serrulate, acute tip (Ruppiaceae) … Ruppia maritima
2. Leaf blade not tapered or only slightly so, not serrulate, the tip truncate to rounded with teeth or extensions (Cymodoceaceae) [3]
3. Leaf blades flat, the tip truncate-dentate … Halodule wrightii
3. Leaf blades cylindric, the tip rounded to truncate with marginal extensions … Syringodium filiforme
4. Leaf-bearing nodes separated by scaly rhizomes; leaves 10-60 cm long, petiole lacking; styles 6–8; fruits echinate, dehiscing into 6–8 irregular valves … Thalassia testudinum
4. Leaf-bearing nodes separated by naked rhizomes; leaves 0.5-3 cm long, petiole often apparent; styles 3–5; fruits smooth or ridged, not echinate, dehiscing by pericarp decay … Halophila

Halodule

Halodule wrightii Asch. {AFP} —

Syringodium

Syringodium filiforme Kütz. {AFP} —

RUPPIACEAE

Ruppia

Ruppia maritima L. {AFP} —

POTAMOGETONACEAE

1. Leaves opposite, 1.5-5 cm long, 0.2-1 mm wide; inflorescence sessile or peduncle <2 mm long, of 2-6 flowers; flowers unisexual, without a perianth; stamens 1 per flower; fruit beak 1/3-1/2 as long as fruit body … Zannichellia
1. Leaves alternate, 1.5-20 cm long, 0.2-5 cm wide; inflorescence a pedunculate spike, flowers several; flowers bisexual, with 4 tepals; stamens 2 or 4 per flower; fruit beak <1/10 as long as fruit body [2]
2. Stipular sheaths of submersed leaves free from base of leaf blade or adnate for less than 1/2 length of stipule; leaves both submersed and floating or all submersed, submersed blades translucent, flattened, not channeled; peduncle stiff, sometimes projecting inflorescence above surface of water … Potamogeton
2. Stipular sheaths of submersed leaves adnate to base of leaf blade for 2/3 or more length of stipule; leaves all submersed, blades opaque, turgid, channeled; peduncle flexible, not projecting inflorescence above surface of water … Stuckenia pectinata

Potamogeton: Lacunae refer to the rows of cells adjacent to the midvein that are usualy hyaline and aerated.

1. Submersed leaf blade filiform, linear, or ribbon-like, 0.1-2.5 mm wide (to 10 in P. epihydrus) [2]
1. Submersed leaf blades broadly linear-oblong, lanceolate, elliptic, to nearly orbiculate, 3-58 mm wide (occasional stranded plants without submersed leaves) [7]
2. Rhizomes present; floating leaves present, at least in some plants in population [3]
2. Rhizomes absent; floating leaves absent [5]
3. Lacunae absent in submersed leaves … P. floridanus
3. Lacunae prominent in submersed leaves [4]
4. Stipular sheaths of submersed leaves adnate to base of leaf blade, tip projecting as ligule; submersed leaf blades to 2 mm wide; floating leaf blades 0.8-1.6 cm long; submersed peduncle axillary and recurved, emersed axillary or terminal and erect to slightly recurved; submersed spike capitate, 2-3 mm long, emersed cylindric, 5-9.7 mm long; fruit lateral wings with sharp points … P. diversifolius
4. Stipular sheaths of submersed leaves free from base of leaf blade or with only to 1/5 of sheath adnate, ligule not obvious; submersed leaf blades 1-10 mm wide; floating leaf blades 2-8 cm long; peduncle axillary, erect; spike cylindric, 8-40 mm long; fruit with lateral keels lacking sharp points … P. epihydrus
5. Fruits with abaxial keel or ridge; turions common; peduncle 0.3-1.1(3.7) cm long; embryo with 1 full spiral … P. foliosus
5. Fruits with abaxial surface rounded; turions uncommon; peduncle 0.5-6.6 cm long; embryo with <1 full spiral [6]
6. Leaf blade with 0-2 rows of lacunae along midrib, apex acute, rarely apiculate, rarely with bristle; stipules connate; peduncles filiform to cylindric, 1-3 per plant; inflorescences interrupted; mature fruits obovoid, sides concave, beak toward adaxial edge, rarely median … P. pusillus subsp. pusillus
6. Leaf blade with 1-5 rows of lacunae along midrib, apex acute to obtuse; stipules convolute; peduncles cylindric, more than 3 per plant; inflorescences continuous; mature fruits widest at middle or ovoid, sides rounded, beak median, not toward adaxial edge … P. pusillus subsp. tenuissimus
7. Stem flattened; leaves mostly submersed (sometimes floating or stranded), blade margins conspicuously serrate; fruit beak 2–3 mm; turions formed, hard … P. crispus
7. Stem terete; leaves only submersed (in P. perfoliatus) or submersed and emergent, blade margins entire; fruit beak 1 mm or less; turions rarely formed [8]
8. Submersed leaves clasping stem; floating leaves absent (leaves sometimes at the surface or stranded) … P. perfoliatus
8. Submersed leaves petiolate or sessile (not clasping); floating leaves present [9]
9. Stem conspicuously rusty- or black-spotted; floating leaf blade 1.2-3.2 times as long as wide, 1.5-5 cm wide, rounded to cordate at base; submersed leaf blades crispate, mostly arcuate … P. pulcher
9. Stems without conspicuous dark spots; floating leaf blade 2.2-11 times as long as wide, rounded-acute to cuneate at base, usually tapering to petiole, 1-3 cm wide; submersed leaf blades flat or crispate, mostly not arcuate or occasionally arcuate [10]
10. Submersed leaves sessile or petioles 0.1-4 cm long, the petioles usually shorter than the blade; larger submersed leaves acuminate; fruits grayish green to olive-green … P. illinoensis
10. Submersed leaves with petioles (0.5)2-13 cm long, the petioles usually subequal to longer than the blade; larger submersed leaves acute at apex; fruits red to reddish brown … P. nodosus

*__Potamogeton crispus__ L. {AFP} —
__Potamogeton diversifolius__ Raf. {AFP} — This is the only species in the flora with strongly adnate stipular sheaths.
__Potamogeton epihydrus__ Raf. {AFP} —
•__Potamogeton floridanus__ Small {AFP} — SE.
__Potamogeton foliosus__ Raf. {AFP} —
__Potamogeton illinoensis__ Morong {AFP} —
__Potamogeton nodosus__ Poir. {AFP} —
__Potamogeton perfoliatus__ L. {AFP} —
__Potamogeton pulcher__ Tuck. {AFP} —
__Potamogeton pusillus__ L. {AFP} —

Stuckenia
__Stuckenia pectinata__ (L.)Börner {AFP} —

Zannichellia
__Zannichellia palustris__ L. {AFP} —

DIOSCORALES
BURMANNIACEAE
1. Leaves and stems purplish to pale brownish or whitish; inflorescence racemose or flower solitary; pedicel 2-10 mm long; flower terete or subterete; ovary 1-locular; placentation parietal … A. aphylla
1. Leaves and stems green; inflorescence of dense cymes or flower solitary; pedicel 0-1 mm long; flower 3-angled or 3-winged; ovary 3-locular; placentation axile … Burmannia

Apteria
__Apteria aphylla__ (Nutt.)Barnhart ex Small {AFP} —

Burmannia
1. Inflorescences usually appearing capitate; flowers 3-angled, wings if present <1/5 as wide as flower; perianth whitish; the inner perianth lobes usually less than 2/3 length of outer lobes … B. capitata
1. Inflorescences loosely flowered cymes or flowers solitary; flowers distinctly 3-winged, wings >1/3 as wide as flower; perianth blue, violet, yellow, or greenish; inner perianth lobes 2/3 to nearly equaling length of outer lobes [2]
2. Basal leaves absent; flowers bluish with perianth lobes paler, often cream-colored; … B. biflora
2. Basal leaves present; flowers yellow or greenish … B. flava

__Burmannia biflora__ L. {AFP} —
__Burmannia capitata__ (J.F.Gmel.)Mart. {AFP} —
__Burmannia flava__ Mart. {AFP} — SE.

DIOSCOREACEAE
Dioscorea

1. Leaf blade upper surface variegated whitish along the midrib, the lower surface pale green to purplish … D. dodecaneura
1. Leaf blade upper surface not variegated, the lower surface green or glaucous [2]
2. Plants rhizomatous; bulbils never produced in leaf axils; leaf margins entire or repand; petiole base never clasping; inflorescences regularly produced [3]
2. Plants tuberous; bulbils produced in leaf axils; leaf margins lobed or entire; petiole base sometimes clasping; inflorescences absent or infrequent, or often only one sex present [4]
3. Rhizomes yellow, nodes articulate, each bearing 1 dark, contrasting, somewhat deltate scale leaf or the dark vertical scar remaining once leaf falls; staminate inflorescences (1)2–5 in leaf axils; perianth of both staminate and pistillate flowers yellow to orangish yellow; stamens inwardly curved; thecae connate … D. floridana
3. Rhizomes brownish, nodes not articulate; staminate inflorescences solitary in leaf axils; perianth of both staminate and pistillate flowers greenish white; stamens erect; thecae distinct, widely spreading … D. villosa
4. Leaf blade unlobed [5]
4. Leaf blades lobed, with a sinus, sometimes obscure [6]
5. Stems broadly winged, 4-angular; leaves often opposite or subopposite, the blade base margin somewhat straight and sagittate and angled; seeds winged all around … D. alata
5. Stems terete, usually unwinged; leaves alternate throughout, the blade base mostly evenly rounded; seeds unilaterally winged … D. bulbifera
6. Leaf blade hastate-cordate, margins 3-lobed, lobes rounded, blade apex acute or mucronate; petiole base not clasping … D. polystachya
6. Leaf blade reniform, margins irregularly 3-5-lobed, lobes often elongate or acuminate, blade apex conspicuously caudate … D. sansibarensis

**Dioscorea alata* L. {AFP} —
**Dioscorea bulbifera* L. {AFP} —
**Dioscorea dodecaneura* Vell. {AFP} —
Dioscorea floridana Bartlett {AFP} —
^*Dioscorea polystachya* Turcz. {AFP} —
^*Dioscorea sansibarensis* Pax {AFP} —
Dioscorea villosa L. {AFP} —

NARTHECIACEAE
1. Leaves nearly all basal, cauline ones reduced to scales; inflorescence a raceme or spike, glabrate … Aletris
1. Leaves basal and cauline; inflorescence a panicle, tomentose … Lophiola aurea

Aletris
1. Perianth short-cylindric to campanulate, 1-2 times as long as wide, the lobes incurved to erect at anthesis [2]
1. Perianth narrowly cylindric, 2-3 times as long as wide, the lobes spreading to reflexed at anthesis [4]
2. Perianth golden yellow, campanulate, 6-7 mm long; fruit beak gradually narrowed distally … A. aurea
2. Perianth white to pale yellow, the lobes sometimes faintly yellowish or brownish, campanulate or obovoid, 7-11 mm long; fruit beak abruptly narrowed distally [3]
3. Perianth broadly cylindric to campanulate, white to creamy white … A. obovata

3. Perianth narrowly cylindric, pale yellowish ... A. ×tottenii
4. Leaves dull grayish green, 6-10 mm wide; perianth 6-8 mm long, white; fruit beak gradually tapering from body to tip ... A. bracteata
4. Leaves yellowish green to green, 5-26 mm wide; perianth 7-12 mm long, white or yellow; fruit beak gradually or abruptly narrowed distally [5]
5. Perianth white, 7-10 mm long; fruit beak abruptly narrowed distally ... A. farinosa
5. Perianth yellow, rarely white, 9-12 mm long; fruit beak gradually narrowed distally ... A. lutea

Aletris aurea Walter {AFP} —
Aletris bracteata Northr. {AFP} — SE.
Aletris farinosa L. {AFP} —
Aletris lutea Small {AFP} —
Aletris obovata Nash ex Small {AFP} —
Aletris* ×*tottenii E.T.Browne (*A. lutea* × *A. obovata*) {AFP} —

Lophiola
Lophiola aurea Ker Gawl. {AFP} —

PANDANALES

PANDANACEAE

Pandanus
1. Leaf margins with reddish prickles ... P. utilis
1. Leaf margins entire or whitish prickles [2]
2. Leaf margins with stout whitish prickles (2)4-8 mm long ... P. odorifer
2. Leaf margins entire or with short, weak greenish to whitish prickles 1-4 mm long ... P. tectorius

^*Pandanus odorifer* (Forssk.)Kuntze {AFP} —
^*Pandanus tectorius* Parkinson —
^*Pandanus utilis* Bory —

STEMONACEAE

Croomia
Croomia pauciflora (Nutt.)Torr. {AFP} — SE.

ASPARAGALES

ORCHIDACEAE

subf. Cypripedioideae: ^*Paphiopedilum*
subf. Epidendroideae
- Epidendreae, Bletiinae: *Bletia, Basiphyllaea, Hexalectris*
- Epidendreae, Calypsoinae: *Corallorhiza, Govenia, Tipularia*
- Epidendreae, Laeliinae: ^*Brassavola,* ^*Cattleya*, *Encyclia*, *Epidendrum*, *Laelia,* ^*Myrmecophila* , *Prosthechea*, *Tetramicra*
- Epidendreae, Pleurothallidinae: *Lepanthopsis*, *Stelis*
- Arethuseae, Arethusinae: *Calopogon*
- Arethuseae, Coelogyninae: *Bletilla*

Neottieae: *Neottia*
Malaxideae, Malaxidinae: *Liparis*, *Malaxis*
Tropidieae: *Tropidia*
Collabieae: **Phaius, ^Spathoglottis*
Triphoreae, Triphorinae: Triphora
Dendrobieae: *Bulbophyllum*, ^*Dendrobium*
subf. Orchidoideae
Orchideae Orchidinae: *Habenaria*, *Platanthera*
Cranichideae, Spiranthinae: *Beloglottis*, *Cyclopogon*, *Eltroplectris*, *Mesadenus, Pelexia, Sacoila, Spiranthes*
Cranichideae, Goodyerinae: *Goodyera*, *Platythelys*, **Zeuxine*
Cranichideae, Cranichidinae: *Cranichis, Ponthieva, Prescottia*
subf. Vandoideae
tribe Cymbideae, subtr. Catasetinae: *Galeandra*
tribe Cymbideae, subtr. Cymbidiinae: ^*Cymbidium*
tribe Cymbideae Cyrtopodiinae: *Cyrtopodium*
tribe Cymbideae Eulophiinae: *Eulophia, *Oeceoclades, Orthochilus*
tribe Cymbideae Maxillariinae: *Maxillaria*
tribe Cymbideae Oncidiinae: *Brassia, Ionopsis, Macradenia, Oncidium, Tolumnia Trichocentrum*
Vandeae, Polystachyinae: *Polystachya*
Vandeae, Angraecnae: *Campylocentrum, Dendrophylax*
Vandeae, Aeridinae: ^*Phalaenopsis*, ^*Vanda*
subf. Vanilloideae
tribe Pogonieae: *Cleistesiopsis, Isotria, Pogonia*
tribe Vanilleae: *Vanilla*

1. Lip a large and inflated pouch or sac … Paphiopedilum
1. Lip not expanded into a pouch or sac [2]
2. Plants elongate vines … Vanilla
2. Plants cespitose, rhizomatous, or stoloniferous [3]
3. Plants epiphytic, sometimes in detritus at base of trunks [4]
3. Plants terrestrial, sometimes on downed, decaying logs [7]
4. Plants leafless, with photosynthetic roots … Key A
4. Plants with leaves and roots [5]
5. Stems of elongate pseudobulbs with multiple leaf scars throughout or near the base … Key B
5. Stems of short pseudobulbs with leaf scars confined to the tip, or without pseudobulbs [6]
6. Inflorescence terminal, subtended by leaves … Key C
6. Inflorescence lateral or basal, not terminating the stem, sometimes subtended by leaves but with some leaves distal to the base of the peduncle … Key D
7. Leaves plicate with several prominent longitudinal veins … Key E
7. Leaves with only the midrib prominent, secondary or any longitudinal veins not prominent or scarcely pronounced, or leaves absent [8]
8. Leaves absent (sometimes only present when not flowering) … Key F
8. Leaves present [9]
9. Flowers with an elongate protruding spur at base of lip, spur free from ovary … Key G
9. Flowers without spur at base of lip or spur short and adnate to ovary [10]
10. Leaves present only at one mid-cauline to subterminal node; inflorescence of 1(–3, rarely) flowers … Key H

10. Leaves basal or present at more than 1 node; inflorescence of 2-100 flowers … Key I

Key A
1. Roots strongly flattened, uniformly grayish to green; flowers strongly 2-ranked … Campylocentrum
1. Roots flattened and grayish to green with light speckles or striations, or roots subterete and slender; flowers not 2-ranked … Dendrophylax

Key B
1. Inflorescence basal … Cyrtopodium
1. Inflorescence terminal [2]
2. Leaves mostly ascending; inflorescence of 1-3 flowers, the peduncle usually level with or below the leaf tips … Cattleya
2. Leaves mostly spreading to laxly recurving; inflorescence mostly of 4-50 flowers, the peduncle exserted beyond the leaves [3]
3. Pseudobulb slenderly terete, not hollow; sepals and petals often plane … Dendrobium
3. Pseudobulb thickly cylindric, hollow; sepals and petals often strongly undulate … Myrmecophila

Key C
1. Stem base a distinctly differentiated, persistent pseudobulb, the leaf blade arising from tip of a pseudobulb [2]
1. Stem base terete, sometimes with persistent leaf sheaths but not thickened into a persistent pseudobulb [4]
2. Pseudobulb terete or subglobose; leaf blade narrowly lanceolate, linear-lanceolate, to linear-oblong … Encyclia
2. Pseudobulb compressed; leaf blade broadly elliptic, lanceolate, to narrowly lanceolate [3]
3. Pseudobulb orbicular, ovate, to elliptic; sepals and petals white to pink … Laelia
3. Pseudobulb narrowly oblong, narrowly ovoid, or orbicular; sepals and petals purplish, brownish, greenish, to yellowish, sometimes with dark markings … Prosthechea
4. Leaves 2-8 along an elongate stem with 3-12 nodes … Epidendrum
4. Leaves solitary (sometimes with 3 or more nodes) or few and mostly densely imbricate and basal [5]
5. Leaf blades linear to narrowly lanceolate or oblanceolate [6]
5. Leaf blades broadly elliptic to orbicular [8]
6. Leaf blades 10-20 mm wide; lip, petals, and sepals relatively small, generally of similar color and size … Polystachya
6. Leaf blades 3-10 mm wide; lip white, with an expanded ovate blade much wider than the linear-lanceolate, mostly greenish to yellowish petals and sepals
7. Leaves 1(2); lip white, ovate, the sepals and petals linear-lanceolate, mostly greenish to pale yellowish … Brassavola
7. Leaves 2-5; lip pale pink to pink, with darker stripes alternating with pale or whitish stripes, 3-lobed, the sepals and petals oblong-lanceolate, mostly brownish green … Tetramicra
8. Leaf blades 0.5-4 cm long (rarely longer); leaf sheaths sometimes ciliate … Lepanthopsis
8. Leaf blades 4-20 cm long (shorter in some species outside Florida); leaf sheaths glabrous [9]
9. Petiole unapparent; sepals glabrous; sepals and petals 10-30 mm long … Phalaenopsis)
9. Petiole somewhat distinct, 2-3 cm long; sepals pubescent; sepals and petals 4-8 mm long … Stelis

Key D

1. Stem base a distinctly differentiated, persistent pseudobulb, the leaf blade arising from tip of a pseudobulb [2]
1. Stem base terete, sometimes with persistent leaf sheaths but not thickened into a persistent pseudobulb or this scarcely developed [6]
2. Leaf blade to 16 cm long; inflorescence rachis, fleshy-thickened … Bulbophyllum
2. Leaf blade 12-60 cm long; inflorescence rachis not fleshy [3]
3. Inflorescence sessile or subsessile … Maxillaria
3. Inflorescence elongate, pedunculate, exserted [4]
4. Sepals and petals linear-lanceolate to long-caudate … Brassia
4. Sepals and petals narrowly lanceolate, elliptic, or obovate [5]
5. Sepals and petals narrowly lanceolate, brownish, reddish, yellowish, to greenish … Macradenia
5. Sepals and petals yellow with brownish or purplish markings … Oncidium
6. Leaf blades 2-4 times as long as wide, generally elliptic … Phalaenopsis
6. Leaf blades 4-70 times as long as wide [7]
7. Leaf blades 4-10 cm wide … Trichocentrum
7. Leaf blades 0.2-3 cm wide [8]
8. Leaf blades lax, the upper and lower surfaces generally expanded (sometimes laterally flattened only at the very base), not equitant or scarcely so [9]
8. Leaf blades stiff, terete to laterally flattened (at least in the proximal half), often somewhat equitant, or the upper and lower surfaces generally expanded [10]
9. Plants in dense tufts of numerous stems; leaves linear to linear-oblong; sepals and petals whitish with reddish lines … Cymbidium
9. Plants of few stems; leaves narrowly lanceolate; sepals and petals pale greenish to yellowish … Maxillaria
10. Leaf blades upper and lower surfaces generally expanded (sometimes laterally flattened only at the very base), not equitant or scarcely so … Ionopsis
10. Leaf blades terete to laterally flattened (at least in the proximal half), often equitant [11]
11. Leaves usually few (2-7) and basal; lip larger than the reduced petals and sepals … Tolumnia
11. Leaves usually numerous (6-30) along an elongate stem; lip subequal to much smaller than the showy petals and sepals … Vanda

Key E
1. Leaf blades 2-4(4.5) times as long as wide, 5-15(20) cm long, ovate to ovate-lanceolate [2]
1. Leaf blades 3–60 times as long as wide, 20-100 cm long, lance-elliptic, ovate-lanceolate, narrowly lanceolate, to linear-lanceolate [3]
2. Leaves generally basal, the blade apex rounded to abruptly short-acute; inflorescence spicate or racemose … Liparis
2. Leaves cauline, distal, the blade apex long-acute to attenuate; inflorescence usually paniculate … Tropidia
3. Persistent leaf sheaths forming a conspicuous zigzag pattern where they overlap; inflorescence paniculate, branches spreading to ascending-spreading; flowers yellow … Cyrtopodium
3. Leaf sheaths withering or not forming a conspicuous zigzag pattern; inflorescence racemose, spicate, or paniculate with ascending to appressed branches; flowers not yellow [4]
4. Leaf blades ovate-lanceolate; lip usually deeply bilobed … Govenia
4. Leaf blades lance-elliptic, narrowly lanceolate, to linear-lanceolate; lip unlobed to shallowly lobed [5]
5. Leaf blades 5-20 mm wide; inflorescence bracts 14-35 mm long, subequal to longer than the flowers; sepals and petals tightly appressed and hovering over the lip … Orthochilus

5. Leaf blades 5-90 mm wide; inflorescence bracts 2-45 mm long, mostly shorter than the flowers; sepals and petals spreading [6]
6. Inflorescence terminal, subtended by leaves … Bletilla
6. Inflorescence lateral or basal, not terminating the stem, sometimes subtended by leaves but with some leaves distal to the base of the peduncle [7]
7. Leaf blades 5-30 mm wide; petals, sepals, and lip usually pink, the lip with white or yellow lamellae or crests … Bletia
7. Leaf blades (25)30-90 mm wide; petals, sepals, and lip pink, or reddish, purplish, without lamellae or crests [8]
8. Leaf blades lance-elliptic; inflorescence bracts appressed, spathe-like; lip tubular with inrolled margins … Phaius
8. Leaf blades narrowly lanceolate; inflorescence bracts spreading, not spathe-like; lip not tubular or margins only slightly upturned [9]
9. Sepals all pointed upwards, the lateral ones geniculate and upturned, and the petals hovering over the lip, sepals and petals greenish, yellow, to brownish, the lip mostly oblong and not flared, the lip pink-red to purplish red … Eulophia
9. Sepals radiating, petals spreading, sepals and petals white to pink, the lip clawed with a flared apex, the lip pink … Spathoglottis

Key F
1. Plants 10-30 cm tall; flowers pedicellate … Triphora
1. Plants 20-100 cm tall; flowers sessile or pedicellate [2]
2. Flowers uniformly pink to red, rarely greenish or brownish … Sacoila
2. Flowers white, green, brownish, or mixed with pink and red colors [3]
3. Flowers white, densely arranged, often secund … Spiranthes
3. Flowers green, brownish, or partly white [4]
4. Sepals and petals 3-10 mm long [5]
4. Sepals and petals 10-30 mm long [6]
5. Rhizomes creeping, slender, 2-5 mm wide, with short, thick lateral roots; sepals and petals hooded over the lip; lip white with pink spots; leaf blades absent … Corallorhiza
5. Rhizomes creeping, cormose, 7-15 mm wide, with elongate slender roots; sepals and petals spreading; lip greenish; leaf blade ovate, present fall-early spring, withered or absent during spring flowering … Tipularia
6. Stem base pseudobulbous, with fleshy roots; sepals and petals light green; leaf blades linear-lanceolate, withered or absent during flowering … Galeandra
6. Rhizomes creeping, scaly; sepals and petals whitish or yellowish with dark reddish or purplish stripes; leaf blades absent … Hexalectris

Key G
1. Petiole 5-20 cm long … Eltroplectris
1. Petiole absent or to 1 cm long [2]
2. Leaves basal and cauline, or if basal then broadly elliptic to lance-elliptic … Habenaria
2. Leaves basal, generally narrowly lanceolate … Platanthera

Key H
1. Leaves whorled, (2-)5(-6); flowers 1 (rarely 2) … Isotria
1. Leaves solitary [2]
2. Lip margin crenulate; sepals brownish to greenish, linear-lanceolate, 24–65 mm long … Cleistesiopsis

2. Lip margin laciniate; sepals pink or rarely white, oblong to narrowly lanceolate, 14–23 mm long … Pogonia

Key I
1. Leaves 2(3), opposite, subopposite, or whorled, at terminal node (~near middle portion of total plant height) below inflorescence … Neottia
1. Leaves solitary or several, alternate or basal [2]
2. Leaf blade upper side with strongly whitened reticulate veins … Goodyera
2. Leaf blade reticulate veins obscure or greenish [3]
3. Leaf blade strongly mottled light and dark green … Oeceoclades
3. Leaf blade not mottled, sometimes appearing so due to contrasting veins [4]
4. Plants 5-30 cm tall; leaves several along the stem, the inflorescence ~1/3-1/2 of the plant height [5]
4. Plants 10-100 cm tall; leaves primarily basal, the inflorescence constituting the majority of the plant height [7]
5. Plants arising from corms or tuberous roots; leaves 0.5-2 cm long … Triphora
5. Plant with few, slender, fleshy roots; leaves 1-9 cm long [6]
6. Leaf blade ovate to ovate-lanceolate; perianth white to greenish … Platythelys
6. Leaf blade narrowly lanceolate; perianth white … Zeuxine
7. Leaves 20-100 cm long, numerous at the plant base; inflorescence paniculate with spreading branches … Oncidium
7. Leaves solitary, few, to numerous; inflorescence racemose, or if branched, then the branches ascending to erect [7]
8. Sepals and petals 9-25 mm long, 4-10 mm wide, spreading, pink or white; leaves auriculate, deciduous … Calopogon
8. Sepals and petals 2-13 mm long, 1-4 mm wide, appressed to spreading, colors various; leaves usually not articulate [9]
9. Plants arising from corms or pseudobulbs (bulbous base) [10]
9. Plants arising from slender fibrous or fleshy roots [11]
10. Leaf blade linear-lanceolate; flowers 8-15 mm long … Eulophia
10. Leaf blade broadly ovate; flowers 1-4 mm long … Malaxis
11. Flowers not resupinate (lip at top) [12]
11. Flowers resupinate (lip at bottom) [14]
12. Column 0.3 mm; lip 1–2 mm; dorsal sepal 1–2.2 mm, reflexed … Prescottia
12. Column 1.5–5 mm; lip 2–7 mm; dorsal sepal 3–7 mm, not reflexed [13]
13. Petals linear; lip ovate-subquadrangular, shallowly concave, white with green or pale yellow spots; column prominently winged, 1.5–2 mm … Cranichis
13. Petals obliquely triangular; lip obovate to suborbiculate, deeply concave, white with 1–2 dark green spots; column slightly winged, 2.5–5 mm … Ponthieva
14. Flowers uniformly pink to red, rarely greenish or brownish … Sacoila
14. Flowers white, green, brownish, or mixed with pink and red colors [14]
15. Petioles 10–17 cm long, pinkish, reddish, or brownish … Pelexia
15. Petioles 0-10 cm or less, usually green [16]
16. Flowers white, the column and lip pink at the tip … Basiphyllaea
16. Flowers dull brownish, dull greenish brown, or green, the lip white, or mostly uniformly white without pink [17]
17. Flowers dull brownish, dull greenish brown, or green, the lip white; leaf blade ovate to ovate-lanceolate [18]

17. Flowers mostly uniformly white, rarely spotted; leaf blade ovate, ovate-lanceolate, to linear-lanceolate [19]
18. Flowers generally greenish or greenish brown; petal and sepal apices not recurved; lip oblong, apex slightly flared or pandurate to oblong-ovate with apex usually fan-shaped, 5–7 mm long; column 3.5–4.5 mm long … Cyclopogon
18. Flowers dull brownish or reddish; petal and sepal apices spreading to recurved; lip elliptic to ovate-lanceolate, apex obtuse-rounded, 3.5–6 mm long; column 2–2.5 mm long … Mesadenus
19. Lip white with central green stripe, 4-5 mm long, sagittate and 3-lobed, margins finely denticulate … Beloglottis
19. Lip white, centrally yellow to yellowish or greenish white, 5–7 mm, ovate to ovate-oblong and unlobed, margins erose-crisped … Spiranthes

Basiphyllaea
Basiphyllaea corallicola (Small)Ames {AFP} — SE. Sometimes subsumed under *Bletia*.

Beloglottis
Beloglottis costaricensis (Rchb.f.) Schltr. {AFP} — SE.

Bletia
1. Flower buds obovate, distinctly swollen at the apex and narrowed at the base; pedicellate ovary (2)3-3.5 cm long; sepals 30-40 mm long; upper 2 petals spreading to slightly arched over the lip … B. patula
1. Flower buds roughly ovate to elliptic, mostly narrowest at the apex and widest near the middle or base; pedicellate ovary 0.9-2.1 cm long; sepals (12)15-26 mm long; upper 2 petals hooded directly over the lip [2]
2. Pedicellate ovary 1.8-2.1 cm long; deep pink-purple; lip crests or lamellae nearly white to subtly yellowish white, usually 5 extending into the lip midlobe and 2 shorter peripheral ones that terminate before the midlobe; column 1-2 mm long, lacking a foot … B. florida
2. Pedicellate ovary 0.8-1.8 cm long; perianth light pink to deep pink; lip crests or lamellae distinctly yellowish, usually 5 extending into the lip midlobe and lacking shorter ones; column 8-12 mm long, the base with a ~2 mm long foot … B. purpurea

****Bletia florida*** (Salisb.)R.Br. {AFP} —
Bletia patula Graham {AFP} —
Bletia purpurea (Lam.)DC. {AFP} — ST.

Bletilla
****Bletilla striata*** (Thunb.) Rchb.f. {AFP} —

Brassavola
^*Brassavola nodosa* (L.)Lindl. —

Brassia
[X]***Brassia caudata*** (L.)Lindl. {AFP} — Miami-Dade Co. (Neotropics). Rockland hammocks. SE. Disappeared by the late 1970s (Gann et al. 2002).

Bulbophyllum

[x]***Bulbophyllum pinelianum*** (A.Rich.)Ormerod {AFP} — Collier Co. (Neotropics). Swamps. SE. Disappeared by the 1970s (Gann et al. 2002). The oft-used name *Bulbophyllum pachyrachis* is a later synonym (Bogarín et al. 2014; Ormerod 2016).

Calopogon : The flower consists of 2 lateral ascending sepals and 1 downward-pointing sepal, 2 lateral descending petals and 1 erect lip with numerous bristles mimicking anthers, the column downward-pointing over the sepal.

1. Corm usually forked; inflorescence rachis and ovary purple; flowers never white, strongly fragrant, opening nearly simultaneously; 2 lateral petals obovate, widest above the middle; flowering late Feb-early Jul (esp. Mar-May) … C. multiflorus
1. Corm usually not forked; inflorescence rachis and ovary green to purple; flowers sometimes white, scentless to mildly fragrant, opening sequentially or nearly simultaneously; 2 lateral petals widest near or below the middle; flowering in various months [2]
2. Upper leaf tightly appressed to somewhat ascending; flowers never white, crowded on the rachis, <1 cm apart, opening nearly simultaneously, not fragrant; flowering Dec-early May (esp. Mar-Apr) … C. barbatus
2. Upper leaf ascending to divergent; flowers sometimes white, well-spaced along the rachis, >1 cm apart, opening sequentially, mildly fragrant; flowering in various months [3]
3. Floral bracts 1.5-4.5 mm long; lateral sepals 10-15 mm long, often strongly falcate and curved upwards; lateral petals 9-18 mm long, lanceolate to weakly pandurate, falcate; lip 9-13 mm long, 5-11 mm wide, middle lobe often broadly flared and wing-like (sometimes knobby); flowering late Mar-late Jul (esp. Apr-May) … C. pallidus
3. Floral bracts 3-30 mm long; lateral sepals 13-26 mm long, spreading to slightly falcate and curved upwards; lateral petals 13-28 mm long, obpandurate, slightly falcate to straight; lip 11-23 mm long, 5.5-21 mm wide, middle lobe often abruptly flared and knobby at the apex with a narrow claw; flowering in various months [4]
4. Leaf blade strongly curled transversely; dilated distal portion of middle lip lobe narrowly to widely expanded, whitened; wet, alkaline savannas; flowering Jan-May (esp. Mar-Apr) … C. tuberosus var. simpsonii
4. Leaf blade slightly curled transversely; dilated distal portion of middle lip lobe broadly expanded and not whitened except in entirely white flowers; acidic wetlands; flowering Mar-early Jun (esp. Apr-May) … C. tuberosus var. tuberosus

Calopogon barbatus (Walter)Ames {AFP} —
Calopogon multiflorus Lindl. {AFP} — ST.
Calopogon pallidus Chapm. {AFP} —
Calopogon tuberosus (L.)Britton et al. var. ***simpsonii*** (Small)Magrath {AFP} —
Calopogon tuberosus (L.)Britton et al. var. ***tuberosus*** {AFP} —

Hybrid taxa
C. floridensis, nom. inval. (C. multiflorus × *C. pallidus*)
C. fowleri, nom. inval. (*C. barbatus* × *C. pallidus*)
C. goethensis, nom. inval. (*C. multiflorus* × *C. tuberosus*)
C. obscurus, nom. inval. (*C. barbatus* × *C. multiflorus*)
C. simulans, nom. inval. (*C. barbatus* × *C. tuberosus*)
C. vulgaris, nom. inval. (*C. pallidus* × *C. tuberosus*)

Campylocentrum
Campylocentrum pachyrrhizum (Rchb.f.)Rolfe {AFP} — SE.

Cattleya
^*Cattleya* spp. — A very popular group for cultivation that are extensively hybridized, making taxonomic determination nearly futile.

Cleistesiopsis
1. Column 13-19 mm long; lip 21-33(38) mm long … C. divaricata
1. Column 21-25(29) mm long; lip (26)34-56 mm long … C. oricamporum

Cleistesiopsis divaricata (L.)Pansarin & F. Barros {AFP} — SE.
Cleistesiopsis oricamporum P.M.Br. {AFP} — SE.

Corallorhiza
1. Sepals and petals 2.5-4.5 mm long, mostly with 1 or 2 veins; fruit 5.5-8 mm long; flowering Aug–Oct … C. odontorhiza
1. Sepals and petals 4.5-10 mm long, mostly with 3 veins; fruit 7-14 mm long; flowering Dec-Mar … C. wisteriana

Cranichis
Cranichis muscosa Sw. {AFP} — SE.

Cyclopogon
1. Petioles 1-3.5(5) cm long, spreading to ascending; leaf blade underside grayish to purplish; lateral sepals becoming spreading-recurved; petal midvein and margins dark brownish to reddish; lip apex white and relatively firm … C. cranichoides
1. Petiole 2.5-5(10) cm long, ascending to erect; leaf blade underside green; lateral sepals appressed to somewhat ascending; petal midvein and margins of petals pale greenish to pale brownish; lip apex becoming hyaline and delicate … C. elatus

Cyclopogon cranichoides (Griseb.)Schltr. {AFP} —
Cyclopogon elatus (Sw.)Schltr. {AFP} — SE.

Cymbidium
****Cymbidium dayanum*** Rchb.f. {AFP} — Locally naturalized in peninsula.

Cyrtopodium
1. Terrestrial; sepals green to yellow and mildly curvaceous or undulate, lip yellow with a few reddish spots near the base only and not verruculose-tuberculate … C. flavum
1. Primarily epiphytic; sepals and lip usually with conspicuous dark reddish or purplish splotches throughout, rarely without, sepals strongly curled or undulate, lip verruculose-tuberculate … C. punctatum

****Cyrtopodium flavum*** Link & Otto ex Rchb. {AFP} —
Cyrtopodium punctatum (L.)Lindl. {AFP} — SE.

Dendrobium

^*Dendrobium* spp. — A popular group for cultivation, some of which are the product of hybridization, making taxonomic determination difficult. Flowers sometimes served as a garnish.

Dendrophylax

1. Roots 1.5-3(5) mm wide; peduncle 3-25 cm long; sepals and petals 20-70 mm long; fruit 60-100 mm long ... D. lindenii
1. Roots 0.3-0.9 mm wide; peduncle 1-3 cm long; sepals and petals 2-4 mm long; fruit 4-6 mm long ... D. porrectus

Dendrophylax lindenii (Lindl.)Benth. ex Rolfe {AFP} — SE.
Dendrophylax porrectus (Rchb.f.)Carlsward & Whitten {AFP} — ST.

Eltroplectris

Eltroplectris calcarata (Sw.)Garay & H.R.Sweet {AFP} — SE.

Encyclia

1. Sepals, petals, and lip mostly uniformly yellow to brownish yellow, rarely the lip with faint purplish markings; lip with down-curved margins ... E. rufa
1. Sepals and petals brownish yellow, brownish green, to brownish purple, lip white with purple markings; lip plane or the margins only slightly lax ... E. tampensis

****Encyclia rufa*** (Lindl.)Britton & Millsp. {AFP} —
Encyclia tampensis (Lindl.)Small {AFP} — CE.

Epidendrum

1. Inflorescence peduncle 2-50 cm long, long-exserted [2]
1. Inflorescence peduncle 0.5-3 cm long, shorter than the leaves to slightly exceeding the leaves [4]
2. Sepals and petals orange-red; lip lobe margins fimbriate; leaves 5-13, evenly distributed along the stem ... E. radicans
2. Sepals and petals green, yellow, to white; lip lobe margins entire; leaves clustered at the stem apex or evenly distributed along the stem [3]
3. Leaves 3-13, evenly distributed along the stem; peduncle 9-48 cm long; sepals 1.5-2.2 times as long as wide ... E. amphistomum
3. Leaves 2-3, clustered at the stem apex subtending the peduncle; peduncle 2-10 cm long; sepals 3-6 times as long as wide ... E. conopseum
4. Stems branching; leaf blades nearly all perpendicular to the stem [5]
4. Stems unbranched; leaf blades mostly ascending to ascending-recurved [6]
5. Plants 50-160 cm long; sepals and petals 12-21 mm long, 2.5-6 mm wide ... E. acunae
5. Plants 10-30 cm long; sepals and petals 3-6 mm long, 0.5-2 mm wide ... E. strobiliferum
6. Rhizome creeping; ovary 10-11 mm long, usually subequal to shorter than the subtending bracts; fruit 10-12 mm long ... E. rigidum
6. Cespitose; ovary 20-50 mm long, exserted beyong the subtending bracts; fruit 16-25 mm long [7]
7. Plant to 26 cm long; leaf blades 2-7 cm long; sepals and petals oblong, 11-15 mm long; lip with a broad obscure middle lobe ... E. floridense

7. Plant to 100 cm long; leaf blades 6-15 cm long; sepals and petals linear-lanceolate, 25-60 mm long; lip with an elongate acuminate middle lobe … E. nocturnum

[x]***Epidendrum acunae*** Urb. {AFP} — Collier Co. (Cuba, Mexico, Central America). Swamps. SE. Sometimes subsumed under *E. blancheanum*.
Epidendrum amphistomum A.Rich. {AFP} — SE. Sometimes subsumed under *E. anceps*.
Epidendrum conopseum R.Br. {AFP} — CE.
Epidendrum floridense Hágsater {AFP} — SE.
Epidendrum nocturnum Jacq. {AFP} — SE.
^*Epidendrum radicans* Pav. ex Lindl. {AFP} —
Epidendrum rigidum Jacq. {AFP} — SE.
Epidendrum strobiliferum Rchb.f. {AFP} — SE.

Eulophia
1. Leaves 20-120 cm long, 3-11 cm wide … E. alta
1. Leaves 10-30 cm long, 0.5-2 cm wide [2]
2. Lip green marginally, white medially with darker purplish lines … E. andamanensis
2. Lip white marginally, pink medially with numerous erect fimbriae … E. graminea

Eulophia alta (L.)Fawc. & Rendle {AFP} —
^*Eulophia andamanensis* Rchb.f. {AFP} —
*****Eulophia graminea*** Lindl. {AFP} —

Galeandra
Galeandra bicarinata G.A.Romero & P.M.Br. {AFP} — SE.

Goodyera
Goodyera pubescens (Willd.)R.Br. {AFP} — SE.

Govenia
[xx]•***Govenia floridana*** P.M.Br. {AFP} — Miami-Dade Co. Rockland hammocks. SE. Last specimens perhaps from the 1960s (*Ward 4354*) or 1980s (*Sauleda 9227*). In the protologue, four immature plants were reportedly seen in 2000 by Brown (2000). It is questionable if it is actually an endemic species, rather than some other tropical species. Greenwood (2002) noted a similarity to *G. alba* of Mexico, and also compared it with the Caribbean *G. utriculata*.

Habenaria
1. Leaves basal, abruptly reduced to bracts … H. distans
1. Leaves basal and cauline, gradually reduced in size below the inflorescence [2]
2. Petals and lips unlobed to very obscurely lobed … H. floribunda
2. Petals and lips with elongate linear lobes [3]
3. Leaf blade 4-9 times as long as wide, with obscure cross-veins or only some conspicuous; spur 0.8-1.4 cm long; of hydric habitats … H. repens
3. Leaf blade 1.7-4 times as long as wide, with conspicuous cross-veins throughout; spur 4-18 cm long; of mesic habitats [4]
4. Petal distal segment 20–24 mm, proximal segment 8–11 mm long; spur 9-18 cm long; of shaded hammocks … H. macroceratitis

4. Petal distal segment 10–18 mm long, proximal segment 6–9 mm long; spur 4-10 cm long; of open areas … H. quinqueseta

Habenaria distans Griseb. {AFP} — SE.
Habenaria floribunda Lindl. {AFP} —
Habenaria quinqueseta (Michx.)Eaton {AFP} —
Habenaria repens Nutt. {AFP} —

Hexalectris
Hexalectris spicata (Walter)Barnhart {AFP} — SE. Sometimes subsumed under *Bletia*.

Ionopsis
Ionopsis utricularioides (Sw.)Lindl. {AFP} — SE.

Isotria
Isotria verticillata Raf. {AFP} — SE.

Laelia
^*Laelia rubescens* Lindl. {AFP} —

Lepanthopsis
[x]***Lepanthopsis melanantha*** (Rchb.f.)Ames {AFP} — Collier Co. (Caribbean). Swamps. SE.

Liparis
Liparis nervosa (Thunb.)Lindl. {AFP} — SE.

Macradenia
[x]***Macradenia lutescens*** R.Br. {AFP} — Miami Dade Co. (Caribbean, South America). Rockland hammocks. SE.

Malaxis
1. Leaves 2-3(5); lip usually with yellowish, orange, to reddish coloration … M. spicata
1. Leaves 1; lip green … M. unifolia

Malaxis spicata Sw. {AFP} —
Malaxis unifolia Michx. {AFP} — SE.

Maxillaria
1. Cespitose; pseudobulbs absent or scarcely developed; sepals 13-15 mm long … M. crassifolia
1. Rhizomes elongate, scaly; pseudobulbs present, conspicuous; sepals 6-7 mm long … M. parviflora

Maxillaria crassifolia (Lindl.)Rchb.f. —
[x]***Maxillaria parviflora*** (Poepp. & Endl.)Garay —

Mesadenus
Mesadenus lucayanus (Britton)Schltr. {AFP} — SE.

Myrmecophila
^*Myrmeocphila* spp. — Pseudobulbs may be hollow and serve as a home to symbiotic ants.

Neottia
Neottia bifolia (Raf.) Baumbach {AFP} — ST.

Oeceoclades
*****Oeceoclades maculata*** (Lindl.)Lindl. {AFP} — Peninsula (native to Africa). Forests and disturbed sites. Sometimes subsumed under *Eulophia*. Thought to be first introduced to Brazil before the 1790s, spreading to Trinidad by 1962, Puerto Rico by 1965, and Florida by 1974 (Wetterer & Wetterer 2022).

Oncidium
1. Leaves 25-40 times as long as wide; sepals and petals dull yellow with brownish markings … O. ensatum
1. Leaves 10-20 times as long as wide; sepals and petals bright yellow with dark reddish to purplish markings … O. sphacelatum

Oncidium ensatum Lindl. {AFP} — SE.
^*Oncidium sphacelatum* Lindl. —

Orthochilus
Orthochilus ecristatus (Fernald)Bytebier {AFP} — Sometimes subsumed under *Eulophia*.

Paphiopedilum
^*Paphiopedilum* spp. — Many cultivated plants are the product of hybridization.

Pelexia
Pelexia adnata (Sw.)Poit. ex Rich. {AFP} — SE.

Phaius
*****Phaius tancarvilleae*** (Banks ex L'Hér.)Blume {AFP} —

Phalaenopsis
^*Phalaenopsis* spp. — Perhaps the most popular orchid group in cultivation, extensively hybridized, making taxonomic determination nearly futile.

Platanthera
1. Lip entire, auriculate, lobed, or shallowly erose to lacerate [2]
1. Lip margin strongly fimbriate [5]
2. Lip at the upper part of the flower (resupinate); sepals and petals white; lip entire, unlobed … P. nivea
2. Lip at the lower part of the flower (not resupinate); sepals and petals white, greenish, pale to bright yellow, to orange; lip auriculate, lobed, or shallowly erose to lacerate [3]
3. Inflorescence internodes obscured by the densely congested flowers; sepals and petals bright yellow to orange; lip shallowly erose to lacerate … P. integra

3. Inflorescence internodes visible, the flowers sparse along the rachis; sepals and petals white, pale yellow, to greenish; lip auriculate or lobed [3]
4. Lip without auricles or tubercles, apex shallowly 3-lobed … P. clavellata
4. Lip with a basal pair of auricles or tubercles, apex rounded to emarginate … P. flava
5. Sepals and petals white … P. blephariglottis var. conspicua
5. Sepals and petals mostly or partly pale yellow to orange or off-white [6]
6. Spur 20-35 mm long, exceeding the ovary; rostellum lobes triangular, apices directed forward (column appearing acute in lateral view) … P. ciliaris
6. Spur 4-17 mm long, subequal or shorter than the ovary; rostellum lobes slender, directed downward toward apices (column appearing truncate in lateral view), straight to distally retrorse [7]
7. Spur 8–17 mm (subequal to the ovary), its mouth nearly circular; rostellum lobes strongly retrorsely curved toward apices; viscidia presented downward and approximately parallel to lip … P. chapmanii
7. Spur 4–10 mm (usually shorter than the ovary), its mouth triangular or keyhole-shaped; rostellum lobes scarcely to strongly curved; viscidia presented forward, nearly perpendicular to approximately parallel to lip … P. cristata

Platanthera blephariglottis (Willd.)Lindl. var. ***conspicua*** (Nash)Luer {AFP} — ST.
Platanthera chapmanii (Small)Luer {AFP} — SE.
Platanthera ciliaris (L.)Lindl. {AFP} — ST.
Platanthera clavellata (Michx.)Luer {AFP} — SE.
Platanthera cristata (Michx.)Lindl. {AFP} — ST.
Platanthera flava (L.)Lindl. {AFP} — ST.
Platanthera integra (Nutt.)A.Gray ex L.C.Beck {AFP} — SE.
Platanthera nivea (Nutt.) Luer {AFP} — ST.
Platanthera* ×*bicolor (Raf.)Luer (*P. blephariglottis* × *P. ciliaris*) {AFP} — Synonym *P. lueri*.
Platanthera* ×*canbyi (Ames)Luer (*P. blephariglottis* × *P. cristata*) {AFP} — Synonym *P. beckneri*.
Platanthera* ×*channellii Folsom (*P. ciliaris* × *P. cristata*) {AFP} —

Other hybrid taxa
P. ×apalachicola, nom. inval. (*P. chapmanii* × *P. cristata*)
P. ×corderorum, nom. inval. (*P. blephariglottis* × *P. chapmanii*)
P. ×osceola, nom. inval. (*P. chapmanii* × *P. ciliaris*)

Platythelys
Platythelys latifolia (L.)Garay & Ormerod {AFP} —

Pogonia
Pogonia ophioglossoides (L.)Ker Gawl. {AFP} — ST.

Polystachya
Polystachya concreta (Jacq.)Garay & H.R.Sweet {AFP} — SE.

Ponthieva

1. Leaves withering or absent at anthesis; sepals and petals <5 mm long; petals not conspicuously striped green, 1-2 mm wide; lip indistinctly clawed, obovate; open rockland … P. brittoniae
1. Leaves present at anthesis; sepals and petals >5 mm long; petals conspicuously striped green, 3.5-5 mm wide; lip distinctly clawed, suborbiculate; shady forests … P. racemosa

Ponthieva brittoniae Ames {AFP} — SE.
Ponthieva racemosa (Walter)C.Mohr {AFP} —

Prescottia
Prescottia oligantha (Sw.)Lindl. {AFP} — SE.

Prosthechea
1. Plant with creeping rhizomes, elongate internodes; leaves 2-5.5(8) cm long; inflorescence of 1-3 flowers … P. pygmaea
1. Plant cespitose or with short rhizomes, internodes scarcely apparent; leaves 7-45 cm long; inflorescence of 3-12 flowers [2]
2. Pseudobulb orbicular to broadly ovoid; leaves to 18 cm long; flower resupinate; sepals and petals yellow-green and purplish-spotted throughout, oblanceolate, stiff; lip narrow, yellowish … P. boothiana var. erythronioides
2. Pseudobulb ovoid to narrowly elliptic; leaves to 40 cm long; flower not resupinate; sepals and petals yellow-green, with few to no purplish spots, linear-lanceolate, lax; lip broadly flared, with purplish coloration … P. cochleata

Prosthechea boothiana (Lindl.)W.E.Higgins var. ***erythronioides*** (Small)W.E.Higgins {AFP} — SE.
•***Prosthechea cochleata*** (L.)W.E.Higgins var. ***triandra*** (Ames)Hágsater {AFP} — South Florida. Epiphyte in hammocks and swamps. SE. This variety is characterized by 3 anthers (Ames 1904: 4, 16), rare to absent in the species range outside of Florida; the 2 lateral anthers apparently are able to pollinate the stigma making the plant self-fertile.
Prosthechea pygmaea (Hook.)W.E.Higgins {AFP} — SE.

Sacoila
1. Leaves present with the flowering spike; dorsal sepal 9-15 mm long … S. lanceolata var. paludicola
1. Leaves absent during flowering, the leaves appearing weeks after flowering; dorsal sepal 15-23 mm long [2]
2. Rachis pubescent with bubble-shaped, glandular-capitate, and transitional hairs … S. lanceolata var. lanceolata
2. Rachis scurfy, with white dots … S. squamulosa

++***Sacoila lanceolata*** (Aubl.)Garay var. ***lanceolata*** {AFP} — *Sacoila squamulosa* has been reported as distinctive and present in Florida (Brown 2000; Folsom 2000), but this name has also bee considered a synonym of *S. lanceolata* due to the observation of continuous variation (Acevedo-Rodríguez & Strong 2012; Ackerman 2015). Earliest documentation of this species in Florida is Lake Co. in 1890s (*Nash s.n.*), Manatee Co. in 1900 (*Tracy 6634*), Orlando in 1913 (*Harshberger s.n.*), Pasco Co. in 1928 (*Brooks s.n.*), and Alachua Co. in 1929

(*Weber & West s.n.*). Perhaps it is a recent arrival to Florida, absent from Chapman's floras, first appearing in Small (1903: 320). ST.

Sacoila lanceolata (Aubl.)Garay var. ***paludicola*** (Luer)Sauleda et al. {AFP} — ST.

Spathoglottis

^*Spathoglottis plicata* Blume {AFP} —

Spiranthes

1. Trichomes sharply pointed, not capitate; flowering Apr-Jun … S. vernalis
1. Trichomes blunt, capitate, not pointed, or plant glabrous [2]
2. Inflorescence rachis and flowers moderately to densely pubescent [3]
2. Inflorescence rachis and flowers glabrous, or sparsely to semi-moderately pubescent [9]
3. Labellum with a patch of papillae [4]
3. Labellum not papillate [5]
4. Flowers not fragrant; lateral sepals held parallel or below the flower; flowering Feb-Apr … S. brevilabris
4. Flowers fragrant; lateral sepals usually sweeping upward; flowering Aug-Nov … S. triloba
5. Leaves broadly lanceolate, to 49 cm long; flowers intensely fragrant; flowering Nov-Jan, Apr … S. odorata
5. Leaves linear to oblanceolate, to 13 cm long; flowers not fragrant (or only faintly) [6]
6. Labellum centrally yellow; flowering Apr-Jul … S. laciniata
6. Labellum centrally white (occasionally faint yellow in S cernua); flowering Aug-Nov [7]
7. Lateral sepals flattened … S. cernua
7. Lateral sepals cupped [8]
8. Viscidium and rostellum absent; flower autogamous … S. ovalis var. erostellata
8. Viscidium and rostellum present; flower chasmogamous … S. ovalis var. ovalis
9. Flowers <4 mm long; flowering Jun-Jul … S. tuberosa
9. Flowers >4 mm long [10]
10. Leaves oblanceolate to obovate [11]
10. Leaves linear, linear-lanceolate, or absent [12]
11. Labellum centrally yellow; flowering Feb-Jun … S. floridana
11. Labellum centrally green; flowering Feb-Apr, Nov … S. lacera
12. Labellum coloration restricted to prominent veins; flowering Mar-May … S. praecox
12. Labellum coloration solid [13]
13. Lateral sepals held moderately oblique to widely-spreading, slightly upwardly falcate; flowering Aug-Dec [14]
13. Lateral sepals held slightly oblique, moderately downwardly falcate; flowering Apr-Jun [15]
14. Lateral sepals slightly oblique; flowering Aug-Sep … S. igniorchis
14. Lateral sepals moderately oblique to widely-spreading; flowering Oct-Dec … S. longilabris
15. Labellum ovate to broadly lanceolate, the apex acute, the margin crenulate-ciliate margin; basal calli long-pubescent … S. amesiana
15. Labellum oblong, the apex obtuse, the margin undulate; basal calli glabrous … S. torta

[X]***Spiranthes amesiana*** Schltr. {AFP} — Sometimes subsumed under *S. torta*.
Spiranthes brevilabris Lindl. {AFP} — SE.
Spiranthes cernua (L.)Rich. {AFP} —
Spiranthes floridana (Wherry)Cory {AFP} —
•***Spiranthes igniorchis*** M.C.Pace {AFP} —

Spiranthes lacera (Raf.)Raf. {AFP} —
Spiranthes laciniata (Small)Ames {AFP} — ST.
Spiranthes longilabris Lindl. {AFP} — ST.
Spiranthes odorata (Nutt.)Lindl. {AFP} —
Spiranthes ovalis Lindl. var. ***erostellata*** Catling {AFP} — SE.
Spiranthes ovalis Lindl. var. ***ovalis*** {AFP} — SE.
Spiranthes praecox (Walter)S.Watson {AFP} —
Spiranthes torta (Thunb.)Garay & H.R.Sweet {AFP} — SE.
•***Spiranthes triloba*** (Small)K.Schum. {AFP} —
Spiranthes tuberosa Raf. {AFP} — ST.
Spiranthes vernalis Engelm. & A.Gray {AFP} —

Stelis
Stelis gelida (Lindl.)Pridgeon & M.W.Chase {AFP} — SE.

Tetramicra
Tetramicra cf. ***canaliculata*** (Aubl.)Urb. — Known only from photos of cultivated plants staged in natural habitat in Martin Co. taken by Luer (1972) that allegedly were gathered locally from rosemary scrub (McCartney 1997). Based on the measurements given by Luer (1972), *T. canaliculata* (of Hispaniola thru the Lesser Antilles) would be the likely candidate, but Withner (1996) also proffers *T. elegans* (often synonymized with *T. canaliculata*). The nearest species would be *T. urbaniana* from the Bahamas which has smaller flowers.

Tipularia
Tipularia discolor (Pursh)Nutt. {AFP} — ST.

Tolumnia
Tolumnia bahamensis (Nash ex Britton & Millsp.)Braem {AFP} — SE.

Trichocentrum
1. Corolla white and pink, brown, to maroon; lip subequal in width to other petals … T. carthagenense
1. Corolla yellow and brown, reddish, to maroon; lip much larger or wider than other petals … T. undulatum

×***Trichocentrum carthagenense*** (Jacq.)M.W.Chase & N.H.Williams {AFP} —
Trichocentrum undulatum (Sw.)Ackerman & M.W.Chase {AFP} — SE.

Triphora
1. Leaves appressed-erect to ascending … T. gentianoides
1. Leaves spreading [2]
2. Leaf lower surface purple, margin undulate … T. craigheadii
2. Leaf lower surface green, sometimes suffused with purple, margin entire or undulate [3]
3. Leaves suborbicular, reniform, to broadly ovate, the width subequal to larger than the length, the apex broadly rounded with an abruptly short-acuminate tip; flowers 1 per stem … T. amazonica
3. Leaves ovate to cordate, length larger than to subequal to the width, the apex subacute to acute; flowers 1-many per stem [4]

4. Leaf margin undulate; flowers and fruits erect; sepals erect, strict … T. rickettii
4. Leaf margin entire; flowers post-anthesis and the immature fruit pendent, open flowers spreading to erect, mature fruits erect; sepals spreading … T. trianthophoros

Triphora amazonica Schltr. {AFP} — SE.
•***Triphora craigheadii*** Luer {AFP} — SE.
Triphora gentianoides (Sw.)Ames & Schltr. {AFP} —
•***Triphora rickettii*** Luer {AFP} —
Triphora trianthophoros (Sw.)Rydb. {AFP} — ST.

Tropidia
Tropidia polystachya (Sw.)Ames {AFP} — SE.

Vanda
^*Vanda* spp. — A very popular group for cultivation that are extensively hybridized, making taxonomic determination nearly futile.

Vanilla
1. Leaves ephemeral, the stems soon becoming leafless [2]
1. Leaves persistent, the stems leafy [3]
2. All leaves early deciduous, margins not revolute, apex not hooked; sepals petals <5 cm long, 1.2 cm wide or more; edge of lateral lobes of lip white, the middle lobe subequal to shorter than the lateral lobes, the lip <4 cm long … V. barbellata
2. Most leaves early deciduous, a few persistent, margins revolute, apex hooked; sepals and petals >5 cm long, 1.2 cm wide or less; edge of lateral lobes of lip purple, the middle lobe longer than the lateral lobes, the lip >4 cm long … V. dilloniana
3. Stems 2-4 mm wide; leaves broadly ovate and relatively thin; lip adnate to the column only 5 mm above the base … V. mexicana
3. Stems 5-12 mm wide; leaves elliptic to oblong and relatively thick; lip adnate to the basal 2/3 of the tubular column [4]
4. Larger leaves 2.5-5 cm wide; sepals and petals >7 cm long; fruit to 10 cm long … V. phaeantha
4. Larger leaves (5)6-8 cm wide; sepals and petals <7 cm long; fruit 15-25 cm long
5. Floral bracts 5-10 mm long; corolla lip subentire roughened-undulate, upper side papillate with laciniate scales … V. planifolia
5. Floral bracts 12-18 mm long; corolla lip undulate-denticulate, upper side papillate with lacerate scales … V. pompona

Vanilla barbellata Rchb.f. {AFP} — SE.
Vanilla dilloniana Correll {AFP} — SE.
Vanilla mexicana Mill. {AFP} — SE.
Vanilla phaeantha Rchb.f. {AFP} — SE.
^*Vanilla planifolia* Andrews {AFP} —

Zeuxine
****Zeuxine strateumatica*** (L.)Schltr. {AFP} —

HYPOXIDACEAE

1. Leaves 2-9 cm wide; inflorescence densely capitate, of 10+ flowers; fruit an indehiscent berry ... Curculigo capitulata
1. Leaves 0.1-1.5 cm wide; inflorescence of 1-3(7) flowers; fruit a dehiscent capsule ... Hypoxis

Curculigo
^*Curculigo capitulata* (Lour.)Kuntze {AFP} —

Hypoxis
1. Leaves glabrous or nearly so, or with scattered trichomes near base [2]
1. Leaves sparsely to densely pubescent, at least near base [3]
2. Leaves 1–15 mm wide, soft, flexible; floral bracts 1–20(–80) mm; ovary glabrate or sparsely to densely pubescent; seeds muricate ... H. curtissii
2. Leaves 0.3–1 mm wide, hard, stiff; floral bracts 1–7(–12) mm; ovary densely pubescent; seeds with low, rounded sculpturing ... H. juncea
3. Leaves 0.3-1 mm wide; pedicel usually 2+ times longer than bracts ... H. juncea
3. Leaves usually 0.7-26 mm wide; pedicel usually less than 2 times as long as bracts [4]
4. Pedicel usually longer than bracts; tepals longer than pedicel; anthers 1.5–3.5 mm; seeds with low, rounded sculpturing, lacking an evident cuticle ... H. rigida
4. Pedicel shorter to longer than bracts; tepals shorter to longer than pedicel; anthers 0.6–2.2 mm; seeds with an evident wrinkled, membranous cuticle [5]
5. Tepals 1.5–2 times as long as ovary; seeds with low, rounded sculpturing, with an iridescent cuticle ... H. sessilis
5. Tepals1-1.5(2) times as long as ovary; seeds muricate, the cuticle not iridescent ... H. wrightii

Hypoxis curtissii Rose {AFP} —
Hypoxis juncea Sm. {AFP} —
Hypoxis rigida Chapm. {AFP} —
Hypoxis sessilis L. {AFP} —
Hypoxis wrightii (Baker)Brackett {AFP} —

IRIDACEAE
1. Inflorescences spicate, 2–many-flowered, subtended by pair of opposed bracts; rootstock a corm; flowers zygomorphic to subactinomorphic; tepals tubular-connate [2]
1. Inflorescences rhipidiate, (1)2–several-flowered, subtended by 2 foliaceous spathes; rootstock a rhizome, bulb, or indistinct; flowers actinomorphic, tepals distinct or tubular-connate [4]
2. Style branches each divided for about 1/2 its length, filiform throughout ... Freesia
2. Style branches each simple or apically notched, filiform throughout or expanded terminally [3]
3. Tepals shades of orange to reddish; style branches apically notched, not expanded above; seeds not winged, globose ... Crocosmia crocosmiiflora
3. Tepals variously colored; style branches expanded terminally, not filiform throughout; seeds usually broadly winged, globose or angular ... Gladiolus
4. Sepals and petals subequal and very similar in shape and coloring (tepals) [5]
4. Sepals and petals dissimilar in size, shape, or coloring (if subequal and similar, then sepals and petals orange, reddish orange, to pinkish orange, with darker orange to reddish spots) [7]
5. Tepals 0.4-1.3 cm long; fruit 2-8 mm long ... Sisyrinchium
5. Tepals 2-3 cm long; fruit 6-12 mm long [6]

6. Tepals lacking streaks at the base; style erect, 10-12 mm long ... Calydorea caelestina
6. Tepals with short, dark streaks at the base; style central column erect and 2-3 mm long, then split into 6 spreading arms ... Nemastylis floridana
7. Leaves plicate; rootstock a bulb; sepals 2-3 times as long as petals; plants 10-20 cm tall or long ... Herbertia
7. Leaves plane; rootstock a rhizome or indistinct; plants 10-150 cm tall or long [8]
8. Style branches thickened, often bearing acute paired terminal appendages; anthers lightly affixed style branch underside; inner tepals often bent or folded at base and bearing oil glands on short hairs ... Trimezia
8. Style branches usually petaloid, with flat terminal appendages; anthers appressed to style branch; inner tepals usually not bent or folded, eglandular [9]
9. Tepals free; pedicels hairy ... Dietes
9. Tepals united basally into a tube, rarely free; pedicels glabrous ... Iris

Calydorea
•***Calydorea caelestina*** (W.Bartram)Goldblatt & Henrich {AFP} — SE.

Crocosmia
^*Crocosmia ×crocosmiiflora* (Lemoine ex E.Morren)N.E.Br. (*C. aurea* × *C. pottsii*) {AFP} —

Dietes: See treatment by Goldblatt (1981).

1. Stem bracts 9-20 mm long, often brownish, 2 per node and subequal; sepals with a dark purplish or blackish spot at the base; fruit obovate, nearly as wide as long ... D. bicolor
1. Stem bracts 25-50 mm long, usually greenish, solitary or a second, inner one much reduced; sepals with a yellow to orange band or line or band of spots at the base; fruit ellipsoidal, 2-3 times as long as wide [2]
2. Sepals 4.5-6 cm long, with a longitudinal solid or continuous band, line, or band of spots of yellow to orange color; petals with brown markings on the claw; style branches excluding crests 12-20 mm long; flowers may last 3 days ... D. grandiflora
2. Sepals 2.4-4 cm long, with a longitudinal band, line, or band of spots of yellow that fades medially and is largely white at the center; petals without markings; styles branches 7-9 mm long; flowers last 1 day ... D. iridioides

^*Dietes bicolor* (Steud.)Sweet ex Klatt —
^*Dietes grandiflora* N.E.Br. —
^*Dietes iridioides* (L.)Sweet ex Klatt {AFP} —

Freesia
1. Tepals 15-18 mm long, predominantly white, sometimes with yellow markings on lower tepals, tepals and tube lightly flushed with purple abaxially; distal part of tube longer than basal part, very gradually flared; anthers 6-9 mm long ... F. alba
1. Tepals 9-13 mm long, pink to red with dark red markings on lower 3 tepals; tube cylindric throughout or slightly flared distally; anthers 3-4 mm long ... F. laxa

****Freesia alba*** (G.L.Mey.)Gumbl. {AFP} —
****Freesia laxa*** (Thunb.)Goldblatt & J.C.Manning {AFP} —

Gladiolus.
1. Tepals pink to reddish or light purple with white markings on outer 3, perianth tube 10-12 mm long, innter tepals 28-40 mm long, outer tepals 18-25 mm long … G. communis
1. Tepals white to cream or orange to red, perianth tube (25)35-65 mm long, inner tepals 35-70 mm long, outer tepals 20-55 mm long [2]
2. Tepals yellow, orange, to red, or greenish with brown to red streaks, inner tepals 35-50 mm long, outer tepals 20-25(30) mm long … G. dalenii
2. Tepals white, pink, red, yellow, orange, red, to purple, inner tepals 60-70 mm long, outer tepals 45-55 mm long … G. gandavensis

**Gladiolus dalenii* Van Geel {AFP} —
^*Gladiolus ×gandavensis* Van Houtte (*dalenii* × *oppositiflorus*) {AFP} — The application of the widely used name *G. hortulanus* L.H.Bailey (1930) is nebulous but perhaps belongs here.

Herbertia
^*Herbertia lahue* (Molina)Goldblatt {AFP} —

Iris: The flowers are very showy and, in most of our irises, the sepals are the most prominent and largest part of the flower. The sepals are the brightly colored (violet, blue, copper, yellow) outer whorl that often have markings (e.g. yelllow or white) near the base and center. The petaloid stigmas (inner whorl) arch directly over the sepals and can be bifurcate at the tip. The petals are the middle whorl that alternate with the sepals, and in I. *tridentata* are rather small. In *I. domestica* the stigmas are not petal-like. Mature fruits are very helpful for identification but rarely are collected.

1. Sepals and petals orange, reddish orange, to pinkish orange, sometimes with darker orange to reddish spots; style branch or stigma not petaloid, not closely hovering over the sepals … I. domestica
1. Sepals and petals white, blue, purple, lavender, yellow, orange, orange-red, or mixtures of, any spots not orange or reddish; style branch or stigma petaloid, closely arching or hovering over the sepals [2]
2. Sepals with multicellular hairs (beard) along midrib of claw and base of blade [3]
2. Sepals without beard, usually with signal of contrasting color, fine pubescence, ridges, or cockscomblike crest [4]
3. Spathes herbaceous with narrow scarious margins and tip, green, sometimes purple at base … I. ×germanica
3. Spathes entirely scarious, silvery white … I. pallida
4. Perianth entirely yellow … I. pseudacorus
4. Perianth not entirely yellow [5]
5. Perianth uniformly (or nearly so) pinkish brown, yellowish brown, red-brown, to orange-red … I. fulva
5. Perianth mostly white, blue, purple, lavender, and mixtures of, often with yellow or orangish markings on the basally along the midrib of the sepals [6]
6. Sepals white to pale bluish with yellow-orange spots and bands, the margins fimbriate-lacerate … I. japonica
6. Sepals mostly blue, purple, or lavender with only bands of yellow to orange color, rarely only yellow, the margins entire, undulate, to subtly roughened-undulate [7]

7. Style branch broad, more than half as long as sepal, broadly upcurved at the apex … I. hollandica
7. Style branch narrow, less than half as long as sepal, upcurved at the very tip [8]
8. Petals generally hidden by base of sepals, 1-2 cm long … I. tridentata
8. Petals conspicuous, exserted, 2-9.5 cm long [9]
9. Capsules 3-angled or nearly round in cross section and lacking angles, ridges, or wings [10]
9. Capsules with 6 angles, ridges, or wings [11]
10. Rhizomes heterogeneous, innovations appearing at some distance from parent rhizome; flowering scape to 15 cm long; perianth tube subequal to sepals; seeds arillate … I. verna var. smalliana
10. Rhizomes homogeneous; innovations appearing close to parent rhizome; flowering scape (30)50-100 cm long; perianth tube shorter than the sepals; seeds not arillate … I. virginica
11. Stems declining or semierect, sharply zigzag, 20-40 cm long … I. brevicaulis
11. Stems erect, not obviously zigzag, 30-150(200) cm long [12]
12. Leaves yellow-green and evergreen; sepals tips acute to rounded; fruit 2.5-6.3 cm long, with 3 plane faces and 3 faces with 2 rounded ridges, strongly hexagonal (I. hexagona group) … Key A
12. Leaves bright green, not evergreen; sepal tips obtuse, acute, to acuminate; fruit 6-10 cm long nearly circular in cross section, only slightly if at all hexagonal, with 6 narrow, winglike ridges or 6 broadly rounded lobes [13]
13. Fruit with 6 broad, rounded lobes, indehiscent … I. giganticaerulea
13. Fruit with 6 sharp, winglike ridges, dehiscent (I. savannarum group) … Key B

Key A
1. Leaves yellow green; sepal claw yellow-green; style appendages half-ovate … I. hexagona
1. Leaves deep green; sepal claw deep green; style appendages lanceolate … I. rivularis

Key B
1. Perianth white (except yellow crest) … I. albispiritus
1. Perianth blue to violet [2]
2. Style appendages deeply and sharply toothed; fruit bluntly 6-sided … I. kimballiae
2. Style appendages shallowly and bluntly toothed; fruit 6-ribbed … I. savanarrum (s.str.)

Iris brevicaulis Raf. {AFP} —
^*Iris domestica* (L.)Goldblatt & Mabb. {AFP} —
Iris fulva Ker Gawl. {AFP} —
^*Iris ×germanica* L. (*pallida* × *variegata*) {AFP} —
Iris giganticaerulea Small {AFP} —
Iris hexagona Walter {AFP} — Tentative segregate *I. rivularis* (Small 1927) is keyed out above from *I. hexagona* s.str. (Small 1924).
^*Iris pseudacorus* L. {AFP} —
Iris savannarum Small {AFP} — Tentative segregates are keyed out above, such as *I. albispiritus* (Small 1929), *I. kimballiae* (Small 1924), and *I. savanarrum* s.str. (Small 1924, 1933).
Iris tridentata Pursh {AFP} —
Iris verna L. var. ***smalliana*** Fernald ex M.E.Edwards {AFP} —
Iris virginica L. {AFP} —

Nemastylis

•***Nemastylis floridana*** Small {AFP} — SE.

Sisyrinchium: All FL species are part of sect. *Sisyrinchium* except *S. micranthum* in sect. *Morphanthus* (Inácio et al. 2017). Bicknell (in Small 1903) recognized 53 spp. in the SE USA, later reduced to 16 by Alexander (in Small 1903). Following Cholewa & Henderson (2002), nine species are treated for FL.

1. Inflorescence clusters sessile, subtended by a basal spathe far exceeding the inflorescence cluster … S. albidum
1. Inflorescence clusters pedunculate, the basal spathe not reaching the distalmost inflorescence clusters [2]
2. Leaf bases persistent as dense, fibrous tufts [3]
2. Leaf bases not persistent as fibrous tufts or sparsely so [5]
3. Stems 1-1.7 mm wide, with 1 node … S. fuscatum
3. Stems 2.3-5.7 mm wide, with 1-3 nodes [4]
4. Plant yellowish green or light olive green when dry; stem nodes 1-2, first internode longer than longest leaf; leaf blades 1-4 mm wide; fruit 2.5-4(4.8) mm long; seeds 1-1.2 mm long … S. nashii
4. Plant dark to blackish olive when dry; stem nodes 2-3, first internode subequal to longest leaf; leaf blades 3.5-6 mm wide; fruit (3.8)5-8 mm long; seeds 1.3-3 mm long … S. xerophyllum
5. Annual or short-lived perennial; tepals white, pink, maroon, yellow, to pale bluish, the tips acute, short-acuminate … S. micranthum
5. Perennial; tepals pale blue, blue, pale lavender, to violet, the tips usually rounded or retuse with an aristate or mucronate apex [6]
6. Stems 2.3-5 mm wide; fruit 4-7 mm long … S. angustifolium
6. Stems 0.5-2(2.5) mm wide; fruit 2-4.7 mm long [7]
7. Ovary and capsule not contrasting with foliage … S. miamiense
7. Ovary and capsule black, contrasting with much lighter foliage [8]
8. Plant laxly spreading, to 57 cm long, nodes sharply geniculate, stems with 1(2) forks … S. atlanticum
8. Plants stiffly erect, to 75 cm tall, nodes not geniculate, stems with (1)2(3) forks … S. corymbosum

Sisyrinchium albidum Raf. {AFP} —
Sisyrinchium angustifolium Mill. {AFP} —
Sisyrinchium atlanticum E.P.Bicknell — Sometimes subsumed into *S. angustifolium*. Type from NY.
Sisyrinchium corymbosum E.P.Bicknell — Sometimes subsumed into *S. atlanticum* or *S. angustifolium*, but resurrected by Ward (2005). Type from Duval Co., FL.
Sisyrinchium fuscatum E.P.Bicknell — Sometimes subsumed into *S. nashii*. Type from Escambia Co., AL.
Sisyrinchium miamiense E.P.Bicknell — Sometimes subsumed into *S. angustifolium*. The very similar *S. langloisii* (unconfirmed for Florida) is distinguished by the inflorescence outer spathe margins basally connate for 2.2-3.8(5) mm, vs. 3.9-6.5 mm in *S. miamiense*.
****Sisyrinchium micranthum*** Cav. {AFP} — Probably introduced, an earlier name for *S. rosulatum* (Sorrie in Weakley et al. 2023).
Sisyrinchium nashii E.P.Bicknell {AFP} — Type from Lake Co., FL.
Sisyrinchium xerophyllum Greene {AFP} — Type from Lake Co., FL.

Trimezia

1. Rhizome or corm erect; flowering stem unwinged; sepals and petals predominantly yellow [2]
1. Rhizome or corm creeping to suberect; flowering stem winged; sepals and petals predominantly white, blue, lavender, or purple [3]
2. Sepals with a discolorous basal band … T. martinicensis
2. Sepals with purplish or brownish spots at the base … T. steyermarkii
3. Sepals white without spots (purplish and yellow markings at base); inflorescence sometimes arching and rooting at tip along ground … T. northiana
3. Sepals blue to violet with darker spots (purplish and yellow markings at base); inflorescence generaly erect … T. coerulea

^*Trimezia coerulea* (G. Lodd.)Ravenna —
^*Trimezia northiana* (Schneev.)Ravenna —
^*Trimezia steyermarkii* R.C.Foster {AFP} — This species has oft been confused with *T. martinicensis* (Jacq.)Herb., rare to absent in Florida.

ASPHODELACEAE

1. Leaf surface usually ornamented with prickles, tubercles, or ridges [2]
1. Leaf surface usually smooth [3]
2. Leaf margin prickly; anthers and styles exserted … Aristaloe
2. Leaf margin smooth or undifferentiated from surface; anthers and styles included … Haworthiopsis
3. Dwarf herbs with thickly succulent, short leaves … Haworthia
3. Herbs with wide-spreading leaves or caulescent [4]
4. Leaves deltate, margins entire, prickly, or toothed; flowers with nectar; tepals fused into a tube … Aloe
4. Leaves linear-lanceolate, entire; flowers lacking nectar; tepals free … Bulbine frutescens

Aloe

1. Caulescent … A. arborescens
1. Acaulescent, or the stem buried in the substrate [2]
2. Leaf margin prickles rather blunt and soft; inflorescence spicate; corolla usually yellow … A. vera
2. Leaf margin prickles usually acute and stiff; inflorescence capitate or paniculate; corolla usually orange to red [3]
3. Leaf margin distinctly pinkish … A. ×schimperi
3. Leaf margin concolorous or paler than the rest of the blade [4]
4. Inflorescence capitate … A. maculata
4. Inflorescence diffuse with ascending-spreading branches … A. ×commutata

^*Aloe arborescens* Mill. —
^*Aloe ×commutata* Tod. (*grandidentata* × *maculata*) {AFP} — Often this taxon is misidentified as *A. maculata* All. (rare to absent in Florida). The name *A. saponaria* (Aiton)Haw. is often applied as well, but that name has been proposed for rejection due to the ambiguity of its type illustration (Klopper et al. 2016). Another similar species, *A. ×schimperi* Tod. (*maculata* × *striata*), might occur in Florida.
^*Aloe vera* (L.)Burm.f. {AFP} —

Bulbine
^*Bulbine frutescens* (L.)Willd. {AFP} —

HEMEROCALLIDACEAE
1. Upper side of leaf sheath apex connate; inflorescence paniculate; tepals white, blue, to yellowish, free, 4-8 mm long; fruit a blue to violet berry ... Dianella
1. Upper side of leaf sheath apex not connate; inflorescence of (1)2 helicoid cymes; tepals pinkish white, yellow, orange, purple, to red, basally connate forming a tube, the lobes 30-70 mm long; fruit a loculicidal capsule ... Hemerocallis

Dianella
^*Dianella ensifolia* (L.)DC. {AFP} — Identifiable by its locule with 4 ovules. Other names sometimes applied include those with 6-12 ovules per locule: *D. caerulea* (rhizome brown; cymules of 3-25 flowers; pedicels sharply ridged or winged; fruit 7-12 mm long) or *D. tasmanica* (rhizome yellow; cymules of 2-5 flowers; pedicels terete; fruit 12-25 mm long).

Hemerocallis
1. Tepals variously pink, pale pinkish white, purple, red ... Hemerocallis hybrids
1. Tepals generally yellow to orange [2]
2. Flowers not fragrant; tepals orange, pale orange, to pinkish or reddish orange (yellow at the base), veins rather conspicuous; inner tepal margins wavy ... H. fulva
2. Flowers fragrant; tepals lemon yellow, veins fairly obscure; inner tepal margins smooth ... H. lilioasphodelus

****Hemerocallis fulva*** (L.)L. {AFP} —
^*Hemerocallis lilioasphodelus* L. {AFP} —
^*Hemerocallis* hybrids —

ALLIACEAE
1. Flower solitary ... Ipheion uniflorum
1. Flowers several in an umbel [2]
2. Inflorescence bracts 16-25 mm long; corolla, tepals pale pink to purple, connate forming a tube as long as the lobes, the lobes (7)10-16 mm long; cultivated only ... Tulbaghia violacea
2. Inflorescence bracts 6-18 mm long; tepals predominantly white, sometimes pinkish, or tepals absent (bulbils present), free or connate only at the very base, the tube scarcely discernible or to 1/3 of the tepal length [3]
3. Plant with garlic or onion-like odor; leaves 1-7 mm wide; tepals 4-9 mm long or absent (bulbils sometimes present); ovules or seeds 1-2 per locule ... Allium
3. Plant lacking a garlic or onion-like odor; leaves 2-15 mm wdie; tepals 8-15 mm long (bulbils absent); ovules or seeds 3-many per locule ... Nothoscordum

Allium
1. Outer bulb coats membranous to chartaceous, with or without distinct cellular markings (reticulation), without fibers or with some parallel fibers; scape triquetrous, 2-edged, winged; inflorescence bulbils absent ... A. neapolitanum
1. Outer bulb coats persisting as fibrous reticulum; scape terete to slightly 3 or 4-angled; inflorescence bulbils present or absent [2]
2. Inflorescence of flowers, producing fruits (capsules) [3]

2. Inflorescence with bulbils [4]
3. Outer bulb coats membranous to chartaceous, with or without distinct cellular markings (reticulation), without fibers or with some parallel fibers … A. cepa
3. Outer bulb coats persisting as fibrous reticulum [4]
4. Ovary and capsule lacking crests; tepals pink (rarely white), ovate, elliptic, to lanceolate, the apex obtuse to acute … A. canadense var. mobilense
4. Ovary and capsule crested with 6 irregularly contorted processes; tepals white to pink or purple, lanceolate to linear-lanceolate, the apex acute to acuminate … A. cuthbertii
5. Outer bulb coats persisting as fibrous reticulum; leaf sheaths not extending more than 1/4 scape; spathe bract beakless or beak much shorter than base … A. canadense var. canadense
5. Outer bulb coats membranous, if with fibers these not forming reticulum; leaf sheaths extending to midscape or above; spathe bract with beak equaling or longer than base [6]
6. Spathe bract 2-5, persistent … A. ampeloprasum
6. Spathe bract 1, caducous … A. sativum

^*Allium ampeloprasum* L. —
Allium canadense L. var. ***canadense*** {AFP} —
Allium canadense L. var. ***mobilense*** (Regel)M.Ownbey {AFP} —
^*Allium cepa* L. —
Allium cuthbertii Small {AFP} —
^*Allium neapolitanum* Cirillo {AFP} —
^*Allium sativum* L. —

Ipheion
^*Ipheion uniflorum* (Graham)Raf. {AFP} —

Nothoscordum
1. Leaves 2-4(5) mm wide; flowers not fragrant; tepals free or connate only at the very base … N. bivalve
1. Leaves (4)5-15 mm wide; flowers fragrant; tepals connate to 1/3 of their length [2]
2. Flowers opening mid-afternoon until evening; filaments linear-lanceolate, contiguous in the lower half or less; ovary obovoid … N. borbonicum
2. Flowers opening in evening until morning; filaments linear-cuspidate, closely contiguous for most of their length; ovary ellipsoid-oblong, subcylindric, to obovoid … N. gracile

Nothoscordum bivalve (L.)Britton {AFP} —
****Nothoscordum gracile*** (Aiton)Stearn {AFP} — According to Ravenna (1991), the weedy species noted by Small in the southeastern USA is *N. borbonicum*. Jacobsen & McNeal, Jr. (2002 in FNA, vol. 26) felt that *N. gracile* was the proper name (like Stearn 1986), and *N. borbonicum* was misapplied in the USA.

AMARYLLIDACEAE
1. Leaves absent at flowering; tepals linear, pink to red; filaments pink to red, subequal and very similar to tepals; fruits red to orange and berry-like; cultivated only … Scadoxus
1. Leaves present or absent at flowering; tepals linear-lanceolate to ovate, white, pink, yellow, purple, to red; filaments not at all similar to tepals; fruit not berry-like; native, naturalized, or cultivated [2]
2. Flower a conspiucous corona internal to the tepals [3]

2. Flower without a corona, or corona minute [4]
3. Corona spreading or rotate, white; filaments adnate to the corona … Hymenocallis
3. Corona tubular, yellow or white; filaments not adnate to the corona … Narcissus
4. Inflorescence with 1(-4) flowers [5]
4. Inflorescence with (1)2-100 flowers [6]
5. Scape solid; flowers pendulous; perianth 1-2.5 cm long … Galanthus nivalis
5. Scape hollow; flowers declinate to suberect; perianth 2-16 cm long … Zephyranthes
6. Scape hollow [7]
6. Scape solid [8]
7. Flowers declinate to erect, with a minute corona; tepals white, orange, pink, to red, lacking a green spot … Hippeastrum
7. Flowers pendulous, lacking a corona; tepals white with a green spot near the tip … Leucojum aestivum
8. Ovary superior; tepals bluish; seeds not fleshy (Agapanthaceae) … Agapanthus
8. Ovary inferior; tepals white, orange, pink, to red; seed fleshy [8]
9. Leaves present at flowering; flowers actinomorphic to subtly zygomorphic; tepals white to pink or reddish; stamens shorter than to subequal to tepals … Crinum
9. Leaves absent at flowering; flowers strongly zygomorphic; tepals pink, orange, to red; stamens longer than the tepals … Lycoris

Crinum

1. Perianth limb lobes linear to narrowly oblanceolate, overlapping only near the base [2]
1. Perianth limb lobes obovate to oblanceolate, overlapping with adjacent limbs for at least ⅓ of their length [4]
2. Leaf blades 2-4 cm wide; inflorescence of 2-7 flowers; perianth limb lobes white to occasionally partly pale pink (native and widespread in Florida) … C. americanum
2. Leaf blades 4-15 cm wide; inflorescence of 10-100 flowers [3]
3. Scape usually strongly purplish (at least distally) and often the scape bracts, pedicel, tube, and lower surface of strongly purplish … C. amabile
3. Scape, scape bracts, and pedicel usually green, and flower tube and lower surface of perianth limb lobes generally white to yellowish … C. asiaticum
4. Leaf blade 0.3-1.5 cm wide … C. campanulatum
4. Leaf blades 2-6 cm wide [5]
5. Perianth limb lobes white with pink or purplish color stripes [6]
5. Perianth limb lobes mostly uniformly white to pink, or with greenish or white stripes [7]
6. Flower (ovary) and fruit distinctly pedicellate; scape and tube usually green or greenish … C. bulbispermum
6. Flower (ovary) and fruit sessile to subsessile; scape and tube usually strongly purplish, … C. zeylanicum
7. Flower (ovary) and fruit distinctly pedicellate … C. powellii
7. Flower (ovary) and fruit sessile to subsessile [8]
8. Perianth limb lobes white, style white to greenish … C. jagus
8. Perianth limb lobes and style (at least distally) usually pink … C. moorei

Crinum americanum L. {AFP} —
^*Crinum amabile* Donn ex Ker Gawl. —
^*Crinum asiaticum* L. {AFP} —
^*Crinum bulbispermum* (Burm.f.)Milne-Redh. & Schweick. {AFP} —
^*Crinum campanulatum* Herb. {AFP} —

^*Crinum jagus* (J.Thomps.)Dandy —
^*Crinum moorei* Hook.f. —
^*Crinum powellii* Baker —
^*Crinum zeylanicum* (L.)L. {AFP} —

Galanthus
^*Galanthus nivalis* L. {AFP} —

Hymenocallis
1. Leaves evergreen; inflorescence of 3-15 flowers; perianth tube (6)7.5-20 cm long; filaments green (at least distally); flowering late Jun-Oct [2]
1. Leaves deciduous; inflorescence of 1-9(12) flowers; perianth tube 4-13.5 cm long; filaments white; flowering Feb-Aug [3]
2. Leaves 50-100 cm long, 4-9 cm wide, blade broadly liguliform; inflorescence of (5)9-15 flowres; margins between free portions of filaments wavy, prominent projections absent; ovary ovoid, 0.9-1.6 cm long, 5-10 mm wide; flowering late Jun-Oct … H. latifolia
2. Leaves 35-75 cm long, 1.5-3 cm wide, blade narrowly liguliform; inflorescence of 3-5 flowers; margins between free portions of filaments with 1-2 prominent lacerations; ovary pyriform, 1.5-2.4 cm long, ca. 10 mm wide; flowering late Jun-Sep … H. puntagordensis
3. Ovary 14-30 mm long, 6-15 mm wide; ovules 4-8 per locule [4]
3. Ovary 7-15 mm long, 5-10 mm wide; ovules 1-3(4) per locule [9]
4. Inflorescence of 1-2 flowers; tepals pale green [5]
4. Inflorescence of 2-4 flowers; tepals white [7]
5. Inflorescence of 1 flower; tepals ascending, equal to or shorter than perianth tube … H. palmeri
5. Inflorescence of 2(3) flowers; tepals long-spreading, nearly always longer than perianth tube [6]
6. Plants often in dense clumps; leaf blades glaucous … H. henryae var. glaucifolia
6. Plants solitary or in loose clumps; leaf blades not glaucous or only slightly so … H. henryae var. henryae
7. Corona 6-9 cm wide … H. rotata
7. Corona 4-6 cm wide [8]
8. Longest leaf not exceeding 4 dm at anthesis; free filaments to 3 cm; anthers 1.2–1.5 cm … H. godfreyi
8. Longest leaf exceeding 4 dm at anthesis; free filaments to 4 cm; anthers 1.5–2 cm … H. tridentata
9. Leaf blades oblanceolate, distinctly wider beyond middle before tapering; inflorescence with 2-9 flowers [10]
9. Leaf blades liguliform to narrowly lanceolate or narrowly oblanceolate; inflorescence with 2-3 flowers [11]
10. Bulbs rhizomatous; leaves coriaceous, not glaucous; scape bracts 3-4(6) cm long, apex acute; flowering Apr-Jul … H. choctawensis
10. Bulbs not rhizomatous; leaves noncoriaceous, glaucous; scape bracts 4-7 cm long, apex long-acuminate; flowering Jul-Aug … H. occidentalis
11. Scape bracts narrowly lanceolate, 2.5–5.5 cm × 7–12 mm [12]
11. Scape bracts lanceolate, 3–5 cm × 10–20 mm [13]
12. Leaves suberect to erect, the blade channeled nearly throughout, typically liguliform; staminal corona funnelform at full anthesis, soon gradually spreading … H. crassifolia

12. Leaves chiefly arching low, often appearing prostrate, the blade channeled proximally, occasionally narrowly oblanceolate; staminal corona rotate at full anthesis ... H. duvalensis
13. Bulbs 2.5-4 cm long; scape bracts 3-4(4.5) cm long, 1-1.5 cm wide ... H. franklinensis
13. Bulbs 4.5-7.5 cm long; scape bracts 4-5 cm long, 1.5-2 cm wide ... H. gholsonii

Hymenocallis choctawensis Traub {AFP} —
Hymenocallis crassifolia Herb. {AFP} —
Hymenocallis duvalensis Traub {AFP} —
•***Hymenocallis franklinensis*** G.Lom.Sm. et al. {AFP} —
•***Hymenocallis gholsonii*** G.Lom.Sm. & Garland {AFP} —
•***Hymenocallis godfreyi*** G.Lom.Sm. & Darst {AFP} — SE.
•***Hymenocallis henryae*** Traub var. ***glaucifolia*** J.N.Henry & G.Lom.Sm. {AFP} — SE.
•***Hymenocallis henryae*** Traub var. ***henryae*** {AFP} — SE.
Hymenocallis latifolia (Mill.)M.Roem. {AFP} —
Hymenocallis occidentalis (Leconte)Kunth {AFP} —
•***Hymenocallis palmeri*** S.Watson {AFP} —
•***Hymenocallis puntagordensis*** Traub {AFP} —
•***Hymenocallis rotata*** (Ker Gawl.)Herb. {AFP} —
•***Hymenocallis tridentata*** Small {AFP} —

Leucojum

^*Leucojum aestivum* L. {AFP} —

Lycoris

1. Tepals and filaments yellow to orange ... Lycoris aurea
1. Tepals and filaments pink to red ... Lycoris radiata

^*Lycoris aurea* (L'Hér.)Herb. —
^*Lycoris radiata* (L'Hér.)Herb. {AFP} —

Narcissus

1. Inflorescence of 1-4 flowers; tepals and corona uniformly yellow [2]
1. Inflorescence of 1-15(20) flowers; tepals and corona uniformly white or yellow and white [4]
2. Leaf blades nearly terete, 2-4 mm wide ... N. jonquilla
2. Leaf blades flat 4-15(20) mm wide [3]
3. Inflorescence with 1-4 flowers; corona ca. ca. 1/2 to 3/4 as long as free portion of tepals ... N. odorus
3. Inflorescence with 1 flower; corona subequal to free portion of tepals ... N. pseudonarcissus
4. Inflorescence with 1 flower [5]
4. Inflorescence with 5-15(20) flowers [6]
5. Tepals white; corona yellow to greenish with a striking red margin, 1/4 or less as long as free portion of tepals ... N. poeticus
5. Tepals white to pale yellow; corona yellow to orange, the margin sometimes darker orange, ca. 1/3 to 2/3 as long as the free portion of the tepals ... N. incomparabilis
6. Tepals and corona white ... N. papyraceus
6. Tepals white, corona yellow to orange ... N. tazetta

^*Narcissus ×incomparabilis* Mill. (*N. poeticus* × *N. pseudonarcissus*) {AFP} —

^*Narcissus jonquilla* L. —
^*Narcissus papyraceus* Ker Gawl. —
^*Narcissus pseudonarcissus* L. {AFP} —
^*Narcissus tazetta* L. {AFP} —

Zephyranthes: The perianth tube is the part immediately below where the filaments arise.
1. Perianth tube 1-4 mm long [2]
1. Perianth tube 7-40 mm long [6]
2. Stigma 3-lobed capitate ... Z. candida
2. Stigma 3-fid [3]
3. Flower actinomorphic; filaments spreading or diverging, of 1-2 different lengths [4]
3. Flower subzygomorphic; filaments fasciculate, of 4 different lengths [5]
4. Perianth white, sometimes flushed pink abaxially; distal tepals erect; stamens in 2 distinctly subequal sets ... Z. insularum
4. Perianth rose pink; distal tepals not erect; stamens in 2 slightly subequal sets ... Z. rosea
5. Leaf blade 5-18 mm wide; tepals white to pink, sometimes dark pink or purple towards the base; anthers 6-13 mm long; stigma exserted beyond anthers ... Z. robusta
5. Leaf blade 1-4 mm wide; tepals usually yellow and reddish-darkened on the veins, on the lower surface, or towards the tepal base; anthers (2)4-5 mm long; stigma nearly level with anthers ... Z. tubispatha
6. Tepals yellow ... Z. citrina
6. Tepals white to pink [7]
7. Stamens fasciculate; stigma and filaments included in perianth tube ... Z. drummondii
7. Stamens diverging; stigma and filaments exserted beyond perianth tube [8]
8. Tepals usually bright pink; anthers 13-22 mm long ... Z. carinata
8. Tepals usually white to light pink or with pink or purple on the lower surface; anthers 3-10 mm long [9]
9. Perianth tube 1/3 or more as long as perianth; stigma level with or below the anthers ... Z. simpsonii
9. Perianth tube 1/3 or less as long as perianth; stigma exserted more than 2 mm beyond anthers [10]
10. Leaves bright green; perianth tube (0.8)1-2.1 cm long, <1/4 as long as perianth, ca. 1/3-3/4 as long as filaments and spathe ... Z. atamasco
10. Leaves dull green; perianth tube (1.7)2-3.1 cm long, 1/4 or more as long as perianth, 2/3 as long as to longer than the filaments and spathe ... Z. treatiae

Zephyranthes atamasco (L.)Herb. {AFP} — ST.
^*Zephyranthes candida* (Lindl.)Herb. {AFP} —
****Zephyranthes carinata*** Herb. {AFP} —
****Zephyranthes citrina*** Baker {AFP} —
^*Zephyranthes drummondii* D.Don {AFP} —
^*Zephyranthes insularum* H.H.Hume ex Moldenke {AFP} —
****Zephyranthes robusta*** (Herb. ex Sweet)Baker {AFP} —
^*Zephyranthes rosea* Lindl. {AFP} —
Zephyranthes simpsonii Chapm. {AFP} — ST.
Zephyranthes treatiae S.Watson {AFP} — ST.
^*Zephyranthes tubispatha* (L'Hér.)Herb. {AFP} —

AGAPANTHACEAE

Agapanthus

^*Agapanthus praecox* Willd. — Subspecies *orientalis* might be common in cultivation. The name *A. africanus* is used often, but it might be misapplied or involve hybrids. Numerous hybrids appear to be in cultivation. See Snoeijer (2004).

HYACINTHACEAE

1. Leaves petiolate, the blade ovate … Drimiopsis
1. Leaves sessile, linear, linear-lanceolate, to oblong [2]
2. Leaves mottled … Ledebouria
2. Leaves green, not mottled [3]
3. Perianth tubular, usually purple to brown, the lobes extremely small … Muscari
3. Perianth of free tepals or tepals connate with long lobes, white, yellow, orange, pink, blue, to purple [4]
4. Tepals connate basally forming a tube … Hyacinthus
4. Tepals free … Ornithogalum

Drimiopsis

^*Drimiopsis maculata* Lindl. & Paxton —

Hyacinthus

^*Hyacinthus orientalis* L. —

Ledebouria

^*Ledebouria socialis* (Baker)Jessop —

Muscari

1. Leaf blades 6-20(30) mm wide; tepals of fertile flowers pale to olive brown, sterile flowers bright violet, shorter than the 6-25 mm ascending pedicels … M. comosum
1. Leaf blades 2-8 mm wide; tepals of fertile and sterile flowers blue, longer than the 1-4(5) mm declined, nodding, or spreading pedicels [2]
2. Leaf blades 3-8 mm wide; racemes of 12-20 flowers; perianth tubes of fertile flowers globose … M. botryoides
2. Leaf blades 2-4(5) mm; racemes of 20-40 flowers; perianth tubes of fertile flowers obovoid to oblong-urceolate or cylindric … M. neglectum

^*Muscari neglectum* Guss. {AFP} — Only this taxon is recorded for the flora, but similar taxa are compared in the key above.

Ornithogalum

1. Tepas orange … O. dubium
1. Tepals white … O. umbellatum

^*Ornithogalum dubium* Houtt. —
^*Ornithogalum umbellatum* L. —

AGAVACEAE

1. Leaves chartaceous to coriaceous, lax [2]

1. Leaves fibrous or succulent, stiff [4]
2. Leaves petiolate, the blade ovate … Hosta
2. Leaves sessile, linear [3]
3. Inflorescence arching-stoloniferous … Chlorophytum comosum
3. Inflorescence erect … Schoenolirion
4. Leaf tip spine mostly >1 cm long, >2 mm wide on mature plants … Agave
4. Leaf tip spine mostly <1 cm long, <2 mm wide, or without a spine [5]
5. Leaf margin with fraying filaments or fibers … Yucca
5. Leaf margin without filaments [6]
6. Leaves few, usually <10; inflorescence spicate … Agave virginica
6. Leaves numerous, >10; inflorescence paniculate [7]
7. Leaves entire or with fine or stout marginal prickles inflorescence sometimes bulbiliferous, much longer than the exceeding the leafy portion of stem; ovary inferior … Furcraea
7. Leaves entire to very finely denticulate; inflorescence not bulbiferous, shorter to not much longer than the leafy portion of stem; ovary superior … Yucca

Agave
1. Leaf apex flexible, membranaceous … A. virginica
1. Leaf apex with a hardened, rigid terminal spine [2]
2. Terminal spine decurrent (sclerified spine tissue extending down margins of leaf) [3]
2. Terminal spine abrupt, truncate at the base [4]
3. Larger leaves with stout, hardened marginal prickles throughout the margin, the larger ones >2 mm long and often sitting on the tuberculate margins … A. americana
3. Larger leaves entire or with weak marginal prickles to ca. 1 mm long only at the base of the leaves, the margin mostly straight … A. weberi
4. Most or all leaves recurved … A. demeesteriana
4. Most leaves, and especially young ones, held straight (older leaves and those in shade sometimes weak and reflexed) [5]
5. Leaves entire or with occasional sporadic spines or marginal prickles weak, usually < 3 mm long and < 4 mm wide … A. sisalana
5. Leaves with marginal hardened spines throughout; marginal prickles of larger leaves fairly robust, usually > 3 mm long, to 8 mm wide [6]
6. Leaves variegated or olive-green to blue-green or green, sometimes glaucous; flowering usually Jun-Aug; anthers 17.2-27.5 mm long; ovary 16.7-29 mm long … A. angustifolia
6. Leaves virid, bright to light green and not glaucous (or glaucous only at the leaf base); flowering Jan-Feb; anthers 18-24 mm long; ovary 25-40 mm long … A. decipiens

^*Agave americana* L. {AFP} —
****Agave angustifolia*** Haw. {AFP} —
^*Agave attenuata* Salm-Dyck —
•***Agave decipiens*** Baker {AFP} — The plants of Florida are strikingly similar to those of the Yucatan peninsula referred to as *A. angustifolia*, and scarcely distinguishable. Zona (2001) found that *A. decipiens* tends to have shorter anthers (13.1-23.5 m long) and longer ovaries (22.2-43.5 mm long) vs. *A. angustifolia* (anthers 17.2-27.5 mm long, ovaries 16.7-27.6 mm long), but one flowering specimen of *A. sisalana* (*Hansen et al. 11836*) was erroneously included in the measurements.
^*Agave demeesteriana* Jacobi {AFP} — Apparently an older name for what was known as *A. desmetiana* Jacobi.
^*Agave lophantha* Schiede — Later synonym is *A. univittata* (Thiede et al. 2021).

^*Agave salmiana* Otto ex Salm-Dyck —
*__*Agave sisalana*__ Perrine {AFP} —
Agave virginica L. {AFP} —
++***Agave weberi*** F.Cels ex J.Poiss. {AFP} — Southern peninsula (native to Mexico). Coastal strands, disturbed sites. SE. Commonly cultivated and most likely introduced to Florida. Putative native populations are wanting. Formerly considered an endemic, as *A. neglecta*.

Chlorophytum

^*Chlorophytum comosum* (Thunb.)Jacques {AFP} —

Furcraea

1. Leaves ensiform, sword-shaped [2]
1. Leaves linear-attenuate [3]
2. Trunk to 0.3 m tall; leaf upper surface and usually lower surface smooth, margins entire or with fine spines near the base or throughout … F. foetida
2. Trunk to 5 m tall; leaf upper and lower surface scabrid, margins with stout spines throughout … F. selloana
3. Trunk to 1 m tall; marginal spines singular, yellow to brownish; inflorescence branched in upper 3/4 … F. hexapetala
3. Trunk to 0.3 m tall; marginal spines often double or bifurcate, pinkish or reddish; inflorescence branched in upper 2/3 … F. tuberosa

*__*Furcraea foetida*__ (L.)Haw. {AFP} —
*__*Furcraea selloana*__ K.Koch {AFP} —

Schoenolirion

1. Leaves without fleshy bases, arising from tops of vertical rootstocks, withering to persistent fibers; inflorescence unbranched or with 2-3(6) branches; tepals and filaments white or greenish white … S. albiflorum
1. Leaves with fleshy bases, arising from bulbs at tops of vertical rootstocks, not withering to persistent fibers; inflorescence unbranched (rarely branched); tepals and filaments yellow … S. croceum

Schoenolirion albiflorum (Raf.)R.R.Gates {AFP} —
Schoenolirion croceum (Michx.)A.W.Wood {AFP} — SE.

Yucca

1. Acaulescent aboveground (occasionally underground stem revealed by erosion), leaves all basal; leaves with marginal fibers; fruits dehiscent, erect [2]
1. Caulescent (mature plants), leaves along an elongate stem, vegetative stem of mature plants at least 0.2 m tall; leaves without marginal fibers or sometimes with marginal fibers (in Y. gloriosa); fruits indehiscent, pendent or occasionally erect [4]
2. Leaves broadly involute, especially at the tip, the marginal fibers lax, to 20 cm long, overlapping and attached to proceeding fibers; inflorescence branches strongly ascending to strict; sepals much narrower than petals; stamens shorter than the pistil; styles erect, slightly narrower than the ovary; fruits sometimes constricted medially … Y. filamentosa
2. Leaves plane, the marginal fibers stiff, rarely exceeding 4 cm, shorter than the distance between the bases of adjacent fibers; inflorescence branches divergent to spreading; sepals

slightly narrower than petals; stamens longer than the pistil; styles diverging, much narrower than the ovary; fruits not constricted medially [3]
3. Inflorescence glabrous ... Y. flaccida var. flaccida
3. Inflorescence pubescent ... Y. flaccida var. smalliana
4. Stems (excluding inflorescence) 4-10+ m tall, proximal and basal portions of stem naked and devoid of leaves, distally stems usually with numerous green deflexed leaves and numerous old non-green deflexed leaves; larger leaves 5-10 cm wide, >0.5 m long, margins denticulate, apex soft, pliable; cultivated only ... Y. gigantea
4. Stems (excluding inflorescence) usually 0.3-4 m tall (very rarely to 7 m), stem usually completely covered in leaves including deflexed old non-green persistent leaves (occasionally stem devoid of leaves on tall plants); larger leaves 2-5(6) cm wide, <0.7 m long, rarely to 1 m long, margins entire to denticulate, apex with a stiff spine; native and cultivated [5]
5. Stems with leaves loosely imbricate, the dilated basal part of the leaf that attaches to the stem usually plainly visible; leaves dark to light green, occasionally grayish or bluish green, stiffly spreading (infrequently laxly recurved), margin sharpy denticulate, rarely subentire, without marginal fibers; tepals 3-4 cm long; filaments 1.8-2.2 cm long; anthers 2-3 mm long; style 4-7 mm long; fruits fleshy and succulent ... Y. aloifolia
5. Stems with leaves tightly imbricate, the dilated basal part of the leaf that attaches to the stem usually not plainly visible; leaves green to blue-green or glaucous, stiff to lax, margin entire to roughened-minutely denticulate, sometimes with marginal fibers; tepals 4-5 cm long; filaments 2.2-2.8 cm long; anthers 3-4 mm long; style 6-11 mm long; fruits dry and spongy or leathery [6]
6. Leaf blade mostly stiff, rigid; fruit pendent, 5.5-8 cm long ... Y. gloriosa var. gloriosa
6. Leaf blade mostly pliable; fruit mostly erect, 2.5-4.5 cm long ... Y. gloriosa var. tristis

Yucca aloifolia L. {AFP} —
Yucca filamentosa L. {AFP} —
Yucca flaccida Haw. var. ***flaccida*** —
Yucca flaccida Haw. var. ***smalliana*** (Fernald)H.E.Ahles —
^*Yucca gigantea* Lem. — Smith & Figueiredo (2016) recognized *Y. guatemalensis* Baker as a smaller form with the base of trunk enlarged and leaves 0.5-0.9(1) m long, 5-8 cm wide. (syn. *Y. guatemalensis*).
Yucca gloriosa L. var. ***gloriosa*** {AFP} — Probably native only to Nassau Co. in Florida. Forms in the panhandle and elsewhere are probably introduced. Ward (2004, in Palmetto 22:6-8) "It is well, perhaps, that *Yucca gloriosa* in the panhandle is clearly of cultivated origin." SE.
^*Yucca gloriosa* L. var. *tristis* Carrière {AFP} — SE.

ASPARAGACEAE
Asparagus
1. Cladodes (leaf-like structure) linear or oblong, 0.8-2 mm wide [2]
1. Cladodes (leaf-like structure) filiform, 0.1-0.4 mm wide [3]
2. Stems climbing to erect to 1-7 m long, the branchlets typically 4 cm or longer; cladodes (5)10-40 mm long; fruit 5-7 mm wide with 1-3 seeds ... A. aethiopicus
2. Stems erect to weakly decumbent to 0.6 m long, the branchlets typically 3.5 cm or shorter, the cladodes 5-15 mm long; fruit ca. 5 mm wide with one seed ... A. densiflorus
3. Primary branches ascending to horizontal, the cladodes generally not plane; cladodes (4)10-15(30) mm long; some flowers unisexual; fruit red ... A. officinalis

3. Primary branches horizontal with cladodes nearly plane; cladodes 2-5(10) mm long; flowers bisexual; fruit purple-black … A. setaceus

*__*Asparagus aethiopicus*__ L. {AFP} —
^*Asparagus densiflorus* (Kunth)Jessop —
^*Asparagus officinalis* L. {AFP} —
*__*Asparagus setaceus*__ (Kunth)Jessop {AFP} —

RUSCACEAE

1. Shrubs or trees; cultivated only [2]
1. Herbs; native, naturalized, and cultivated [4]
2. Trunk swollen at the base … Beaucarnea recurvata
2. Trunk not swollen or only scarcely so at the base [3]
3. Rhizomatous, roots lacking secondary tissue; leaves often pinkish, reddish, or purplish; flower subtended by 1 bract and 1 bifid bracteole; ovary with 2-16 ovules per locule; fruit with several small seeds (Laxmanniaceae) … Cordyline fruticosa
3. Lacking rhizomes, roots with secondary tissue; leaves usually green or variegated green and yellow; flower subtended by 1 bract and 0-1 non-bifid bracteoles; ovary with 1 ovule per locule; fruit with 1-3 large seeds … Dracaena
4. Leaves cauline (at least larger ones) [5]
4. Leaves basal [6]
5. Flowers in a terminal panicle; fruit red, speckled or spotted when immature … Maianthemum racemosum
5. Flowers and fruits axillary; fruit glaucous blue to black, rarely reddish, not speckled or spotted when immature … Polygonatum biflorum
6. Leaves 5-15 cm wide [7]
6. Leaves 0.2-1.5(2.3) cm wide [8]
7. Leaves chartaceous to subcoriaceous, easily torn … Aspidistra elatior
7. Leaves leathery, not easily torn (Sansevieria) … Dracaena
8. Roots without tuberous swellings; leaves coriaceous … Nolina
8. Roots sometimes with tuberous swellings; leaves chartaceous [9]
9. Flowers erect, terminal at the tip of a strict pedicel, corollas cupulate to rotate; ovaries superior (flowers hypogynous); anthers free, oblong in outline, apically obtuse, dehiscing apically and appearing poricidal, filaments longer than or as long as anthers; stigmas entire; fruits blackish … Liriope
9. Flowers nodding, on a recurving pedicel or floral tube, corollas mostly campanulate; ovaries inferior to semi-inferior (flowers epigynous to perigynous); anthers more or less connate in a column, narrowly lanceolate in outline, apically narrowly attenuate-acute, dehiscing longitudinally, filaments much shorter than the anthers (anthers subsessile); stigmas 3-lobed; fruits commonly blue, sometimes blackish … Ophiopogon japonicus

Aspidistra

^*Aspidistra elatior* Blume {AFP} —

Dracaena

1. Erect shrubs or trees, leaves cauline; cultivated only … Key A
1. Rhizomatous herbs, leaves all basal (formerly Sansevieria); cultivated and naturalized … Key B

Key A
1. Leaf blades strongly narrowed proximally and generally petiolate, the petiole ascending and the blade spreading to laxly recurved (if the leaf subsessile, then the base still ascending) [2]
1. Leaves sessile to subsessile, spreading to recurved (the base of the blade generally oriented similar to the rest of the blade or only the extreme sub-clasping base of the leaf ascending) [3]
2. Leaf blade base rounded and abruptly contracted to the petiole … Dracaena aubryana
2. Leaf blade cuneate and the petiole rather flared at the apex and somewhat confluent with the blade [3]
3. Stems remaining green for much of their length; leaf blade 2-4.5 times longer than wide, the blade often distinct from the petiole (lucky bamboo) … Dracaena sanderiana
3. Stems often quickly developing bark and becoming brownish or grayish; leaf blades 4.5-12 times longer tha wide, the blade often rather indistinct from the petiole [4]
4. Leaves not densely congested, distinctly separated along the stem … Dracaena fragrans var. fragrans
4. Leaves densely congested, pseudowhorled … Dracaena fragrans var. compacta
5. Leafy part of stem slender, to 1-2.5 mm wide; leaf blade generally ovate to obovate, sometimes spotted-variegate … Dracaena surculosa
5. Leafy part of stem robust, 2.5-8 mm wdie; leaf blade generally linear to lanceolate, sometimes variegated in lines [6]
6. Arborescent, forming stout, large trunks, often 0.6-2 m wide, branches usually in distal part of plant and leaves all in the apex of the plant; leaves stiff … Dracaena draco
6. Shrubby, trunk weak and usually <0.5 m wide, usually with multiple basal stems and leaves distributed not all in the apical portion of plant; leaves stiff to lax [7]
7. Leaves generally broadly lanceolate … Dracaena reflexa var. reflexa
7. Leaves generally linear-lanceolate [8]
8. Leaves mostly lax, undulate or twisted or recurving … Dracaena angustifolia
8. Leaves mostly rather stiff and flat or plane (syn. Dracaena marginata) … Dracaena reflexa var. angustifolia

Key B
1. Leaves cylindric … D. angolensis
1. Leaves flattened [2]
2. Leaf blade with a marginal band throughout, discolorous and distinct from rest of blade, the marginal band ca. 0.5 mm wide or less and usually pale, stramineous, or orangish (or sometimes green), the band sometimes fraying; leaf blade mostly green and pale green … D. hyacinthoides
2. Leaf blade margin without a distinct marginal band throughout, or the band indistinct, or much larger than 0.5 mm wide; leaf blade often with whitish green or yellowish coloration strongly contrasting with the green colors … D. trifasciata

^*Dracaena angolensis* (Welw. ex Carrière)Byng & Christenh. {AFP} —
^*Dracaena draco* (L.)L. —
^*Dracaena fragrans* (L.)Ker Gawl. —
****Dracaena hyacinthoides*** (L.)Mabb. {AFP} —
^*Dracaena reflexa* Lam. —
^*Dracaena sanderiana* Mast. —
^*Dracaena surculosa* Lindl. —
^*Dracaena trifasciata* (Prain)Mabb. {AFP} —

Liriope
1. Plants cespitose and clumping, without stolons; leaves (5)8-16(23) mm wide, (15)30-70 cm long; inflorescence subequal to longer than the leaves, rarely shorter; peduncles 15-30 cm long; rachis 5-11 cm long, with 25-80 flower fascicles; outer bracts linear, 0.5 mm wide near apex, with abrupt, hyaline, ovate, wings borne basally, to 2 mm wide; style 1.5-2.5 mm long, subequal to shorter than stamens ... L. muscari
1. Plants colonial, from slender stolons; leaves (2)3-8(10) mm wide, (14)18-60 cm long; inflorescence mostly shorter than the leaves; peduncles 3.5-15 cm long; rachis 1-4 cm long, with 4-15 flower fascicles; outer bracts narrowly triangular with hyaline wings, 0.7 to 1 mm wide near apex, gradually expanding to 4 mm wide basally; style ca. 3 mm long, slightly exceeding stamens ... L. spicata

^*Liriope muscari* (Decne.)L.H.Bailey {AFP} —
^*Liriope spicata* Lour. {AFP} —

Lomandra
^*Lomandra longifolia* Labill. —

Maianthemum
Maianthemum racemosum (L.) Link {AFP} —

Nolina
1. Leaf blades 2-4(5) mm wide, 45-85 cm long; with sunken stomata in pits forming gray to white bands alternating with 7-14 longitudinal collenchymatous bands; inflorescence racemose; fruit usually asymmetrical, unwinged, 4-4.5 mm long ... N. atopocarpa
1. Leaf blades 5-9(11) mm wide, 70-100 cm long, with sunken stomata at the bottom of longitudinal papillate grooves (fine white lines) alternating with 20-31 longitudinal collenchymatous bands; inflorescence paniculate; fruit triangular and appearing winged, mostly symmetrical, 7-9 mm long ... N. brittoniana

•***Nolina atopocarpa*** Bartlett {AFP} — ST.
•***Nolina brittoniana*** Nash {AFP} — FE. SE.

Ophiopogon
^*Ophiopogon japonicus* (Thunb.)Ker Gawl. {AFP} —

Polygonatum
Polygonatum biflorum (Walter)Elliott {AFP} —

LILIALES

ALSTROEMERIACEAE
Alstroemeria
****Alstroemeria psittacina*** Lehm. {AFP} —

COLCHICACEAE
1. With lobed corms; leaf blade apex terminated by a tendril; tepals strongly reflexed, usually partly or wholly orange to red, usually strongly undulate, 4-8 cm long ... Gloriosa superba

1. With short or elongate rhizomes; leaf blade apex without a tendril; tepals strict to distally spreading, not noticeably undulate, whitish to pale yellow, 1-4 cm long … Uvularia

Gloriosa

^*Gloriosa superba* L. {AFP} —

Uvularia

1. Stems terete; leaf blades perfoliate (at least at mid-stem), margins smooth; tepals densely papillose adaxially; fruit obovoid, the apex truncate … U. perfoliata
1. Stems angled distally; leaf blades sessile, margins minutely papillose-denticulate; tepals smooth adaxially; fruit generally ellipsoid, the apex acute [2]
2. Peduncles bearing 1, ovate, leafy bract directly subtending the flower; tepal apex prolonged-acute to acuminate; ovary and capsule sessile or subsessile … U. floridana
2. Peduncles ebracteate; tepal apex rounded to short-acute; ovary and capsule stipitate … U. sessilifolia

Uvularia floridana Chapm. {AFP} — SE.
Uvularia perfoliata L. {AFP} —
Uvularia sessilifolia L. {AFP} —

MELANTHIACEAE

1. Scape with one whorl of large foliaceous bracts subtending the flowers (the rhizome has scale-like leaves or cataphylls); fruit a berry … Trillium
1. Leaves basal or cauline, not in one whorl; fruit a capsule [2]
2. Leaves 5-20 cm long, 4.5(6) cm wide, more or less petiolate with an elliptic, ovate, obovate, to oblanceolate blade; anthers 2-locular … Chamaelirium luteum
2. Leaves 20-70 cm long, 0.5-10 cm wide, linear and sessile, or petiolate with an elliptic to lanceolate blade 5-10 cm wide; anthers 1-locular [3]
3. Inflorescence a spike of subsessile to sessile flowers, pedicel 0-2 mm long … Schoenocaulon dubium
3. Inflorescence a raceme or panicle of pedicellate flowers, pedicel 2-20 mm long [4]
4. Inflorescence floccose-puberulent; seeds winged … Veratrum
4. Inflorescence rachis glabrous to pubescent; seeds not winged, sometimes angled [4]
5. Rhizomatous; tepals 9-15 mm long, with conspicuous basal glands adaxially … Zigadenus glaberrimus
5. Rhizomes weak or absent, plant base a bulb; tepals 4-10 mm long, eglandular or the gland obscure [6]
6. Inflorescence racemose, the bracts subtending flowers 1-2 times as long as wide; tepals glands absent; leaf apex rounded, obtuse, to abruptly acute; fruit about as long as wide … Amianthium muscaetoxicum
6. Inflorescence racemose or paniculate, the bracts subtending flowers 2-5 times as long as wide; tepals gland absent or obscure; leaf apex mostly attenuate; fruit longer than wide … Stenanthium

Amianthium

Amianthium muscaetoxicum (Walter) A.Gray {AFP} — The original spelling of the species epithet should be maintained (Art. 60.10, ex. 38) but is sometimes spelled "*muscitoxicum*".

Chamaelirium
Chamaelirium luteum (L.)A.Gray {AFP} —

Schoenocaulon
•***Schoenocaulon dubium*** (Michx.)Small {AFP} —

Stenanthium
1. Inflorescence diffuse, paniculate; pedicel 4-6 mm long … S. gramineum
1. Inflorescence compact and racemose, or with few basal racemose branches; pedicel 10-20 mm long [2]
2. Plants 30-80(100) cm tall; largest leaves 3-5(7) mm wide; inflorescence unbranched … S. densum
2. Plants 70-155 cm tall; largest leaves 4-10(12) mm wide; inflorescence branched towards the base … S. texanum

Stenanthium densum (Desr.)Zomlefer & Judd {AFP} —
Stenanthium gramineum (KerGawl.)Morong {AFP} — SE.
Stenanthium texanum (Bush)Sorrie & Weakley {AFP} —

Trillium: Technically, the aboveground, photosynthetic leafy tissues have been termed bracts of a flowering scape, and the true leaves being the scales of the rhizome.

1. Leaf-like bracts 2.5-3.5 times as long as wide; sepals spreading to reflexed with the tips hanging below the bracts; petals distinctly clawed, the claw purplish and darker in color than the blade, the blade yellow to pale purplish; filaments and antherse 4-6 mm long, subequal … T. lancifolium
1. Leaf-like bracts 0.8-2.5 times as long as wide; sepals spreading to reflexed with the tips usually not hanging below the bracts; petals without a claw or slightly clawed, the petal generally uniformly colored, greenish to dark purplish; filaments 1-3 mm long, much shorter than the anthers, the anthers 8-16 mm long [2]
2. Leaf-like bracts usually widest near the middle; anther dehiscence introrse; petals (3)4-5(7.5) times longer than wide; ovary weakly 3-angled to smooth (rarely very obscurely 6-angled) … T. maculatum
2. Leaf-like bracts widest below the middle; anther dehiscence latrorse, occasionally introrse basally with age; petals 2-5(6) times longer than wide; ovary strongly 6-angled [3]
3. Scape 17-44 cm long, 2.5-3 times longer than leaf-like bracts; bract tips at anthesis held far above the ground; petals 2-3 times longer than wide … T. decipiens
3. Scape 8-20 cm long, 1-2 times longer than leaf-like bracts; bract tips at anthesis typically nearly touching the ground or nearly so; petals (2.5)3-5(6) times longer than wide … T. underwoodii

Trillium decipiens J.D.Freeman {AFP} —
Trillium lancifolium Raf. {AFP} — SE.
Trillium maculatum Raf. {AFP} —
Trillium underwoodii Small {AFP} —

Veratrum
1. Leaf blade linear; tepals clawed, the glands yellow-green and nectariferous … V. virginicum

1. Leaf blade elliptic to lanceolate; tepals not clawed, the glands dark purple to blackish and not nectariferous ... V. woodii

Veratrum virginicum (L.)W.T.Aiton {AFP} —
Veratrum woodii J.W.Robbins ex A.W.Wood {AFP} — SE.

Zigadenus
Zigadenus glaberrimus Michx. {AFP} —

LILIACEAE
1. Leaves 1-2, basal, often variegated ... Erythronium
1. Leaves >2, cauline, usually uniformly green [2]
2. Leaves in 2 whorls; tepals yellow-green to green, 0.6-1 cm long ... Medeola
2. Leaves alternate, or with >2 whorls; tepals or petals 3-25 cm long [3]
3. Tepals with nectaries at base ... Lilium
3. Tepals without nectaries at base ... Tulipa

Erythronium
Erythronium umbilicatum C.Parks & Hardin {AFP} — SE.

Lilium
1. Leaves all alternate, to 20 cm long, to 1.5 cm wide; tepals 13-25 cm long, white, sometimes suffused with purple colors, the tepals overlapping and forming a closed tube for most of their length [2]
1. Leaves all alternate, or some or all whorled, or all whorled, to 15 cm long, 3.5 cm wide; tepals to 12 cm long, pinkish, yellow, orange, to reddish, not white, the tepals not overlapping or only overlapping at the very base [4]
2. Not rhizomatous; leaves to 15 mm wide; tepals 13-18 cm long, inner surface glabrous at base ... L. longiflorum
2. Rhizomatous; leaves to 10 mm wide; tepals 13-25 cm long, inner surface papillose at the base [4]
3. Stem often scabridulous; leaves numerous and crowded at base of stem, 3-10 mm wide; tepals 13-20 cm long, recurved at the tip, flower tube dilated from the middle to the apex outer ones often suffused with purple especially along midvein ... L. formosanum
3. Stem glabrous; leaves scattered along the stem, 2-6 mm wide; flower tube subcylindric, slightly dilated at apex; tepals 18-25 cm long, spreading at the tip ... L. philippinense
4. Not rhizomatous; leaves alternate, not papillose; pedicel erect to slightly curved; anthers yellow to orange-yellow ... L. catesbaei
4. Rhizomatous or not; leaves alternate or some or all whorled, papillose or not on the margins and lower surface veins; pedicel recurved; anthers orange-brown to brown [5]
5. Not rhizomatous; leaves distinctly succulent or fleshy, oblanceolate to obovate, the lower surface strongly pale; flowers strongly fragrant ... L. michauxii
5. Rhizomatous; leaves not fleshy, elliptic to lancoleate or oblanceolate (infrequently obovate), the lower surface mildly lighter green; flowers odorless or mildly fragrant [6]
6. Rhizomes 9-18 cm long, with 3-4 annual bulbs, scaleless sections between bulbs 2.7-5.4 cm; bulb-scale leaves or their abscission scars present; leaves usually papillose on the margins and lower surface veins; inflorescences with 1-4 flowers; dominant color of tepals pale yellow to orange ... L. iridollae

6. Rhizomes 5-10.5 cm long, with 2(3) annual bulbs, scaleless sections between bulbs 0.3-3.8(4.6) cm; bulb-scale leaves or their abscission scars absent; leaves not papillose on the margins and lower surface veins; inflorescences with 1-22 flowers; dominant color of tepals orange to red … L. superbum

Lilium catesbaei Walter {AFP} — ST.
*****Lilium formosanum*** A.Wallace
Lilium iridollae M.K.Henry {AFP} — SE.
*****Lilium longiflorum*** Thunb. {AFP} —
Lilium michauxii Poir. {AFP} — SE.
*****Lilium philippinense*** Baker {AFP} —
Lilium superbum L. {AFP} — SE.

Medeola
Medeola virginiana L. {AFP} — SE.

SMILACACEAE
Smilax
1. Stems annual, herbaceous, and lacking prickles; petioles 1-9 cm long (shorter on youngest part of stems); peduncle 3.5-14 cm long [2]
1. Stems perennial, becoming woody, with prickles (especially at the base of stems) or without prickles; petioles of mature leaves usually 0.1-2 cm long (longer, to 3 cm, at the very base of the stems); peduncle usually <4.5 cm long [4]
2. Plants climbing, usually >1m tall; tendrils numerous … S. lasioneuron
2. Plant erect, usually <1 m tall; tendrils absent or few and short [3]
3. Leaf blade underside glaucous, glabrous … S. biltmoreana
3. Leaf blade underside finely pubescent … S. hugeri
4. Plants usually <1 m tall; stems densely pubescent; leaf blades densely pubescent below … S. pumila
4. Plants usually >1 m tall; stems glabrous; leaf blades glabrous [5]
5. Leaf blades strongly glaucous below … S. glauca
5. Leaf blades green to pale green below, not glaucous or only slightly so [6]
6. Midvein of the leaf blade underside pronounced, with the lateral veins much less pronounced to somewhat obscure and the reticulate venation obscure … S. laurifolia
6. Midvein and lateral veins of the leaf blade underside usually relatively similarly pronounced, at least towards the base, the reticulate venation conspicuous [7]
7. Prickles at the base of the stem dense and bristly; leaf blade margin with numerous fine, minute prickles, especially toward the basal margin … S. hispida
7. Prickles well-spaced and broad-based, not dense and bristly; leaf blade margin entire or with few coriaceous prickles [8]
8. Leaf blade margin with a light-colored cartilaginously thickened band or vein, the margin with or without prickles; peduncle 0.2-6 cm long [9]
8. Leaf blade margin thin or not strongly thickened into a light-colored band, the margin without prickles; peduncle 0.5-2.0 cm long [11]
9. Long-rhizomatous; inner pair of basal veins of the leaf blade distinct at the base and blending in with the pronounced reticulate venation towards the apex; peduncle 1.5-6 cm long; (leaf blade sometimes variegated, sometimes with prickles, usually widest below the middle;

fertile, leafy portion of stem often with straight prickles to ca. 5 mm; berries lustrous to slightly glaucous) … S. bona-nox
9. Short-rhizomatous and/or tuberous; inner pair of basal veins of the mature leaf blade distinct from the base to the apex, distinct and more pronounced than the subtle to prominulous reticulate venation; peduncle to 0.2-1.6 cm long; (leaf blade either usually widest below the middle, without prickles, and sometimes variegated (S. auriculata) or usually widest near the middle, sometimes with prickles, and not variegated (S. havenensis); fertile, leafy portion of stem usually without prickles (S. auriculata) or often with slightly curved prickles to ca. 2 mm long (S. havenensis); berries glaucous or lustrous) [10]
10. Prickles rare on distal fertile and leafy portions of the stem, more common at the stem base; leaf blade often widest below the middle, infrequently widest at or above the middle, occasionally variegated, upper surface with the veins faintly impressed, the margin and midvein without prickles; fruits round, glaucous or lustrous … S. auriculata
10. Prickles common on distal fertile and leafy portions of the stem, also common at the stem base; leaf blade widest at the middle, not variegated, upper surface smooth, the margin and midvein below with or without prickles; fruits sometimes pointed at the apex, not glaucous … S. havanensis
11. Distal leaf blades with the base acute, the blade margin gradually reduced into the petiole … S. smallii
11. Distal leaf blades with the base truncate, broadly rounded, or cordate, the blade margin sharply reduced into the petiole [12]
12. Leaf blade usually ovate to broadly ovate; mature fruit bluish black … S. rotundifolia
12. Leaf blade ovate-lanceolate to broadly ovate; mature fruit orange to red … S. walteri

Smilax auriculata Walter {AFP} —
Smilax biltmoreana (Small)J.B.Norton ex Pennell —
Smilax bona-nox L. {AFP} — The variety *littoralis* Coker ex Sorrie has been recognized by the tuber and rhizomes mostly lacking prickles (Coker 1944; Sorrie 2014).
Smilax glauca Walter {AFP} —
Smilax havanensis Jacq. {AFP} — ST.
Smilax hispida Raf. {AFP} — The earlier name *Smilax tamnoides* is sometimes preferred for this species (FNA, vol. 26), whereby Fernald (1944) declared Catesby's (1730) type illustration was "a beautiful match for the terete-stemmed plant". Contrarily, *S. hispida* is commonly preferred (Wilbur 2003), with Clausen (1951) concluding Catesby's observation was probably chimeric. Following Coker (1944), plants with at least some leaf blades pandurate are referred to as var. *australis*, which might apply to most of Florida.
Smilax hugeri (Small)J.B.Norton ex Pennell {AFP} — Sometimes subsumed under *S. ecirrhata*.
Smilax lasioneuron Hook. {AFP} —
Smilax laurifolia L. {AFP} —
Smilax pumila Walter {AFP} —
Smilax rotundifolia L. {AFP} —
Smilax smallii Morong {AFP} — The earlier name *S. maritima* is sometimes promoted. Although it is evident that the description of *S. maritima* refers to *S. auriculata*, in synonymy is cited *S. ovata*, nom. illeg. (Wood 1861), a name interpreted as a synonym of *S. smallii* (see Art. 6.13).
Smilax walteri Pursh {AFP} —

'COMMELINIDS'

POALES

BROMELIACEAE

1. Leaf unarmed, entire (mostly native species, a few non-native) [2]
1. Leaf margin with spines, sometimes weak, minute, or sparse (all non-native, some species with entire leaves) [6]
2. Leaves usually grayish, densely covered in minute scales (mostly native spp.) … Tillandsia
2. Leaves usually green, glabrous or with few microscopic scales, or partly whitish and covered with chalky powder [3]
3. Inflorescence usually strongly distichous or secund (non-native spp.) [4]
3. Inflorescence usually spirally arranged, or flowers few or solitary (native spp.) [5]
4. Flowers spaced or somewhat densely packed, most or at least some subtending bracts nearly completely free or only partially overlapping adjacent bracts … Vriesea
4. Flowers very densely packed, most subtending bracts overlapping adjacent ones for half or more of their length … Wallisia
5. Floral bracts inconspicuous, reduced, much smaller than the flowers or fruits; seed appendage apical, folded at maturity … Catopsis
5. Floral bracts conspicuous, as large as the flowers and fruits or nearly so; seed appendage basal, straight at maturity … Guzmania
6. Leaves narrow, grass-like … Pitcairnia
6. Leaves broad, relatively stiff [7]
7. Inflorescence bracts inconspicuous, smaller than the flowers; ovary superior; fruit a capsule; seeds winged … Dyckia
7. Inflorescence bracts usually conspicuous and larger than the flowers; ovary inferior; fruit fleshy or leathery, a berry or compound; seeds without an appendage [8]
8. Petals naked [9]
8. Petals appendaged; inflorescence sessile or pedunculate [10]
9. Inflorescence sessile or pedunculate, usually not accumulating water; filaments forming a tube and joined to the center of the petals … Bromelia
9. Inflorescence sessile, embedded in the leaf rosette, sometimes accumulating standing water; filaments not forming a tube, the petals free … Neoregelia
10. Inflorescence with an apical leaf rosette which may form a new plant; ovaries fused with each other and with the fleshy bracts to form a compound fruit … Ananas
10. Inflorescence lacking an apical leaf rosette; ovaries distinct [11]
11. Flowers pedicellate; sepals connate … Portea
11. Flowers sessile or pedicellate; sepals free [12]
12. Inflorescence simple or compound; sepals mucronate or pungent, or if blunt then small and the ovules long-caudate; petals mostly erect, spreading, to weakly recurved … Aechmea
12. Inflorescence simple; sepals unarmed or soft-apiculate; petals erect to recurved [13]
13. Flowers sessile or pedicellate; petals often strongly recurved and coiled or zygomorphic … Billbergia
13. Flowers sessile; petals mostly erect, spreading, to weakly recurved … Quesnella

Aechmea

^*Aechmea blanchetiana* (Baker)L.B.Sm. —
^*Aechmea bracteata* (Sw.)Griseb. —
^*Aechmea chantinii* (Carrière)Baker —
^*Aechmea distichantha* Lem. —
^*Aechmea fasciata* (Lindl.)Baker —

^*Aechmea gamosepala* Wittm. —

Alcantarea
^*Alcantarea imperialis* (Carrière)Harms —

Ananas
^*Ananas comosus* (L.)Merr. — There was once a considerable commercial industry in the late 1800s-early 1900s (Writers' Program 1941).

Billbergia
^*Billbergia nutans* H.Wendl. —
^*Billbergia pyramidalis* (Sims)Lindl. {AFP} —

Bromelia
^*Bromelia pinguin* L. {AFP} —

Catopsis
1. Leaf not chalky at the base, the tip attenuate; inflorescence with 5-20 racemes; floral bracts 4-7 mm long ... C. floribunda
1. Leaf often conspicuously chalky at the base (occasionally not apparent or sloughed off), the tip sharply acute-subulate; inflorescence with 1-6 racemes (rarely to 11); floral bracts 6-15 mm long [2]
2. Leaves ascending to erect-appressed, mostly >15 cm long on mature rosettes; floral bracts 6-10 mm long; flower diurnal; corolla white ... C. berteroniana
2. Leaves ascending to spreading, mostly <15 cm long on mature rosettes; floral bracts 12-15 mm long; flower nocturnal; corolla yellow ... C. nutans

Catopsis berteroana (Schult. & Schult.f.)Mez {AFP} — SE.
Catopsis floribunda L.B.Sm. {AFP} — SE.
Catopsis nutans (Sw.)Griseb. {AFP} — SE.

Dyckia
^*Dyckia brevifolia* Baker {AFP} —

Guzmania
^*Guzmania lingulata* (L.)Mez —
Guzmania monostachia (L.)Rusby ex Mez {AFP} — SE.

Neoregelia
^*Neoregelia carolinae* (Beer)L.B.Sm. —
^*Neoregelia spectabilis* (Antoine)L.B.Sm. —

Portea
^*Portea petropolitana* (Wawra)Mez —

Quesnelia
^*Quesnelia testudo* Lindm. —

Tillandsia

1. Plant forming pendent festoons to 3 m long, individual stems or shoots tangled and difficult to discern, roots unapparent; inflorescence sessile with 1 flower; petals yellow-green … T. usneoides
1. Plant erect to spreading, sometimes angled downwards, 0.03-2 m long, solitary or cespitose, individual stems or shoots apparent, roots apparent; inflorescence exserted, with 1-200 flowers; petals white to violet [2]
2. Longest leaves <13 cm long [3]
2. Longest leaves >13 cm long [6]
3. Stem with appressed leaf base 2-4 mm wide; leaves 2-ranked, the basal leaves 2-3(-4) mm wide … T. recurvata
3. Stem with appressed leaf bases 10-40 mm wide; leaves rosulate, the basal leaves 5-25 mm wide [4]
4. Leaves flat or with the margins slightly involute, the margins distant and only touching at the apex, densely overlapping in a tight rosette; base of the flowers embedded in the rosette without visible, appressed bracts … T. ionantha
4. Leaves strongly involute, the margins touching or nearly so, forming a pseudobulb at the base; flowers borne on an exserted inflorescence with visible, appressed bracts [5]
5. Scales appressed, the plant appearing smooth-granular; inflorescence broadly elliptic, usually not exserted beyond the leaves … T. paucifolia
5. Scales erect, the plant appearing fuzzy; inflorescence linear, usually evidently exserted from the leaves … T. pruinosa
6. Flowers distant, the floral bracts of one flower subequal to the rachis internodes, not overlapping or scarcely so those of adjacent flowers, the inflorescence rachis plainly visible at anthesis [7]
6. Flowers densely congested, the floral bracts imbricate with those of adjacent flowers, the inflorescence rachis not visible at anthesis [8]
7. Plant solitary or cespitose, perennial, forming basal offshoots; plant base cylindrical, the leaf bases not holding pools of water; leaves with horizontal banding; floral bracts 2.3--3.1 cm long; inflorescences with 2--6 flowers per branch; corolla pink to dark rose … T. flexuosa
7. Plant solitary, monocarpic (dying after fruiting), not forming basal offshoots; plant base bowl-shaped, the leaf bases sometimes holding pools of water; leaves uniform in color, lacking banding, or rarely variegated; floral bracts 1.2--2 cm; inflorescence with 6--11 flowers per branch; corolla white … T. utriculata
8. Plant base pseudobulbous, formed by the somewhat abruptly widened and appressed leaf sheaths which are rather distinct from the articulated blade; peduncle bracts lax and spreading; inflorescence unbranched or irregularly branched with 1-13 branches, not pyramidal in overall shape [9]
8. Plant base not pseudobulbous, the leaf sheaths of the basal leaves gradually transitioning into the blade; peduncle bracts strictly appressed to ascending; inflorescence with 0-15 branches, sometimes pyramidal in shape [10]
9. Leaves at the peduncle base rather abruptly differentiated from those of the pseudobulb; inflorescence unbranched to 4-branched, the branches tightly appressed to one another … T. balbisiana
9. Leaves at the peduncle base somewhat gradually transitioning from the pseudobulb; inflorescence of 3-13 branches, the branches ascending and diverging, not tightly appressed … T. ×smalliana

10. Basal leaves 15-75 mm wide at the base; floral bracts 18-30 mm long [11]
10. Basal leaves 4-18 mm wide at the base; floral bracts 9-17 mm long [15]
11. Leaf blade brittle, easily snapping into separate pieces; peduncle with appressed bract bases 3-4.5 mm wide; peduncle bracts with short, acuminate tips; inflorescence of 1-3 branches ... T. variabilis
11. Leaf coriaceous, not easily snapping into separate pieces; peduncle with appressed bract bases 4-14 mm wide; peduncle bracts with long linear-filiform tips; inflorescence of 2-15 branches [12]
12. Basal leaves 25-75 mm wide at the base; floral bracts 20-30 mm long, 8-10 mm wide from the keel to the margin, glabrate, sparsely lepidote only at the tip [13]
12. Basal leaves 15-24 mm wide at the base; floral bracts 18-21 mm long, 4-5 mm wide from the keel to the margin, uniformly lepidote ... T. floridana
13. Spike >10 cm long, rarely shorter, strongly compressed, 2.5-5 cm wide at anthesis; bract subtending each flower (3)3.5-4.8 cm long; very rare in south Florida ... T. fasciculata var. fasciculata
13. Spike <10 cm long, rarely longer, subterete to somewhat compressed, 1.5-2.5 cm wide at anthesis; bract subtending each flower 2-2.5(3) cm long [14]
14. Spikes clavate with long slender bracteate sterile bases; rare in south Florida ... T. fasciculata var. clavispica
14. Spikes short-stipitate or subsessile; widespread ... T. fasciculata var. densispica
15. Basal leaves 3-7 mm wide at base, 0.6-0.9 mm wide at the involute mid-blade; peduncle bracts green, reddish green, to dark purple-red, not bright; floral bracts 9-14 mm long, 2-4 mm wide from the keel to the margin, green to red; corolla 18-22 mm long ... T. setacea
15. Basal leaves 6-20 mm wide at base, (0.8)1.1-3 mm wide at the involute to flat mid-blade; peduncle bracts usually uniformly red to pink, bright and conspicuous, rarely light green; floral bracts 14-17 mm long, 3-5 mm wide from the keel to the margin, usually uniformly red to pink, sometimes reddish green; corolla 30-45 mm long [15]
16. Basal leaves 6-10 mm wide at the base; bracts just below the spikes and the floral bracts tightly appressed, usually the tips just as appressed ... T. bartramii
16. Basal leaves 10-20 mm wide at the base; bracts just below the spikes and often the floral bracts appressed at the base, with the tips often diverging or spaced from the rachis axis ... T. simulata

Tillandsia balbisiana Schult. & Schult.f. {AFP} — ST.
Tillandsia bartramii Elliott {AFP} —
Tillandsia fasciculata Sw. var. ***clavispica*** Mez — Hendry, Lee, Miami-Dade, & Monroe keys. Rockland hammocks. SE.
Tillandsia fasciculata Sw. var. ***densispica*** Mez — Central and south peninsula. Hammocks. SE.
x***Tillandsia fasciculata*** Sw. var. ***fasciculata*** {AFP} — Miami-Dade Co. Rockland hammocks. SE. Known from one specimen (*Prince s.n.*, FLAS).
Tillandsia flexuosa Sw. {AFP} — ST.
•***Tillandsia floridana*** (L.B.Sm.)H.Luther {AFP} —
^*Tillandsia ionantha* Planch. {AFP} —
Tillandsia paucifolia Baker {AFP} —
Tillandsia pruinosa Sw. {AFP} — SE.
Tillandsia recurvata (L.)L. {AFP} —
Tillandsia setacea Sw. {AFP} —
•***Tillandsia simulata*** Small {AFP} —

• ***Tillandsia ×smalliana*** H.Luther (*T. balbisiana* × *T. fasciculata*) {AFP} — South peninsula (probably not endemic, presumably elsewhere but so far not documented outside of Florida).
Tillandsia usneoides (L.)L. {AFP} —
Tillandsia utriculata L. {AFP} — SE.
Tillandsia variabilis Schltdl. {AFP} — ST.

Wallisia
^*Wallisia cyanea* Barfuss & W.Till —

TYPHACEAE
1. Inflorescence of globose heads arising from the axils of leaf-like bracts … Sparganium americanum
1. Inflorescence a terminal spike … Typha

Sparganium
Sparganium americanum Nutt. {AFP} —

Typha: See illustration in Galen Smith (2012).
1. Spike with a conspicuous naked, sterile gap (0)1-8 cm long between distal staminate part and proximal female part; pistillate bracteoles present (evident under magnification after removal from spike, resembling perigonial hairs, with brown, enlarged tips narrower than stigmas); pistillate part (stigmas) cinnamon-brown to orange-brown when dry; pistal hair tips straw-colored to orange-brown in mass, usually with 1 subapical orange-brown, enlarged cell; stigmas linear-lanceolate; plant to 4 m tall; leaf sheath margin broadly clear; leaf mucilage glands at sheath-blade transition orange-brown, numerous on entire sheath and proximal 1-10 cm of blade … T. domingensis
1. Spike lacking a sterile gap, the distal staminate and proximal pistillate part contiguous, or very rarely with a gap to 8 cm long between; pistillate bracteoles absent; pistillate part (stigmas) dark brown when dry; pistal hair tips colorless, white in mass, not enlarged; stigmas ovate to narrowly ovate-lanceolate; plant to 3 m tall; leaf sheath margin narrowly clear; leaf mucilage glands at sheath-blade transition usually colorless, obscure, absent from sheath center and blade … T. latifolia

Typha domingensis Pers. {AFP} —
Typha latifolia L. {AFP} —

CYPERACEAE
subf. Cyperoideae
- Cladieae: Cladium
- Sclerieae: Scleria
- Schoeninae: Schoenus
- Rhynchosporeae: Rhynchospora
- Dulichieae: Dulichium
- Scirpieae: Scirpus
- Cariceae: Carex
- Eleocharidae: Eleocharis
- Abdilgaardieae: Abildgaardia, Bulbostylis, Fimbristylis

Bolboschoeneae: Bolboschoenus
Fuireneae: Fuirena
Schoenoplecteae: Schoenoplectus
Pseudoschoeneae: Schoenoplectiella
Cypereae, Ficiniinae: Isolepis
Cypereae, Cyperinae: Cyperus

1. Pistillate flowers and achenes partially to completely enclosed in an usually inflated sac (perigynium), open at the apex where the stigma or style protrudes; flowers unisexual, with the male flowers typically apical and female flowers basal … Carex
1. Flowers and achenes not enclosed in a sac-like structure; flowers bisexual or unisexual (Scleria) [2]
2. Spikelet scales distichous [3]
2. Spikelet scales spirally arranged [8]
3. Perianth bristles present, subtending achene [4]
3. Perianth bristles absent [6]
4. Leaf blades absent … Eleocharis baldwinii
4. Leaf blades present [5]
5. Leaves cauline; inflorescences axillary, numerous … Dulichium arundinaceum
5. Leaves basal or nearly so; inflorescences terminal, solitary … Schoenus nigricans
6. Achene generally yellow, brown, to black … Cyperus
6. Achene white or grayish white, sometimes with darkened areas [7]
7. Inflorescence a solitary spikelet, the scales and florets densely congested … Abildgaardia ovata
7. Inflorescence of 1-several spikelets, the scales and florets adjacent, but generally individually apparent and spaced … Scleria
8. Achene with a persistent, apical tubercle or swollen style base [9]
8. Achene lacking an apical tubercle or swollen style base [11]
9. Leaf blades absent or to 4 mm long and scale-like; culm with 1 spikelet … Eleocharis
9. Leaf blades present, >4 mm long; culm with 2 or more spikelets [10]
10. Leaf sheath fimbriate-ciliate; style 3-fid; achene trigonous, the tubercle usually <½ as wide as achene … Bulbostylis
10. Leaf sheath glabrous; style usually 2-fid; achene usually biconvex, the tubercle usually >½ as wide as achene … Rhynchospora
11. Inflorescence bract 1 (rarely 2), erect, confluent with the culm, the inflorescence appearing lateral; perianth bristles present or absent [12]
11. Inflorescence bract 1-8, spreading to erect, not confluent or only 1 bract confluent with the culm and perianth bristles absent, the inflorescence generally appearing terminal [14]
12. Plant rhizomatous, usually >40 cm tall; culms usually >2 mm wide; perianth bristles present … Schoenoplectus
12. Plant cespitose or nearly so, usually <40 cm tall; culms 0.2-1.2 mm wide; perianth absent [13]
13. Spikelets 1(3), scales gibbous; style 3-fid … Isolepis carinata
13. Spikelets (1)2-6(10), scales not gibbous; style usually 2-fid … Schoenoplectiella erecta subsp. raynallii
14. Plant 0.5-3 m tall, rhizomatous, rhizomes 2.5-13 mm wide, 5-20 cm long, culms 4-10 mm wide [15]
14. Plant 0.2-1.5(2) m tall, cespitose or if rhizomatous, rhizomes <2.5 mm wide or <5 cm long, culms 0.1-5 mm wide [16]

15. Rhizomes with few, non-overlapping scales; leaves unarmed, not prickly; spikelets 10-30 mm long, 6-10 mm wide ... Bolboschoenus robustus
15. Rhizomes densely scaly-imbricate; leaves armed, copiously prickly; spikelets 2-3 mm long, 1-2 mm wide ... Cladium
16. Spikelet scales usually recurved or spreading; inner whorl of perianth bristles with a claw and expanded blade ... Fuirena
16. Spikelet scales recurved to appressed; perianth bristles lacking or these without expanded blades [17]
17. Perianth bristles (0)3-6 ... Scirpus
17. Perianth absent, or of 1-2 scales or bractlets [18]
18. Spikelets few to numerous, often sessile or nearly so (those with spirally arranged scales); style smooth ... Cyperus
18. Spikelets numerous and usually some pedunculate or spikelet solitary, the spikelet mostly ovate to lanceolate; style fimbriate, papillate, ciliiolate, toothed, to smooth ... Fimbristylis

Abildgaardia
Abildgaardia ovata (Burm.f.)Kral {AFP} —

Bolboschoenus
Bolboschoenus robustus (Pursh)Soják {AFP} —

Bulbostylis
1. Spikelets pedcunculate, at least some [2]
1. Spikelets sessile to subsessile [4]
2. Achene yellowish to pale brown, rugose ... B. capillaris
2. Achene waxy gray, papillate [3]
3. Plants annual, 10-20(30) cm tall; scapes mostly 0.5 mm wide; inflorescence mostly simple, open; longest involucral bract shorter than inflorescence; spikelets mostly dark red-brown or dull brown ... B. ciliatifolia var. ciliatifolia
3. Plants perennial, 15-40 cm tall; scapes mostly 0.5-0.7 mm wide; inflorescence mostly compound, open or dense; proximalmost involucral bract longer than inflorescence; spikelets red brown or pale brown ... B. ciliatifolia var. coarctata
4. Inflorescence bracts few, inconspicuous, longest usually not exceeding the spikelets; spikelets red, red-brown, or dull brown; achene 0.5-0.6 mm long, finely reticulate ... B. barbata
4. Inflorescence bracts numerous, conspicuous, longest much exceeding the spikelets; spikelets pale or greenish or tan; achene 1-1.2 mm long, transversely rugose or rugulose [5]
5. Annual, to 20 cm tall; inflorescence bracts with scarious, entire border gradually narrowing to blade; anthers 1, 0.5 mm long ... B. stenophylla
5. Perennial, to 50 cm tall; inflorescence bracts with broad, scarious, strongly pectinate-fimbriate sheath border abruptly narrowing to blade; anthers 3, 3 mm long ... B. warei

****Bulbostylis barbata*** (Rottb.)C.B.Clarke {AFP} —
Bulbostylis capillaris (L.)C.B.Clarke {AFP} —
Bulbostylis ciliatifolia (Elliott)Fernald {AFP} —
Bulbostylis stenophylla (Elliott)C.B.Clarke {AFP} —
Bulbostylis warei (Torr.)C.B.Clarke {AFP} —

Carex

1. Culms terminated by a single spike; margin of the staminate scales basally connate (subg. Euthyceras and Uncinia) … Key A
1. Culms mostly with 2 or more spikes; margin of the staminate scales free [2]
2. Achene lenticular and stigmas 2; spikes sessile; cladoprophylls usually absent (subg. Vignea) [3]
2. Achene trigonous and stigmas 3 (if lenticular and stigmas 2, then spikes pedunculate); spikes subsessile to pedunculate; cladoprophylls usually present (on adaxial side of peduncle base, as a tubular sterile sheath or a utriculiform sheath containing a pistillate flower) (subg. Carex) [6]
3. Perigynium margins winged (sect. Cyperoideae, including former sect. Ovales) … Key B
3. Perigynium margins not winged [4]
4. Some spikes gynecandrous (basally staminate, distally pistillate) … Key C
4. Spikes androgynous (basally pistillate, distally staminate), rarely otherwise [5]
5. Leaf blades 1.4-3 mm wide; spikes not overlapping adjacent ones; perigynia spongy- or corky-thickened near the base (Carex rosea group) … Key D
5. Leaf blades 2-15 mm wide; spikes often overlapping adjacent ones; perigynia spongy- or corky-thickened or not near the base (Carex diandra group) … Key E
6. Achene lenticular and stigmas 2 … Key F
6. Achene trigonous and stigmas 3 [7]
7. Perigynium glaucous or waxy (sect. Glaucescentes) … Key G
7. Perigynium not glacuous nor waxy [8]
8. Perigynium (including beak) 10-20 mm long; achene body confluent with a hardened, persistent filiform style base (sect. Lupulinae) … Key H
8. Perigynium (including beak) 3-10 mm long; achene body with or without a persistent style base [9]
9. Perigynium pubescent, or glabrous and leaves short-pilose [10]
9. Perigynium glabrous, and leaves glabrous or sometimes papillose [15]
10. Perigynium 2-4 mm long (sect. Acrocystis) … Key I
10. Perigynium 4-10 mm long [11]
11. Pistillate scale truncate and short-aristate, the margin dark chestnut brown, the vein green, the rest hyaline (sect. Pictae) … C. baltzellii
11. Pistillate scale not truncate and short-aristate [12]
12. Achene loose, not filling the perigynium [13]
12. Achene tightly or wholely filling the perigynium [14]
13. Peryngium 4-10 mm long, gradually tapering to an indistinct beak (sect. Hymenochlaenae, in part) … Key J
13. Peryngium 2-6 mm long, distally rounded then abruptly tapered to a distinct beak (sect. Paludosae, in part) … Key K
14. Perigynium pubescent (sect. Hallerianae) … Key L
14. Perigynium glabrous (sect. Porocystis) … Key M
15. Pistillate spikes 3-8 mm wide [16]
15. Pistillate spikes 8-25 mm wide [18]
16. Pistillate spikes (7)15-80 mm long (sect. Hymenochlaenae, in part) … Key J
16. Pistillate spikes 4-12 mm long [17]
17. Culms obtustely trigonous; veins of the perigynium impressed to flattish and slightly raised, or raised and perigynium rounded at the base or peryngium sharply trigonous (sect. Griseae) … Key N
17. Culms acutely trigonous to faintly winged; veins of the perigynium raised or prominent, perigynium cuneate at the base, terete to rounded-trigonous (sect. Paniceae) … Key O
18. Pistillate spikes 1-2(3); achene 1.4-1.9 mm long (sect. Ceratocystis) … C. lutea

18. Pistillate spikes 1-9; achene 1.4-5 mm long [19]
19. Perigynium abruptly contracted to a definite beak [20]
19. Perigynium tapered to an indefinite beak [21]
20. Perigynium body widest above the middle (sect. Squarrosae) … Key P
20. Perigynium body widest near or below the middle (sect. Vesicariae, in part) … Key Q
21. Pistillate spikes congested and overlapping (sect. Vesicariae, in part) … Key Q
21. Pistillate spikes sparse, mostly not overlapping [22]
22. Perigynium with 10-15 (obscure) veins (sect. Paludosae, in part) … Key K
22. Perigynium with 20-26 veins (sect. Rostrales) … Key R

Key A
1. Leaves 0.4-1.3 mm wide, usually subequal to shorter than the culm (subg. Euthyceras) … C. leptalea
1. Leaves 1.2-4.6 mm wide, usually 1.2-3 times longer than the culm (subg. Uncinia) [2]
2. Leaves 1.2-2 times longer than the culm; peduncles usually ascending to nodding; perigynia 6-7.5(8) mm long … C. basiantha
2. Leaves 2-3 times longer than the culm; peduncles usually erect; perigynia (7)7.5-11 mm long … C. superata

Key B
1. Perigynia 2-3.3 times longer than wide … C. tribuloides
1. Perigynia 1-2 times longer than wide [2]
2. Perigynia 1-1.2 times longer than wide … C. reniformis
2. Perigynia 1.3-2 times longer than wide [3]
3. Spikes tapering to the base; achene occupying ca. 1/2 of the perigynium width … C. festucacea
3. Spikes rounded at the base; achene occupying ca. 1/3 of the perigynium width [4]
4. Pistillate scale aristate … C. alata
4. Pistillate scales obtuse to acuminate [5]
5. Perigynia 4-6.1 mm long, 3-4.4 mm wide … C. vexans
5. Perigynia 2.6-4.6 mm long, 1.5-2.8 mm wide [6]
6. Pistillate scales sharply acute, the midvein reaching the apex; perigynium beak spreading, slender, the winged margin not reaching the apex; styles laterally sinuous at base … C. albolutescens
6. Pistillate scales bluntly acute, the midvein not reaching the apex; perigynium beak appressed-ascending, triangular, the winged margin extending to the apex; styles straight … C. longii

Key C
1. Spikes 2-5 times longer than wide; perigynium lanceolate, 4-4.5 mm long, ascending-strict (sect. Deweyanae) … C. bromoides
1. Spikes 1-2 times longer than wide; perigynium broadly ovate, 2-3.5 mm long, spreading to spreading-ascending (Carex elongata group) [2]
2. Perigynium widest near the middle, the beak smooth … C. seorsa
2. Perigynium widest near the base, the beak serrulate [3]
3. Leaves 1.6-4(4.5) mm wide; inflorescence (1.5)1.8-5.5 cm long … C. atlantica subsp. atlantica
3. Leaves (0.5)0.8-1.6 mm wide; inflorescence 0.8-2 cm long … C. atlantica subsp. capillacea

Key D

1. Pistillate scale 2-3 mm long; anthers 1.5-2.3 mm long; achene 1.3-1.6 mm long … C. retroflexa
1. Pistillate scale 1.4-2.1 mm long; anthers 0.8-1.3 mm long; achene 1.6-2.2 mm long … C. rosea

Key E
1. Leaf blades 5-15 mm wide [2]
1. Leaf blades 1-5(7) mm wide [4]
2. Leaf sheath apex yellow, thickened, not fragile; leaf blade upper surface minutely papillose … C. laevivaginata
2. Leaf sheath apex not yellow, thin, fragile; leaf blade not papillose [3]
3. Leaf sheath smooth, red-dotted … C. cruscorvi
3. Leaf sheath rugose, colorless; achene 2 mm long … C. stipata
4. Inflorescence 0.7-2 cm long, capitate … C. leavenworthii
4. Inflorescence 1.5-15(18) cm long, cylindric [5]
5. Inflorescence 1.5-4 cm long; achene 1.9-2.2 mm long … C. muehlenbergii
5. Inflorescence 3-15(18) cm long; achene 1.2-1.9 mm long [6]
6. Inflorescence (6)7-15(18) cm long; peryngium biconvex, deep olive green to dark brown, with 8-11 veins … C. decomposita
6. Inflorescence 3-10 cm long; peryngium plano-convex, green to pale brown, veinless or with 3 veins [7]
7. Leaves shorter than the flowering stem; inflorescence 3-7 cm long; perigynia 3.2–4 mm long, 2–2.6 mm wide, beak 1/3 length of body … C. fissa var. aristata
7. Leaves longer than the flowering stem; inflorescence (3)7-10 cm long; perigynia 2–3.2 mm long, 1.3–1.8 mm wide, beak 1/3–1/2 length of body … C. vulpinoidea

Key F
1. Spikes 5-8 mm long; perigynia pubescent (sect. Acrocystis, in part) … C. floridana
1. Spikes 20-80 mm long; perigynia papillose (sect. Phacocystis) … C. mitchelliana

Key G: sect. Glaucescentes
1. Perigynia with 6-8 prominently veins; pistillate scale tapering to an acute or aristate apex … C. joorii
1. Perigynia veinless or with 3-8 weak veins; pistillate scales retuse or rounded with an aristate tip distinct from the body [2]
2. Leaves strongly scabrous on margins and abaxial surface; pistillate spikes spreading to pendent; perigynia faces veinless or with 3-4 faint veins; achenes ellipsoid, longer than wide; fertile Jul-Oct … C. glaucescens
2. Leaves glabrous or sparsely scabrous on margins and abaxial surface; pistillate spikes erect to ascending; perigynia faces with 3-8 weak veins; achenes rhomboid, length and width subequal; fertile nearly year-round … C. verrucosa

Key H: sect. Lupulinae
1. Sheath of the distal nonbracteal leaf 0–1.5(2.5) cm long; beak of perigynium 1.5–4.2 mm long; achenes elliptic or obovate, rounded at the middle [2]
1. Sheath of the distal nonbracteal leaf (1.3)1.7-21 cm long; beak of perigynium 4.5–10 mm long; achenes broadly obovate, rhombic, to nearly triangular, rounded, angular, to knobby at the middle [3]
2. Perigynia rhombic-ovoid, usually pubescent at least near the base, base cuneate, 8–35 per spike … C. grayi
2. Perigynia lanceoloid to ovoid, glabrous, base rounded, 1–12(20) per spike … C. intumescens

3. Perigynia spreading to spreading-ascending; achenes wider than long, widest beyond midle … C. gigantea
3. Perigynia ascending, sometimes some spreading-ascending; achenes longer than or as long as wide, widest near middle [4]
4. Achenes (2.2)2.4–3.4 mm wide, often nearly as wide as long, angles of achenes knobby … C. lupuliformis
4. Achenes 1.7–2.6(2.8) mm wide, longer than wide, angles of achenes smoothly rounded [5]
5. Plants loosely colonial, long-rhizomatous; staminate peduncle (3)6–18 cm long, usually exceeding distal pistillate spike by 2–12 cm … C. louisianica
5. Plants loosely cespitose or not, short-rhizomatous; staminate peduncle 0.5–6(7) cm long, shorter than to exceeding distal pistillate spike by <2 cm … C. lupulina

Key I: sect. Acrocystis
1. Pistillate spikes from basal nodes and also at cauline nodes in close proximity to staminate spike … C. austrodeflexa
1. Pistillate spikes produced only at cauline nodes in close proximity to staminate spike [2]
2. Culms (10)20-45 cm long, the bases (remnants of old leaves) slightly or not at all fibrous; staminate peduncles 0.4–9.9 mm long [3]
2. Culms 2–20(27) cm, the bases (remnants of old leaves) slightly to strongly fibrous; staminate peduncles 0.3–1.2 mm long [4]
3. Rhizomes 18-70 mm long … C. albicans var. australis
3. Rhizomes 0-5(20) mm long … C. albicans var. emmonsii
4. Leaves 1.2-2.2(2.5) mm wide; culms 1.9-10(13.7) cm tall … C. reznicekii
4. Leaves (1.9)2.3-4.5 mm wide; culms (4.5)6.6-38(51) cm tall … C. floridana

Key J: sect. Hymenochlaenae
1. Base of culms brown from old bladed leaf bases; peryginium beak 2-2.5 mm long with hyaline teeth … C. cherokeensis
1. Base of culms usually with dark maroon bladeless sheaths; peryngium beak 0.3-2 mm long and usually opaque [2]
2. Leaf blades pilose and ciliate; perigynia ovoid-oblong to lance-ovoid, 2–6 mm long … C. oxylepis
2. Leaf blades glabrous and sometimes scabrous; perigynia fusiform to narrowly lance-ovoid, 4.5-9.5 mm long [3]
3. Lateral pistillate spikes linear, 2–3 mm wide; pistillate scales white-hyaline with green midrib, less than 1/2 as long as mature perigynia; pistillate flowers attached 2–9 mm apart, each perigynium strongly overlapping only the 1 immediately above; perigynia 2-ribbed, obscurely and unevenly veined between ribs … C. debilis
3. Lateral pistillate spikes cylindric, 4–5 mm wide; pistillate scales chestnut-hyaline with green midrib, at least 1/2 as long as mature perigynia; pistillate flowers usually attached 1–3 mm apart, each perigynium strongly overlapping at least 2 perigynia above; perigynia strongly veined from base to apex … C. venusta

Key K: sect. Paludosae
1. Leaf blades glaucous; perigynium with 10-15 veins, glabrous … C. hyalinolepis
1. Leaf blades green; perigynium with 14-22 veins, pubescent … C. striata

Key L: sect. Hallerianae

1. Hairs on distal part of perigynium 0.3-0.4 mm long; achenes 2.5–2.6 mm long, 1.3–1.7 mm wide, stipe to 1 mm long, filling only 1/2 of perigynia … C. dasycarpa
1. Hairs on distal part of perigynium 0.1-0.2 mm long; achenes 3–3.5 mm long, 1.9–2 mm wide, sessile, almost wholly filling perigynia … C. tenax

Key M: sect. Porocystis
1. Mature perigynia trigonous or plano-convex, ascending … C. complanata
1. Mature perigynia terete, spreading … C. caroliniana

Key N: sect. Griseae
1. Perigynia veins raised or prominent [2]
1. Perigynia veins impressed to flattish and slightly raised [7]
2. Perigynia narrowly ellipsoid to lanceolate, sharply trigonous, the faces flat or concave, the base cuneate [3]
2. Perigynia broadly ellipsoid to subglobose, terete to weakly trigonous, the faces convex, the base rounded [5]
3. Longest vegetative shoot (1.4)1.7–3.7(4.9) times as long as longest flowering culm; pistillate peduncle usually shorter than its sheath; staminate spikes 0.6–1.4(1.6) mm wide; staminate scales obtuse, those from center of spike 2.6–3.6(3.8) mm long … C. abscondita
3. Longest vegetative shoot 0.5–1.3(1.8) times as long as longest flowering culm; pistillate peduncle usually longer than its sheath; staminate spikes (1)1.2–2.7 mm wide; staminate scales acute, those from center of spike 3.6–5.5 mm long [4]
4. Terminal spike usually surpassed by bract blade of distal lateral spike; longest peduncle of staminate spike 0.9–7.2(11.4) cm long; widest leaves 2.7–4.5(5.3) mm wide; perigynia 3.2-4.2 mm long, (8)11–15-veined, apex conspicuously excurved … C. digitalis var. floridana
4. Terminal spike usually surpassing bract blade of distal lateral spike; longest peduncle of staminate spike (6.3)8.1–15.9 cm long; widest leaves 2–2.9(3.5) mm wide; perigynia 2-3.4 mm long long, 7–10-veined, apex barely excurved … C. digitalis var. macropoda
5. Rhizomes elongate, >15 mm long, culms mostly solitary; terminal spike and distal lateral spike (unless staminate) usually separated; proximal spikes usually arising from proximal 1/2 of culms … C. microdonta
5. Rhizomes absent or short, <15 mm long, culms cespitose; terminal spike and distal lateral spike usually overlapping; proximal spikes usually arising from distal 1/2 of culms [6]
6. Leaves not glaucous; longest bract blade of distal lateral spike 1.5–4.5(7) cm; ligule of proximal bract 0.5–6.5 mm long; perigynia (1.6)1.9–3 times as long as wide … C. gholsonii
6. Leaves usually glaucous; longest bract blade of distal lateral spike 4–16 cm; ligule of proximal bract (2)3–18(26) mm long; perigynia 1.4–2.2(2.4) times as long as wide … C. granularis
7. Culm bases brown; leaf blades glaucous [8]
7. Culm bases purplish or reddish; leaf blades not glaucous [9]
8. Pistillate spikes (5)5.7–8(9.6) mm wide; perigynia (4)4.2–5.5(6) mm long; achene bodies 0.4–0.5 times as long as perigynia, the achene beak straight to bent less than 30° … C. flaccosperma
8. Pistillate spikes (3.3)4.2–6.1(7.3) mm wide; perigynia (3.7)3.9–4.5(4.7) mm long; achene bodies 0.5–0.7 times as long as perigynia, the achene beak usually bent 30–90° … C. pigra
9. Proximal bracts with sheaths loose; perigynia spirally imbricate [10]
9. Proximal bracts with sheaths tight; perigynia distichously imbricate [11]
10. Purple-red part of culm base 0.3–2.4(7.3) cm high; widest leaf blades 3.3–8(9.1) mm wide; achene stipes 0.2–0.6 mm long … C. corrugata
10. Purple-red part of culm base (3.4)4–7.3 cm high; widest leaf blades 2.4–4(5.3) mm wide; achene stipes 0.6–0.9 mm long … C. godfreyi

11. Longest lateral spike with (2)5–8 perigyina (including undeveloped or aborted ones); perigynia 2.1–2.5(2.7) times as long as wide, apex usually abruptly contracted, the beak (0.3)0.5–1.2 mm long … C. calcifugens
11. Longest lateral spike with 6–12 perigynia (including undeveloped or aborted ones); perigynia (2.4)2.5–3.3 times as long as wide, apex gradually tapering, beakless or beak 0.1–0.4 mm long [12]
12. Plant loosely cespitose, rhizome internodes 7-58 mm long; longest vegetative shoot 1.4–2.2 times as long as longest culm; longest peduncle of terminal spike 0.9–3.2(6.8) cm; 2 distalmost lateral spikes usually overlapping … C. paeninsulae
12. Plant cepsitose, rhizome internodes to 6.4 mm long; longest vegetative shoot 0.5–1.3 times as long as longest culm; longest peduncle of terminal spike (2.2)5.1–8.9(10.4) cm; 2 distalmost lateral spikes usually widely separate or occassionally overlapping … C. thornei

Key O: sect. Paniceae
1. Bract blades of distal lateral spikes lanceolate or narrowly lanceolate, wider than spikes, concealing them when viewed from abaxial surface, widest bract blade of distalmost lateral spike (2.9)3.2–8.3 mm wide … C. kraliana
1. Bract blades of distal lateral spikes linear, narrower than spikes, not concealing them, widest bract blade of distalmost lateral spike 0.5–3.4 mm wide [2]
2. Base of leaves purplish or reddish … C. gracilescens
2. Base of leaves brownish [3]
3. Perigynia 2.5–3.8(4.1) mm long, 1.5–1.9 times as long as achene bodies; beak 0.2–0.6 mm long … C. blanda
3. Perigynia (3.3)3.4–5.5 mm long, 1.9–2.3 times as long as achene bodies; beak 0.5–1.7 mm long [4]
4. Distal lateral spikes overlapping; terminal spike exceeded by or subequal to distal lateral spike; perigynia ascending; peduncle of proximalmost spike arising in distal 1/2 of culm … C. crebriflora
4. Distal lateral spikes separate; terminal spike clearly exceeding distal lateral spike; perigynia ascending or spreading; peduncle of proximalmost spike arising in proximal 1/3 of culm [5]
5. Longer peduncles of proximal lateral spikes 4.6–14 times as long as spikes they subtend; perigynia spreading [6]
5. Longer peduncles of proximal lateral spikes 1.4–3.3(5.3) times as long as spikes they subtend; perigynia ascending [7]
6. Plant long-rhizomatous, rhizomes elongate, <1.5 mm wide, >20 mm long … C. chapmannii
6. Plant densely cespitose, rhizomes absent or short, >1 mm wide, <30 mm long … C. styloflexa
7. Widest leaf on vegetative shoots, including overwintered leaves, 2–6(7) mm wide; medial pistillate spikes loosely flowered with the ratio of number of perigynia to spike length 0.2–0.5 … C. ignota
7. Widest leaf on vegetative shoots, including overwintered leaves, 6-14 mm wide; medial pistillate spikes densely flowered with the ratio of number of perigynia to spike length 0.5–1.0 … C. striatula

Key P: sect. Squarrosae
1. Terminal spike largely staminate; pistillate scales with long awns, exceeding perigynia bodies; achenes 1.2–2.1 mm long … C. aureolensis
1. Terminal spike gynecandrous; pistillate scales with short awns or awnless, completely hidden by perigynia; achenes 2–3 mm long … C. typhina

Key Q: sect. Vesicariae
1. Pistillate spikes 10-15 mm long; pistillate scales awnless, margins entire … C. elliottii
1. Pistillate spikes 15-50 mm long; pistillate scales scabrous-awned, margins often ciliate [2]
2. Perigynia with 12–25 veins, veins (except for 2 prominent laterals) confluent at or proximal to mid beak, bodies elliptic to lance-ovate, 1–2.2 mm wide; achenes smooth … C. comosa
2. Perigynia with 5–12 veins, veins separate nearly to apex, bodies broadly elliptic to rotund, (1.8)2–4.2 mm wide; achenes rough-papillose … C. lurida

Key R: sect. Rostrales
1. Perigynia lanceolate, (8.3)10.5–15.6 mm long, 4–7 times as long as wide, apex gradually tapered, bidentulate; achene beak absent … C. lonchocarpa
1. Perigynia ovate to narrowly ovate, 6.4–10.7 mm long, 2.6–3.9 times as long as wide, apex contracted; achene beak 1.3–3 mm long … C. turgescens

Carex abscondita Mack. {AFP} —
Carex alata Torr. {AFP} —
Carex albicans Willd. ex Spreng. var. ***australis*** (L.H.Bailey)Rettig {AFP} —
Carex albicans Willd. ex Spreng. var. ***emmonsii*** (Dewey ex Torr.)Rettig {AFP} —
Carex albolutescens Schwein. {AFP} —
Carex atlantica L.H.Bailey subsp. ***atlantica*** {AFP} —
Carex atlantica L.H.Bailey subsp. ***capillacea*** (L.H.Bailey)Reznicek {AFP} —
Carex aureolensis Steudel {AFP} —
Carex austrodeflexa P.D.McMillan et al. {AFP} —
Carex baltzellii Chapm. ex Dewey {AFP} — ST.
Carex basiantha Steud. {AFP} —
Carex blanda Dewey {AFP} —
Carex bromoides Schkuhr {AFP} —
Carex calcifugens Naczi {AFP} —
Carex caroliniana Schwein. {AFP} —
Carex chapmannii Steud. {AFP} — ST.
Carex cherokeensis Schwein. {AFP} —
Carex comosa Boott {AFP} —
Carex complanata Torr. & Hook. {AFP} —
Carex corrugata Fernald {AFP} —
Carex crebriflora Wiegand {AFP} —
Carex crus-corvi Shuttlew. ex Kunze {AFP} —
Carex dasycarpa Muhl. {AFP} —
Carex debilis Michx. {AFP} —
Carex decomposita Muhl. {AFP} —
Carex digitalis Willd. var. ***floridana*** (L.H.Bailey)Naczi & Bryson {AFP} — Appearing distinct based on AFLP data (Ford et al. 2006).
Carex digitalis Willd. var. ***macropoda*** Fernald {AFP} —
Carex elliottii Schwein. & Torr. {AFP} —
Carex festucacea Schkuhr ex Willd. {AFP} —
Carex fissa Mack. var. ***aristata*** F.J.Herm. {AFP} —
Carex flaccosperma Dewey {AFP} —
Carex floridana Schwein. {AFP} —
Carex gholsonii Naczi & Cochrane {AFP} —
Carex gigantea Rudge {AFP} —

Carex glaucescens Elliott {AFP} —
Carex godfreyi Naczi {AFP} —
Carex gracilescens Steud. {AFP} —
Carex granularis Muhl. ex Willd. {AFP} —
Carex grayi J.Carey {AFP} —
Carex hyalinolepis Steud. {AFP} —
Carex intumescens Rudge {AFP} —
Carex joorii L.H.Bailey {AFP} —
Carex kraliana Naczi & Bryson {AFP} —
Carex laevivaginata (Kük.)Mack. {AFP} —
Carex leavenworthii Dewey {AFP} — Sometimes included in *C. cephalophora*.
Carex leptalea Wahlenb. {AFP} —
Carex lonchocarpa Willd. ex Spreng. {AFP} —
Carex longii Mack. {AFP} —
Carex louisianica L.H.Bailey {AFP} —
Carex lupuliformis Sartw. ex Dewey {AFP} —
Carex lupulina Muhl. ex Willd. {AFP} —
Carex lurida Wahlenb. {AFP} —
Carex lutea LeBlond {AFP} —
Carex microdonta Torr. & Hook. {AFP} — SE.
Carex mitchelliana M.A.Curtis {AFP} —
Carex muehlenbergii Schkuhr ex Willd. {AFP} —
Carex oxylepis Torr. & Hook. {AFP} —
•***Carex paeninsulae*** Naczi et al. {AFP} —
Carex pigra Naczi {AFP} —
Carex reniformis (L.H.Bailey)Small {AFP} —
Carex retroflexa Muhl. ex Willd. {AFP} —
Carex reznicekii Werier {AFP} —
Carex rosea Schkuhr ex Willd. {AFP} —
Carex seorsa Howe {AFP} —
Carex stipata Muhl. ex Willd. {AFP} —
Carex striata Michx. {AFP} —
Carex striatula Michx. {AFP} —
Carex styloflexa Buckley {AFP} —
Carex superata Naczi et al. {AFP} —
Carex tenax Chapm. ex Dewey {AFP} —
Carex thornei Naczi {AFP} —
Carex tribuloides Wahlenb. {AFP} —
Carex turgescens Torr. {AFP} —
Carex typhina Michx. {AFP} —
Carex venusta Dewey {AFP} —
Carex verrucosa Muhl. {AFP} —
•***Carex vexans*** F.J.Herm. {AFP} —
Carex vulpinoidea Michx. {AFP} —

Cladium

1. Culm 1–3 m tall, 5–10 mm wide; leaf blades 5–20 mm wide, flat to folded, margins strongly scabrid; inflorescences 30–50 cm long, with tertiary and quaternary branches … C. jamaicense

1. Culm 0.3–1 m tall, 1–2 mm wide; leaf blades 2–3 mm wide, folded to involute, margins mostly smooth; inflorescences 15–25 cm long, with primary and secondary branches only … C. mariscoides

Cladium jamaicense Crantz {AFP} —
Cladium mariscoides (Muhl.)Torr. {AFP} —

Cyperus
1. Spikelet scales spirally arranged [2]
1. Spikelet scales distichous [4]
2. Leaves 0.2-2 mm wide; spikelet scales 0.1-0.5 mm wide; perianth of 1-2 hyaline scales (former Lipocarpha) … Key A
2. Leaf blades 2-7 mm wide; spikelet scales 0.5-2.5 mm wide; perianth absent [3]
3. Culms to 100 cm long, with leaves primarily basal; leaves 30-110 cm long; leaf ligule present, ciliate; style 2-fid (former Oxycaryum) … C. blepharoleptos
3. Culms to 12 cm long, densely leafy throughout; leaves 3-8 cm long; leaf ligule absent; style 3-fid (former Remirea) … C. pedunculatus
4. Inflorescence of 1–4 spikes, sessile; spikelets with 1–3 scales; styles 2-fid; achene lenticular (former Kyllinga) … Key B
4. Inflorescence with 1-many arrays of 1-many spikes, sessile or pedunculate; spikelets with 5–76 scales; styles 2- or 3-fid; achene lenticular or trigonous [5]
5. Stigmas 2; achenes biconvex (Pycreus group) … Key C
5. Sitgmas 3; achenes trigonous or terete [6]
6. Spikelet disarticulating into 1-fruited segments (scale, internode, and rachilla wings) (Diclidium group) … Key D
6. Spikelet not disarticulating into 1-fruited segments [7]
7. Leaves lacking blades, or blades rarely to 9 mm long … Key E
7. Leaves with conspicuous blades [8]
8. Spikelets digitate or pseudowhorled, borne from the same point or appearingly so, internodes unapparent between the spikelets, rachis 0-2.5 mm long [9]
8. Spikelets dense to sparse along a prolonged or elongate rachis, spicate or racemose, rachis 3-25 mm long [10]
9. Spikelet scales 1-keeled longitiudinally or rounded … Key F
9. Spikelet scales 2-keeled and longitudinally flattened or depressed along the middle … Key G
10. Spikelets with most (middle and proximal ones) descending at a downward angle, only the few distalmost spreading … Key H
10. Spikelets with most spreading to ascending, not regularly pointing downward or only a few proximal ones descending [11]
11. Spikelets overlapping, densely spicate and radiating in nearly all directions, the rachis nearly completely obscured or inaccessible (rachis internodes 0.05-0.2 mm long), the spikes thus globose to cylindric; floral scales 2-5(7) per spikelet … Key I
11. Spikelets generally well-spaced, with discernible rachis between adjacent spikelets (rachis internodes usually 0.5-5 mm long, at least proximally on the spike), loosely spicate or paniculate, semi-distichous or loosely spiraled around the rachis, the spikes thus irregular in shape or only roughly cylindric in outline; floral scales 2-30 per spikelet … Key J

Key A: formerly genus Lipocarpha

1. Leaves 1-2 mm wide; spikes (1)3-6, terminal, the bracts spreading; anthers 0.5 mm (Lipocarpha maculata) … C. neotropicalis
1. Leaves 0.3-0.6 mm wide; spikes (1)2-3, appearing lateral with the erect bract continuous with the culm; anthers 0.1-0.2 mm long [2]
2. Outer scales contracted into an awn subequal to longer than the scale body; stigmas 3 (Lipocarpha squarrosa) … C. neochinensis
2. Outer scales apiculate; stigmas 2 (Lipocarpha micrantha) … C. subsquarrosus

Key B: formerly genus Kyllinga
1. Floral scale winged, laciniate; anthers 2 mm long (Kyllinga squamulata) … C. metzii
1. Floral scale ciliate or glabrous, not winged; anthers 0.2-1.2 mm long [2]
2. Spikes white [3]
2. Spikes green [4]
3. Plant with slender, delicate stolons; central spike hemispherical to pyramidal; achene brown (Kyllinga bulbosa) … C. richardii
3. Plant cespitose; central spike cylindric; achene black (Kyllinga odorata) … C. sesquiflorus
4. Plant rhizomatous; anthers 0.8-1.1 mm long … C. brevifolius
4. Plant cespitose; anthers 0.2-0.4 mm long (Kyllinga pumila) … C. hortensis

Key C: Pycreus group
1. Spikelets with 3-6 floral scales, the scales with several longitudinal veins … C. hyalinus
1. Spikelets with (4)6-54 floral scales, the scales mostly with 1 vein on either side [2]
2. Floral scales 3-4 mm long … C. unioloides
2. Floral scales 1-2.5 mm long [3]
3. Floral scales with erect to recurved awn, the awn 0.3-0.5 mm long … C. pumilus
3. Floral scales without an awn, merely acute to acuminate [4]
4. Culms 1.5-2.5 m tall; inflorescence bracts 20-100 cm long; achene dorsiventrally flattened, borne with face toward rachilla … C. alopecuroides
4. Culms 0.1-0.8 m tall; inflorescence bracts 1-35 cm long; achene laterally flattened, biconvex, or subcylindric, borne with edge toward rachilla [5]
5. Inflorescence bracts (2)8-35 cm long; spikelet with floral scales distant, not overlapping or scarcely overlapping; floral scales with clear or hyaline border … C. flavicomus
5. Inflorescence bracts 2-15(23) cm long; spikelet with floral scales imbricate, closely overlapping; floral scales with a yellowish, brownish, or greenish border [6]
6. Achene linear-oblong, 0.4-0.5(0.6) mm wide, 2-2.5 times longer than wide … C. polystachyos
6. Achene ellipsoid to obovoid, (0.5)0.6-0.8 mm wide, 1.3-2 times longer than wide [7]
7. Floral scales light to dark brown or purplish, usually at least partly dark brown or purplish; stigmas 1-1.5 mm long; achene black … C. bipartitus
7. Floral scales yellowish to greenish or partly pale brown; stigmas 0.5-1 mm long; achene black to brown [8]
8. Cespitose annual; stamens 3; achene black or dark purplish … C. flavescens
8. Rhizomatous perennial; stamens 2; achene brown … C. lanceolatus

Key D: Diclidium
1. Culms 0.5-1 mm wide; leaves 0.5-2 mm wide; inflorescence bracts 0.5-1 mm wide, longest one erect; spikelet clusters usualy subsessile, spikelets digitate or nearly so … C. filiformis
1. Culms (0.5)1-4 mm wide; leaves 4-12 mm wide; inflorescence bracts 1-14 mm wide, longest spreading to ascending; spikelet clusters pedunculate, spikelets on an elongate rachis … C. odoratus

Key E
1. Primary inflorescence bracts 2-3(4) [2]
1. Primary inflorescence bracts 20-100 [4]
2. Culm (4)7-20 mm wide, distinctly septate; spikelets in spicate clusters … C. articulatus
2. Culm 2-8 mm wide, not noticeably septate; spikelets in digitate clusters [2]
3. Primary inflorescence branches 5-50, mostly linear, usually of varying lenghts, immature spikelets early apparent; anthers 0.3-0.5 mm long … C. haspan
3. Primary inflorescence branches 50-250, mostly filiform, mostly all elongate and subequal in length, greatly elongate and often appearing naked before immature spikelets arise; peduncles subtending spikelet clusters filiform anthers 1-1.2 mm long … C. prolifer
4. Primary inflorescence bracts 15-30, these 15-40 cm long; spikelets in digitate clusters, these subtended by short bracts 3-10 mm long … C. involucratus
4. Primary inflorescence bracts 4-12, these 3-45 cm long; spikelets in spicate clusters, these subtended by elongate bracts 15-250 mm long [5]
5. Primary inflorescence bracts (8)20–45 cm long; primary inflorescence branches stiff, ascending to erect; spikelet clusters subtended by linear bracts, 1.5-5 mm wide … C. giganteus
5. Primary inflorescence bracts 3–8 cm long; primary inflorescence branches slender, drooping or arching; spikelet clusters subtended by filiform bracts, 0.5-2 mm wide … C. papyrus

Key F
1. Annuals [2]
1. Perennials [5]
2. Floral scales (2.4)2.6-3 mm long; achene 1-1.5 mm long … C. compressus
2. Floral scales 0.6-2.2 mm long; achene 0.5-0.8(1.1) mm long [3]
3. Floral scale apex truncate to obtuse, scarcely if at all mucronulate … C. difformis
3. Floral scale apex recurved [4]
4. Floral scale with 1 lateral vein per half, the apex emarginate or retuse with a cupsidate awn … C. cuspidatus
4. Floral scale with 3-4 lateral veins per half, the apex acuminate or attenuate … C. squarrosus
5. Rhizomatous; leaves 2-15 mm wide [6]
5. Cespitose; leaves 1-4 mm wide [7]
6. Leaf blades and inflorescence bracts with 3(-5) major veins, these 3-15 mm wide; primary inflorescence bracts 8-14 … C. albostriatus
6. Leaf blades and inflorescence bracts with 1 major vein, these 1-5 mm wide; primary inflorescence bracts 3-5 … C. lecontei
7. Plant viscid; leaf blades involute [8]
7. Plant not viscid; leaf blades flat or V-shaped [9]
8. Floral scales 2.4-2.6 mm wide; achene obovate, 0.9-1 mm wide, black to dark brownish or reddish black, with a hyaline, iridiscent overlay … C. elegans
8. Floral scales 1.5-2.4 mm wide; achene oblanceolate, 0.5-0.8 mm wide, dull light to dark brown … C. oxylepis
9. Culm bases scarcely if at all cormose; basal leaf sheaths brown to dark purplish or dark red; floral scales reddish; rachilla wings 0.2 mm wide … C. fuligineus
9. Culm bases distinctly globose-cormose, the culm about half as wide as the cormose base; pale brown, pinkish red, to pale yellow or greenish; floral scales light brown, off-white, or stramineous; rachilla wingless or wings to 0.6 mm wide [10]
10. Spikelet clusters usually sessile or subsessile, rarely a few pedunculate; rachilla wings absent; floral scales 2.6-3.6 mm long; achene sessile … C. filiculmis

10. Spikelet clusters (at least some) usually pedunculate; rachilla wings 0.4-0.6 mm wide; floral scales 2-2.8 mm long; achene substipitate … C. grayi

Key G
1. Culms antrorsely scabrid; leaf blades and bracts with some distinct cross-veins [2]
1. Culms smooth to mostly retrorsely scabrid; leaf blades and bracts lacking cross-veins [3]
2. Primary inflorescence branches 3-5; floral scales ovate, 1.4-1.6 mm long; achenes 1-1.2 mm long … C. drummondii
2. Primary inflorescence branches 6-12; floral scales oblanceolate, (1.3)1.5-2(2.4) mm long; achenes 1.2-1.5 mm long … C. virens
3. Achene base swollen, spongy … C. distinctus
3. Achene base not swollen, sometimes stipitate [4]
4. Floral scale apex erect to slightly recurved; achene linear, 0.2-0.3 mm wide, 4-5 times as long as wide … C. pseudovegetus
4. Floral scale apex erect to mostly incurved; achene ovoid to ellipsoid, 0.2-0.7 mm wide, 2-3 times as long as wide [5]
5. Longest inflorescence bract erect, continuous with the culm; floral scales pinkish or reddish … C. reflexus
5. Longest inflorescence bract spreading to ascending, not continuous with the culm; floral scales yellowish to green [6]
6. Culms smooth; achene 0.4-0.7 mm wide, usually stipitate [7]
6. Culms smooth to retrorsely scabrid (rarely a prickle antrorse); achene 0.2-0.4 mm wide, not or scarcely stipitate [8]
7. Inflorescence usually densely congested, the spikelet clusters mostly longer than to slightly shorter than their subtending peduncles; floral scales 2-2.3 mm long; achene surface puncticulate … C. eragrostis
7. Inflorescence open, the spikelet clusters mostly much shorter than their elongate subtending peduncles; floral scales (1.2)1.5-2 mm long; achene surface partly reticulate … C. ochraceus
8. Culm base dark reddish brown, dark purplish, to nearly black, stout and robust, 0.8-1.5 cm wide; floral scales (1.2)1.4-1.6(1.8) mm long, pale green … C. entrerianus 0.8-1.5
8. Culm base pale reddish or brownish green, somewhat gracile, 0.4-0.8(1.2) cm wide; floral scales 1-1.5 mm long, yellowish green … C. surinamensis

Key H
1. Culms glabrous; leaves and bracts glabrous except for marginal prickles; spikes ca. 2 times long as wide; rachilla wing clasping achene for its entire length (therefore achene not visible in abaxial view); floral scales golden brown … C. hystricinus
1. Culms (at least distally) minutely to densely scabridulous; leaves and bracts harshly scabrid or hirtellous on adaxial surface; spikes nearly as wide as long; rachilla wing clasping achene 3/4 or less of its length; floral scales grayish green to brown, often red-purple striate [2]
2. Culm obtusely trigonous to subterete; leaves and inflorescence bracts usually puberulent; inflorescence branches scabrid; spikes tight, burlike, turbinate; terminal scale spinose; spikelets with 1(–2) floral scales; rachilla wing hyaline, clasping achene ca. 1/2 its length; longest bract equaling or shorter than longest ray; … C. plukenetii
2. Culm sharply angled; leaves and inflorescence bracts with pubescence confined to midrib on abaxial side; inflorescence branches glabrous (rarely with a few antrorse hairs proximal to spike); spikes loose, obtrulloid to obdeltoid; terminal scale not spinose; spikelets with 3–6(8) floral scales; rachilla wing papery with narrow, hyaline border, clasping achene for 3/4 its length; longest ray shorter than bracts … C. retrofractus

Key I
1. Culms, rays, and leaf blades papillose; leaves harshly scabrid on margins and midribs … C. ligularis
1. Culms, rays, and leaf blades not papillose; leaves scabridulous or glabrous on margins and midribs [2]
2. Spikelet clusters sessile, or most sessile and a few pedunculate; spikelets mostly ascending; floral scales 1.8-2.6 mm wide … C. aggregatus
2. Spikelet clusters with numerous pedunculate ones and few sessile ones (more sessile in C. blodgettii); spikelets mostly spreading, or distal ones ascending, middle ones spreading, and proximal ones descending; floral scales 1-2.2 mm wide [3]
3. Floral scales 3.5-4.5 mm long … C. echinatus
3. Floral scales 1.8-3.6 mm long [4]
4. Spikelet clusters subglobose and about as long as wide; spikelets 4-8 mm long; floral scales 2.3-3.6 mm long, 1.8-2.2 mm wide … C. croceus
4. Spikelet clusters subcylindric and 1.2–3 times longer than wide; spikelets 4-7 mm long; floral scales 1.8-2.6 mm long, 1-1.5 mm wide [5]
5. Spikelets 4-7 mm long, 1.5-2 mm wide; stigma 1-2 mm long; floral scales ascending (rarely subappressed); achenes oblong-fusiform; rachilla wing thin, deciduous, covering less than 1/2 achene face [6]
5. Spikelets 2.2-4(4.5) mm long, 0.8-1.6 mm wide; stigma 0.6-0.9 mm long; floral scales appressed; achenes abruptly constricted, not fusiform; rachilla wing persistent, 0.2–0.3 mm wide, covering at least 1/2 achene face [7]
6. Most spikelet clusters sessile, few pedunculate, peduncles <2 cm long; floral scales greenish to reddish brown … C. blodgettii
6. Most spikelet clusters pedunculate, few sessile, peduncles to 8 cm long … C. ovatus
7. Inflorescence bracts usually divaricate; of xeric areas … C. nashii
7. Inflorescence bracts usually ascending; of mesic areas … C. retrorsus

Key J
1. Inflorescence paniculate, branched below spikelet clusters; spikelets mostly ascending to erect (proximal ones sometimes spreading), floral scales obovate-orbiculate, apex mucronate (somewhat emarginate); styles <0.1 mm long … C. iria
1. Inflorescence usually spicate & unbranched below spikelet clusters, occasionally branching; spikelets mostly spreading (sometimes some distal ones ascending to erect); floral scales elliptic, oblong, or ovate, apex acute to obtuse; styles 0.2–3.6 mm long [2]
2. Floral scales 2-7 per spikelet [3]
2. Floral scales (3)6-36(42) per spikelet [4]
3. Leaf blades 3-10 mm wide; spikelets narrowly ellipsoid, 1.5–2 mm wide … C. tetragonus
3. Leaf blades 0.8-3 mm wide; spikelets oblong to linear, 0.6–1.6 mm wide … C. thyrsiflorus
4. Rachis hispidulous … C. pilosus
4. Rachis glabrous [5]
5. Floral scales sparse along rachilla, the apex of the scale barely (if at all) reaching the base of the proceeding scale (along the same side of the rachilla) … C. distans
5. Floral scales imbricate along the rachilla [6]
6. Floral scales (2.1)2.4-4 times as long as wide [7]
6. Floral scales 1-2 times as long as wide [8]

7. Floral scales densely red-glandular punctate, mucronulate to mucronate, mucro 0.2–0.5 mm, terminal scale conduplicate; anthers 0.5–0.8(–1.4) mm; styles 0.8–1 mm; stigmas 1–2 mm … C. lentiginosus
7. Floral scales eglandular, acute at the apex, terminal scale involute; anthers 0.3–0.5 mm; styles 1–2 mm; stigmas 3–4 mm … C. strigosus
8. Floral scales whitish with a light green edge, and often reddish speckled … C. sphacelatus
8. Floral scales mostly brown, red-brown, reddish, or greenish, not speckled [9]
9. Floral scales 0.8-1.3 mm wide; achenes 0.4-1 mm long, pale, grayish, to brown [10]
9. Floral scales (1)1.4-3 mm wide; achenes 1-2 mm long, brown to black [11]
10. Plants perennial, cespitose-short-rhizomatous; culms 50–150 cm long, 2–15 mm wide; floral scales 1.6–1.8 mm long; achenes 0.9 mm long; anthers 0.4–0.5 mm long … C. digitatus
10. Plants annual, cespitose; culms 5-25(105) cm long, 1–2.5(8) mm wide; floral scales 1.3–1.5 mm long; achenes 0.4–0.6 mm long; anthers 0.2–0.3 mm long … C. erythrorhizos
11. Robust, cespitose-short-rhizomatous, the culm base usually reddish brown; floral scales deciduous; achene coarsely punctate … C. planifolius
11. Usually weak, with elongate, slender stolons, tuber-bearing, (if robust, then the culm base mostly yellowish or greenish); floral scales persistent; achene puncticulate [12]
12. Floral scales yellowish brown to dark brown … C. esculentus
12. Floral scales purple to reddish brown, with green midrib … C. rotundus

****Cyperus aggregatus*** (Willd.)Endl. {AFP} —
****Cyperus albostriatus*** Schrad. {AFP} —
****Cyperus alopecuroides*** Rottb. {AFP} —
Cyperus articulatus L. {AFP} —
Cyperus bipartitus Torr. {AFP} —
****Cyperus blepharoleptos*** Steud. {AFP} —
Cyperus blodgettii Britton —
****Cyperus brevifolius*** (Rottb.)Endl. ex Hassk. {AFP} —
Cyperus compressus L. {AFP} —
Cyperus croceus Vahl {AFP} —
Cyperus cuspidatus Kunth {AFP} —
****Cyperus difformis*** L. {AFP} —
****Cyperus digitatus*** Roxb. {AFP} —
****Cyperus distans*** L.f. {AFP} —
Cyperus distinctus Steud. {AFP} —
Cyperus drummondii Torr. & Hook. {AFP} —
Cyperus echinatus (L.)A.W.Wood {AFP} —
Cyperus elegans L. {AFP} —
****Cyperus entrerianus*** Boeck. {AFP} —
****Cyperus eragrostis*** Lam. {AFP} —
Cyperus erythrorhizos Muhl. {AFP} —
****Cyperus esculentus*** L. {AFP} —
Cyperus filiculmis Vahl {AFP} —
Cyperus floridanus Britton {AFP} — South peninsula (Caribbean islands). Open areas. SE.
Sometimes subsumed under *C. filiformis*, but Strong & Acevedo-Rodríguez (2005) maintain them as distinct, i.e. that *C. filiformis* has a rachilla with broad coriaceous wings, disarticulating into 1-fruited segments (rachilla node & achene) and scales 2.5-3.5 mm long, 1.7-2 m wide (not found in Florida), while *C. floridanus* has a rachilla with hyaline wings,

persistent or disarticulating as whole spikelet, scales 1.4-2.2 mm long, 0.8-1.2 mm wide with 4-5 nerves per side.

Cyperus flavescens L. {AFP} —

Cyperus flavicomus Michx. {AFP} —

Cyperus fuligineus Chapm. {AFP} — SE.

Cyperus grayi Torr. {AFP} —

Cyperus haspan L. {AFP} —

Cyperus hortensis (Salzm. ex Steud.)Dorr {AFP} —

****Cyperus hyalinus*** Vahl {AFP} —

Cyperus hystricinus Fernald {AFP} —

****Cyperus involucratus*** Rottb. {AFP} —

****Cyperus iria*** L. {AFP} —

****Cyperus lanceolatus*** Poir. {AFP} —

Cyperus lecontei Torr. ex Steud. {AFP} —

X++***Cyperus lentiginosus*** Millsp. & Chase {AFP} — Monroe keys (Neotropics).

Cyperus ligularis L. {AFP} —

****Cyperus metzii*** (Hochst. ex Steud.)Mattf. & Kük. {AFP} —

****Cyperus neochinensis*** (Tang & F.T.Wang)Bauters {AFP} —

Cyperus neotropicalis Alain {AFP} —

****Cyperus ochraceus*** Vahl {AFP} —

Cyperus odoratus L. {AFP} —

Cyperus ovatus Baldwin {AFP} —

****Cyperus oxylepis*** Nees ex Steud. {AFP} —

****Cyperus papyrus*** L. {AFP} —

Cyperus pedunculatus (R.Br.)J.Kern {AFP} — SE.

****Cyperus pilosus*** Vahl {AFP} —

Cyperus planifolius Rich. {AFP} —

Cyperus plukenetii Fernald {AFP} —

Cyperus polystachyos Rottb. {AFP} — Globally widespread species, wrangled by Clarke (1884) into varieties. The similar *C. filicinus* was distinguished by larger floral scales (2.7-3.6 mm long, 1.6-1.8 mm wide) and large achenes (1.2-1.6 mm long, 0.6-0.9 mm wide) but allegedly is absent from Florida (Tucker et al., FNA, vol. 23).

****Cyperus prolifer*** Lam. {AFP} —

Cyperus pseudovegetus Steud. {AFP} —

****Cyperus pumilus*** L. {AFP} —

****Cyperus reflexus*** Vahl {AFP} —

Cyperus retrofractus (L.)Torr. ex A.Gray {AFP} —

****Cyperus richardii*** Steud. {AFP} —

****Cyperus rotundus*** L. {AFP} —

Cyperus sesquiflorus (Torr.)Mattf. & Kük. {AFP} —

****Cyperus sphacelatus*** Rottb. {AFP} —

Cyperus squarrosus L. {AFP} —

Cyperus strigosus L. {AFP} —

Cyperus subsquarrosus (Muhl.)Bauters {AFP} —

Cyperus surinamensis Rottb. {AFP} —

Cyperus tetragonus Elliott {AFP} —

Cyperus thyrsiflorus Jungh. {AFP} —

****Cyperus unioloides*** R.Br. {AFP} —

Cyperus virens Michx. {AFP} —

Dulichium

Dulichium arundinaceum (L.)Britton {AFP} —

Eleocharis

1. Culms 0.5-9 mm wide, transverse septae conspicuous and complete or obscure and incomplete; spikelets (6)9-78 mm long, most 0.6-1.1 times as wide as the culm or 2-4 times as wide … Key A
1. Culms 0.2-1 mm wide, transverse septae incomplete and obscure; spikelets 2-12(23) mm long, 2-8 times as wide as the culm [2]
2. Culms with branches in successive false whorls, which terminate in clusters of leaves essentially indistinguishable from stems, the spikelets borne singly on branches arising from among leaves; spikelets consisting of 2 scales, the single flower subtended by the distal scale (Websteria) … E. confervoides
2. Culms unbranhced, with 1 terminal spikelets; spikelets with 4-160 scales and numerous flowers [3]
3. Styles 2-fid; achene biconvex or lenticular (Maculosae group) … Key B
3. Styles 3-fid (or sometimes 2-fid in E. ambigens, E. minima, E. obtusa); achene trigonous to subterete or biconvex … Key C

Key A
1. Spikes often subulate, generally dark brown to reddish in color, with 100-500+ densely arranged floral scales, 15-40 scales per mm; floral scales 1-3 mm long, 1-1.5 mm wide, with 1 vein (rarely 10 widely spaced veins) (Truncatae group) [2]
1. Spikes mostly rounded, obutse, or abruptly acute at the tip, generally pale in color, with 4-220 floral scales, 0.5-3 scales per mm; floral scales 3-8 mm long, 2-5 mm wide, with 15+ obscure to prominent veins (subg. Limnochloa) [3]
2. Culms (2.8)3-6(10) mm wide, subequal to the spikelet width; achene tubercle 2-4 times longer than wide, nearly as long as the achene body … E. elegans
2. Culms 0.5-3(4) mm wide, the spikelet 2-4 times wider than the culm; achene tubercle wider than or as wide as long, <1/2 as long as achene body … E. montana
3. Culms 0.5-1.5 mm wide; spikelets 1.4–3 mm wide, with 4–26 floral scales; submersed culms sometimes flaccid and lacking spikelets [4]
3. Culms 2.5-9 mm wide; spikelets 3–8 mm wide, with 30–220 floral scales; submersed culms not becoming flaccid and sterile [5]
4. Floral scales 3.5-4.5 mm long, usually with a conspicuous brown to blackish submarginal band; achenes 0.6–1.3 mm long, 0.5–0.8 mm wide … E. elongata
4. Floral scales 5-8 mm long, usually without a conspicuous submarginal band; achenes 1.9–2.6 mm long, 1–1.4 mm wide … E. robbinsii
5. Culms distinctly septate (septae complete), internally hollow between septae [6]
5. Culms not septate or only obscurely so (septae incomplete), internally spongy [7]
6. Perianth bristles filiform, smooth to weakly toothed, shorter than to subequal to achene body; achene surface with linear-oblong cells medially and apically (rectangular towards the base) … E. equisetoides
6. Perianth bristles flattened linear-lanceolate, coarsely retrorsely spinulose, longer than achene body; achene surface with rectangular cells … E. interstincta

7. Achene apex gradually narrowed and spongy-thickened, apex similar in texture (reticulate) to achene body except for the darkened tip (tubercle), tubercle scarcely differentiated and confluent, narrower than achene apex [8]
7. Achene apex constricted, sharply differentiated from the flared base of the tubercle [9]
8. Culm terete to scarcely trigonous; perianth bristles usually smooth; achene (including tubercle) 2.3-3.3 mm long … E. cellulosa
8. Culm sharply 3-angled; perianth bristles retrorsely spinulose; achene (including tubercle) 1.8-2.2 mm long … E. mutata
9. Culm 3-angled; perianth bristles usually retrorsely spinulose; achene 1.4-2 mm long, 1.2-1.6 mm wide, tubercle 0.3-0.8 mm long … E. acutangula subsp. breviseta
9. Culm 4-angled; perianth bristles usually smooth to sparsely retrorsely spinulose; achene 1.8-3 mm long, 1.3-2 mm wide, tubercle 0.7-1.5 mm long … E. quadrangulata

Key B
1. Leaf sheath thin, delicate, hyaline, the margin sometimes tearing; achenes greenish to reddish or brown [2]
1. Leaf sheath firm, opaque, the margin intact; achenes black [3]
2. Achenes red-brown to dark brown, 0.4–0.8(1.1) mm long, 0.3–0.6 mm wide, apex usually not strongly constricted proximal to tubercle, perianth bristles usually shorter than to subequal to achene … E. flavescens
2. Achenes green to golden-brown, 0.5–1.1 mm long, 0.4–0.8 mm wide, usually strongly constricted proximal to tubercle, perianth bristles usually longer than the achene … E. olivacea
3. Perianth bristles colorless or white; achenes 0.3–0.5 mm long, 0.3–0.4 mm wide, apex often constricted to a neck below tubercle … E. atropurpurea
3. Perianth bristles red-brown, rarely whitish; achenes 0.5–1.1 mm long, 0.3–0.7 mm wide, apex rounded below tubercle … E. geniculata

Key C
1. Achene surface with prominent longitudinal ribs, horizontal ridges much finer (Scirpidium group) [2]
1. Achene surface smooth, honeycomb-reticulate, finely reticulate, or cancellate, the ridges all fairly equal in prominence, lacking more strongly prominent longitidinal ribs [3]
2. Culms firm to flaccid, not very spongy, 1–45 cm long; anthers 0.5–1.5 mm long … E. acicularis
2. Culms soft, very spongy, 1–12 cm long; anthers 0.3–0.5 mm … E. radicans
3. Achenes apex gradually narrowed to a rudimentary or scarcely distinct tubercle, similar in texture and color to the achene body or only subtly changing [4]
3. Achenes apex generally narrowed below a distinct tubercle, the tubercle sharply differentiated from the achene body, the tubercle base usually flared [6]
4. Culms to 100 cm long, with 8 ridges; anthers 2-2.4 mm long; achene (including indistinct tubercle) 1.5-2.5 mm long … E. rostellata
4. Culms to 55 cm long, with or without ridges; anthers 0.7-1.5 mm long; achene (including indistinct tubercle) 0.9-1.4 mm long [5]
5. Rhizomes with curved tubers; culms to 15(20) cm long, lacking ridges; perianth bristles 6 … E. parvula
5. Rhizomes lacking curved tubers; culms to 55 cm long, with 8-12 ridges; perianth bristles absent … E. tricostata
6. Achenes 0.7-1.7 mm long; spikelets or culm tips not proliferous (or if proliferous, achene nearly black) [7]

6. Achenes 0.4-0.8(0.9) mm long, smooth, finely pitted, or cancellate; spikes or culm tips sometimes proliferous [13]
7. Achene coarsely honey-comb reticulate (Tuberculosae group) [8]
7. Achene smoothish to finely rugulose or cancellate [9]
8. Culm usually trigonous; tubercle much narrower and shorter than the achene, much smaller than the achene … E. tortilis
8. Culm terete; tubercle as long and as wide as achene, often larger than the achene … E. tuberculosa
9. Achenes dark purplish brown to black, smooth, widest near the apex, the tubercle 0.7-1.1 mm wide, as wide as the achene; some culms often arching or decumbent and with tips rooting … E. melanocarpa
9. Achenes stramineous, orangish, to brown, widest near the middle, the tubercle 0.2-0.6 mm wide and usually narrower than the achene; culms not rooting at tips [10]
10. Achenes (0.9)1-1.5 mm long, (0.7)0.8-1.3 mm wide, the tubercle 0.3-0.5 mm long, 0.4-0.8 mm wide [11]
10. Achenes 0.7-1 mm long, 0.6-0.8 mm wide, the tubercle 0.1-0.3 mm long, 0.2-0.4 mm wide [12]
11. Spikelets 2-3 mm wide, acute at the tip, floral scales 3-5 per mm … E. ambigens
11. Spikelets (2)3-4 mm wide, obtuse or rounded at the tip; floral scales 8-20 per mm (Ovatae group) … E. obtusa
12. Culm base pale brownish (scarcely any red color if at all); leaf sheath apex acute to lanceolate or disintegrating; perianth bristles sometimes exceeding the tubercle … E. albida
12. Culm base distinctly reddish; leaf sheath apex subtruncate to obtuse; perianth bristles not exceeding the tubercle … E. montevidensis
13. Scales distichous; spikes with 2-4 flowers … E. baldwinii
13. Scales spirally arranged (or spirodistichous); spike mostly with 4-50(75) flowers [14]
14. Achenes 0.45–0.9 mm, finely reticulate or cancellate … E. vivipara
14. Achene smooth or very finely pitted [15]
15. Stolons and rhizomes absent; floral scales 1–1.2 mm long; perianth bristles absent; spikelets not proliferating … E. nigrescens
15. Stolons or rhizomes present; floral scales 1.3–2.2 mm long; perianth bristles present or absent; spikelets sometimes proliferating [16]
16. Spikelet proximal scale deciduous or sometimes persistent, similar to floral scales or smaller; perianth bristles present [17]
16. Spikelet proximal scale persistent, differentiated from floral scales, usually longer and resembling involucral bract, often with excurrent midrib; perianth bristles present or absent [18]
17. Rhizomes absent, stolons present; spikelets often proliferating; perianth bristles colorless to stramineous, slightly shorter than to equaling tubercle; achenes sometimes spotted olive or brown … E. minima
17. Rhizomes present; spikelets not proliferating; perianth bristles red-brown, equaling to exceeding tubercle; achenes not spotted … E. nana
18. Proximal scale apex rounded [19]
18. Proximal scale apex subacute to acute [20]
19. Plants usually robust; floral scales pale brown and papery; perianth bristles well developed; achenes to 0.8 mm long, minutely pitted … E. brittonii
19. Plants usually small; floral scales whitish with red-brown markings; perianth bristles absent or poorly developed; achenes not more than 0.6 mm long, smooth … E. brittonii variant
20. Spikelet proximal scale 0.8–1 mm wide; perianth bristles 0.6–1 mm long … E. microcarpa var. filiculmis

20. Spikelet proximal scale 0.4–0.5 mm wide; perianth bristles 0.2–0.4 mm long … E. microcarpa var. microcarpa

Eleocharis acicularis (L.)Roem. & Schult. {AFP} —
****Eleocharis acutangula*** (Roxb.)Schult. subsp. ***breviseta*** D.J.Rosen {AFP} —
Eleocharis albida Torr. {AFP} —
Eleocharis ambigens Weath. {AFP} — Sometimes included in *E. fallax* (see Sorrie & LeBlond 2014).
Eleocharis atropurpurea (Retz.)J.Presl & C.Presl {AFP} —
Eleocharis baldwinii (Torr.)Chapm. {AFP} —
Eleocharis brittonii Svenson ex Small — Sometimes included in *E. microcarpa*.
Eleocharis cellulosa Torr. {AFP} —
Eleocharis confervoides (Poir.)Steud. {AFP} —
****Eleocharis elegans*** (Kunth)Roem. & Schult. {AFP} —
Eleocharis elongata Chapm. {AFP} —
Eleocharis equisetoides (Elliott)Torr. {AFP} —
Eleocharis flavescens (Poir.)Urb. {AFP} —
Eleocharis geniculata (L.)Roem. & Schult. {AFP} —
Eleocharis interstincta (Vahl)Roem. & Schult. {AFP} —
Eleocharis melanocarpa Torr. {AFP} —
Eleocharis microcarpa Torr. var. ***filiculmis*** Torr. —
Eleocharis microcarpa Torr. var. ***microcarpa*** {AFP} —
Eleocharis minima Kunth {AFP} —
Eleocharis montana (Kunth)Roem. & Schult. {AFP} —
Eleocharis montevidensis Kunth {AFP} —
****Eleocharis mutata*** (L.)Roem. & Schult. {AFP} —
Eleocharis nana Kunth {AFP} —
****Eleocharis nigrescens*** (Nees)Steud. {AFP} —
Eleocharis obtusa (Willd.)Schult. {AFP} —
Eleocharis olivacea Torr. {AFP} —
Eleocharis parvula (Roem. & Schult.)Link ex Bluff et al. {AFP} —
Eleocharis quadrangulata (Michx.)Roem. & Schult. {AFP} —
Eleocharis radicans (A.Dietr.)Kunth {AFP} —
Eleocharis robbinsii Oakes {AFP} —
Eleocharis rostellata (Torr.)Torr. {AFP} — SE.
Eleocharis tortilis (Link)Schult. {AFP} —
Eleocharis tricostata Torr. {AFP} —
Eleocharis tuberculosa (Michx.)Roem. & Schult. {AFP} —
Eleocharis vivipara Link {AFP} —

Fimbristylis
1. Annual; style 3-fid; achene trigonous or ovoid [2]
1. Annual or perennial; style 2-fid; achene lenticular [3]
2. Ligule of short hairs; leaf blades flat; spikelets 3-7 mm long, narrowly lanceolate, tip acute; achene sharply trigonous, smooth to finely papillose … F. autumnalis
2. Ligule not evident; leaf blades strongly folded, bifacial; spikelets 2-4 mm long, globose to ovoid, tip rounded; achene ovoid, obscurely trigonous, reticulate-pitted … F. littoralis
3. Ligule not evident or inconspicuous of hairs to 0.1 mm long [4]
3. Ligule of short hairs [7]

4. Annual; leaf blades 0.2-1 mm wide ... F. vahlii
4. Perennial; leaf blades 1-3 mm wide [5]
5. Plants 10-60 cm tall; spikelets 2-4 mm long, mostly densely congested; ... F. cymosa
5. Plants 40-200 cm tall; spikelets 5-20 mm long, mostly well spaced from each other [6]
6. Leaf bases hardened, coriaceous, reddish or dark brown; often of brackish areas ... F. castanea
6. Leaf bases weak, mostly light in color; of freshwater areas ... F. puberula
7. Spikeletes 1-2(3), the scales pale light brownish; achene smooth or weakly pitted ... F. schoenoides
7. Spikelets (1)3-40, the scales generally reddish or brownish; achene conspicuously pitted or latticed [8]
8. Rhizomes scaly, elongate; fertile scales sometimes puberulent apically ... F. caroliniana
8. Rhizomes absent; fertile scales usually glabrous [9]
9. Annual; achene face (1 side) smoothish or with many (20 or more) longitudinal rows of shallow pits or cells, thus finely striate ... F. tomentosa
9. Annual or perennial; achene face (1 side) coarsely reticulate, usually with 12 or fewer longitudinal rows of horizontally oriented, rectangular cells [10]
10. Perennial; achene not verrucose ... F. dichotoma
10. Annual; achene verrucose, at least apically (sometimes subtle with 1+ warts) [11]
11. Leaf blades glabrous, or margins scabrid or ciliolate; warts of achene scattered over body, or rarely achenes smooth ... F. annua
11. Leaf blades hirsute-ciliate, at least proximally; warts present only at apex of achene margin ... F. decipiens

Fimbristylis annua Kral — Sometimes included in *F. dichotoma*.
Fimbristylis autumnalis (L.)Roem. & Schult. {AFP} —
Fimbristylis caroliniana (Lam.)Fernald {AFP} —
Fimbristylis castanea (Michx.)Vahl {AFP} — Sometimes included in *F. spadicea* (Kral 1971: 105, 132-133; Kral, FNA, vol. 23).
Fimbristylis cymosa R.Br. {AFP} —
Fimbristylis decipiens Kral — Sometimes included in *F. dichotoma*.
Fimbristylis dichotoma (L.)Vahl {AFP} —
****Fimbristylis littoralis*** Gaudich. {AFP} —
Fimbristylis puberula (Michx.)Vahl {AFP} —
****Fimbristylis schoenoides*** (Retz.)Vahl {AFP} —
****Fimbristylis tomentosa*** Vahl — Sometimes included in *F. dichotoma* (Kral 1971).
Fimbristylis vahlii (Lam.)Link {AFP} —
++***Fuirena umbellata*** Rottb. {AFP} —

Fuirena
1. Rhizomes long-creeping; leaves lacking blades or blades to 2 cm long (very rarely to 5 cm long) [2]
1. Rhizomes absent or culms mostly clustered on the rhizome; leaves commonly with blades 2-20 cm long [3]
2. Leaf blades to 2(5) cm long; involucral bract longer than spikelets; spikelets mostly lance-ovoid or lance-cylindric, sessile in terminal cluster or sometimes some peduncled; perianth blade tips acuminate ... F. longa

2. Leaf blades 0-0.4 cm long, rarely longer; involucral bract shorter than spikelets; spikelets mostly ovoid, sessile in terminal cluster; perianth blade tips mostly acute … F. scirpoidea
3. Inflorescence 6-20 cm long, with 6-40 spikelet clusters, … F. umbellata
3. Inflorescence 1-3 cm long, with 1-4 spikelet clusters [4]
4. Rhizomes without cormlike shoot buds; sheaths mostly glabrous; perianth blade apex with a subapical apiculus or bristle, rarely lacking … F. simplex
4. Rhizomes with cormlike shoot buds; sheaths glabrous, hispid, or hirsute; perianth blade apex, without subapical, abaxial apiculus or bristle [5]
5. Perianth bristle smooth or weakly antrorsely barbed, not reaching perianth blades … F. breviseta
5. Perianth bristles finely retrorsely barbed, reaching at least base of perianth blades [6]
6. Annual; perianth blade tip long-acuminate to aristate; anthers 0.5-0.7 mm long … F. pumila
6. Perennial; perianth blade tip acuminate; anthers ca. 1 mm long … F. squarrosa
… F. umbellata

Fuirena breviseta (Coville)Coville {AFP} —
Fuirena longa Chapm. — Sometimes included in *F. scirpoidea*.
Fuirena pumila (Torr.)Spreng. {AFP} —
Fuirena scirpoidea Michx. {AFP} —
++***Fuirena simplex*** Vahl {AFP} —
Fuirena squarrosa Michx. {AFP} —
Fuirena umbellata Rottb. {AFP} —

Isolepis
Isolepis carinata Hook. & Arn. ex Torr. {AFP} —

Rhynchospora
1. Inflorescence bracts involucrate and strikingly white basally (green near the tip), the inflorescence sessile; spikelets pale yellow to white (Dichromena) … Key A
1. Inflorescence bracts not involucrate, green, the inflorescence usually diffuse and pedunculate [2]
2. Plants to 0.5-2 m tall; leaf blades 1-20 mm wide; style simple or slightly 2-fid; achene tubercle 4-21 mm long (Ceratoschoenus) … Key B
2. Plants usually <1.5 m tall; leaf blades mostly 0.1-7 mm wide; style deeply 2-divided; achene tubercle 0.1-2 mm long [3]
3. Perianth bristles absent [4]
3. Perianth bristles present, sometimes vestigial [5]
4. Spikelets 3.5-11 mm long, brown to nearly black, with 8-12(15) scales, 5-10(12) fertile, perianth bristles absent; tubercle broad, the base indented or V-shaped with the sides often decurrent or upcurved; usually annual (Psilocarya) … Key C
4. Spikelets 1.5-3 mm long, brown, with 3-8 scales, 1-2(4) fertile; tubercle base mostly subtruncate to slightly decurrent; perennial … Key D
5. Perianth bristles plumose (at least at the base) … Key E
5. Perianth bristles barbellate or smooth [6]
6. Perianth bristles retrorsely barbellate; achene base strongly narrowed and stipe-like (tubercle margins not setulose) … Key F
6. Perianth bristles antrorsely barbellate or smooth; achene base usually not stipe-like (if stipe-like, then tubercle margins setulose at the base) [7]

7. Achene surface smooth or nearly so, any reticulations or lines faint and scarcely raised or only on part of the body, sometimes the only the middle part of the body smooth … Key G
7. Achene surface prominently reticulate or ridged, the lines and ridges distinctly raised throughout the body … Key H

Key A: Dichromena
1. Plant cespitose; proximal floral scales ciliolate on the keel; achene body 0.8-1 mm long … R. floridensis
1. Plant rhizomatous; proximal floral scales glabrous; achene body 1-1.5 mm long [2]
2. Rhizomes 1-2 mm wide; involucral bracts 3-6(7), 2-7 mm wide, white portion 1-2.5 cm long; achene tubercle base subtruncate … R. colorata
2. Rhizomes 3-4 mm wide; involucral bracts (5)6-8, 5-10 mm wide, white portion 2.2-5.5 cm long; achene tubercle base angled-decurrent … R. latifolia

Key B: Ceratoschoenus
1. Leaf blades 2-4 mm wide; spikelets in globose clusters; tubercle barely exserted; spikelet 5-7 mm long (Polycephalae) … R. tracyi
1. Larger spikelet clusters dense or open, hemispheric to turbinate; tubercle tip long exserted; spikelets 9-18 mm long (Longirostres) [2]
2. Plant with scaly rhizomes [3]
2. Plant without scaly rhizomes [4]
3. Rhizomes 3-4 mm wide; longer leafy bracts usually overtopped by inflorescence; achene 2.8-3.5 mm wide, widest above the middle, the perianth bristles subequal to the achene body … R. careyana
3. Rhizomes 1-2 mm wide; longer leafy bracts extending beyond inflorescence; achene 2-3 mm wide, widest near the middle, the perianth bristles ca. 2 times as long as achene body … R. inundata
4. Inflorescence elongate- or spreading-diffuse, with clusters typically of few, spaced spikelets; perianth bristles ca. 1/2 as long as achene body … R. corniculata
4. Inflorescence shortly or narrowly compact, with clusters of numerous, densely packed spikelets; perianth bristles ca. 2 times as long as achene body … R. macrostachya

Key C: Psilocarya
1. Tubercle deltate-lanceolate, as long as or longer than wide, 0.4-0.7 mm long … R. scirpoides
1. Tubercle broad and low, much wider than long, 0.1-0.3 mm long [2]
2. Achene body lacking light-colored bands, the tubercle base upcurved at the sides … R. eximia
2. Achene body with prominent, transvere irregularly undulate light-colored bands, the tubercle bases descending or decurrent at the sides … R. nitens

Key D
1. Achene body 0.6-0.9 mm long, tubercle 0.1 mm wide and perched atop the achene body, its margins discontinuous [2]
1. Achene body 1-1.3 mm long, tubercle 0.2-0.5 mm wide and its margins confluent with the apex of the achene body [3]
2. Achene surface reticulate … R. divergens
2. Achene surface with prominent transverse bands … R. pusilla
3. Leaf blades 0.4-1 mm wide; achene surface smoothish with a finely reticulate pattern … R. chapmanii
3. Leaf blades 1-2.5 mm wide; achene surface strongly ridged-reticulate … R. perplexa

Key E
1. Spikelets 1-3(5) per culm, each well separated from adjacent ones [2]
1. Spikelets (2)4-30 per culm, in dense clusters [3]
2. Spikelet with 3-8 fertile scales; perianth bristles not reaching the middle of the achene body; tubercle merely widest at the base … R. galeana
2. Spikelets with 1-3 fertile scales; perianth bristles exceeding the middle of the achene body; tubercle distinctly flared above the base … R. oligantha
3. Spikelets 8-10 mm long; perianth bristles 5-8 mm long … R. megaplumosa
3. Spikelets 2.5-7(8) mm long; perianth bristles 0.3-2.5 mm long [4]
4. Leaf blades linear, 1-3 mm wide; spikelets (3.5)4-6 mm long; basal leaf sheaths dark reddish brown … R. intermedia
4. Leaf blades filiform, 0.3-0.9(1) mm wide; spikelets 2.5-3.5(4) mm long; basal leaf sheaths dark reddish brown or pale brown [5]
5. Basal leaf sheaths dark reddish brown, semi-lustrous; perianth bristles reaching or exceeding the tubercle apex, plumose only at the very base … R. marliniana
5. Basal leaf sheaths pale brown, dull; perianth bristles exceeding to not reaching the tubercle apex, plumose throughout the basal half … R. plumosa

Key F
1. Spikelets pale brown; perianth bristles 14-20 … R. macra
1. Spikelets pale brown or dark reddish brown; perianth bristles 6 [2]
2. Spikelets with (1)2-3(5) fruits (if 1, then the terminal floret sterile) [3]
2. Spikelets with 1 fruit (terminating the spikelet) [4]
3. Widest glomerule (12)15-21 mm wide; perianth bristles 3-4.7 mm long; fruit (including tubercle) (3)3.2-3.8 mm long, (1)1.1-1.4 mm wide, the achene body with a prominent raised margin … R. glomerata
3. Widest glomerule 6.5-14(16) mm wide; perianth bristles 2.9-3.6 mm long; fruit (including tubercle) 2.4-3.0 mm long, 0.7-1.1 mm wide, the achene body margin not prominent or only slightly so … R. leptocarpa
4. Spikelets mostly pale red brown, narrowly ellipsoid to lanceoloid, in turbinate to hemispheric clusters; fruit (including tubercle) (2.5)2.7–3.3(3.5) mm long; tubercle 0.2-0.4 mm wide at base … R. chalarocephala
4. Spikelets dark red brown, broadly lanceoloid, in dense, mostly globose clusters; fruit (including tubercle) 2.5–4.5 mm long; tubercle 0.4-0.8 mm wide at base [5]
5. Glomerules mostly 1–2 cm wide; fruit (including tubercle) 3.5–4(4.2) mm long, achene body 1-1.5(2) mm wide … R. cephalantha
5. Glomerules mostly 0.5–1 cm wide; fruit (including tubercle) 2.5–3 mm long, achene body 0.9–1.1 mm wide … R. microcephala

Key G
1. Tubercle margins (and often pedicellar joint and perianth bristle bases) setulose or ciliate; most perianth bristles exceeding the achene body and often reaching or exceeding the tubercle [2]
1. Tubercle margins (and pedicellar joint, the perianth bristle bases) smooth or not setulose (if somewhat setulose, then perianth bristles shorter than to reaching the achene body apex) [6]
2. Leaf blades (1.5)2-4(5) mm wide; achene base narrowly cuneate-stipitate … R. crinipes
2. Leaf blades 0.4-2 mm wide; achene base rounded, truncate, to cuneate, not stipitate or scarcely so [3]

3. Achene narrowly obovate, 1.8-2.2 times as long as wide … R. curtissii
3. Achene ovate to obovate, 1.2-1.5 times as long as wide [4]
4. Spikelets 2.5-4 mm long … R. filifolia
4. Spikelets (4.5)5-7 mm long [3]
5. Rhizomes or stolons absent; plant 10-40(50) cm tall … R. harperi
5. Rhizomatous or stoloniferous; plant 40-70 cm tall … R. pleiantha
6. Leaf blades 3-7 mm wide; spikelets 4-8 mm long [7]
6. Leaf blades 0.2-3(4) mm wide [9]
7. Spikelets 4-8(9) mm long; achene body 2.8-4 mm long, dark brown-purple to black … R. megalocarpa
7. Spikelets 4-6 mm long; achene body 1.5-2.5 mm long, brown to dark brown [8]
8. Culms triquetrous, scabrid; perianth bristles 12 … R. baldwinii
8. Culms terete or obscurely trigonous, papillose to scabrid-puberulent; perianth bristles 6 … R. ciliaris
9. Fruit (including tubercle) 1-1.6 mm long [10]
9. Fruit (including tubercle) (1.5)1.7-3.5(4.1) mm long [11]
10. Perianth bristles not extending beyond the middle of the achene … R. brachychaeta
10. Perianth bristles extending past the middle of the achene, some reaching the apex … R. fernaldii
11. Tubercle 1.2-2 mm long, gradually narrowed, 0.8-1.2 times as long as the achene body, perianth bristles reaching just below tubercle apex to exceeding it … R. gracilenta
11. Tubercle 0.5-0.9 mm long, often indented or abruptly narrowed, 0.3-0.6 times as long as the achene body, the perianth bristles not reaching tubercle base to reaching just the middle [12]
12. Leaves (1)1.5-3(4) mm wide … R. fascicularis
12. Leaves 0.2-1.5(2.5) mm wide [13]
13. Fruit tubercle flat, sometimes apiculate; perianth none or more often vestigial, no bristles reaching beyond midbody of fruit … R. debilis
13. Fruit tubercle tip subulate or blunt; perianth bristles mostly reaching fruit midbody to apex … R. wrightiana

Key H
1. Leaf blades 0.2-0.5 mm wide [2]
1. Leaf blades 1-7(10) mm wide [4]
2. Fruit (including tubercle) 0.9-1 mm long, with a distinct flattened margin, the transverse ridges scarcely if at all more prominent than the vertical ones … R. thornei
2. Fruit (including tubercle) 1.8-3 mm long, the margin indistinct, the transverse ridges much more prominent than the vertical ones [3]
3. Spikelets 3-4(4.5) mm long, with 2-4 fruits or with 1 fruit and a sterile terminal floret; perianth bristles not reaching achene middle or rarely so; tubercle 0.3-0.6 mm long … R. rariflora
3. Spikelets 4.5-5.2 mm long, with 1 fruit (terminal) per spikelet; perianth bristles reaching or extending past the tubercle base; tubercle 0.8-1.5 mm long … R. stenophylla
4. Fruit (including tubercle) 2-3.2 mm long [5]
4. Fruit (including tubercle) 1-2(2.1) mm long [13]
5. Achene 1.8-2.7 times as long as wide … R. inexpansa
5. Achene body 0.9-1.4 times as long as wide [6]
6. Spikelets 5-8(9) mm long; achene pale yellow-brown; rhizomatous … R. odorata
6. Spikelets (3)4-5(6) mm long; achene brown to very dark brown; mostly cespitose, or rhizomatous in R. caduca [7]
7. Achene strongly compressed, faces nearly flat [8]

7. Achene rounded to subtly compressed, faces convex [9]
8. Perianth bristles extending slightly past the achene mid-body or less; tubercle conic, flared at the base into a distinct bulging rim … R. compressa
8. Perianth bristles reaching tubercle base or beyond; tubercle somewhat compressed, gradually narrowed to the sometimes slightly bulging rim … R. punctata
9. Rhizomatous; tubercle uniform throughout, without a distinct base … R. caduca
9. Cespitose; tubercle base usually with a distinct rim different in color and texture from the rest of the tubercle [10]
10. Fruit 2.5–3 mm; spikelets 4–5.5 mm; perianth reaching past fruit midbody … R. grayi
10. Fruit 2–2.5 mm; spikelets 2.5–4 mm; perianth not reaching past fruit mid-body [11]
11. Leaves 2-5 mm wide; achene coarsely rugose … R. recognita
11. Leaves 1-3 mm wide; achene finely rugose to minutely pitted [12]
12. Terminal spikelet clusters on stiffish branchlets, usually dense and exceeded at least by subulate tips of subtending leafy bract and bractlets; achene body broadly obovoid to suborbicular, medially with mostly isodiametric tiny alveoli or pits, or minutely raised reticulate in an almost honeycomb pattern of alveolae, or evenly finely cancellate … R. harveyi var. harveyi
12. Terminal spikelet clusters on more slender, lax, erect to excurved branches and exceeding subtending bracts and bractlets; achene body obovoid, lenticular, medially with oblong or roundish pitlike alveoli, intervals between contiguous transverse rows forming shallow, broad, pale, smooth ridges … R. harveyi var. culixa
13. Plant with stout, elongate rhizomes, 1.5-4 mm thick, 4-30 cm long; inflorescence branches nearly perpendicular to main axis, each spikelet on an elongate, filiform peduncle … R. miliacea
13. Plant cespitose; inflorescence branches mostly ascending to erect, sometimes spreading-ascending, the spikelets clustered together on short peduncles [13]
14. Tubercle conic, the base flared with a distinct rim discontinuous from the achene body, the achene body tip narrower than the tubercle rim [14]
14. Tubercle somewhat flat, the base distinct but its margins continuous with the achene body [15]
15. Spikelets broadly ovoid to subglobose; achene body distinctly transversely wavy-rugose, intervals composed of irregular rows of vertical, rectangular alveolae … R. globularis var. globularis
15. Spikelets ovoid; achene body subtly transversely wavy rugose, mostly with transverse, undulate rows of subisodiametric to very broadly rectangular lattices or alveolae … R. globularis var. pinetorum
16. Perianth bristles 0-3, scarcely reaching the middle of the achene … R. perplexa
16. Perianth bristles 6, extending past the middle of the achene to past the tubercle tip [16]
17. Tubercle base downcurved, the margin somewhat decurrent with the achene body … R. decurrens
17. Tubercle base mostly straight, horizontal [17]
18. Tubercle moderately to densely setulose … R. mixta
18. Tubercle margin smooth, papillate, to sparsely ciliolate [18]
19. Achene faces mostly flat … R. elliottii
19. Achene faces convex, sometimes somewhat flattened [19]
20. Inflorescence comprising 0.6-0.8 of the culm length; spikelets 1.5-1.9 mm long; achene 0.7-1 mm long … R. sulcata
20. Inflorescence comprising 0.1-0.4(0.5) of the culm length; spikelets 2-3 mm long; achene 1-1.2 mm long [20]
21. Plants slender, mostly less than 1 meter tall, with leaves typically <40 cm long and <3 mm wide; inflorescence cluster branches ascending, the clusters mostly tightly congested; perianth

bristles subequal, 0.5-1.5 times as long as the achene body; achene 1.0–1.7 times as long as wide, dark brown, shallowly nearly horizontally ridged or with nearly isodiametric alveolae, ridges 7–9 … R. microcarpa
21. Plants robust, taller culms 1.2-1.4(1.7) m tall, with leaves (11)40-60(88) cm long and (2)3-5(7) mm wide; Inflorescence cluster branches widely spreading in flower, spreading to ascending in fruit, the clusters rather open, not congested; perianth bristles unequal, 0.9–1.5 times as long as the achene body; achene 1.0–1.2 times as long as wide, light brown, strongly transversely ridged with 6–8 irregular ridges and narrow rectangular alveolae … R. vernalis

Rhynchospora baldwinii A.Gray {AFP} —
Rhynchospora caduca Elliott {AFP} —
Rhynchospora careyana Fernald —
Rhynchospora cephalantha A.Gray {AFP} —
Rhynchospora chalarocephala Fernald & Gale {AFP} —
Rhynchospora chapmanii M.A.Curtis {AFP} —
Rhynchospora ciliaris (Michx.)C.Mohr {AFP} —
Rhynchospora colorata (L.)H.Pfeiff. {AFP} —
Rhynchospora compressa J.Carey ex Chapm. {AFP} —
Rhynchospora corniculata (Lam.)A.Gray {AFP} —
Rhynchospora crinipes Gale {AFP} — SE.
Rhynchospora curtissii Britton ex Small {AFP} —
Rhynchospora debilis Gale {AFP} —
Rhynchospora decurrens Chapm. {AFP} —
Rhynchospora divergens Chapm. ex M.A.Curtis {AFP} —
Rhynchospora elliottii A.Dietr. {AFP} —
Rhynchospora eximia (Nees)Boeck. {AFP} —
Rhynchospora fascicularis (Michx.)Vahl {AFP} —
Rhynchospora fernaldii Gale {AFP} —
Rhynchospora filifolia A.Gray {AFP} —
Rhynchospora floridensis (Britton ex Small)H.Pfeiff. {AFP} —
Rhynchospora galeana Naczi et al. {AFP} —
Rhynchospora globularis (Chapm.)Small var. ***globularis***{AFP} —
Rhynchospora globularis (Chapm.)Small var. ***pinetorum*** (Britton & Small)Gale —
Rhynchospora glomerata (L.)Vahl {AFP} —
Rhynchospora gracilenta A.Gray {AFP} —
Rhynchospora grayi Kunth {AFP} —
Rhynchospora harperi Small {AFP} —
Rhynchospora harveyi W.Boott var. ***culixa*** (Gale)Kral —
Rhynchospora harveyi W.Boott var. ***harveyi*** {AFP} —
Rhynchospora inexpansa (Michx.)Vahl {AFP} —
Rhynchospora intermedia (Chapm.)Britton {AFP} —
Rhynchospora inundata (Oakes)Fernald {AFP} —
Rhynchospora latifolia (Baldwin)W.W.Thomas {AFP} —
Rhynchospora leptocarpa (Chapm. ex Britton)Small {AFP} —
Rhynchospora macra (C.B.Clarke ex Britton)Small {AFP} —
Rhynchospora macrostachya Torr. ex A.Gray {AFP} —
Rhynchospora marliniana Naczi et al. {AFP} —
Rhynchospora megalocarpa A.Gray {AFP} —
•***Rhynchospora megaplumosa*** E.L.Bridges & Orzell {AFP} — SE.

Rhynchospora microcarpa Baldwin ex A.Gray {AFP} —
Rhynchospora microcephala (Britton)Britton ex Small {AFP} —
Rhynchospora miliacea (Lam.)A.Gray {AFP} —
Rhynchospora mixta Britton ex Small {AFP} —
Rhynchospora nitens (Vahl)A.Gray {AFP} —
Rhynchospora odorata C.Wright ex Griseb. {AFP} —
Rhynchospora oligantha A.Gray {AFP} —
Rhynchospora perplexa Britton ex Small {AFP} —
Rhynchospora pleiantha (Kük.)Gale {AFP} —
Rhynchospora plumosa Elliott {AFP} —
Rhynchospora punctata Elliott {AFP} —
Rhynchospora pusilla Chapm. ex M.A.Curtis {AFP} —
Rhynchospora rariflora (Michx.)Elliott {AFP} —
Rhynchospora recognita (Gale)Kral — Sometimes included under *R. globularis*.
Rhynchospora scirpoides (Torr.)A.Gray {AFP} —
Rhynchospora stenophylla Chapm. {AFP} — ST.
Rhynchospora sulcata Gale {AFP} —
Rhynchospora thornei Kral {AFP} —
Rhynchospora tracyi Britton {AFP} —
•***Rhynchospora vernalis*** E.L. Bridges & Orzell — North and central peninsula.
Rhynchospora wrightiana Boeck. {AFP} —

Schoenoplectiella

Schoenoplectiella erecta (Poir.)Lye subsp. ***raynalii*** (Schuyler)Beentje {AFP} —

Schoenoplectus

1. Inflorescence pedunculate (at least partly so) [2]
1. Inflorescence sessile or subsessile [4]
2. Culms sharply trigonous; leaves 5-25, 2-6+ having blades; spikelets 10-25 mm long, 5-7 mm wide; anthers 3-3.5 mm long; achenes 3-4.5 mm long … S. etuberculatus
2. Culms terete to obscurely or bluntly trigonous; leaves 3-4, 0-2 having blades; spikelets 5-11(17) mm long, 2.5-4 mm wide; anthers 1.5-2 mm long; achenes 1.5-2.8 mm long [3]
3. Perianth with 2-4 straplike bristles, these lacerate to fimbriate, reddish … S. californicus
3. Perianth with 6 bristles, these retrorsely barbed, brownish … S. tabernaemontani
4. Culms 0.5-1 mm wide; leaf blades 0.2-1 mm wide; spikelets 1 … S. subterminalis
4. Culms 5-20 mm wide; leaf blades 2-9 mm wide; spikelets 1-35 [5]
5. Distal leaf blade 0.5-0.9(1.5) times as long as sheath; inflorescence bract 1-6 cm long; spikelet scale notch 0.1-0.4 mm deep, the awn 0.2-0.6 mm long … S. americanus
5. Distal leaf blade (0.9)1.2-3 times longer than the sheath; inflorescence bract (1)3-20 cm long; spikelet scale notch (0.3)0.5-1 mm deep, the awn 0.5-1.5(2.5) mm long [6]
6. Spikelets 3-35; distal leaf blade 0.9-1.5 times longer than the sheath; achenes 1.9-2.6 mm long; styles 2-fid … S. deltarum
6. Spikelets 1-5(10); distal leaf blade (1)1.5-3 times longer than the sheath; achenes (2)2.5-3.5 mm long; styles 2- or 3-fid … S. pungens

Schoenoplectus americanus (Pers.)Volkart ex Schinz & R.Keller {AFP} —
Schoenoplectus californicus (C.A.Mey.)Soják {AFP} —
Schoenoplectus deltarum (Schuyler)Soják {AFP} —

Schoenoplectus etuberculatus (Steud.)Soják {AFP} —
Schoenoplectus pungens (Vahl)Palla {AFP} —
Schoenoplectus subterminalis (Torr.)Soják {AFP} —
Schoenoplectus tabernaemontani (C.C.Gmel.)Palla {AFP} —

Schoenus
Schoenus nigricans L. {AFP} —

Scirpus
1. Spikelets to ca. 700 per culm, with the perianth bristles long-exserted, giving the spikelet a woolly appearance; achene 0.6-0.9 mm long, 0.3-0.5 mm wide … S. cyperinus
1. Spikelets to ca. 250 per culm, with the perianth bristles not or only scarcely exserted, not at all woolly in appearance; achene 0.8-1.7 mm long, 0.6-0.8 mm wide [2]
2. Spikelet 1-2 mm wide; spikelet scales 1-1.8 mm long; perianth bristles smooth to toothed; achene 0.8-1 mm long, strongly trigonous with flat to concave faces … S. divaricatus
2. Spikelet 2-3 mm wide; spikelet scales 1.8-2.5 mm long; perianth bristles smooth; achene 1-1.5 mm long, plano-convex to trigonous with convex sides [3]
3. Mature culms reclining, inflorescences bending to (or nearly to) ground, with 2–3 lateral inflorescences in axils of distal leaves in addition to terminal inflorescence; rays and pedicels scabrous or scabrellous throughout or only in distal 1/2, often proliferous with axillary bulblets … S. lineatus
3. Mature culms erect or ascending, with terminal inflorescences only or sometimes with 1(2) lateral inflorescences in axils of distal leaves; rays and pedicels scabrous near nodes, otherwise smooth, axillary bulblets absent … S. pendulus

Scirpus cyperinus (L.)Kunth {AFP} —
Scirpus divaricatus Elliott {AFP} —
Scirpus lineatus Michx. {AFP} —
Scirpus pendulus Muhl. {AFP} —

Scleria: Several species have recently colonized Florida. If any arrived by natural means, can they be considered native?

subg. Hypoporum: S. distans, S. lithosperma, S. verticillata
subg. Trachylomia: S. baldwinii, S. ciliata, S. georgiana, S. oligantha, S. triglomerata
subg. Scleria, sect. Margaleia: S. lacustris
subg. Scleria, Foveolidia: S. reticularis
subg. Scleria, Ophryoscleria: S. eggersiana, S. microcarpa
subg. Scleria, sect. Scleria: S. gaertneri

1. Hypogynium present at the achene base, distinctly different in texture and color from the achene body, hypogynium marginate, ciliate, lobed, tuberculate, or papillose (sometimes obscured by a ciliate-margined cupule) [2]
1. Hypogynium absent or vestigial, the tapered and lobed or indented achene base naked and visible [9]
2. Leaf blades 9–25 mm wide [3]
2. Leaf blades 1-8(10) mm wide [4]

3. Stem and sheath angles smooth; cupule with marginal red-brown cilia concealing the eciliate hypogynium … S. eggersiana
3. Stem and sheath angles retrorsely scabrous; cupule absent, the hypogynium without cilia … S. lacustris
4. Hypogynium with papillose tubercles [5]
4. Hypogynium lobed or obscurely angled and crustose [6]
5. Hypogynium with 3 or 6 tubercles; achene ridged to tuberculate, sometimes faintly so (S. ciliata complex) … Key A
5. Hypogynium with 8-9 tubercles; achene smooth … S. oligantha
6. Hypogynium narrower than achene body, a papillose continuous crust, obscurely angled (S. trigolmerata complex) … Key B
6. Hypogynium wider than achene body, lobed [7]
7. Achene ridged, verrucose, sometimes faintly so, often pubescent but sometimes glabrate (S. reticularis complex) … Key C
7. Achene smooth, glabrous [8]
8. Achene often with dark coloration, depressed globose (wider than long), without a cupule, the hypognium lacking cilia … S. gaertneri
8. Achene white, ovoid (longer than wide), cupule with sparse cilia concealing the eciliate hypogynium … S. microcarpa
9. Inflorescence a single terminal cluster [10]
9. Inflorescence of few to several separated spikes (subg. Hypoporum) [11]
10. Achenes 3–4 mm long, base not papillose or granulose … S. baldwinii
10. Achenes 2–3 mm long, base papillose or granulose … S. georgiana
11. Contra-ligules well-developed, ciliate; subtending bracts conspicuous and exceeding the spikes … S. lithosperma
11. Contra-ligules inconspicuous; subtending bracts inconspicuous, not exceeding the spikes [12]
12. Plants rhizomatous; leaves pubescent or rarely glabrous; achene smooth … S. distans
12. Plants without rhizomes; leaves glabrous; achene ridged … S. verticillata

Key A
1. Achenes reticulate-ridged; leaf blades 1-2 mm wide; plant glabrous to sparsely pilose … S. curtissii
1. Achenes tuberculate, verrucose, papillate, or nearly smooth; leaf blades 1-7 mm wide; plant glabrous to densely hairy [2]
2. Leaf blades 1–2.5 mm wide; hypogynium with 6 distinctly separate tubercles arranged in pairs; achenes 1–2.5 mm long [3]
2. Leaf blades 1–7 mm wide; hypogynium with 3 tubercles (these sometimes 2-lobed) or 6 tubercles; achenes 2–3.6 mm long [4]
3. Plants glabrous or sparsely to densely hairy, hairs 0.1-0.4 mm long … S. pauciflora var. pauciflora
3. Plants copiously villous-ciliate with spreading hairs 0.5–1 mm long on culms, leaves, and bracts … S. pauciflora var. caroliniana
4. Culm 40-100 cm tall; primary terminal bract 2-5 mm wide, cilia 1-2.2 mm long; hypogynium with 6 (rarely 3 deeply lobed) tubercles, the basal rim 1.4-1.8(2.1) mm wide; achenes smooth to subtly undulate, papillate only at the base … S. bellii
4. Culm (15)30-70(75) cm tall; primary terminal bract 0.4-4.1 mm wide, cilia (0)0.1-1.1(1.3) mm long; hypogynium with 3 tubercles (these sometimes 2-lobed), the basal rim (0.6)0.8-1.4(1.6) mm wide; achenes usually ridged or reticulate and papillose throughout [5]

5. Culms, leaves, and bracts glabrate, not ciliate … S. ciliata var. glabra
5. Culms hairy; leaves and bracts ciliate [6]
6. Leaves 1–3.5 mm wide; achenes 2–3 mm long, 1.5–2.3 mm wide … S. ciliata var. ciliata
6. Leaves (2.5)3.5–7 mm wide; achenes 2.6–3.6 mm long, 2–2.6 mm wide … S. ciliata var. elliottii

Key B
1. Leaves 1-2.5 mm wide; achenes 1.5-2 mm long … S. minor
1. Leaves 3-9 mm wide; achenes 2-3.5 mm long [2]
2. Rhizomes knotty; leaf sheath contraligule (sheath apex) membranous band glabrescent, sharply differentiated from the basal line (ligule of the contraligule) marking the transition from the sheath; achenes 2-2.5(3) mm long … S. triglomerata
2. Rhizomes elongate or not; leaf sheath contraligule (sheath apex) membranous band puberulent to tomentulose, indistinct from the basal line (ligule of the contraligule) marking the transition from the sheath; achenes (2)2.8-3.3 mm long [3]
3. Culms cespitose; inflorescence terminal and lateral; hypogynium of acute-tipped papillae or tubercles; of mesic to hydric areas … S. flaccida
3. Culms along elongate rhizomes; inflorescence only terminal; hypogynium of rounded papillae or tubercles; of mesic to xeric areas … S. nitida

Key C
1. Culm 20-90(125) cm long; terminal stem internode 6-30 cm long; proximalmost lateral panicle spreading or drooping on filiform, flexuous peduncle (15)20–100 mm long; distalmost lateral panicle with bract (including sheath) usually 1/4–3/4 length of terminal internode; pistillate scales mostly 4-5 mm long; achene usually with tufts or lines of tawny hairs on ridges, rarely glabrous … S. reticularis var. pubescens
1. Culms (6)15-50 cm long; terminal stem internode usually 3-8 cm long; proximalmost lateral panicle erect, on stiff erect peduncle 0-20(90) mm long; distalmost lateral panicle with bract (including sheath) usually 3/4 or more length of terminal internode; pistillate scales mostly 3-4 mm long; achene glabrous … S. reticularis var. reticularis

Scleria baldwinii (Torr.)Steud. {AFP} —
Scleria ciliata Michx. var. ***ciliata*** {AFP} — Discussing the group broadly (*S. ciliata, S. curtissii,* and *S. pauciflora*), Kessler (1987) stated that "The intergradation of achene size and tuberculation make it difficult, if not impossible, to determine some specimens based solely on an examination of achenes. Scales, pubescence, culm length, and culm diameter also intergrade." The rather sporadic distribution given for *S. bellii* (keyed out above) (LeBlond et al. 2015) suggests the morphotype may have arisen multiple times indepedently.
Scleria ciliata Michx. var. ***glabra*** (Chapm.)Fairey —
Scleria ciliata Michx. var. ***elliottii*** (Chapm.)Fernald —
Scleria curtissii Britton —
Scleria distans Poir. {AFP} —
++***Scleria eggersiana*** Boeck. {AFP} —
++***Scleria gaertneri*** Raddi {AFP} —
Scleria georgiana Core {AFP} —
++***Scleria lacustris*** C.Wright {AFP} —
Scleria lithosperma (L.)Sw. {AFP} — SE.
++***Scleria microcarpa*** Nees ex Kunth {AFP} —
Scleria minor Stone — Of this taxon, Fairey, III (1967) wrote “there is some intergradation with *Scleria triglomerata* producing transitional forms, although this intergradation seems to be

minimal." Similarly, Kessler (1987) noted "that a series of variations occurs between *S. triglomerata* and *S. minor*".

Scleria oligantha Michx. {AFP} —

Scleria pauciflora Muhl. ex Willd. var. ***caroliniana*** Alph. Wood —

Scleria pauciflora Muhl. ex Willd. var. ***pauciflora*** —

Scleria reticularis Michx. var. ***pubescens*** Britton {AFP} — Sometimes treated as the species *S. muehlenbergii*, i.e. it "appears to be geographically, ecologically, and morphologically distinct" but "More study is clearly needed" (Reznicek et al. 2002). As a variety, the oldest epithet is perhaps *S. bracteata* var. *angusta*. Fairey, III (1967) remarked that "size variation among the two varieties is great, therefore, size alone cannot be taken as a definitive character for separating the two forms" and "Transitional forms can be traced from the common extreme form of var. *pubescens* through a line of forms in which the pubescence is gradually reduced to small distant tufts on the achenes, and finally to a form with glabrous achenes". Kessler (1987) treated *S. reticularis* as a polymorphic species, noting that it "is often difficult to determine where one variety [e.g. *pubescens*] ends and another begins".

Scleria reticularis Michx. var. ***reticularis*** {AFP} —

Scleria triglomerata Michx. {AFP} — The entities *S. flaccida* and *S. nitida* are keyed out above, but Fairey, III (1967) felt that "Such forms probably represent only expected minor variations in a large population group and do not warrant segregation into ranks higher than formae." Kessler (1987) wrote that *S. flaccida* and *S. nitida* "represent variations of *S. triglomerata*, and their classification as separate species can not be justified."

Scleria verticillata Muhl. ex Willd. {AFP} —

JUNCACEAE

1. Leaves glabrous; fruits with 1 or 3 locules; seeds many ... Juncus
1. Leaves hairy; fruits with 1 locule; seeds 3 ... Luzula

Juncus

1. Leaf blades absent (only scales or sheaths present), or 1-3, terete and primarily basal; basalmost inflorescence bract solitary, stiffly erect, essentially confluent with the culm and exceeding the inflorescence, the inflorescence appearing lateral ... Key A
1. Leaf blades present (sometimes 1-3, terete, and basal); basalmost inflorescence bracts 1-many, erect to laxly spreading, shorter to longer than the inflorescence, sometimes the larger bract appearing confluent with the culm, the inflorescence generally appearing terminal [2]
2. Leaves not septate (or if septate, most flowers solitary); flowers borne singly or (1)2-12(20) per glomerule or head ... Key B
2. Leaves septate (incomplete sometimes); flowers 2-60 per glomerule or head ... Key C

Key A

1. Leaf blades 1-3 and basal; flowers sessile and 2-6 per glomerule or head; of brackish to marine habitats ... J. roemerianus
1. Leaf blades absent or 1-2 and basal; flowers borne singly, distributed along the inflorescence branches, sometimes pedicellate; of freshwater to slightly brackish habitats [2]
2. Leaf blades (0)1(2), usually present on some culms; fruit 3.5-5 mm long, subglobose, 1-locular ... J. coriaceus
2. Leaf blades absent; fruit 1.5-3.2 mm long, trigonous, 3-locular [3]
3. Culms densely clumping on the short rhizome; stamens 3; fruit subequal to the tepals, mostly broadly rounded to emarginate ... J. effusus subsp. solutus

3. Culms solitary along the creeping rhizome; stamens 6; fruit longer than the tepals, usually tapered and apiculate … J. gymnocarpus

Key B
1. Flowers sessile and (1)2-12(20) per glomerule or head [2]
1. Flowers borne singly (infrequently in clusters of 2-3), distributed along the inflorescence branches, sometimes pedicellate [5]
2. Annual or short-lived perennial; culms submersed, floating, or terrestrial and weak, often repent and mat-forming; leaves often in fascicles; fruit 3.5-5.5 mm long; seeds 0.3-0.4 mm long … J. repens
2. Perennial; culms mostly erect to ascending; leaves solitary and scattered along the culm; fruit 1.8-2.9 mm long; seeds 0.4-0.7 mm long [3]
3. Rhizome internode width (0.8)1.0-1.4(1.9) mm, longest distance between adjacent rhizome cataphylls (5.3)6.3-10.5(13.0) mm; infructescence usually congested, (1.8)2.4-4.7(6.4) cm long … J. longii
3. Rhizome internode width (0.4)1-3.5(4.5) mm, longest distance between adjacent rhizome cataphylls (0.1)0.4-3(4.6) mm; infructescence usually loose, sometimes congested, (1.4)17.9-103.9(145) cm long [4]
4. Tallest culm (27.2)50.8-81.2(100.7) cm, stem base (3.4)5.8–9.6(12) mm wide; sheath of lowest leaf (3.2)4.3-7.8(9.7) cm long; widest leaf blade (2.6)3.1-4.5(5.4) mm wide; anthers (0.5)0.6-1.0(1.3) mm long, exserted … J. biflorus
4. Tallest culm (19.2)26.0-44(56.8) cm, base (0.4)2.0-4.4(6) mm wide; sheath of lowest leaf (1.7)2.2-3.8(4.7) cm long; widest leaf blade (1.3)1.6-2.6(3.5) mm wide; anthers (0.2)0.3-0.5(0.7) mm long, concealed by tepals … J. marginatus
5. Annual, to 40 cm tall or long; inflorescence length 0.3-0.7 as long as the entire aboveground part of the plant … J. bufonius
5. Perennial, 10-100 cm tall; inflorescence length 0.03-0.3 as long as the entire aboveground part of the plant [6]
6. Inflorescence diffuse, (2)6-25 cm long, (1)2-15 cm wide; fruit 1.5-3.5 mm long, the apex gradually tapering into a beak; leaf sheath auricle 0.3-1 mm long, membranous … J. abortivus
6. Inflorescence relatively compact to somewhat spreading, 1-8(12) cm long, 1-7(9) cm wide; fruit (2.5)2.8-4.7 mm long, the apex rounded, retuse, to abruptly narrow to a beak; auricle 0.2-5 mm long, scarious or membranous [7]
7. Auricle at summit of leaf sheath 0.2-0.6(1) mm long, scarious, hyaline-margined; anthers 0.4-0.8 mm long; seed 0.3-0.4 mm long … J. dichotomus
7. Auricles at summit of leaf sheath 1-3(5) mm long, membranous to subcoriaceous, not hyaline-margined; anthers 0.1-0.2 mm long; seed 0.5-0.7 mm long … J. tenuis

Key C
1. Seeds tailed, 1–2.6 mm long (including tail); seed body covered with whitish translucent veil [2]
1. Seeds not tailed, 0.3–0.7 mm; seed body diaphonous yellow-brown [3]
2. Heads of 5-50 flowers; fruit subequal to the tepals; seed 1-1.9 mm long … J. canadensis
2. Heads of 2-8 flowers; fruit longer than the tepals; seed 1.8-2.6 mm long … J. trigonocarpus
3. Heads of (1)2-25(50) flowers, sometimes subglobose; fruit abruptly contracted or sometimes gradually tapering to the beak; cespitose [4]
3. Heads of 20-60 flowers, globose to subglobose; fruit tapering to the beak; rhizomatous or cespitose [8]
4. Fruit 1.3-2 times as long as tepals [5]

4. Fruit subequal to tepals [6]
5. Fruit 2.8-4.2 mm long ... J. debilis
5. Fruit 4-5.5 mm long ... J. diffusissimus
6. Inflorescence with 5-50 heads; tepals 2.6-3.5 mm long, subequal; fruit 2.8-3.5 mm long ... J. acuminatus
6. Inflorescence with 30-250 heads or glomerules; tepals 1.7-2.9 mm long, inner ones shorter; fruit 1.9-2.9 mm long [7]
7. Leaf blade with faint ringlike bands at position of septa; roots often with terminal tubers; inner tepals 2.4–2.8 mm ... J. elliottii
7. Leaf blade with prominent and conspicuous ringlike bands at position of cross partitions; roots without terminal tubers; inner tepals 1.7–2.1 mm ... J. nodatus
8. Leaf blades laterally flattened or compressed [9]
8. Leaf blades terete [10]
9. Leaf sheath auricle absent; fruit valve tips remaining united after dehiscence; seeds lance-elliptic, slightly curved and asymmetric ... J. polycephalos
9. Leaf sheath auricle 1-3 mm long; fruit valve tips usually free after dehiscence; seeds broadly elliptic, symmetric ... J. validus
10. Culms 4-8 mm wide near the base, (60)80-150 cm tall; largest leaf blades (24)40-80(108) cm long, 3-7(8) mm wide; inflorescence (10)15-25 cm long, with (15)25-55(80) heads ... J. paludosus
10. Culms 1-3 mm wide near the base; largest leaf blades 2-24 cm long, 1–2 mm wide; inflorescence 1-10 cm long, with 1-23(32) heads [11]
11. Basal leaf sheaths and cataphylls usually reddish; uppermost leaf blade often shorter than the sheath; heads strictly globose; tepals reddish brown to purplish, the inner ones shorter ... J. megacephalus
11. Basal leaf sheaths and cataphylls primarily straw-colored to brown; uppermost leaf blade often longer than the sheath; heads usually somewhat lobed; tepals green to light brown, subequal ... J. scirpoides

Juncus acuminatus Michx. {AFP} —
Juncus bufonius L. {AFP} —
Juncus canadensis J.Gay ex Laharpe {AFP} —
Juncus coriaceus Mack. {AFP} —
Juncus debilis A.Gray {AFP} —
Juncus dichotomus Elliott {AFP} —
Juncus diffusissimus Buckley {AFP} —
Juncus effusus L. subsp. ***solutus*** (Fernald & Wiegand)Hämet-Ahti {AFP} —
Juncus elliottii Chapm. {AFP} —
Juncus gymnocarpus Coville {AFP} — SE.
Juncus marginatus Rostk. {AFP} —
Juncus megacephalus M.A.Curtis {AFP} —
Juncus nodatus Coville {AFP} —
Juncus paludosus E.L.Bridges & Orzell {AFP} —
Juncus pelocarpus E.Mey. {AFP} —
Juncus polycephalos Michx. {AFP} —
Juncus repens Michx. {AFP} —
Juncus roemerianus Scheele {AFP} —
Juncus scirpoides Lam. {AFP} —
Juncus tenuis Willd. {AFP} —

Juncus trigonocarpus Steud. {AFP} —
Juncus validus Coville {AFP} —

Luzula

1. Inflorescence of solitary flowers or in clusters of 2; fruit longer than tepals; caruncle subeqal to seed body … L. acuminata
1. Inflorescence of globose to cylindric heads or glomerules; fruit usually shorter than tepals; caruncle half or less of seed body … L. echinata

Luzula acuminata Raf. {AFP} —
Luzula echinata (Small)F.J.Herm. {AFP} —

MAYACACEAE

Mayaca

Mayaca fluviatilis Aubl. {AFP} — Here *M. fluviatilis* is treated as the only species in Florida and occurring throughout the American tropics. Carvalho (2007) retained *M. aubletii* Michx. as a synonym of *M. fluviatilis*, but based on subtle anther differences recognized *M. kunthii* and *M. sellowiana* as widespread species with rare occurrences in the southeastern USA. In a treatment focused on Cuba, Urquiola Cruz (2001) recognized *M. aubletii* and *M. fluviatilis* as distinct species, giving them virtually the same distribution as throughout the American tropics, and distinguished *M. fluviatilis* by being generally erect plants with leaves spirally arranged with short bifurcate apices, pedicels 1-5 mm or rarely to 10 mm long, petals white, pink, or purple and rounded at the apex, and capsules oblong-elliptic vs. *M. aubletii* as generally creeping plants with leaves arranged on the dorsal and lateral part of the stems and without bifurcate apices, pedicels 5-30 mm long, petals white to pink-purple and emarginate at the apex, and capsules subglobose to ovoid.

ERIOCAULACEAE

1. Larger roots pale, septate, unbranched; lacunar tissue (air spaces) evident at leaf base; scape glabrous; perianth parts in 2s, petals with glands on adaxial surface; stamens 3-4 or 6; anthers 2-locular, apex of staminal column with 2-3 glands, glands unappendaged; pistil 2(3)-carpellate; style unappendaged, 2(3)-branched … Eriocaulon
1. Larger roots pale to dark, not septate, unbranched or branched; lacunar tissue (air spaces) not evident at leaf base; scape hairy or glabrous; perianth parts in 3s (or 2s in Lachnocaulon digynum), petals if present without glands; stamens (2)3; anthers 1-2-locular; apex of staminal column usually with 3 glands, glands appendaged or unappendaged; pistil (2)3-carpellate; style appendaged, 2–3-branched [2]
2. Roots pale to dark, slender, fibrous, branched; scapes glabrate distally, hairs if present neither swollen nor glandular; involucral bracts mostly dull and brown, reflexed, obscured by inflorescence; hairs of perianth club-shaped; staminal filaments adnate to rim of androphore; anthers 1-locular; style branches 2-cleft … Lachnocaulon
2. Roots pale, thickened, spongy, appearing unbranched; scapes stipitate glandular distally, basally some hairs swollen; involucral bracts often lustrous pale golden, spreading, not obscured by inflorescence; hairs of perianth tapering, acute; staminal filaments low in corolla tube; anthers 2-locular; style branches undivided … Syngonanthus flavidulus

Eriocaulon

1. Leaves to 40 cm long; fertile scape to 1 m long; heads (8)10-20 mm wide; receptable pilose [2]
1. Leaves to 15 cm long; fertile scape to 0.4 m long; heads 3-8(10) mm wide; receptacle pilose, glabrate, or glabrous [3]
2. Heads soft, easily flattened when pressed; sheath of scape usually longer than the longest leaves; involucral bracts gray, apex rounded or obtuse; receptacular bracteoles gray, apex acute; pistillate flower petals adaxially villous; club-shaped hairs of perianth with all cells mealy white ... E. compressum
2. Heads hard, not flattening when pressed; sheath of scape usually shorter than the longest leaves; involucral bracts straw-colored, apex acute; receptacular bracteoles pale, apex narrowly acuminate; pistillate flower petals adaxially glabrescent; club-shaped hairs of perianth with terminal cells whitened and the basal cells transparent ... E. decangulare
3. Receptacle copiously pilose; some or most receptacular bracteoles and perianth parts with chalk white hairs ... E. texense
3. Receptacle glabrous or sparsely hairy; receptacular bracteoles and perianth glabrous or hairy, hairs club-shaped, clear or white [4]
4. Perianth parts and receptacular bracteoles with glabrous or with few white hairs, the upper part of the head appearing gray; seeds conspicuously irregularly pale-reticulate, alveolae mainly rectangular ... E. ravenelii
4. Perianth parts and receptacular bracteoles with copious white hairs, the upper part of the head appearing white; seeds obscurely or faintly reticulate [5]
5. Involucral and receptacular bracts mostly white to stramineous, somewhat hyaline (blackish sepals sometimes showing thru the receptacular bracts), the lower part of the head appearing pale; seeds dark red-brown, ovoid or ellipsoid, 0.5–0.75 mm, faintly rectangular-reticulate, often papillate in lines ... E. lineare
5. Involucral and receptacular bracts dark gray or blackish, the lower part of the head appearing dark; seeds brown, nearly round, 0.3 mm, obscurely reticulate, alveolae irregularly and horizontally rectangular ... E. nigrobracteatum

Eriocaulon compressum Lam. {AFP} —
Eriocaulon decangulare L. {AFP} —
Eriocaulon lineare Small {AFP} —
•***Eriocaulon nigrobracteatum*** E.L.Bridges & Orzell {AFP} — SE.
Eriocaulon ravenelii Chapm. {AFP} —
Eriocaulon texense Körn. {AFP} —

Lachnocaulon: Stützel et al. (2024) provide a reasonable argument for including *Lachnocaulon* in *Paepalanthus*.

1. Plants 12-40 cm tall; heads 3.5-7(9) mm wide, macroscopically pale gray to white due to apical hairs of receptacular bracts and perianth being mostly white, mealy, opaque or whitish-translucent; scapes pilose, hairs (1)1.3-2(2.5) mm long, infrequently glabrate to sparsely pilose [2]
1. Plants 5-17(20) cm tall; heads 2-4 mm wide, macroscopically brown or gray-brown due to apical hairs of bracts and perianth being translucent, not white, the brown color of bract and perianth showing through; scapes glabrous or pilose, hairs (1)1.3-2(2.5) mm long [3]

2. Leaves linear, gradually attentuate; scapes usually pilose throughout, infrequently glabrous; mature heads 4-7(9) mm wide; seeds pale to dark brown, not lustrous, longitudinal ribs conspicuous, transverse ribs less conspicuous than longitudinal ribs ... L. anceps
2. Leaves narrowly linear, abruptly attenuate; scapes glabrate within 1 cm below heads; mature heads 3.5-4(5) mm wide; seeds dark red-brown, very lustrous, longitudinal ribs faint, transverse ribs forming finely cross-striolate pattern ... L. beyrichianum
3. Scapes with copious, ascending hairs; heads dull gray-brown; hairs of receptacle copious, partly obscuring flowers (old heads may lose some hairs); gynoecium 3-carpellate ... L. minus
3. Scapes glabrous; heads gray to brown or reddish brown; gynoecium 2-3-carpellate [4]
4. Leaves 0.5-1(2) cm long; scape sheaths longer than above leaves; heads gray or gray-brown, usually globose by seeding time; gynoecium 2-carpellate ... L. digynum
4. Leaves 2-3(4) cm long; scape sheaths shorter than or subequal to leaves; heads dark brown to reddish brown, usually short cylindric by seeding time; gynoecium 3-carpellate ... L. engleri

Lachnocaulon anceps (Walter)Morong {AFP} —
Lachnocaulon beyrichianum Sporl. ex Körn. {AFP} —
Lachnocaulon digynum Körn. {AFP} — ST.
Lachnocaulon engleri Ruhland {AFP} —
Lachnocaulon minus (Chapm.)Small {AFP} —

Syngonanthus
Syngonanthus flavidulus (Michx.)Ruhland {AFP} —

XYRIDACEAE
Xyris: The 3 sepals are generally brownish, mostly or completely concealed within the rigid outer bracts. The two lateral sepals are most conspicuous. The 3 petals are yellow to white, and may shrivel making it difficult to measure their full expanded length. The 3 stamens overlay the petals, and the staminodes alternate with the petals.

1. Plants 4-30(60) cm tall; leaves 2-10(15) cm long; scapes 0.5-1 mm wide; scape sheaths mostly equaling or exceeding principal leaves; spikes 3-8(10) mm long; lateral sepals 2-5 mm long, the keels subentire, papillate, or ciliate; seeds 0.3–0.5 mm long [2]
1. Plants (10)15-150 cm tall; leaves 5-70 cm long; scapes 0.7-3 mm wide; scape sheaths exceeded by leaves; spikes 5-30 mm long; lateral sepals 4-15 mm long, the keels subentire, ciliate, long-fimbriate, or lacerate; seeds 0.4-1 mm long [4]
2. Spikes mostly as broad as long; margins of fertile bracts scarious, lacerate, often squarrose with red inner band; lateral sepal keel reddish apically ... X. brevifolia
2. Spikes mostly longer than broad; margins of fertile bracts entire or erose; lateral sepal keel not reddish apically, concolorous [3]
3. Leaf sheath base with distinct chestnut brown patch; leaf blades olive green; scape sheath subequal to leaves ... X. drummondii
3. Leaf sheath base without chestnut brown patch; leaf blades strongly maroon-tinged; scape sheath exceeding the leaves ... X. flabelliformis
4. Leaf blades 0.5-2.5(3) mm wide [5]
4. Leaf blades (2)3-25 mm wide [10]
5. Leaf blades with or without a distinct light margin; spike bracts lacerate and often recurved [6]
5. Leaf blades without a distinct margin; spike bracts entire or erose, erect [7]

6. Leaf blades flat, with a distinct light margin on both sides, the blades usually wider than the scape ... X. elliottii
6. Leaf blades terete to flattened, usually with only one side having a distinct light margin or absent, occasionally on both sides, the blades subequal to or narrower than the scape ... X. stenotera
7. Plants 30-90 cm tall; leaf sheath pinkish, soft; leaf blades 1-2.5(3) mm wide; spikes 10-32 mm long; lateral sepal exserted 0-1 mm beyond the subtending bract [8]
7. Plants 15-40(50) cm tall; leaf sheath lustrous brown to red-brown, chaffy or firm; leaf blades 0.5-1 mm wide; spikes 4-7(10) mm long; lateral sepal included [9]
8. Rhizomes scaly; spikes 20-32 mm long; lateral sepal not or scarcely exserted; petal blade slightly erose to shallowly serrate distally; seeds with regular rectangular alveolae ... X. correlliorum
8. Rhizomes absent; spikes 10-16 mm long; lateral sepal exserted 0.5-1 mm beyond the subtending bract; petal blade deeply lacerate apically; seeds with obscure alveolae ... X. longisepala
9. Staminodes not bearded; seeds (0.7)0.8-1 mm long, finely lined longitudinally ... X. baldwiniana
9. Staminodes with a dense bearded tuft; seeds 0.5 mm long, strongly longitudinally ribbed ... X. isoetifolia
10. Lateral sepal keel long-fimbriate, the fimbriae 0.4-1 mm long and nearly subequal to the blade width [11]
10. Lateral sepal keel subentire, lacerate, or ciliate [13]
11. Leaves not in fans; leaf sheath coriaceous, lustrous, brown; leaf blades twisted; scape edges smooth to lightly scabrous; petals expanding in afternoon sepal fimbriae reddish ... X. caroliniana
11. Leaves in fans; leaf sheath chartaceous, dull, pinkish to pale yellow or green; leaf blades flat to scarcely twisted; scape edges strongly scabrous; petals expanding in morning; sepal fimbriae pale [12]
12. Stolons absent; plant base pale green, soft; spikes 12-25 mm long; style branches mostly ascending to erect ... X. fimbriata
12. Stolons sometimes present; plant base dark reddish, coriaceous-bulbous; spikes 20-40(45) mm long; style branches spreading ... X. panacea
13. Lateral sepal keel regularly ciliate through most of length [14]
13. Lateral sepal keel entire to lacerate, or with irregular teeth [16]
14. Leaf sheaths pinkish, pale purplish, to pale yellowish; leaf blade usually pale green (when fresh), margins often with elongate papillae; petal blade (exserted portion) 8-11 mm long; seeds translucent, 0.5-0.65 mm long ... X. ambigua
14. Leaf sheaths dark reddish, purplish, or brownish; leaf blade deep green with maroon tints (when fresh), margins usually minutely roughened or with low, rounded papillae; petal blade (exserted portion) 3-5 mm long; seeds mealy or farinous, (0.55)0.6-0.8 mm long [15]
15. Scape strongly 2-ribbed with intervening minor ribs, distally somewhat flattened and narrower than the spike; spike 1-2(2.7) cm long; seeds pale ... X. louisianica
15. Scape sharply 2-ribbed without intervening minor ribs or these obscure, distally flattened and nearly as wide as the spike; spike (1.5)2-3(3.5) cm long; seeds dark ... X. stricta
16. Lateral sepals slightly to strongly exserted from the subtending bracts ... X. smalliana
16. Lateral sepals included in the subtending bracts [17]
17. Plant base often pinkish; leaf blade distally twisted; scapes flexuous, often spirally twisted [18]

17. Plant base not pinkish; leaf blade usually not twisted; scapes usually not flexuous, not twisted [21]
18. Plants 15-50 cm tall; spikes tilted 10-20 degrees from scape apex; seed surface farinose … X. calcicola
18. Plants (20)30-100 cm tall; spikes straight and erect with the scape apex; seed surface not farinose [19]
19. Base of plant deeply set in substrate, not bulbous, lacking outer scale leaves; leaf blades 2-4 mm wide; petals blades 2.8-4 mm long … X. chapmanii
19. Base of plant shallowly set in substrate, bulbous, with blackish outer scale leaves; leaf blades 2-10 mm wide; petal blades 4.5-5.5 mm long [20]
20. Leaf blade and scape smooth or scabrous only along edges; petal blades obovate, white or yellow; seeds ovoid, 0.5-0.6 mm long … X. platylepis
20. Leaf blade and scape surfaces prominently papillose or tuberculate-scabrid; petal blades suborbicular, yellow; seeds narrowly ovoid or ellipsoidal, 0.6-1 mm long … X. scabrifolia
21. Scape with 2 prominent edges, otherwise without intervening ridges or these few and obscure, scape distally strongly flattened, (2)2.5-4 mm wide [22]
21. Scape with numerous prominent ridges (at least proximally), scape distally terete to slightly flattened, 1-2(2.5) mm wide [23]
22. Scape edges wing-like, each edge ca. ½ as wide or more as the central part; spikes 5-15(20) mm long … X. difformis
22. Scape edges not wing-like, each edge <½ as wide as the central part; spikes 20-35 mm long … X. laxifolia var. iridifolia
23. Leaf blades bright yellow-green, the surface smooth to sparsely scabrid; seeds translucent [24]
23. Leaf blades dull green, the surface minutely papillate to tuberculate-scabrid with distinct dark striations; seeds farinose or dark [25]
24. Perennial, usually cespitose; leaf base pinkish or purplish, spreading to expose dark scape base; leaf blades linear-curvaceous, spreading, 5-10(15) cm long; spikes (3-)5 mm long; petals not persistent … X. curtissii
24. Annual, solitary or cespitose; leaf base pale yellowish, rarely pinkish, not spreading, scape base concealed; leaf blades ascending, (5)10-60 cm long; spikes 7-15(25) mm long; petals often persistent, turning black … X. jupicai
25. Plants solitary or in loosely cespitose; leaf bases dark purplish, rarely pinkish; spikes sharply acute … X. floridana
25. Plants densely cespitose; leaf bases dark brown to gray (inner ones pale); spikes bluntly acute … X. serotina

Xyris ambigua Beyr. ex Kunth {AFP} —
Xyris baldwiniana Schult. {AFP} —
Xyris brevifolia Michx. {AFP} —
•***Xyris calcicola*** E.L.Bridges & Orzell {AFP} —
Xyris caroliniana Walter {AFP} —
Xyris chapmanii E.L.Bridges & Orzell — Sometimes included under *X. scabrifolia*, "such intergradation that it is impossible to break the two out even as varieties" (Kral, FNA vol. 22).
•***Xyris correlliorum*** E.L.Bridges & Orzell {AFP} —
Xyris curtissii Malme {AFP} —
Xyris difformis Chapm. {AFP} —
Xyris drummondii Malme {AFP} —
Xyris elliottii Chapm. {AFP} —

Xyris fimbriata Elliott {AFP} —
Xyris flabelliformis Chapm. {AFP} —
Xyris floridana (Kral)E.L.Bridges & Orzell {AFP} —
Xyris isoetifolia Kral {AFP} — SE.
Xyris jupicai Rich. {AFP} —
Xyris laxifolia Mart. var. ***iridifolia*** (Chapm.)Kral {AFP} —
Xyris longisepala Kral {AFP} — SE.
Xyris louisianica E.L.Bridges & Orzell {AFP} —
•***Xyris panacea*** L.C.Anderson & Kral {AFP} — SE.
Xyris platylepis Chapm. {AFP} —
Xyris scabrifolia R.M.Harper {AFP} — ST.
Xyris serotina Chapm. {AFP} —
Xyris smalliana Nash {AFP} —
•***Xyris stenotera*** (Malme)E.L.Bridges & Orzell {AFP} —
Xyris stricta Chapm. {AFP} —

POACEAE

subf. Pharoideae: Pharus
subf. Orzyoideae
    Oryzeae, Zizaniinae: Luziola, Zizania, Zizaniopsis
    Oryzeae, Oryzinae: Leersia, Oryza
subf. Bambusoideae
    Olyreae: Lithachne, Olyra
    Arundinarieae, Arundinariinae: Arundinaria, Phyllostachys, Pleioblastus, Pseudosasa
    Arundinarieae, Bambusinae: Bambusa
subf. Pooideae
    Brachyeletreae: Brachyelytrum
    Meliceae: Glyceria, Melica
    Stipeae: Piptochaetium
    Poeae, Aveninae: Avena, Koeleria, Lagurus, Sphenopholis
    Poeae, Alopecurinae: Alopecurus
    Poeae, Phleinae: Phleum
    Poeae, Poinae: Poa
    Poeae, Airinae: Aira
    Poeae, Paraphollinae: Desmazeria
    Poeae, Dactylidinae: Dactylis
    Poeae, Lolinae: Festuca, Lolium
    Poeae, Phalaridinae: Phalaris
    Poeae, Anthoxanthinae: Anthoxanthum
    Poeae, Brizinae: Briza
    Poeae, Agrostidinae: Agrostis, Limnodea, Polypogon
    Bromeae: Bromus
    Triticeae: Elymus, Hordeum, Secale, Triticum
subf. Aristidioideae: Aristida
subf. Panicoideae
    Thysolaeneae: Thysolaena
    Chasmanthieae: Chasmanthium
    incertae sedis: Kellochloa, Sacciolepis
    Paniceae, Anthephorinae: Anthephora, Digitaria

Paniceae, Dichantheliinae: Dichanthelium
Paniceae, Boivinellinae: Alloteropsis, Amphicarpum, Echinochloa, Lasiacis, Oplismenus
Paniceae, Panicinae: Panicum
Paniceae, Melidinae: Eriochloa, Melinis, Urochloa
Paniceae, Cenchrinae: Cenchrus, Paspalidium, Setaria, Stenotaphrum
Paspaleae, Arthropogoninae: Coleataenia, Phanopyrum
Paspaleae, Paspalinae: Anthenantia, Axonopus, Paspalum
Otachyriinae: Hymenachne, Steinchisma
Andropogoneae: Elionurus, Tripidium
Andropogoneae, Arthraxoninae: Arthraxon
Andropogoneae, Tripsacinae: Tripsacum, Zea
Andropogoneae: Chrysopogon
Andropogoneae, Rottboellinae: Coix, Rottboellia
Andropogoneae, Ratzeburgiinae: Coelorachis, Eremochloa, Hackelochloa, Hemarthria
Andropogoneae, Saccharinae: Erianthus, Miscanthus, Polytrias
Andropogoneae, Sorghinae: Sorghastrum, Sorghum
Andropogoneae, Germainiinae: Imperata,
Andropogoneae: Microstegium
Andropogoneae, Andropogoninae: Anatherum, Andropogon, Hyparrhenia, Schizachyrium
Andropogoneae, Anthistiriinae: Bothriochloa, Cymbopogon, Dichanthium, Heteropogon, Themeda
subf. Arundinoideae**:** Arundo, Phragmites
subf. Danthonioideae**:** Cortaderia, Danthonia
subf. Chloridioideae
Triraphideae: Neyraudia
Eragrostideae: Eragrostis, Uniola
Zoysieae: Spartina, Sporobolus, Zoysia
Dactylocteniinae: Dactyloctenium
Eleusininae: Chloris, Ctenium, Cynodon, Dinebra, Diplachne, Disakisperma, Eleusine, Eustachys, Leptochloa
Pappophorinae: Tridens
Monanthochloinae: Bouteloua, Distichlis, Muhlenbergia
Gouiniinae: Triplasis
Hubbardochloinae: Gymnopogon

Key: Arundinoideae
1. Leaf blades 30-100 cm long, 2-7(9) cm wide, the base wider than the culm; spikelets of 2-4 florets; rachilla internodes glabrous; glumes 10-15 mm long, subequal to spikelet length; lemma pilose; anthers 2-3 mm long … Arundo
1. Leaf blades 10-40 cm long, 2-4 cm wide, the base ~subequal to the culm width; spikelets of 3-10 florets; rachilla internodes pilose; glumes 3-7 mm long, shorter than the spikelet length; lemma glabrous; anthers 1.5-2 mm long … Phragmites

Key: Leptochloa s.lat.
1. Inflorescence (25)30-100 branches; spikelets 2-4 mm long, with 2-5(6) florets; lemmas 0.9-2 mm long; anthers 0.2-0.4 mm long; caryopses 0.5-1.2 mm long (ligules 0.5-3.2 mm long, truncate-erose) … Dinebra
1. Inflorescence with 3-35 branches; spikelets 2.5-12(14) mm long, with 3-20 florets; lemmas (1.5)2.3-6 mm long; anthers 0.2-2.7 mm long; caryopses 1-2.4 mm long (ligules various) [2]

2. Ligules 2–8 mm long, apex acute to attenuate (somewhat lacerate) ... Diplachne fusca
2. Ligules 0.3-5.4 mm long, truncate-erose or obtuse-erose [3]
3. Inflorescence of 2-15 branches, with secondary inflorescences often concealed in leaf sheaths; lemmas 4-5 mm long, membranous, apices broadly acute, obtuse, or truncate, unawned; panicles with 2-15 branches; caryopses 1.9-2.3 mm long, strongly dorsally compressed ... Disakisperma dubium
3. Inflorescence of 9-25 branches, without secondary inflorescences in leaf sheaths; lemmas 1.5-3.6 mm long, chartaceous, apices usually acute, rarely obtuse, unawned or awns to 11 mm long; panicles with 9-25 branches; caryopses 1.3-1.8 mm long, somewhat laterally compressed; ... Leptochloa

Agrostis
1. Stoloniferous; palea 0.7-1.4 mm long ... A. stolonifera
1. Cespitose; palea absent or to 0.2 mm long [2]
2. Lemma usually with a subapical flexuous awn 3-10 mm long; callus hairs to 0.6 mm long, dense; anther 1 ... A. elliottiana
2. Lemma unawned or with a straight or geniculate awn to 3 mm long arising from near the middle of the lemma; anthers 3 [3]
3. Leaf blades 2-5 mm wide, flat; pedicels to 7.3 mm long; lemmas 1.3-2.2 mm long; callus hairs abundant, to 0.3 mm long; flowering Sep-Oct ... A. perennans
3. Leaf blades 0.5-2 mm wide, usually involute; pedicels to 9.6 mm long; lemmas 0.8-2 mm long; callus hairs sparse, to 0.2 mm long; flowering Mar-Sep [4]
4. Pedicels to 3.5 mm long, spikelets appearing clustered; lemmas 0.8-1.2 mm long, exceeding the ripe caryopses by no more than 0.2 mm; anthers 0.2-0.5 mm long; flowering Apr-Jul ... A. hyemalis
4. Pedicels to 9.6 mm long, spikelets not appearing clustered; lemmas 1.4-2 mm long, exceeding the ripe caryopses by 0.3+ mm; anthers 0.4-0.8 mm long; flowering Mar-Sep ... A. scabra

Agrostis elliottiana Schult. {AFP} —
Agrostis hyemalis (Walter)Britton et al. {AFP} —
Agrostis perennans (Walter)Tuck. {AFP} —
Agrostis scabra Willd. {AFP} —
*****Agrostis stolonifera*** L. {AFP} —

Aira
*****Aira caryophyllea*** L. {AFP} —

Alloteropsis
*****Alloteropsis cimicina*** (L.)Stapf {AFP} —

Alopecurus
Alopecurus carolinianus Walter {AFP} —

Amphicarpum
Amphicarpum muehlenbergianum (Schult.)Hitchc. {AFP} —

Anatherum

1. Rames usually conspicuously wholly exserted or nearly so, and mostly distant from adjacent ones; anthers 1 or 3, 1.2-3.5 mm long … Key A
1. Rames usually at least partly concealed by the subtending sheath and sometimes in dense arrays; anthers 1, 0.5-2 mm long … Key B

Key A
1. Inflorescence peduncles (4.5)5-9(11.5) cm long; rame internode pubescence uniform; sessile spikelets 4–5 mm long; lemma awns mostly 5–10 mm long; anthers 1; leaf blades (1.5)2–2.5(3) or (3)5-6(8) mm wide [2]
1. Inflorescence peduncles (8)9–17 cm long; rame internode pubescence becoming sparse basally; sessile spikelets 5–7 mm long; lemma awns mostly 10–25 mm long; anthers 3; leaf blades (2.5)3-4.5(5) mm wide [2]
2. Culms 2.5–4.5 mm wide; basal leaf sheaths appressed-pubescent, often silvery-silky; basal leaf blades 5–6 mm wide, upper surface appressed-pubescent, often silvery-silky; inflorescence units (10)30-40(50) per culm, each with 2–4 rames … A. arctatus
2. Culms 1.5–2.0 mm wide; basal leaf sheaths moderately to densely villous; basal leaf blades (1.5)2–2.5(3) mm wide, glabrous to sparsely pubescent with spreading hairs; inflorescence units (3)8-14(27) per culm, all with 2 rames … A. cumulicola
3. Rame internodes with longest hairs 8–9 mm long, somewhat obscuring the spikelets; first glume nerveless and glabrous or nearly so between the keels; lemma awns (18)20-22(25) mm long; pedicellate spikelet vestigal, 1–2 mm long … A. ternarius
3. Rame internodes with longest hairs 3–6 mm long, not obscuring the spikelets; first glume 2–3-nerved between the keels, its surface moderately to densely scabridulous; lemma awns (9)11-16(18) mm long; pedicellate spikelets, 2–4 mm long [4]
4. Culms (1.1)1.4-1.7(1.9) m tall; basal leaf sheaths and lower surface of basal leaf blades green or bluish green, not glaucous; culm internodes not glaucous; inflorescence units (5)10-20(26) per culm … A. cabanisii
4. Culms (1.5)1.8-2.1(2.3) m tall; basal leaf sheaths and lower surface of basal leaf blades bluish-glaucous; culm internodes slightly to evidently glaucous; inflorescence units (6)8-10(12) per culm … A. miamiensis

Key B
1. Leaves strongly chalky-glaucous [2]
1. Leaves green to slightly glaucous [4]
2. Ligule 0.9-2 mm long (excluding cilia), the cilia 0-0.2 mm long; cauline leaf blades 33-75 cm long; pubescence below raceme sheath usually moderate to dense; racemes (1)1.3-2(2.3) cm long … A. cretaceus
2. Ligule 0.2-0.5 mm long (excluding cilia), the cilia 0.3-1.2 mm long; cauline leaf blades 12-38 cm long; pubescence below raceme sheath absent or sparse to dense; racemes (1.4)1.8-2.7(4) cm long [3]
3. Pubescence below raceme sheath absent; raceme sheaths (2.1)2.6-3.8(4.9) cm long; racemes (1.4)1.7-2.4(3.2) cm long; spikelets (2.6)3.4-3.7(4.4) mm long … A. capillipes
3. Pubescence below raceme sheath sparse to dense; raceme sheaths (2.4)3.2-4.8(6) cm long; racemese (1.5)2-3(4) cm long; spikelets (3)3.5-3.9(4.9) mm long … A. dealbatum
4. Spikelets lacking awns; anthers 3 … A. bicorne
4. Sessile spikelets with awns; anthers 1(-3) [5]
5. Leaf blades appressed-pubescent; peduncles (1)3-4(13) mm long; callus (base of sessile spikelet) hairs 1.5-5 mm long; sessile spikelets (3.5)4.1-4.5(5) mm long … A. longiberbis

5. Leaf blades glabrous or with mostly spreading (rarely appressed) hairs; peduncles (1)5-70(100) mm long; callus hairs 1-3(3.5) mm long; sessile spikelets (2.6)3.5-5(5.5) mm long [6]
6. Peduncles with (2)4-13 rames … A. mohrii
6. Peduncles with (1)2-5(7) rames [7]
7. Culms 0.3-1.2(1.4) m tall; leaf blades 0.8-3(5) mm wide; inflorescence units 2-31 per culm [8]
7. Culms (0.2)0.9-3.1 m tall; leaf blades (1.7)3-9.5 mm wide; inflorescence unites 5-210 per culm [11]
8. Peduncles with 2 rames; anthers 1.2-2 mm long; sessile spikelets (4)4.8-5(5.5) mm long … A. tracyi
8. Peduncles with 2-5 rames; anthers 0.6-1.7 mm long; sessile spikelets (3)4.1-4.4(5.7) mm long [9]
9. Ligules 0.8-1.5 mm long, the cilia <0.1 mm long … A. perangustatum
9. Ligules 0.2-0.8(1) mm long [10]
10. Basal leaf sheath faces appressed-pubescent, 2.5-5 mm wide from keel to keel; basal leaf blades 2-5 mm wide unfolded, not difficult to unfold; upper culm sheaths 6.6-8.5 mm wide when unrolled; rachis internode 3.8-5 mm long; pedicel 5.6-8 mm long … A. gyrans
10. Basal leaf sheaths faces glabrous, (0.5)1.4-2.6(3) mm wide from keel to keel; basal leaf blades (0.6)1-2.2(2.8) mm wide unfolded, very difficult to unfold; upper culm sheaths (4)4.7-6.3(7) mm wide when unrolled; rachis internode (2.5)3-3.8(4) mm long; pedicel 4.5-5.6(5.8) mm long … A. subtile
11. Culm 1-3 m long; inflorescence branches arching; rames (1.2)1.5-2.1(2.6) cm long … A. brachystachyum
11. Culms 0.3-2.5 m long; inflorescence branches erect to ascending; rames (0.5)1.7-5.3 cm long [12]
12. Leaf blades 32-61 cm long, usually glabrous; sheaths often scabrous; inflorescence units (9)50-210 per culm; rame internode hairs uniform (not sparse basally); anthers 1.3-2 mm long … A. floridanum
12. Leaf blades 11-109 cm long, glabrous to densely pubescnet; sheath smooth to scabrous; inflorescence units 6-600 per culm; rame internodes sparsely pubescent basally, more densely pubescent distally; anthers 0.5-1.5 mm long [13]
13. Leaf blades 11-52 cm long; sheaths smooth, rarely somewhat scabrous; ligules 0.2-1 mm long; keels of the lower glumes usually smooth below midlength, scabrous distally [14]
13. Leaf blades 13-109 cm long; sheaths usually scabrous, sometimes smooth; ligules 0.6-2.2 mm long; keels of the lower glumes sometimes scabrous below midlength [15]
14. Sheaths subtending the inflorescence units (1.7)2.4-3.1(4) mm wide; inflorescences units usually with 2 rames; peduncles (1) 4-9 (30) mm long; rames (1.3)1.5-2.3(3) cm long … A. campbellii
14. Sheaths subtending the inflorescences units (2.2)3.3-4.4(5.6) mm wide; inflorescence units with 2-5(7) rames; peduncles (2)3-6(12) mm long; rames (0.5)1.9-3.3(4.4) cm long … A. virginicus
15. Leaf sheaths usually smooth; ligules ciliate, the cilia 0.2-0.9 mm long; sheaths subtending the inflorescence units 1.5-3 mm wide; … A. tenuispatheum
15. Leaf sheaths often scabrous; ligules, when ciliate, with the cilia no more than 0.5 mm long; sheaths subtending the inflorescence units (1.5)2.3-3.4(4.4) mm wide [16]
16. Leaves usually glabrate to sparsely pilose; upper portion of the plants oblong to obpyramidal; mature peduncles (4)11-35(60) mm long; anthers eventually falling … A. glomeratus
16. Leaves densely villous; upper portion of the plants cylindrical to oblong; mature peduncles 2-5 (8) mm long; withered remnants of anthers retained within the spikelets … A. hirsutior

Anatherum arctatum (Chapm.)Voronts. & E.A. Kellogg {AFP} — ST.
*****Anatherum bicorne*** (L.)P. Beauv. {AFP} —
Anatherum brachystachyum (Chapm.)Roberty {AFP} —
Anatherum cabinisii (Hack.)Voronts. & E.A. Kellogg — Fernald & Griscom (1935) state "We are unable, also, to keep apart as a species *A. Cabainisii* Hack. Numerous specimens are transitional from true *A. Cabanisii* to *A. ternarius*".
Anatherum campbellii (U.B. Deshmukh, M.B. Shende, & E.S. Reddy)E.L. Bridges & Orzell {AFP} —
Anatherum capillipes (Nash)Voronts. & E.A. Kellogg {AFP} —
Anatherum cretaceum (Weakley & Schori)Weakley & Schori {AFP} —
•***Anatherum cumulicolum*** (E.L.Bridges & Orzell)Voronts. & E.A. Kellogg {AFP} —
Anatherum dealbatum (C. Mohr. ex Hack.)Weakley & LeBlond —
Anatherum floridanum (Scribn.)Voronts. & E.A. Kellogg {AFP} —
Anatherum glaucescens (Kunth)Voronts. & E.A. Kellogg —
Anatherum glomeratum (Walter) Voronts. & E.A. Kellogg {AFP} —
Anatherum hirsutius (Hack.)Weakley & LeBlond {AFP} —
Anatherum gyrans (Ashe) Voronts. & E.A. Kellogg {AFP} —
Anatherum longiberbe (Hack.)Voronts. & E.A. Kellogg {AFP} —
•***Anatherum miamiense*** (E.L. Bridges & Orzell)Voronts. & E.A. Kellogg —
Anatherum mohrii (Hack.)Voronts. & E.A. Kellogg {AFP} —
Anatherum perangustatum (Nash)Voronts. & E.A. Kellogg {AFP} —
Anatherum subtile Budach & E.L. Bridges — The type specimen is from Highlands Co. No other specimens were cited but it is said to be elsewhere, "with most records from Florida and only a few confirmed records from Alabama, Georgia, and Louisiana." (Budach & Bridges in Weakley et al. 2023).
Anatherum tenuispatheum (Nash)Sorrie & Weakley {AFP} —
Anatherum ternarium (Michx.)Voronts. & E.A. Kellogg {AFP} —
Anatherum tracyi (Nash)Voronts. & E.A. Kellogg {AFP} —
Anatherum virginicum (L.) Voronts. & E.A. Kellogg {AFP} —

Andropogon

1. Cespitose; pedicellate spikelets usually vestigial or absent, or occasionally well-developed and staminate in terminal spikelet units; sessile spikelets 2.6-8.4 mm long (formerly Andropogon sect. Leptopogon) … Anatherum
1. Rhizomes sometimes present; pedicellate spikelets usually well-developed, (3.5)6-12 mm long, usually staminate; sessile spikelets 5-12 mm long … A. gerardi

Andropogon gerardi Vitman {AFP} — Panhandle, north peninsula (to Canada & Central America).

Anthenantia

1. Leaves 10-60 cm long, blades 2-5 mm wide, margins scabrous, the blade base underside appearing confluent with the sheath … A. rufa
1. Leaves 10-30 cm long, blades 5-10 mm wide, margins papillose-hispid, the blade base bent from the sheath and of a light color … A. villosa

Anthenantia rufa (Nutt.)Schult. {AFP} —

Anthenantia villosa (Michx.) P.Beauv. {AFP} —

Anthephora

****Anthephora hermaphrodita*** (L.)Kuntze {AFP} —

Anthoxanthum

****Anthoxanthum aristatum*** Boiss. {AFP} —

Aristida

1. Lower glume with 3-7 veins [2]
1. Lower glume with 1-2(3) veins [3]
2. Upper glume awn (7)11-20(24) mm long; lemma central and lateral awns subequal, (8)12-65(70) mm long … A. oligantha
2. Upper glume awn 3-7 mm long; lemma lateral awns 1-4 mm long, the central awn 12-25 mm long … A. ramosissima
3. Lemma central awn spirally coiled at base [4]
3. Lemma central awn straight to curved (if coiled, then awns joined to form a column) [5]
4. Glumes unequal, lower 5-8(10) mm long, upper 7-13 mm long; lemmas smooth to scabridulous, 6-11 mm long … A. dichotoma var. curtissii
4. Glumes subequal, lower 3-6 mm long, upper 4-7 mm long; lemmas sparsely appressed-pubescent, 3-8 mm long … A. dichotoma var. dichotoma
5. Lemma lateral awns absent or to 1 mm long (central awn 10-25 mm long); inflorescence 5-25 cm wide … A. floridana
5. Lemma lateral awns 3-140 mm long (if absent, inflorescence 1-6 cm wide) [6]
6. Inflorescence nodes and usually leaf sheaths lanose-floccose … A. lanosa
6. Inflorescence nodes and leaf sheaths glabrous to sparsely pilose [7]
7. Leaf blade tightly involute, pilose on outer surface and often the region near ligule; generally flowering only after fire (burnt culms usually present) … A. stricta var. beyrichiana
7. Leaf blade flat, folded, or involute and glabrate; flowering without fire or after fire [8]
8. Inflorescence densely spiciform, branches appressed, spikelets congested; upper glumes awned, the awns 10-12 mm long; lemmas terminating in a beak 7-30 mm long … A. spiciformis
8. Inflorescence loosely racemiform, paniculiform, or racemiform, branches spreading to appressed, spikelets relatively well spaced; upper glumes unawned or with an awn to 6 mm long; lemmas not beaked or with a beak less than 7 mm long [9]
9. Lemma awns clearly jointed with the lemma blade, the awns disarticulating … A. tuberculosa
9. Lemma awns confluent with the lemma blade [10]
10. Inflorescence 15-25 cm wide, the branches base with pulvini, the branches mostly widely spreading to drooping … A. patula
10. Inflorescence 2-12 cm wide, the branches without pulvini (rarely present in A. purpurea), appressed, ascending, to spreading or drooping [11]
11. Rhizomatous and densely cespitose; basal leaf sheaths becoming fibrous with age … A. rhizomophora
11. Cespitose, without rhizomes; basal leaf sheaths mostly remaining intact or flaking [12]
12. Inflorescence unbranched, the nodes with a single spikelet … A. mohrii
12. Inflorescence nodes with branches or multiple spikelets [13]
13. Glumes unequal, lower 4-12 mm long, upper 7-25 mm long [14]
13. Glumes subequal or the lower longer, 2-11 mm long [15]

14. Lower glume 6-9(11) mm long, upper glume 9-12 mm long; lemmas 5-7 mm long, awns 8-15 mm long; callus 1-2 mm long … A. gyrans
14. Lower glume 4-12 mm long, upper glume 7-25 mm long; lemmas 6-16 mm long, awns (8)15-140 mm long; callus 0.5-1.8 mm long … A. purpurea
15. Lower glume strongly 2-keeled, (7.5)9-13 mm long; central awns 15-40 mm long … A. palustris
15. Lower glume 1-keeled (if 2-keeled, 5-10 mm long); central awns 8-25(27) mm long [16]
16. Lemma awns divergent to reflexed, contorted at base, central awns ca. twice as thick as lateral awns, divergent to arcuate-reflexed … A. simpliciflora
16. Lemma awns mostly erect to ascending, not contorted at base, central and lateral subequal in thickness or central ca. twice as thick but not contorted [17]
17. Culms 3-6 mm wide at base; primary inflorescence branches 4-20 cm long; lower glume 1-veined; callus 1-2 mm long … A. condensata
17. Culms 1-4 mm wide at base; primary inflorescence branches 1-5 cm long; lower glume with 1-2 veins; callus 0.4-0.8 mm long [18]
18. Annual; internodes mostly longer than the leaf sheaths; ligules ca. 0.5 mm long; leaf blades 5-14 cm long, 1-2 mm wide; inflorescence 6-22 cm long [19]
18. Perennial; internodes mostly shorter than the leaf sheaths; ligules ca. 0.2 mm long; leaf blades 10-25 cm long, 1-3 mm wide; inflorescence (15)20-55 cm long [20]
19. Lemma central awns 8-27 mm long, lateral awns (1)6-18 mm long … A. longespica var. geniculata
19. Lemma central awns 1-10(14) mm long, lateral awns absent or to 5(8) mm long … A. longespica var. longespica
20. Central awns divaricate to reflexed, ca. twice as thick at the base as the lateral awns … A. purpurascens var. virgata
20. Central and lateral awns divergent, subequal in thickness at the base [21]
21. Leaf blades 1-3 mm wide, often curling; glumes unequal, lower 6-10 mm long, upper 5-8 mm long; lemma awns straight or only slightly contorted at the base; … A. purpurascens var. purpurascens
21. Leaf blades 1(-1.5) mm wide, usually not curling; glumes subequal, 8-9 mm long; lemma awns spirally contorted at the base; … A. purpurascens var. tenuispica

Aristida condensata Chapm. {AFP} —
Aristida dichotoma Michx. var. ***curtissii*** A.Gray ex S.Watson & J.M.Coult. {AFP} —
Aristida dichotoma Michx. var. ***dichotoma*** {AFP} —
Aristida floridana (Chapm.)Vasey {AFP} —
Aristida gyrans Chapm. {AFP} —
Aristida lanosa Muhl. ex Elliott {AFP} —
Aristida longespica Poir. var. ***geniculata*** (Raf.)Fernald {AFP} —
Aristida longespica Poir. var. ***longespica*** {AFP} —
Aristida mohrii Nash {AFP} —
Aristida oligantha Michx. {AFP} —
Aristida palustris (Chapm.)Vasey {AFP} —
•***Aristida patula*** Chapm. ex Nash {AFP} —
Aristida purpurascens Poir. var. ***purpurascens*** {AFP} —
Aristida purpurascens Poir. var. ***tenuispica*** (Hitchc.)Allred {AFP} —
Aristida purpurascens Poir. var. ***virgata*** (Trin.)Allred {AFP} —
*****Aristida purpurea*** Nutt. {AFP} —
Aristida ramosissima Engelm. ex A.Gray {AFP} —

•***Aristida rhizomophora*** Swallen {AFP} —
Aristida simpliciflora Chapm. {AFP} —
Aristida spiciformis Elliott {AFP} —
Aristida stricta Michx. var. ***beyrichiana*** (Trin.)D.B.Ward {AFP} — Treated as a species by Peet (1993). According to Kesler et al. (2003), 17% of *stricta* s.str. specimens were bearded (dense woolly indumentum abaxially around base of leaf blade) and 63% were conspicuously tufted (hairs at collar corners near ligule), and differences in glume lengths were not significant, contrary to Peet (1993). Relationships among populations have been studied via allozymes (Walters et al. 1994) and ISSR (Sharma et al. 2011).
Aristida tuberculosa Nutt. {AFP} —

Arthraxon
*****Arthraxon hispidus*** (Thunb.)Makino {AFP} —

Arundinaria: The distinctive peripheral air canals of *A. tecta* were emphasized by McClure (1963, 1973). Marsh (1977) was unsuccessful at inducing air canals in waterlogged conditions for *A. gigantea*.
1. Rhizome horizontal (rarely upturned to terminate in a culm), solid or hollow-centered, without air canals; culms 2-8 m tall, to 3 cm wide; primary branches to 25 cm long, with 0-1 compressed basal internodes; culm internodes usually sulcate; culm leaves deciduous … A. gigantea
1. Rhizome shortly horizontal, then upturned terminating in a culm, hollow-centered, the periphery with air canals (ca. 0.5-1 mm wide); culms 1-2.5(3) m tall, to 2 cm wide; primary branches (25)50-80 cm long, with 2-5 compressed basal internodes; culm internodes usually terete; culm leaves persistent to tardily deciduous … A. tecta

Arundinaria gigantea (Walter)Muhl. {AFP} —
Arundinaria tecta (Walter)Muhl.

Arundo
*****Arundo donax*** L. {AFP} —

Avena
^*Avena fatua* L. var. *sativa* (L.)Hausskn. {AFP} —

Axonopus
1. Leaf blades 1.5-6 mm wide; spikelets 1.6-2.2(2.8) mm long, upper glume (lower absent) and lower lemma sparsely pilose, 2-veined … A. fissifolius
1. Leaf blades 2-20 mm wide; spikelets 2-5.5 mm long, glume and lower lemma glabrous to sparsely pilose, with 2-7 veins [2]
2. Spikelets 2-3.5 mm long; glume and lower lemma sparsely pilose, with 2-5 veins … A. compressus
2. Spikelets 3.5-5.5 mm long; glume glabrous, lower lemma glabrous to sparsely pilose, with 5-7 veins … A. furcatus

Axonopus compressus (Sw.)P.Beauv. {AFP} —
Axonopus fissifolius (Raddi)Kuhlm. {AFP} —
Axonopus furcatus (Flüggé)Hitchc. {AFP} —

Bambusa
1. Branchlets of the lower branches perpendicular and recurved, hardened, thorn-like, lacking foliage leaves (subg. Bambusa) [2]
1. Branchlets of the lower branches bearing foliage leaves, not thornlike [2]
2. Culm leaf blade adaxially sparsely puberulous to glabrous ... B. balcooa
2. Culm leaf blade adaxially densely pubescent ... B. bambos
3. Culm leaf auricles absent or poorly developed [4]
3. Culm leaf auricles well developed, 1.5-5 cm long, 0.4-1.5 cm wide [5]
4. Culms 6-15 m tall, erect; culm internodes glabrous; culm leaf auricles small, rounded, ciliate; foliage leaf blades abaxially pubescent initially, becoming glabrous, adaxially glabrous (subg. Dendrocalamopsis) ... B. oldhamii
4. Culms 1-7 m tall, broadly arching distally; culm internodes antrorsely hispid; culm leaf auricles very small or inconspicuous; foliage leaf blades abaxially densely pubescent, adaxially glabrous ... B. multiplex
5. Culm leaf sheath with stiff, dark brown hairs, the auricles subequal; foliage leaf blades glabrous on both surfaces ... B. vulgaris
5. Culm leaf sheath glabrous or with stiff, brown hairs, the auricles unequal, the larger one to 2 times as large as smaller one; foliage leaf blades abaxially densely pubescent, adaxially glabrous or sparsely pilose near base [6]
6. Culm leaf sheath glabrous or with stiff, brown hairs, larger auricle narrowly oblong to lanceolate, ca. 1.5 cm long, 0.4-0.5 cm wide ... B. textilis
6. Culm leaf sheath glabrous, larger auricle ovate to ovate-elliptic, ca. 2.5 cm long, 1-1.4 cm wide ... B. tuldoides

****Bambusa multiplex*** (Lour.)Raeusch. ex Schult. & Schult.f. {AFP} —
^*Bambusa oldhamii* Munro —
^*Bambusa vulgaris* Schrad. ex J.C.Wendl. {AFP} —

Bothriochloa
1. Sessile spikelet 4.5-7.3 mm long, pedicellate spikelet 3-4 mm long ... B. barbinodis
1. Sessile spikelet 2.5-4.5 mm long, pedicellate spikelet 1.5-4.5 mm long [2]
2. Panicle with 10-20 branches, the primary rachis longer than the branches [3]
2. Panicel with 1-8 branches, the primary rachis shorter than the branches [4]
3. Panicles reddish when mature; hairs below the sessile spikelets about 1/4 as long as the spikelets, sparse, not obscuring the spikelets ... B. bladhii
3. Panicles silvery-white or light tan; hairs below the sessile spikelets at least 1/2 as long as the spikelets, copious, at least somewhat obscuring the spikelets ... B. laguroides subsp. torreyana
4. Lower glumes of sessile spikelet without a glandular pit ... B. ischaemum var. songarica
4. Lower glumes of sessile spikelet with a conspicuous glandular pit ... B. pertusa

****Bothriochloa barbinodis*** (Lag.)Herter {AFP} —
****Bothriochloa bladhii*** (Retz.)S.T.Blake {AFP} —
****Bothriochloa ischaemum*** (L.)Keng var. ***songarica*** (Rupr. ex Fisch. & C.A.Mey.)Celarier & J.R.Harlan {AFP} —
Bothriochloa laguroides (DC.)Herter subsp. ***torreyana*** (Steud.)Allred & Gould {AFP} —
****Bothriochloa pertusa*** (L.)A.Camus {AFP} —

Bouteloua
1. Culms 1-15(30) cm long; leaf blades 1-10 cm long; spikelets 2.8-4 mm long, glabrous; florets unisexual ... B. dimorpha
1. Culms (8)10-80 cm long; leaf blades 1-30 cm long; spikelets 4-8 mm long, glabrous or pubescent; florets bisexual [2]
2. Inflorescence branches (12)30-80, each disarticulating as a whole and with (1)2-7(15) spikelets ... B. curtipendula
2. Inflorescence branches 1-6, each with 20-50 spikelets, disarticulation above the glumes ... B. hirsuta

*****Bouteloua curtipendula*** (Michx.)Torr. {AFP} —
*****Bouteloua dimorpha*** Columbus {AFP} —
Bouteloua hirsuta Lag. {AFP} —

Brachyelytrum
Brachyelytrum erectum (Schreb. ex Spreng.)P.Beauv. {AFP} —

Briza
1. Spikelets 10-20 mm long, lower glume 5-6 mm long, upper glume 6-7 mm long, proximal lemmas 7-9 mm long and villous distally ... B. maxima
1. Spikelets 2-7 mm long, lower glume 2-3 mm long, upper glume 2-4 mm long, proximal lemmas 1-2 mm long and glabrous to minutely scurfy ... B. minor

*****Briza maxima*** L. {AFP} —
*****Briza minor*** L. {AFP} —

Bromus
1. Spkelets strongly laterally compressed; lower glume with 5-7(9) veins; lemma strongly keeled, awns absent or to 3.5 mm long; leaf sheath densely hairy ... B. catharticus
1. Spikelets terete to slightly compressed; lower glume with 1-5 veins; lemma rounded, the awns absent or 1-13 mm long; leaf sheath hairy or glabrous [2]
2. Lower leaf sheaths glabrous or glabrate; lemmas 6.5-8.5(10) mm long ... B. secalinus
2. Lower leaf sheaths uniformly hairy; lemmas 7-12 mm long
3. Lower glume with 1 vein [4]
3. Lower glume with 3-5 veins [5]
4. Perennial; lemma awns (3)4-7(8) mm long, arising <1.5 mm below lemma tip ... B. pubescens
4. Annual; lemma awns 10-18 mm long, arising 1.5 mm or more below lemma tip ... B. tectorum
5. Lemma 8-12 mm long, 1.7-2.6 mm wide, awns 3-10 mm long, straight, arising <1.5 mm below lemma tip ... B. commutatus
5. Lemma 7-9 mm long, 1.2-2.2 mm wide, awns 8-13 mm long, divergent to erect, arising >1.5 mm below lemma tip ... B. japonicus

*****Bromus catharticus*** Vahl {AFP} —
*****Bromus commutatus*** Schrad. {AFP} —
*****Bromus japonicus*** Thunb. {AFP} —
Bromus pubescens Spreng. {AFP} —
*****Bromus secalinus*** L. {AFP} —
*****Bromus tectorum*** L. {AFP} —

Cenchrus

1. Spikelets subtended by hardened, retrorsely scabrid, spinose bristles; plants <1 m tall [2]
1. Spikletes subtended by soft, plumose or antrorsely scabrid bristles (if spinose, then antrorsely scabrid); plants 0.5-8 m tall (former Pennisetum) [8]
2. Bristles all terete ... C. myosuroides
2. Inner bristles flattened, at least at the base [3]
3. Outer bristles terete, slender, acicular, whorled, in a ring, or in an arc [4]
3. All bristles flattened (sometimes a few smaller, basal ones terete, these not in a whorl or ring) [5]
4. Rachis internodes 0.8-1.7 mm long; most outer bristles subequal to slightly exceeding the inner ones; mature bur body 2.7-4.2 mm wide (excluding bristles), 4-5.3 mm long ... C. brownii
4. Rachis internodes (0.8)1.3-4 mm long; most outer bristles reaching near the middle of the inner ones; mature bur body 4.1-6.3 mm wide (excluding bristles), 5.3-8 mm long ... C. echinatus
5. Leaf blades 1-3.5 mm wide; rachis internodes 2-4 mm long; spikelet glabrate ... C. gracillimus
5. Leaf blades (1)3-14.2 mm wide; rachis internodes <2 mm long; spikelet pubescent, sometimes glabrate [6]
6. Fascicles with 45-75 bristles, the innner 0.5-0.9(1.4) mm wide at base ... C. longispinus
6. Fascicles with 8-43 brisltes, the innter 1-3 mm wide at base [7]
7. Fascicles 5.5-10.2 mm long, 2.5-5 mm wide, glabrate to moderately pubescent; inner bristles 2-5.8 mm long ... C. spinifex
7. Fascicles 9-16 mm long, 4-8 mm wide, densely pubescent, the inner bristles 4-8 mm long ... C. tribuloides
8. Leaf blades 2-3.5 mm wide, folded or involute ... C. setaceus
8. Leaf blades (2)3.5-12 mm wide, flat [9]
9. Panicles 4-200 cm long; fascicles not disarticulating from the rachis; bristles subequal to the spikelets, to 6 mm long; upper lemma margins pubescent; caryopses protruding from the florets at maturity ... C. americanus
9. Panicles 2-37.5 cm long; fascicles disarticulating from the rachis at maturity; some bristles longer than the spikelets, to 35 mm long; upper lemma margins glabrous; caryopses concealed by the lemmas and paleas at maturity [10]
10. Upper lemma smooth, lustrous, differentiated from the lower lemma; upper florets disarticulating [11]
10. Upper and lower lemma similar; upper florets not disarticulating [12]
11. Spikes terminal and axillary; fascicles with 40-90 long-ciliate inner bristles and 10-20 scabrous outer bristles; fascicle axes 1.5-2.5 mm long; spikelets pedicellate, pedicels 1-3.5 mm long ... C. pedicellatus
11. Spikes terminal; fascicles with 6-14 long-ciliate inner bristles and 13-30 scabrous outer bristles; fascicle axes 0.2-0.5 mm long; spikelets sessile ... C. setosus
12. Lower portion of the rachises scabrous; inner bristles fused at the base ... C. ciliaris
12. Lower portion of the rachises pubescent; inner bristles not fused [14]
13. Culms 0.5-1.5 m tall, internodes not glaucous; leaf blades 6-11 mm wide, usually reddish or purplish; lower glume 0.5-1 mm long ... C. cupreus
13. Culms (1)2-8 m tall, internodes often partly glaucous; leaf blades (4)12-40 mm wide, usually green; lower glume 0-0.3 mm long ... C. purpureus

****Cenchrus americanus*** (L.)Morrone {AFP} —
Cenchrus brownii Roem. & Schult. {AFP} —
****Cenchrus ciliaris*** L. {AFP} —

^*Cenchrus cupreus* (Thorpe)Govaerts {AFP} —
Cenchrus echinatus L. {AFP} —
Cenchrus gracillimus Nash {AFP} —
Cenchrus myosuroides Kunth {AFP} —
*****Cenchrus pedicellatus*** (Trin.)Morrone {AFP} —
*****Cenchrus setosus*** Sw. {AFP} — Once recognized as *P. polystachion*, it appears that name was misapplied (Veldkamp 2014; Jarvis, Linnaean Typification Project).
*****Cenchrus purpureus*** (Schumach.)Morrone {AFP} — The blade channeled along midrib basally, midrib becoming conspicuous on older leaves, barely auriculate-clasping at base; nodes hairy; stems glaucous helps to distinguish this species from other tall grasses.
*****Cenchrus setaceus*** (Forssk.)Morrone {AFP} —
Cenchrus spinifex Cav. {AFP} —
Cenchrus tribuloides L. {AFP} —

Chasmanthium

1. Inflorescence branches lax, drooping; pedicels 10-30 mm long; lower glumes 4.2-9.1 mm long; callus pilose; fertile lemma keel wing scabrous to pilose throughout; caryopses 2.9-5 mm long … C. latifolium
1. Inflorescence branches spreading, ascending to erect, generally stiff; pedicels 0.5-5 mm long; lower glumes 1.2-5 mm long; callus glabrous; fertile lemma keel not winged, scabridulous only near the apex; caryopses 1.9-3 mm long [2]
2. Culms leafy in proximal half; leaf blades (8)20-50 cm long; inflorescence branches mostly appressed; spikelets 4-10 mm long; fertile lemma with 3-9 veins; lemman and palea spreading open, exposing the caryopses [3]
2. Culms leafy nearly throughout; leaf blades 7-16(33) cm long; inflorescence branches mostly ascending to spreading; spikelets 9.5-24 mm long; fertile lemma with 9-13 veins; lemma and palea closely imbricate, concealing the caryopses [4]
3. Culm nodes to 1 mm wide; leaf sheath and collar glabrous; fertile lemma straight, with 3-7 veins … C. laxum
3. Culm nodes (1)2-3.5 mm wide; leaf sheath and collar pilose; fertile lemma usually curved or irregularly contorted, with 7-9 veins … C. sessiliflorum
4. Culm nodes often dark purple to blackish; ligules entire; inflorescence branch axils scabrous; fertile floret ascending from the rachilla; sterile florets (0)1(2); lower glumes 3.1-5 mm long … C. nitidum
4. Culm nodes mostly light brown; ligules irregularly laciniate; inflorescence branch axils pilose; fertile floret diverging-spreading from the rachilla; sterile florets 2-4; lower glumes 2.5-2.9 mm long, with 2-3 veins … C. ornithorhynchum

Chasmanthium latifolium (Michx.)H.O.Yates {AFP} —
Chasmanthium laxum (L.)H.O.Yates {AFP} —
Chasmanthium nitidum (Baldwin)H.O.Yates {AFP} —
Chasmanthium ornithorhynchum (Steud.)H.O.Yates {AFP} —
Chasmanthium sessiliflorum (Poir.)H.O.Yates {AFP} —

Chloris: The glumes generally lack awns, only having a pointed apex. The shorter lower glume is sometimes appressed to the rachis and nearly hidden. The lowermost lemmas usually all have conspicuous awns and the paleas are delicate, thin, and included. The second lemma

(floret) is typically subtended by a prolonged rachilla segment, with additional lemmas (floret) subtended by progressively shorter rachillae.

1. Lower glume 0.5-0.7 mm long; upper glume 1-1.5 mm long; proximalmost lemma awn 0.3-1.5 mm long ... C. cucullata
1. Lower glume 0.7-2.8 mm long; upper glume 1.9-4.3 mm long; proximalmost lemma awn 1.4-15 mm long [2]
2. Second floret 1.4-3.2 mm long [3]
2. Second floret 0.4-1.6 mm long [4]
3. Stoloniferous perennial; panicle branches 8-20 cm long; spikelets with 1 fertile floret and (1)2-4 staminate or sterile florets; third floret longer than subtending rachilla segment ... C. gayana
3. Usually a cespitose annual, sometimes stoloniferous; panicle branches 5-10 cm long; spikelets with 1 fertile floret and 1(-3) sterile florets; third floret absent or shorter than subtending rachilla segment ... C. virgata
4. Cespitose annual; spikelets with 1 fertile floret and 1 sterile floret; proximalmost lemma awn 6-13 mm long; second floret 0.4-0.7 mm long ... C. radiata
4. Cespitose annual or perennial; spikelets with 1 fertile floret and (1)2(3) sterile florets; proximalmost lemma awn 1.4-7.7 mm long; second floret 0.9-1.6 mm long [5]
5. Cespitose annual, frequently stoloniferous; inflorescence branches 3-8 cm long, generally straight; first lemma awn 4-7.7 mm long and marginal hairs to 1 mm long; distal lemmas broadly convex and apically truncate, dissimilar from first lemma ... C. barbata
5. Cespitose perennial, rarely stoloniferous; inflorescence branches (5)8-20 cm long, often lax and curvaceous, sometimes somewhat straight; first lemma awn 1.4-4.8 mm long and marginal hairs 1-3 mm long; distal lemmas similar to first lemma, but shorter, not broadly convex or only partly at the apex ... Stapfochloa elata

*****Chloris barbata*** Sw. {AFP} —
*****Chloris cucullata*** Bischoff {AFP} —
*****Chloris gayana*** Kunth {AFP} —
*****Chloris radiata*** (L.)Sw. {AFP} —
*****Chloris virgata*** Sw. {AFP} —

Chrysopogon
1. Upper lemma of sessile spikelet unawned, or awns to 0.8 cm long; pedicellate spikelet 2.5-8 mm long [2]
1. Upper lemma of sessile spikelet with awns 2-16 cm long; pedicellate spikelet 2.5-15 mm long [3]
2. Stoloniferous; callus of sessile spikelets 3-6.4 mm long, sharp, with golden-yellow hairs ... C. aciculatus
2. Cespitose; calluses of sessile spikelets 0.6-0.8 mm long, rounded, with white hairs ... C. zizanioides
3. Sessile spikelets 3.5-5(8) mm long, callus 0.7-1.5 mm long; upper lemma awn 2-3 cm long; pedicellate spikelets 7-15 mm long ... C. fulvus
3. Sessile spikelets 8-10 mm long, callus ca. 7 mm long; upper lemma awn 10-16 cm long; pedicellate spikelets 7-15 mm long ... C. pauciflorus

*****Chrysopogon aciculatus*** (Retz.)Trin. {AFP} —

*****Chrysopogon fulvus*** (Spreng.)Chiov. {AFP} —
Chrysopogon pauciflorus (Chapm.)Benth. ex Vasey {AFP} —

Coelorachis

1. Culms and sheaths terete; sessile spikelet lower glumes with pits along the veins, medially smooth or with rectangular pits … C. cylindrica
1. Culms and sheaths flattened and keeled; sessile spikelet lower glumes smooth, rugose, or with ridges or rectangular pits [2]
2. Spikelets 2.1-2.4 mm wide; sessile spikelet lower glumes with rectangular pits … C. tessellata
2. Spikelets 1.3-2 mm wide; sessile spikelet lower glume rugose or smooth [3]
3. Rachis distinctly indented below sessile spikelets; sessile spikelet lower glume conspicuously transversely rugose … C. rugosa
3. Rachis not indented below sessile spikelets or only slightly so; sessile spikelet lower glume smooth to lightly transversely rugose … C. tuberculosa

Coelorachis cylindrica (Michx.)Nash {AFP} —
Coelorachis rugosa (Nutt.)Nash {AFP} —
Coelorachis tessellata (Steud.)Nash {AFP} —
Coelorachis tuberculosa (Nash)Nash {AFP} — ST.

Coleataenia

1. Leaf sheath broad, relatively even width from base to apex, the apex truncate to auriculate and the sheath margin extended 1-3 mm in width from the blade, the sheath much wider than the blade, the blade 1.5-2.5 mm wide; with creeping rhizomes … C. abscissa
1. Leaf sheath relatively narrow, tapered or not, the apex not auriculate, the sheath margin not extended or only slightly extended (<0.6 mm) from the blade, the sheath subequal to slightly wider than the blade, the blade 1.5-12 mm wide; cespitose or with creeping rhizomes [2]
2. Leaf blades 1.5-4 mm wide, usually involute; glumes and lower lemmas without keeled midveins; upper florets with glabrous apices; panicles with appressed branches, relatively few spikelets; with short-creeping, knotty rhizomes, sometimes appearing nearly cespitose … C. tenera
2. Leaf baldes 2-12 mm wide, involute or not; glumes and lower lemmas with keeled midveins; upper florets with a tuft of small hairs at the apices; panicles appressed to spreading branches, with relatively many spikelets; cespitose or with scaly rhizomes [3]
3. Plants with conspicuous, elongate, scaly rhizomes; ligule membranous with scabrous edge, cilia <0.1 mm long; spikelets 2.3-3.9 mm long, rarely lanceolate, often falcate … C. anceps
3. Plants cespitose, lacking conspicuous rhizomes; ligule membranous or ciliate; spikelets usually 1.6-3.8 mm long, lanceolate, not falcate [4]
4. Blades usually 2-7 mm wide; ligule ciliate, the cilia 0.5-3 mm long [5]
4. Blades usually 5-12 mm wide; ligule membranous with scabrous edge, cilia <0.1 mm long [6]
5. Spikelets 2-2.7 mm long, green or purplish-stained, often obliquely set on the pedicels … C. longifolia subsp. longifolia
5. Spikelets 2.6-3.8 mm long, usually purple, slender, erect on the pedicels … C. longifolia subsp. combsii
6. Spikelets 2.4-3 mm long, usually <0.7 mm wide, fruit stipitate … C. rigidula subsp. elongata
6. Spikelets 1.6-2.5 mm long, usually >0.6 mm wide, fruit not or slightly stipitate [7]
7. Lower inflorescence branches ascending to erect; spikelets 1.9-2.5 mm long … C. rigidula subsp. condensa

7. Lower inflrorescence branches ascending to spreading; spikelets 1.6-2.3 mm long … C. rigidula subsp. rigidula

•***Coleataenia abscissa*** (Swallen)LeBlond {AFP} — SE.
Coleataenia anceps (Michx.)Soreng {AFP} —
Coleataenia longifolia (Torr.)Soreng {AFP} —
Coleataenia rigidula (Bosc ex Nees)LeBlond {AFP} —
Coleataenia tenera (Beyrich ex Trin.)Soreng {AFP} —

Cortaderia
****Cortaderia selloana*** (Schult. & Schult.f.)Asch. & Graebn. {AFP} —

Ctenium
1. Rhizomes absent; upper glume with a row of prominent glands on each side of midrib, the glume awn diverging at maturity … C. aromaticum
1. Rhizomes scaly; upper glume eglandular or glands few, inconspicuous, glume awn straight to ascending … C. floridanum

Ctenium aromaticum (Walter)A.W.Wood {AFP} —
Ctenium floridanum (Hitchc.)Hitchc. {AFP} — SE.

Cymbopogon
1. Pedicel margin pilose, adaxially glabrous; ligules 3-6 mm long; lower glume keels of sessile spikelets narrowly winged; citronella … C. nardus
1. Pedicel margin pilose, adaxially pilose; ligule and glume keel various [2]
2. Ligules 0.5-2 mm long; leaf blades green; lower glumes of the sessile spikelets flat above, the keels narrowly winged; lemongrass … C. citratus
2. Ligules 2-6 mm long; leaf blades whitish; lower glumes of the sessile spikelets shallowly concave distally, the keels not winged … C. jwarancusa

^*Cymbopogon citratus* (DC. ex Nees)Stapf {AFP} —
^*Cymbopogon jwarancusa* (Jones)Schult. {AFP} —
^*Cymbopogon nardus* (L.)Rendle {AFP} —

Cynodon: A stout, somewhat woody species, *C. aethiopicus* Clayton & J.R. Harlan, has supposedly been grown in Florida (Barkworth 2003).

1. Plant with subterranean rhizomes and surface stolons; larger main stems 0.5-1 mm wide; racemes straight and stiff, <5.5 cm long … C. dactylon
1. Plant with surface stolons, without rhizomes; larger main stems 2-3 mm wide; racemes typically lax and curvaceous, >4.5 cm long … C. nlemfuensis

****Cynodon dactylon*** (L.)Pers. {AFP} —
****Cynodon nlemfuensis*** Vanderyst {AFP} —

Dactylis
****Dactylis glomerata*** L. {AFP} —

Dactyloctenium

1. Caryopses transversely rugose, with distinct ridges … D. aegyptium
1. Caryopses transversely granular or papillate … D. ctenoides

**Dactyloctenium aegyptium* (L.)Willd. {AFP} —
**Dactyloctenium ctenoides* (Steud.)J.W. Lorch ex Bosser — Reported for Florida (Langde et al. 2025).

Danthonia

1. Leaf sheaths usually villous, occasionally glabrate; glumes 14-18 mm long; lemma margin hairs 2.5-4 mm long; lemma awns 10-17 mm long … D. sericea
1. Leaf sheaths glabrous or pilose at base; glumes 7-10 mm long; lemma hairs 0.5-2 mm long, awns 2-8 mm long … D. spicata

Danthonia sericea Nutt. {AFP} —
Danthonia spicata (L.)P.Beauv. ex Roem. & Schult. {AFP} —

Desmazeria

**Desmazeria rigida* (L.)Tutin {AFP} —

Dichanthelium

1. Plant rather low, with numerous basal spreading or sprawling branches and leaves, the inflorescence often not exceeding or only slightly exceeding the leaves … Key A
1. Plant usually elongate and erect, unbranched or some branches cauline, with numerous cauline leaves, the inflorescence exserted or not [2]
2. Ligules (or pseudoligule) of hairs 1-5 mm long, at least some hairs 2-5 mm long … Key B
2. Ligules (or pseudoligule) membranous or of hairs to 1.8(2) mm long [3]
3. Leaf sheaths mottled, sometimes viscid; culm stout 2-6 mm wide … Key C
3. Leaf sheaths not mottled (if mottled, culm slender, 0.3-2 mm wide) [4]
4. Leaf blades rounded-cordate at the base, the blade base abruptly contracted to the sheath (erectifolium-commutatum group) … Key D
4. Leaf blades generally cuneate at the base, gradually narrowed to the sheath [5]
5. Distal internodes greatly elongated, the leaves nearly all in the basal part, mostly with only a solitary leaf (often reduced in size) somewhat midway between the basal leaves and the inflorescence … D. nudicaule
5. Distal internodes subequal to proximal ones, the leaves usually well developed throughout the culm below the inflorescence [6]
6. Lower glumes thinner and more weakly veined than the upper glumes, attached 0.1-0.5 mm below the upper glumes, the bases clasping the pedicels; spikelets attenuate basally [7]
6. Lower glumes similar in texture and vein prominence to the upper glumes, attached immediately below the upper glumes, the bases not clasping the pedicels; spikelets usually not attenuate basally [9]
7. Culm leaf blades 2-7 cm long, 7-12 times as long as wide, not or slightly involute, spreading, without raised veins, not longitudinally wrinkled; spikelets obovoid-obpyriform, planoconvex in side view (lancearium group) … Key E
7. Culm leaf blades 4-16 cm long, 15-50 times as long as wide, or involute, stiffly erect or ascending, with prominently raised veins, the lower blades usually longitudinally wrinkled; spikelets ellipsoid to obovoid, biconvex in side view [8]

8. Culm internodes and nodes, and spikelets densely villous or densely pubescent … D. consanguineum
8. Culm internodes and nodes, and spikelets glabrous to moderately pubescent (aciculare group) … Key F
9. Culms 5-40(55) cm tall, delicate, 0.2-0.8(1.6) mm wide; spikelets 1.1-1.7 mm long; larger leaf blades 1.5-6 cm long, 1.5-6 mm wide (ensifolium group) … Key G
9. Culms (18)40-100 cm tall, rarely delicate, (0.8)1-2 mm wide; spikelets 1.5-2.7 mm long; larger leaf blades 3.5-14 cm long, 5-14 mm wide (dichotomum group) … Key H

Key A
1. Leaf sheath hairs retrorse to spreading; distal leaf blades 4-17 cm long, at least 3/4 as long as basal ones, the margins short-ciliate; spikelets with papillose-based hairs … D. laxiflorum
1. Leaf sheath glabrous or hairs ascending; distal leaf blades 1.5-6 cm long, <3/4 as long as basal ones, the margins with papillose-bsed cilia; spikelets glabrous or pubescent, lacking papillae [2]
2. Spikelet pubescent, 1.5-2.1 mm long … D. strigosum var. leucoblepharis
2. Spikelet glabrous, 1.1-1.8 mm long [3]
3. Stem nodes and leaf blade surfaces glabrous … D. strigosum var. glabrescens
3. Stem nodes and leaf blade surfaces pubescent … D. strigosum var. strigosum

Key B
1. Spikelets 2.5-4.3 mm long, usually obovoid, turgid; upper glumes usually with an orange or purple spot at the base, the veins prominent [2]
1. Spikelets 0.8-3 mm long, ellipsoid or obovoid, not turgid; upper glumes lacking an orange or purple spot at the base and the veins not prominent [4]
2. Culm nodes with dense, spreading to retrorse hairs; leaf blade lower surface softly velvety pubescent … D. ravenelii
2. Culm nodes glabrous or sparsely pubescent; eaf blade lower surface glabrous or pubescent, but not velvety pubescent [3]
3. Ligule of hairs 2-3 mm; larger leaf blades 4-9 mm wide, 10-15 times longer than wide, often partly involute; spikelets ellipsoid to oblong-obovoid, (3)3.4-4.2 mm long, 1.7-2(2.2) mm wide, sparsely pubescent or rarely glabrous … D. oligosanthes subsp. oligosanthes
3. Ligule of hairs 1-1.5 mm long; larger leaf blades 6-15 mm wide, 7-10 times longer than wide, flat; spikelets broadly obovoid-ellipsoid, 2.7-3.5 mm long, 2-2.4 mm wide, glabrous or rarely sparsely pubescent … D. oligosanthes subsp. scribnerianum
4. Sheaths with hairs to 4 mm long; spikelets 1.8-3 mm long [5]
4. Sheaths glabrous or pubescent with hairs no more than 3 mm long; spikelets 0.8-1.6(2.1) mm long [7]
5. Proximal culm internodes and associated leaf sheaths with soft, spreading or retrorse, papillose-based hairs, the longer hairs to 4-7 mm long; spikelets 1.8-2.5 mm long … D. ovale subsp. villosissimum
5. Proximal culm internodes and associated leaf sheaths glabrate or with ascending or appressed hairs (lacking papillae) 2-4 mm; spikelets 2.1-3 mm long [6]
6. Basal leaf blades long-ciliate on or near the margins and bases; spikelets 2.5-3 mm long … D. ovale subsp. ovale
6. Basal leaf blades lacking long cilia on or near the margins and bases; spikelets 2.1-2.6 mm long … D. ovale subsp. pseudopubescens
7. Culms weak, 0.3-0.8 mm wide; spikelets 0.8-1.1 mm long, puberulent to subglabrous … D. wrightianum

7. Culms weak to robust, (0.8)1-2.5 mm wide; spikelets 1.1-1.6 mm long [8]
8. Spikelets 1.1-1.5 mm long [9]
8. Spikelets 1.3-1.6 mm long [10]
9. Culm nodes, internodes, and leaf sheaths pubescent to glabrate … D. leucothrix subsp. leucothrix
9. Culm nodes, internodes, and leaf sheaths glabrous … D. leucothrix subsp. longiligulatum
10. Inflorescence 2-6 times as long as wide, the branches ascending-appressed; spikelets ascending to appressed … D. spretum
10. Inflorescence 1-2 times as long as wide, the branches spreading to ascending; spikelets diverging to ascending [11]
11. Culm nodes, internodes, and leaf sheaths glabrous … D. acuminatum subsp. lindheimeri
11. Culm nodes, internodes, and leaf sheaths pubescent to glabrate [12]
12. Culms and proximal leaf sheaths with spreading long hairs (sometimes with short hairs also present); leaf blade lower surface softly pubescent … D. acuminatum subsp. acuminatum
12. Culms and sheaths pilose with with mostly ascending hairs or short spreading hairs; leaf blade lower surface appressed-pubescent or puberulent … D. acuminatum subsp. fasciculatum

Key C: scoparium group
1. Culms nodes densely villous, often turgid, subtended by a viscid glabrous ring; leaf blades densely soft pubescent … D. scoparium
1. Culm nodes glabrous or sparsely pubescent, not turgid; leaf blades glabrous or sparsely pubescent [2]
2. Cauline blades 15-30 mm wide, apices flat, acuminate; spikelets sparsely pubescent … D. clandestinum
2. Cauline blades 7-15 mm wide, apices involute, long tapering; spikelets glabrous or sparsely puberulent … D. scabriusculum

Key D: commutatum group
1. Culm leaf blades ascending, some margins often with white-cartilaginous; spikelets 1-1.4 mm long … D. erectifolium
1. Culm leaf blades ascending to spreading. lacking white, cartilaginous margins or the white margin ca. 0.1 mm wide; spikelets 1.4-5.2 mm long [2]
2. Spikelets 1.4-2.2 mm long … D. sphaerocarpon
2. Spikelets 2.4-3.2 mm long [3]
3. Ligule membranous-ciliate, 0.4-0.9 mm long; spikelets 3.8-5.2 mm long; some lower florets staminate … D. boscii
3. Ligule membranous-ciliate, 0.1-0.4 mm long; spikelets 2.2-3.2 mm long; lower floret sterile [4]
4. Leaf blade undersides glaucous, light green … D. mutabile
4. Leaf blade undersides green, not glaucous [5]
5. Culm leaf blades nearly linear, 5-14 mm wide, 9-12 times as long as wide; spikelets 3-3.2 mm long; spikelets 1.8-2.5 times as long as the lower glume … D. equilaterale
5. Culm leaf blades ovate-lanceolate, 6-25 mm wide, 4-8 times as long as wide; spikelets 2.5-3.2 mm long; spikelets 3-4 times as long as the lower glume [6]
6. Culms more or less erect, with caudices; leaf blades nearly symmetrical, straight; spikelets 2.5-2.9 mm long; lower lemma apex obtuse … D. commutatum subsp. commutatum
6. Culms decumbent or sprawling, with loose caudices or rhizomes; leaf blades strongly asymmetric-falcate; spikelets 2.9-3.2 mm long; lower lemma apex acute … D. commutatum subsp. joorii

Key E: lancearium group
1. Culm leaf blades 2-5 cm long, 2.5-4.5 mm wide; spikelets 1.5-2.0 mm long, puberulent to nearly glabrous … D. lancearium subsp. portoricense
1. Culm leaf blades 4-7 cm long, 3.5-8 mm wide; spikelets 1.8-2.6 mm long, usually densely pubescent or puberulent (rarely glabrous); [2]
2. Basal leaf blades 2-5 cm long; culm leaf blades 2-5 mm wide, spreading (patulum) … D. lancearium subsp. lancearium
2. Basal leaf blades 3-8 cm long; culm leaf blades 6-12 mm wide, ascending … D. lancearium subsp. webberianum

Key F: aciculare group
1. Spikelets 2.9-3.6 mm long, strongly attenuate at the base; lower glumes attached 0.3-0.5 mm below the upper glumes … D. aciculare subsp. fusiforme
1. Spikelets 1.7-3(3.2) mm long, not strongly attenuate at the base; lower glumes attached 0.1-0.2 mm below the upper glumes [2]
2. Basal leaf blades 1-3 cm long, often <½ as long as the cauline blades; inflorescence usually more than ½ as wide as long, branches spreading; spikelets 1.7-2.3 mm long … D. aciculare subsp. aciculare
2. Basal leaf blades 4-8 cm long, mostly >½ as long as the cauline blades; inflorescence usually less than ½ as wide as long, branches ascending to erect; spikelets (1.8)2-3(3.2) mm long [3]
3. Larger cauline blades 5-8 cm long, 3-5 mm wide, 10-25 times as long as wide; inflorescence usually <1/4 as wide as long, branches strongly ascending to erect; spikelets 1.8-2.2 mm long, pubescent, apex obtuse; upper glume and lower lemma reaching the upper lemma … D. aciculare subsp. neuranthum
3. Larger cauline blades 5-9 cm long, 2-3 mm wide, 15-40 times as long as wide; inflroescence usually 1/4-1/2 as wide as long, branches ascending; spikelets 2.3-3(3.2) mm long, glabrous to sparsely pubescent, apex acute; upper glume and lower lemma exceeding the upper lemma [4]
4. Culms, leaf sheaths, and spikelets usually pubescent, at least proximally … D. aciculare subsp. angustifolium
4. Culms, leaf sheaths, and spikelets sparsely pubescent to almost glabrous … D. aciculare subsp. pinetorum

Key G: ensifolium group
1. Culm nodes pubescent; leaf sheath with spreading hairs; ligule of hairs 1-2 mm long … D. curtifolium
1. Culm nodes glabrous to sparsely pubescent; leaf sheath glabrous or sparsely ciliate; ligule of hairs 0.2-1 mm long [2]
2. Culms reclining or weakly erect; ligule of hairs (0.2)0.8-1.8 mm long; cauline leaf blade margins not white-cartilaginous … D. ensifolium
2. Culms erect, sometimes geniculate basally; ligule of hairs 0.2-0.7 mm long; cauline leaf blade margins white- cartilaginous [3]
3. Culms and branches few; cauline leaf blades flat, the bases rounded; flag leaves subtending inflorescence much shorter than proximal leaves … D. tenue
3. Culms and branhces numerous; cauline leaf blades often involute, the bases subcordate; flag leaves subtending inflorescence slightly shorter than proximal leaves [4]
4. Culms 5-20 cm tall, glabrous or puberulent; spikelets 1.3-1.5 mm long, puberulent … D. chamaelonche subsp. breve

4. Culms 10-45 cm tall, glabrous; spikelets 1.1-1.4 mm long, glabrous … D. chamaelonche subsp. chamaelonche

Key H: dichotomum group
1. Proximal culm nodes pubescent (or culms erect, terete, leaf blades spreading) [2]
1. Proximal culm nodes glabrous (culms weak, flattened if leaf blades spreading) [4]
2. Spikelets 1.5-1.8 mm long, upper floret 0.6-0.8 mm wide … D. dichotomum subsp. microcarpon
2. Spikelets 1.8-2.5 mm long; upper floret 0.7-1.0 mm wide [3]
3. Culm nodes often glabrous, sometimes pubescent; spikelets glabrous, rarely pubescent; mid-culm leaf blades 5-7 mm wide … D. dichotomum subsp. dichotomum
3. Culm nodes pubescent; spikelets pubescent; mid-culm blades 7-14 mm wide … D. dichotomum subsp. nitidum
4. Culms weak, reclining or sprawling, often flattened; leaf blades spreading, green; inflorescence branches spreading to ascending … D. lucidum
4. Culms robust, erect, terete; leaf blades ascending, green to olive-green; inflorescence branches ascending to subappressed [5]
5. Leaf blades thickened, olive green; spikelets moderately pubescent … D. sphagnicola
5. Leaf blades moderately thick, green; spikelets glabrous [6]
6. Distal leaf sheaths 2.5-7.5(10.5) mm long; peduncle 5-18.5 cm long; lower glume 0.6-0.9 mm long … D. dichotomum subsp. roanokense
6. Distal leaf sheaths (6)8-15 mm long; peduncle (20)30-50(60 cm long; lower glume 0.3-0.7(0.9) mm long … D. hirstii

Dichanthelium aciculare (Desv. ex Poir.)Gould & C.A.Clark subsp. ***aciculare*** —
Dichanthelium aciculare (Desv. ex Poir.)Gould & C.A.Clark subsp. ***angustifolium*** (Elliott)Freckmann & Lelong —
Dichanthelium aciculare (Desv. ex Poir.)Gould & C.A.Clark subsp. ***fusiforme*** (Hitchc.)Freckmann & Lelong —
Dichanthelium aciculare (Desv. ex Poir.)Gould & C.A.Clark subsp. ***neuranthum*** (Griseb.)Freckmann & Lelong —
Dichanthelium aciculare (Desv. ex Poir.)Gould & C.A.Clark subsp. ***pinetorum*** (Swallen)Majure —
Dichanthelium acuminatum (Sw.)Gould & C.A.Clark subsp. ***acuminatum*** {AFP} —
Dichanthelium acuminatum (Sw.)Gould & C.A.Clark subsp. ***fasciculatum*** (Torr.)Freckmann & Lelong
Dichanthelium acuminatum (Sw.)Gould & C.A.Clark subsp. ***lindheimeri*** (Nash)Freckmann & Lelong {AFP} —
•***Dichanthelium arenicollinum*** LeBlond & S.C. Carr — Clay & Volusia cos. Thought to be part of sect. *Pedicellata*.
Dichanthelium boscii (Poir.)Gould & C.A.Clark {AFP} —
•***Dichanthelium chamaelonche*** subsp. ***breve*** (Hitchc. & Chase)Freckmann & Lelong {AFP} —
Dichanthelium chamaelonche (Trin.)Freckman & Long subsp. ***chamaelonche*** —
Dichanthelium clandestinum (L.)Gould {AFP} —
Dichanthelium commutatum (Schult.)Gould subsp. ***commutatum*** {AFP} —
Dichanthelium commutatum (Schult.)Gould subsp. ***joorii*** (Vasey)Freckmann & Lelong {AFP} —
Dichanthelium consanguineum (Kunth)Gould & C.A.Clark —
Dichanthelium curtifolium (Nash)LeBlond —

Dichanthelium dichotomum (L.)Gould subsp. ***dichotomum*** {AFP} —
Dichanthelium dichotomum (L.)Gould subsp. ***microcarpon*** (Muhl. ex Elliott)Freckmann & Lelong —
Dichanthelium dichotomum (L.)Gould subsp. ***nitidum*** (Lam.)Freckmann & Lelong —
Dichanthelium dichotomum (L.)Gould subsp. ***roanokense*** (Ashe)Freckmann & Lelong —
Dichanthelium ensifolium (Baldwin ex Elliott)Gould {AFP} —
Dichanthelium equilaterale (Scribn.)Wipff —
Dichanthelium erectifolium (Nash)Gould & C.A.Clark {AFP} —
Dichanthelium hirstii (Swallen)Kartesz —
Dichanthelium lancearium (Trin.)Greuter & R.Rankin subsp. ***lancearium*** —
Dichanthelium lancearium (Trin.)Greuter & R.Rankin subsp ***portoricense*** (Desv. ex Ham.)Majure {AFP} —
Dichanthelium lancearium (Trin.)Greuter & R.Rankin subsp. ***webberianum*** (Nash)Majure —
Dichanthelium laxiflorum (Lam.)Gould {AFP} —
Dichanthelium leucothrix (Nash)Freckmann subsp. ***leucothrix*** {AFP} —
Dichanthelium leucothrix (Nash)Freckmann subsp. ***longiligulatum*** (Nash)Freckmann & Lelong ({AFP} —
Dichanthelium lucidum (Ashe)LeBlond —
Dichanthelium mutabile (Scribn. & J.G.Sm.)Wipff —
Dichanthelium nudicaule (Vasey)B.F.Hansen & Wunderlin {AFP} — ST.
Dichanthelium oligosanthes (Schult.)Gould subsp. ***oligosanthes*** {AFP} —
Dichanthelium oligosanthes (Schult.)Gould subsp. ***scribnerianum*** (Nash)Freckmann & Lelong {AFP} —
Dichanthelium ovale (Elliott)Gould & C.A.Clark subsp. ***ovale*** {AFP} —
Dichanthelium ovale (Elliott)Gould & C.A.Clark subsp. ***pseudopubescens*** (Nash)Freckmann & Lelong {AFP} —
Dichanthelium ovale (Elliott)Gould & C.A.Clark subsp. ***villosissimum*** (Nash)Freckmann & Lelong {AFP} —
Dichanthelium patentifolium Nash)Wipff {AFP} —
Dichanthelium ravenelii (Scribn. & Merr.)Gould {AFP} —
Dichanthelium scabriusculum (Elliott)Gould & C.A.Clark {AFP} —
Dichanthelium scoparium (Lam.)Gould {AFP} —
Dichanthelium sphagnicola (Nash)LeBlond {AFP} —
Dichanthelium spretum (Schult.)Freckmann {AFP} —
Dichanthelium sphaerocarpon (Elliott)Gould {AFP} —
Dichanthelium strigosum (Muhl. ex Elliott)Freckmann var. ***glabrescens*** (Griseb.)Freckmann {AFP} —
Dichanthelium strigosum (Muhl. ex Elliott)Freckmann var. ***leucoblepharis*** (Trin.)Freckmann {AFP} —
Dichanthelium strigosum (Muhl. ex Elliott)Freckmann var. ***strigosum*** {AFP} —
Dichanthelium tenue (Muhl.)Freckmann & Lelong {AFP} —
Dichanthelium wrightianum (Scribn.)Freckmann {AFP} —

Dichanthium

1. Rame (inflorescence branch) densely villous, sessile or subsessile, with spikelets occurring at the very base ... D. sericeum
1. Rame glabrous to pilose, pedunculate, with a bare region or peduncle 2-10 mm long below the first set of spikelets [2]

2. Rame peduncle glabrate to glabrous except for a tuft of hairs at the very base, inflorescence peduncle glabrous … D. annulatum
2. Rame peduncle and often the upper part of the inflorescence peduncle strongly pilose … D. aristatum

*__*Dichanthium annulatum*__ (Forssk.)Stapf {AFP} —
*__*Dichanthium aristatum*__ (Poir.)C.E.Hubb. {AFP} —

Digitaria

1. Inflorescence a diffuse panicle, the spikelets widely separated from each other, the pedicels to 8 cm long … D. cognata
1. Inflorescence with spikelike branches, the spikelets mostly densely aggregated, the pedicels to 0.5 cm long [2]
2. Upper glume and often lower lemma with capitate to clavate trichomes … Key A
2. Upper glume and lower lemma without capitate or clavate trichomes [3]
3. Spikelets 1.3-2.2 mm long … Key B
3. Spikelets 2.1-5.2 mm long … Key C

Key A
1. Basal leaf sheaths glabrous; leaf blades usually <1.1 mm wide and involute … D. filiformis var. dolichophylla
1. Basal leaf sheaths usually pilose, sometimes glabrous; leaf blades 1.2-6 mm wide and flat
2. Cauline nodes 1-2; glume and lemma hairs long; fruit concealed by the sterile lemma … D. leucocoma
2. Cauline nodes 3-6; glume and lemma hairs short; fruit tip exserted beyond the sterile lemma [3]
3. Culms 10-80 cm tall; panicle branches 3-13 cm long; spikelets 1.3-1.9 mm long … D. filiformis var. filiformis
3. Culms 75-150 cm tall; panicle branches 10-25 cm long; spikelets 2-2.8 mm long … D. filiformis var. villosa

Key B
1. Stems with exserted terminal inflorescences and usually some with axillary (sometimes concealed) inflorescences … D. ischaemum
1. Stems with exserted terminal inflorescences only [2]
2. Inflorescence 8-30 cm long; upper glume glabrous, 0.9-1.5 mm long; lower lemma glabrous or with sparsely hairy apices, 5- or 7-veined
2. Inflorescence 2-15 cm long; upper glume pubescent, 0.7-2.2 mm long; lower lemma pubescent, 5-7-veined [4]
3. Spikelets 2.3-2.4 mm long; upper glume 1.4-1.5 mm long, >1/2 as long as spikelets; lower lemma 7-veined, sparsely pubescent at tip … D. bakeri
3. Spikelets 1.7-2.3 mm long; upper glume 0.9-1.1 mm long, <1/2 as long as spikelets; lower lemma 5-veined, glabrous … D. gracillima
4. Spikelets paired on the middle portions of the primary branches; pedicels not adnate to the branch axes … D. nuda
5. Spikelets in groups of 3-5 on the middle portions of the primary branches, the longer pedicels in each group often adnate to the branch axes for part of their length [6]

6. Primary panicle branches usually all digitate, sometimes 1 below the others, the branches erect to ascending; upper lemmas dark brown at maturity; upper glumes 1/2 as long as to almost equaling the upper lemmas … D. violascens
6. Primary panicle branches, if more than 2, racemose, the terminal branches erect, the other branches usually divergent; upper lemmas light brown to brown at maturity; upper glumes almost as long as the upper lemmas [7]
7. Leaf sheaths and upper leaf blades usually densely pilose; upper glumes 1/6-1/3 long as the spikelets … D. serotina
7. Leaf sheaths and upper leaf blades usually glabrate; upper glumes subequaling the spikelets [8]
8. Upper glumes 3-veined; spikelets lanceolate; plants not stoloniferous … D. floridana
8. Upper glumes 5-veined; spikelets elliptic to obovate; plants stoloniferous … D. longiflora

Key C
1. Lower lemma villous with pale brown to golden brown hairs, longest ones 2-6 mm long … D. insularis
1. Lower lemma with whitish to faintly yellowish trichomes <2 mm long [2]
2. Inflorescence branches not winged or the wings not more than ½ the width of the midrib; leaves often villous to hirsute, especially proximal ones [3]
2. Inflorescence branches winged, the wings at least ½ the width of the midrib; leaves villous to glabrate [5]
3. Culms sometimes branching at the aerial nodes, not rooting at the lower nodes; leaf blades 2-2.2 mm wide, flat or folded; upper glumes glabrous … D. pauciflora
3. Culms not branching at the aerial nodes, often rooting at the lower nodes; leaf blades 2-7 mm wide, flat; upper glumes villous or glabrous [4]
4. Upper glumes 7-9-veined, glabrous or obscurely pubescent … D. simpsonii
4. Upper glumes (3-)5-veined, shortly villous on the margins and sometimes between the margins … D. subcalva
5. Plant densely cespitose or rhizomatous, the stems hardened and knobby at the base, sometimes with long stolons rooting at distant nodes [6]
5. Plant cespitose to diffuse, the stems weak or not knobby at the base, sometimes rooting at the proximal nodes, without long stolons that root primarily at distant nodes [7]
6. Midveins of the lower lemmas smooth throughout … D. eriantha
6. Midveins of the lower lemmas scabrous, at least on the distal ½ … D. milanjiana
7. Inner pair of lateral veins of the lower lemma of the sessile spikelet moderately well spaced between the midvein and the margin [8]
7. Inner pair of lateral veins of the lower lemma of the sessile spikelet crowded near the margin [10]
8. Lowest panicle nodes glabrous or with hairs less than 0.4 mm long; spikelets 2.6-3.7 mm long; spikelets dimorphic with respect to their pubescence; lower lemmas of the upper spikelets of each spikelet pair with marginal hairs that become widely divergent at maturity; lower lemmas of the lower spikelets in each pair glabrous or with hairs that remain appressed at maturity … D. bicornis
8. Lowest panicle nodes with hairs more than 0.4 mm long; spikelets 1.7-2.8 mm long; spikelets homomorphic with respect to their pubescence [9]
9. Leaf sheaths usually pilose throughout, especially the proximal sheaths; upper surfaces of the blades evenly, sometimes densely, hairy; upper glumes 1/3-1/2 as long as the spikelets … D. horizontalis

9. Leaf sheaths glabrous or with sparsely pilose near the base; upper surfaces of the blades glabrous or with a few long hairs near the base; upper glumes 2/5-4/5 as long as the spikelets … D. nuda
10. Lower glumes absent or no more than 0.1 mm long [11]
10. Lower glumes 0.1-0.8 mm long [12]
11. Upper glumes 1-2.2 mm long, 0.4-0.8 times as long as the spikelets; anthers 0.3-0.6 mm … D. nuda
11. Upper glumes 0.2-1.3 mm long, less than 0.4 times as long as the spikelets; anthers 0.6-1.3 mm long … D. setigera
12. Primary branches glabrous or with hairs shorter than 1 mm; spikelets 2.7-4.1 mm long; lower glumes 0.2-0.8 mm long [13]
2. Primary branches with scattered hairs 1-4 mm long; spikelets 1.7-2.8 mm long; lower glumes 0.1-0.2 mm long [14]
13. Lowermost inflorescence node glabrous or the hairs <0.4 mm long; lower glume rounded to truncate at the apex; lower lemma of the sessile spikelet with equidistant veins … D. bicornis
13. Lowermost inflorescence node with hairs >0.2 mm long; lower glume acute at the apex; lower lemma of the sessile spikelet with veins crowded at the margin … D. ciliaris
14. Leaf sheaths usually pilose throughout, especially the proximal sheaths; upper surfaces of the blades evenly, sometimes densely, hairy; upper glumes 1/3-1/2 as long as the spikelets … D. horizontalis
14. Leaf sheaths glabrous or with sparsely pilose near the base; upper surfaces of the blades glabrous or with a few long hairs near the base; upper glumes 2/5-4/5 as long as the spikelets … D. nuda

•***Digitaria bakeri*** (Nash)Fernald — Listed as a synonym of *D. gracillima* by Hitchcock (1935) and Hitchcock & Chase (1951), but sometimes recognized as distinct (Henrard 1950).
****Digitaria bicornis*** (Lam.)Roem. & Schult. {AFP} —
Digitaria ciliaris (Retz.)Koeler {AFP} —
Digitaria cognata (Schult.)Pilg. {AFP} —
****Digitaria eriantha*** Steud. {AFP} —
Digitaria filiformis (L.)Koeler var. ***dolichophylla*** (Henrard)Wipff {AFP} — Probably restricted to Miami-Dade, and probably misapplied elsewhere in Florida. ST.
Digitaria filiformis (L.)Koeler var. ***filiformis*** {AFP} — A DNA phylogeny of the complex investigated relationships (Nichols et al. 2024).
Digitaria filiformis (L.)Koeler var. ***villosa*** (Walter)Fernald — According to Hitchcock (1935), this taxon seems "to intergrade to some extent" with var. *filiformis*.
•***Digitaria floridana*** Hitchc. {AFP} —
•***Digitaria gracillima*** (Scribn.)Fernald {AFP} —
Digitaria horizontalis Willd. {AFP} —
Digitaria insularis (L.)Fedde {AFP} —
****Digitaria ischaemum*** (Schreb. ex Schweigg.)Schreb. ex Muhl. {AFP} —
•***Digitaria leucocoma*** (Nash)Urb. —Listed as a synonym by Hitchcock & Chase (1951), but sometimes recognized as distinct (Henrard 1950).
****Digitaria longiflora*** (Retz.)Pers. {AFP} —
****Digitaria milanjiana*** (Rendle)Stapf {AFP} —
****Digitaria nuda*** Schumach. {AFP} —
•***Digitaria pauciflora*** Hitchc. {AFP} — SE.
Digitaria serotina (Walter)Michx. {AFP} —
****Digitaria setigera*** Roth ex Roem. & Schult. {AFP} —

•***Digitaria simpsonii*** (Vasey)Fernald {AFP} —
•***Digitaria subcalva*** Hitchc. {AFP} — Subsumed under *D. texana* by Webster & Hatch (1990), but distinguished by Bridges & Orzell (in Weakley et al. 2018).
****Digitaria violascens*** Link {AFP} —

Dinebra
1. Leaf sheath glabrous to minutely scabrous; inflorescence 1-3 cm wide … D. nealleyi
1. Leaf sheath sparsely to densely hairy, hairs papillose-based; inflorescence 4-17 cm wide [2]
2. Glumes lanceolate to narrowly elliptic, shorter than to slightly exceeding florets; lemmas 1.3-1.7 mm long; caryopses usually with a narrow, shallow ventral groove, smooth, apices broadly obtuse to acute … D. panicea subsp. brachiata
2. Glumes linear to narrowly lanceolate, exceeding the florets; lemmas 0.9-1.2 mm long; caryopses without a ventral groove, often somewhat coarsely rugose, the apices broadly obtuse … D. panicea subsp. mucronata

****Dinebra nealleyi*** (Vasey)P.M.Peterson & N.Snow {AFP} —
Dinebra panicea (Retz.)P.M.Peterson & N.Snow subsp. ***mucronata*** (Michx.)P.M.Peterson & N.Snow {AFP} —

Diplachne
1. Inflorescence usually partially enclosed in the leaf sheaths, exceeded by the leaves; lower glume 1.5-3 mm long; lemmas often with a dark spot in the basal ½ … D. fusca subsp. fascicularis
1. Inflorescence usually completely exserted, exceeding the leaves; lower glume 0.6-1.3(2.6) mm long; lemmas usually lacking a dark spot … D. fusca subsp. uninervia

Diplachne fusca (L.)P.Beauv. ex Roem. & Schult. subsp. ***fascicularis*** (Lam.)P.M.Peterson & N.Snow {AFP} —
Diplachne fusca (L.)P.Beauv. ex Roem. & Schult. subsp. ***uninervia*** (J.Presl)P.M.Peterson & N.Snow {AFP} —

Disakisperma
Disakisperma dubium (Kunth)P.M.Peterson & N.Snow {AFP} —

Distichlis
1. Leaves clustered on short-shoots, the blades 0.5-1(1.5) cm long; inflorescence with 1 spikelet … D. littoralis
1. Leaves well spaced on the main culm, the blades (1)3-12(20) cm long; inflorescence with 2-20 spikelets … D. spicata

Distichlis littoralis (Engelm.)H.L.Bell & Columbus {AFP} —
Distichlis spicata (L.)Greene {AFP} —

Echinochloa
1. Ligules hispid, at least on the lower leaves … E. polystachya
1. Ligules absent, glabrous, or short-pubescent [2]
2. Leaf sheaths, at least the lowermost, distinctly hirsute or hispid or papillose, usually with papilla-based trichomes … E. walteri

2. Leaf sheaths glabrous or rarely with a few scattered soft trichomes [3]
3. Lateral branches of the panicle simple, <2 cm long, with spikelets in four regular rows; spikelets awnless [4]
3. Lateral branches of panicle sometimes rebranched, often >2 cm long, with spikelets in irregular rows; spikelets awned or awnless [5]
4. Inflorescence branches ascending to spreading; spikelets disarticulating at maturity, the grain shed … E. colonum subsp. colonum
4. Inflorescence branches often incurved; spikelets plump, not disarticulating at maturity, the grain persisting (E. frumentacea) … E. colonum subsp. edulis
5. Upper lemma narrowly ovate or ellipsoid … E. crus-pavonis
5. Upper lemma broadly ovate or ellipsoid [6]
6. Lower floret (enclosed by lowermost lemma and palea) of the spikelet male; anthers of upper florets (floret enclosed by coriaceous lemma) 1.2-1.7 mm long … E. paludigena
6. Lower floret (enclosed by lowermost lemma and palea) of the spikelet sterile or absent; anthers of upper florets (floret enclosed by coriaceous lemma) 0.4-1.2 mm long [7]
7. Apex of the upper lemma acute or obtuse, sharply differentiated into a withering, membranous tip and with a line of minute hairs (<0.1 mm long) continuous with the coriaceous lemma margin at the separation of the two zones [7]
7. Apex of the upper lemma acute to acuminate, gradually differentiated into the membranous tip and without a ring of short trichomes (although the apex may be setulose) [8]
7. Inflorescence branches (at least some) ascending to spreading; spikelets green to purplish, disarticulating at maturity, the grain shed, awns absent or prolific (to 3 mm long) … E. crus-galli subsp. crus-galli
7. Inflorescence branches often incurved; spikelets plump, purplish brown, not disarticulating at maturity, the grain persisting, awns absent or few (to 2 mm long) (E. esculenta) … E. crus-galli subsp. utilis
8. Spikelets 2.5-3.8 mm long; lower lemmas unawned or awned, the awns to 10 mm long … E. muricata var. microstachya
8. Spikelets 3.5-5 mm long; lower lemmas usually awned, the awns 6-16 mm long … E. muricata var. muricata

**Echinochloa colonum* (L.)Link {AFP} —
**Echinochloa crus-galli* (L.)P.Beauv. subsp. *crus-galli* {AFP} —
^*Echinochloa crus-galli* (L.)Link subsp. *utilis* (Ohwi & Yabuno)T.Koyama —
**Echinochloa crus-pavonis* (Kunth)Schult. {AFP} —
Echinochloa muricata (P.Beauv.)Fernald var. *microstachya* (P.Beauv.)Fernald {AFP} —
Echinochloa muricata (P.Beauv.)Fernald var. *muricata* {AFP} — This species is quite challenging to separate from *E. crus-galli*. Excellent comparisons of the two with photos were published by Hoste (2004) and Darbyshire et al. (2009).
•*Echinochloa paludigena* Wiegand {AFP} —
**Echinochloa polystachya* (Kunth)Hitchc. {AFP} —
Echinochloa walteri (Pursh)A.Heller {AFP} —

Eleusine
**Eleusine indica* (L.)Gaertn. {AFP} —

Elionurus
Elionurus tripsacoides Humb. & Bonpl. ex Willd. {AFP} —

Elymus

Elymus virginicus L. {AFP} —

Eragrostis

1. Palea keel conspicuously ciliate, cilia 0.2-0.8 mm long and subequal to longer than the lemma width (lemma eglandular) … Key A
1. Palea keel scabrous or with cilia <0.3 mm long, much shorter than the lemma width (if cilia to 0.3 mm long, then lemma glandular) [2]
2. Culms, leaves, lemmas, inflorescence rachis, or pedicels with glands … Key B
2. Culms, leaves, lemmas, inflorescence rachis, or pedicels eglandular [3]
3. Annual, culm bases weak … Key C
3. Perennials, culm base tough [4]
4. Inflorescence very diffuse, to 45 cm wide, the spikelets distant from each other along the branches (pedicels and internodes between pedicels to 4.5 cm long), the branches spreading to spreading-ascending … Key D
4. Inflorescence relatively compact, to 15(30) cm wide, the spikelets overlapping along the branches (pedicels and internodes between pedicels mostly <1.5 cm long), the branches spreading to appressed … Key E

Key A
1. Pedicels 1-4(7) mm long, straight to curved, subequal to longer than the spikelets; lemma margin cilia 0.3-0.5 mm long; anthers 3 … E. tenella
1. Pedicels 0.1-1 mm long, straight, mostly shorter than the spikelets; anthers 2 [2]
2. Inflorescence 0.2-1.5 cm wide, branches mostly appressed; spikelets densely congested … E. ciliaris var. ciliaris
2. Panicles 1.5-5 cm wide, branches spreading to ascending; spikelets relatively distant … E. ciliaris var. laxa

Key B
1. Pedicels 1-10 mm long, lax, appressed or divergent; spikelets 0.6-1.4 mm wide … E. pilosa
1. Pedicels 0.2-4 mm long, stiff, straight, usually divergent; spikelets 1.1-4 mm wide [2]
2. Spikelets 6-20 mm long, 2-4 mm wide, with 10-40 florets; lemmas 2-2.8 mm long, with 1-3 crateriform glands along the keels; disarticulation below the florets, the rachillas persistent; anthers yellow … E. cilianensis
2. Spikelets 4-7(11) mm long, 1.1-2.2 mm wide, with 7-12(20) florets; lemmas 1.4-1.8 mm long, rarely with 1 or 2 crateriform glands along the keels; disarticulation below the lemmas, both the paleas and rachillas usually persistent; anthers reddish-brown [3]
3. Leaf blades and pedicels eglandular, below the inflorescence nodes with gland areas even with the rachis, lacking a bulbous margin, often lustrous; anthers 3 … E. barrelieri
3. Leaf blade margins and inflorescence rachis sometimes and pedicels usually glandular, with a bulbous margin, dull; anthers 2 … E. minor

Key C
1. Stem stoloniferous, repent, erect fertile stems usually <12 cm long … E. hypnoides
1. Stems erect (sometimes repent and rooting at base), usually >10 cm long [2]
2. Ligules membranous, without cilia; inflorescence elongate with numerous overlapping appressed to ascending primary branches … E. japonica

2. Ligules membranous and with cilia, these often longer than the ligule blade; inflorescence primary branches mostly ascending to spreading, not densely overlapping [3]
3. Caryopses shallowly to deeply grooved on the adaxial surface … E. mexicana subsp. virescens
3. Caryopses without a ventral groove, usually globose [4]
4. Spikelets ovoid, (1.6)2-4 mm wide; florets disarticulating intact from the persistent rachillas … E. unioloides
4. Spikelets generally oblong, 0.6-2.5 mm wide; lemmas mostly disarticulating separately from the paleas, sometimes both the paleas and the rachillas persistent [5]
5. Lemmas 1.6-3 mm long; caryopses 0.7-1.3 mm long, obovoid, smooth, light brown to white … E. tef
5. Lemmas 1-2.2 mm long; caryopses 0.3-1.1 mm long, subglobose, pyriform, or obovoid to prism-shaped, smooth or faintly striate, brownish [6]
6. Lemma lateral veins often greenish and apparent; caryopses 0.3-0.6 mm long, ovoid, subglobose to obovoid [7]
6. Lemma lateral veins pale, obscure or apparent; caryopses 0.5-1.1 mm long, pyriform or obovoid to prism-shaped [8]
7. Inflorescence primary branches 6-10 per culm; spikelets 5-12(18) mm long, with 12-42 florets; lemmas 1.3-2 mm long; anthers 3 … E. cumingii
7. Inflorescence primary branches (12)15-20 per culm; spikelets 2-4.6 mm long, with 5-15 florets; lemmas 1-1.3 mm long; anthers 2 … E. gangetica
8. Proximal nodes of inflorescence with whorl of (2)3-6 branches; spikelets 0.6-1.4 mm wide; lower glumes 0.3-0.6(0.8) mm long, usually <1/2 as long as the lowest lemmas; lemmas with inconspicuous lateral veins … E. pilosa
8. Proximal nodes of inflorescence with 1-2 branches; spikelets 1.2-2.5 mm wide; lower glumes 0.5-1.5 mm long, at least 1/2 as long as the lowest lemmas; lemmas with evident lateral veins [9]
9. Spikelets mostly uniformly pinkish tp purplish red; anthers 0.5-0.7 mm long … E. tracyi
9. Spikelest mostly pale to dark olive, greenish, sometimes partly reddish; anthers 0.2-0.4 mm long [10]
10. Pedicels along branches spreading to spreading-ascending (at least some) … E. pectinacea var. miserrima
10. Pedicels along branches appressed to ascending-appressed … E. pectinacea var. pectinacea

Key D
1. Spikelets mostly pale gray to dark gray, margins or some spots sometimes stramineous [2]
1. Spikelets mostly pale greenish, stramineous, to pink, red, or purplish [4]
2. Leaf blades glabrate, hairy around the collar and ligule, otherwise hairs few to none along blade surface and margins; spikelets 0.5-1(1.3) mm wide; flowering Jun-Nov … E. lugens
2. Leaves pilose, especially the blade surface; spikelets 1-1.8 mm wide; flowering Mar-May [3]
3. Leaf sheaths glabrous or with few hairs along the margins; spikelets 3-7 mm long; lemmas 1.6-2.2 mm long; anthers 0.5-0.8 mm long … E. intermedia
3. Leaf sheaths pilose; spikelets (2.5)3-5 mm long; lemmas 1.2-1.8 mm long; anthers 0.3-0.5 mm long … E. polytricha
4. Leaf sheaths densely pilose; spikelets 2-7.5 mm long, florets 2-10(12); anthers 3 [5]
4. Leaf sheaths glabrate; spikelets 4-18(23) mm long, florets 4-22(30); anthers 2 [6]
5. Cespitose; proximal inflorescence nodes glabrate; florets 2-4(6); upper glume 1.5-2.8 mm long … E. hirsuta
5. Rhizomatous; proximal inflorescence nodes moderately to densely pilose; florets 3-10(12); upper glume 1-2(2.3) mm long … E. spectabilis

6. Pedicels ascending to spreading, occasionally some appressed, longer than the spikelets; disarticulation below the lemmas, the paleas persistent ... E. elliottii
6. Pedicels appressed, shorter than the spikelets (except the terminal spikelet); disarticulation usually in the rachilla beneath the florets ... E. refracta

Key E
1. Spikelets 2.4-5 mm wide; glumes 1.7-4 mm long; lemmas 2-6 mm long ... E. secundiflora subsp. oxylepis
1. Spikelets 1-2.4 mm wide; glumes 1-2.2 mm long; lemmas 1.1-2.5 mm long [2]
2. Inflorescence 20-50(60) cm long; spikelets 0.7-1.4 mm wide; anthers 2, 0.2-0.3 mm long; caryopses flattened ventrally ... E. prolifera
2. Inflorescence 8-40(45) cm long; spikelets 1.2-2.4 mm wide; anthers 2-3, 0.2-0.9 mm long; caryopses subglobose, terete, grooved, or dorsally compressed [3]
3. Anthers 3, 0.7-1.2 mm long; florets completely disarticulating [4]
3. Anthers 2, 0.2-0.7 mm long; paleas often persistent after disarticulation of the glumes and lemmas [5]
4. Culm nodes mostly dark red to dark purplish black; spikelets with 10-22 florets; caryopses terete to laterally compressed, opaque, uniformly reddish brown ... E. atrovirens
4. Culm nodes pale stramineous to pale purplish; spikelets with 3-12(14) florets; caryopses dorsally compressed, translucent, greenish over the embryo; caryopses dorsally compressed, adaxial surfaces with a shallow, broad groove or ungrooved, smooth, mostly translucent, light brown, bases often greenish ... E. curvula
5. Inflorescence 1-3.5 cm wide, contracted, condensed into glomerate lobes; primary branches 0.8-3 cm long ... E. elongata
5. Inflorescence (1)2-17 cm wide, open to contracted; primary branches 1-15 cm long [6]
6. Culm nodes mostly dark red to dark purplish black; leaf blades (8)12-40 cm long, 2-5 mm wide; inflorescences all exserted, 15-45 cm long; caryopses 0.6-0.8 mm long, striate, obovoid to ellipsoid ... E. bahiensis
6. Culm nodes pale stramineous to pale purplish; leaf blades 4-8(18) cm long, 1-2 mm wide; inflorescence 5-15 cm long, often some inflorescences partially to completely enclosed by the subtending sheaths; caryopses 0.5-0.6 mm long, smooth, globose ... E. scaligera

**Eragrosutis atrovirens* (Desf.)Trin. ex Steud. {AFP} —
**Eragrostis bahiensis* Schrad. ex Schult. {AFP} —
**Eragrostis barrelieri* Daveau {AFP} —
**Eragrostis cilianensis* (All.)Vignolo ex Janch. {AFP} —
**Eragrostis ciliaris* (L.)R.Br. {AFP} —
**Eragrostis cumingii* Steud. {AFP} —
**Eragrostis curvula* (Schrad.)Nees {AFP} —
Eragrostis elliottii S.Watson {AFP} —
**Eragrostis elongata* (Willd.)Jacq.f. {AFP} —
**Eragrostis gangetica* (Roxb.)Steud. {AFP} — Florida material has fairly light spikelets compared to type material of *E. gangetica*.
Eragrostis hirsuta (Michx.)Nees {AFP} —
Eragrostis hypnoides (Lam.)Britton et al. {AFP} —
**Eragrostis intermedia* Hitchc. {AFP} —
**Eragrostis japonica* (Thunb.)Trin. {AFP} —
**Eragrostis lugens* Nees {AFP} —
**Eragrostis mexicana* (Hornem.)Link subsp. *virescens* (J.Presl)S.D.Koch & I.Sánchez {AFP} —

*__Eragrostis minor__ Host {AFP} —
__Eragrostis pectinacea__ (Michx.)Nees ex Jedwabn. var. __miserrima__ (E.Fourn.)Reeder {AFP} —
__Eragrostis pectinacea__ (Michx.)Nees ex Jedwabn. var. __pectinacea__ {AFP} —
*__Eragrostis pilosa__ (L.)P.Beauv. {AFP} —
__Eragrostis polytricha__ Nees {AFP} —
*__Eragrostis prolifera__ (Sw.)Steud. {AFP} —
__Eragrostis refracta__ (Muhl.)Scribn. {AFP} —
*__Eragrostis scaligera__ Salzm. ex Steud. {AFP} —
__Eragrostis secundiflora__ J.Presl subsp. __oxylepis__ (Torr.)S.D.Koch {AFP} —Koch (1978) detailed geographic and morphological differences among Brazilian material (*E. compacta*) and subsp. *oxylepis*. Perhaps the southern Mexico specimens (type of *secundiflora*) are intermediate.
__Eragrostis spectabilis__ (Pursh)Steud. {AFP} —
*__Eragrostis tenella__ (L.)P.Beauv. ex Roem. & Schult. {AFP} —
•__Eragrostis tracyi__ Hitchc. {AFP} — SE.
*__Eragrostis unioloides__ (Retz.)Nees ex Steud. {AFP} —

Eremochloa
*__Eremochloa ophiuroides__ (Munro)Hack. {AFP} —

Erianthus: There appears to be ample justification to segregate *Erianthus* from *Saccharum* (Evans et al. 2022, ined.).

1. Base of the awns flattened and spirally twisted; scaly rhizomes present or absent [2]
1. Base of the awns terete and straight or slightly twisted; scaly rhizomes not evident, mostly cespitose or with upturned scaly shoots [3]
2. Scaly rhizomes usually evident, lateral; culm distally and inflorescence rachis densely pubescent; callus hairs 9-14 mm long … E. alopecuroides
2. Scaly rhizomes mostly absent, or only with short, upturned shoots; culm distally and inflorescence rachis glabrous to sparsely pilose; callus hairs 3-7 mm long … E. contortus
3. Inflorescence 1-2.5(3) cm wide; calluses glabrous or with hairs to 2.6 mm long; panicles 1-2.5 cm wide … E. strictus
3. Inflorescence 3-15 cm wide; callus hairs 3-20(25) mm long, often equaling the spikelets [4]
4. Inflorescence 3-5(7) cm wide, the proximal nodes glabrous to sparsely pilose; callus hairs 3-6 mm long, subequal to shorter than the spikelets … E. coarctatus
4. Inflorescence (6)8-15 cm wide, the proximal nodes densely pilose; callus hairs (6)10-20(25) mm long, longer than the spikelets … E. giganteus

__Erianthus alopecuroides__ (L.)Elliott {AFP} —
__Erianthus contortus__ Baldwin ex Elliott {AFP} —
__Erianthus coarctatus__ Fernald {AFP} —
__Erianthus giganteus__ (Walter)P.Beauv. {AFP} —
__Erianthus strictus__ Baldwin {AFP} —

Eriochloa
1. Internodes pilose to pubescent; inflorescence branches appressed to the main axis; spikelets solitary at the middle of the branches, sometimes in unequally pedicellate pairs near the base … E. contracta

1. Internodes glabrous to sparsely pubescent; inflorescence branches spreading to ascending-appressed, at the least basal branches divergent from the main axis; spikelets in unequally pedicellate pairs or triplets at the middle of the branches, sometimes solitary distally [2]
2. Plants annual; upper glumes acute to acuminate, often terminating in awnlike apices up to 1.5 mm long; lower florets without paleas ... E. acuminata
2. Plants perennial; upper glumes acute, unawned; lower floret of each spikelet usually with a palea [3]
3. Culms decumbent, rooting at the lower nodes; spikelets 3.2-3.9 mm long, 1.1-1.3 mm wide; lower floret of each spikelet with or without a palea ... E. polystachya
3. Culms erect to slightly decumbent, not rooting at the lower nodes; spikelets 3.7-5.7 mm long, 1.3-1.8 mm wide; lower floret of each spikelet always with a palea [4]
4. Lower florets staminate; blades generally flat, usually 8-15 mm wide ... E. michauxii var. michauxii
4. Lower floret sterile; blades involute to conduplicate, 5-8 mm wide ... E. michauxii var. simpsonii

*****Eriochloa acuminata*** (J.Presl)Kunth {AFP} —
*****Eriochloa contracta*** Hitchc. {AFP} —
xx• ***Eriochloa michauxii*** (Poir.)Hitchc. var. ***simpsonii*** Hitchc. {AFP} — Lee, Collier, Monroe mainland, & keys. Coastal grasslands. Last specimens perhaps from late 1960s from Captiva and Sanibel islands (*Brumbach 5334, 5788, 6456*).
Eriochloa michauxii (Poir.)Hitchc. var. ***michauxii*** {AFP} —
*****Eriochloa polystachya*** Kunth {AFP} —

Eustachys
1. Spikelets 2.4-3.7 mm long [2]
1. Spikelets 1.5-2.5 mm long [4]
2. Inflorescence branches 1-3; spikelets 3-3.7 mm long; lower lemma awn 0.4-0.6 mm long ... E. floridana
2. Inflorescence branches (3)4-36; spikelets 2.4-3 mm long; lower lemma awn 0.7-1.2 mm long or only mucronate [3]
3. Inflorescence branches 10-36, lax and curvaceous; keel of lower lemma glabrous ... E. distichophylla
3. Inflorescence branches (3)4-9, stiff; keel of lower lemma pubescent ... E. neglecta
4. Culms 60-150 cm long; inflorescence branches 8-24; lower lemma veins and keel glabrous or with few hairs ... E. glauca
4. Culms 20-80(100) cm long; inflorescence branches (1)4-15; lower lemma veins or keels pubescent [5]
5. Inflorescence branches 8-15; keel of lower lemma glabrous, lateral veins with white hairs 1-2 mm long ... E. retusa
5. Inflorescence branches (1)4-11; keel and lateral veins of lower lemma densely pubescent, hairs to 1 mm long [6]
6. Lower lemma pale to reddish brown, lateral vein hairs spreading, white, and 0.5-1 mm long; upper sterile lemma 1.3-1.5 mm long ... E. caribaea
6. Lower lemma dark brown to nearly black, lateral veins hairs appressed, brown, and 0.1-0.4 mm long; upper sterile lemma 0.8-1(1.2) mm long ... E. petraea

*****Eustachys distichophylla*** (Lag.)Nees {AFP} —

Eustachys floridana Chapm. {AFP} —
Eustachys glauca Chapm. {AFP} —
Eustachys neglecta (Nash)Nash {AFP} —
Eustachys petraea (Sw.)Desv. {AFP} —
*****Eustachys retusa*** (Lag.)Kunth {AFP} —

Festuca

1. Perennial; spikelets 4-5(7) mm long, with 2-4 florets; anthers 3 … F. subverticillata
1. Annual (perennial); spikelets 3.5-12 mmm long, with 3-11(17) florets; anthers 1(3) [2]
2. Lower glume 0.5-2 mm long, <1/2 the length of the upper glume … F. myuros
2. Lower glume 1.5-5 mm long, >1/2 the length of the upper glume [3]
3. Lemmas 2.5-5 mm long, the distal half more pubescent than the proximal half, the awns 4.5-10 mm long; caryopses 1.5-2.5 mm long … F. sciurea
3. Lemmas 2.7-9.5 mm long, if pubescent, the distal half no more so than the proximal half but occasionally ciliate, the awns 0.3-13 mm long; caryopses 1.7-6.5 mm long [4]
4. Inflorescence nodes with 1 branch; spikelets with (1)4-8 florets, the internodes 0.6-1.1 mm long; caryopses 3.5-5 mm long … F. bromoides
4. Inflorescence nodes with 1-2 branches; spikelets with (4)5-11(17) florets, the internodes 0.5-0.7 mm long; caryopses 1.7-3.7 mm long … F. octoflora

*****Festuca bromoides*** L. {AFP} —
*****Festuca myuros*** L. {AFP} —
Festuca octoflora Walter {AFP} —
Festuca sciurea Nutt. {AFP} —
Festuca subverticillata (Pers.)E.B.Alexeev {AFP} —

Glyceria

1. Spikelets (6.5)10-23 mm long, with (5)8-16 florets … G. septentrionalis
1. Spikelets 1.8-4 mm long, with 3-7 florets … G. striata

*****Glyceria septentrionalis*** Hitchc. {AFP} —
Glyceria striata (Lam.)Hitchc. {AFP} —

Gymnopogon

1. Leaf blades (1.5)2.5-12 cm long, (2)5-10(18) mm wide; spikelets with 1(2) florets, lemma awns (2.4)4-12.2 mm long … G. ambiguus
1. Leaf blades (1)2-8.5 cm long, 2-8(10) mm wide; spikelets with 1-2 florets, lemma awns 0.7-3 mm long [2]
2. Scaly rhizomes usually evident; most inflorescence branches bereft of spikelets along the basal 1/3-2/3; spikelets with 1(2) florets; lower glume 2-4 mm long … G. brevifolius
2. Usually densely cespitose without evident scaly rhizomes; most inflorescence branches bereft of spikelets along the basal 1/4-1/20 or spikelets present at very base of branch; spikelets with (1)2-3(4) florets; lower glume (2.5)3-6 mm long … G. chapmanianus

Gymnopogon ambiguus (Michx.)Britton et al. {AFP} —
Gymnopogon brevifolius Trin. {AFP} —
Gymnopogon chapmanianus Hitchc. {AFP} —

Hackelochloa
*****Hackelochloa granularis*** (L.)Kuntze {AFP} —

Hemarthria
*****Hemarthria altissima*** (Poir.)Stapf & C.E.Hubb. {AFP} —

Heteropogon
1. Perennial; glumes eglandular, glabrous or hirsute … H. contortus
1. Annual; glumes with glandular pits, glabrous … H. melanocarpus

*****Heteropogon contortus*** (L.)P.Beauv. ex Roem. & Schult. {AFP} —
*****Heteropogon melanocarpus*** (Elliott)Elliott ex Benth. {AFP} —

Hordeum
1. Leaf sheath without auricles; lateral spikelets sterile and pedicellate, sometimes with awns to 1.8 mm long … H. pusillum
1. Leaf sheath auricles to 6 mm long; lateral spikelets usually sessile and fertile and with awns to 18 cm long, sometimes pedicellate and sterile and awnless … H. vulgare

Hordeum pusillum Nutt. {AFP} — Possibly was variously domesticated in the USA outside of Florida (Graham et al. 2017).
*****Hordeum vulgare*** L. {AFP} —

Hymenachne
1. Ligules 1-2.5 mm long; leaf blades (9)12-28 mm wide, the base cordate and much wider than the culm; spikelets 3.5-5 mm long, the apex filiform-acuminate … H. amplexicaulis
1. Ligules 0.3-0.7 mm long; leaf blades 5-15 mm wide, the base usually truncate to cuneate and not much wider than the culm; spikelets 2-2.8 mm long, acute … H. hemitomon

*****Hymenachne amplexicaulis*** (Rudge)Nees {AFP} —
Hymenachne hemitomon (Schult.)C.C.Hsu {AFP} —

Hyparrhenia
1. Spikelet hairs whitish … H. hirta
1. Spikelet hairs reddish … H. rufa

*****Hyparrhenia hirta*** (L.)Stapf {AFP} —
*****Hyparrhenia rufa*** (Nees)Stapf {AFP} —

Imperata
1. Major secondary veins of leaf blades typically whitish and distinctly discolorous from rest of blade; flowering after fire or cutting of shoots; upper hyaline lemmas 0-2.5 mm long; stamens 1 per floret, filaments dilated at base, anthers 1.4-2.8(3.2) mm long … I. brasiliensis
1. Major secondary veins of leaf blades light green, scarcely discolorous from rest of blade, or whitish and discolorous; flowering year-round; upper hyaline lemmas (0.7)1.3-2.3(3.4) mm long; stamens 2 per floret, filaments not dilated at base, anthers (2.2)2.5-4.2 mm long … I. cylindrica

Imperata brasiliensis Trin. {AFP} — Levy & Marion cos. south to Miami-Dade. The native ilk (as *I. brasiliensis* here) flowers only when cut or burned and has been misapplied to various northern and panhandle populations. Earliest collections by Chapman (FLAS, NY).
****Imperata cylindrica*** (L.)P.Beauv. {AFP} — Cultivated in Florida in 1937, and was naturalized by the 1950s in Hernando and Walton counties. Analyses by Burrell et al. (2015) suggest that one clonal lineage (CL2, possibly from the Philippines) is predominant in Florida (probably the robust one with larger anthers), with another (CL1, possibly from southern Japan) present in the panhandle (probably with smaller anthers).

Kellochloa
1. Leaf blades 2-4 mm wide; spikelets 3-4 mm long, ca. 1.5 mm wide; upper glume and lower lemma tuberculate-hispid … K. brachyantha
1. Leaf blades 2-10 mm wide; spikelets 1.5-2.2 mm long, ca. 1 mm wide; upper glume and lower lemma verrucose … K. verrucosa

[++]***Kellochloa brachyantha*** (Steud.)Lizarazu et al. {AFP} — Santa Rosa Co. (primarily AR, LA, OK, TX). Possibly a recent dispersal, but otherwise in decent habitat.
Kellochloa verrucosa (Muhl.)Lizarazu et al. {AFP} —

Koeleria
****Koeleria gerardi*** (Vill.)Shinners {AFP} —

Lagurus
****Lagurus ovatus*** L. {AFP} —

Lasiacis
1. Leaves glabrous to glabrate or sparsely ciliate, the blades linear-lanceolate to narrowly lanceolate, (3)5-12(30) mm wide; fertile florets whitish to light brown at maturity … L. divaricata
1. Leaves often pubescent, the blades ovate to broadly lanceolate,(8)15-30(56) mm wide; fertile florets dark brown to nearly black at maturity … L. ruscifolia

Lasiacis divaricata (L.)Hitchc. {AFP} —
****Lasiacis ruscifolia*** (Kunth)Hitchc. {AFP} —

Leersia
1. Cespitose; spikelets 1.5-2 mm long, glabrous … L. monandra
1. Rhizomatous; spikelets 2.5-6.5 mm long, the margins usually ciliate [2]
2. Spikelets 2.7-3.5(4) mm wide … L. lenticularis
2. Spikelets 0.5-2 mm wide [3]
3. Rhizome scales imbricate; inflorescence branches solitary at nodes; spikelets 2.4-3.3(3.6) mm long; anthers 2 … L. virginica
3. Rhizome scales lacking or not imbricate; inflorescence branches 2-4 at the proximal nodes; spikelets 3.2-6.5 mm long; anthers 3 or 6 [4]
4. Inflorescence exserted, 5-15 cm long, branches appressed to ascending, spikelet-bearing to near the base; spikelets 3.2-4.7(5) mm long; anthers 6 … L. hexandra
4. Inflorescence exserted or enclosed partly by the leaf sheath, 10-30 cm long, branches spreading when exserted, naked on the lower 1/3; spikelets (4)4.2-6.5 mm long; anthers 3 … L. oryzoides

Leersia hexandra Sw. {AFP} —
Leersia lenticularis Michx. {AFP} —
Leersia monandra Sw. {AFP} —
Leersia oryzoides (L.)Sw. {AFP} —
Leersia virginica Willd. {AFP} —

Leptochloa
Leptochloa virgata (L.)P.Beauv. {AFP} —

Limnodea
Limnodea arkansana (Nutt.)L.H.Dewey {AFP} —

Lithachne
++***Lithachne pauciflora*** (Sw.)P.Beauv. {AFP} — Hammocks. Sporadic in central and south peninsula (Neotropics). Possibly naturally dispersed? Native to the nearby the Greater Antilles.

Lolium
1. Inflorescence paniculiform, usually with branches proximally [2]
1. Inflorescence spiciform with spikelets along the one central axis [3]
2. Leaf sheath auricles ciliate (at least 1 or 2 hairs); inflorescence branches usually 2 at the proximal node, the shorter with 1-13 spikelets, the longer with 3-19 spikelets; lemmas usually scabrous or hispidulous, unawned or with an awn up to 4 mm long ... L. arundinaceum
2. Leaf sheath auricles glabrous; inflorescence branches 1-2 at the proximal node, if 2 the shorter with 1-2(3) spikelets, the longer with 2-6(9) spikelets; lemmas usually smooth, sometimes slightly scabrous, unawned or with a mucro to 0.2 mm long ... L. pratense
3. Leaves rolled in bud, blades (2)3-8(13) mm wide; spikelets with 10-22 florets; lemma awns (0)1-15 mm long ... L. multiflorum
3. Leaves folded in bud, blades 1-12 mm wide; spikelets with 2-10(11) florets; lemmas awns 0-23 mm long [4]
4. Perennial; leaf blades (1)2-4(6) mm wide; second glume usually shorter than the floret; lemma 0.8-2 mm wide, awns 0-8 mm long; caryopses 0.7-1.5 mm wide, 3-4.5 times longer than wide ... L. perenne
4. Annual; leaf blades 1-12 mm wide; second glume subequal to longer than the floret; lemma 1.2-3 mm wide, awns 0-23 mm long; caryopses 1-3 mm wide, 2-3 times longer than wide ... L. temulentum

****Lolium arundinaceum*** (Schreb.)Darbysh. {AFP} —
****Lolium multiflorum*** Lam. — Hybrids with *L. perenne* are called *L. ×hybridum* Hausskn.
****Lolium pratense*** (Huds.)Darbysh. —
****Lolium perenne*** L. {AFP} —
****Lolium temulentum*** L. {AFP} —

Luziola
1. Culm weak, prostrate or immersed; leaf blades floating or immersed, 1.5-5(8) cm long, the tip rounded to subacute; inflorescences 0.5-2 cm long, 2-5 spikelets, the pistillate one nearly concealed with only the stigma exserted ... L. fluitans

1. Culm stiff, erect; leaf blades emergent or immersed, 3-30(39) cm long, the tip long-acute to attenuate; inflorescences 1-12 cm long, 8-50 spikelets, mostly exserted [2]
2. Culm robust 3-10 mm wide; ligules 10-40 mm long; leaf blades 7-20 mm wide ... L. subintegra
2. Culm slender, 0.5-2 mm wide; ligules 2-6 mm long; leaf blades 0.5-6 mm wide [3]
3. Pistillate spikelet 3-5 mm long; fruit striate ... L. bahiensis
3. Pistillate spikelet 2-2.5 mm long; fruit smooth ... L. peruviana

Luziola bahiensis (Steud.)Hitchc. {AFP} —
Luziola fluitans (Michx.)Terrell & H.Rob. {AFP} —
****Luziola peruviana*** J.F.Gmel. {AFP} —
****Luziola subintegra*** Swallen {AFP} —

Melica
Melica mutica Walter {AFP} —

Melinis
1. Sheaths and blades densely pilose, sticky, aromatic; spikelets 1.7-2.4 mm long, glabrate, lemmas often awned; glumes and pedicels glabrous, scabridulous; lower florets without paleas ... M. minutiflora
1. Sheaths glabrate to moderately pilose, not noticeably sticky nor aromatic; spikelets 2-5.7 mm long, copiously hairy (glumes and usually pedicels), with hairs to 7 mm long, glumes or lemmas often awned; lower florets with paleas ... M. repens

****Melinis minutiflora*** P.Beauv. {AFP} —
****Melinis repens*** (Willd.)Zizka {AFP} —

Microstegium
****Microstegium vimineum*** (Trin.)A.Camus {AFP} —

Miscanthus
****Miscanthus sinensis*** Andersson {AFP} —

Muhlenbergia
1. Culms 1-3 m tall, 3-6 mm wide, woody; cauline leaf blades (esp. proximal ones) absent or vestigial ... M. dumosa
1. Culms 0.1-1.4(1.6) m tall, 0.5-2 mm wide, not woody; cauline leaf blades present [2]
2. Culms 0.1-0.5(0.7) m tall, decumbent, sometimes rooting at nodes; leaf blades (1)3-5(10) cm long; inflorescence 1-1.6 cm wide ... M. schreberi
2. Culms 0.6-1.4(1.6) m tall, erect; leaf blades 10-100 cm long; inflorescence 5-30(41) cm wide [3]
3. Leaf blades involute, 35-100 cm long; upper glume with awns 2-25 mm long; lemma apex with 2 setaceous teeth 1-5 mm long; lemma awns 8-35 mm long ... M. capillaris var. filipes
3. Leaf blades flat or involute, 10-50(80) cm long; upper glume unawned or with awns to 5 mm long; lemma apex without setaceous teeth or the teeth no more than 1 mm long; lemma awns 2-13(18) mm long or absent [4]
4. Glumes less than 1/2 as long as the lemmas; lemmas with awns to 2-13(18) mm long ... M. capillaris var. capillaris

4. Glumes more than 1/2 as long as the lemmas; lemmas usually unawned, or with awns <3 mm long ... M. capillaris var. trichopodes

Muhlenbergia capillaris (Lam.)Trin. var. ***capillaris*** {AFP} —
Muhlenbergia capillaris (Lam.)Trin. var. ***filipes*** (M.A.Curtis)Chapm. ex Beal {AFP} —
Muhlenbergia capillaris (Lam.)Trin. var. ***trichopodes*** (Elliott)Vasey {AFP} —
^*Muhlenbergia dumosa* Scribn. ex Vasey —
Muhlenbergia schreberi J.F.Gmel. {AFP} —

Neyraudia

****Neyraudia reynaudiana*** (Kunth)Keng ex Hitchc. {AFP} — The blade not channeled much at all, and auriculate-clasping half of the stem help to distinguish this from other tall grasses.

Oplismenus

1. Leaf blades generally more ovate-lanceolate; awns slender, whitish, and minutely antrorsely scabrous; stigma pale, whitish, inconspicuous ... O. burmannii
1. Leaf blades generally more lanceolate to linear-lanceolate; awns thicker, reddish, scabrous; stigma red, conspciuous [2]
2. Larger leaf blades >6 cm long; fertile part of inflorescence usually >7 cm long ... O. hirtellus
2. Larger leaf blades <5.5 cm long; fertile part of inflorescence <7 cm long ... O. setarius

****Oplismenus burmannii*** (Retz.)P.Beauv. {AFP} —
****Oplismenus hirtellus*** (L.)P.Beauv. {AFP} —
Oplismenus setarius (Lam.)Roem. & Schult. {AFP} —

Oryza

1. Rhizomes sometimes present; leaf sheath auricles absent or to 15 mm long; spikelets deciduous; lemmas awned, awns 4-11(16) cm long; anthers 3.5-7.4 mm long ... O. rufipogon
1. Rhizomes absent; leaf sheath auricles absent or to 5 mm long; spikelets persistent; lemmas usually unawned or awns to 6(15) cm long; anthers 1-2.5 mm long ... O. sativa

****Oryza rufipogon*** Griff. {AFP} —
^*Oryza sativa* L. —

Panicum

1. Spikelet 2.5-7.5 mm long; lower glume 1.8-4 mm long [2]
1. Spikelet 1.8-4.1 mm long; lower glume 0.4-1.8 mm long [4]
2. Annual; nodes puberulent; leaf sheath pilose with some papillose-based hairs; leaf blade upper surface pubescent ... P. miliaceum
2. Rhizomatous perennial; nodes glabrous; leaf sheath glabrous to pilose; leaf blade upper surface glabrous or with few trichomes at the base [3]
3. Plant glabrous throughout; panicle narrow and compact, the branches ascending to appressed; coastal, saline-influenced sites ... P. amarum
3. Plant usually at least pilose on leaf sheath margins, collars, or basally on upper surface of leaf blades; panicle open and diffuse, the branches ascending to spreading; habitats various ... P. virgatum
4. Rhizomatous perennial; lower floret staminate ... P. repens
4. Annual or perennial without rhizomes, sometimes rooting at basal nodes; lower floret sterile

[5]
5. Nodes glabrous; lower glume 0.4-0.8 mm long; ligule of dense bristile to 2 mm long [6]
5. Nodes pilose; lower glume 0.8-2 mm long [7]
6. Leaf sheath and upper blade surface pilose with papillose-based hairs ... P. dichotomiflorum var. bartowense
6. Leaf sheath and upper blade surface glabrous to pilose, not papillose-based ... P. dichotomiflorum var. dichotomiflorum
7. Panicle 3.8-31 cm wide, <2 times longer than wide ... P. capillare
7. Panicle 1.4-5.1 cm wide, 2-3 times longer than wide ... P. flexile

Panicum amarum Elliott {AFP} —
Panicum capillare L. {AFP} —
Panicum dichotomiflorum Michx. var. ***bartowense*** (Scribn. & Merr.)Fernald {AFP} —
Panicum dichotomiflorum Michx. var. ***dichotomiflorum*** {AFP} —
Panicum flexile (Gatt.)Scribn. {AFP} —
****Panicum miliaceum*** L. {AFP} —
****Panicum repens*** L. {AFP} —
Panicum virgatum L. {AFP} —

Paspalidium

1. Cespitose; inflorescence branch terminating in a bristle 3-6 mm long (subtending the terminal spikelet); spikelets 1.8-2.2 mm long ... P. chapmanii
1. Rhizomatous; inflorescence branch terminating in a short point lacking a bristle; spikelets 2.2-3.2 mm long ... P. geminatum

Paspalidium chapmanii (Vasey)Davidse & R.W.Pohl {AFP} — SE.
Paspalidium geminatum (Forssk.)Stapf {AFP} —

Paspalum: The lower glume is usually absent, but if present, it is usually markedly shorter than the upper glume and lemmas. The upper glume is generally as long as the spikelet, somewhat cupped around the florets.

1. Spikelets solitary (1 pedicel) ... Key A
1. Spikelets paired (both fertile), or sometimes 1 fertile spikelet paired with a naked pedicel or a sterile spikelet [2]
2. Spikelets glabrous (generally green, greenish, to stramineous, or glaucous and spikelet pairs not overlapping on a narrow rachis) ... Key B
2. Spikelets pubescent, or glabrous and distinctly brown, olive to dark brown (at least partly so on some spikelets), or glabrous and glaucous (with a rachis 0.8-1.2 mm wide and overlapping spikelet pairs) ... Key C

Key A
1. Inflorescence branches not paired at the terminus, of 1-70 racemosely arranged branches [2]
1. Inflorescence with a pair of branches at the tip arising from the same point or nearly so (sometimes the branches separated by 1 cm), occasionally with 1(-5) branches below [5]
2. Inflorescence axis 0.6-1.3 mm wide, not winged or scarcely so, the spikelets exposed ... P. laeve

2. Inflorescence axis (including wings) 1-4 mm wide, winged and mostly or wholly concealing or hooded over the spikelets [2]
3. Branches 7-70, disarticulating at maturity, the axes extending beyond the distal spikelets; spikelets 1-1.9 mm long … P. repens
3. Branches (1)2-6, persistent, terminating in a spikelet [4]
4. Spikelets 3.2-4 mm long; upper lemmas with a few short hairs at the apex … P. acuminatum
4. Spikelets 1.7-2.1 mm long; upper lemmas glabrous … P. dissectum
5. Spikelets 3.8-5.2 mm long; lower and upper glume absent (occasionally upper glume present on distal spikelets); upper lemma and palea membranous, not inrolled; stamens 1-2 … P. eglume
5. Spikelets 1.3-4.5 mm long; lower glume usually absent, upper glume present; upper lemma and palea coriaceous-indurate, the lemma margins usually inrolled; stamens 3 [6]
6. Upper glume pubescent (lower glume usually absent or to 1 mm long) [7]
6. Upper glume glabrous (lower glume usually absent or to 1 mm long) [8]
7. Spikelets 1.3-1.9 mm long; upper glumes pilose along the margins … P. conjugatum
7. Spikelets 2.4-3.2 mm long; upper glumes sparsely short pubescent on the abaxial surface … P. distichum
8. Spikelets 1.9-2.3 mm long … P. minus
8. Spikelets 2.5-4.5 mm long [9]
9. Ligules 1-2 mm long; spikelets 3-4.5 mm long, 1.1-2 mm wide; upper glume and lower lemma 3-veined; of coastal habitats … P. vaginatum
9. Ligules 0.2-0.5 mm long; spikelets 2.5-4 mm long, 2-2.8 mm wide; upper glume and lower lemma 5-veined; widely distributed [10]
10. Leaf blades flat, (2)4-10 mm wide; spikelet 3.2-4 mm long, (2)2.4-2.8 mm wide … P. notatum var. notatum
10. Leaf blades folded, 2-4 mm wide; spikelet 2.5-3.2 mm long, 2-2.2 mm wide … P. notatum var. saurae

Key B
1. Leaf blades usually involute, 0.2-2(2.8) mm wide; inflorescence branches 1(3), 5-23 cm long … P. monostachyum
1. Leaf blades flat or folded, 1.9-18 mm wide; inflorescence branches (1)2-15(28), 0.8-18 cm long [2]
2. Inflorescence branches 8-25; glumes absent; lower lemma ribbed over the veins … P. malacophyllum
2. Inflorescence branches (1)2-15(28); upper glume present (lower glume usually absent); lower lemma not ribbed over the veins [3]
3. Ligules 0.2-0.5 mm long; spikelets 1.3-2.6 mm long [4]
3. Ligules 1-4 mm long; spikelets 2-4.1 mm long [5]
4. Culms 20-60 cm tall; leaf blades glabrous to sparsely pilose at the base; inflorescence terminal; spikelets 1.3-1.5 mm long, 0.7-1.1 mm wide; glume and lemma 5-veined (may be obsucre), glabrous to sparsely pubescent … P. caespitosum
4. Culms 25-110 cm tall; leaf blades glabrous or pilose; inflorescence terminal and sometimes also axillary, the axillary ones partially or completely enclosed by the subtending leaf sheath; spikelets 1.4-2.6 mm long, (0.9)1.4-1.8 mm wide; glume and lemma 3-veined or veins obscure, glabrous, pubescent, or stipitate-glandular … P. setaceum
5. Plant often glaucous; inflorescence branch axis 0.2-0.8 mm wide; spikelet pairs distant, not overlapping; lower glume often present, 0.1-0.3 mm long … P. bifidum
5. Plant not glaucous, or sparingly so; inflorescence branch axis 0.3-2 mm wide, sometimes winged; spikelet pairs overlapping adjacent ones; lower glume absent (rarely present) [6]

6. Inflorescence branches (0.8)2-8(10) cm long; upper glume 3-veined [7]
6. Inflorescence branches 4-19 cm long; upper glume 5-veined [8]
7. Plants shortly rhizomatous; leaf blades conduplicate to flat; spikelets 2-2.8 mm wide … P. praecox
7. Plants decumbent, rooting at the lower nodes, not rhizomatous; leaf blades flat; spikelets 1.5-2 mm wide … P. pubiflorum
8. Inflorescence branches 3-25; spikelets 2.2-2.5 mm long, 1-1.3 mm wide … P. arundinaceum
8. Inflorescence branches (1)3-6; spikelets turgid, 2.9-4.1 mm long, 1.9-3.1 mm wide … P. floridanum

Key C
1. Upper glumes and lower lemma margins lacerate-winged … P. fimbriatum
1. Upper glumes and lower lemma margins not winged [2]
2. Spikelets 1-1.3 mm long [3]
2. Spikelets 1.3-4.1 mm long [4]
3. Culm nodes glabrous; inflorescence branches 2-6; spikelets appressed to the branch axes, 0.7-0.9 mm wide, stipitate-glandular … P. blodgettii
3. Culm nodes pilose; inflorescence branches 18-50; spikelets diverging from the branch axes, 0.9-1.1 mm wide, pubescent, eglandular … P. paniculatum
4. Upper glume and lower lemma margins pilose, the hairs 0.5-1 mm long [5]
4. Upper glume and lower lemma margins glabrous to short-pubescent, the hairs 0.05-0.2(0.5) mm long [6]
5. Inflorescence branches 2-7; spikelets 2.3-4 mm long, 1.7-2.5 mm wide; upper glume and lower lemma 5- or 7-veined … P. dilatatum
5. Inflorescence branches (4)10-20(30); spikelets 1.8-2.8 mm long, 1.1-1.5 mm wide; upper glume and lower lemma 3-veined … P. urvillei
6. Spikelets distinctly brown, olive to dark brown (at least partly so on some spikelets), or glaucous [7]
6. Spikelets green, greenish, to stramineous, generally not glaucous [11]
7. Annual; inflorescence branch axis 0.7-2.3 mm wide and broadly winged, the wings about as wide as or wider than the central vein; spikelets 2-2.2 mm long, glabrous or sparingly pubescent towards the base … P. boscianum
7. Perennial; inflorescence branch axis 0.5-1.7 mm wide, narrowly winged, the wings narrower than the central vein; spikelets 2-3.2 mm long, pubescent, sometimes glabrous [8]
8. Inflorescence branches 10-20, the branch axis 1-1.7 mm wide; spikelets 1.8-2.4 mm wide … P. virgatum
8. Inflorescence branches 2-13, the branch axis 0.5-1(1.2) mm wide; spikelets 1.1-2.2 mm wide [9]
9. Leaf blades 7-18 mm wide; spikelets 1.1-1.8 mm wide; plant generally green, not glaucous … P. conspersum
9. Leaf blades 2.5-5 mm wide; spikelets 1.4-2.2 mm wide; plant often bluish glaucous [10]
10. Rhizomes 5-25 cm long; spikelets 2.3-2.7 mm long, 1.4-1.8 mm wide … P. lepton
10. Rhizomes <5 cm long, often indistinct; spikelets 2.5-3 mm long, 1.5-2.2 mm wide … P. plicatulum
11. Inflorescence branches (6)15-44 [12]
11. Inflorescence branches 1-7(10) [13]
12. Inflorescence branches spreading to reflexed (rarely ascending), the branch axis 0.3-0.4 mm wide; leaf blades 10-23 mm wide … P. coryphaeum

12. Inflorescence branches erect to ascending, the branch axis 0.5-0.6 mm wide; leaf blades 4.9-6.1 mm wide … P. quadrifarium
13. Lower glume present, 0.2-0.5(1.8) mm long … P. botterii
13. Lower glume absent [14]
14. Spikelets 2.8-3.6 mm long; cespitose to decumbent and rooting at proximal nodes; leaf blades 4-18 mm wide … P. pubiflorum
14. Spikelets 1.3-2.6 mm long; plant cespitose to short-rhizomatous; leaf blades 1.9-18 mm wide [15]
15. Culms 80-110 cm tall; ligules 1-2.9 mm long; leaf blades mostly involute; spikelets 1.6-2.2 mm long, 1.1-1.3 mm wide … P. laxum
15. Culms 20-110 cm tall; ligules 0.2-0.5 mm long; leaf blades flat; spikelets 1.3-2.6 mm long, 0.7-1.3 mm wide [16]
16. Culms 20-60 cm tall; leaf blades 1.9-6.2 mm wide, glabrous to sparsely pilose at the base; inflorescence terminal; spikelets 1.3-1.5 mm long, 0.7-1.1 mm wide; glume and lemma 5-veined (may be obsucre), glabrous to sparsely pubescent … P. caespitosum
16. Culms 25-110 cm tall; leaf blades 2-18 mm wide, glabrous or pilose; inflorescence terminal and sometimes also axillary, the axillary ones partially or completely enclosed by the subtending leaf sheath; spikelets 1.4-2.6 mm long, (0.9)1.4-1.8 mm wide; glume and lemma 3-veined or veins obscure, glabrous, pubescent, or stipitate-glandular … P. setaceum

Key D: P. setaceum varieties. See Banks (1966) for treatment.
1. Leaf blade surfaces glabrous to glabrate, margins ciliate or eciliate [2]
1. Leaf blade surfaces and margins hirsute or ciliate, sometimes nearly glabrous except puberulent on the upper surface distally (in *stramineum*) [5]
2. Leaf blades 2.4-6.1 mm wide, stiff; spikelets 2-2.6 mm long … P. setaceum var. rigidifolium
2. Leaf blades 3-18 mm wide, lax to somewhat stiff (if somewhat stiff, >6 mm wide); spikelets 1.4-2.4 mm long [3]
3. Leaves mostly basal, the blades recurved, yellowish-green; spikelets 1.4-1.8 mm long, usually glabrous, sometimes stipitate-glandular … P. setaceum var. longepedunculatum
3. Leaves basal and cauline, the blades straight, yellowish green, dark green, to purplish; spikelets 1.7-2.4 mm long, pubescent, occasionally glabrous [4]
4. Leaf blades dark green to purplish; lower lemma with conspicuous midveins … P. setaceum var. ciliatifolium
4. Leaf blades yellowish-green to dark green; lower lemmas without evident midveins … P. setaceum var. stramineum
5. Plants widely spreading to prostrate; leaf blades yellow-green; spikelets 1.7-2.1(2.4) mm long … P. setaceum var. supinum
5. Plants erect to spreading; leaf blades yellow-green, green, or grayish green; spikelets 1.4-2.5 mm long [6]
6. Spikelets 1.8-2.5 mm long, usually glabrous, light green to green; lower lemma usually with conspicuous midveins … P. setaceum var. muhlenbergii
6. Spikelets 1.4-2.4 mm long, usually pubescent, pale yellow to light green or purple-spotted; lower lemma usually without conspicuous midveins [7]
7. Leaves mostly basal, the blades grayish green, hirsute; spikelets often purple-spotted, 1.4-1.9 mm long, often stipitate-glandular … P. setaceum var. villosissimum
7. Leaves basal and cauline, the blades yellowish green, dark green, or grayish green, glabrate to hirsute; spikelets not purple-spotted, 1.4-2.4 mm long, eglandular [8]
8. Leaves grayish green, the blades 1.5-7 mm wide, hirsute; spikelets 1.4-1.9 mm long … P. setaceum var. setaceum

8. Leaves yellowish green to dark green, the blades 3.3-13.5 mm wide, glabrate to hirsute; spikelets (1.6)1.7-2.2(2.4) mm long ... P. setaceum var. stramineum

*__Paspalum acuminatum__ Raddi {AFP} —
*__Paspalum arundinaceum__ Poir. {AFP} —
__Paspalum bifidum__ (Bertol.)Nash {AFP} —
__Paspalum blodgettii__ Chapm. {AFP} —
__Paspalum boscianum__ Flüggé {AFP} —
__Paspalum caespitosum__ Flüggé {AFP} —
__Paspalum conjugatum__ P.J.Bergius {AFP} —
*__Paspalum coryphaeum__ Trin. {AFP} —
*__Paspalum dilatatum__ Poir. {AFP} —
__Paspalum dissectum__ (L.)L. {AFP} —
__Paspalum distichum__ L. {AFP} —
__Paspalum eglume__ Morrone & Zuloaga {AFP} — Peninsula (also Cuba, Mexico, reported for Alabama). Marshes and prairies. Once known as *Reimarochloa oligostachya*, but since been found to be part of *Paspalum* (Scataglini et al. 2014). Similar to *P. vaginatum*, but *P. eglume* has more widely spaced spikelets (each spikelet overlapping only with 2 adjacent ones, the tip of one overlapping with the base of the next) and the leaves more widely spaced (stem node and base of sheaths often visible).
*__Paspalum fimbriatum__ Kunth {AFP} —
__Paspalum floridanum__ Michx. {AFP} —
__Paspalum laeve__ Michx. {AFP} —
__Paspalum langei__ (E.Fourn.)Nash {AFP} — *Paspalum botterii* is a synonym, according to Denham (2005).
__Paspalum laxum__ Lam. {AFP} —
*__Paspalum malacophyllum__ Trin. {AFP} —
*__Paspalum minus__ E.Fourn. {AFP} —
__Paspalum monostachyum__ Vasey ex Chapm. {AFP} —
*__Paspalum lepton__ Schult {AFP} — (syn. *P. nicorae* Parodi)
*__Paspalum notatum__ Flüggé var. __notatum__ {AFP} —
*__Paspalum notatum__ Flüggé var. __saurae__ Parodi {AFP} —
*__Paspalum paniculatum__ L. {AFP} —
__Paspalum plicatulum__ Michx. {AFP} —
__Paspalum praecox__ Walter {AFP} —
__Paspalum pubiflorum__ Rupr. ex E.Fourn. {AFP} —
__Paspalum repens__ P.J.Bergius {AFP} —
__Paspalum setaceum__ Michx. var. __ciliatifolium__ (Michx.)Vasey— Throughout (Banks 1966: 279).
__Paspalum setaceum__ Michx. var. __longepedunculatum__ (Leconte)Alph.Wood — Nearly throughout, except perhaps confined to the coast in the pandhandle (Banks 1966: 281).
__Paspalum setaceum__ Michx. var. __muhlenbergii__ (Nash)D.J. Banks {AFP} — N FL (Banks 1966: 282).
__Paspalum setaceum__ Michx. var. __rigidifolium__ (Nash)D.J. Banks — Peninsula (Banks 1966: 282).
__Paspalum setaceum__ Michx. var. __setaceum__ {AFP} — Nearly throughout except perhaps absent from S FL (Banks 1966: 281).
__Paspalum setaceum__ Michx. var. __stramineum__ (Nash)D.J. Banks — Panhandle & N peninsula (Banks 1966: 279).
__Paspalum setaceum__ Michx. var. __supinum__ (Bosc ex Poir.)Trin. — Throughout (Banks 1966: 282).

Paspalum setaceum Michx. var. ***villosissimum*** (Nash)D.J. Banks — Peninsula (Banks 1966: 283).
****Paspalum urvillei*** Steud. {AFP} —
Paspalum vaginatum Sw. {AFP} — Coastal counties (Carolinas south thru South America). Salt or brackish marshes. Quite similar to *P. eglume*, except *P. vaginatum* has more imbricate spikelets (each spikelet overlapping with 3-4 adjacent spikelets, the base of the next distal spikelet arising from near the middle of the adjacent proximal spikelet) and the leaves more imbricate (stem nodes and leaf sheath bases rarely visible).
****Paspalum virgatum*** L. {AFP} —

Phalaris

1. Glume keel wings irregularly dentate or crenate to occasionally entire, varying within a panicle; sterile florets 1, 0.7-1.8 mm long, glabrous or glabrate … P. minor
1. Glume keel wings smooth; sterile florets 2, 0.5-1.5 mm long, sparsely hairy (at least distally) [2]
2. Panicles cylindrical, sometimes lobed, 0.6-1.5 cm wide; glumes 2-6 mm long, 0.6-1.1 mm wide; fertile florets 2-3.8 mm long; anthers 0.5-1.3 mm long … P. angusta
2. Panicles usually ovoid to ellipsoid or oblong-ovoid, occasionally cylindrical, not lobed, 0.8-2 cm wide; glumes 3.8-10 mm long, 0.8-1.5 mm wide; fertile florets 2.9-6.8 mm long; anthers 1.5-4 mm long [3]
3. Glumes 7-10 mm long, 2-2.5 mm wide; fertile florets 4.5-6.8 mm long; anthers 2-4 mm long … P. canariensis
3. Glumes 3.8-6(8) mm long, 0.8-1.5 mm wide; fertile florets 2.9-4.7 mm long; anthers 1.5-2 mm long … P. caroliniana

****Phalaris angusta*** Nees ex Trin. {AFP} —
****Phalaris canariensis*** L. {AFP} —
Phalaris caroliniana Walter {AFP} — Possibly was domesticated in the Eastern Agricultural Complex north of Florida (Fritz in Minnis 2014).
****Phalaris minor*** Retz. {AFP} —

Phanopyrum

Phanopyrum gymnocarpon (Elliott)Nash {AFP} —

Pharus

Pharus lappulaceus Aubl. {AFP} — SE.

Phleum

****Phleum pratense*** L. {AFP} —

Phragmites

1. Culm dull, finely ribbed or longitudinally grooved, exposed parts typically greenish; inflorescence densely compact, erect with ascending branches; lower glume 3.4-3.7 mm long; lemma 9-9.8 mm long … P. australis
1. Culm lustrous, smooth to faintly grooved, exposed parts typically red-purplish; inflorescence diffuse, lax, branches drooping; lower glume 3.9-4.2 mm long; lemma 9.8-10.4 mm long … P. berlandieri

*****Phragmites australis*** (Cav.)Trin. ex Steud. {AFP} —
Phragmites berlandieri E.Fourn. {AFP} —

Phyllostachys

1. Rhizome internodes with ring of air canals; culm sheaths red-brown, sometimes tinged with green, unmarked or densely extremely minutely and imperceptibly dark brown spotted, spots aggregating into a distal dark brown patch; culm intranode ca. 5 mm; culm internodes green or gradually developing purple-brown to black spots or turning uniform purple-brown or black; leaf blade erect or gradually deflexed, imbricate at shoot apex; flowering branchlets shortly spicate … P. nigra
1. Rhizome internodes without air canals; culm sheaths yellow-green, yellow-brown, pale red-brown, brown-purple, dark green, or becoming straw-colored, sometimes striped with purple, with variably sized dark brown spots, proximally sometimes sparser and smaller; culm intranode ca. 3 mm; culm internodes green to yellow, glaucous, or purple; leaf blade usually horizontal or reflexed, rarely erect; flowering branchlets spicate [2]
2. Culm sheath oral setae present, auricles small; culm sheaths densely brown-hairy; culm internodes green to glaucous or purple … P. edulis
2. Culm sheath auricles and oral setae absent; culm sheaths fringed with white hairs at base, otherwise glabrous; culm internodes green to yellow [3]
3. Culm internodes strongly shortened and ventricose at culm base, inflated below nodes at mid-culm; culm sheath ligule short, 1–2 mm … P. aurea
3. Culm internodes normal; culm sheath ligule long, 3-5 mm long … P. meyeri

^*Phyllostachys aurea* Carrière ex Rivière & C.Rivière {AFP} —
^*Phyllostachys meyeri* McClure {AFP} —
^*Phyllostachys nigra* (Lodd. ex Lindl.)Munro —

Piptochaetium

1. Glumes 9-15 mm long; florets 7-13 mm long, callus 2-3 mm long; awns 40-75 mm long; anthers 0.3-0.5 or 3-4 mm long … P. avenaceum
1. Glumes 15-22 mm long; florets 13.5-22 mm long, callus 3.5-8 mm long; awns 62-120 mm long; anthers 4-7 mm long … P. avenacioides

Piptochaetium avenaceum (L.)Parodi {AFP} —
•***Piptochaetium avenacioides*** (Nash)Valencia & Costas {AFP} —

Pleioblastus

^*Pleioblastus variegatus* (J. Dix)Makino {AFP} — The taxonomy is unclear in this group (Serviss & Kratz 2025), with alternate names/potential synonyms used being *P. fortunei* (Van Houtte)Nakai and *P. pygmaeus* (Miq.)Nakai.

Poa

1. Annual, 2-30(45) cm long; leaf blades 2-10 cm long, 1-3(6) mm wide; inflorescence 1-10 cm long; spikelets 2-5 mm long; anthers 0.6-1.1 mm long [2]
1. Perennial, 5-120 cm long; leaf blades 1.5-25 cm long, 0.5-5 mm wide; inflorescence 2-20 cm long; spikelets 3-8.2 mm long; anthers 1-2.7 mm long [3]
2. Calluses subtending the lemmas glabrous; anthers 3, 0.6-1.1 mm long … P. annua
2. Calluses subtending the lemmas villous; anthers 1, 0.1-0.3 mm long … P. chapmaniana

3. Rhizomatous [4]
3. Cespitose [5]
4. Dioecious; calluses subtending the lemmas glabrate (staminate plants) or villous (pistillate plants); anthers 1.6-2.7 mm long (or vestigial) ... P. arachnifera
4. Monoecious; calluses subtending the lemmas villous; anthers 1-2 mm long ... P. pratensis
5. Inflorescence nodes mostly with 1-2(4) branhces; spikelets (3)5-8 mm long; calluses subtending the lemmas glabrous (rarely sparsely, short-villous) ... P. autumnalis
5. Inflorescence nodes mostly with (2)3-10 branches; spikelets 2.5-4.4 mm long, calluses subtending the lemmas villous ... P. sylvestris

**Poa annua* L. {AFP} —
**Poa arachnifera* Torr. {AFP} —
Poa autumnalis Muhl. ex Elliott {AFP} —
Poa chapmaniana Scribn. {AFP} —
**Poa pratensis* L. {AFP} —
Poa sylvestris A.Gray {AFP} —

Polypogon
1. Glumes hispidulous proximally, deeply lobed, lobes 0.3-1.2 mm long; lemmas unawned or awns <1 mm long ... P. maritimus
1. Glumes hispidulous throughout, shallowly lobed, lobes 0.1-0.2 mm long; lemmas awns 0.5-1(4.5) mm long ... P. monspeliensis

**Polypogon maritimus* Willd. {AFP} —
**Polypogon monspeliensis* (L.)Desf. {AFP} —

Polytrias
**Polytrias indica* (Houtt.)Veldkamp {AFP} —

Pseudosasa
**Pseudosasa japonica* (Sieb. & Zucc. ex Steud.)Makino ex Nakai {AFP} —

Rottboellia
**Rottboellia cochinchinensis* (Lour.)Clayton {AFP} —

Saccharum
1. Spikelets with awns ... Erianthus
1. Spikelets without awns [2]
2. Rhizomes short; culms numerous, 2-5 cm wide; leaf blades 20-60 mm wide; peduncles and pedicels usually glabrous ... S. officinarum
2. Rhizomes elongate; culms solitary or few, 0.6-2 cm wide; leaf blades 10-25 mm wide; peduncles and pedicels pilose ... S. spontaneum

^*Saccharum officinarum* L. {AFP} — An important crop of south Florida (Heitmann 1998).
**Saccharum spontaneum* L. {AFP} —

Sacciolepis

1. Annual; leaf blades 1.5-5.5 mm wide; inflorescence 0.5-9(13) cm long, the primary branches fused to the rachis for most of its length, the proximal ones 0.1-0.5 cm long; spikelets 2.1-3.3 mm long; upper glumes 9-veined; paleas of the lower floret 0.5-1 mm long, <1/2 as long as the lower lemma ... S. indica
1. Perennial; leaf blades 3-22 mm wide; inflorescence 3-30 cm long, the primary branches free, proximaly ones 0.4-11.5 cm long; spikelets 2.9-5 mm long; upper glumes 11-veined; paleas of the lower floret 2-4 mm long, subequal to the lower lemma ... S. striata

**Sacciolepis indica* (L.)Chase {AFP} —
Sacciolepis striata (L.)Nash {AFP} —

Schizachyrium

1. Leaf blade upper surface midline with a longitudinal strip of lighter colored, spongy tissue texturally distinct from rest of blade (of bulliform cells) (rhizomatous, without a pronounced collar region, larger blades to 15 cm long, spikelets strict to ascending) ... S. tenerum
1. Leaf blade upper surface uniformly colored and textured, lacking lighter colored spongy tissue [2]
2. Stems often rooting and branching at the lower nodes in contact with the soil; leaf collars usually elongate (ca. 1-2 mm long) and narrowed relative to the sheath and blade; plants of sandy coastal habitats [3]
2. Stems not rooting or branching at the lower nodes; leaf collars neither elongate (<1 mm long) nor particularly narrowed; plants of varied habitats [4]
3. Ligules (0.5)1-2 mm long; pedicellate spikelets 1.5-5.5 mm long; east coast ... S. littorale
3. Ligules 0.5-1 mm long; pedicellate spikelets 4.5-8.5 mm long; panhandle ... S. maritimum
4. Larger leaf blades 2.5-10 cm long, mostly spreading often nearly at right angles to the culm ... S. niveum
4. Larger leaf blades 10-100 cm long, generally ascending to spreading [5]
5. Rames appearing linear, the spikelets generally strict or appressed, the pedicel bases 0.2-0.5 mm wide, gradually widening to 0.3-1 mm distally, straight, often somewhat stiff, not tending to curve outward ... S. sanguineum
5. Rames appearing somewhat open, the spikelets generally spreading or divergent, the pedicel bases 0.1-0.2 mm wide, flaring above midlength to ~0.5 mm wide, strict-ascending to tending to curve outward [6]
6. Leaf blades 1-4 mm wide, often involute or folded [7]
6. Leaf blades 3-9 mm wide, usually flat [9]
7. Plant rhizomatous ... S. rhizomatum
7. Plant cespitose [8]
8. Plant gracile; leaf blades 0.5-1 mm wide; inflorescence with few branches, the rames with 7-10 spikelet pairs ... S. gracile
8. Plant robust; leaf blades 0.5-4 mm wide; inflorescence with several branches, the rames with 10-13 spikelet pairs ... S. sericatum
9. Plant rhizomatous ... S. stoloniferum
9. Plant cespitose [10]
10. Leaf sheath and blades usually densely pubescent throughout; pedicellate spikelet of proximal units staminate, 5-10 mm long, with a lemma (those of distal units smaller and sterile) ... S. divergens
10. Leaf sheath and blades usually glabrate, sometimes densely pubescent only near the base of the plant; pedicellate spikelets usually sterile, 1-6 mm long, without a lemma ... S. scoparium

Schizachyrium divergens (Hack.)Wipff {AFP} — Recently elevated to species (Wipff, III 2024).
Schizachyrium gracile (Spreng.)Nash {AFP} —
Schizachyrium littorale (Nash)E.P.Bickn. {AFP} —
Schizachyrium maritimum (Chapm.)Nash {AFP} —
•***Schizachyrium niveum*** (Swallen)Gould {AFP} — SE.
•***Schizachyrium rhizomatum*** (Swallen)Gould {AFP} —
Schizachyrium sanguineum (Retz.)Alston {AFP} — It is conceivable that Florida material is taxonomically distinct from *S. sanguinuem* s.str. (its type from China) but morphological differences are so far fleeting. *Schizachyrium domingense* (type from Hispaniola) would be the next older species name from the Americas, if distinct. Among many other names for consideration, two have their types from Florida: *S. oligostachyum* and var. *pruinatus*. Hatch (1975) recognized 3 varieties of *S. sanguineum* based on pubescence characters, all 3 applied to Florida, but others (Türpe 1984; Manrique 1994) found no justification for infraspecific taxa.
Schizachyrium scoparium (Michx.)Nash var. ***scoparium*** {AFP} —
•***Schizachyrium sericatum*** (Swallen)Gould {AFP} — SE.
Schizachyrium stoloniferum Nash {AFP} —
Schizachyrium tenerum Nees {AFP} —

Secale
****Secale cereale*** L. {AFP} —

Setaria Excluded: *Setaria leucopila* reported for Florida, but no specimens known.

1. Bristles on pedicel below each spikelet 4-18 [2]
1. Bristles on pedicel below each spikelet 0-3(6) (some spikelets abortive) [4]
2. Annual; spikelets 2-3.4 mm long … S. pumila
2. Perennial; spikelets 2-2.5 mm long [3]
3. Leaf blades 4-20(25) cm long; inflorescence (11) cm long … S. parviflora
3. Leaf blades (8)15-50 cm long; inflorescence (5)10-25 cm long; bristles … S. sphacelata
4. Bristles retrorsely scabrous … S. adhaerans
4. Bristles antrorsely scabrous [5]
5. Bristle usually only subtending the terminal spikelet, bristles subtending more proximal spikelets usually absent or infrequent [6]
5. Bristles subtending all spikelets [8]
6. Annual; leaf blades 10-25 mm wide; inflorescence rachis villous … S. barbata
6. Perennial; leaf blades 20-80 mm wide; inflorescence rachis scabrous or puberulent [7]
7. Inflorescence compact and spicate, the branches stiff and 2-5 cm long … S. megaphylla
7. Inflorescence open and paniculate, the branches lax and 6-10 cm long … S. palmifolia
8. Perennial; inflorescence somewhat loosely flowered [9]
8. Annual; inflorescence usually densely flowered or sometimes somewhat loose [11]
9. Spikelets 3-3.2 mm long … S. macrosperma
9. Spikelets 1.9-2.5 mm long [10]
10. Leaf blades 1-5 mm wide; lower glumes ca. 1/3 as long as the spikelets … S. rariflora
10. Leaf blades 6-12 mm wide; lower glumes ca. half as long as the spikelets … S. setosa
11. Upper lemmas smooth and shiny (occasionally obscurely rugose); leaf blades 10-35 mm wide [12]

11. Upper lemmas distinctly transversely rugose, dull; leaf blades to 4-15(25) mm wide [13]
12. Spikelets 2.8-3.2 mm long, the lower palea absent or up to 1/2 as long as the lower lemma … S. italica
12. Spikelets 1.8-2.2 mm long, the lower palea subequal to the lower lemma … S. magna
13. Culm nodes often strigose or hispid; upper lemmas coarsely rugose … S. corrugata
13. Culm nodes glabrous; upper lemmas finely rugose [14]
14. Leaf blade upper surface softly pilose; inflorescence mostly nodding from the base; spikelets 2.5-3 mm long … S. faberi
14. Leaf blades upper surface scabrous; inflorescence mostly nodding only near the apex; spikelets 1.8-2.2 mm long … S. viridis

**Setaria adhaerens* (Forssk.)Chiov. — Commonly confused with *Setaria verticillata*, which is allegedly tetraploid, with leaf sheaths distally ciliate and leaf blade lower surface (and usually upper surface) without papilose-based hairs or these very few (unknown in Florida; occasionally with antrorsely scabrous awns, cf. *S. verticilliformis*). *Setaria adhaerens* is diploid, with glabrous leaf sheath margins and leaf blade lower surface (and upper surface) moderately to densely pilose with papillose-based hairs, occasionally a few blades sparsely pilose (Layton & Kellogg 2014).
****Setaria barbata*** (Lam.)Kunth {AFP} —
Setaria corrugata (Elliott)Schult. {AFP} —
****Setaria faberi*** R.A.W.Herrm. {AFP} —
****Setaria italica*** (L.)P.Beauv. {AFP} —
Setaria macrosperma (Scribn. & Merr.)K.Schum. {AFP} —
Setaria magna Griseb. {AFP} —
****Setaria megaphylla*** (Steud.)T.Durand & Schinz {AFP} —
****Setaria palmifolia*** (J.König)Stapf {AFP} —
Setaria parviflora (Poir.)Kerguélen {AFP} —
****Setaria pumila*** (Poir.)Roem. & Schult. {AFP} —
****Setaria rariflora*** Mikan ex Trin. {AFP} —
****Setaria setosa*** (Sw.)P.Beauv. {AFP} —
****Setaria sphacelata*** (Schumach.)M.B.Moss ex Stapf & C.E.Hubb. {AFP} —
****Setaria viridis*** (L.)P.Beauv. {AFP} —

Sorghastrum

1. Rhizomatous; spikelet awns 2-15(30) mm long, mostly with one bend (once-geniculate); glume surfaces stramineous to faintly brown … S. nutans
1. Cespitose; awns (16)25-40 mm long, mostly with two bends (twice-geniculate, sometimes subtle); glume surfaces brown [2]
2. Inflorescence secund; pedicels sharply curved or recurved; spikelets 0.8-1.2 mm wide … S. secundum
2. Inflorescence not secund; pedicels flexuous; spikelets 1.1-1.8 mm wide [3]
3. Inflorescence main axis straight to slightly curved, with branches arising from all sides; spikelets 1.3-1.8 mm wide; flowering Jul-Sep … S. apalachicolense
3. Inflorescence main axis arching, with branches arising from one side; spikelets 1.1-1.4 mm wide; flowering Sep-Nov … S. elliottii

•***Sorghastrum apalachicolense*** D.W.Hall {AFP} —
Sorghastrum elliottii (C.Mohr)Nash {AFP} —
Sorghastrum nutans (L.)Nash {AFP} —

Sorghastrum secundum (Elliott)Nash {AFP} —

Sorghum

1. Rhizomatous perennial; spikelets disarticulating at maturity; sessile spikelets 3.8-6.5 mm long; caryopses concealed at maturity … S. halepense
1. Annual, or short-lived perennial; spikelets not disarticulating or tardily so; sessile spikelets 3-9 mm long; caryopses sometimes exposed at maturity [2]
2. Inflorescence branches persistent at maturity; sessile spikelets 3-9 mm long; caryopses exposed at maturity … S. bicolor subsp. bicolor
2. Inflorescence branches disarticulating at maturity; sessile spikelets 5-8 mm long; caryopses concealed at maturity [3]
3. Inflorescence branches tardily disarticulating; sessile spikelets 5-6 mm long … S. bicolor subsp. drummondii
3. Inflorescence branches readily disarticulating; sessile spikelets 5-8 mm long … S. bicolor subsp. verticilliflorum

^*Sorghum bicolor* Moench subsp. *bicolor* {AFP} —
^*Sorghum bicolor* Moench subsp. *drummondii* (Nees ex Steud.)de Wet ex Davidse {AFP} —
^*Sorghum bicolor* Moench subsp. *verticilliflorum* (Steud.)de Wet ex Wiersema & J.Dahlb. {AFP} —
****Sorghum halepense*** (L.)Pers. {AFP} —

Spartina: Clearly nested within *Sporobolus*, but the distinctiveness and wide use of the genus has kept it in circulation. Hence, there has been hesitancy to subsume it but use of *Sporobolus* may be the eventual best choice.

1. Leaf blade margins smooth to slightly scabrous; spikelets glabrous or sparsely pilose; rhizomatous … S. alterniflora
1. Leaf blade margins strongly scabrous; spikelets scabrous or hispid; rhizomatous or cespitose [2]
2. Inflorescence with 2-15 branches [3]
2. Inflorescence with (5)13-51(75) branches [4]
3. Cespitose; inflorescence branches strongly appressed … S. bakeri
3. Rhizomatous; inflorescence branches mostly spreading to ascending … S. patens
4. Rhizomatous; leaf blades 6-20 mm wide, flat or somewhat involute; inflorescence branches spreading-ascending, 6-13(15) cm long; spikelets 9-14 mm long … S. cynosuroides
4. Cespitose; leaf blades 1.5-4.5 mm wide, involute; inflorescence branches strongly appressed, 0.5-6(7) cm long; spikelets 5-8(10) mm long … S. spartinae

Spartina alterniflora Loisel. {AFP} —
Spartina bakeri Merr. {AFP} —
Spartina cynosuroides (L.)Roth {AFP} —
Spartina patens (Aiton)Muhl. {AFP} —
Spartina spartinae (Trin.)Merr. ex Hitchc. {AFP} —

Sphenopholis

1. Spikelets 4.5-9.5 mm long; distal lemma awns (2)3-7(9) mm long … S. pensylvanica
1. Spikelets 2.1-5.2 mm long; distal lemma awns usually absent or sometimes 0.1-3 mm long [2]

2. Leaf blades 0.3-1.5(2) mm wide, involute ... S. filiformis
2. Leaf blades (1)2-8 mm wide, flat to slightly involute [3]
3. Lower glume 0.3-0.4 mm wide, 1/3 - 1/2 as wide as the upper glume; distal lemma margins scabrous ... S. nitida
3. Lower glume 0.1-0.3 mm wide, 1/4-1/3 as wide as the upper glume; distal lemma margins mostly smooth and scabrous only at the tip [4]
4. Panicles usually nodding, not spicate, the spikelets usually loosely arranged; upper glumes not subcucullate, 3-5 times as long as wide ... S. intermedia
4. Panicles usually erect, often spicate, the spikelets usually densely arranged; upper glumes subcucullate, 2-3 times as long as wide ... S. obtusata

Sphenopholis filiformis (Chapm.)Scribn. {AFP} —
Sphenopholis nitida (Biehler)Scribn. {AFP} —
Sphenopholis obtusata (Michx.)Scribn. {AFP} —
Sphenopholis pensylvanica (L.)Hitchc. {AFP} —

Sporobolus
1. Calluses (just below lemma) hairy, the hairs 1/4 - 7/8 as long as the lemmas; paleas hairy; fruits falling with the lemma and palea ... S. vaseyi
1. Calluses glabrous to glabrate; paleas glabrous; fruits falling free of the lemma and palea [2]
2. Lemma strigose or scabridulous [3]
2. Lemma glabrous [4]
3. Perennial; panicle 5-11 cm long; spikelets 4-9(10) mm long ... S. clandestinus
3. Annual; panicle 1-5 cm long; spikelets 2.3-6 mm long ... S. vaginiflorus
4. Spikelets (3.5)4-6.6 mm long [5]
4. Spikelets 0.7-3.8 mm long [7]
5. Culms (including the inflorescence) 30-70 cm tall; leaf blades 0.5-1.5(2) mm wide, 15-40(50) cm long, margins often smooth, blade base upper side and margins densely pubescent; inflorescence branches stiffly ascending; pedicels 1-3(10) mm long, strongly appressed; lower glume (0.8)0.95-1.1(1.3) times as long as the upper glume ... S. curtissii
5. Culms (including the inflorescence) (30)70-160(220) cm tall; leaf blades 1.2-10 mm wide, (30)40-80 cm long, margins scabridulous, blade base upper side and margins glabrate to sparsely pilose; inflorescence branches initially ascending, later loosely ascending to spreading; pedicels (2)4-15 mm long, ascending to spreading; lower glume 0.5-0.95 times as long as the upper glume [6]
6. Leaf blades (2)3-10 mm wide, mostly pale bluish-green (sometimes some yellowish), mostly widely spreading to recumbent with age; lower glume (0.6)0.75-0.95 times as long as the upper glume ... S. floridanus
6. Leaf blades 1.2-2.0(3.0) mm wide, dark green, mostly strictly ascending; lower glume (0.5)0.6-0.8 as long as the upper glume ... S. osceolensis
7. Annual; inflorescence very diffuse, the spikelets widely dispersed at the tips of the branches; spikelets 0.7-1.1 mm long ... S. tenuissimus
7. Perennial, or annual in S. pyramidatus; inflorescence dense to open, usually at least the upper half of the branches with spikelets; spikelets 1.2-3.8 mm long [8]
8. Upper glume 0.4-1.6 mm long, <2/3 as long as the floret and not exceeding the lemmas [9]
8. Upper glume 1.1-3.2 mm long, >2/3 as long as the floret and nearly reaching the lemma tip to exceeding the lemmas [11]
9. Spikelets 2-2.7 mm long, the upper glumes usually 1/2 - 2/3 as long as the florets, acute to obtuse, entire ... S. indicus

9. Spikelets 1.3-1.8(2) mm long, the upper glumes usually <1/2 as long as the florets, truncate, erose to denticulate [10]
10. Inflorescence branches without spikelets on the lower ¼; anthers 2(3), 0.5-0.8 mm long … S. diandrus
10. Inflorescence branches spikelet-bearing to the base; anthers (2)3, 0.9-1.1 mm long … S. jacquemontii
11. Spikelets 1.8-3.8 mm long; lower glume 0.9-2.5 mm long; upper glume 1.8-3.8 mm long; lemmas 2-3.6 mm long; paleas 2-3.6 mm long; anthers 1-2 mm long [12]
11. Spikelets 1.2-2 mm long; lower glume 0.3-1.1 mm long; upper glume 1.1-2 mm long; lemmas 1.1-2 mm long; paleas 1-2 mm long; anthers 0.2-1 mm long [13]
12. Cespitose; inflorescence usually open, the internodes plainly visible, lower half to quarter of primary branches usually lacking spikelets, proximal nodes with whorls or verticils of 4-6 spreading to ascending branches; spikelets purplish or reddish … S. junceus
12. Rhizomatous or stoloniferous; inflorescence dense, the internodes usually concealed, primary branches with spikelets throughout, proximal nodes with appressed branches; spikelets pale … S. virginicus
13. Panicle 10-25(35) cm long, the primary branches eglandular and with spikelets throughout their length; anthers 0.5-1 mm long … S. domingensis
13. Panicle 4-8(18) cm long, the primary branches with elongate glands and lacking spikelets on the lower half to quarter; anthers 0.2-0.4 mm long … S. pyramidatus

Sporobolus compositus (Poir.)Merr. var. clandestinus (Biehler)Wipff & S.D.Jones {AFP} —
Sporobolus curtissii Small ex Kearney {AFP} —
Sporobolus domingensis (Trin.)Kunth {AFP} —
Sporobolus floridanus Chapm. {AFP} — North peninsula and panhandle (also Alabama to South Carolina).
****Sporobolus indicus*** (L.)R.Br. {AFP} —
****Sporobolus jacquemontii*** Kunth {AFP} —
Sporobolus junceus (P.Beauv.)Kunth {AFP} —
•***Sporobolus osceolensis*** E.L. Bridges & Orzell — North and central peninsula.
Sporobolus pyramidatus (Lam.)Hitchc. {AFP} —
****Sporobolus tenuissimus*** (Mart. ex Schrank)Kuntze {AFP} —
Sporobolus vaginiflorus (Torr. ex A.Gray)A.W.Wood {AFP} —
•***Sporobolus vaseyi*** P.M.Peterson {AFP} — ST.
Sporobolus virginicus (L.)Kunth {AFP} —

Stapfochloa: Segregated from *Chloris* by its long-ciliate lemma margins (Peterson et al. 2015).

[x]***Stapfochloa elata*** (Desv.)P.M.Peterson {AFP} — Open rocklands. Miami Dade Co. & Monroe keys (Neotropics).

Steinchisma
1. Leaf blades 2-5 mm wide; primary inflorescence branches usually <10; spikelets 1.8-2.4 mm long … S. hians
1. Leaf blades 2-9 mm wide; primary inflorescence branches usually 10-30; spikelets 0.9-1.3 mm long … S. laxum

Steinchisma hians (Elliott) Nash {AFP} —

*__Steinchisma laxum__ (Sw.)Zuloaga {AFP} —

Stenotaphrum
__Stenotaphrum secundatum__ (Walter)Kuntze {AFP} —

Themeda
*__Themeda quadrivalvis__ (L.)Kuntze {AFP} —

Thysanolaena
^*Thysanolaena latifolia* (Roxb. ex Hornem.)Honda —

Tridens
1. Panicles 0.3-4 cm wide, the primary branches ascending to strict [2]
1. Panicles 1-20 cm wide, the primary branches ascending, spreading, reflexed, or pendent [3]
2. Plant with elongate rhizomes; spikelets 7-10 mm long, the glumes subequal to the lemmas; lemmas 4-5 mm long ... T. carolinianus
2. Plant densely cespitose; spikelets 4-7 mm long, the glumes longer than and exceeding the lemmas; lemmas (2)3-3.5 mm long ... T. strictus
3. Lower glume (1)1.5-2.5 mm long; lemma lateral veins rarely reaching the distal margin ... T. eragrostoides
3. Lower glume 2.5-4.5 mm long; lemma lateral veins sometimes excurrent as short points [4]
4. Panicle 7-17(20) cm long; pedicels 0.1-0.9 mm long; lower glume 4-4.5 mm long ... T. ambiguus
4. Panicle 15-40 cm long; pedicels 3-8 mm long; lower glume 2.5-3 mm long [5]
5. Panicles nodding; pulvini inconspicuously or conspicuously hairy, the hairs confined to the upper side of the branches ... T. flavus var. chapmanii
5. Panicles erect throughout, the pulvini conspicuously hairy completely around the base of the branches ... T. flavus var. flavus

__Tridens ambiguus__ (Elliott)Schult. {AFP} —
__Tridens carolinianus__ (Steud.)Henrard {AFP} —
[x]__Tridens eragrostoides__ (Vasey & Scribn.)Nash {AFP} —
__Tridens flavus__ (L.)Hitchc. var. __chapmanii__ (Small)Shinners {AFP} — Ignored by Hitchcock (1935, as *Triodia*), as a variety by Shinners (1954), and as a species by Hitchcock & Chase (1951: 208, 214).
__Tridens flavus__ (L.)Hitchc. var. __flavus__ {AFP} — Tips of veins excurrent 1-1.5 mm long were recognized as var. *aristata*.
__Tridens strictus__ (Nutt.)Nash {AFP} —

Tripidium
*__Tripidium ravennae__ (L.)H.Scholz {AFP} — For comparison with similar species, see Amalraj & Balasundaram (2006).

Triplasis
1. Internodes uniformly pubescent, at least in distal half; lemma awns (4.4)6-8.1 mm long and arising near mid-lemma between the lobes of the lemma, much exceeding the long, subulate-pointed lobes of the bi-lobed lemma ... T. americana

1. Internodes glabrous, or puberulent only ~1-2 mm below the node, or pubescent; lemma awns 1-3.1 mm long, shorter than or barely exceeding the lobes of the lemma [2]
2. Internodes pubescent; lemma awns 1.5-3 mm long, the lobes acute … T. intermedia
2. Internodes glabrous, or puberulent only ~1-2 mm below the node; lemma awns 0-1.9 mm long, the lobes obtuse to rounded … T. purpurea

Triplasis americana P.Beauv. {AFP} —
Tiplasis intermedia Nash — Treated as a synonym of *T. purpurea* by Hitchcock & Chase (1951) and others, but resurrected by Wilder et al. 2019 & Wilder & McCollom (2023). Protologue by Nash (1898). Perhaps proximal internodes are sometimes pubescent and awns sometimes reach nearly 3 mm long in *T. purpurea*.
Triplasis purpurea (Walter)Chapm. {AFP} —

Tripsacum
1. Culms 1-2(4) m tall, 3-5 mm wide; leaf blades 9-35(45) mm wide, flat, subequal to the sheath … T. dactyloides
1. Culms 0.2-1 m tall, 1-2 mm wide; leaf blades 1-7(15) mm wide, involute or folded, conspicuously narrower than the sheath … T. floridanum

Tripsacum dactyloides (L.)L. {AFP} —
Tripsacum floridanum Porter ex Vasey {AFP} — ST. Southern peninsula (Greater Antilles).

Triticum
^*Triticum aestivum* L. {AFP} —

Uniola
Uniola paniculata L. {AFP} —

Urochloa
1. Lowest node of inflorescence with 4-11 whorled or fascicled branches … U. maxima
1. Lowest node of inflorescence with 1(-2) branches [2]
2. Spikelets solitary; inflorescence branches usually 7 or fewer [3]
2. Some or most spikelets paired (except near the tips of branches, sometimes most spikelets solitary and very few paired in U. ramosa); inflorescence branches usually (3)5 or more [9]
3. Lower glume 5-7-veined; glumes scarcely separated by a rachilla <0.3 mm long [4]
3. Lower glume 9-11-veined; glumes separated by a rachilla 0.3-0.5 mm long [5]
4. Sheath and pedicels glabrate, or pedicel with 1-2 hairs; spikelets 1.4-1.7 mm wide … U. arrecta
4. Sheath and pedicels usually pilose; spikelets 1.8-2.3 mm wide … U. platyphylla
5. Upper glume glabrate (lower glume with palea) [6]
5. Upper glume pubescent (if glabrous, then spikelet tip usually reaching beyond lower glume of distal spikelet and lower floret lacking palea, in U. piligera) [7]
6. Base of the blade subcordate, not clasping the stem; spikelet tip not exceeding lower glume of distal spikelet; spikelets 3-4.5 mm long … U. distachyos
6. Base of the blade cordate, clasping the stem; spikelet tip usually exceeding lower glume of distal spikelet; spikelets 4-6 mm long … U. plantaginea
7. Leaf blade and sheath glabrate; lower glume 3.3-5.3 mm long … U. dictyoneura
7. Leaf blade and sheath pilose; lower glume 1.8-3.3 mm long [8]

8. Internodes pilose, especially below the node; spikelets 4.4-4.8(-6) mm long; lower floret with a palea … U. brizantha
8. Internodes glabrate; spikelets 3.8-4.3(4.9) mm long; lower floret lacking a palea … U. piligera
9. Spikelets 4.8-6 mm long … U. texana
9. Spikelets 2.-4.2 mm long [10]
10. Inflorescence branches densely pilose, with papillose-based trichomes … U. arizonica
10. Inflorescence branches glabrous, pilose, or pubescent, hairs not or rarely papillose-based [11]
11. Plant usually sprawling, spreading and rooting at the lower nodes separated by elongate internodes; nodes often villous; primary inflorescence branches flat and winged to slightly triquetrous; lower glume 1-3-veined … U. mutica
11. Plant cespitose, shortly sprawling, or occasionally sprawling with elongate internodes; nodes glabrous to pubescent; primary inflorescence branches triquetrous; lower glume 3-5-veined [12]
12. Upper glume and lower lemma with cross-venation throughout its length … U. fusca var. reticulata
12. Upper glume and lower lemma without cross-venation or only in the distal half of the glume [12]
13. Spikelets abruptly acuminate at the apex … U. adspersa
13. Spikelets mostly rounded and shortly-mucronate or shortly-apiculate at the apex … U. ramosa

Urochloa adspersa (Trin.)R.D.Webster {AFP} —
****Urochloa arizonica*** (Scribn. & Merr.)Morrone & Zuloaga {AFP} —
****Urochloa arrecta*** (Hack. ex T.Durand & Schinz)Morrone & Zuloaga {AFP} —
****Urochloa brizantha*** (Hochst. ex A.Rich.)R.D.Webster {AFP} —
****Urochloa dictyoneura*** (Fig. & De Not.)Veldkamp {AFP} — Sosef (2016) included *U. humidicola* (Rendle)Morrone & Zuloaga as a synonym, concluding that a "distinction does not hold" between the two alleged forms.
****Urochloa distachyos*** (L.)T.Q.Nguyen {AFP} — Sosef (2016) included *U. subquadripara* (Trin.)R.D. Webster as a synonym, observing "an almost continuous grade" between the alleged forms.
****Urochloa fusca*** (Sw.)B.F.Hansen & Wunderlin var. ***reticulata*** (Torr.)B.F.Hansen & Wunderlin {AFP} —
****Urochloa maxima*** (Jacq.)R.D.Webster {AFP} —
****Urochloa mutica*** (Forssk.) T.Q.Nguyen {AFP} —
****Urochloa piligera*** (F.Muell. ex Benth.)R.D.Webster {AFP} —
****Urochloa plantaginea*** (Link)R.D.Webster {AFP} —
Urochloa platyphylla (Munro ex C.Wright)R.D.Webster {AFP} —
****Urochloa ramosa*** (L.)T.Q.Nguyen {AFP} — Vorontsova (2022) distinguishes the very similar *U. deflexa* solely by the presence of at least some pedicels being longer than its spikelet, and further noted that "According to Clayton & Renvoize (1982) and Clayton (1989*), U. ramosa* is doubtfully distinct from *U. deflexa*; the two indeed look similar, but *U. ramosa* can be distinguished by its shorter pedicels."
****Urochloa texana*** (Buckley)R.D.Webster {AFP} —

Zea: 7 species, native to Mexico and Central America. Historically cultivated by indigenous groups, primarily in northern Florida (Kelly et al. 2006).

1. Pistillate inflorescences of cylindrical spikes, 2-5(10) cm thick, with 8-24+ rows of spikelets pairs, each inflorescence tightly and permanently enclosed by several leaf sheaths and a large prophyll, not disarticulating at maturity; caryopses 60-1000+, not concealed; staminate panicle branches not disarticulating below the sessile spikelets, lacking abscission layers, the central axis of the panicles polystichous, much thicker than the lateral branches ... Z. mays subsp. mays
1. Pistillate inflorescences of cylindrical, distichous rames, 0.5-0.9 cm thick, with 2 rows of spikelet pairs, each rame usually enclosed by a single leaf sheath and a prophyll, disarticulating at maturity into fruitcases; caryopses 4-15, each one concealed within a fruitcase; staminate panicles composed of rames that disarticulate below the sessile spikelets and have evident abscission layers, the central axis of the panicles similar in width to the rames [2]
2. Staminate spikelet (6.5)7.5-10.5 mm long, 2.5-3.5 mm wide; fruitcases 9-12 per spike, 6-10 mm long, 4-6 mm wide, the axial side (opposite of glume) pointed apically ... Z. mays subsp. mexicana
2. Staminate spikelet 4.5-7(8) mm long, 1.5-2.5 mm wide; fruitcases 5-9(10) per spike, 5-8 mm long, 3-5 mm wide, the axial side (opposite of glume) blunt apically ... Z. mays subsp. parviglumis

^*Zea mays* L. subsp. *mays* {AFP} —
^*Zea mays* L. subsp. *mexicana* (Schrad.)Iltis {AFP} —
^*Zea mays* L. subsp. *parviglumis* Iltis & Doebley {AFP} —

Zizania
Zizania aquatica L. {AFP} —

Zizaniopsis
Zizaniopsis miliacea (Michx.)Döll & Asch. {AFP} —

Zoysia
1. Leaf blades 0.1-0.5 mm wide; peduncle included or extending to 1 cm beyond the sheath of the subtending leaf; racemes with 3-12 spikelets; spikelet 0.5-0.8 mm wide ... Z. pacifica
1. Leaf blades 0.5-5 mm wide; peduncle extending (0.3)1-6.5 cm beyond the sheath of the subtending leaf; racemes with 10-50 spikelets; spikelet 0.6-1.4 mm wide [2]
2. Culm internodes 2-10 mm long; leaf blades ascending; pedicels 1.6-3.5 mm long; spikelets ovate, 1-1.4 mm wide ... Z. japonica
2. Culm internodes 5-40 mm long, all plants with at least some internodes >14 mm long; leaf blades patent; pedicels 0.6-1.6 mm long; spikelets lanceolate, 0.6-1 mm wide ... Z. matrella

^*Zoysia japonica* Steud. {AFP} —
****Zoysia matrella*** (L.)Merr. {AFP} —
****Zoysia pacifica*** (Goudswaard)M.Hotta & Kuroki {AFP} —

ARECALES

ARECACEAE: Cespitose palms usually have new stems continuously arising from the base of the plant. Solitary palms show no signs of new stems at the base; however small or slender solitary palms are frequently planted in tight clusters giving the illusion of being cespitose.

1. Leaves palmately to costapalmately divided [2]
1. Leaves pinnately to bipinnately divided [3]

2. Petiole, trunk, leaf sheath, and/or leaf blade armed with spines (sometimes rare in Livistona chinensis) … Key A
2. Petiole, trunk, leaf sheath, and leaf blade unarmed (petiole generally smooth) … Key B
3. Plant with a green to glaucous crownshaft completely encircling or encircling ca. two-thirds or more of stem apex, formed from sheathing leaf bases … Key C
3. Plants without a green or glaucous crownshaft [4]
4. Petiole with prickly teeth or trunk armed with spines … Key D
4. Petiole or trunk unarmed, the petiole margin sometimes roughened … Key E

Key A
1. Leaf sheath armed, these appearing to arise from the trunk [2]
1. Leaf sheath unarmed, the trunk appearing unarmed [3]
2. Plant low to the ground, to 3 m tall; stem with long needle-like spines (actually part of leaf sheath) … Rhapidophyllum hystrix
2. Plant >3 m tall; stem clothed in bands of spines (part of leaf sheath) … Zombia antillarum
3. Plant cespitose (rarely single-trunked) or stems branching [4]
3. Plant with one stem (branching very rare) [7]
4. Stems prostrate to ascending, branching; petiolar prickles <2 mm long; fruit cylindrical, ca. 1.5-2.5 cm long … Serenoa repens
4. Stems erect, caespitose; petiolar prickles 2-5 mm long; fruit globose, ca. 1 cm long [5]
5. Leaf blade nearly completely divided into leaflets with dentate tips … Licuala spinosa
5. Leaf blade fused for ca. ½ its length; leaflets acute at tips [6]
6. Plant monoecious, to 7 m tall; stem <15 cm wide, the persistent leaf bases loosely packed; inflorescence subequal to longer than the leaves … Acoelorraphe wrightii
6. Plant often dioecious, to 4 m tall (rarely to 6 m); stem usually >15 cm wide, the persistent leaf base densely packed; inflorescence shorter than the leaves, usually not reaching the leaf blade (commonly cultivated, not naturalized in Florida) … Chamaerops humilis
7. Leaf blade nearly completely undivided … Licuala grandis
7. Leaf blade divided 1/3 or more into leaflets [8]
8. Plant monocarpic; petioles > 2 m long; inflorescence terminal … Corypha umbraculifera
8. Plant perennial; petioles mostly <2 m long; inflorescence axillary [9]
9. Plant often dioecious; mature plants to 4(6) m tall; inflorescence compact, the rachis obscure … Chamaerops humilis
9. Plant monoecious; mature plants to 20 m tall; inflorescence elongate, the rachis apparent [10]
10. Petiole split at the base; young leaves with filamentous threads; inflorescence subequal to longer than the leaves … Washingtonia robusta
10. Petiole not split at the base; young leaves lacking filamentous threads; inflorescence shorter to longer than the leaves [11]
11. Without conspicuous woven fibers at base of and between the leaves … Copernicia
11. Woven fibers conspicuous at base of and between the leaves [12]
12. Leaf blade tips of mature plants abruptly bent and drooping; inflorescence with 3 orders of branching; fruit glaucous blue to black, usually ellipsoidal … Livistona
12. Leaf blades generally held straight; inflorescences with 5 orders of branching, immediately 3-forking to 3 equal main axes; fruit orange-red to brownish blue, globose … Saribus rotundifolius

Key B
1. Upper and lower surface of leaves strongly bluish or silvery [2]

1. Upper surface of leaves mostly green, sometimes somewhat gray-green or blue-green, the lower surface green, glaucous, or silvery [3]
2. Base of petiole auriculate with a sharp corner; plant relatively larger; leaf tips mostly blunt or bifid (commonly cultivated, not naturalized in Florida) … Bismarckia nobilis
2. Base of petiole curved, without a sharp corner; plant relatively smaller; leaf tips mostly acute and pointed (commonly cultivated, not naturalized in Florida) … Latania loddigesii
3. Plant cespitose or rhizomatous (commonly cultivated, not naturalized in Florida) … Rhapis excelsa
3. Plant with one stem [4]
4. Leaves costapalmate; perianth 2-seriate … Sabal
4. Leaves palmate; perianth 1-seriate [5]
5. Petiole typically 30-80 cm long (not including sheathing petiole base), not split at the base; inflorescence 30-50 cm long; fruit red or purple to blackish purple [6]
5. Petiole typically 60-170 cm long, split at the base; leaf blade glaucous or greenish below; inflorescence 60-150 cm long; fruit white [7]
6. Petiole entire, smooth; leaf blade lustrous silvery below (dense overlay of paralell fibers), somewhat lax; fruits purple to blackish purple … Coccothrinax
6. Petiole smoothish, rough-margined, to slightly tuberculate at the base; leaf blade green, often very stiff; fruits red; cultivated … Trachycarpus fortunei
7. Petiole base split at middle and with secondary splits along basal inner margin; hastula silky-pubescent adaxially; leaf blades glaucous below; segment apices stiff or occasionally lax; flowers and fruits sessile or pedicel inconspicuous; seeds perforate … Leucothrinax morrisii
7. Petiole base split at the middle only; hastula glabrous adaxially; leaf blades green or light green below; segment apices typically lax; flowers and fruits pedicellate (pedicel usually exceeding 1 mm); seeds not perforate … Thrinax radiata

Key C
1. Leaflets arising from several planes along a leaf, not in two distinct or neat rows [2]
1. Leaf with two distinct, neat rows of leaflets on each side of the leaf [3]
2. Leaf not like a bottlebrush; leaf slightly to moderately curved; leaflets long, often laxly drooping, generally gradually narrowed to an acute tip, without filamentous leaflets; petiole base glabrous; fruit smaller, red to purple … Roystonea regia
2. Leaf like a bottlebrush with condensed leaflets, often some basal leaflets drooping and filamentous; leaf strongly curved, especially near tip; leaflets short, mostly stiff, with an indefinite tip, appearing torn or split; petiole base pubescent; fruit larger, orange (commonly cultivated, not naturalized in Florida) … Wodyetia bifurcata
3. Crownshaft fused ca. half or less of its length, the margin gradually ascending and rounded towards the petiole; inflorescence axillary within leaves … Pseudophoenix sargentii
3. Crownshaft fused most of its length, the margin more abruptly rounded to the petiole; inflorescence at base of crownshaft [4]
4. Crownshaft not evenly cylindrical, abruptly thicker at the base; leaves often 6 or less Hyophorbe
4. Crownshaft generally evenly cylindrical, not much thicker at base; leaves often more than 6 [5]
5. Leaflets mostly ascending to erect (occasionally somewhat horizontal) [6]
5. Leaflets mostly horizontal to drooping (in Carpentaria esp. older leaves, sometimes ascending on new leaves) [8]
6. Plant cespitose … Dypsis lutescens
6. Plant with one stem [7]

7. Leaves often with long slender, dangling leaflets near the base; crownshaft green, mostly smooth; trunk thicker; fruits larger ... Adonidia merrillii
7. Leaves without slender, dangling leaflets; crownshaft somewhat glaucous and striate; trunk thinner; fruits smaller ... Ptychosperma elegans
8. Stems slender, often green for much of their length; inflorescence rachis of female plants bright orange ... Chamaedorea
8. Stems thicker, mostly gray; inflorescence rachis green to gray, not orange [9]
9. Leaf strongly arched, the tip pointing to the ground (occasionally cultivated, not naturalized in Florida) ... Carpentaria acuminata
9. Leaves mostly straight to gently arched [10]
10. Leaves often with long slender, dangling leaflets near the base; inflorescence branches spreading; fruit large (commonly cultivated, not naturalized in Florida) ... Veitchia arecina
10. Leaves without slender, dangling leaflets; inflorescence branches descending to drooping; fruit small ... Ptychosperma macarthurii

Key D
1. Stem armed with spines; petiole with spines, also often on the rachis interspersed with the leaflets ... Acrocomia totai
1. Stem unarmed (except for prickles on the leaf); petiole with spines, not on the rachis interspersed with the leaflets [2]
2. Petiole armed with spines, not grading into leaflets ... Elaeis guineensis
2. Petiole armed with spines, these grading into leaflets [3]
3. Petiole margin often fibrous in some areas ... Butia odorata
3. Petiole margin not fibrous ... Phoenix

Key E
1. Leaves more than once pinnate ... Caryota
1. Leaves once pinnate [2]
2. Leaves in whorls of 3 along stem forming 3 vertical rows (commonly cultivated, not naturalized in Florida) ... Dypsis decaryi
2. Leaves not in whorls of 3, not forming 3 vertical rows [3]
3. Leaflets arising from several planes along a leaf, not in two distinct or neat rows; fruit an orange berry ... Syagrus romanzoffiana
3. Leaf with two distinct, neat rows of leaflets, one on each side of the leaf; fruit large, a coconut ... Cocos nucifera

Acoelorraphe
Acoelorraphe wrightii (Griseb. & H.Wendl.)H.Wendl. ex Becc. {AFP} — ST.

Acrocomia
^*Acrocomia totai* Mart. {AFP} —

Adonidia
^*Adonidia merrillii* (Becc.)Becc. {AFP} —

Bismarckia
^*Bismarckia nobilis* Hildebrandt & H.Wendl. —

Butia
^*Butia odorata* (Barb.Rodr.)Noblick {AFP} —

Carpentaria
^*Carpentaria acuminata* (H.Wendl. & Drude)Becc. —

Caryota
1. Plant cespitose, the stems <16 cm wide … C. mitis
1. Plant with one stem, >15 cm wide … C. urens

^*Caryota mitis* Lour. {AFP} —
^*Caryota urens* L. {AFP} —

Chamaedorea
1. Cespitose; stems often very slender [2]
1. Solitary (but often planted in groups); stems thicker [3]
2. Plants shrubby, the stems and inflorescences usually apparent; foliage often light green … Chamaedorea seifrizii
2. Plants dense and bushy, the stems and inflorescences usually obscured; foliage often dark green … Chamaedorea cataractarum
3. Leaves simple to bifid or pinnately divided, if pinnate then leaflets not much narrower at the base … Chamaedorea metallica
3. Leaves pinnately divided, the leaflets conspicuously narrowing at the base … Chamaedorea elegans

^*Chamaedorea cataractarum* Mart. —
^*Chamaedorea elegans* Mart. —
^*Chamaedorea metallica* O.F. Cook ex H.E. Moore —
^*Chamaedorea microspadix* Burret —
Chamaedorea seifrizii Burret {AFP} —

Chamaerops
^*Chamaerops humilis* L. —

Chrysalidocarpus
^*Chrysalidocarpus lutescens* H.Wendl. {AFP} —

Coccothrinax
1. Stem 20-170 cm tall; leaves 13-39 per plant; petiole width 1-2.6 cm; leaf segments 30-52 per leaf … C. argentata subsp. argentata
1. Stem mostly 35-100(170) cm tall; leaves 12-30 per plant; petiole width 0.8-2.2 cm; leaf segments 25-50 per leaf … C. argentata subsp. garberi

Coccothrinax argentata (Jacq.)L.H.Bailey subsp. ***argentata*** {AFP} — ST. Monroe Co. keys.
Coccothrinax argentata (Jacq.)L.H.Bailey subsp. ***garberi*** (Chapm.)Zona et al. {AFP} — ST. Broward & Miami-Dade cos.

Cocos
^*Cocos nucifera* L. {AFP} —

Copernicia
1. Petioles indistinct or not visible; leaf blade with prickles … Copernicia macroglossa
1. Petioles distinct, visible; leaf blade with or without prickles [2]
2. Petiole subequal to leaf blade … Copernicia baileyana
2. Petiole shorter than leaf blade … Copernicia fallaensis

^*Copernicia alba* Morong —
^*Copernicia baileyana* León —
^*Copernicia fallaensis* León —
^*Copernicia macroglossa* Schaedtler —

Corypha
^*Corypha umbraculifera* L. —

Dypsis
^*Dypsis decaryi* (Jum.)Beentje & J.Dransf. —

Elaeis
^*Elaeis guineensis* Jacq. {AFP} —

Hyophorbe
1. Trunk typically swollen, thicker than crownshaft; leaflets … Hyophorbe lagenicaulis
1. Trunk gradually narrowed to crownshaft; leaflets mostly stiff but usually some lax … Hyophorbe verschaffeltii

^*Hyophorbe lagenicaulis* (L.H. Bailey)H.E.Moore —
^*Hyophorbe verschaffeltii* H.Wendl. —

Latania
^*Latania loddigesii* Mart. —

Leucothrinax
Leucothrinax morrisii (H.Wendl.)C.Lewis & Zona {AFP} — ST.

Licuala
1. Stem solitary; leaf blade nearly completely undivided … L. grandis
1. Stems densely cespitose; leaf blade divided … L. spinosa

^*Licuala grandis* H.Wendl. —
^*Licuala spinosa* Thunb. —

Livistona
1. Leaflets fused ca. half of length; petiole thorns often wanting … L. chinensis
1. Leaflets mostly separate, only a small portion fused together at the leaf base; petiole thorns

conspicuous … L. decoroa

*__*Livistona chinensis*__ (Jacq.)R.Br. ex Mart. {AFP} —
^*Livistona decora* (W.Bull) Dowe —

Phoenix
1. Plant cespitose … Phoenix reclinata
1. Plant solitary-trunked [2]
2. Plant <4 m tall; trunk slender, with blunt-pointed protrusions … Phoenix roebelinii
2. Plant >4 m tall; trunk thicker, relatively smooth, knobby, or with persistent leaf bases [3]
3. Leaves twisted, held along a vertical plane … Phoenix rupicola
3. Leaves held horizontally [4]
4. Trunk with persistent leaf bases … Phoenix sylvestris
4. Trunk without persistent leaf bases [5]
5. Plant tall, trunk very robust with compressed leaf scars mostly not forming conspicuous knobs; leaves less glaucous … Phoenix canariensis
5. Plant very tall, trunk robust with spaced leaf scars forming rounded knobs; leaves glaucous … Phoenix dactylifera

^*Phoenix canariensis* H.Wildpret —
^*Phoenix dactylifera* L. —
*__*Phoenix reclinata*__ Jacq. {AFP} —
^*Phoenix roebelenii* O'Brien {AFP} —
^*Phoenix rupicola* T. Anderson —
^*Phoenix sylvestris* Roxb. —

Pseudophoenix
__*Pseudophoenix sargentii*__ H.Wendl. ex Sarg. {AFP} — SE.

Ptychosperma
1. Plant with one stem; leaflets mostly ascending to erect … P. elegans
1. Plant usually cespitose; leaflets mostly horizontal to drooping … P. macarthurii

^*Ptychosperma elegans* (R.Br.)Blume {AFP} —
^*Ptychosperma macarthurii* (H.Wendl. ex H.J.Veitch)H.Wendl. ex Hook.f. {AFP} —

Rhapidophyllum
__*Rhapidophyllum hystrix*__ (Pursh)H.Wendl. & Drude ex Drude {AFP} — CE.

Rhapis
^*Rhapis excelsa* (Thunb.)A.Henry —

Roystonea
__*Roystonea regia*__ (Kunth)O.F.Cook {AFP} — SE.

Sabal : The leaves have been used for roof thatches as well as tools and crafts; and the heart of palm as a food source (Miller 2021).

1. Leaf blade nearly flat, weakly costapalmate, lacking filamentous fibers … S. minor
1. Leaf blade with the midrib curved downward and sides folded upward, strongly costapalmate, with filamentous fibers [2]
2. Stem subterranean; leaves 3-6, the blade often yellowish green; hastula 1.5-5 cm long; flowers borne on the tertiary branches; fruit 15.7-19 mm wide; seed 10-13 mm wide … S. miamiensis
2. Stem subterranean to aerial; leaves 3-40, the blade yellowish to bluish green; hastula 1-13.2 cm long; flowers usually borne on secondary, tertiary, or quaternary branches fruit 8.1-15.4 mm wide; seed 5-10(11) mm wide [3]
3. Stem usually subterranean (rarely emergent and forming a discernible trunk); leaves 4-7, sometimes yellowish or somewhat bluish; petiole 0.3-0.6 m long, 0.6-2.1 cm wide; hastula 1.6-3.3 cm long; leaf blade tips often acute and stiff; flowers borne on the secondary branches (not counting the main inflorescence axis) … S. etonia
3. Stem emergent, usually forming a discernible trunk (sometimes barely emergent in south Florida); leaves (4)10-30, usually somewhat bluish; petiole 0.7-2 m long, 1.9-4 cm wide; hastula 5.3-18 cm long; leaf blade tips often attenuate and lax; flowers usually borne on the tertiary or quaternary branches (not counting the main inflorescence axis, sometimes on secondary branches on low plants in South Florida) … S. palmetto

- ***Sabal etonia*** Swingle ex Nash {AFP} — Peninsula. Scrub.
- ***Sabal miamiensis*** Zona {AFP} — Broward & Miami Dade cos. Scrub and pinelands. Described by Zona (1985). Recently rediscovered (Tucker et al. 2024).

Sabal minor (Jacq.)Pers. {AFP} — Central peninsula thru panhandle (southeastern USA). Wet forests.

Sabal palmetto (Walter)Lodd. ex Schult. & Schult.f. {AFP} — Throughout. Various habitats, becoming less frequent in the driest areas. Plants of pine rocklands are found frequently flowering without a trunk, with few leaves, and with flowers on secondary branches, but blend into larger plants in the same area (cf. *S. schwarzii*).

Saribus

****Saribus rotundifolius*** (Lam.)Blume {AFP} —

Serenoa

Serenoa repens (W.Bartram)Small {AFP} — CE.

Syagrus

****Syagrus romanzoffiana*** (Cham.)Glassman {AFP} —

Thrinax

Thrinax radiata Lodd. ex Schult. & Schult.f. {AFP} — SE.

Trachycarpus

^*Trachycarpus fortunei* (Hook.)H.Wendl. —

Veitchia

^*Veitchia arecina* Becc. —

Washingtonia
*__*Washingtonia robusta*__ H.Wendl. {AFP} —

Wodyetia
^*Wodyetia bifurcata* A.K.Irvine —

Zombia
^*Zombia antillarum* (Descourt.)L.H. Bailey —

COMMELINALES

COMMELINACEAE

1. Inflorescence subtended by conspicuous spathaceous bracts, cupped or folded around the inflorescence base [2]
1. Inflorescence bracts inconspicuous or inflorescence subtended by open, typical leaves [3]
2. Spathaceous inflorescence bracts generally ovate, often strongly folded, distinctly dissimilar from cauline leaves; petals all blue, orange, or 2 blue and 1 white, clawed, blades sometimes unequal, blade of larger petals usually broadly ovate to suborbicular; 3 fertile stamens, 3 staminodes, filaments glabrous … Commelina
2. Spathaceous inflorescence bracts elongate, the base of the bract cupped at the base of the inflorescence, the bracts very similar to the cauline leaves; petals pink, purple, bluish-pink, bluish-purple, or white, not clawed or rarely so, equal, blade lanceolate, ovate, to broadly ovate; 6 fertile stamens, filaments usually bearded … Tradescantia
3. Sepals externally purplish, petaloid; anthers poricidal; seeds arillate … Dichorisandra
3. Sepal externally green, not petaloid; anthers dehiscing longitudinally; seeds not arillate [4]
4. Flowers sessile or subsessile; ovary and capsule 2–3-locular … Callisia
4. Flowers distinctly pedicellate; ovary and capsule 3-locular [5]
5. Petals white; fertile stamens 6, staminodes absent … Gibasis pellucida
5. Petals pale pink to dark pink; fertile stamens 2-3, staminodes 3-4 … Murdannia

Callisia
1. Plants repent and mat-forming or stoloniferous; leaf blades not linear, 6-50 mm wide; petals white; filaments glabrous; [2]
1. Plants caespitose, solitary, or short-creeping; leaf blades linear, 1-15 mm wide; petals pale to dark pink; filaments bearded (Cuthbertia) [5]
2. Robust, stoloniferous plants; leaves 15-30 cm long … C. fragrans
2. Weak, mat-forming plants; leaves 1-8.5 cm long [3]
3. Leaves 3-8 cm long; inflorescence many-branched, 8-25 cm long … C. multiflora
3. Leaves 1-2(3.5) cm long; inflorescence simple to few-branched, 1-8 cm long [4]
4. Flowers distinctly pedicellate; petals conspicuous, 3-6 mm long; stamens 6; ovary and fruit 3-locular … C. cordifolia
4. Flowers sessile or subsessile; petals inconspicuous, 2-3 mm long; stamens 0-6; ovary and fruit 2-locular … C. repens
5. Distal leaf blades as wide as opened, flattened sheaths or wider, 4-15 mm wide; roots glabrous to sparsely puberulent … C. rosea
5. Distal leaf blades much narrower than opened, flattened sheaths, 1-5 mm wide; roots various [6]

6. Plants cespitose, roots glabrous to sparsely puberulent; bracts often elongate, somewhat herbaceous, 2-14 mm long … C. graminea
6. Plants mostly solitary or short-creeping, not cespitose or scarcely so, roots persistently woolly; bracts usually minute, scarious, 1-3(7) mm long … C. ornata

Callisia cordifolia (Sw.)E.S.Anderson & Woodson {AFP} —
*****Callisia fragrans*** (Lindl.)Woodson {AFP} —
Callisia graminea (Small)G.C.Tucker {AFP} —
^*Callisia multiflora* (M.Martens & Galeotti)Standl. —
•***Callisia ornata*** (Small)G.C.Tucker {AFP} —
*****Callisia repens*** (Jacq.)L. {AFP} —
Callisia rosea (Vent.)D.R.Hunt {AFP} —

Commelina
1. Margins of spathe free to the base [2]
1. Margins of spathe clearly united in the basal portion [5]
2. Spathes sometimes with whitish or pale green patches with contrasting, dark green veins; lower petal white or paler than others; capsule 2-locular; seeds rugose pitted-reticulate … C. communis
2. Spathes without contrasting veins; all petals bluish and concolorous with others; capsule 3-locular; seeds reticulate or smooth to faintly alveolate [3]
3. Spathes not at all to slightly falcate; distal cyme usually vestigial (rarely well developed, 1-flowered); seeds smooth to faintly alveolate … C. caroliniana
3. Spathes usually distinctly falcate; distal cyme in larger spathes usually well developed, 1-several-flowered; seeds reticulate [4]
4. Leaf blades 1.5-5(8) cm long, 0.5-1(2.2) cm wide; medial anther connective with broad transverse violet band; capsules 3-5-seeded (occasionally less, by abortion) … C. diffusa var. diffusa
4. Leaf blades 6-14 cm long, 1-3.3 cm wide; medial anther connective without dark band; capsules typically 1-2-seeded … C. diffusa var. gigas
5. Leaf sheaths often with red hairs; leaf blades (1)1.5-4(5) cm wide [6]
5. Leaf sheaths without red hairs; leaf blades 0.1-1.5 cm wide (rarely wider in FL material) [7]
6. Main stems ascending to decumbent, repent or scrambling; leaf sheaths often red-pilose; leaf blades 1-11 cm long, 1.5-4(4.5) cm wide, 1.3-1.9 times as long as wide, the apex rounded to obtuse; spathes 0.5-2 cm long, pubescent; subterranean, cleistogamous flowers sometimes present … C. benghalensis
6. Main stems erect to ascending; leaf sheaths with red hairs at summit; leaf blades 6-20 cm long, (1)1.5-3.5(5) cm wide, 4-6 times as long as wide, the apex acute to attenuate; spathes 1.5-3.5 cm long, glabrate; subterranean, cleistogamous flowers absent … C. virginica
7. Roots stout, ca. 2 mm thick; leaf sheaths with auricles at summit; leaf blades 2.6-31 times as long as wide; spathes with or without patch of septate hairs; lower petal white, less than ½ the size of upper petals; locules all 1-seeded; seeds mostly smooth … C. erecta
7. Roots thin, ca. 1 mm thick; leaf sheaths not auriculate; leaf blades 4-25 times as long as wide; lower petal white or blue to lilac or lavender, not or only slightly smaller than upper petals; spathes with patch of septate hairs; some locules usually 2-seeded; seeds smooth or reticulate [8]
8. Leaf blade 4-8 times as long as wide; spathe tip acute; upper petals blue; seeds smooth … C. forskaolii

8. Leaf blade 7.5-25 times as long as wide; spathe tip acuminate; upper petals peach-colored to very pale orangeish; seeds reticulate ... C. gambiae

*__Commelina benghalensis__ L. {AFP} —
*__Commelina caroliniana__ Walter {AFP} —
*__Commelina communis__ L. {AFP} —
*__Commelina diffusa__ Burm.f. var. __diffusa__ {AFP} —
*__Commelina diffusa__ Burm.f. var. __gigas__ (Small)Faden {AFP} —
__Commelina erecta__ L. {AFP} —
*__Commelina forskaolii__ Vahl {AFP} —
*__Commelina gambiae__ C.B.Clarke {AFP} —
__Commelina virginica__ L. {AFP} —

Dichorisandra
^*Dichorisandra thyrsiflora* J.C. Mikan —

Gibasis
*__Gibasis pellucida__ (M.Martens & Galeotti)D.R.Hunt {AFP} —

Murdannia
1. Leaf blades 1-4.5 times longer than wide; inflorescence usually with 2 or more persistent bracteoles, the flowers widely spaced and distant; flowers radially symmetrical with the petals evenly spaced; dark veins of petals conspicuous throughout ... M. spirata var. parviflora
1. Leaf blades 4-17 times longer than wide; inflorescence with 1 bracteole, without bracteoles, or these caducous, the flowers solitary or compact along the rachis; flowers radially or bilaterally symmetrical with the petals evenly spaced or not; veins of petals obscure or partly apparent near the base [2]
2. Inflorescence of 1 flower; flowers radially symmetrical with the petals evenly spaced; petals whitish towards the base and pinkish towards the apex; capsules (4-)5-9 mm long ... M. keisak
2. Inflorescence of 1-8 flowers; flowers bilaterally symmetrical with the petals not evenly spaced; petals fairly uniform in color; capsules 2.5-5 mm long ... M. nudiflora

*__Murdannia keisak__ (Hassk.)Handel-Mazz. {AFP} —
*__Murdannia nudiflora__ (L.)Brenan {AFP} —
*__Murdannia spirata__ (L.)G.Brückn. var. __parviflora__ Faden {AFP} —

Tradescantia
1. Stems prostrate to decumbent (rarely erect); sepals pilose, generally all keeled; filaments densely bearded at the base with long moniliform hairs; stigma punctate; embryotega inconspicuous (subg. Austrotradescantia) [2]
1. Stems prostrate, decumbent, to erect; sepals rarely keeled, if present keel restricted to the dorsal sepal; filaments glabrous to sparsely bearded at mid-length, rarely at the base or apex with short moniliform hairs; stigma truncate to capitulate or capitate to trilobate; embryotega with a conspicuous apicule [4]
2. Stems pilose; leaf blade lower surface often purple; petals white to dark pink ... T. cerinthoides
2. Stems glabrous; leaf blade lower surface green; petals white [3]

3. Leaves lanceolate-oblong to ovate-elliptic, 5-10 cm long, 2-3.5 cm wide; cyme pairs 2-4 per shoot; bracts, especially those of axillary inflorescences, usually reduced … T. crassula
3. Leaves lanceolate-elliptic to ovate-lanceolate, to 2.5-5 cm long, 1-2 cm wide; cyme pairs usually 1-2 per shoot; bracts all or mostly foliaceous, occasionally reduced … T. fluminensis
4. Roots thin and fibrous, rarely tuberous; leaf blade lower surface often strongly dark purple, upper surface sometimes variegated; inflorescence composed by the main florescence and generally 1–many coflorescences, peduncle bracts commonly present, cincinni bracts spathaceous; stamens subequal, connectives cordate to sagittate to linear-tapered, rarely rhomboid, anther sacs globose, rarely ellipsoid, pollen white; embryotega semilateral (subg. Campelia) [5]
4. Roots fleshy to tuberous; leaf blade lower surface green or purple, upper surface not variegated; inflorescence composed only by the main florescence, peduncle bracts never present, cincinni bracts leaf-like or reduced; stamens equal, connectives quadrangular to rectangular, rarely slightly rhomboid to slightly sagittate, anther sacs elliptic to curved, pollen yellow; embryotega dorsal [6]
5. Stems short, scarcely apparent; leaf blades 10-35 cm long, 3-5 cm wide … T. spathacea
5. Stems trailing, elongate; leaf blades 3-9 cm long, 1.5-3 cm wide … T. zebrina
6. Stems prostrate to decumbent; leaves lanceolate to ovate to rotund, rarely cylindrical, base obtuse to cordate; pedicel apically gibbous; stamens epipetalous, filaments glabrous or sparsely bearded; stigmatic papillae evenly distributed in the stigma (subg. Setcreasea) [7]
6. Stems erect; leaves linear to acicular, base truncate to rounded; pedicels apically non-gibbous; stamens free; filaments densely bearded; stigmatic papillae restricted to the margins of the stigma (subg. Tradescantia) [8]
7. Stems and leaves glabrous to sparsely pilose, often darky purplish … T. pallida
7. Stems and leaves densely woolly or floccose, usually green, sometimes purplish … T. sillamontana
8. Distal leaf blades wider than opened, flattened sheaths … T. subaspera
8. Distal leaf blades equal to or narrower than opened, flattened sheaths [9]
9. Sepals glabrous or with an apical tuft of eglandular hairs … T. ohiensis
9. Sepals pilose, sometimes glandular [10]
10. Sepal usually uniformly eglandular-pilose, glandular hairs few and inconspicuous … T. hirsutiflora
10. Sepals usually glandular-puberulent, glandular hairs usually numerous and conspicuous, often mixed with eglandular hairs, usually with an apical tuft of eglandular hairs … T. roseolens

*****Tradescantia crassula*** Link & Otto {AFP} —
*****Tradescantia fluminensis*** Vell. {AFP} —
Tradescantia hirsutiflora Bush {AFP} — Panhandle.
Tradescantia ohiensis Raf. {AFP} —
^*Tradescantia pallida* (Rose)D.R.Hunt {AFP} —
Tradescantia roseolens Small {AFP} — NE and central peninsula. Wilder et al. (2019) point out that many plants of Highlands Co. have few to no glandular hairs on the calyx.
*****Tradescantia spathacea*** Sw. {AFP} —
Tradescantia subaspera Ker Gawl. {AFP} —
^*Tradescantia zebrina* Bosse {AFP} —

HAEMODORACEAE
Lachnanthes

Lachnanthes caroliana (Lam.)Dandy {AFP} — Throughout (coastal plain). The epithet was originally spelled "caroliana" and according to IPNI it is not correctable to "caroliniana".

PHILYDRACEAE

Philydrum

^*Philydrum lanuginsoum* Banks ex Gaertn. — Cultivated.

PONTEDERIACEAE

1. Sessile leaves spirally-alternate, petiolate leaves when present non-pulvinate, blade membranous; inflorescence reduced to a solitary cincinnus; stamens (1-)3, staminodes sometimes present; septal nectaries absent; stigma unevenly trilobate … Heteranthera
1. Sessile leaves distichously alternate, petiolate leaves always present and pulvinate, blade chartaceous to coriaceous; inflorescence a 2-many branched thyrsi (rarely reduced to a solitary flower); stamens 6, staminodes absent; septal nectaries present (if absent, then flowers pedicellate and anthers poricidal); stigma capitate or trilobate, rarely trifid … Pontederia s.lat.

Heteranthera

1. Plant with sessile, linear leaves; inflorescences 1-flowered; stamens equal; anthers coiling … H. dubia
1. Plant with some leaves petiolate, the blade generally ovate to reniform or suborbicular; inflorescences of 1-8 flowers; stamens unequal; anthers not coiling [2]
2. Leaf blades ovate to elliptic, longer than wide, the base rounded to truncate, or subtly subcordate Inflorescences 1-flowered; perianth essentially actinomorphic … H. limosa
2. Leaf blades reniform to suborbicular, the base cordate; inflorescences of 2-8 flowers; perianth zygomorphic … H. reniformis

Heteranthera dubia (Jacq.)MacMill. {AFP} —
****Heteranthera limosa*** (Sw.)Willd. {AFP} —
Heteranthera reniformis Ruiz & Pav. {AFP} —

Pontederia: Pellegrini et al. (2018) subsume *Eichhornia* into *Pontederia*, while Haines (2020, 2021) splits the former *Eichhornia* into three genera (*Cabanisia*, *Eichhornia*, *Oshuna*).

1. Ovary 1-locular by abortion, fertile locule 1-ovulate, placentation pendulous; fruit an achene, anthocarp hardened, ridges sinuate, toothed or echinate; seeds smooth (Pontederia subg. Pontederia) [2]
1. Ovary 3-locular, locules many-ovulate, placentation axial; fruit a capsule, anthocarp thin to thickened, if thickened ridges smooth; seeds longitudinally winged [3]
2. Leaf blade 1.4-4.5 times longer than wide, diaphanous when backlit, the upper side smooth to scabrous, the underside microscopically smooth (or with sparse or irregular faint pits); inflorescence bract (3)4.5-7 cm long; floral tube glabrate to pubescent at maturity … P. cordata var. cordata
2. Leaf blade 2.5-10 times longer than wide, opaque when backlit, the upperside smooth, the underside microscopically evenly pitted (best seen with diffuse light); inflorescence bract 2-3.5 cm long; floral tube pubescence persistent … P. cordata var. lanceolata
3. Stems erect, not stoloniferous; leaf blade base cordate; inflorescence paniculate (Pontederia subg. Cabanisia) … P. paniculata

3. Stems trailing, often stoloniferous; leaf blade base rounded to truncate; inflorescence spicate [4]
4. Plants typically rooted in mud; sessile leaves alternate on elongate stem; inflated petioles absent; perianth limb lobe margins erose (Pontederia subg. Eichhornia) … P. azurea
4. Plants typically free-floating or stranded; sessile leaves produced in rosette; petioles commonly inflated; perianth limb lobe margins entire (Pontederia subg. Oshunae) … P. crassipes

**Pontederia azurea* Sw. {AFP} —
Pontederia cordata L. var. ***cordata*** {AFP} —
Pontederia cordata L. var. ***lanceolata*** (Nutt.)Griseb. —
**Pontederia crassipes* Mart. {AFP} —
**Pontederia paniculata* Spreng. {AFP} —

ZINGIBERALES

CANNACEAE

Canna: The staminodes are the larger, conspicuous, brightly colored petaloid parts of the flower.

1. Petaloid staminodes broadly ovate, free portion 1-2 times as long as wide; petals recurved to erect [2]
1. Petaloid staminodes narrowly elliptic, free portion 3-8 times as long as wide; petals erect [3]
2. Staminodes yellow; petals strongly recurved; fruit irregularly ellipsoid, 5-6 cm long, 4-4.5 cm wide; seeds brown, nearly globose, 6-6.5 mm long, 5-6 mm wide … C. flaccida
2. Staminodes yellow, orange, to red, often a mixture of colors; petals erect to laxly recurved; usually sterile … C. ×hybrida
3. Leaves glaucous; staminodes yellow; fruit globose to ellipsoid, 2-5 cm long, 2-4 cm wide; seeds brown, ovoid, 7-10 mm long, 6-8 mm wide … C. glauca
3. Leaves not glaucous; staminodes usually red, sometimes yellow orange; fruit ellipsoid to nearly globose, 1.5-3 cm long, 1.5-2 cm wide; seeds black, globose to nearly globose, 5-8 mm long, 4-6.7 mm wide … C. indica

Canna flaccida Salisb. {AFP} —
^*Canna glauca* L. {AFP} —
^*Canna ×hybrida* Rodigas (*glauca* × *indica* × *iridiflora*) {AFP} —
^*Canna indica* L. {AFP} —

MARANTACEAE

1. Petiole to 1 m long, exceeding the blade in length; leaf blade not variegated, to 60 cm long, to 40 cm wide; inflorescence to 3 m long; bracts deciduous; sepals persistent in fruit; generally of inundated habitats … Thalia geniculata
1. Petiole usually <0.3 m long, usually shorter than the blade; leaf blade often strikingly variegated, usually <40 cm long, <20 cm wide; inflorescence usually <1 m long; bracts persistent or deciduous; sepals persistent or caducous in fruit; cultivated or sparingly naturalized [2]
2. Usually acaulescent, some taxa cauline; inflorescence usually simple; sepals usually persistent in fruit; outer staminodes (0)1 … Goeppertia
2. Acaulescent or cauline; inflorescence simple or branched; sepals caducous or persistent in fruit; outer staminodes 2 [3]

3. Sepals persistent in fruit; corolla tube longer than wide ... Maranta
3. Sepals caducous in fruit; corolla tube longer to shorter than wide [4]
4. Acaulescent; inflorescence usually simple; corolla tube length subequal to longer than wide ... Ctenanthe
4. Caulescent; inflorescence usually branched; corolla tube width subequal to wider than long ... Stromanthe

Ctenanthe
^*Ctenanthe burle-marxii* H.Kenn. —

Goeppertia
^*Goeppertia insignis* (W.Bull ex W.E.Marshall)J.M.A.Braga et al. —
^*Goeppertia makoyana* (É. Morren)Borchs. & S.Suárez —
^*Goeppertia majestica* (Linden)Borchs. & S.Suárez —
^*Goeppertia roseopicta* (Linden ex Lem.)Borchs. & S.Suárez —
^*Goeppertia zebrina* (Sims)Nees —

Maranta
^*Maranta arundinacea* L. {AFP} —
^*Marantha leuconeura* É. Morren —

Stromanthe
^*Stromanthe thalia* (Vell.)J.M.A.Braga —

Thalia
Thalia geniculata L. {AFP} —

COSTACEAE
1. Corolla open, the margin fimbriate to irregular dentate ... Hellenia speciosa
1. Corolla tubular, mostly entire ... Costus

Costus
1. Inflorescence bracts recurved to spreading, with red foliaceous appendages ... C. comosus
1. Inflorescence bracts strictly appressed or nearly so, lacking appendages (at least most) [2]
2. Inflorescence fusiform, the apex acute; bract margin pale and lacerate; leaf upper surface costa strigulose ... C. pulverulentus
2. Inflorescence cylindric, the apex rounded; bract margin not paler, entire to roughened; leaf upper surface costa strigulose or glabrous [3]
3. Leaf costa upper surface strigulose; inflorescence bracts as wide as long, pale greenish to pale orange-red; calyx 3-7 mm long ... C. scaber
3. Leaves glabrous; inflorescence bracts much wider than long, distal ones often lustrous red; calyx 6-9 mm long ... C. woodsonii

^*Costus comosus* (Jacq.)Roscoe —
^*Costus pulverulentus* C.Presl {AFP} —
^*Costus scaber* Ruiz & Pav. —
^*Costus woodsonii* Maas —

Hellenia
^*Hellenia speciosa* (J.Koenig)S.R.Dutta —

ZINGIBERACEAE
1. Aboveground stems and leaves evergreen; lateral staminodes absent or small, not petaloid; fruit indehiscent (Alpinieae) [2]
1. Aboveground stems and leaves usually dying back seasonally; lateral staminodes petaloid or not; fruit dehiscent [3]
2. Inflorescence paniculate with lateral cincinni, terminating the leafy stem … Alpinia
2. Inflorescence capitate or spicate, basal, separate from the leafy stem … Etlingera
3. Labellum connate to filament in elongate slender, arching tube containing the style, exserted above the flower and longer than the petals or labellum; ovary unilocular (Globbeae) … Globba
3. Labellum (showy lower lip) not connate to filament, not exserted above flower, not longer than petals or the labellum; ovary 3-locular, sometimes incompletely so (Zingibereae) [4]
4. Leaves basal … Kaempferia
4. Leaves cauline [5]
5. Inflorescence terminal or pseudoterminal on a leafy stem; filament linear; anther exserted … Hedychium
5. Inflorescence basal, on a scaly stem, separate from the leafy stem; filament rectangular or nearly absent; anther enclosed in corolla [6]
6. Inflorescence bracts spreading to reflexed, ovate to narrowly ovate with an obtuse to rounded apex; lateral staminodes petaloid … Curcuma
6. Inflorescence bracts imbricate, reniform to broadly ovate-orbicular with a broadly rounded (sometimes mucronate) apex; lateral staminodes absent or reduced to small teeth adnate to labellum … Zingiber

Alpinia
1. Inflorescence bracts persistent and large, pink to red (sect. Guillainia) … A. purpurata
1. Inflorescence ebracteate or the bracts small or caducous [2]
2. Bracteoles not enclosing flower buds; labellum <2 cm long (sect. Alpinia) … A. galanga
2. Bracteoles enclosing flower buds; labellum >3 cm long (sect. Catimbium) [3]
3. Upper corolla lobe (atop labellum) narrowly elliptic to ligulate, about as wide as central longitudinal veins area on labellum; labellum margins whitish to pale yellow … A. calcarata
3. Upper corolla lobe (atop labellum) broadly elliptic, about as wide as central reddish patch of labellum; labellum margins usually vibrant yellow … A. zerumbet

^*Alpinia calcarata* (Andrews)Roscoe —
^*Alpinia galanga* (L.)Willd. —
^*Alpinia purpurata* (Vieill.)K.Schum. —
^*Alpinia zerumbet* (Pers.)B.L.Burtt & R.M.Sm. {AFP} — The name *A. nutans* Roscoe has been widely misapplied to this species (see https://www.inaturalist.org/observations/28113246).

Curcuma
1. Leaves with a conspicuous purplish or reddish patch along the midrib … C. picta
1. Leaf blade generally uniformly green … C. zedoaria

^*Curcuma alismatifolia* Gagnep. —
^*Curcuma longa* L. —

^*Curcuma petiolata* Roxb. —
^*Curcuma picta* Roxb. ex Škornick. {AFP} —

Etlingera
1. Inflorescence conic to cylindric, the bracts narrowly ovate to ligulate, the basal bracts spreading to reflexed … E. elatior
1. Inflorescence flat-topped obconic, the bracts very broadly ovate, the basal bracts recurved at the tip … E. corneri

^*Etlingera corneri* Mood & Ibrahim —
^*Etlingera elatior* (Jack)R.M.Sm. —

Globba
^*Globba schomburgkii* Hook.f. {AFP} —

Hedychium
1. Inflorescence bracts densely imbricate or overlapping, the rachis not visible; filament white to yellow or slightly pinkish [2]
1. Inflorescence elongate, the rachis plainly apparent; filament pink, dark pink, to red [3]
2. Upper, showy labellum and 2 lateral petaloid staminodes white, the staminodes broadly elliptic to obovate … H. coronarium
2. Upper, showy labellum and 2 lateral petaloid staminodes pale yellow, the staminodes elliptic to oblanceolate … H. flavescens
3. Labellum and petaloid staminodes orange to pinkish orange … H. coccineum
3. Labellum and petaloid staminodes yellow … H. gardnerianum

**Hedychium coronarium* J.Koenig {AFP} —

Kaempferia
^*Kaempferia pulchra* Ridl. {AFP} —

Zingiber
1. Inflorescence bracts green, herbaceous … Z. officinale
1. Inflorescence bracts pale yellow to red, youngest and distal ones often green, fleshy [2]
2. Inflorescence bracts open and gaping … Z. spectabile
2. Inflorescence bracts tightly appressed … Z. zerumbet

^*Zingiber officinale* Roscoe —
^*Zingiber spectabile* Griff. —
^*Zingiber zerumbet* (L.)Sm. {AFP} —

HELICONIACEAE
1. Primary inflorescence bract usually brightly colored with orange to red colors; fruit fleshy … Heliconiaceae
1. Primary inflorescence bract somewhat dull, green, reddish, pinkish, bluish green, or purplish; fruit a woody capsule … Strelitziaceae

1. Inflorescence pendent, the primary (cincinnal) bract held above the flower … H. rostrata

1. Inflorescence erect, the primary (cincinnal) bract held below the flower [2]
2. Primary (cincinnal) inflorescence bracts 4-6, open, not tightly enclosing the flower bases … H. psittacorum
2. Primary (cincinnal) inflorescence bracts 5-10, tightly folded or cupper around the flower bases [3]
3. Primary (cincinnal) inflorescence bract orange, linear-lanceolate, long acuminate … H. latispatha
3. Primary (cincinnal) inflorescence bract red or reddish, ovate, acute to acuminate … H. bihai

Heliconia
^*Heliconia bihai* (L.)L. —
*****Heliconia latispatha*** Benth. {AFP} —
^*Heliconia psittacorum* L.f. —
^*Heliconia rostrata* Ruiz & Pav. —

STRELITZIACEAE
1. Caulescent; overlapping petiole bases creating a distinct zigzag line; petiole to 4.5 m long, the base subentire, lacking a conspicuous brown split margin or this minimal and scarcely apparent; leaf blade to 2 m long, to 1 m wide; inflorescence with (5)8-20 primary bracts, the bracts green; petals white, subequal, not connivent; seed aril blue … Ravenala madagascariensis
1. Caulescent or acaulescent; overlapping petiole bases with a short irregular zigzag line or the line not apparent; petiole to 1 m long, base subentire or roughened with a conspicuous erose and split brown margin to 1 cm wide; leaf blade to 1 m long, to 0.5 m wide; inflorescence with 1-4 primary bracts, the bracts green, reddish, pinkish, bluish green, or purplish; petals blue, purple, or white, unequal, posterior one scale-like; seed aril orange … Strelitzia

1. Acaulescent; leaf blades 10-50 cm long, 5-20 cm wide, not splitting from the margin to the midrib, or blades absent; sepals orange [2]
1. Caulescent; leaf blades 50-100 cm long, 20-50 cm wide, commonly splitting from the margin to the midirb; sepals white [3]
2. Leaves without a leaf blade or the blade extremely reduced … S. juncea
2. Leaf blade 10-50 cm long, 5-20 cm wide … S. reginae
3. Inflorescence simple; petals white … S. alba
3. Inflorescence compound; petals blue … S. nicolai

Ravenala
^*Ravenala madagascariensis* Sonn. —

Strelitzia
^*Strelitzia alba* (L.f.)Skeels —
^*Strelitzia nicolai* Regel & Körn. —
^*Strelizia reginae* Banks —

MUSACEAE
Musa
1. Pseudostems 1-3 m tall, rarely >10 cm wide at base; inflorescence erect [2]
1. Pseudostems (2)2.5-8 m tall, (6)10-30 cm wide at base; inflorescence pendulous [3]

2. Peduncle green; inflorescence bracts bright pink; ovary glabrous; fruit glabrous, 2.5-4 times longer than wide, green, yellow, pink, to red … M. ornata
2. Peduncle red; inflorescence bracts red to pinkish purple; ovary pubescent; fruit pubescent, 1.5-2 times longer than wide, red … M. velutina
3. Petiole margin prominent, widening from 5 mm distally to 15 mm basally, spreading, not clasping pseudostem; peduncule pubescent or puberulent; fertile inflorescence bracts broadly ovate to suborbicular, externally pale yellow, yellowish green, to dull yellowish purple, internally pale yellow to yellowish green, often rolled or reflexed at the tip, often (1)2-4 open simultaneously; fruit 5-7 cm long … M. basjoo
3. Petiole margin various; peduncle glabrous or pubescent; fertile inflorescence bracts lanceolate to broadly ovate, externally brownish purple, red, dull purple, to yellow, internally bright red, pink, dull purple, to yellow and fading uniformly or to yellow towards base, reflexing or not, 1-4 open simultaneously; fruit usually 7-15 cm long [4]
4. Hybrid of or intermediate between M. acuminata and M. balbisiana … M. ×paradisiaca
4. Not intermediate [5]
5. Suckering moderately; pseudostem 3-8 m tall, (6)10-25 cm wide at base, mostly heavily marked with dark blotches; petiolar canal margin erect or spreading with serial wings basally, not clasping pseudostem; peduncle usually pubescent; fertile bracts externally red, dull purple, to yellow, internally pink, dull purple, to yellow and fading to yellow towards base, lanceolate to narrowly ovate, eventually reflexing and rolling back, widest point of bract usually in the proximal 3/10 or less of its length, apex acute, usually only 1 open at a time; bract scar prominent or tuberculate; pedicel to 1 cm long; male flower creamy white, the free tepal variably corrugated below apex; stigma orange to bright yellow; ovules in 2 regular rows per locule; fruit 8-13 cm long, 1.5-3 cm wide, subcylindric, pulp often edible; seeds dull black, often somewhat angular or flattened, 5-7 mm by 2-4 mm, minutely tuberculate to nearly smooth … M. acuminata
5. Suckering freely; pseudostem 6-7 m tall, (7)10-30 cm wide at base, greenish with dark blotches in upper part; petiolar canal margin inclosed, not winged basally, clasping pseudostem; peduncle glabrous; bracts externally brownish purple, internally bright red and uniform upon fading, broadly ovate, not reflexing, widest point of bract usually beyond the proximal 3/10 of its length, apex obtuse, often (1)2-4 open simultaneously; bract scar scarcely prominent; pedicel 1-2 cm long; staminate flower variably flushed with pink, the free tepal rarely corrugated; stigma cream, pale yellow to pale pink; ovules in 4 irregular rows per locule; fruit 7-15 cm long, 3-5 cm wide, angulate; seeds black, 5-6 mm by 4-5 mm, irregularly globose, minutely verrucose … M. balbisiana

^*Musa acuminata* Colla {AFP} —
^*Musa balbisina* Colla —
^*Musa basjoo* Siebold ex Miq. —
^*Musa ornata* Roxb. {AFP} —
^*Musa ×paradisiaca* L. (*M. acuminata* × *M. balbisiana*) {AFP} —
^*Musa velutina* H.Wendl. & Drude —

MAGNOLIIDS

Figure: Estimated phylogeny of extant magnoliids. Black font=contains taxa native to Florida; Gray font=not native, not included.

CANELLALES

CANELLACEAE

Canella

Canella winterana (L.)Gaertn. {AFP} — SE.

PIPERALES

ARISTOLOCHIACEAE: The calyx forms the prominent, colorful floral tissue, while the corolla is absent (or vestigial).

1. Herbs or vines with aerial, leafy stems; flower (calyx) zygomorphic; stamens 5-6 … Aristolochia
1. Rhizomatous herbs without aerial stems; leaves all basal; flower (calyx) actinomorphic; stamens 12 … Asarum

Aristolochia

1. Erect to decumbent herb; inflorescence at the plant base, below the leaves (Endodeca) … A. serpentaria

1. Prostrate to climbing vine; inflorescence not at the plant base [2]
2. Leaf blades 3-lobed … A. trilobata
2. Leaf blades unlobed (except for being sometimes cordate at the base) [3]
2. Leaf blade oblong to spatulate; inflorescence of several flowers … A. maxima
2. Leaf blade cordate-ovate to cordate-reniform; flowers solitary [3]
3. Stem tomentose; leaf blade underside tomentose with prominent primary veins and conspicuous fine reticulate venation … A. tomentosa
3. Stem glabrous to puberulent; leaf blade underside glabrous to puberulent with flat to scarcely prominent primary veins and obscure to conspicuous coarse reticulate venation [4]
4. Pseudostipules absent; leaf blades usually broadly lobed at the base, the inner pair of primary basal veins straight or nearly so (with side branches); calyx tube dilated at base ; calyx limb expanded on only 1 side; stamens 5 … A. pentandra
4. Pseudostipules present or absent; leaf blades unlobed or scarcely lobed at the base, the inner pair of primary basal veins mostly sinuous, bent, or bifurcating; calyx tube dilated near the middle; calyx limb expanded on all sides; stamens 6 [5]
5. Fresh leaf blade upperside variegated with whitened vein areas, surfaces bordering the veins sometimes also white; calyx with prominent fimbriate projections on the margin … A. fimbriata
5. Fresh leaf blade upperside non-variegated with green or whitish vein areas; calyx without fimbria [6]
6. Calyx limb 2-lobed, bilabiate, the 2 lobes narrowly elongate or clawed, the upper hovering above the lower [7]
6. Calyx limb 1-lobed, limb spreading, orbicular to broadly elliptic, usually cordate at the base [8]
7. Upper calyx lobe suborbicular, narrowly clawed, pendent, deflected, ruffled … A. labiata
7. Upper calyx lobe ovate-spatulate, broadly clawed, erect, not deflected, not ruffled … A. ringens
8. Calyx 4-7.5(12) cm long, 3.5-7.5(10.5) cm wide, stiff, the lower half below the throat shorter, subequal, to slightly longer than the upper half, calyx tube cylindric; leaf blade underside often somewhat glaucous or whitened, somewhat obscuring reticulate venation … A. elegans
8. Calyx 16-25(30) cm long, 16-20(25) cm wide; leaf blade underside sometimes somewhat glaucous but the reticulate venation generally easily discerned … A. gigantea

****Aristolochia elegans*** Mast. {AFP} — Sometimes subsumed under *A. littoralis* Parodi, González (1990: 93) considered the description of *A. littoralis* more similar to *A. odoratissima* L., and that neither were synonyms of *A. elegans*.
****Aristolochia fimbriata*** Cham. {AFP} —
^*Aristolochia gigantea* Mart. & Zucc. —
****Aristolochia labiata*** Willd. {AFP} —
****Aristolochia maxima*** Jacq. {AFP} —
Aristolochia pentandra Jacq. {AFP} — SE.
****Aristolochia ringens*** Vahl {AFP} —
Aristolochia serpentaria L. {AFP} — Variously placed in *Endodeca* (sister to *Isotrema* s.str.) or *Isotrema*.
Aristolochia tomentosa Sims {AFP} — Sometimes placed in *Isotrema* (Zhu et al. 2019). SE.
^*Aristolochia trilobata* L. —

Asarum: Both Florida taxa are sometimes placed in *Hexastylis* (see Diggs, Jr. et al. 2025).

1. Leaf blade triangular-sagittate to subhastate; sterile tip of the style 2-cleft to the stigma ... A. arifolium
1. Leaf blade cordate to subreniform; sterile tip of the style notched, the sinus not reaching the stigma ... A. virginicum

Asarum arifolium Michx. {AFP} — ST.
Asarum virginicum L. {AFP} —

PIPERACEAE

1. Epiphytic or terrestrial herbs; stipules absent; floral bracts glabrous or gland-dotted; flowers bisexual; ovary 1-carpellate; stamens 2 ... Peperomia
1. Terrestrial vines, subshrubs, shrubs, to small trees; stipules present, enclosing young stem; floral bracts ciliate; flowers unisexual; ovary 2-4(5)-carpellate; stamens 2-4 ... Piper

Peperomia

1. Leaf blades less than 1.2(1.5) cm long and wide, generally orbicular ... P. rotundifolia
1. Larger leaf blades more than 1.5 cm long or wide, orbicular or not [2]
2. Stems strigose; leaves opposite or whorled (rarely alternate near the base) ... P. humilis
2. Stems glabrous; leaves alternate (sometimes opposite at the terminal flowering nodes) [3]
3. Leaves sessile or petiole to 3 mm, the blade auriculate at the base and somewhat clasping the stem ... P. amplexicaulis
3. Leaves petiolate, the petiole 3-30 mm long, the blade not clasping the stem [4]
4. Leaf blades broadest near or at the base, weak and membranaceous ... P. pellucida
4. Leaf blades usually broadest near the middle or above the middle, relatively stiff and succulent [5]
5. Leaf blades lanceolate, oblanceolate, to elliptic [6]
5. Leaf blades ovate, obovate, spatulate, to suborbicular [7]
6. Plant not glandular black-punctate (or minutely so); petiole slightly expanded and clasping at the base, decurrent in lines or wings along the stem; lateral veins of leaf blade impressed and conspicuous at least in the lower half ... P. alata
6. Plant conspicuously glandular black-puncate; petiole not or slightly expanded and clasping at the base, not decurrent; lateral veins of the leaf blade inconspicuous or faintly impressed ... P. glabella
7. Peduncle glabrous; fruit beak tapering smoothly from the broadened base to the acute apex, straight to gradually hooked from near the middle ... P. magnoliifolia
7. Peduncle with microscopic, spicule-like trichomes; fruit beak filiform above the conical base, abruptly hooked or curved at the apex ... P. obtusifolia

Peperomia alata Ruiz & Pav. {AFP} — SE.
****Peperomia amplexicaulis*** (Sw.)A.Dietr. {AFP} — SE.
Peperomia glabella (Sw.)A.Dietr. {AFP} — SE.
Peperomia humilis A.Dietr. {AFP} — SE.
[X]***Peperomia magnoliifolia*** (Jacq.)A.Dietr. {AFP} — SE.
Peperomia obtusifolia (L.)A.Dietr. {AFP} — SE.
****Peperomia pellucida*** (L.)Kunth {AFP} —
Peperomia rotundifolia (L.)Kunth {AFP} — SE.

Piper: *Piper methysticum* Forst. is to be expected in cultivation, but otherwise no specimens are known and it is often confused with *P. auritum*.

1. Erect subshrubs, shrubs, to small trees; larger leaf blades 15-40 cm long [2]
1. Vines or weak subshrubs; larger leaf blades 5-13(15) cm long [5]
2. Leaf blade elliptic-lanceolate, obliquely rounded to cuneate at the base ... P. aduncum
2. Leaf blade ovate to orbicular, obliquely to evenly cordate at the base [3]
3. Leaf blade pinnately veined; with anise-like odor ... P. auritum
3. Leaf blade mostly palmately veined; without anise-like odor [4]
4. Stem and petiole glabrate; leaf blade palmately veined, the base of the inner veins often appressed to the midvein; inflorescence of a solitary spike opposite of the leaf ... P. methysticum
4. Stem and petiole pubescent; leaf blade usually palmate-pinnately veined, with 2 or more major veins arising from along the midrib; inflorescence of several spikes and axillary ... P. umbellatum
5. Leaf blade upper side strongly lustrous with impressed cross-veins; inflorescence erect ... P. sarmentosum
5. Leaf blade upper side dull to weakly lustrous, the cross-veins not impressed or weakly so; inflorescence pendulous ... [6]
6. Dioecious; leaf blade base cordate; inflorescence unisexual; infructescence 3-5(7) cm long; fruit embedded in rachis ... P. betle
6. Monoecious; leaf blade base rounded to cuneate; inflorescence bisexual; infructescence (5)7-10 cm long; fruit not embedded in rachis ... P. nigrum

****Piper aduncum*** L. {AFP} —
****Piper auritum*** Kunth {AFP} —
^*Piper betle* L. —
^*Piper nigrum* L. —
****Piper sarmentosum*** Roxb. {AFP} —
****Piper umbellatum*** L. {AFP} —

SAURURACEAE
1. Leaf blades 0.8-1.4 times longer than wide, the reticulate venation obscure on the underside; inflorescence 1-3 cm long, subtended by involucral petaloid bracts; fruit a capsule ... Houttuynia cordata
1. Leaf blades 1.7-2.3 times longer than wide, the reticulate venation conspicuous on the underside; inflorescence 5-35 cm long, without involucral bracts; fruit a schizocarp ... Saururus cernuus

Houttuynia
****Houttuynia cordata*** Thunb. {AFP} —

Saururus
Saururus cernuus L. {AFP} —

LAURALES

CALYCANTHACEAE
Calycanthus

Calycanthus floridus L. {AFP} — SE.

LAURACEAE

Cassytheae: Cassytha
Cinnamomeae: Camphora, Cinnamomum, Damburneya, Licaria, Sassafras
Laureae: Lindera, Litsea
Perseeae: Persea

1. Parasitic vine; stems often orange to pale green-yellow, with haustoria, essentially leafless with minute scales (ca. 1 mm) … Cassytha filiformis
1. Shrubs or trees; stems generally greenish to gray, with evident sizeable leaves, without haustoria [2]
2. Leaf blade basal lateral veins fairly pronounced and subparallel with the blade margin, usually reaching mid-blade or extending to near the apex [3]
2. Leaf blade basal lateral veins generally not pronounced, spreading or if subparallel to the blade margin then usually not reaching mid-blade [5]
3. Young stems and leaves pubescent; leaves deciduous, often at least some leaf blades lobed; flowers emerging before leaves or with emerging leaves … Sassafras albidum
3. Young stems and leaves glabrate or sericeous or the domatia pubescent; leaves persistent, the blades unlobed; flowers emerging with mature leaves [4]
4. Buds scaly; leaf blade pinninerved to subtriplinerved with the distal lateral veins nearly as pronounced as the basal ones, often glaucous, with domatia in the basal leaf axils of the lower surface, with the smell of camphor when crushed … Camphora officinarum
4 Buds naked or scales indistinct; leaf blades trinerved to triplinerved with the two basal lateral veins arising from at or near the base pronounced (any distal lateral veins much less pronounced), not glaucous, without domatia on the lower surface, with a cinnamon-like smell when crushed … Cinnamomum
5. Dioecious shrubs or small trees to 5 m; leaves deciduous; flowers unisexual [6]
5. Monoecious shrubs or trees to 20 m; leaves persistent; flowers bisexual [7]
6. Leaf blade 0.5-1 cm wide; inflorescence with 1-5 flowers; anthers 4-locular … Litsea aestivalis
6. Leaf blade 1.5-5 cm wide; inflorescence with 1-20 flowers; anthers 2-locular … Lindera
7. Young stems and leaf blade lower surface pubescent or sericeous … Persea
7. Young stems and leaf blade glabrous or glabrate [8]
8. Bark gray, smooth; leaf blade upper surface with visible and conspicuous reticulate venation, acute or gradually acuminate at the tip, crushed odor mildly pungent; fertile stamens 9; anthers 4-locular; fruit 1-2 cm long, subtended by a cupule with a single margin or an inconspicuous double margin … Damburneya coriacea
8. Bark brown, papillate-granular from the lenticels; leaf blade upper surface with inconspicuous or obscure reticulate venation, abruptly to gradually acuminate at the tip, crushed odor faintly aromatic; fertile stamens 3; anthers 2-locular; fruit 2-3 cm long, subtended by a cupule with an evident double margin, the basal margin often flared … Licaria triandra

Camphora

****Camphora officinarum*** Nees {AFP} —

Cassytha

Cassytha filiformis L. {AFP} —

Cinnamomum

1. Leaf blade ovate to lanceolate, basal lateral veins evanescent in the distal half, the blade apex acuminate … C. burmannii
1. Leaf blade elliptic to oblong, basal lateral veins pronounced and distinct nearly to the tip, the blade apex obtuse to acute … C. iners

*****Cinnamomum burmanni*** (Nees & T.Nees)Blume {AFP} —
*****Cinnamomum iners*** Reinw. ex Blume {AFP} —

Damburneya

Damburneya coriacea (Sw.)Trofimov & Rohwer {AFP} — Eastern C-S peninsula & S peninsula. Hammocks. The visible reticulate venation of the leaf blades and smoothish gray twigs are helpful characters for vegetative ID.

Licaria

Licaria triandra (Sw.)Kosterm. {AFP} —Miami-Dade Co., Brickell Hammock. SE.

Lindera

1. Leaf blade somewhat leathery, broadly rounded to obtuse at the tip, larger blades usually <8 cm long and <4 cm wide, young leaves faintly aromatic when crushed, becoming essentially odorless with age … L. subcoriacea
1. Leaf blade membranous, acute to acuminate at the tip, larger blades usually >8 cm long and >4 cm long, crushed leaves strongly aromatic throughout growing season [2]
2. Shrubs or small trees, usually taller than 1 m; leaves horizontal to mostly ascending, the blade obovate, base cuneate, apex acuminate on larger leaves; fruiting pedicels of previous season not persistent on stem, not conspicuously enlarged at apex … L. benzoin
2. Low shrubs rarely over 1.5 m tall; leaves drooping, the blade elliptic to ovate, base rounded to widely cuneate, apex acute; fruiting pedicels of previous season persistent on stem, enlarged at apex … L. melissifolia

Lindera benzoin (L.)Blume {AFP} —
Lindera melissifolia (Walter)Blume {AFP} —FE. SE.
Lindera subcoriacea Wofford {AFP} — SE.

Litsea

Litsea aestivalis (L.)Fernald {AFP} — SE.

Nectandra

[x]***Nectandra hihua*** (Ruiz & Pav.)Rohwer {AFP} — It is quite possible *N. hihua* occurred in Florida, e.g. Key West hammocks. It is a widespread species and it would be a short jump from its nearest distribution in Cuba (Rohwer 1993). The syntype of the synonymous *N. antillana* Mesin. was *Rugel 733* labeled from Florida, although usually interpreted as a labeling error.

Persea: The traditional genus *Persea* may or may not be monophyletic (Rohwer et al. 2009; Song et al. 2019; Xiao et al. 2022). *Persea* subg. *Persea* includes the avocado (*P. americana*). The other group (mainly *P.* subg. *Eriodaphne*) is in a separate clade and includes those native

to Florida. The Asian ascomycete *Raffaelea lauricola* (laurel wilt) has been introduced to the USA and is predominantly damaging to the genus *Persea* (Ploetz et al. 2017).

1. Leaf blade to 30 cm long, to 19 cm wide (hairs loos); calyx deciduous in fruit; fruit 5-15 cm long; seed 3-6 cm long ... P. americana
1. Leaf blade to 15 cm long, to 6 cm wide (hairs wavering or sericeous); calyx persistent in fruit; fruit 0.6-1.5 cm long; seed 0.6-1.2 cm long [2]
2. Indumentum of erect, ascending, to loosely spreading hairs, generally oriented in different directions, sometimes wavy (not straight and not tightly appressed, not subparallel, sometimes some hairs sub-sericeous and sometimes short and sparse esp. in south FL); peduncles 1-7 cm long, usually longer than the subtending petiole; fruit 6-10 mm wide or long; generally of mesic-hydric to flood-prone sites ... P. palustris
2. Indumentum sericeous with straight, tightly appressed and nearly parallel hairs; peduncles 0.5-3 cm long, mostly subequal, shorter than, to slightly longer than the subtending petiole; fruit 8-12 mm wide or long; generally of mesic-xeric to xeric sites of well-drained sand [3]
3. Leaf blade underside sparsely to moderately sericeous, hairs mostly well spaced, glaucescence of young leaves usually apparent; fruit 8-11 mm wide or long; generally of mesic to xeric sites ... P. borbonia
3. Leaf blade underside densely sericeous, the hairs touching or overlapping, obscuring the glaucescence of young leaves (appearing strongly lustrous reddish brown, fading to pale in older leaves); fruit 10-12 mm wide or long; restricted to xeric sites ... P. humilis

^*Persea americana* Mill. {AFP} — Native to southern Mexico and Central America. Introduced to south Florida at least by the early 1800s, and developed into a productive industry through the hybridization of West Indian and Guatemalan strains (e.g. the Booth cultivars in the 1920s; Knight & Campbell 1999).
Persea borbonia (L.)Spreng. {AFP} —
•***Persea humilis*** Nash{AFP} — Does not appear sharply separated from *P. borbonia*, and sometimes placed as an infraspecific taxon.
Persea palustris (Raf.)Sarg. {AFP} —

Sassafras
Sassafras albidum (Nutt.)Nees {AFP} —

MAGNOLIALES
ANNONACEAE
1. Shrubs to small trees; petiole 0-7(10) mm long, sometimes indistinct; carpels 2-18, free, the fruit a simple berry [2]
1. Trees; petiole (5)7-18 mm long, distinct; carpels free or coalesced [3]
2. Leaf base acute to attenuate; petals 15-80 mm long; fruit oblong, 30-100 mm long, yellow-green ... Asimina
2. Leaf base rounded-truncate to acute; petals 3-6 mm long; fruit subglobose, 4-5 mm long, purple ... Polyalthia
3. Carpels 20+, coalescent into an aggregate syncarp ... Annona
3. Carpels 2-18, free, the fruit a simple berry ... Cananga

Annona

1. Leaves glabrous, or ephemerally sparsely pubescent; petals 6, ovate, these broad and conspicuous [2]
1. Leaves usually pubescent, at least when young; petals 3, oblong or lance-oblong, or 6 with the 3 inner to 3 mm long [4]
2. Leaf blade upper side often with distinct, discolorous reticulate venation, the lower side lacking domatia in the vein axils; petals usually with red coloration on the interior; inner petals valvate; fruit smooth ... A. glabra
2. Leaf blade upper side with indistinct or concolorous reticulate venation, the lower side with cavernous domatia in the vein axils; petals lacking red coloration; inner petals imbricate; fruit scaly, the scales with erect or spreading, acute or hardened tips [3]
3. Fruit pulp yellowish or orangish; seeds usually brown ... A. montana
3. Fruit pulp whitish; seeds brown to blackish ... A. muricata
4. Fruit with distinct, bulging segments individually separable ... A. squamosa
4. Fruit smooth, without separable segments [5]
5. Leaf blade lower side pubescent ... A. cherimola
5. Leaf blade lower side glabrate ... A. reticulata

^*Annona cherimola* Mill. —
Annona glabra L. {AFP} —
^*Annona montana* Macfad. — Sparingly naturalized.
^*Annona muricata* L. —
^*Annona reticulata* L. —
^*Annona squamosa* L. {AFP} — Sparingly naturalized.

Asimina: The taxa of *Deeringothamnus* are derived within the *Asimina* lineage (Fonseca et al. 2024).

1. Leaf blade chartaceous, often abruptly narrowed to an acuminate or acute tip, the larger blades 4-10 cm wide; inner and outer petals usually similar in shape, texture, and color, usually both uniformly maroon throughout; outer petals 1-2.5 cm long [2]
1. Leaf blade coriaceous, not abruptly narrowed, the tip rounded or acute, the larger blades 1-5 cm wide; inner and outer petals often dissimilar in shape, texture, or color, usually not both uniformly maroon, or if the petals similar then white, yellow, to pink, rarely both maroon; outer petals 1.5-7 cm long [3]
2. Plant 1.5-6 m tall with a trunk to 10 cm wide; larger leaf blades 4-6.5 cm wide; peduncle <1 cm long at anthesis; fruit 3-6(7) cm long; seeds 1-1.5(2) cm long ... A. parviflora
2. Plant 1.5-11(14) m tall with a trunk to 30 cm wide; larger leaf blades 5-10 cm wide; peduncle >0.9 cm long at anthesis; fruit 5-15 cm long; seeds 1.5-2.5 cm long ... A. triloba
3. Flowers usually from nodes of previous year's growth, emerging before or with the leaves; flowering primarily Nov-Apr, rarely other months, e.g. Aug-Oct [4]
3. Flowers usually from shoots of current year's growth, emerging after some leaves are full-sized or nearly so; flowering primarily Apr-Jun, also as early as Feb-Mar in some species (e.g. obovata, pulchella, pygmaea), rarely other months, e.g. Oct-Dec [5]
4. Stems and leaves with pale, blonde to tan pubescence, often dense, glabrate on older tissue; larger leaf blades mostly >2.2 cm wide, upperside generally not glaucous and the venation generally apparent, secondary veins of the underside often drying pale blonde to tan; inner petals yellow-white with deep yellow corrugate base ... A. incana
4. Stems and leaves with some reddish, pale red, to orange-tan pubescence, dense on young shoots and buds, often relatively sparse on mature leaves; leaf blades <2.2(3) cm wide,

upperside often glaucous bluish green obscuring the venation, secondary veins of the underside often drying brown-red; inner petals white or yellowish white, rarely pink or cherry red, mostly with deep maroon to purple corrugate base ... A. reticulata
5. New shoots, petiole, lower surface of leaf blade along veins, and peduncle with dense, bright red hairs; flowers terminal, often on lateral branchlets ... A. obovata
5. New shoots, petiole, lower surface of leaf blade, and peduncle glabrous to sparsely red-hairy; flowers axillary on primary stems, rarely terminal on lateral branchlets [6]
6. Mature plants less than 40 cm tall [7]
6. Mature plants 80-300 cm tall [9]
7. Larger leaf blades 6-10 cm long, secondary veins more pronounced than reticulate veins; peduncular bracts or bracteoles present; inner and outer petals usually with maroon colors, dissimilar in shape, size, or texture ... A. pygmea
7. Leaf blades 2-5(7) cm long, reticulate veins as pronounced as secondary veins or nearly so; peduncular bracts absent; inner and outer petals white to yellow, similar in shape, color, and texture [8]
8. Petals 6–12(15), ascending to apically recurved, white to pink, linear or narrowly oblong, 2–3 cm long, ca. 2 mm wide ... A. pulchella
8. Petals usually 6, erect or slightly spreading, canary yellow, broadly to narrowly elliptic to ovate, ca. 1.5 cm long, ca. 3–4 mm wide ... A. rugelii
9. Outer petals 1-3.5 cm long, cream-yellow to reddish or maroon; inner petals maroon, rarely green or white [10]
9. Outer petals 4-8 cm long, uniformly white (rarely pink), sometimes with a few purplish streaks near the base; inner petals usually white, rarely uniformly pink or red-purple [11]
10. Leaf blades 8-20 times longer than wide, often canaliculate ... A. manasota
10. Leaf blades 2-8 times longer than wide, usually flat ... A. tetramera
11. Primary stems erect to ascendent; leaf blades 8-20 times longer than wide ... A. angustifolia
11. Primary stems weakly to strongly arching; leaf blades 6-10 times longer than wide ... A. spatulata

Asimina angustifolia Raf. {AFP} —
•***Asimina*** ×***bethanyensis*** DeLaney (*manasota* × *reticulata*) {AFP} —
•***Asimina*** ×***colorata*** DeLaney (*obovoata* × *pygmea*) {AFP} —
Asimina incana (W.Bartram)Exell {AFP} —
•***Asimina*** ×***kralii*** Delaney (*incana* × *pygmea*) {AFP} —
•***Asimina manasota*** DeLaney {AFP} —
Asimina ×***nashii*** Kral (*angustifolia* × *incana*) {AFP} —
•***Asimina*** ×***oboreticulata*** DeLaney (*obovata* × *reticulata*) {AFP} —
•***Asimina obovata*** (Willd.)Nash {AFP} —
Asimina parviflora (Michx.)Dunal {AFP} —
•***Asimina*** ×***peninsularis*** DeLaney (*parviflora* × *reticulata*) {AFP} —
•***Asimina pulchella*** (Small)Rehder & Dayton {AFP} — FE. SE.
Asimina pygmea (W.Bartram)Dunal {AFP} —
Asimina reticulata Shuttlew. ex Chapm. {AFP} —
•***Asimina rugelii*** B.L.Rob. {AFP} — FE. SE.
Asimina spatulata (Kral)D.B.Ward {AFP} —
•***Asimina tetramera*** Small {AFP} — FE. SE.
Asimina triloba (L.)Dunal {AFP} —

Cananga

^*Cananga odorata* (Lam.)Hook.f. & Thomson — Sparingly naturalized.

Polyalthia
*__*Polyalthia suberosa*__ (Roxb.)Thwaites {AFP} —

MAGNOLIACEAE
1. Leaf blade 4- to 6-lobed, truncate-emarginate at the apex; fruit an aggregate of samaras … Liriodendron
1. Leaf blade unlobed, rounded to acute at the apex; fruit an aggregate of follicles … Magnolia

Liriodendron
Liriodendron tulipifera L. {AFP} —

Magnolia
1. Leaf blade auriculate, cordate, to truncate at the base [2]
1. Leaf blade acute to rounded at the base [3]
2. Foliar buds, twigs, and follicles pubescent; leaf blade lower surface chalky white (sometimes pale green to glaucous), pubescent … M. ashei
2. Foliar buds, twigs, and follicles glabrous; leaf blade lower surface green or glaucous, glabrous … M. pyramidata
3. Leaf blade 2-5.5(6) cm wide, the lower surface chalky white to glaucous, glabrous or silky-pubescent … M. virginiana
3. Leaf blade 4.5-20 cm wide, the lower surface whitish-glaucescent, green, to red-brown, glabrous, felted, or pilose [4]
4. Trees evergreen; leaf blade thick-leathery, the lower surface glabrous or red-brown felted, the upper surface lustrous green; flowers 15–30(–45) cm wide, strongly lemony fragrant … M. grandiflora
4. Trees deciduous; leaf blade thin, not leathery, abaxially pale green to whitish, glabrous or pilose, adaxially green; flowers 5.5–11cm across, malodorous or aromatic [5]
5. Leaves not in whorl-like clusters; leaf blade cuneate to broadly rounded-truncate at the base; flowers pleasantly aromatic; tepals greenish, glaucous, occasionally yellow to orange-yellow, usually less than 8 cm long, erect, outermost tepals reflexed, greenish; follicetums 2–7 long, 0.8–2.7 cm wide; follicles short-beaked … M. acuminata
5. Leaves usually in terminal whorl-like clusters; leaf blade cuneate to attenuate at the base; flowers malodorous; tepals creamy white, 8–12(-16) cm long, spreading, outermost tepals reflexed, greenish; follicetums 6–10 long, 2–3.5 cm wide; follicles long-beaked … M. tripetala

Magnolia acuminata (L.)L. {AFP} — SE.
^*Magnolia figo* (Lour.)DC. —
Magnolia grandiflora L. {AFP} —
•***Magnolia ashei*** Weath. {AFP} — SE.
Magnolia pyramidata W.Bartram {AFP} — SE.
^*Magnolia ×soulangeana* Soul.Bod. (*denudata* × *liliiflora*) —
Magnolia tripetala (L.)L. {AFP} — SE.
Magnolia virginiana L. var. ***australis*** Sarg. {AFP} —

EUDICOTS
RANUNCULALES

LARDIZABALACEAE
Akebia
^*Akebia quinata* (Houtt.)Decne. {AFP} —

PAPAVERACEAE
1. Leaves compound; flowers zygomorphic [2]
1. Leaves simple; flowers actinomorphic [3]
2. Corolla yellow; fruit elongate, several-seeded, dehiscent; seed with an elaiosome … Corydalis
2. Corolla white, pink, to purple; fruit spherical, 1-seeded, indehiscent; seed without an elaiosome … Fumaria
3. Leaf blades with prickles; fruit an apically 3- to 7- valvate capsule … Argemone
3. Leaf blades without prickles; fruit not an apically 3- to 7- valvate capsule [4]
4. Plant annual, caulescent; leaf blade pinnately veined and often pinnately lobed or toothed; stigmas several from a sessile disc; fruit an apically 5- to 18-porate capsule … Papaver
4. Plant perennial, rhizomatous, acaulescent; leaf blade palmately veined and palmately lobed; stigma 1, on a short style; fruit a basally 2-valvate capsule … Sanguinaria

Argemone
1. Leaf blade margins with the prickles typically spaced 2-8 mm apart, the leaves often appearing markedly towards the flowers; pedicel 1-35 mm long; petals white, 3-4.5 cm long; stamens 80-160 … A. albiflora
1. Leaf blade margins with the prickles typically spaced 5-15 mm apart, the leaves often only mildly reduced towards the flowers; pedicel 0-3.5 mm long; petals yellow, 2-3 cm long; stamens 25-50 … A. mexicana

Argemone albiflora Hornem. {AFP} —
Argemone mexicana L. {AFP} —

Corydalis
1. Spurred petal 7–9 mm long, spur incurved and ca. 2 mm long; fruit pendent, the pedicels 6-18 mm long … C. flavula
1. Spurred petal typically 10–22 mm long, spur mostly straight and ca. 4–8 mm long; fruit erect, the pedicels 2-6 mm long … C. micrantha subsp. australis

Corydalis flavula (Raf.)DC. {AFP} —
Corydalis micrantha (Engelm.ex A.Gray)A.Gray subsp. ***australis*** (Chapm.)G.B.Ownbey {AFP} —

Fumaria: Monographed by Lidén (1986) who recognized 50 species, while some have thought that taxa in the genus have been "needlessly multiplied, by the hair-splitting of novelty-seeking botanists" Harvey (1894). Some notes provided by Lidén (1986:43-44) are worth restating: "Many species produce cleistogamous flowers in shade, especially late in the season. Such flowers are smaller, do not open, the development of the wings is arrested and the pigmentation is lost. The spur is reduced as well as the nectary. The sepals become longer, narrower and less dentate (with a few exceptions). In some taxa that normally have recurved

fruiting pedicels the recurvation is diminished in shade, but the contrary is found in *F. montana* and *muralis*" [...] "Vegetative development is of course much affected by light and water supply" [...] Aberrant leaves, where the leaflets are much broader than normal, flabellate and appearing as compound of several fused elements (fasciation?) are not uncommon on *F. parviflora* in South Spain. The same has been seen on *F. agraria*, *F. vaillantii* and *F. officinalis* ssp. *wirtgenii*." [...] "My concept of species comes closer to that of Pugsley, even though I have reduced most of those he described as new." Below are the taxa to be expected, as some Florida specimens have been annotated by Lidén as *F. densiflora*, *F. muralis*, *F. officinalis* ssp. *wirtgenii*, and *F. vaillantii*. "The *muralis* complex needs further studies and this treatment is only preliminary. Especially in the British Isles and Portugal many local lines are found and the complex seems to be still in a state of active speciation." (Lidén 1986:79).

1. Leaflets >1.5 mm wide; corolla 9-13 mm long [2]
1. Leaflets <1.5 mm wide; corolla 5-9 mm long [4]
2. Corolla (10)11–13 mm long, white with black-purple tip (often flushed pinkish red after fertilization); fruiting pedicels arcuate-recurved; 2n=64 ... F. capreolata
2. Corolla 9-11(12) mm long, pink; fruiting pedicels usually erect to patent; 2n=48 [3]
3. Corolla 9-11(12) mm long, pale pink and sometimes with darker wings or tips; fruiting pedicels erect to patent; fruiting pedicels erectopatent; fruit rugose ... F. bastardii
3. Corolla 9-11 mm long, pink with blackish purple tips; fruiting pedicels erecto-patent to patent or rarely somewhat arcuate; fruit finely rugose to almost smooth ... F. muralis
4. Sepals 0.5-0.75(1) mm long; corolla (4.5)5-6 mm long; 2n=32 [5]
4. Sepals 1.5-3.5 mm long; corolla 6-7 mm long; ploidy various [6]
5. Sepals 0.5-0.75 mm wide; corolla white, often fading pink after fertilization; bracts usually longer than the fruiting pedicels; fruit not glaucous... F. parviflora
5. Sepals 0.25-0.5 mm wide; corolla pink, wings sometimes darker; bracts shorter to subequal to the fruiting pedicels; fruit glaucous ... F. vaillantii
6. Sepals 1.5-3 mm wide, wider than the corolla; fruit width and length subequal; 2n=32 ... F. densiflora
6. Sepals 0.75-1.5 mm wide, narrower than the corolla; fruit wider than long [7]
7. Racemes with 10-45(53) flowers; sepals (2)2.5-3.5 mm long, 1.5 mm wide; corolla deep pink; fruit rugulose, truncate; 2n=32 ... F. officinalis subsp. officinalis
7. Racemes with 10-24 flowers; sepals 1.5-2 mm long, 0.75-1 mm wide; corolla pale pink; fruit rugose, apiculate; 2n=48 ... F. officinalis subsp. wirtgenii

****Fumaria capreolata*** L. {AFP} —
****Fumaria officinalis*** L. {AFP} — Subspecies *officinalis* is "widely naturalized" and subsp. *wirtgenii* is said to be found in Florida (Lidén 1986:83).
****Fumaria parviflora*** Lam. {AFP} —

Papaver

1. Upper cauline leaves not clasping stem; anthers bluish, filaments purple; fruit sessile to substipitate, obscurely ribbed, to 2 cm long ... P. rhoeas
1. Upper cauline leaves clasping stem; anthers pale yellow, filament white; fruit stipitate, unribbed, to 9 cm long ... P. somniferum

^*Papaver rhoeas* L. {AFP} —
^*Papaver somniferum* L. {AFP} —

Sanguinaria
Sanguinaria canadensis L. {AFP} —

MENISPERMACEAE

1. Shrubs, glabrous … Pachygone laurifolius
1. Vines, glabrous to pubescent [2]
2. Leaves peltate (at least some, sometimes only 1 mm of blade tissue surrounding the petiole), the blade with 7-9 primary veins arising from the petiole point of attachment, the lower surface glabrate; stamens 12-36 … Menispermum canadense
2. Leaves usually not peltate, the blade with 3-7 primary veins at the blade base, the lower surface usually puberulent, pilose, to tomentose (at least on the veins); stamens 4-12 [3]
3. Leaf blade reniform to orbicular; inflorescence with foliaceous bracts 3-15 mm long; pistillate sepal 1, petal 1, pistil 1; staminate sepals 4, petals 4, connate, stamen filaments fused, anthers 1-locular; fruit pubescent … Cissampelos pareira
3. Leaf blade ovate, cordate, or lobed; inflorescence with minute, scale-like bracts to 1.5 mm long; pistillate and staminate sepals 6-9, petals distinct when present, stamen filaments distinct, anthers 2-4-locular, pistils 2-6; fruit glabrous [4]
4. Leaf blades obscurely to deeply lobed, the lobe tip obtuse to acuminate; petals absent or vestigial; stamens 12; carpels 3; fruit ca. 20 mm long, the endocarp hollow on the upper side and cup-shaped … Calycocarpum lyonii
4. Leaf blade unlobed to obscurely lobed, the lobe tips rounded to obtuse; petals 6; stamens 6; carpels 6; fruit 6-8 mm long, the endocarp laterally flattened and coiled … Nephroia carolinus

Calycocarpum
Calycocarpum lyonii (Pursh)A.Gray {AFP} —

Cissampelos
[X]***Cissampelos pareira*** L. {AFP} — Miami-Dade Co. (Neotropics). Rockland hammocks. SE.

Menispermum
Menispermum canadense L. {AFP} —

Nephroia
Nephroia carolinus (L.)L.Lian & Wei Wang {AFP} —

Pachygone
^*Pachygone laurifolia* (DC.)L.Lian & Wei Wang —

BERBERIDACEAE

1. Rhizomatous, acaulescent herb; leaves peltate, simple; flower solitary … Podophyllum peltatum
1. Erect shrub; leaves compound, not peltate; inflorescence with multiple flowers [2]
2. Leaves pinnately compound, the leaflets with stiff prickles; inflorescence racemose; sepals and petals yellow … Mahonia bealei
2. Leaves 2- to 3-pinnately compound, the leaflets entire; inflorescence paniculate; sepals and petals white … Nandina domestica

Mahonia
^*Mahonia bealei* (Fortune) Carrière {AFP} —

Nandina
*__*Nandina domestica*__ Thunb. {AFP} —

Podophyllum
Podophyllum peltatum L. {AFP} — SE.

RANUNCULACEAE
1. Herbs or vines; leaves opposite … Clematis
1. Herbs or shrubs; leaves alternate, sometimes pseudowhorled or basal [2]
2. Acaulescent; leaves all basal; inflorescence basal with foliaceous bracts dissimilar to the leaves … Anemone
2. Caulescent; some leaves cauline; inflorescence cauline [3]
3. Shrub (but sometimes unbranched aboveground); all leaves crowded in a pseudowhorl at the stem apex … Xanthorhiza simplicissima
3. Herb; at least some leaves distant, not all leaves crowded at stem apex [4]
4. Leaves regularly divided into linear lobes 1-2 mm wide; flowers zygomorphic … Delphinium
4. Leaves simple or compound, if lobed the lobes >2 mm wide and not linear; flowers actinomorphic [5]
5. Leaves compound and the leaflets with numerous acute-tipped teeth; fruit a berry … Actaea pachypoda
5. Leaves simple or compound, if compound the leaflets entire or with few rounded teeth; fruit not a berry [6]
6. Leaves simple (sometimes deeply divided), trifoliolate, or palmately once-compound; sepals green; petals yellow to white, unspurred … Ranunculus
6. Leaves compound, at least some 2- to 3-compound; sepals green, yellow, pink, red, to white; petals absent or yellow with a red spur [7]
7. Leaflets entire or coarsely and shallowly lobed, the sinuses ⅓ or less the length of the leaflet; fruit an achene … Thalictrum
7. Leaflets usually lobed, many with sinuses ½ or more the length of the leaflet; fruit a follicle [8]
8. Leaflets eglandular; flowers pendent; sepals 5, red or greenish; petals 5, yellow to yellow-green with a red spur … Aquilegia canadensis
8. Leaflets glandular-apiculate; flowers spreading to erect; sepals 5, white; petals absent … Enemion biternatum

Actaea
Actaea pachypoda Elliott {AFP} — SE.

Anemone
1. Leaves simple, shallowly to moderately lobed; basal inflorescence bracts persistent; foliaceous involucral bracts ovate, sepaloid, 0-3 mm below the flower; petaloid sepals 5-12; achene beak indistinct … A. americana

1. Leaves compound or deeply lobed; basal inflorescence bracts lacking; foliaceous involucral bracts dissected into linear lobes, 1-20 cm below the flower; petaloid sepals 7-25; achene beak subulate, curved, 1-2.5 mm long … A. berlandieri

Anemone americana (DC.)H.Hara {AFP} — SE.
Anemone berlandieri Pritz. {AFP} —

Aquilegia

Aquilegia canadensis L. {AFP} — SE.

Clematis

1. Erect herb, the stems mostly <70 cm long; leaves simple, or the blade deeply dissected, rarely compound … C. baldwinii
1. Vine, the stems mostly >1 m long; leaves compound (simple foliaceous bracts subtending the inflorescence) [2]
2. Flowers pendent and solitary on a long pedicel (peduncle), these sometimes fascicled; calyx blue, pink, to reddish, campanulate [3]
2. Flowers erect to spreading in a panicle or cyme; calyx white, rotate [5]
3. Leaflets with prominent reticulate venation on both sides … C. reticulata
3. Leaflets with reticulate venation obscure to visible, flat with the surface [4]
4. Leaflet underside not glaucous; sepals violet-blue, margins proximally thick and tomentose, distally broadly expanded, 2-6 mm wide, thin, crispate; achene beaks 2-3.5 cm, appressed puberulent … C. crispa
4. Leaflet underside glaucous; sepals red to purplish-red, margins not expanded, thick, not crispate; achene beaks 5-7 cm long, plumose … C. glaucophylla
5. Leaflets entire, rarely cleft; flowers bisexual (some unisexual); pistils or achenes 5-10; anthers ca. 3 mm long … C. terniflora
5. Leaflets lobed to coarsely toothed; flowers all unisexual; anthers 0.5-1 mm long
6. Leaves pinnately or bi-ternately compound; pistils or achenes 18-35 … C. catesbyana
6. Leaves trifoliolate; pistils or achenes 40-70 … C. virginiana

•***Clematis baldwinii*** Torr. & A.Gray {AFP} —
Clematis catesbyana Pursh {AFP} —
Clematis crispa L. {AFP} —
Clematis glaucophylla Small {AFP} —
Clematis reticulata Walter {AFP} —
*****Clematis terniflora*** DC. {AFP} —
Clematis virginiana L. {AFP} —

Delphinium

1. Annuals; petiole of basal leaves 5-15 mm long; pistil 1; petals 2, connate … D. ajacis
1. Perennials; petiole of basal leaves 17-100 mm long; pistils 3(-5); petals 4, distinct … D. carolinianum

^*Delphinium ajacis* L. {AFP} —
Delphinium carolinianum Walter {AFP} — SE.

Enemion

Enemion biternatum Raf. {AFP} — SE.

Ranunculus

1. All leaf blades entire, undulate, to toothed (rarely lobed or compound) [2]
1. At least some leaf blades distinctly lobed (sinuses at least ½ the blade length), divided, or compound, the basal ones sometimes unlobed or undivided [3]
2. Petals 4-6, 2-6 mm long; achene 0.8-1 mm long … R. laxicaulis
2. Petals 1-3, 1.5-2.5 mm long; achene 1-1.2 mm long … R. pusillus
3. Basal leaves mostly crenate and unlobed … R. abortivus
3. Basal leaves lobed, divided, or with coarse teeth [4]
4. Flowers sessile, opposite the leaves … R. platensis
4. Flowers pedicellate, axillary [5]
5. Fruiting head ellipsoid … R. sceleratus
5. Fruiting head globose [6]
6. Petals 1-2 mm long; achene faces with papillae of hooked bristles … R. parviflorus
6. Petals 3-16 mm long; achene faces papillose, tuberculate, or prickly [7]
7. Petals 7-12 mm long; basal leaves 3-foliolate [8]
7. Petals 3-8 mm long; basal leaves 3-foliolate, 3-lobed, or unlobed [10]
8. Sepals reflexed along well-defined transverse fold 1-3 mm above base; styles laterally stigmatic; achene faces papillate to glabrous, beak 0.4-0.7 mm long … R. sardous
8. Sepals spreading, sometimes reflexed from base with age; styles stigmatic only at the tip; achene faces glabrous, beak 0.8-2.6 mm long [9]
9. Stems erect or nearly erect, never rooting at nodes … R. hispidus var. hispidus
9. Stems decumbent, sometimes rooting at nodes … R. hispidus var. nitidus
10. Stem hirsute; petals 3-5 mm long; achene face smooth … R. recurvatus
10. Stem glabrous, sparsely pilose, to hispid; petals 4-8 mm long; achene face tuberculate to prickly [11]
11. Basal leaves 3-foliolate; achene faces with low rounded protuberuances; achene beak 0.3–0.7 mm long … R. trilobus
11. Basal leaves unlobed to 3-lobed; achene faces with spiny protuberances; achene beak 1–2.5 mm long [12]
12. Peduncle usually longer than the subtending leaf; achene faces covered with high sharp tubercles or low spines; achene beak ca. 1 mm long … R. marginatus var. trachycarpus
12. Peduncle usually subequal to shorter than the subtending leaf; achene faces covered with long spines; achene beak 2–2.5 mm long … R. muricatus

Ranunculus abortivus L. {AFP} —
Ranunculus hispidus Michx. {AFP} —
Ranunculus hispidus Michx. var. ***nitidus*** (Chapm.)T.Duncan {AFP} —
****Ranunculus laxicaulis*** (Torr. & A.Gray)Darby {AFP} — SE.
****Ranunculus marginatus*** d'Urv. var. ***trachycarpus*** (Fisch. & C.A.Mey.)Azn. {AFP} —
****Ranunculus muricatus*** L. {AFP} —
****Ranunculus parviflorus*** L. {AFP} —
****Ranunculus platensis*** A.Spreng. {AFP} —
Ranunculus pusillus Poir. {AFP} —
Ranunculus recurvatus Poir. {AFP} —
****Ranunculus sardous*** Crantz {AFP} —
Ranunculus sceleratus L. {AFP} —

*****Ranunculus trilobus*** Desf. {AFP} —

Thalictrum
1. Plant to 30 cm tall; flowers solitary or in umbels, bisexual … T. thalictroides
1. Plant 40-200 cm tall; flowers in racemes or panicles, unisexual or unisexual and bisexual [2]
2. Leaflets linear to narrowly lanceolate or oblanceolate, (2.6–)4–26 times longer than wide … T. cooleyi
2. Leaflets nearly orbiculate, ovate, lanceolate to obovate, usually less than 4 times longer than wide [2]
3. Leaflet coriaceous with strongly revolute margins, the underside stipitate-glandular (or occasionally muricate or whitened papillose, rarely pubescent otherwise); achenes more or less sessile, often stipitate-glandular; sepals 3-4 mm long; anthers 1.5-2.8 mm long; stigma 2-3.5 mm long … T. amphibolum
3. Leaflet chartaceous to subcoriaceous, margins sometimes revolute (except the lobes), the underside glabrous; achenes short stipitate to sessile, glabrous to pubescent; sepals 1-2 mm long; anthers 0.5-1.2 mm long; stigma 0.6-1.7 mm long … T. macrostylum

Thalictrum amphibolum Greene {AFP} — (*T. revolutum*, misapplied).
Thalictrum cooleyi Ahles {AFP} —FE. SE.
Thalictrum macrostylum Small & A.Heller {AFP} —
Thalictrum thalictroides (L.)A.J.Eames & B.Boivin {AFP} — SE.

Xanthorhiza
Xanthorhiza simplicissima Marshall {AFP} — SE.

PROTEALES
NELUMBONACEAE
Nelumbo
1. Tepals yellow, the outermost normally persistent; mature fruits mostly less than 1.25 times longer than wide … N. lutea
1. Tepals pink to white, all normally caducous; mature fruits mostly more than 1.5 times longer than wide … N. nucifera

Nelumbo lutea Willd. {AFP} —
****Nelumbo nucifera*** Gaertn. {AFP} —

PLATANACEAE
Platanus
Platanus occidentalis L. {AFP} —

PROTEACEAE
1. Leaves alternate … Grevillea
1. Leaves opposite to subopposite … Macadamia

Grevillea
^*Grevillea robusta* A.Cunn. ex R.Br. {AFP} —

Macadamia
^*Macadamia integrifolia* Maiden & Betche —

BUXALES

BUXACEAE

1. Shrubs to small trees, 1-5 m tall, not clonal; leaves opposite or subopposite, the blade margins entire; tepals of pistillate flowers 5-6; seeds 2 per locule … Buxus
1. Herbs to subshrubs, 10-40 cm tall, clonal; leaves alternate, the blade margins toothed; tepals of pistillate flowers usually 4; seeds 1 per locule … Pachysandra

Buxus: Several species are sometimes cultivated (included in the key below), but only two further treated below are especially common.

1. Staminate ovary half as long or less than the inner sepals [2]
1. Staminate ovary two-thirds as long as to subequal to the inner sepals [4]
2. Leaves 3-4 times as long as wide … Buxus wallichiana
2. Leaves 2-3 times as long as wide [3]
3. Stem and petiole usually persistently whitish-pubescent; leaves 15-30(40) mm long, blade upper surface dark green and strongly lustrous; inflorescence 4-6 mm wide, the bracteoles ovate and acute-tipped; staminate flowers sessile; anthers 1-2 mm long; fruiting style 2-5 mm long, <1/2 as long as fruit … Buxus sempervirens
3. Stem and petiole usually glabrous to glabrate; leaves 25-40(45) mm long, blade upper surface green and moderately lustrous; inflorescence 8-12 mm wide, the bracteoles suborbicular and obtuse-itpped; staminate flowers pedicellate; anthers 2-5 mm long; fruiting style 5-7 mm long, revolute at tips, 2/3 to subequal to fruit … Buxus balearica
4. Stems and petioles pubescent; leaf blade oblanceolate or narrowly spathulate, mostly widest above the middle, rarely obovate or narrowly lanceolate staminate flowers pedicellate … Buxus harlandii
4. Stems and petioles glabrate to pubescent; leaf blades ovate, ovate-oblong, to oblong, generally widest below the middle, rarely lanceolate, oblanceolate, or obovate; staminate flowers sessile [5]
5. Stems and petioles glabrous or glabrate [6]
5. Stems and petioles pubescent [7]
6. Densely branched, branches slender; leaf blades subcoriaceous, oblanceolate, rarely obovate or lanceolate … Buxus microphylla
6. Sparsely branched, branches thick; leaf blades coriaceous, ovate or ovate-elliptic, rarely obovate or lanceolate … Buxus japonica
7. Leaves 1.3-5 cm. long, the lateral nerves distinct above, the margin slightly revolute … Buxus sinica
7. Leaves scarcely more than 2 cm long, the lateral nerves on both sides obscure or inapparent, the margin strongly revolute … Buxus insularis

^*Buxus microphylla* Siebold & Zucc. — This species is generally described as being mostly glabrous. The plants in Florida are generally pubescent, and are likely hybrids (maybe with *B. sempervirens* and backcrossed to *B. microphylla*?). A study of 275 accessions at the U.S. National Arboretum found that "most of the boxwood hybrids in cultivation were developed from interspecific crosses between *B. sempervirens* and *B. microphylla*.

Clustering of the hybrids with *B. microphylla* accessions indicate they are more closely related to *B. microphylla*" (Thammina et al. 2017).
^*Buxus sempervirens* L. — Rare in Florida.

Pachysandra
Pachysandra procumbens Michx. {AFP} — SE.

DILLENIALES

DILLENIACEAE
Dillenia
^*Dillenia indica* L. —

CARYOPHYLLALES

DROSERACEAE
1. Leaf blade of 2 hinged lobes fringed with stout bristles, the upper surface of each lobe with 3(4) hairs that when 2 are disturbed in succession causes the lobes to enclose as a trap; inflorescences umbel-like cymes; stamens 15–20 … Dionaea muscipula
1. Leaf blade unlobed, surfaces covered with glandular trichomes; inflorescences circinate or scorpioid cymes; stamens 5 … Drosera

Dionaea
****Dionaea muscipula*** J.Ellis {AFP} —

Drosera
1. Leaf blades filiform, not differentiated from petioles; stem base bulbose-cormose (from expanded petiole base); petals 7-17(20) mm [2]
1. Leaf blades linear or suborbiculate to obovate, elongate-spatulate, or cuneate, differentiated from petioles or not; stem base not bulbose-cormose; petals 3-7(8) mm [3]
2. Leaf blades 8-25(30) cm long, ca. 1 mm wide or less, glandular trichomes red to reddish purple, drying dark brown; scapes 6-26 cm long; petals 7-10(12) mm long … D. filiformis var. floridana
2. Leaf blades 30-50 cm long, 1-2 mm wide, glandular trichomes pale green, drying pale greenish brown; scapes 25-60 cm long; petals 12-17(-20) mm long … D. tracyi
3. Petiole often glandular and scarcely distinct from the expanded blade; scapes stipitate-glandular; stipules absent or reduced to minute hairs; seeds black, crateriform … D. brevifolia
3. Petiole usually eglandular, rather distinct from the blade; scapes glabrous; stipules present, free from petioles; seeds reddish brown or brown, papillose [4]
4. Plant always rosulate; leaves spreading to prostrate, usually <4(6) cm long; petioles flat, sparsely glandular-pilose; petals pink to white, 6-7 mm long; seeds coarsely papillose-corrugated, 0.4-0.5 mm long … D. capillaris
4. Plant rosulate at first, usually developing leafy stems 1-8(20) cm long; leaves spreading to erect, to 8 cm long; petioles filiform, glabrous; petals white (rarely pink), 3-6 mm long; seeds uniformly papillose, 0.7-1 mm long … D. intermedia

Drosera brevifolia Pursh {AFP} —
•***Drosera*** ×***californica*** Cheek var. ***arenaria*** B. Rice (*filiformis* var. *floridana* × *tracyi*) {AFP} —
Drosera capillaris Poir. {AFP} —

•***Drosera filiformis*** Raf. var. ***floridana*** B.Rice {AFP} — SE.
Drosera intermedia Hayne {AFP} — ST.
Drosera tracyi (Diels)Macfarl. {AFP} —

NEPENTHACEAE

Nepenthes

^*Nepenthes* hybrids — The hybrid of *N. alata* × *N. ventricosa* is thought to be most common.

PLUMBAGINACEAE

1. Leaves all basal; petals free nearly to the base; stamens adnate to the petals … Limonium carolinianum
1. Leaves primarily cauline; petals connate for most of their length; stamens free from petals … Plumbago

Limonium

Limonium carolinianum (Walter)Britton {AFP} —

Plumbago

1. Leaf blade tip typically rounded; calyx stipitate-glandular and lacking eglandular hairs; corolla bluish … P. auriculata
1. Leaf blade tip typically acute; calyx stipitate-glandular and pubescent; corolla white … P. zeylanica

^*Plumbago auriculata* Lam. {AFP} —
Plumbago zeylanica L. {AFP} — *Plumbago scandens* L. (type from Jamaica) is sometimes applied to the plants of the Americas, though it is apparently indistinguishable from *P. zeylanica* s.str. (Smith 2005).

POLYGONACEAE

1. Ocrea absent; leaves whorled or predominantly basal … Eriogonum
1. Ocrea present (a nodal sheath arising from the base of the petiole and sheathing the stem above the petiole), sometimes obscure or fibrous; leaves alternate and cauline [2]
2. Shrubs or trees [3]
2. Herbs or vines [4]
3. Young stems solid; ocrea persistent; fruit a fleshy berry; ectomycorrhizal with mushroom-forming fungi … Coccoloba
3. Young stems hollow; ocrea caducous; fruit a winged achene; not ectomycorrhizal … Triplaris melaenodendron
4. Vines with tendrils [5]
4. Herbs or vines without tendrils [6]
5. Leaf blade base usually cordate, the sinus often as long as the petiole, blade with conspicuous reticulate venation; tepals pink, rarely white to yellowish … Antigonon leptopus
5. Leaf blade base truncate to cordate, if cordate the sinus shorter than the petiole, blade reticulate venation obscure; tepals green to greenish white … Brunnichia ovata
6. Branch bases adnate to the stem, appearing to arise above the node … Polygonella
6. Branches appearing directly from the node, not adnate to the stem [7]
7. Tepals 6 (rarely 5) [8]
7. Tepals 3-5 [9]

8. Flowers unisexual; outer 3 tepals of pistillate flowers each with apex ending in stout spine … Emex spinosa
8. Flowers bisexual or, rarely, unisexual; outer 3 tepals each without apex ending in stout spine … Rumex
9. Outer tepals winged or keeled [10]
9. Outer tepals without wings or keels [11]
10. Vines, sometimes scandent or sprawling; larger leaf blades 2-7 cm wide; stigmas capitate … Fallopia
10. Erect herbs; larger leaf blades 4.5-30 cm wide; stigmas fimbriate … Reynoutria japonica
11. Tepals free; achenes exserted … Fagopyrum esculentum
11. Tepals connate for at least part of their length; achenes exserted or not [12]
12. Ocreae chartaceous, usually tan, brown, or reddish, rarely silvery, glabrous or scabrous to variously pubescent, never 2-lobed distally, often tearing with age; tepals generally with 3 main veins from the base … Persicaria
12. Ocreae often hyaline, silvery, glabrous, 2-lobed distally, often disintegrating into fibers or completely; tepals generally with 1 primary vein from the base
[13]
13. Branch bases adnate to the stem, appearing to arise above the node … Polygonella
13. Branches appearing directly from the node, not adnate to the stem … Polygonum

Antigonon
*****Antigonon leptopus*** Hook. & Arn. {AFP} —

Brunnichia
Brunnichia ovata (Walter)Shinners {AFP} —

Coccoloba
1. Leaf blades ovate, lanceolate, to elliptic, usually 1.2-3 times longer than wide, the base cuneate to subcordate, the basal lateral veins usually ascending, the midrib whitish to pale green when fresh; fruits 9-14 mm long … C. diversifolia
1. Leaf blades orbicular to subreniform, the length subequal to or less than the width, the base usually cordate, the basal lateral veins usually nearly perpendicular to the midrib to somewhat retrorse, the midrib whitish to red when fresh; fruits 12-20 mm long … C. uvifera

Coccoloba diversifolia Jacq. {AFP} —
Coccoloba ×***hybrida*** Castañeda-Noa (*diversifolia* × *uvifera*) {AFP} —
Coccoloba uvifera (L.)L. {AFP} —

Emex
*****Emex spinosa*** (L.)Campderá {AFP} —

Eriogonum
1. Leaves of the flowering stem alternate or fascicled, whitish lanate on the lower surface; tepals monomorphic, silvery or whitish tomentose on the outer surface; filaments glabrous … E. floridanum
1. Leaves of the flowering stem whorled or opposite, white to rusty tomentose on the lower surface; tepals dimorphic, the outer surface tan to rusty lanate; filaments pilose … E. tomentosum

•***Eriogonum floridanum*** Small {AFP} — FT. SE.
Eriogonum tomentosum Michx. {AFP} —

Fagopyrum

****Fagopyrum esculentum*** Moench {AFP} —

Fallopia

1. Fruiting perianth without wings or wings to 1 mm wide; achene dull, minutely granular-tuberculate … F. convolvulus
1. Fruiting perianth with wings 1-2.1 mm wide; achene shiny, smooth … F. scandens

****Fallopia convolvulus*** (L.)A.Löve {AFP} —
Fallopia scandens (L.)Holub {AFP} —

Persicaria

1. Stems with recurved prickles [2]
1. Stems without prickles [4]
2. Leaf blade broadly hastate, hastate-cordate, to triangular; tepals 4 … P. arifolia
2. Leaf blade linear-lanceolate to oblong; tepals 5 [3]
3. Leaves subsessile to sessile, the blade base cordate, truncate, to cuneate; peduncle glandular-stipitate, at least distally … P. meisneriana var. beyrichiana
3. Leaves petiolate (becoming subsessile distally), the blade base cordate to sagittate; peduncle eglandular … P. sagittata
4. Styles exserted, persistent on achenes; inflorescences spikelike, interrupted … P. virginiana
4. Styles included, rarely exserted, deciduous; inflorescences capitate, paniclelike, or spikelike, uninterrupted or interrupted [5]
5. Petiole winged, auriculate; inflorescence capitate … P. capitata
5. Petiole not winged nor auriculate; inflorescence spiciform [6]
6. Ocrea eciliate or the cilia <0.5 mm long [7]
6. Ocrea ciliate with bristles 1-12 mm long [9]
7. Rhizomatous perennial; peduncles glabrous to sparsely setose below the flowers; achene biconvex … P. glabra
7. Annual; peduncles usually stipitate-glandular; achene discoid or concave [8]
8. Inflorescence usually arching or nodding; tepals usually 4; outer tepals with prominent distally bifurcate anchor-shaped veins … P. lapathifolia
8. Inflorescence usually erect; tepals usually 5; outer tepals without anchor-shaped veins … P. pensylvanica
9. Upper stem and peduncles stipitate-glandular … P. careyi
9. Upper stem and peduncles not stipitate-glandular [10]
10. Stem hirsute, at least near the inflorescence [11]
10. Stem glabrous to appressed pubescent [12]
11. Ocrea without a broad herbaceous flange; petiole 0.1-0.3 cm long; leaf blades linear-lanceolate … P. hirsuta
11. Ocrea with a broad green-herbaceous flange; petiole 1-9 cm long; leaf blades broadly ovate … P. orientalis
12. Annual; ocreolae of the inflorescence usually overlapping; tepals eglandular [13]

12. Rhizomatous perennial; ocreolae of the inflorescence usually not overlapping, or only overlapping sparingly so or distally; tepals sometimes glandular-punctate [14]
13. Inflorescence ocreolae bristles (0.5)1-4(6) mm long, subequal to the tube; styles 3; achenes trigonous, 1.6-2.3 mm long, 1.1-1.6 mm wide … P. longiseta
13. Inflorescence ocreolae bristles 0.2-1.3(2) mm long, shorter than the tube; styles 2-3; achenes trigonous, and discoid or biconvex, (1.9)2-2.7 mm long, (1.5)1.8-2.2 mm wide … P. maculosa
14. Ocrea surface with flexuous spreading hairs, the cilia at the apex 6-12 mm long; leaf blades 1.5-4(4.8) cm wide, the upper surface puberulent-hirsute, esp. when young; tepals white … P. setacea
14. Ocrea surface glabrous or with stiff ascending-appressed hairs, the cilia at the apex 1-7(11) mm long; leaf blade 0.5-2 cm wide, the upper surface glabrous; tepals white, pink, to greenish [15]
15. Tepals not glandular, rarely glandular on inner tepals only or sparse on the base of tepals, distal petaloid part white, pink, to greenish; achenes 1-2.2(3) mm long, 1-1.8(2.3) mm wide … P. hydropiperoides
15. Tepals uniformly glandular-punctate, distal petaloid part usually white; achenes (1.8)2.2-3.2 mm long, 1.5-2.2 mm wide … P. punctata

Persicaria arifolia (L.)Haraldson {AFP} —
****Persicaria capitata*** (Buch.-Ham. ex D.Don)H.Gross {AFP} —
****Persicaria careyi*** (Olney)Greene {AFP} —
Persicaria glabra (Willd.)M.Gómez {AFP} —
Persicaria hirsuta (Walter)Small {AFP} —
Persicaria hydropiperoides (Michx.)Small {AFP} —
Persicaria lapathifolia (L.)Delarbre {AFP} —
****Persicaria longiseta*** (Bruijn)Kitag. {AFP} —
****Persicaria maculosa*** Gray {AFP} —
Persicaria meisneriana (Cham. & Schltdl.)M.Gómez var. ***beyrichiana*** (Cham. & Schltdl.)C.C.Freeman {AFP} — SE.
****Persicaria orientalis*** (L.)Spach {AFP} —
Persicaria pensylvanica L.)M.Gómez {AFP} —
Persicaria punctata (Elliott)Small {AFP} — Dalci (1972: 163-177) did not find justification for the 12 infraspecific taxa proposed by Fassett (1949). Plants with larger leaf blades (2-4.5 cm wide), overlapping ocreolae with cilia 0-1 mm long, and interrupted inflorescences as *P. robustior* (reported for Florida).
Persicaria sagittata (L.)H.Gross ex Nakai {AFP} —
Persicaria setacea (Baldwin)Small {AFP} —
Persicaria virginiana (L.)Gaertn. {AFP} —

Polygonella

1. Ocrea ciliate at the apex; leaves linear with an acute to acuminate apex [2]
1. Ocrea lacking cilia at the apex; leaves generally linear-spatulate to spatulate with an obtuse to rounded apex [5]
2. Leaves narrowly linear, usually <1.3 mm wide; inner tepal margin entire to erose; filaments dimorphic [3]
2. Leaves linear, larger ones usually 1-3 mm wide; inner tepal margin fimbriate; filaments monomorphic [4]

3. Plant with multiple stems at the base of the plant … P. basiramia
3. Plant with one main stem at the base of the plant (Polygonum delopyrum) … P. ciliata
4. Plant 10-60 cm tall; stem minutely scabrous below the inflorescence; leaves without hyaline margins … P. fimbriata
4. Plant 35-110 cm tall; stem smooth to sparsely scabrous along the angles below the inflorescence; leaves with hyaline margins (Polygonum nesomii) … P. robusta
5. Larger leaf blades (3)8-30 mm wide (Polygonum smallianum) … P. macrophylla
5. Larger leaf blades 0.3-6(10) mm wide [6]
6. Larger leaf blades 16-40(65) mm long (often nearly leafless or with few at maturity); inflorescence (13)20-40 mm long (Polygonum pinicola; Polygonella gracilis) … P. tenera
6. Larger leaf blades 4-16(36) mm long (usually abundantly leafy at maturity); inflorescence 4-20(33) mm long [7]
7. Plant prostrate; leaf margin not hyaline; stigma and style 0.5-0.8 mm long (Polygonum dentoceras) … P. myriophylla
7. Plant erect to decumbent; leaf margin hyaline distally; stigma and style ca. 0.1 mm long [8]
8. Larger leaf blades 0.5-1.5(2) mm wide … P. polygama var. brachystachya
8. Larger leaf blades (2)3-6 mm wide … P. polygama var. polygama

•***Polygonella basiramia*** (Small)G.L.Nesom & V.M.Bates {AFP} — FE. SE.
•***Polygonella ciliata*** Meisn. {AFP} —
Polygonella fimbriata (Elliott)Horton {AFP} —
Polygonella macrophylla Small {AFP} — ST.
•***Polygonella myriophylla*** (Small)Horton {AFP} — FE. SE.
•***Polygonella polygama*** Vent. var. ***brachystachya*** (Meisn.)Wunderlin {AFP} —
Polygonella polygama Vent. var. ***polygama*** {AFP} —
•***Polygonella robusta*** (Small)G.L.Nesom & V.M.Bates {AFP} —
Polygonella tenera (Meisn.)ined. {AFP} — (syn. *P. gracilis*)

Polygonum
1. Stem mostly erect; flowers mostly in terminal, loose, leafy spiciform inflorescences with the distal flowers subtended by leaves subequal to shorter than the flowers … P. argyrocoleon
1. Stem prostrate to erect; flowers axillary, with the distal flowers subtended by leaves much longer than the flowers [2]
2. Ocrea not pruinose at the base; tepals appressed in fruit; achene dull, tuberculate … P. aviculare
2. Ocrea pruinose at the base; tepals ascending-spreading in fruit; achene shiny, smooth … P. glaucum

****Polygonum argyrocoleon*** Steud. ex Kunze {AFP} —
****Polygonum aviculare*** L. {AFP} — The native *P. buxiforme* may be a waif in Florida. Other non-native infraspecific taxa may intergrade: (Costea & Tardif 2003). Haines (2011:737-739, Fl. Nov.-Ang.) made the argument that *P. buxiforme* is worthy of species recognition, with outer tepals cucullate or saccate at base, much wider and longer than mostly concealed inner tepals, perianth 0.9-1.3 times longer than wide (vs. *P. aviculare* outer tepals flat to folded (possibly sometimes cucullate in fruit), subequal to the mostly exposed inner tepals, not concealing them, perianth 1.5-2.9 times longer than wide).
Polygonum glaucum Nutt. {AFP} —

Reynoutria

*__*Reynoutria japonica*__ Houtt. {AFP} — *Reynoutria sachalinensis* and *R. ×bohemica* are very similar and difficult to distinguish from *R. japonica* (Freeman & Hinds in FNA, vol. 5).

Rumex

1. Plant dioecious (flowers unisexual); leaf blades (at least some) sagittate or hastate [2]
1. Plant monoecious (flowers bisexual and sometimes unisexual); leaf blades not sagittate nor hastate [3]
2. Pedicel articulated near base of tepal; inner tepal lacking a wing, as wide as achene … R. acetosella
2. Pedicel articulated at middle or below; Inner tepal with a conspicuous wing, much wider than achene … R. hastatulus
3. Inner tepal margins dentate [4]
3. Inner tepal margins entire to crenulate [7]
4. Inner tepal scarcely reticulate, the the tubercle (basal medial callosity of inner tepal) smooth and acute at the tip [5]
4. Inner tepal alveolate-reticulate, the tubercle (basal medial callosity of inner tepal) verrucose and obtuse at the tip [6]
5. Larger leaf blades 20-40 cm long … R. obtusifolius
5. Larger leaf blades 4-7 cm long … R. paraguayensis
6. Leaf blade coriaceous, cuneate at the base … R. obovatus
6. Leaf blade chartaceous, subcordate to truncate at the base … R. pulcher
7. Plants with long-creeping underground rhizomes and/or stolons, producing ascending or erect axillary shoots; inner tepals 2.5-3.5 mm wide … R. cuneifolius
7. Plants without rhizomes or stolons; inner tepals 3-9 mm wide [8]
8. Pedicels 3-5 mm long, 2-2.5 times longer than inner tepals [9]
8. Pedicels 7-17 mm long, 2.5-5 times longer than inner tepals [11]
9. Inner tepal 5-10 mm wide, the tubercle 1(-3) per flower and smooth, free margin of tepal often 2 times as wide as tubercle … R. patientia
9. Inner tepal 3-5 mm wide, the tubercle (1-)3 per flower and reticulate-rugose, free margin of tepal subequal to the tubercle in width [10]
10. Plants not developing basal rosette of leaves; free margins of inner tepal wider than or at least as wide as tubercle; inflorescence interrupted nearly throughout … R. chrysocarpos
10. Plants developing basal rosette of leaves (sometimes not persistent at maturity); inflorescence densely or interrupted only at base … R. crispus
11. Leaf blades ovate or ovate-elliptic, 1.9-2.6 times as long as wide, lateral veins spreading, nearly perpendicular to midvein (especially near base) … R. verticillatus subsp. fascicularis
11. Leaf blades linear-lanceolate to broadly lanceolate (rarely ovate-lanceolate), (2)3-7(10) times as long as wide, lateral veins strict to ascending [12]
12. Leaf blades mostly lanceolate to broadly lanceolate, 3-5(6) times as long as wide, coriaceous and somewhat fleshy; inflorescences normally rather dense (sometimes interrupted only at base); pedicels 2-3(3.5) times as long as inner tepals; inner tepals as wide as or wider than long … R. verticillatus subsp. floridanus
12. Leaf blades mostly linear-lanceolate, 5-7(10) times as long as wide, thin; inflorescences normally interrupted (at least at base); pedicels (2.5)3-5 times as long as inner tepals; inner tepals longer than wide, or rarely as long as wide … R. verticillatus subsp. verticillatus

*__*Rumex acetosella*__ L. {AFP} —

*__Rumex chrysocarpos__ Moris {AFP} —
*__Rumex crispus__ L. {AFP} —
*__Rumex cuneifolius__ Campd. {AFP} —
__Rumex hastatulus__ Baldwin {AFP} —
*__Rumex obovatus__ Danser {AFP} —
*__Rumex obtusifolius__ L. {AFP} —
*__Rumex paraguayensis__ Parodi {AFP} —
*__Rumex patientia__ L. {AFP} —
*__Rumex pulcher__ L. {AFP} — Six subspecies have been recognized.
•__Rumex verticillatus__ L. subsp. __fascicularis__ (Small)Á.Löve {AFP} —
__Rumex verticillatus__ L. subsp. __floridanus__ (Meisner)Á.Löve {AFP} —
__Rumex verticillatus__ L. subsp. __verticillatus__ {AFP} —

Triplaris
*__Triplaris melaenodendron__ (Bertol.)Standl. & Steyerm. {AFP} —

TAMARICACEAE
Tamarix
*__Tamarix canariensis__ Willd. {AFP} —

AMARANTHACEAE
1. Tepals usually scarious or chartaceous, occasionally indurate or membranaceous; filaments basally connate (amaranths) [2]
1. Tepals membranaceous to fleshy; filaments free (chenopods) [9]
2. Leaves alternate [3]
2. Leaves mostly or all opposite [4]
3. Flowers unisexual; fruit with 1 seed … Amaranthus
3. Flowers bisexual; fruit with 2 or more seeds … Celosia
4. Inflorescences terminal panicles; flowers unisexual … Iresine
4. Inflorescences terminal or axillary glomerules, heads, or spiciform; flowers bisexual [5]
5. Tips of fruiting perianth of sterile flowers uncinate, burr-like … Cyathula prostrata
5. Tips of fruiting perianth not uncinate (barbed hairs present in a few species) [6]
6. Inflorescence bracteoles with a spinose midrib and mature fruits often retrorse on the rachis … Achyranthes
6. Inflorescence bracteoles not spinose (occasionally stiffened, tepals spinose in a few species) and mature fruits typically spreading to appressed-antrorse [7]
7. Inflorescences mostly compound, interrupted spikes, peduncles typically 10-50 cm long (occasionally shorter or subtended by a reduce leaf); tepals connate into indurate tubes with lateral crests or spines, lanate … Froelichia floridana
7. Inflorescences simple spikes or few-branched panicles, flowers progressively farther apart below, peduncles 0-13 cm long; tepals basally connate into indurate tubes, without ornamentation, ± glabrous [8]
8. Inflorescence not immediately subtended by 2 leaves, mostly axillary and sometimes terminal … Alternanthera
8. Inflorescence usually subtended by 2 leaves, mostly terminal and sometimes axillary … Gomphrena
9. Stems succulent; leaves opposite, scalelike; of saline habitats … Salicornia

9. Stems not succulent (sometimes thickened and green); leaves alternate, with a sizable expanded blade, not scalelike; of freshwater or saline habitats [10]
10. Leaves and bracts spinose at the tip … Salsola kali subsp. pontica
10. Leaves and bracts not spinose, sometimes mucronate at the tip [11]
11. Leaves linear, usually fleshy … Suaeda linearis
11. Leaves not linear, not fleshy or only slightly so [12]
12. Flowers unisexual (rarely bisexual); pistillate flowers usually lacking perianth, at least some flowers enclosed by 2 accrescent, connate, dentate, or tuberculate bracts in fruit … Atriplex
12. Flowers bisexual (rarely unisexual); perianth present, not enclosed by paired bracts in fruit [13]
13. Stems and leaves glandular … Dysphania
13. Stem and leaves eglandular (sometimes farinose) [14]
14. Tepals 3-4 … Oxybasis glauca
14. Tepals 5 [15]
15. Young stems and leaves with the vesicular trichomes (farinose) slightly yellowish or brownish and fully collapsed when dry, fresh leaves generally green with a pungent odor; tepal midrib pronounced … Chenopodiastrum murale
15. Young stems and leaves with the vesicular trichomes (farinose) white and cup-shaped when dry and persistent, fresh leaves generally grayish with a weak or noxious odor; tepal midrib weak … Chenopodium

Achyranthes

1. Leaf blades orbiculate, obovate-orbiculate, to broadly rhombic, the apex rounded to apiculate; tepals 3-4(5) mm long … A. aspera var. aspera
1. Leaf blades elliptic, ovate, to broadly ovate, the apex acuminate; tepals (5)6-7 mm long … A. aspera var. pubescens

Achyranthes aspera* L. var. ***aspera* {AFP} — Central & southern peninsula, Franklin Co. (native to the Paleotropics, Australia). Disturbed sites.
Achyranthes aspera* L. var. ***pubescens* (Moq.)C.C.Towns. {AFP} — Central & southern peninsula (native to the Neotropics?, cf. Sukhorukov et al. 2024). Disturbed sites.

Alternanthera: The pseudostaminodes alternate with the stamens as extensions of the androecial tube.

1. Inflorescence pedunculate [2]
1. Inflorescence sessile to subsessile [4]
2. Leaves sessile, the blade apex subacute to rounded; bracts not keeled; tepals glabrous … A. philoxeroides
2. Leaves mostly petiolate, the blade apex acute to acuminate; bracts keeled; tepals pilose [3]
3. Young stems and leaves villous; bracts slightly shorter to subequal to tepals … A. brasiliana
3. Young stems and leaves pubescent, strigose, to glabrous; bracts <½ the length of tepals … A. flavescens
4. Tepals dimorphic, the tip spinose, hairs barbed [5]
4. Tepas monomorphic, not spinose, hairs not barbed [6]
5. Leaf blades longer than wide, largest ones 1.5 cm long, 1 cm wide; tepals 3-4(5) mm long, weakly spinose-tipped, densely villous; pseudostaminode apex usually entire, rarely dentate … A. caracasana

5. Leaf blades often as wide as long, largest ones 2 cm long, 2 cm wide; tepals 5-7 mm long, strongly spinose-tipped, sparsely villous; pseudostaminode apex dentate ... A. pungens
6. Young stems and leaves glabrous to glabrate [7]
6. Young stems and leaves pubescent to villous [8]
7. Leaves 1.5-5 cm long, 2-4 times as long as wide, the blade ovate, elliptic, to obovate; anthers 5, oblong ... A. maritima
7. Leaves 2-8 cm long, 2.2-10 times as long as wide, the blade oblong, linear-lanceolate, to narrowly ovate; anthers 3–5, globose; mature fruit expanded beyond the tepals ... A. sessilis
8. Leaves 2.5-7 cm long, green or sometimes reddish or bronze; pseudostaminode ligulate, subequal to longer than filaments, the apex fimbriate; anther linear-oblong, 0.7-1 mm long; pistil bottle-shaped with an elongate, narrowed apex ... A. bettzickiana
8. Leaves 0.5-2.5 cm long, green; pseudostaminode deltate, subequal to shorter than filaments, entire to dentate; anther reniform to ellipsoid, 0.3-0.4 mm long; pistil broadly obcordate, the apex nub-like ... A. paronichyoides

****Alternanthera brasiliana*** (L.)Kuntze {AFP} —
****Alternanthera bettzickiana*** (Regel.)G.Nicholson {AFP} — Material in Florida apparently is *A. bettzickiana*, a name sometimes treated as a variety of *A. ficoidea* (Backer 1948; Veldkamp 1971; Mears 1977; Mears & Gillis 1977). The name *A. ficoidea* (=*A. tenella*) has a convoluted history and was ultimately adopted with a conserved type.
****Alternanthera caracasana*** Kunth {AFP} —
Alternanthera flavescens Kunth {AFP} —
Alternanthera maritima (Mart.)A.St.-Hil. {AFP} — Mid-east and southern peninsula. Dunes. Sometimes treated as a variety of *A. littoralis*, which is otherwise confined to Africa (Pedersen 1990).
****Alternanthera paronichyoides*** A.St.-Hil. {AFP} —
****Alternanthera philoxeroides*** (Mart.)Griseb. {AFP} —
****Alternanthera pungens*** Kunth {AFP} —
****Alternanthera sessilis*** (L.)R.Br. ex DC. {AFP} —

Amaranthus: Many species have been used for food, esp. the young shoots, leaves, or seeds. Indigenous groups of the SW USA have utilized *A. palmeri* et al. for leafy greens or edible seeds (Castetter 1935, Castetter & Underhill 1935). Subgenus *Acnida* was revised by Sauer (1955).

1. Stem nodes usually with paired spines ... A. spinosus
1. Stem nodes without spines [2]
2. Plant dioecious (subg. Acnida) [3]
2. Plant monoecious, staminate and carpellate flowers intermingled or separated [6]
3. Leaf blades linear-oblong (basal ones sometimes lance-ovate), (2.7)4-12 times as long as wide, with 3-10 secondary veins per side or these obscure, most <1.1 cm wide (basal ones to 2.5 cm wide), those subtending the inflorescence <0.5 cm wide, margins often reddish ... A. floridanus
3. Leaf blades narrowly lanceolate to ovate (infrequently linear-oblong), 1.2-8 times as long as wide, with 10-30 secondary veins per side, larger ones 1-12 cm wide, usually at least some subtending the inflorescence >0.5 cm wide, margins usually greenish [4]
4. Plant (0.25)0.5-1.5(3) m tall; petioles commonly subequal to longer than the leaf blade; staminate flower bracts longer than 2 mm, mostly with prominent midribs; outer staminate

tepals with prominent midribs, usually longer than the inner tepals; carpellate flowers with 5 tepals, at least some >2 mm long; utricle circumscissile dehiscent ... A. palmeri
4. Plant (0.25)1-3(9) m tall; petioles usually shorter than the leaf blade; staminate flower bracts 2 mm or shorter, midribs mostly not prominent or sometimes moderately prominent; outer staminate tepals without prominent midribs (sometimes moderately prominent), mostly not longer than the inner tepals; carpellate flower with 0-2 tepals, tepals usually <2 mm long; utricle indehiscent [5]
5. Staminate bracts 1.5-2 mm long, midribs prominent; utricles 1-2.5 mm long; seeds 1-1.2 mm wide ... A. australis
5. Staminate bracts <1 mm long, midribs not prominent; utricles 2.5-4 mm long; seeds 2-3 mm wide ... A. cannabinus
6. Inflorescences predominantly of axillary clusters or glomerules, distal nodes sometimes condensed into leafy spikes [7]
6. Inflorescences predominantly terminal spikes and/or panicles, leafless or almost leafless at least in the distal part, axillary spikes or clusters usually also present [10]
7. Pistillate flowers usually with 3 tepals [8]
7. Pistillate flowers usually with (4-)5 tepals [9]
8. Leaf blades obtuse or acuminate to short-mucronate or shallowly emarginate at apex; utricles dehiscent ... A. albus
8. Leaf blades usually deeply and broadly emarginate at apex; utricles indehiscent ... A. blitum
9. Inflorescence axes thickened, becoming indurate at maturity ... A. crassipes
9. Inflorescence axes not thickened, not indurate at maturity ... A. polygonoides
10. Inflorescence bracts shorter than tepals; tepals of pistillate flowers usually 2-3; utricles indehiscent [11]
10. Inflorescence bracts usually exceeding tepals, sometimes shorter than tepals; tepals of pistillate flowers usually 5; utricles dehiscent [13]
11. Utricles distinctly rugose, equaling or slightly exceeding tepals ... A. viridis
11. Utricles smooth to faintly rugose, occasionally wrinkled or rugose in dry plants, distinctly exceeding tepals [12]
12. Plants annual; leaf blades usually deeply emarginate at apex; utricles subglobose to obovate, compressed; seeds filling fruit almost completely ... A. blitum
12. Plants short-lived perennial or annual; leaf blades retuse or shallowly emarginate at apex; utricles ellipsoid, slightly to distinctly inflated; seeds filling only proximal portions of fruit ... A. deflexus
13. Tepals of pistillate flowers acute, acuminate, to aristate at apex [14]
13. Tepals of pistillate flowers obtuse, rounded, to emarginate at apex [15]
14. Bracts shorter than 2 mm, shorter than tepals; style branches strongly spreading; seeds 0.8-1 mm wide ... A. dubius
14. Bracts 2-7 mm, longer than or equaling tepals; style branches erect or slightly reflexed; seeds. 1-1.3 mm wide ... A. hybridus
15. Inflorescences drooping, usually bright red to purple, occasionally white or yellowish, rarely green; bracts subequal to tepals and usually not exceeding style branches at maturity; seeds white, ivory, reddish, brown, or black ... A. caudatus
15. Inflorescences erect or reflexed only at the tip, usually green, occasionally silvery green, sometimes reddish; bracts usually exceeding tepals and style branches; seeds brown to black ... A. retroflexus

*****Amaranthus albus*** L. {AFP} —
Amaranthus australis (A.Gray)J.D.Sauer {AFP} —

*__Amaranthus blitum__ L. subsp. __emarginatus__ (Salzm. ex Uline & W.L.Bray)Carretero et al. {AFP} —

__Amaranthus cannabinus__ (L.)J.D.Sauer {AFP} —

*__Amaranthus caudatus__ L. {AFP} —

X++__Amaranthus crassipes__ Schltdl. {AFP} — Monroe Co. keys (Caribbean islands, Mexico, South America). Disturbed sites. The earliest Florida collections are from Blodgett in 1838–1853 and Rugel 1842-1849. A few Chapman specimens bore the locality Apalachicola, suggestive of arrival by the port. Other specimens bear nebulous localities such as Florida or south Florida, but probably these are all from Key West. An NY specimen of Blodgett read "nearly prostrate rich soils" while specimens of Curtiss attributed it to "waste places". Small's label more specifically says "sandy places near the beach". With at least 22 herbarium sheets of it in Florida from 1838-1912, its apparent commonness in the Key West lends the possibility it was native there. It was not reported by Melvill (1884) for Key West nor by Millspaugh (1907) for islands west of Key West. Its occurrence at the port locations of New Orleans, Louisiana and Mobile, Alabama suggest it is an introduced waif there and lends the possibility it was similarly introduced to Key West. That it was somewhat common on Key West but is now absent and was not found elsewhere in the keys is peculiar. If non-native to Florida, it could have been introduced after the US established Key West as a port in 1822, where soon developed wrecking, fishing, salt, and cigar industries (Maloney 1876; Dodd 1944). In the early 1830s, about 100-170 maritime vessels per year were arriving to Key West from foreign ports (Maloney 1876). In 1831, the population was about 300, increasing to at least 500 in 1838, and in 1850 at least 1,800 (Dodd 1944; Maloney 1876).

*__Amaranthus deflexus__ L. {AFP} —

*__Amaranthus dubius__ Mart. ex Thell. {AFP} —

•__Amaranthus floridanus__ (S.Watson)J.D.Sauer {AFP} — Extinct in the wild or nearly so.

*__Amaranthus hybridus__ L. {AFP} —

*__Amaranthus palmeri__ S.Watson {AFP} —

*__Amaranthus polygonoides__ L. {AFP} —

*__Amaranthus retroflexus__ L. {AFP} —

*__Amaranthus spinosus__ L. {AFP} —

*__Amaranthus viridis__ L. {AFP} —

Atriplex

1. Larger leaf blades 3-15 mm wide, entire or some with few teeth; fruiting bracteoles 2-5 mm wide or long … A. pentandra
1. Larger leaf blades 10-80 mm wide, usually with several teeth; fruiting bracteoles (3)4-8(10) mm wide or long [2]
2. Plants erect; leaf blade ovate to lanceolate, with Kranz anatomy … A. rosea
2. Plants decumbent; leaf blade ovate to deltate, without Kranz anatomy … A. tatarica

__Atriplex pentandra__ (Jacq.)Standl. {AFP} —

*__Atriplex rosea__ L. {AFP} —

*__Atriplex tatarica__ L. {AFP} —

Celosia

1. Flowers densely aggregated, the central inflorescence rachis scarcely visible; tepals 6-8 mm long; styles 3-4 mm long … C. argentea

1. Flowers or flower clusters separated along the rachis (at least on the lower portion), the inflorescence rachis visible (if rachis obscure, then tepals 2-3 mm long); tepals 2-7 mm long; styles 0.2-1 mm long [2]
2. Perennial; flowers mostly single along the inflorescence rachis; tepals 3.5-7 mm long, spreading at anthesis … C. nitida
2. Annual; flowers in compact clusters along the inflorescence rachis; tepals 2-3 mm long, erect at anthesis … C. trigyna

^*Celosia argentea* L. {AFP} —
Celosia nitida Vahl {AFP} — SE.
^*Celosia trigyna* L. {AFP} —

Chenopodiastrum
*__*Chenopodiastrum murale*__ (L.)S.Fuentes et al. {AFP} —

Chenopodium
1. Leaf blades entire, unlobed, strongly malodorous; tepals rounded, not keeled … C. vulvaria
1. Leaf blades usually dentate or lobed, rarely all entire, not or weakly odorous; tepals keeled [2]
2. Young leaf blades (esp. at their bases) vividly pink to maroon, larger blades 6.5-15 cm long, 2-15 cm wide … C. gigantea
2. Young leaf blades generally green to grayish, larger blades 2-10 cm long, 1-15 cm wide [3]
3. Seeds smooth to faintly ornamented … C. album
3. Seeds distinctly honeycomb-reticulate [3]
3. Leaves mostly strongly 3-lobed, the central lobe 2-3 times longer than the lateral lobes … C. ficifolium subsp. blomianum
3. Leaves mostly unlobed or some weakly 3-lobed with the lateral lobes only slightly more pronounced than the teeth or the lateral lobes nearly as long as the central lobe [4]
4. Larger leaf blades 2-5(15) cm long, 4(9) cm wide, the base broadly cuneate; inflorescence usually diffuse, the clusters separated … C. berlandieri
4. Larger leaf blades 5-15 cm long, 4-10 cm wide; inflorescence densely compact, the cluster nearly all touching or overlapping … C. quinoa

*__*Chenopodium album*__ L. {AFP} —
Chenopodium berlandieri Moq. {AFP} — A close relative of quinoa, it probably was domesticated into various forms with uniform seeds in the Eastern Agricultural Complex north of Florida (Belcher et al. 2023).
*__*Chenopodium ficifolium*__ Sm. subsp. ***blomianum*** (Aellen)Aellen {AFP} —
^*Chenopodium giganteum* D.Don —
^*Chenopodium quinoa* Willd. —
*__*Chenopodium vulvaria*__ L. {AFP} —

Cyathula
*__*Cyathula prostrata*__ (L.)Blume {AFP} —

Dysphania
1. Leaves sessile to subsessile; leaf blade pinnatifid, not or scarcely aromatic … D. multifida
1. Leaves petiolate or the blade base attenuate and merging into the petiole (at least on lower leaves); leaf blade coarsely dentate to entire, mildly or distinctly aromatic (e.g. malodorous) [2]

2. Plant ascending to erect; leaf blade base mostly attenuate and merging with the petiole, the larger blades 3.5 to 12 cm long; tepals connate for ca. ½ their length … D. ambrosioides
2. Plant prostrate to decumbent; leaf blade base mostly acute, with a distinct petiole, the larger blades 1.5-3 cm long; tepals free nearly to the base … D. pumilio

*__Dysphania ambrosioides__ (L.)Mosyakin & Clemants {AFP} —
*__Dysphania multifida__ (L.)Mosyakin & Clemants {AFP} —
*__Dysphania pumilio__ R.Br.)Mosyakin & Clemants {AFP} —

Froelichia
__Froelichia floridana__ (Nutt.)Moq. {AFP} —

Gomphrena
1. Inflorescence bright pink to purple … G. globosa
1. Inflorescence whitish [2]
2. Stem and leaves pilose; leaf blade not succulent … G. serrata
2. Stem and leaves glabrous; leaf blade succulent … G. vermicularis

^*Gomphrena globosa* L. —
*__Gomphrena serrata__ L. {AFP} —
__Gomphrena vermicularis__ L. {AFP} — Once placed in *Blutaparon* or *Philoxerus*, its deeply nested in the *Gomphrena* lineage (Ortuño Limarino & Borsch 2020).

Iresine
1. Annual or short-lived perennial, not rhizomatous; tepals 0.6-0.8 mm long, 3-veined and obtuse at the tip; fruit 0.6-0.8 mm long, included in tepals … I. diffusa
1. Rhizomatous perennial; tepals 1-1.3 mm long, faintly 1-veined and acute at the tip; fruit 1-1.5 mm long, exserted from tepals … I. rhizomatosa

__Iresine diffusa__ Humb. & Bonpl. ex Willd. {AFP} —
__Iresine rhizomatosa__ Standl. {AFP} —

Oxybasis
*__Oxybasis glauca__ (L.)S.Fuentes et al. {AFP} —

Salicornia
1. Perennial from a slender rhizome; basal stems often sprawling and branching with terminal erect stems; typically some stems not terminated by an inflorescence; dried inflorescence ca. 1-2 mm wide … S. ambigua
1. Annual from a slender taproot; main stem usually erect and solitary at the base, many-branched apically, the branches ascending to erect; all stems terminating in an inflorescence; dried inflorescence ca. 2-3 mm wide … S. bigelovii

__Salicornia ambigua__ Michx. {AFP} — Once in the now-subsumed genus *Sarcocornia*, this species resides in *Salicornia* subg. *Amerocornia* (Piirainen et al. 2017). The species *S. perennis* is considered an Old World taxon that was misapplied to American plants (Alonso & Crespo 2008; Guilló et al. 2015; Piirainen et al. 2017).

Salicornia bigelovii Torr. {AFP} — This is part of *Salicornia* subg. *Salicornia* (Piirainen et al. 2017). The species epithet is sometimes spelled "bigelowii" .

Salsola

****Salsola kali*** L. subsp. ***pontica*** (Pall.)Mosyakin {AFP} —

Suaeda

Suaeda linearis (Elliott)Moq. {AFP} —

CARYOPHYLLACEAE

1. Stipules present, 2 interpetiolar and connate or 4 per node, white to silvery to tan to green, scarious, filiform, bristle-like, or broad [2]
1. Stipules absent [8]
2. Petals absent (sepals may be petaloid); fruit a 1-seeded utricle … Paronychia
2. Petals 5 (rarely absent or 3); fruit a many-seeded capsule [3]
3. Leaves predominantly basal (often absent at maturity), cauline leaves scale-like with long internodes, the stem nearly leafless … Stipulicida
3. Leaves cauline (and sometimes basal), not scale-like, the stem leafy [4]
4. Cauline leaf blades elliptic, obovate, ovate, or orbicular, mostly (1.5)2-25 mm wide [5]
4. Cauline leaf blades linear, 0.2-1.3 mm wide [6]
5. Stems often long-creeping and sometimes rooting at distant nodes; leaf blade broadly ovate to orbicular; petals divided (often nearly to the base) into 2 or 4 lobes … Drymaria cordata
5. Stems not rooting at distant nodes; leaf blade elliptic to obovate; petals undivided … Polycarpon tetraphyllum
6. Larger leaf blades 0.8-2(2.5) cm long; flowers densely compact in the inflorescence dense, pedicels scarcely apparent; style 1 … Polycarpaea corymbosa
6. Larger leaf blades 2-6 cm long; flowers spaced and individually obvious in the inflorescence, pedicels conspicuous; styles 3 or 5 [7]
7. Leaves densely clustered of 8-15 at the main stem nodes; styles, stigmas, and capsule valves 5 … Spergula arvensis
7. Leaves mostly in pairs along the main stem nodes; styles, stigmas, and capsule valves 3 … Spergularia marina
8. Sepals free (rarely connate at the base) [9]
8. Sepals connate for most of their length [15]
9. Flowers subsessile; sepals present (greenish) 1-4 mm long; petals absent; fruit a 1-seeded utricle … Scleranthus annuus
9. Flowers usually pedicellate; sepals present; petals present or absent; fruit a many-seeded capsule [10]
10. Petals bilobed or 2-fid(4-fid), divided at least ⅕ or more of the petal length, or petals absent [11]
10. Petals unlobed, the apex obtuse to rounded (rarely notched), or petals absent [12]
11. Capsules cylindric, dehiscing by apical teeth … Cerastium
11. Capsules ovoid, dehiscing ¼ or more of the length of the fruit by valves … Stellaria
12. Capsules dehiscing by 6 apical teeth; stigmas 3 … Arenaria
12. Capsule dehiscing ¼ or more of the length of the fruit by 3-5 valves; stigmas 3-5 [13]
13. Sepals and petals 1-3 mm long; capsule valves 4-5; stigmas 4-5 … Sagina decumbens
13. Sepals 2.5-5 mm long; petals 5-11 mm long; capsule valves 3-4; stigmas 3-4 [14]

14. Densely branched at the base from a subterranean woody stem; leaves 2-8(13) mm long ... Geocarpon
14. Matted weak stems at the base, without a subterranean woody stem; leaves 4-30 mm long ... Sabulina
15. Calyx subtended by 4 involucel bracteoles subequal to the calyx ... Dianthus armeria
15. Calyx not subtended by bracteoles [16]
16. Calyx and petals 1-4 mm long ... Gypsophila paniculata
16. Calyx and petals 6-62 mm long [17]
17. Calyx 25-62 mm long, lobes longer than tube ... Agrostemma githago
17. Calyx 6-28(-40) mm long, lobes usually shorter than or subequal to the calyx tube [18]
18. Styles 3 or 5, occasionally 4 (absent in staminate flowers); fruit valves 3-5 or splitting into 6-10 teeth [19]
18. Styles 2(3); fruit valves usually 4 [20]
19. Plant glabrous; seeds rugose ... Atocion armeria
19. Plant glabrate, pubescent, or glandular; seeds rugose, papillate, tuberculate, or reticulate ... Silene
20. Plants perennial; pedicels 1-6 mm long; calyx tubes terete; coronal appendages 2 ... Saponaria officinalis
20. Plants annual; pedicels (5)10-30(55) mm long; calyx tubes 5-angled or keeled; coronal appendages absent ... Vaccaria hispanica

Agrostemma
**Agrostemma githago* L. {AFP} —

Arenaria
1. Perennial, often rhizomatous; leaves mostly 6-35 mm long, the blade 1-veined, linear-lanceolate to narrowly elliptic ... A. lanuginosa
1. Annual; leaves 2-7 mm long, the blade 3- to 5-veined, ovate to narrowly lanceolate [2]
2. Fruit cylindric to cylindric-ovoid, not significantly broader at base (walls nearly straight); seeds ca. 0.4 mm long ... A. serpyllifolia subsp. leptoclados
2. Fruit ovoid to ovoid-conic, broader at base; seeds 0.5-0.6 mm long ... A. serpyllifolia subsp. serpyllifolia

Arenaria lanuginosa (Michx.)Rohrb. {AFP} —
**Arenaria serpyllifolia* L. subsp. *leptoclados* (Rchb.)Nyman {AFP} —
**Arenaria serpyllifolia* L. subsp. *serpyllifolia* {AFP} —

Atocion
**Atocion armeria* (L.)Raf. {AFP} —

Cerastium
1. Pedicels 0-4(5) mm long, subequal to shorter than the sepals and fruits ... C. glomeratum
1. Pedicels (2)5-15 mm long, subequal to longer than the sepals and fruits [2]
2. Stems densely silvery long-pilose; bracts or sepals herbaceous, not scarious ... C. brachypetalum
2. Stems short-pilose; bracts or sepals scarious-margined [3]
3. Perennial, often rhizomatous; sepals 5-7 mm long; fruit 9-17 mm long ... C. fontanum subsp. vulgare

3. Annual; sepals 3-5 mm long; fruit 4-7 mm long … C. semidecandrum

**Cerastium brachypetalum* Pers. {AFP} —
**Cerastium fontanum* Baumg. subsp. *vulgare* (Hartm.)Greuter & Burdet {AFP} —
**Cerastium glomeratum* Thuill. {AFP} —
**Cerastium semidecandrum* L. {AFP} —

Dianthus
**Dianthus armeria* L. {AFP} —

Drymaria
**Drymaria cordata* (L.)Willd. ex Schult. {AFP} —

Geocarpon
Geocarpon carolinianum (Walter)E.E.Schilling {AFP} —

Gypsophila
**Gypsophila paniculata* L. {AFP} —

Paronychia
1. Leaf blade with spinulose mucro at the apex; sepals inconspicuously nerved, generally uniformly green in the distal half, gradually narrowed to a 0.3-0.4 mm long awn … P. herniarioides
1. Leaf blade acute to obtuse at the apex; sepals strongly 3-nerved, generally with some white to red coloration in the distal half, rounded or with a mucro to 0.2 mm long [2]
2. Leaves and foliaceous bracts strongly and broadly revolute, broader towards the base, deltoid, ovate, to cordate (the upper lanceolate); flowers <1 mm long … P. chartacea
2. Leaves and foliaceous bracts flat (or nearly so), narrowed towards the base, spatulate, oblanceolate to elliptic; flowers >1 mm long [3]
3. Flowers 2.3-3.5 mm long [4]
3. Flowers 1.1-2.2 mm long [5]
4. Primary stems usually 2 or more at the plant base, the unbranched region of the stem longer than the branched part of the plant; sepals without a subterminal cusp … P. erecta
4. Primary stems 1, the unbranched region of the stem shorter than the branched part of the plant; sepals with an evident subterminal cusp … P. rugelii
5. Flowers about as wide as long (excluding spreading sepal lobes), without a hypanthium; sepals free for most of their length and often ciliate … P. baldwinii
5. Flowers longer than wide (excluding spreading sepal lobes), with a hypanthium; sepals connate and often pubescent in the lower half, constricted near the middle [6]
6. Sepals straight or nearly so, mucronate … P. patula
6. Sepals distinctly hooded at the apex, mucro absent or subtle [7]
7. Primary stems 1 at the plant base, decumbent; flowers 1.0-1.6 mm long; sepals not enlarged or thickened at the base into tubercles … P. americana
7. Primary stems usually 2 or more at the plant base, prostrate to procumbent; flowers 1.4-2 mm long; sepals enlarged or thickened at the base, tuberculate … P. discoveryi)

Paronychia americana (Nutt.)Fenzl ex Walp. {AFP} —
Paronychia baldwinii (Torr. & A.Gray)Fenzl ex Walp. {AFP} —

•***Paronychia chartacea*** Fernald {AFP} — FT. SE.
•***Paronychia discoveryi*** DeLaney {AFP} —
Paronychia erecta (Chapm.)Shinners {AFP} —
Paronychia herniarioides (Michx.)Nutt. {AFP} —
•***Paronychia minima*** (L.C.Anderson)J.J.Schenk & A.D.Appleton {AFP} — ST.
Paronychia patula Shinners {AFP} —
Paronychia rugelii (Chapm.)Shuttlew. ex Chapm. {AFP} —

Polycarpaea
****Polycarpaea corymbosa*** (L.)Lam. {AFP} —

Polycarpon
****Polycarpon tetraphyllum*** (L.)L. {AFP} —

Sabulina
Sabulina paludicola (Fernald & B.G.Schub.)E.E.Schilling {AFP} — SE.

Sagina
Sagina decumbens (Elliott)Torr. & A.Gray {AFP} —

Saponaria
****Saponaria officinalis*** L. {AFP} —

Scleranthus
****Scleranthus annuus*** L. {AFP} —

Silene
1. Calyx 5-9 mm long [2]
1. Calyx 10-30 mm long [3]
2. Calyx glabrous; seeds dull gray-black … S. antirrhina
2. Calyx pilose; seeds dark reddish brown … S. gallica
3. Petals bright red [4]
3. Petals white, pink, to purplish [5]
4. Stem leafy, with 10 or more nodes of large leaves below the inflorescence; petals apex entire to notched ca. 1 mm long or less … S. regia
4. Stem subscapose, with 2-4 nodes of reduced leaves below the inflorescence; petal apex 2-fid, the sinus >1 mm long … S. virginica
5. Petal apices copiously lacerate … S. catesbaei
5. Petal apices entire to 2-lobed [6]
6. Flowers unisexual; calyx lobes (4)5; styles (4)5 … S. latifolia
6. Flowers bisexual; calyx lobes 6(8); styles 3(4) [7]
7. Plant to 20 cm tall; flowers diurnal; calyx 15-22 mm long, the lobes 1-3 mm long and obtuse … S. caroliniana
7. Plant to 80 cm tall; flowers mostly nocturnal; calyx 12-15 mm long, the lobes 5-10 mm long and subulate … S. noctiflora

Silene antirrhina L. {AFP} —

Silene caroliniana Walter {AFP} — SE.
Silene catesbaei Walter {AFP} —FE. SE.
*****Silene gallica*** L. {AFP} —
*****Silene latifolia*** Poir. {AFP} —
*****Silene noctiflora*** L. {AFP} —
Silene regia Sims {AFP} — SE.
Silene virginica L. {AFP} — SE.

Spergula
*****Spergula arvensis*** L. {AFP} —

Spergularia
Spergularia marina (L.)Griseb. {AFP} —

Stellaria
1. Leaves of lower part of stem sessile to subsessile [2]
1. Leaves of lower part of stem petiolate (if sessile, then leaves not linear-lanceolate and flowers not solitary in the leaf axils) [3]
2. Leaves linear-lanceolate to narrowly lanceolate; inflorescence a terminal branched cyme; pedicels 10-30 mm long … S. graminea
2. Leaves elliptic to broadly obovate; flowers solitary in leaf axils; pedicels 2-10 mm long … S. parva
3. Pedicels 1-10 mm long; sepals 3-4 mm long; petals usually absent; stamens 0-3; fruit 2-4(5) mm long; seeds 0.5-0.9 mm wide … S. pallida
3. Pedicels 3-40 mm long; sepals 3-8 mm long; petals usually present; stamens 3-10; fruit 3-6 mm long; seeds 0.9-2 mm wide [4]
4. Leaves mostly sessile and only short-petiolate near the base; stamens 10; seeds 1.5-2 mm wide … S. puber
4. Leaves mostly distinctly long-petiolate along the stem, becoming sessile distally on the stem; stamens 3-8; seeds 0.9-1.3 mm wide
5. Leaf blade base broadly rounded to acute; seeds tuberculate … S. media
5. Leaf blade base cordate to truncate; seeds stipitate-glandular … S. prostrata

*****Stellaria graminea*** L. {AFP} —
*****Stellaria media*** (L.)Vill. {AFP} —
*****Stellaria pallida*** (Dumort.)Crépin {AFP} —
*****Stellaria parva*** Pedersen {AFP} —
Stellaria prostrata Baldwin {AFP} —
Stellaria puber Michx. {AFP} —

Stipulicida
1. Sepal margins lacerate-fimbriate; outer sepals often much shorter than inner sepals (usually by 0.1-0.5 mm); tips of the outer sepals mucronate with longest mucro (0.1)0.2-0.4(0.5) mm long … S. setacea var. lacerata
1. Sepal margins entire, roughened-entire, to rough-undulate; outer sepals subequal to slightly shorter or longer than inner sepals (usually by 0.0-0.2 mm); tips of the outer sepals acute to obtuse or retuse-obcordate, with longest mucro 0-0.1 mm long
2. Stems 0.15-0.25 mm wide; inflorescence of 1-2 flowers … S. setacea var. filiformis

2. Stems (0.15)0.25-0.55 mm wide; inflorescence of 2-8 flowers ... S. setacea var. setacea

Stipulicida lacerata (C.W.James)D.B.Poind. et al. {AFP} — Peninsula (Cuba). Raised to species rank by Poindexter et al. (2014), but retained as a variety by Judd (1983) owing to reported intermediates.
•***Stipulicida setacea*** Michx. var. ***filiformis*** (Nash)D.B.Ward — Lake Wales Ridge. Treated as a variety by Ward (2001).
Stipulicida setacea Michx. var. ***setacea*** {AFP} —

Vaccaria
*****Vaccaria hispanica*** (Mill.)Rauschert {AFP} —

AIZOACEAE
1. Leaves alternate [2]
1. Leaves opposite [3]
2. Leaves sessile or subsessile; ovay superior ... Aizoon secundum
2. Leave petiolate; ovary half-inferior ... Tetragonia tetragonoides
3. Leaves connate-perfoliate at the base ... Carpobrotus edulis
3. Leaves sessile or petiolate, not perfoliate [4]
4. Showy, colorful petals and petaloid stamens numerous; ovary inferior ... Aptenia cordifolia
4. Flowers only with petaloid sepals, petals and petaloid stamens absent; ovary superior [5]
5. Leaves of a pair at a node equal to subequal in size ... Sesuvium
5. Leaves of a pair at a node starkly unequal in size [6]
6. Leaf blade to 8 mm long, to 4 mm wide; ovary with 2(3) locules, 2(3) styles ... Sesuvium humifusum
6. Leaf blade to 40 mm long, to 30 mm wide; ovary with 1 locule, 1 style ... Trianthema portulacastrum

Aizoon
*****Aizoon secundum*** L.f. {AFP} —

Aptenia
^*Aptenia cordifolia* (L.f.)Schwantes {AFP} —

Carpobrotus
^*Carpobrotus edulis* (L.)L.Bolus {AFP} —

Sesuvium
1. Petiole usually sharply distinct from the leaf blade, the margin of the lateral flaps of the petiole fimbriate; leaves of a pair at a node starkly unequal in size; leaf blade to 8 mm long, to 4 mm wide ... S. humifusum
1. Petiole usually gradually confluent with the leaf blade, the margin of the lateral flaps of the petiole entire; leaves of a pair at a node equal to subequal in size; leaves to 70 mm long, to 12 mm wide [2]
2. Annual; stems not rooting at nodes; leaves to 27 mm long; pedicel 0-1 mm long; sepal lobes 3-6 mm long; stamens 5 ... S. maritimum
2. Perennial; stems often rooting at nodes; leaves to 70 mm long; pedicel 3-20 mm long; sepal lobes 5-12 mm long; stamens 30 ... S. portulacastrum

*__Sesuvium humifusum__ (Turpin)Bohley & G.Kadereit {AFP} —
__Sesuvium maritimum__ (Walter)Britton et al. {AFP} —
__Sesuvium portulacastrum__ (L.)L. {AFP} —

Tetragonia
*__Tetragonia tetragonoides__ (Pall.)Kuntze {AFP} —

Trianthema
__Trianthema portulacastrum__ L. {AFP} —

GISEKIACEAE
Gisekia
*__Gisekia pharnacioides__ L. {AFP} —

AGDESTIDACEAE
Agdestis
*__Agdestis clematidea__ Moç. & Sessé ex DC. {AFP} —

PHYTOLACCACEAE
1. Annual; leaves opposite or appearing whorled ... Gisekia pharnacioides
1. Perennial; leaves alternate [2]
2. Vine with stems arising from large above-ground tubers; inflorescence a panicle ... Agdestis clematidea
2. Herbs, shrubs, or vines without large above-ground tubers; inflorescence a raceme, spike, or dichasium [3]
3. Petioles to 1(1.5) cm long; leaves with a garlic-like or foul odor; inflorescence a virgate spike-like raceme; fruit an achene with reflexed spinose tips ... Petiveria alliacea
3. Petioles to 4(8) cm long; leaves lacking a garlic-like or foul odor; inflorescence a raceme, not virgate; fruit a berry [4]
4. Sepals 5(-8); carpels and styles 6-12; fruit 6-11 mm wide ... Phytolacca americana
4. Sepals 4; carpel 1, style absent or 1; fruit 2-6 mm wide [5]
5. Perennial herb to subshrub; stamens 4; style present; stigma capitate; berries red to orange or yellow ... Rivina humilis
5. Woody vine or shrub; stamens 8-13; style absent; stigma penicillate; berries black ... Trichostigma octandrum

Phytolacca
1. Fruiting pedicels >6 mm, longer than fruit; flowering part of racemes (10)12-30 cm long, drooping to spreading ... Phytolacca americana var. americana
1. Fruiting pedicels <7 mm, shorter than fruit; fertile part of racemes 6-9(14) cm long, erect to ascending, sometimes spreading ... Phytolacca americana var. rigida

__Phytolacca americana__ L. var. __americana__ {AFP} —
__Phytolacca americana__ L. var. __rigida__ (Small)D.B.Caulkins & R.E.Wyatt —

Trichostigma
__Trichostigma octandrum__ (L.)H.Walter {AFP} — SE.

NYCTAGINACEAE

1. Stem with supranodal thorns; leaves alternate; flowers included in and surrounded by conspicuous white or colored bracts (commonly cultivated, not or sparingly naturalized) … Bougainvillea
1. Stem with or without thorns; leaves alternate, subopposite, or opposite; flowers not surrounded by white or colored bracts [2]
2. Woody, vine, shrub or tree; flowers unisexual (plants dioecious); calyx lobes green, yellowish, to white; stigma penicillate [3]
2. Herbaceous, sometimes woody at the base; flowers bisexual; calyx lobes purplish to white; stigma capitate [4]
3. Fruit dry, glandular … Pisonia
3. Fruit fleshy, berry-like, eglandular … Guapira
4. Flowers subtended by foliaceous connate, bracts forming an involucre … Mirabilis jalapa
4. Flowers ebracteate or subtended by narrow, small, distinct bracts that do not form an involucre [5]
5. Stems prostrate, decumbent, to erect; flowers usually several in clusters; fruits aerial, the peduncles not or only slightly elongating after anthesis, not penetrating the soil … Boerhavia
5. Stems prostrate, rooting at some nodes; flowers solitary; fruits hypogeous, the peduncles greatly elongating after anthesis, penetrating the soil … Okenia hypogaea

Boerhavia

1. Annual; calyx and fruit glabrous; perianth nearly white, often suffused with pink or purple between the lobes; fruit narrowly obdeltate, truncate to subtruncate with low dome at the apex … B. erecta
1. Perennial, usually; calyx and fruit glandular; perianth usually uniformly pink to purple (rarely almost white), sometimes darker between the lobes; fruit narrowly oblanceolate, rounded at the apex [2]
2. Leaves usually distributed throughout the plant; peduncle pubescent; flowers usually >5 per cluster; stamens exserted from the perianth … B. coccinea
2. Leaves usually concentrated in the proximal ½ of the plant; peduncle glabrate; flowers usually 2-5 per cluster; stamens included to slightly exserted from the perianth … B. diffusa

****Boerhavia coccinea*** Mill. {AFP} —
Boerhavia diffusa L. {AFP} —
Boerhavia erecta L. {AFP} —

Bougainvillea

1. Flower tube hirsute-villous (hairs 0.25-1.25 mm long); leaf blade broadly ovate to nearly orbicular, the tip broadly rounded to abruptly acuminate, the base truncate to truncate-cuneate to nearly cordate … Bougainvillea spectabilis
1. Flower tube glabrous, puberulent, to puberulent-villous (hairs <0.25 mm long); leaf blade various [3]
2. Leaf blade elliptic to ovate, the tip acuminate or rarely obtuse, the base cuneate to broadly cuneate … Bougainvillea glabra
2. Leaf blade broadly ovate to nearly orbicular, the tip broadly rounded to abruptly acuminate, the base truncate to truncate-cuneate to nearly cordate … Bougainvillea buttiana

^*Bougainvillea* ×*buttiana* Holttum & Standl. (*B. glabra* × *B. peruviana*) —
^*Bougainvillea glabra* Choisy —
^*Bougainvillea spectabilis* Willd. —

Guapira
1. Petiole ca. 0.5-1 mm wide, 4-20 mm long; leaf blades 1-3 cm wide, 1-6 times as long as the petiole, cuneate to attenuate at the base … G. discolor
1. Petiole ca. 1.5-2 mm wide, 1-9 mm long; leaf blades mostly 2-4 cm wide, 6-15 times as long as the petiole, truncate to cuneate at the base … G. obtusata

Guapira discolor (Spreng.)Little {AFP} — A moderately to copiously pubescent form from the Keys was afforded varietal rank (under *Pisonia* as var. *floridana*; Ward 2004).
Guapira obtusata (Jacq.)Little {AFP} —

Mirabilis
****Mirabilis jalapa*** L. {AFP} —

Okenia
Okenia hypogaea Schltdl. & Cham. {AFP} — SE.

Pisonia
1. Vine; stems usually armed in some places with recurved axillary thorns, often with stout persistent branched thorns on the trunk; leaf blade usually with 5 or less obscure to conspicuous secondary veins on each side of the midrib, the tip typically acuminate; fruit with rows of stalked glands along the entire length … P. aculeata
1. Shrub or small tree; stems unarmed; leaf blade usually with 5 or more very conspicuous secondary veins on each side of the midrib, the tip rounded; fruit with rows of stalked glands only in the upper half … P. rotundata

Pisonia aculeata L. {AFP} — Rare in lower keys.
Pisonia rotundata Griseb. {AFP} — SE.

PETIVERIACEAE
Petiveria
Petiveria alliacea L. {AFP} —

Rivina: A monospecific genus, a neotropical species now introduced into the paleotropics. Divided by Walter (1909) into three species, three varieties, but dismissed by later workers (Raeder 1961).
Rivina humilis L. {AFP} —

BASELLACEAE
1. Perennial; stems not succulent; flowers pedicellate; sepals membranous, spreading at anthesis … Anredera
1. Annual; stems succulent; flowers sessile to subsessile; sepals fleshy, barely opening at anthesis … Basella alba

Anredera

1. Larger leaf blades subtending inflorescence mostly cordate at the base with a broad sinus (sometimes the blade also attenuate along the petiole); bract subtending flower bilobed and cup-like, persistent; sepal not winged in fruit; sometimes with axillary tubers … A. cordifolia
1. Larger leaf blades subtending inflorescence only tapering at the base, lacking a sinus at the base; bracts subtending flower 2, distinct, deciduous; sepal winged in fruit; without axillary tubers … A. vesicaria

**Anredera cordifolia* (Ten.)Steenis {AFP} —
**Anredera vesicaria* (Lam.)C.F.Gaertn. {AFP} —

Basella
^*Basella alba* L. {AFP} —

MOLLUGINACEAE
Mollugo
**Mollugo verticillata* L. {AFP} —

CACTACEAE
1. Leaves persistent, with broad, flat blades; flowers in paniculiform, corymbiform, or aggregate cymes … Pereskia
1. Leaves caducous, small and terete, vestigial, or absent; flowers solitary from the areoles [2]
2. Stems flattened (rarely subcylindric); areoles evenly distributed on stems, usually bearing minute, barbed bristles (glochids); inner flower petals brightly colored (red to yellow) [3]
2. Stems cylindric to flattened; areoles restricted to ribs, angles, and edges of stem, lacking glochids (areoles evenly distributed on cylindric stems of Rhipsalis); inner flower petals whitish [4]
3. Stems linear oblong, indeterminate, usually with 40-100 areoles per face; flower and fruit areoles sometimes spiny; flowers usually functionally unisexual; plants usually dieocious … Consolea
3. Stems elliptic, ovate, orbicular, to obovate, determinate, usually with 2-50 areoles per face; flower and fruit areoles not spiny; flowers bisexual; plants monoecious … Opuntia
4. Branches <7 mm wide in diameter; flowers rotate, <2 cm long; floral tube obsolete; perianth segments less than 12 … Rhipsalis
4. Branches more than 7 mm in diameter; flowers funnelform, salverform, or campanulate, >4 cm long; floral tube elongate; perianth segments more than 12 [5]
5. Vines or epiphytes; stems with adventitious roots [6]
5. Clambering to erect shrubs or trees; stems without adventitious roots (unless broken or fallen to ground) [7]
6. Stems flat (basally cylindric), rarely 3-winged … Epiphyllum phyllanthus var. hookeri
6. Stems 3-8 ribbed, angled, or winged, rarely 2-winged … Selenicereus
7. Stems with 3-5 ribs; usually at least some flower and fruit areoles with a few spines … Acanthocereus
7. Stems with 8-14 ribs; flower and fruit areoles without spines [8]
8. Shrubs or rarely tree-like; stems slender, <3.5 cm wide distally, usually; flower tube areoles pilose, the tube scales with acute apices; fruit with several areoles … Harrisia
8. Tree-like; stems stout, >3.5 cm wide distally; flower tube areoles glabrous, the tube scales rounded at the tip; fruit often with few to no areoles [9]
9. Stem ribs usually 6; flowers 15-25 cm long … Cereus hexagonus

9. Stem ribs 9-14; flowers 4-6 cm long … Pilosocereus

Acanthocereus: The taxonomy of *Acanthocereus* is not well resolved and there at least two different taxa in Florida.

1. Plants weak, mostly subshrubs to clambering or vine-like; stems 2-7(9) cm wide; spines elongate and slender, mostly 1-4 cm long; pericarpel usually with spines … A. floridanus
1. Plants robust, shrubby; stems 9-20 cm wide; spines short and stout, mostly 0.5-2 cm long; pericarpel lacking spines … A. tetragonus

•***Acanthocereus floridanus*** Small ex Britton & Rose {AFP} — ST. Possibly endemic, as nearest native populations of *Acanthocereus* are the Yucatan. Traditionaly known as *A. tetragonus*, which could be a different species.
^*Acanthocereus tetragonus* (L.)Hummelinck — A stout, robust form that is often cultivated, but clearly does not represent the native form. Possibly native to the gulf coast of Mexico, and perhaps not true *A. tetragonus* (type from Curaçao).

Cereus

****Cereus hexagonus*** (L.)Mill. {AFP} — This arborescent cactus is commonly cultivated in Florida and the West Indies, and native to northern South America. It is often misidentified as *C. repandus*, a species with much shorter flowers (5-11 cm long) (Britton & Rose 1920:17-18). The name *C. lepidotus* might possibly be more applicable to this species here, such that *C. hexagonus* could be misapplied here (Taylor & Zappi 2019). This species is only weakly distinguished from *C. jamacuru* (native to eastern Brazil), which tends to have more numerous spines, often robust and long, with stout protruding areoles. Another similar species is *C. hildmannianus* (native to southern Brazil to eastern Argentina), which tends to have stout areoles with fewer, somewhat short spines, outer tepals often reddish (vs. reddish to more greenish tepals in the other species), and fruit yellow to red, splitting from the apex (vs. red fruits often with a lateral split in the other species). The name *Cereus peruvianus* is widely misapplied, but it is currently treated as a synonym of *C. repandus* (see Hunt & Taylor 1992).

Consolea

1. Cladodes generally with spines confined to the margins, not reticulate, areoles usually not on conspicuous, demarcated tubercles; seeds 2-5 mm wide … C. millspaughii subsp. corallicola
1. Cladodes spineless or with spines on the faces and margins, sometimes slightly reticulate-lined, areoles often within roundish tubercles delimited by a conspicuous line; seeds 6-8 mm wide … C. rubescens

•***Consolea millspaughii*** (Britton)A.Berger subsp. ***corallicola*** (Small)Majure {AFP} — FE. SE.
^*Consolea rubescens* (Salm-Dyck ex DC.)Lem. —

Epiphyllum

^*Epiphyllum hookeri* Haw. {AFP} —

Harrisia

1. Spines to 1.5 cm long; scales 4.5-8.0 mm long at middle of hypanthium; pericarpel and immature fruit green; mature fruit yellow … H. aboriginum

1. Spines to 3.5 cm long; scales 7.0-10.3 mm long at middle of hypanthium; pericarpel and immature fruit reddish green to purple; mature fruit orange to red ... H. fragrans

- ***Harrisia aboriginum*** Small ex Britton & Rose {AFP} — Manatee south to Lee Co. Coastal strand. FE. SE.
- ***Harrisia fragrans*** Small ex Britton & Rose {AFP} — FE. SE.

Kroenleinia
^*Kroenleinia grusonii* (Hildm.)Lodé —

Opuntia: Fruits were probably an important food historically (Tuross et al. 1994). *Opuntia anahuacensis* Griffiths (described from eastern Texas) is sometimes applied to panhandle populations. *Opuntia tunoidea* Gibbes (type from South Carolina) is sometimes applied to north FL material.

1. Spines absent; inner petaloid tepals red and appressed; stamens and style much exserted beyond the tepals ... O. cochenillifera
1. Spines present or absent; inner petaloid tepals yellow (rarely reddish) and spreading; stamens and style not exserted beyond the tepals [2]
2. Surface of cladodes (stem segments) pubescent ... O. leucotricha
2. Surface of cladodes (stem segments) glabrous [3]
3. Mature cladodes 10-60 cm long, usually with >15 areoles per face (not counting areoles along the margin), often without spines, glochids conspicuous or inconspicuous [4]
3. Mature cladodes mostly 8-25 cm long, with <15 areoles per face (not counting areoles along the margin), with or without spines, usually with conspicuous glochids to 4 mm long [5]
4. Mature cladodes mostly (25)30-60 cm long, with inconspicuous glochids to 2 mm long ... O. ficus-indica
4. Mature cladodes mostly 10-20 cm long, replete with conspicous tufts of glochids ... O. microdasys
5. Distal cladodes with 1-2 areoles per diagonal row per face, narrowly ovate, elliptic, to linear, mostly 1-2.5 cm wide, subcylindric to slightly flattened, loosely attached and readily disarticulating; spines strongly barbed apically ... O. drummondii
5. Distal cladodes with 2-4 areoles per diagonal row per face, obovate to elliptic, mostly 2.5-16 cm wide, flattened, firmly attached ro readily disarticulating; spines barbed apically or not [6]
6. Spines disposed from areoles in a stellate pattern or in different planes, ascending to spreading or recurved, sometimes absent; radial spines numerous, few, or absent; young spines yellow to dark yellow [7]
6. Spines disposed from areoles mostly in the same plane and perpendicular to the stem, sometimes absent; radial spines 0-1; young spines red, brown, whitish, or dark yellow [9]
6. Spines yellow to dark yellow, becoming gray in age, length often >1/3 width of the stem, mostly straight to slightly curved and mostly nearly perpendicular to the stem; stem segments entire to slightly undulate ... O. ochrocentra
6. Spines yellow to dark yellow, length mostly <1/3 width of the stem, often spreading and curved; stem segments often with a scalloped or undulate margin [7]
7. Tepals pale pinkish orange or peach-colored ... O. keyensis
7. Tepals yellow [8]
8. Cladode margins undulate-tuberculate; areoles usually with abundant, robust curved spines; spines often strongly flattened at base ... O. dillenii

8. Cladode margins subentire to lightly undulate; areoles usually with no or few, short spines; spines often round to slightly flattened at base … O. stricta
9. Mature spines reddish, with alternating light and dark bands, margins often undulating, length generally <1/2 the width of the stem … O. zebrina
9. Mature spines generally uniformly gray, margins straight to faintly undulating, length sometimes >half the width of the stem [10]
10. Plants forming clumps; cladodes 3.2-13.5 cm long, 2.4-6.7 cm wide, and 6.5-15.8 mm thick, easily disarticulating; caducous leaves 3.5-7.0 mm long; spines strongly retrorsely barbed to the touch; fruits 2.1-3.0 cm long; seeds 3.1-3.6 mm long … O. abjecta
10. Plants forming mats, clumps, or erect shrubs; cladodes 3.1-24(29.5) cm long, 2-9.5 cm wide, and 3.6-19.9 mm thick, usually not easily disarticulating (sometimes easily disarticulating in summer months in O. mesacantha); caducous leaves 4.8-13.8 mm long; spines strongly barbed or not; fruits 2.1-5.0 cm long; seeds 3.9-5.7 mm long [11]
11. Erect shrubs (developing a definite erect trunk), 0.3–2 m tall, with thick tuberous rootstock, the stems strongly ascending or erect; cladodes obovate to elliptic, rarely completely round, often relatively strongly narrowed and acute at the base, sometimes slightly glaucous, never cross wrinkling unless under severe drought stress, 6.5–29.5 cm long, 3.7–9.5 cm wide, 6.4–10.9 mm thick; pericarpel often <2 times as long as wide (when fresh); seeds 3.9–4.7 mm long … O. austrina
11. Small shrubs in clumps or mats (trunk not evident or poorly formed), 0.1–0.5 m tall, roots mostly cord-like or fibrous, the stems weakly ascending, decumbent or trailing; cladodes mostly obovate, rotund, or elliptic, often relatively broadly rounded at the base, not glaucous, often cross-wrinkling during the winter, 3.1–17.7 cm long, 2-9 cm wide, 3.6–19.9 mm thick; pericarpel often >2 times as long as wide (when fresh); seeds 4.7–5.9 mm long [12]
12. Cladodes typically scalloped-margined, elliptical or rotund; spines delicate, 0.7–0.9 mm in diameter; seeds with the funicular envelope smooth, only moderate, if any, protrusion of the cotyledons and hypocotyl … O. mesacantha subsp. lata
12. Cladodes typically smooth-margined, obovate or rotund; spines robust, 0.95–1.3 mm in diameter; seeds with the funicular envelope bumby, cotyledons and hypocotyl noticeably protruding … O. mesacantha subsp. mesacantha

•***Opuntia abjecta*** Small ex Britton & Rose {AFP} — SE.
•***Opuntia austrina*** Small {AFP} —
****Opuntia cochenillifera*** (L.)Mill. {AFP} — Naturalized occasionally, probably often due to vegetative spread by humans. Frequently cultivated.
Opuntia dillenii (Ker Gawl.)Haw. — Difficult to assess if truly a distinct species. ST.
Opuntia drummondii Graham {AFP} —
^*Opuntia engelmannii* var. *cacanapa* (Griffiths & Hare) D. Weniger — Cultivated in street plantings (syn. *O. ellisiana*).
^*Opuntia engelmannii* var. *lindheimeri* (Engelm.) B.D.Parfitt & Pinkava — Sparingly cultivated.
^*Opuntia ficus-indica* L. {AFP} — Cultivated, scarcely naturalized.
Opuntia keyensis Small — South Florida (perhaps in the Caribbean). Unclear how distinct it may be from *O. stricta* s.lat.
^*Opuntia leucotricha* DC. {AFP} — Putatively naturalized historically.
Opuntia mesacantha Raf. subsp. ***lata*** (Small)Majure {AFP} —
Opuntia mesacantha Raf. subsp. ***mesacantha*** {AFP} —
^*Opuntia microdasys* (Lehm.)Pfeiff. — Possibly naturalized in the Keys; otherwise only cultivated.
•***Opuntia ochrocentra*** Small ex Britton & Rose {AFP} —

Opuntia stricta (Haw.)Haw. {AFP} — ST.
•***Opuntia zebrina*** Small — Miami-Dade and Monroe cos. Cape Sable (type) and Lower Keys.

Pereskia

1. Clambering shrub or vine; spines dimorphic, those of the young branches recurved, those of the older branches straight; flowers many in a paniculiform or corymbiform cyme; filaments white … P. aculeata
1. Shrub or tree; spines of one kind, all straight; flowers few in a terminal aggregate cyme; filaments red … P. grandifolia

^*Pereskia aculeata* Mill. {AFP} —
^*Pereskia grandifolia* Haw. {AFP} —

Pilosocereus

1. Flowering areoles densely woolly with silken hairs >8 mm long and tomentose with short hairs … P. millspaughii
1. Flowering areoles tomentose only, hairs <5 mm long … P. robinii

Pilosocereus millspaughii (Britton)Byles & G.D.Rowley {AFP} — Monroe Co. (also Bahamas, Cuba). Present as one population in the Upper Keys, now extirpated in the wild probably due to sea level rise; stems were salvaged and are in cultivation (Possley et al. 2024). Florida material is probably similar to plants of the northeast coast of Cuba. Whether they are conspecific with plants of the Bahamas remains unclear.
Pilosocereus robinii (Lem.) Byles & G.D. Rowley {AFP} —FE. SE.

Rhipsalis

1. Stems monomorphic, the segments cylindrical or slightly winged and usually glabrate; flowers rotate … R. baccifera
1. Stems heteromorphic, the basal segements cylindrical, the distal ones shorter, cylindrical or clavate and usually pilose; flowers campanulate or funnelform … R. cereuscula

×***Rhipsalis baccifera*** (Sol.)Stearn {AFP} — SE.
^*Rhipsalis cereuscula* Haw. {AFP} —

Schlumbergera

^*Schlumbergera truncata* (Haw.)Moran —

Selenicereus

1. Stems 3-ribbed usually; flower and fruit areoles without conspicuous trichomes; bracts of fruit persistent … S. undatus
1. Stems with 4-8 ribs; flower and fruit areoles with conspicuous trichomes or spines; bracts of fruits withering-deciduous [2]
2. Stems with 5-8 ribs, areoles with 6-18 spines, these 4-12(15) mm long … S. grandiflorus
2. Stems with 4-6 ribs, areoles with 1-5 spines, these often 1-3 mm long, occasionally longer … S. pteranthus

****Selenicereus grandiflorus*** (L.)Britton & Rose {AFP} —
****Selenicereus pteranthus*** (Link ex A.Dietr.)Britton & Rose {AFP} —

*__Selenicereus undatus__ (Haw.)D.R. Hunt {AFP} —

PORTULACACEAE

Portulaca

1. Leaf axils without trichomes or these inconspicuous and <1 mm long; petals yellow [2]
1. Leaf axils with conspicuous trichomes, mostly >3 mm long; petals various [3]
2. Primary root tuberous, with filamentous fibrous roots; branches 0.5-2 mm wide; leaf blade 1.5-9 mm long, 0.5-5 mm wide; inflorescence of (1)3-4(6) sessile flowers per node; hypanthium 2-2.5 mm wide; style lobes 3-4; fruit ~2 mm wide; seeds ~0.5 mm long, ~0.5 mm wide; in pockets within exposed, surficial flat rock among pine rocklands or rockland hammock, clearings, and firebreaks … P. minuta
2. Roots slender and uniformly attenuate (sometimes somewhat tuberous) with filamentous fibrous roots,; branches 0.5-4 mm wide; leaf blade 2-20(30) mm long, 1-10(15) mm wide; inflorescence of (1)2-8 sessile flowers per node; hypanthium 2.5-6(10) mm wide; style lobes (3)4-6; fruit (2)4-5(9) mm wide; seeds (0.6)0.7-1.2 mm long, 0.5-1 mm wide; various, primarily disturbed, habitats … P. oleracea
3. Leaf blades 3-8 mm wide, broadly oblanceolate; petals pink to purple … P. amilis
3. Leaf blades 1-2.5 mm wide, subterete, subulate to linear-oblanceolate; petal color varied [4]
4. Flowers 2.5-5.5 cm wide; petals 15-25 mm long, of various colors; seeds 0.75-1 mm wide; petals of various colors … P. grandiflora
4. Flowers 0.5-1.5 cm wide; petals 3-8 mm long, mostly pink or yellow; seeds 0.4-0.7 mm wide [5]
5. Primary stems mostly herbaceous; petals pink to purple; capsule cap conic; seeds black … P. pilosa
5. Primary stems somewhat woody; petals yellow; capsule cap hemispheric; seeds mostly brownish … P. rubricaulis

*__Portulaca amilis__ Speg. {AFP} —
^*Portulaca grandiflora* Hook. {AFP} —
__Portulaca minuta__ Correll {AFP} — First documented in 2013 (Bradley et al. in Weakley et al. 2019); very similar to *P. oleracea*, and, perhaps, *P. tuberculata* León.
__Portulaca oleracea__ L. {AFP} —
__Portulaca pilosa__ L. {AFP} —
__Portulaca rubricaulis__ Kunth {AFP} —

TALINACEAE

Talinum

1. Inflorescence racemose; pedicel 3-angled, distinctly thicker distally; petals >6mm long; stigma 1, 3-lobed … T. fruticosum
1. Inflorescence paniculate; pedicel terete, mostly uniformly slender; petals <7 mm long; stigmas 3, linear … T. paniculatum

*__Talinum fruticosum__ (L.)Juss. {AFP} —
*__Talinum paniculatum__ (Jacq.)Gaertn. {AFP} —

SANTALALES

SANTALACEAE

Santalum

^*Santalum album* L. {AFP} —

VISCACEAE
Phoradendron
1. Stem internodes somewhat angled or quadrangular; scale-like leaves (cataphylls) at the base of a branch (generally sheathing or appressed to the stem) perpendicular to the midrib of the subtending leaf (transverse basal phyllotaxy); fruit white to yellowish white ... P. leucarpum
1. Stem internodes terete; scale-like leaves (cataphylls) at the base of a branch (generally sheathing or appressed to the stem) in line or the same plane as the midrib of the subtending leaf and branch, its back to the stem or midrib (median basal phyllotaxy); fruit yellow to orange to reddish ... P. rubrum

Phoradendron leucarpum (Raf.)Reveal & M.C.Johnst. {AFP} —
Phoradendron rubrum (L.)Griseb. {AFP} — SE.

SCHOEPFIACEAE
Schoepfia
Schoepfia schreberi J.F.Gmel. {AFP} —

XIMENIACEAE
Ximenia
Ximenia americana L. {AFP} —

ROSIDS

VITALES

VITACEAE

1. Leaves simple [2]
1. Leaves compound [4]
2. Pith brown; inflorescence a thyrse; petals connate distally … Vitis
2. Pith white; inflorescence corymb-like cyme; petals free [3]
3. Tendrils 2-branched; petals and stamens 5 … Ampelopsis cordata
3. Tendrils unbranched; petals and stamens 4 … Cissus
4. Leaves bi- to tripinnately compound … Nekemias arborea
4. Leaves trifoliolate or palmately compound [5]
5. Leaves palmately compound … Parthenocissus quinquefolius
5. Leaves trifoliolate [6]
6. Leaflet blade truncate at base, distinct from petiolule; inflorescence axillary; seeds usually 1 per fruit … Causonis trifolia
6. Leaflet blade usually decurrent along petiolule; inflorescence leaf-opposed; seeds 2-4 per fruit … Cissus trifoliata

Ampelopsis

Ampelopsis cordata Michx. {AFP} —

Causonis
*****Causonis japonica*** (Thunb.)Raf. {AFP} —
*****Causonis trifolia*** (L.)Mabb. & J.Wen {AFP} —

Cissus
1. Young stems strongly quadrangular, >7 mm wide … C. quadrangularis
1. Young stems terete to obscurely angular, <5 mm wide [2]
2. Leaves trifoliolate … C. trifoliata
2. Leaves simple (plant sometimes with densely-branched leafless growths caused by *Mycosyrinx* fungus) … C. verticillata

*****Cissus quadrangularis*** L. {AFP} —
Cissus trifoliata (L.)L. {AFP} —
Cissus verticillata (L.)Nicolson & C.E.Jarvis {AFP} —

Nekemias
Nekemias arborea (L.)J.Wen & Boggan {AFP} —

Parthenocissus
Parthenocissus quinquefolia (L.)Planch. {AFP} —

Vitis : Revised by Moore (1991).
1. Bark rather smooth, tightly adherent; stems below new growth with conspicuous lenticels; pith continuous at the nodes; tendrils unbranched; leaf blades unlobed, coarsely toothed, the surfaces glabrous to glabrate (sometimes hirtellous on the veins) [2]
1. Bark furrowed, in longitudinal strips and fibers, sometimes peeling; lenticels inconspicuous; pith with diaphragms at the nodes; tendrils branched; leaf blades lobed or unlobed, coarsely to shallowly toothed, the surfaces glabrous to densely hairy [4]
2. Infructescence of 2-8 berries, the berry >1.5 cm wide, thick-skinned with moderate pulp, with lenticels; seed >7 mm long; panhandle and north Florida … V. rotundifolia
2. Infructescence of 4-30 berries, the berry <1 cm wide, thin-skinned with little pulp, lacking lenticels; seed <7 mm long; mostly peninsular Florida [3]
3. Leaf blades mostly 4-8 cm wide, with 8 or more teeth per side; raphe of seed broad and rounded; various habitats of the peninsula … V. munsoniana
3. Leaves 2-3.5 cm wide, with 7 or fewer teeth per side; raphe of seed narrow and ridged; vines usually shrub-like or trailing, at times weakly; climbing scrub of Polk, Highlands Counties … V. munsoniana var. pygmaea
4. Leaf blade densely white, gray-white, to reddish white tomentose on the lower surface, the color of the blade surface (except the veins) completely occluded, the blade tip rounded to acute, infrequently short-acuminate … V. shuttleworthii
4. Leaf blade glabrate to arachnoid on the lower surface, the color of the blade surface generally visible or partly so betwixt the hairs, the blade tip acute to acuminate [5]
5. Leaves arachnoid to hirtellous, especially on the lower surface, rarely subglabrous; teeth of leaf blade often shallow, less frequently pronounced with a wide triangular base, usually ca. 1 mm long or less [6]

5. Mature leaf blades glabrous or with pubescence limited to tufts of hairs in axils of main veins on lower surface and sometimes on upper petiole, green beneath; teeth of leaf blade mostly pronounced on a wide triangular base, usually >1 mm high [8]
6. Young stems slightly to distinctly angled, nodes sometimes red-banded; leaf blade unlobed to obscurely lobed, the lower surface not glaucous; fruits 4-8 mm wide, not or slightly glaucous; generally of mesic to hydric habitats ... V. simpsonii
6. Young stems terete, nodes not red-banded; leaf blade unlobed to deeply lobed, the lower surface glaucous (sometimes somewhat obscured by hairs); fruits 8-20 mm wide, glaucous; generally of mesic to xeric habitats (V. aestivalis) [7]
7. Internodes shorter; leaf blades with 3-5 lobes with acute tips; flowering earlier ... V. aestivalis var. aestivalis
7. Internodes longer; leaf blades with 5-9 lobes with rounded tips; flowering later ... V. aestivalis var. smalliana
8. Flowers bisexual; fruit longer than wide, skin adherent to pulp ... V. vinifera
8. Flowers unisexual; fruit about as long as wide, skin separable from pulp [9]
9. Young stems purplish red to reddish chestnut; nodal diaphragm 2.5-4 mm thick; leaf blade lobed, the lobes acuminate ... V. palmata
9. Young stems gray, green, brown, or suffused purplish partially or on one side only; nodal diaphragm 1-2.5 mm thick; leaf blade unlobed or obscurely lobed, the lateral lobes acute (rarely acuminate), the central lobe acute to acuminate ... V. vulpina

Vitis aestivalis Michx. var. ***aestivalis*** {AFP} — The name *V. rufotomentosa* has been promoted (rufotomentose young leaves), but revisionary studies are lacking to clarify this entity. A nuclear DNA phylogeny found that two samples from Florida (Sumter & Taylor Co.) referred to as *V. rufotomentosa* formed a clade sister to a Florida sample (Leon Co.) identified as *V. aestivalis*, together embedded in a broader *V. aestivalis* clade which further included another Floridian (Gadsden Co.) *V. aestivalis* (Talavera et al. 2023). A plastome analysis recovered two Florida samples tenatively called *V. rufotomentosa* to form a clade apart from other samples (from Texas and New Jersey) (Wen et al. 2018).

Vitis aestivalis Michx. var. ***smalliana*** (L.H.Bailey)Comeaux — Used for development of some cultivars. See Munson (1909); Comeaux & Fantz (1987).

Vitis munsoniana J.H.Simpson ex Planchon var. ***munsoniana*** — Peninsula, possibly endemic or nearly endemic. Involved in hybridization of some muscadine cultivars.

• ***Vitis munsoniana*** J.H.Simpson ex Planchon var. ***pygmaea*** ined. — Central peninsula. Informally proposed as a formae by Rogers & Mortensen (1979).

Vitis palmata Vahl {AFP} —

Vitis rotundifolia Michx. {AFP} — Panhandle and north peninsula (also southeastern USA). Muscadine grape, sometimes cultivated, often for wine. Some cultivars probably from North Carolina.

• ***Vitis shuttleworthii*** House {AFP} — This species formed part of the pedigree of the Stover cultivar.

Vitis simpsonii Munson {AFP} — Often confused with *V. aestivalis* (Comeaux & Fantz 1987). Some of the plants included under the informal subspecies *divergens, sola* pertain here (Rogers & Mortensen 1979), but also probably include some of *V. aestivalis*.

^*Vitis vinifera* L. — Involved in many hybrids such as Golden Muscat (x *V. labrusca*), and subsequent hybridizations with *V. aestivalis* and *V. simpsonii* to produce local cultivars (Mortensen 1971).

Vitis vulpina L. {AFP} —

SAXIFRAGALES

ALTINGIACEAE

Liquidambar

1. Leaf blades primarily 3-lobed ... L. formosana
1. Leaf blades primarily 5-lobed ... L. styraciflua

^*Liquidambar formosana* Hance —
Liquidambar styraciflua L. {AFP} — The resin has been used as a source of storax or styrax (Anonymous 1930) and as a chewing gum (Hale 1853).

HAMAMELIDACEAE

1. Leaf blade 1-4.5 cm long, unlobed, entire ... Loropetalum chinense
1. Larger leaf blades 4-16 cm long, toothed, sinuate, or lobed [2]
2. Leaf blade toothed primarily at the apex, the underside densely stellate-pubescent; inflorescence terminal, elongate, 8- to 30-flowered spikes; calyx lobes 5-7(-9), erect; petals absent; stamens 12-34; filaments white, 4-17 mm; staminodes absent; capsules in groups of more than 3 ... Fothergilla milleri
2. Leaf blade margin repand to sinuate, the underside glabrous to sparsely stellate-pubescent; inflorescence axillary, (1-)3(-5)-flowered clusters; calyx lobes 4, reflexed; petals 4, liguliform, yellow or reddish, deep red to orange; stamens 4, very short; staminodes 4; capsules solitary or 2-3 together ... Hamamelis

Fothergilla

Fothergilla milleri W.D.Phillips & J.E.Haynes {AFP} — SE.

Hamamelis

1. Sepals and petals red to red and pale yellow; flowering late Dec-Feb ... H. ovalis
1. Sepals and petals yellow-green to yellow; flowering Nov-mid Dec ... H. virginiana

Hamamelis ovalis S.W.Leonard {AFP} —
Hamamelis virginiana L. {AFP} — Traditionally used for various medicinal applications, and to produce the modern astringent witch hazel extract, especially from the bark of young stems and twigs (Fulling 1953).

Loropetalum

^*Loropetalum chinense* (R.Br.)Oliv. {AFP} —

CRASSULACEAE

1. Leaf blades 20-150 mm long; petals united for much of their length ... Kalanchoe
1. Leaf blades 2-20 mm long; petals free or only slightly connate at the base ... Sedum

Kalanchoe

1. Leaf blade ovate to obovate, mostly <1.7 times longer than wide [2]
1. Leaf blade or leaflets subterete, lanceolate, to elliptic, mostly >1.7 times times longer than wide [3]
2. Leaves green, yellowish, whitish, to reddish green; flowers erect ... K. blossfeldiana
2. Leaves gray-green to bluish green; flowers pendent ... K. fedtschenkoi

3. Flowers erect … K. crenata
3. Flowers pendent [4]
4. Leaves simple or compound, scarcely paler below; calyx 2.5-5 cm long, lobed only at the tip; corolla lobed only at the tip and reddish only at the tip … K. pinnata
4. Leaves simple, paler below and often dark-mottled; calyx 0.6-1.6 cm long, deeply lobed; corolla deeply lobed and reddish throughout except for the nectar chamber [5]
5. Leaf blade subterete, toothed only near the tip … K. delagoensis
5. Leaf blade flattened, toothed along most of the margin [6]
6. Larger leaf blades >3 cm wide, triangular to lanceolate, with teeth at the base of the blade below the widest point, the blade base auriculate, cordate, to truncate (broadly cuneate in immature plants) … K. daigremontiana
6. Leaf blades <3 cm wide, narrowly lanceolate, usually without teeth at the base of the blade below the widest point, the blade base cuneate to subtruncate … K. ×houghtonii

^*Kalanchoe blossfeldiana* Poelln. {AFP} —
^*Kalanchoe crenata* (Andrews)Haw. {AFP} —
^*Kalanchoe daigremontiana* Raym.-Hamet & H.Perrier {AFP} —
****Kalanchoe delagoensis*** Eckl. & Zeyh. {AFP} —
****Kalanchoe ×houghtonii*** D.B.Ward (*K. daigremontiana* × *K. delagoensis*) {AFP} —
^*Kalanchoe fedtschenkoi* Raym.-Hamet & H.Perrier {AFP} —
****Kalanchoe pinnata*** (Lam.)Pers. {AFP} —

Sedum
1. Leaves alternate, the blade 2-8 mm long … S. acre
1. Leaves whorled, the blade 8-25 mm long [2]
2. Leaves 4(-5) per whorl, blade linear-elliptic or linear-lanceolate; flowering shoots erect … S. mexicanum
2. Leaves 3(-4) per whorl, blades narrowly rhombic-elliptic to widely lanceolate; flowering shoots creeping or ascending … S. sarmentosum

^*Sedum acre* L. {AFP} —
^*Sedum adolphi* Raym.-Hamet —
^*Sedum mexicanum* Britton {AFP} —
^*Sedum sarmentosum* Bunge {AFP} —

HALORAGACEAE
1. Leaves whorled, pseudowhorled, or opposite, occasionally alternate; flowers 4-merous … Myriophyllum
1. Leaves alternate; flowers 3-merous … Proserpinaca

Myriophyllum
1. Plants dioecious (only pistillate in North America); leafy stems mostly emersed; petiole 5-7 mm long; all leaves pectinate; emersed leaves mostly 2.5-3.5 cm long … M. aquaticum
1. Plants monoecious, lower flowers pistillate, upper staminate; leafy stems mostly submersed; petiole <2 mm long; submersed leaves pectinate; emersed leaves pinnately divided, serrate, or bract-like, <2 cm long [2]
2. Leaves gray-green to dark green, strictly whorled, typically retaining their shape upon drying; stamens 8 … M. spicatum

2. Leaves green to reddish green, pseudowhorled to alternate (may appear whorled), typically collapsing and entangled upon drying; stamens 4 [3]
3. Leaf division typically 12-28 per leaf; distal flowers whorled; fruit prominently beaked … M. heterophyllum
3. Leaf divisions typically 8-16 per leaf; distal flowers alternate; fruit short-beaked [4]
4. Bracts 1-3 mm long, shorter than most inflorescence internodes, pectinate to entire; fruit surface smooth to papillose … M. laxum
4. Bracts 4-10 mm long, subequal to longer than inflorescence internodes, pinnatifid to pectinate; fruit surface tuberculate … M. pinnatum

****Myriophyllum aquaticum*** (Vell.)Verdc. {AFP} —
Myriophyllum heterophyllum Michx. {AFP} —
Myriophyllum laxum Shuttlew. ex Chapm. {AFP} —
Myriophyllum pinnatum (Walter)Britton et al. {AFP} —
****Myriophyllum spicatum*** L. {AFP} —

Proserpinaca
1. Emersed leaves serrate; submersed pectinate leaves mostly with 8-14 pairs of divisions 5-30 mm long, the medial portion along the midrib of the leaf usually >1 mm wide; fruits 2.3-6.0 mm wide … P. palustris
1. Emersed leaves pinnatifid to pectinate; submersed pectinate leaves with 4-12 pairs of divisions 2-7.5 mm long, the medial portion along the midrib of the leaf usually 1 mm or less wide; fruits 2.0-3.6 mm wide … P. pectinata

Proserpinaca palustris L. {AFP} —
Proserpinaca pectinata Lam. {AFP} —

PENTHORACEAE
Penthorum
Penthorum sedoides L. {AFP} —

GROSSULARIACEAE
Ribes
Ribes echinellum (Coville)Rehder {AFP} —FT. SE.

ITEACEAE
Itea
Itea virginica L. {AFP} —

CROSSOSOMATALES

STAPHYLEACEAE
Staphylea
Staphylea trifolia L. {AFP} — SE.

GERANIALES

GERANIACEAE

1. Leaves pinnately divided; stamens 5, staminodes 5; mericarps rounded basally, retaining the seed, the awn spiraled … Erodium
1. Leaves palmately divided; stamens 10; mericarps pointed basally, ejecting the seed, the awn recurved … Geranium

Erodium
1. Lateral leaflets (or leaf lobes) mostly 0.5-1.5 cm long, 0.5-1.5 cm wide and with deep sinuses nearly reaching the midvein; apical pits of mericarps eglandular, subtended by 0-1 furrows, sometimes slightly marked … Erodium cicutarium
1. Lateral leaflets (or leaf lobes) 1.5-3 cm long, 1-2.5 cm wide and the margins mostly shallowly incised with few sinuses reaching halfway to the midvein; apical pits of mericarps sessile-glandular, subtended by 1(2) furrows … Erodium moschatum

**Erodium cicutarium* (L.)L'Her. ex Aiton {AFP} —
**Erodium moschatum* (L.)L'Her. —

Geranium
1. Perennial with a creeping rhizome; larger leaf blades 7.5-16 cm wide; petals 12-18 mm long … G. maculatum
1. Annual, without a rhizome; larger leaf blades 2-6 cm wide; petals 4-6 mm long [2]
2. Fruiting pedicels >2 times longer than the calyx; sepals awn-tipped; beak of mature style column 2-6 mm long seed surface reticulate-alveolate … G. bicknellii
2. Fruiting pedicels shorter than the calyx; sepals with a minute callous tip; beak of the mature style column 1-2 mm long; seed surface smooth or with irregular rows of alveolae … G. carolinianum

**Geranium bicknellii* Britton {AFP} —
Geranium carolinianum L. {AFP} —
Geranium maculatum L. {AFP} — SE.

Pelargonium
1. Leaf blades deeply dissected … Pelargonium graveolens
1. Leaf blade margins crenate, sometimes with few sinuses reaching halfway to the petiole … Pelargonium hybridum

^*Pelargonium graveolens* L'Hèr. —
^*Pelargonium ×hybridum* (L.)L'Hèr. (*inquinans* × *zonale*) —

MYRTALES

COMBRETACEAE
1. Leaves opposite [2]
1. Leaves alternate, sometimes pseudowhorled in tight spirals [3]
2. Erect shrub or tree; petiole with glands; petals ca. 1 mm long and greenish white … Laguncularia racemosa
2. Scandent shrub or vine; petiole eglandular; petals 1-2 cm long and white to pink to red … Combretum indicum
3. Petiole with glands; flowers and fruits densely congested in spherical or oblong heads … Conocarpus erectus

3. Petiole eglandular; flowers and fruits generally clearly separated from one another in spikes [4]
4. Leaves not pseudowhorled on short shoots; leaf blades somewhat succulent; sepals ca. 1 mm long, green; petals present, 4-5 mm long ... Lumnitzera racemosa
4. Leaves commonly pseudowhorled in tight spirals on short shoots; leaf blades chartaceous; sepals 1-15 mm long, green to white; petals absent ... Terminalia

Combretum
^*Combretum indicum* (L.)DeFilipps {AFP} —

Conocarpus
Conocarpus erectus L. {AFP} —

Laguncularia
Laguncularia racemosa (L.)C.F.Gaertn. {AFP} —

Lumnitzera
****Lumnitzera racemosa*** Willd. {AFP} —

Terminalia
1. Larger leaf blades 1-9 cm long, without domatia; extrafloral nectaries absent; calyx lobes scarcely developed, persistent at apex of fruit; fruit 5-10 mm long (sometimes parasitized fruits long and skinny like a string bean) [2]
1. Larger leaf blades 8-35 cm long, the undersurface without domatia or with domatia in the vein axils along the midrib or along the secondary veins; extrafloral nectaries absent or present at the blade base or petiole apex; calyx lobes well developed, deltoid, deciduous from apex of fruit; fruit 10-70 mm long [3]
2. Stems with few to no thorns; larger leaf blades 2.5-9 cm long; inflorescence elongate to paniculiform, 3-19 cm long; fruit 4-10 mm long ... T. buceras
2. Stems with numerous thorns; larger leaf blades 1-2(3.5) cm long; inflorescence subcapitate to umbelliform, 1-3(-4) cm long; fruit 3-4 mm long ... T. molinetii
3. Petiole apex or leaf blade base with raised or stalked extrafloral nectaries; leaf blade mostly oblong-elliptic, with 12-20 per major lateral veins on each side the midrib, the undersurface without domatia ... T. arjuna
3. Petiole or leaf blade base without extrafloral nectaries or with surficial extrafloral nectaries; leaf blade mostly obovate, with 3-12 major lateral veins on each side of the midrib, the undersurface with domatia in the vein axils along the midrib or along the secondary veins [4]
4. Leaf blade 16-35 cm long, 9-15 cm wide, usually truncate to auriculate at the base or sometimes cuneate, the apex usually shortly acuminate; fruit with 2 ridges or wings, 3.5-7 cm long ... T. catappa
4. Leaf blade to 8-18 cm long, 3-6 cm wide, cuneate at the base, the apex rounded to obscurely acuminate; fruit without ridges or wings, 1.2-2 cm long ... T. muelleri

^*Terminalia arjuna* (Roxb. ex DC.)Wight & Arn. {AFP} —
****Terminalia buceras*** (L.)C.Wright {AFP} — Allegedly some cultivars are hybrids with *T. molinetii* or *T. spinosa*. Almost certainly not native to Florida, but doubt has been raised (Francis 1989; Morton 1993). Early reports of it are from Elliott's Key (*Sargent s.n.*, 19 Apr 1886, USF; *Curtiss 5451*, 3 Jul 1895, USF). Little, Jr. (1976) considered it non-native, noting

the Elliott Key specimens were from a "grove of trees on the border of the forest near a house and a pineapple plantation."

*__Terminalia catappa__ L. {AFP} —
__Terminalia molinetii__ M.Gómez {AFP} —
*__Terminalia muelleri__ Benth. {AFP} —

MELASTOMATACEAE

1. Herb [2]
1. Shrub or tree [3]
2. Leaf blades 0.4-1.5 cm long; petals 5, 0.5-0.6 cm long; anther connective with ventral appendages; ovary 3-locular ... Acisanthera erecta
2. Leaf blades 0.8-7.5 cm long; petals 4, 0.7-2.5 cm long; anther connective with dorsal appendages; ovary 4-locular ... Rhexia
3. Leaf blade upper surface smooth, glabrous or sparingly lepidote, and the lower surface white-lepidote; petals 0.5-0.7 cm long; fruit a berry ... Miconia bicolor
3. Leaf blade upper surface rough, with appressed trichomes, and the lower surface strigose-pilose to sericeous; petals 2.5-4 cm long; fruit a capsule ... Melastoma malabathricum

Acisanthera

++__Acisanthera erecta__ J.St.-Hil. {AFP} —

Heterotis

^*Heterotis rotundifolia* (Sm.)Jacq.-Fél. {AFP} —

Melastoma

*__Melastoma malabathricum__ L. {AFP} —

Miconia

__Miconia bicolor__ (Mill.)Triana {AFP} — ST.

Rhexia

1. Leaves ovate, suborbiculate, elliptic, to narrowly elliptic, 1-3 cm long, 1-3.5 times as long as wide, margins finely serrate [2]
1. Leaf blades linear, linear-elliptic, narrowly elliptic, spatulate, oblanceolate, to lanceolate, (1.3)2-7.5 cm long, 3-13 times as long as wide, margins entire, obscurely toothed, to finely serrate [4]
2. Leaf blades mostly elliptic, 1.5-3 cm long; inflorescences diffuse, not obscured by bracts; anthers 3-4 mm long, usually curved ... R. parviflora
2. Leaf blades mostly ovate to suborbiculate, 1-2 cm long; inflorescences condensed, mostly obscured by foliaceous bracts anthers 1-2 mm long, straight or nearly so [3]
3. Plant 9-40 cm tall; leaf margins eciliate or ciliate; hypanthium stipitate-glandular ... R. nuttallii
3. Plant 18-70 cm tall; leaf margins ciliate; hypanthium glabrous except for a few hairs near the apex or along calyx lobes ... R. petiolata
4. Leaf blades 2-3 cm long; petals yellow; anthers straight or nearly so, 1-2.5 mm long ... R. lutea
4. Leaf blades 3-7.5 cm long; petals pink; anthers usually curved, 3-11 mm long; [5]
5. Stem glabrous; leaves glabrous to minutely serrulate; hypanthium stipitate-glandular; seeds 1-2 mm long ... R. alifanus

5. Stem glabrate to stipitate-glandular; leaves stipitate-glandular, strigose, hirsute, ciliate, or villous; hypanthium stipitate-glandular to glabrous; seeds 0.6-0.8 mm long [6]
6. Faces of the stem subequal and flat [7]
6. Faces of the stem unequal, one opposing pair wide and convex, the other pair narrow and concave [8]
7. Leaf blades linear, oblong, to oblanceolate, 1-5 mm wide, twisted and spreading-ascending to nearly vertical, margins entire to minutely crenulate and stipitate-glandular; hypanthium (4)5-7(8) mm long; petals 1-1.2 cm long … R. salicifolia
7. Leaf blades linear-lanceolate, ovate, to elliptic, (7)10-25(35) mm wide, spreading, margins serrate to serrulate, eciliate, eglandular; hypanthium (6)7-10 mm long; petals 1.5-2 cm long … R. virginica
8. Hypanthium 9-20 mm long, glabrous or stipitate-glandular; petals 1.5-2.5 cm long; anthers 7-11 mm long [9]
8. Hypanthium 6-11 mm long, usually stipitate-glandular, sometimes glabrous; petals 1-1.5 cm long; anthers 5-8 mm long [10]
9. Leaf blades linear-oblong to linear-lanceolate; petals 1.5-2 cm long; hypanthium stipitate-glandular … R. cubensis
9. Leaf blades lanceolate to linear-lanceolate; petals 2-2.5 cm long; hypanthium glabrous to glabrate (calyx rim and lobes stipitate-glandular) … R. nashii
10. Leaf blades primarily linear; petals white to pale pink … R. mariana var. exalbida
10. Leaf blades lanceolate, elliptic, to narrowly ovate; petals pink … R. mariana var. mariana

Rhexia alifanus Walter {AFP} —
Rhexia cubensis Griseb. {AFP} —
Rhexia lutea Walter {AFP} —
Rhexia mariana L. var. ***exalbida*** Michx. {AFP} —
Rhexia mariana L. var. ***mariana*** {AFP} —
Rhexia nashii Small {AFP} —
Rhexia nuttallii C.W.James {AFP} —
Rhexia parviflora Chapm. {AFP} — SE.
Rhexia petiolata Walter {AFP} —
Rhexia salicifolia Kral & Bostick {AFP} — ST.
Rhexia virginica L. {AFP} —

MYRTACEAE

subf. Myrtoideae
- Eucalypteae: Blakella, Eucalyptus
- Melaleuca: Callistemon, Melaleuca
- Myrteae: Eugenia, Feijoa, Mosiera, Myrcia, Myrcianthes, Pimenta, Plinia, Psidium, Rhodomyrtus
- Syzygieae: Syzygium

1. Leaves usually alternate, sometimes opposite; fruit a woody capsule [2]
1. Leaves opposite to subopposite; fruit a fleshy berry [4]
2. Leaf blades typically with basal and parallel secondary veins; inflorescence of spikes; flowers without a calpytra, the sepals and petals distinct … Melaleuca
2. Leaf blades pinnate-veined; inflorescence of umbels; flowers with a circumscissile-dehiscent calyptra, without distinct sepals or petals [3]

3. Stems, buds, petioles, and/or leaf blades reddish hirsute; operculum double (sepaline and petaline), sepaline usually shed earlier than petaline and leaving a scar; ovules within each locule arranged irregularly, lacking distinct columns; xylem vessels of wood solitary in transection ... Blakella torelliana
3. Stems, buds, petioles and leaf blades glabrous; operculum single (petaline) or double (sepaline and petaline); ovules within each locule arranged in 2, 4, 6 (5) columns; xylem vessels of wood grouped in transection ... Eucalyptus
4. Buds and lower leaf blade surface whitish-tomentose; leaf blade with basal secondary veins parallel to margin and extending to the apex ... Rhodomyrtus tomentosa
4. Buds and lower leaf blade surface glabrous or pubescent, but not whitish tomentose; leaf blade venation various [5]
5. Leaf blade with numerous punctae forming a roughened, bullate surface texture ... Myrcianthes fragrans
5. Leaf blade surface generally smooth [6]
6. Leaf blades typically with 10-40 fine, close-set, nearly straight, subparallel ascending secondary veins on each side of the midrib [7]
6. Leaf blades typically with 0-22 well-spaced secondary veins visible on each side of the midrib, the secondary veins not with the above combination of characters or the secondary veins not apparent [8]
7. Leaf blades usually 3-6 cm long; calyx a circumscissile calyptra; petals absent ... Myrcia
7. Leaf blades 8-24 cm long; calyx not forming a calyptra; petals present, sometimes forming a calyptra ... Syzygium
8. Sepals and petals 5-merous; fruit 1.5-8 cm long; ovary 3-6 carpellate ... Psidium
8. Sepals and petals 4-merous; fruit 0.4-1.5 cm long; ovary 2-4 carpellate [9]
9. Leaf blades mostly 9-20 cm long ... Pimenta dioica
9. Leaf blades 2-8 cm long [10]
10. Leaf blades mostly 2.5-8 cm long, 1-4 cm wide; petiole 1-9 mm long; calyx open in bud; sepals 1-4 mm long ... Eugenia
10. Leaf blades mostly 1-4 cm long, 0.8-3 cm wide; petiole 1-3 mm long; calyx closed or nearly so in bud; sepals 3-4 mm long ... Mosiera longipes

Blakella: A segregate of *Eucalyptus*, and once placed in *Corymbia* (Crisp et al. 2024; Cook et al. 2025).
^*Blakella torelliana* (F.Muell.)Crisp & L.G. Cook {AFP} —

Eucalyptus: Segregate genera are recognized here, while Nicolle et al. (2024) argued for retaining *Eucalyptus* in the broader sense.

1. Leaves (esp. sterile shoots) and inflorescence nodes usually opposite [2]
1. Leaves and inflorescence nodes alternate [3]
2. Plant not glaucous; leaf blades lance-ovate to lanceolate; inflorescence terminal and compound of numerous umbels; bark with multicolored with longitudinal lines of greenish, gray, orangish, brownish, and/or pinkish; ... E. deglupta
2. Plant often strongly glaucous (esp. the leaf blade undersides); leaf blades orbicular, ovate, to lanceolate; inflorescence axillary, of a single umbel; bark fibrous of tight, rough, woven gray strips ... E. cinerea

3. Leaf blades mostly less than 2 cm wide; peduncle < 2 mm wide; pedicel distinct from rounded base of flower bud and fruit; fruit hemispheric to ovoid … E. camaldulensis subsp. acuta
3. Leaf blades mostly more than 1.5 cm wide; peduncle usually > 2 mm wide; pedicel indistinct from widened base of flower bud and fruit; fruit subpyriform or cylindric [4]
4. Bark shedding, smooth on the upper trunk; length from base of pedicel to fruit rim <1 cm; fruit subpyriform … E. grandis
4. Bark retained, rough throughout trunk; length from base of pedicel to fruit rim >1 cm; fruit subpyriform-cylindric … E. robusta

**Eucalyptus camaldulensis* Dehnh. subsp. *acuta* Brooker & M.W.McDonald {AFP} —
^*Eucalyptus cinerea* F.Muell. ex Benth. —
^*Eucalyptus deglupta* Blume —
**Eucalyptus grandis* W.Hill ex Maiden {AFP} —
**Eucalyptus robusta* Sm. {AFP} —

Eugenia

1. Leaf blade obovate, with a narrower angle towards the base, the apex broadly rounded; petioles, pedicels, and peduncles densely puberulent … E. foetida
1. Leaf blade ovate, with a narrower angle towards the tip, the apex usually acuminate; petioles, pedicels, and peduncles glabrous to glabrate or puberulent [2]
2. Leaves subsessile, the petiole 0-3(4) mm long [3]
2. Leaves petiolate, the petiole 2-8 mm long [4]
3. Leaf blade apex with a strong acumen; pedicels 10-30 mm long; calyx lobes equal, 4-8 mm long; fruit ribbed, 12-15 mm long or wide … E. uniflora
3. Leaf blade apex rounded to obtuse; pedicels 5-10 mm long; calyx lobes unequal, 1-4 mm long; fruit not ribbed, 7-12 mm long or wide… E. coronata
4. Leaf blade lustrous on the upper surface, abruptly narrowed to an acuminate apex … E. confusa
4. Leaf blade dull to slightly lustrous on the upper surface, gradually narrowed to an acuminate apex [5]
5. Leaf blade rather chartaceous, with conspicuous whitish lateral veins on the upper surface when fresh (obscure when dry) and typically lacking a light green margin, the midrib prominent on the lower surface for half or more of the blade length; pedicels 1-3 mm long; larger sepals ca. 1 mm long … E. axillaris
5. Leaf blade rather coriaceous, the lateral veins unapparent or obscure on the upper surface when fresh and dry, with a apparent light green margin on the upper surface, the midrib slightly prominent only at the base of the blade underside; pedicels 8-20(30) mm long; larger sepals 2-4 mm long … E. rhombea

Eugenia axillaris (Sw.)Willd. {AFP} —
Eugenia confusa DC. {AFP} — SE.
^*Eugenia coronata* Schumach. {AFP} —
Eugenia foetida Pers. {AFP} —
Eugenia rhombea (O.Berg)Krug & Urb. {AFP} — SE.
**Eugenia uniflora* L. {AFP} —

Feijoa

^*Feijoa sellowiana* (O.Berg)O.Berg —

Melaleuca

1. Leaf blades < 4 mm wide … M. linariifolia
1. Largest leaf blades > 4 mm wide [2]
2. Leaf blades elliptic; flowers joined to the inflorescence axis in clusters of 3; filaments white to greenish to yellow … M. quinquenervia
2. Leaf blades linear-elliptic; flowers joined to the inflorescence singly; filaments red … M. viminalis

^*Melaleuca linariifolia* Sm. {AFP} —
****Melaleuca quinquenervia*** (Cav.)S.T.Blake {AFP} —
****Melaleuca viminalis*** (Sol. ex Gaertn.)Byrnes {AFP} — Central and southern peninsula. Disturbed wetlands. Widely cultivated.

Mosiera

Mosiera longipes (O.Berg)Small {AFP} — ST.

Myrcia: The neotropical genus *Myrcia* has been expanded to include ~750 species, including the entire genus *Calyptranthes* (Lucas & Sobral 2011; Lucas et al. 2011).

1. Young twigs angled; petiole 4-8 mm long; midrib sunken towards the base of the blade; inflorescence tomentulose; pedicel to 2 mm long; calyptra obtuse to rounded … M. aromatica
1. Young twigs terete; petiole 2-4 mm long; midrib prominent towards the base of the blade; inflorescence glabrous; pedicel 2-5 mm long; calpytra apiculate … M. zuzygium

Myrcia neopallens A.R. Lourenço & E.Lucas {AFP} — ST. The taxonomy of McVaugh (1963) is here preferred, over Burton et al. (2021, 2022) who placed this as *Myrcia chytraculia* (L.) A.R. Lourenço & E.Lucas var. *pauciflora* (O. Berg)G.P. Burton & E. Lucas. At the varietal rank, var. *pauciflora* has priority for this taxon, but there is hesitancy to place it with *M. chytraculia*, this being endemic to Cuba and Jamaica. Material from Mexico (*Myrcia aromatica* Schltdl., glabrate, stems mostly terete, type from Veracruz?; var. *mexicana* (Lundell)McVaugh, type from Chiapas) and Costa Rica (var. *williamsii* (Standl.)McVaugh) was also kept separate by McVaugh (1963). At the present, it seems best to use the epithet *neopallens* as a species until further clarification of relationships.
Myrcia zuzygium (L.)A.R.Lourenço & E.Lucas {AFP} — SE. The taxonomy of McVaugh (1963) is here preferred to Burton et al. (2021, 2022) who placed this as a variety of *M. chytraculia*. *Myrcia zuzygium* is clearly distinct from *M. neopallens* in Florida.

Myrcianthes

1. Cymes usually with 3-7 flowers; corolla <1 cm wide … Myrcianthes fragrans var. fragrans
1. Cymes usually with 10-14 flowers; corolla >1 cm wide … Myrcianthes fragrans var. simpsonii

Myrcianthes fragrans (Sw.)McVaugh var. ***fragrans*** {AFP} — ST.
•***Myrcianthes fragrans*** (Sw.)McVaugh var. ***simpsonii*** (Small)R.W.Long— ST.

Pimenta

^*Pimenta dioica* (L.)Merr. {AFP} —

^*Pimenta racemosa* (Mill.)J.W.Moore —

Plinia
^*Plinia cauliflora* (Mart.)Kausel —

Psidium
1. Leaf blade glabrous on the lower surface, the veins generally even with the blade surface … P. cattleianum
1. Leaf blades pubescent on the lower surface, the midrib and secondary veins impressed on the upper surface and prominent on the lower surface [2]
2. Leaf blades with 9-22 secondary veins on each side of the midrib; petals 13-22 mm long; fruit 2-10 cm long … P. guajava
2. Leaf blades with 6-10 secondary veins on each side of the midrib; petals 10-14 mm long; fruit 1-2.5 cm long … P. guineense

****Psidium cattleyanum*** Sabine {AFP} — Though originally published as "*cattleianum*", correctable to "*cattleyanum*".
****Psidium guajava*** L. {AFP} —
****Psidium guineense*** Sw. {AFP} —

Rhodomyrtus
****Rhodomyrtus tomentosa*** (Aiton)Hassk. {AFP} —

Syzygium
1. Petiole usually >1 cm long; leaf blade usually >4 cm wide, abruptly acuminate, the major secondary veins closely set; inflorescence on older parts of branches, paniculate; flower buds 5-6 mm long; calyx truncate, the lobes inconspicuous; petals connate, calyptrate at anthesis … S. cumini
1. Petiole usually <1 cm long; leaf blade usually <5 cm wide, gradually acuminate, the major secondary veins relatively more widely spaced; inflorescence terminal, racemose; flower buds 25-30 mm long; calyx 4-lobed; petals free … S. jambos

****Syzygium cumini*** (L.)Skeels {AFP} —
^*Syzygium jambos* (L.)Alston {AFP} —
^*Syzygium malaccense* (L.)Merr. & L.M.Perry —
^*Syzygium paniculatum* Gaertn. —
^*Syzygium samarangense* (Blume)Merr. & L.M.Perry —

LYTHRACEAE
1. Shrub or tree with a definite trunk, usually >2 m tall when mature; petals 14-18 mm long; fruit woody, 9-15 mm long
1. Herbs or shrubs without a trunk or trunk weakly formed, usually <3 m tall when mature; petals to 15 mm long or absent; fruit not woody, <8 mm long [2]
2. Leaves petiolate, the petiole 3-10 mm long; leaf blades 3-20 cm long; pedicels 5-13 mm long; flowers usually 6 or more per node; petals 8-15 mm long … Decodon verticillatus
2. Leaves sessile or the petiole 3 mm long or less; leaf blades 0.5-10 cm long; pedicels usually 5 mm long or less, or to 30 mm long (in Cuphea aspera); flowers usually 10 or less per node; petals to 7 mm long or absent [3]

3. Hypanthium asymmetrical at the base (enlarged and spurred on one side) ... Cuphea
3. Hypanthium symmetrical at the base [4]
4. Hypanthium and fruit cylindrical or oblong ... Lythrum
4. Hypanthium and fruit campanulate to globose [5]
5. Inflorescence terminal and bracteate ... Rotala rotundifolia
5. Flowers in the axils of typical leaves [6]
6. Flowers or fruits 2 or more per leaf axil, 4 or more per node ... Ammannia
6. Flowers or fruits solitary in the leaf axil, 1-2 per node [7]
7. Petals absent; fruit indehiscent ... Didiplis diandra
7. Petals present or absent; fruit dehiscent ... Rotala ramosior

Ammannia
1. Leaf blades linear-lanceolate, rarely elliptic; pedicel 1-2 mm long; petals 4-5, often seen; style filiform, 1.5-3 mm long, exserted ... A. coccinea
1. Leaf blades oblong, oblong-elliptic, spatulate, to linear-lanceolate; pedicel 0-1 mm long; petals 0-4(6), very rarely seen; style stubby, ca. 0.5 mm long ... A. latifolia

Ammannia coccinea Rottb. {AFP} —
Ammannia latifolia L. {AFP} —

Cuphea
1. Nodes with usually at least some whorled leaves; pedicel 8-30 mm long ... C. aspera
1. Nodes with opposite leaves only; pedicel 0-3 mm long [2]
2. Stems, leaf margins, and/or hypanthium usually conspicuously glandular-hirtellous ... C. carthagenensis
2. Stems, leaf margins, and hypanthium glabrous or only sparsely glandular-hirtellous [3]
3. Internodes <0.5 times as long as the subtending leaves; leaf blades mostly linear-lanceolate, with 4-9 major lateral veins on each side of the midrib ... C. hyssopifolia
3. Internodes ca. 0.5-1.5 times as long as the subtending leaves; leaf blades mostly ovate to elliptic, with 2-4 major lateral veins on each side of the midrib ... C. strigulosa

•***Cuphea aspera*** Chapm. {AFP} — SE.
****Cuphea carthagenensis*** (Jacq.)J.F.Macbr. {AFP} —
****Cuphea hyssopifolia*** Kunth {AFP} —
****Cuphea strigulosa*** Kunth {AFP} —

Decodon
Decodon verticillatus (L.)Elliott {AFP} —

Didiplis
Didiplis diandra (Nutt. ex DC.)A.W.Wood {AFP} —

Lagerstroemia Plants of the *L. indica* group are widely cultivated, many perhaps being hybrids. A key is provided to distinguish among the putative groups cultivated or hybridized, but whether definitive identifications can be made is unclear.

1. Leaf blades 10-30 cm long; petal blade 15-30 mm long and wide; fruit 15-30 mm long and wide ... L. speciosa

1. Leaf blades 2-12 cm long; petal blade 2-11 mm long and wide; fruit 5-11 mm long, 5-10 mm wide (cultivated L. indica group) [2]
2. Leaf blades with 9-12 secondary veins per side, upper side persistently minutely pubescent, lower side persistently densely pubescent; calyx sinus auriculate with a persistent appendage ca. 2 mm long and 3 mm wide ... L. limii
2. Leaf blades with 3-12 secondary veins per side, upper side glabrous to ephemerally minutely pubescent, lower side glabrous to minutely pubescent; calyx sinus lacking an auricle or persistent appedage [3]
3. Petioles 5-10 mm long; leaf blades 7-11.5 cm long, with 7-12 secondary veins per side, the apex abruptly strongly acuminate; fruit 8-10 mm long; seeds 7-9 mm long, the wings longer than the body ... L. fauriei
3. Petioles 2-6 mm long; leaf blades 2-7 cm long, with 3-8 secondary veins per side, the apex rounded, obtuse, subacute, to abruptly short-acuminate; fruit 5-8 mm long; seeds 4-6 mm long, the wings subequal to shorter than the body [4]
4. Stems 4-angled and 4-winged; petioles 0-2 mm long; leaf blades 3.5-6.5 cm long, with 3-6 secondary veins per side; hypanthium 4-5.5 mm long, with 0 or 6 veins reaching sinuses; sepal lobes 2-3 mm long; petal blade 5-10 mm long, 7-14 mm wide, the claw 5-10 mm long; bark white, weathering to light to medium gray or gray-brown ... L. indica
4. Stems subterete, sometimes with 4 weak angles or low ridges; petiole 1-6 mm long; leaf blades 2-11.5 cm long, with (4)5-12 secondary veins per side; hypanthium 2-5 mm long, with 0 or 12 weak to strong veins, reaching sinuses and midline of sepals; sepal lobes 1.5-4 mm long; petal blade 2-11 mm long, 2-10(14) mm wide, the claw 2.5-12 mm long; bark white to orange-brown weathering to light or dark gray to dark brown[5]
5. Petioles 1-3 mm long; leaf blades 3.5-8 cm long, with (4)5-8 secondary veins per side ... L. egolfii
5. Petioles 2-6 mm long; leaf blades 2-7 cm long, with 3-6 seconday veins per side ... L. subcostata

^*Lagerstroemia indica* L. {AFP} — Sparingly naturalized.
^*Lagerstroemia speciosa* (L.)Pers. —

Lythrum

1. Fertile above-ground stems 10–50 cm tall, flowering portion of the stem to 13 cm long; larger leaves 0.5–1.4 cm long, 1.2–5 times longer than wide; flowering Feb–Nov [2]
1. Fertile above-ground stems 40–150 cm tall, flowering portion of the stem to 40 cm long; larger leaves 1.3–5 cm long, 3–19 times longer than wide; flowering May–Oct [3]
2. Stem internodes usually, or at least some, conspicuously longer than the subtending leaves; leaves opposite, usually distinctly petiolate, the petiole 0.5–1 mm long, with a discernible gap between the stem and the base of the blade, larger leaves 0.7–1.4 cm long, 1.2–5 times longer than wide; floral tube narrowly obconic; flowering Feb–Jun ... L. flagellare
2. Stem internodes subequal to shorter than the subtending leaves; leaves opposite and sometimes alternate distally, sessile or the petiole to 0.2 mm long, the base of the blade adjacent to the stem, larger leaves 0.5–0.9 cm long, 1.8–2.7 times longer than wide; floral tube subcylindric; flowering late May–Nov ... L. nieuwlandii
3. Leaves opposite to subopposite, very rarely alternate, the larger ones 6.8–19 times longer than wide; petals white to faintly lilac, usually with a darker midrib; of brackish areas ... L. lineare
3. Leaves opposite to subopposite proximally, often becoming alternate distally especially along the fertile portion of the stem, the larger ones 3–9 times longer than wide; petals

commonly lilac, pink, to purple, sometimes white to faintly lilac, usually with a darker midrib; mainly of freshwater areas, rarely brackish [4]
4. Branches mostly spreading to ascending; leaves narrowly lanceolate, lanceolate-ovate, lanceolate-elliptic, elliptic, to oblong, 3–5 times longer than wide, mostly spreading to ascending, floral tube narrowly obconic to subcylindric, 3–4.2 mm long; epicalyx segments and sepals subequal; petals 1.5–3 mm long, 0.5–1.5 mm wide … L. curtissii
4. Branches mostly ascending to strict; leaves linear-lanceolate, narrowly lanceolate, lanceolate, narrowly elliptic, to elliptic, 3–9 times longer than wide, mostly ascending to strict; floral tube subcylindric, 5–6 mm long; epicalyx segments ca. 2 times length of sepals; petals 2–6.5 mm long, 1.5–3 mm wide … L. alatum var. lanceolatum

Lythrum curtissii Fernald {AFP} — SE.
•***Lythrum flagellare*** Shuttlew. ex Chapm. {AFP} — SE.
Lythrum lanceolatum Elliott {AFP} —
Lythrum lineare L. {AFP} —
•***Lythrum nieuwlandii*** A.R.Franck & C.Werner {AFP} — Northwest peninsula. First collected by Buckley in 1843.

Punica
^*Punica granatum* L. —

Rotala
1. Leaf blades linear to oblanceolate; flowers in the axils of typical leaves … Rotala ramosior
1. Leaf blades broadly elliptic to orbicular; inflorescence terminal and bracteate … Rotala rotundifolia

Rotala ramosior (L.)Koehne {AFP} —
*****Rotala rotundifolia*** (Buch.-Ham. ex Roxb.)Koehne {AFP} —

ONAGRACEAE
1. Floral tube absent; sepals persistent or tardily caducous after anthesis; flowers 4- or 5-merous; petals yellow or white … Ludwigia
1. Floral tube present (1.5-25 mm long); sepals deciduous after anthesis; flowers 4-merous; petals yellow, white, or pink (often fading to pink or red) … Oenothera

Ludwigia
1. Leaves opposite … Key A
1. Leaves alternate [2]
2. Sepals 0.9-7 mm long; petals 0.5-6 mm long or absent; stamens 4-5 per flower, as many as the sepals; ovary 0.8-6 mm long; fruit 1-10(12) mm long … Key B
2. Sepals 3-13(16) mm long; petals 3.5-20(26) mm long; stamens 8-10 per flower, twice the number of sepals; ovary 4-22 mm long; fruit 10-50 mm long [3]
3. Sepals 5(-7) … Key C
3. Sepals 4 … Key D

Key A
1. Pedicels 6-45 mm long [2]
1. Pedicels 0-2(5) mm long [3]

2. Pedicel mostly subequal to shorter than the subtending leaf; petals 4-5 mm long … L. arcuata
2. Pedicel usually much longer than the subtending leaf; petals 7-11 mm long … L. brevipes
3. Plant densely strigulose … L. spathulata
3. Plant glabrate [4]
4. Sepals 1-2.1 mm long; petals absent; anthers 0.2-0.4 mm long, the pollen shed as monads; faces of fruit with a longitudinal band or obscure line running down from the sepal midrib, the appearing dissimilar from the corners … L. palustris
4. Sepals 1.8-5 mm long; petals present but often quickly deciduous; anthers 0.4-0.9 mm long, the pollen sheds as tetrads; fruit faces and corners similar in appearance … L. repens

Key B
1. Fruit much longer than wide [2]
1. Fruit about as long as wide [4]
2. Leaf blades elliptic, lanceolate, ovate, to oblanceolate, larger ones 4-12 mm wide; petals absent; fruit with a groove descending from the middle of the calyx lobe … L. glandulosa
2. Leaf blades linear to linear-oblanceolate, larger ones 1-4 mm wide; petals present; fruit without a groove [3]
3. Calyx lobes 2-3 mm long, much shorter than the quadrangular fruit … L. linearis
3. Calyx lobes 5-6 mm long, ca. 0.6-1 times longer than the subcylindric fruit … L. linifolia
4. Pedicel apparent, 3-20 mm long [5]
4. Pedicel scarcely evident, 0-2 mm long [8]
5. Leaf blade base cuneate-attenuate … L. alternifolia
5. Leaf blade base truncate, rounded, to obtuse [6]
6. Proximal leaf blades glabrous; style 7-10 mm long, longer than the sepals … L. virgata
6. Proximal leaf blades pubescent; styles to 3 mm long, shorter than the sepals [7]
7. Plant hirsute, rarely glabrate, hairs to 1.3 mm long, usually with several branches distally … L. hirtella
7. Plant pubescent to puberulent, hairs mostly <0.5 mm long, usually unbranced or few near the base … L. maritima
8. Flowers several, densely congested in a terminal spike with bract-like leaves … L. suffruticosa
8. Flowers mostly separated along a leafy raceme or interrupted spike, or few in a congested, bracteate terminal spike [9]
9. Plant hirtellous [10]
9. Plant glabrous to strigillose [11]
10. Sepals whitish along the upper surface and often tinged pink along the midvein and edge, the apex long-acuminate to subcuspidate and reflexed at tip at least; anther 0.6-1.3 mm long, filament 0.7-1.1 mm long; style glabrous, 0.25-0.5 mm long; nectary disc hirtellous between the lobes … L. pilosa
10. Sepals greenish on the upper surface, the apex acuminate and ascending; anther ca. 0.3 mm long, filament 1.5-2.5 mm long; style hirtellous, 1-2 mm long; nectary disc glabrous … L. ravenii
11. Capsule quadrangular or winged [12]
11. Capsule not angular, not winged [13]
12. Stem usually ridged or winged; sepals whitish and subequal to the fruit … L. alata
12. Stems usually smooth to obscurely ridged; sepals greenish, ca. ½ as long as the fruit … L. lanceolata
13. Sepals 1-2 mm long; fruit 1-1.5 mm long; seeds reddish brown … L. microcarpa
13. Sepals 2-4 mm long; fruit 1.5-7 mm long; seeds tan to yellowish [14]
14. Leaf blades obovate, spatulate, to oblanceolate … L. curtissii

14. Leaf blades linear-lanceolate to oblong-elliptic … L. sphaerocarpa

Key C
1. Stems prostrate to decumbent, rooting [2]
1. Stems erect to ascending, not rooting at least distally [3]
2. Bracteoles below hypanthium lanceolate; hypanthium subequal to shorter than the sepals … L. grandiflora
2. Bracteoles below hypanthium deltoid to ovate; hypanthium longer than the sepals … L. peploides subsp. glabrescens
3. Fruit cylindric, 3-5 cm long (much longer than the pedicel), 2-4 mm wide … L. leptocarpa
3. Fruit obconic, quadrangular, 1-3 cm long (subequal to the pedicel), 5-10 mm wide … L. peruviana

Key D
1. Stem conspicuously 4-winged [2]
1. Stem without wings or slightly ridged on the angles [3]
2. Leaf blades lanceolate, ovate-lanceolate, to elliptic … L. decurrens
2. Leaf blades linear-lanceolate … L. longifolia
3. Stems hirsute to villous [4]
3. Stems glabrate [5]
4. Fruit more than twice as long as the sepals, with a distinct ridge descending from the sepal midvein … L. octovalvis
4. Fruit subequal to slightly longer than the sepals, without a ridge continuous with the sepal midvein … L. peruviana
5. Calyx lobes 3-4 mm long; petals 4-5 mm long … L. erecta
5. Calyx lobes (5)10-15 mm long; petals (10)15-30 mm long [6]
6. Pedicel shorter than the hypanthium; hypanthium subequal to slightly longer than the sepals … L. bonariensis
6. Pedicel longer than the hypanthium; hypanthium more than twice as long as the sepals … L. octovalvis

Ludwigia alata Elliott {AFP} — Putative hybrids documented with *L. suffruticosa*.
Ludwigia alternifolia L. {AFP} —
Ludwigia arcuata Walter {AFP} — Putative hybrids documented with *L. repens*.
*****Ludwigia bonariensis*** (Micheli)H.Hara {AFP} —
Ludwigia brevipes (B.H.Long)Eames {AFP} —
Ludwigia curtissii Chapm. {AFP} — Putative hybrids documented with *L. linifolia*.
Ludwigia decurrens Walter {AFP} —
Ludwigia erecta (L.)H.Hara {AFP} —
Ludwigia glandulosa Walter {AFP} —
*****Ludwigia grandiflora*** (Michx.)Greuter & Burdet {AFP} —
Ludwigia hirtella Raf. {AFP} —
Ludwigia lanceolata Elliott {AFP} —
Ludwigia leptocarpa (Nutt.)H.Hara {AFP} —
Ludwigia linearis Walter {AFP} —
Ludwigia linifolia Poir. {AFP} —
*****Ludwigia longifolia*** (DC.)H.Hara {AFP} —
Ludwigia maritima R.M.Harper {AFP} —
Ludwigia microcarpa Michx. {AFP} —

Ludwigia octovalvis (Jacq.)P.H.Raven {AFP} —
Ludwigia palustris (L.)Elliott {AFP} —
Ludwigia peploides (Kunth)P.H.Raven subsp. ***glabrescens*** (Kuntze)P.H.Raven {AFP} —
++***Ludwigia peruviana*** (L.)H.Hara {AFP} —
Ludwigia pilosa Walter {AFP} — Putative hybrids documented with *L. alata, L. glandulosa*, *L. sphaerocarpa,* and *L. suffruticosa*.
Ludwigia ravenii C.I Peng {AFP} —
Ludwigia repens J.R.Forst. {AFP} —
Ludwigia simpsonii Chapm.
Ludwigia ×simulata Small (*L. lanceolata* × *L. pilosa*) {AFP} —
Ludwigia spathulata Torr. & A.Gray {AFP} —
Ludwigia sphaerocarpa Elliott {AFP} —
Ludwigia suffruticosa Walter {AFP} —
Ludwigia virgata Michx. {AFP} —

Oenothera

1. Inflorescence mostly elongate with several flowers, few to no leaves; petals white to pink (often fading to pink or reddish), 4-15 mm long, 2-5 mm wide; fruit indehiscent, nut-like, with 1-4 seeds (sect. Gaura; formerly genus Gaura) ... Key A
1. Inflorescence mostly with few flowers among leafy stems; petals yellow (often fading to pink or reddish), or pink to white, 5-45 mm long, 3-18 mm wide; fruit a dehiscent capsule with numerous seeds ... Key B

Key A
1. Pedicel slender to filiform, 2-8 mm long [2]
1. Pedicel stubby, 0-1 mm long [3]
2. Petals 4-6 mm long ... O. filipes
2. Petals 8-10 mm long ... O. sinuosa
3. Flowers dense, overlapping along the inflorescence; sepals 2-3.5 mm long; petals 1.5-3 mm long ... O. curtiflora
3. Flowers spaced, mostly not overlapping or only a few overlapping near the inflorescence tip; sepals 4-15 mm long; petals 4-20 mm long [4]
4. Stem short-hirsute; sepals 12-15 mm long; petlas 12-20 mm long ... O. lindheimeri
4. Stem sparsely loose-uncinate; sepals 4-12 mm long; petals 4-10 mm long ... O. simulans

Key B
1. Leaf blades linear-filiform, <1 mm wide (sect. Peniophyllum) ... O. linifolia
1. Leaf blades >1 mm wide [2]
2. Peduncles of flower buds sometimes recurved or drooping; petals white to pink (sect. Hartmannia) [3]
2. Peduncles usually erect; petals yellow [4]
3. Flower buds; petals 5-8 mm long, 3-5 mm wide ... O. rosea
3. Flower buds often drooping; petals 10-25 mm long, 7-20 mm wide ... O. speciosa
4. Plant densely strigulose throughout, the leaf blades grayish green; of coastal habitats [5]
4. Plant glabrate to strigulose or villous, usually the leaf blades and sepals green and not consistently densely strigulose; habitats various [6]
5. Basal leaves 5-14 cm long, 1-2 cm wide, the cauline 0.5-2.5 cm wide; sepals 1.3-3.3 cm long; petals 2-4.5 cm long; stigma exserted beyond the anthers ... O. drummondii

5. Basal leaves 4-8 cm long, 0.7-1 cm wide, the cauline 0.3-1.5 cm wide; sepals 0.3-1.1 cm long; petals 0.5-1.6 cm long; stigma not exserted beyond the anthers ... O. humifusa
6. Plant usually 0.8-3 m tall; larger leaves (5)8-25 cm long, 1-5 cm wide; seeds prismatic and angled [7]
6. Plant usually <1 m tall; larger leaves to 10 cm long, 2 cm wide; seeds ellipsoid to subglobose or ovoid and angled [9]
7. Calyx lobes 2.5-5 cm long; petals 4-6 cm long; styles 2-5 mm long, longer than the anthers ... O. grandiflora
7. Calyx lobes 1-2.5 cm long; petals 1-2.5 cm long; styles 3-17 mm long, subequaling the anthers [8]
8. Hypanthium and fruit villous to hirsute ... O. biennis
8. Hypanthium and fruit glabrate ... O. nutans
9. Flowers mostly opening around sunrise and closing around evening; fruit 4-angled, obovoid to broadly clavate ... O. fruticosa
9. Flowers opening in evening and closing around morning; fruit subcylindric [10]
10. Petal apex acute to rounded ... O. curtissii
10. Petal apex truncate to emarginate [11]
11. Petals 2.5-4 cm long; style 4-7.5 cm long, the part exserted from the floral tube 1.5-3 cm long, stigma lobes exserted above the anthers ... O. grandis
11. Petals 0.5-2.5 cm long; style 2-5 cm long, the part exserted from the floral tube 0.3-2(2.5) cm long, stigma lobes surrounded by or slightly elevated above the anthers ... O. laciniata

Oenothera biennis L. {AFP} —
Oenothera curtiflora W.L.Wagner & Hoch {AFP} —
Oenothera curtissii Small {AFP} —
****Oenothera drummondii*** Hook. {AFP} —
Oenothera filipes (Spach)W.L.Wagner & Hoch {AFP} —
Oenothera fruticosa L. {AFP} —
Oenothera grandiflora L'Hér. ex Aiton {AFP} —
^*Oenothera grandis* Smyth {AFP} — Known only from a 1931 specimen from Bartow collected by J.B. McFarlin while he was conducting his disseration through the University of Michigan. The species is sometimes cultivated for its large flowers, and perhaps this is the source of its occurence in Florida (Dietrich & Wagner 1988). Native to south-central USA & Mexico (Tamaulipas).
Oenothera humifusa Nutt. {AFP} —
Oenothera laciniata Hill {AFP} —
^*Oenothera lindheimeri* (Engelm. & A.Gray)W.L. Wagner & Hoch {AFP} — Waif in Liberty Co., roadside scrub (native to LA, TX). Otherwise occasionally cultivated in N FL.
Oenothera linifolia Nutt. {AFP} —
Oenothera nutans G.F.Atk. & Bartlett {AFP} —
****Oenothera rosea*** L'Hér. ex Aiton —
Oenothera simulans (Small)W.L.Wagner & Hoch {AFP} —
****Oenothera sinuosa*** W.L.Wagner & Hoch {AFP} —
****Oenothera speciosa*** Nutt. {AFP} —

ZYGOPHYLLALES

KRAMERIACEAE
Krameria

Krameria lanceolata Torr. {AFP} —

ZYGOPHYLLACEAE

1. Shrub or tree [2]
1. Herb [3]
2. Leaflets 10-20 per leaf; corolla yellow; fruit of (3)4(5) winged mericarps, seeds without arils … Gonopterodendron
2. Leaflets 4-10 per leaf; corolla blue to purple; fruit a dehiscent 2- or 5-lobed capsule, the seed covered in a fleshy red aril … Guaiacum
3. Leaflets 5-15 mm wide, in 2-4(-6) pairs per leaf; fruit with 10 tuberculate mericarps … Kallstroemia
3. Leaflets 2-5(-8) mm wide, in 3-10 pairs per leaf; fruit with 5 prickled mericarps … Tribulus

Gonopterodendron

^*Gonopterodendron arboreum* (Jacq.)Godoy-Bürki —

Guaiacum

1. Leaflets mostly 4 per leaf; petals tomentulose; fruit obcordate, with 2 wing-like angles … G. officinale
1. Leaflets (4)6-8(10) per leaf; petals glabrous; fruit obovoid, with 5 wing-like angles … G. sanctum

^*Guaiacum officinale* L. {AFP} —
Guaiacum sanctum L. {AFP} — SE.

Kallstroemia: Revised by Porter (1969).

1. Ovary and fruit glabrous, or sometimes sparingly strigose at base or rarely to base of style … K. maxima
1. Ovary and fruit densely appressed short-pilose … K. pubescens

++***Kallstroemia maxima*** (L.)Hook. & Arn. {AFP} — Likely an early introduction or native only to the lower keys (e.g. Key West, *Rugel 67*).
****Kallstroemia pubescens*** (G.Don)Dandy {AFP} — Apparent hybrids reported with *K. maxima* in northern South America (Porter 1969: 106).

Tribulus

1. Peduncle 2-3 cm long, usually longer than the subtending leaf; petals 8-22 mm long; intrastaminal glands connate, forming a 5-lobed ring around the ovary base; fruit pilose only … T. cistoides
1. Peduncle 0.5-1 cm long, usually shorter than the subtending leaf; petals 3-5 mm long; intrastaminal glands free; fruit usually puberulent and pilose … T. terrestris

****Tribulus cistoides*** L. {AFP} —
****Tribulus terrestris*** L. {AFP} —

Fabids

FABALES

FABACEAE

subf. Cercidioideae: Bauhinia, Cercis, Phanera
subf. Caesalpinoideae
    Gleditsia
    Cassia, Chamaecrista, Senna
    Delonix, Parkinsonia, Peltophorum
    Caesalpinia, Denisophytum, Tara Ticanto
subf. Mimosoideae
    Acacia, Albizia, Calliandra
    Mimosa, Senegalia
    Desmanthus
    Acaciella
    Leucaena
    Vachellia
    Lysiloma
    Pithecellobium
    Adenanthera
    Neptunia
subf. Papilionoideae

‘Dalbergioids’
Amorpheae: Amorpha, Dalea
Dalbergieae: Aeschynomene, Arachis, Dalbergia, Stylosanthes, Zornia
‘Genistoids’: Crotalaria, Baptisia, Sophora, Lupinus
‘Hologalegina’
Callerya
Wisteria
Lotus
Sesbania
Gliricidia
Robinia
Lathyrus, Pisum, Vicia
Medicago, Melilotus, Trifolium, Trigonella
Astragalus
‘Milletioids’: Abrus, Canavalia, Galactia, Pongamia, Tephrosia,
Lonchocarpus
Derris
Piscidia
Centrosema, Clitoria
Apios, Mucuna
Alysicarpus, Desmodium, Grona
Cajanus, Rhynchosia
Kummerowia, Lespedeza
Lablab, Phaseolus, Vigna, Leptospron, Sigmoidotropis, Strophostyles, Macroptilium
Erythrina, Psophocarpus
Amphicarpaea, Pueraria, Glycine, Teramnus, Pediomelum
Brachypterum, Chapmannia, Coronilla, Ctenodon, Dichrostachys, Enterolobium,
Guilandina, Hylodesmum, Indigofera, Lotononis, Orbexilum, Pachyrhizus, Tamarindus

1. Leaves simple, 1-foliolate, or phyllodal (sometimes compound as seedlings or young sprouts) … Key A
1. Leaves compound [2]
2. Tendrils terminating some or all leaves … Key B
2. Tendrils absent, or if present then axillary and not terminating the leaves [3]
3. Leaves 2-foliolate … Key C
3. Leaves with 3 or more leaflets [4]
4. Leaves mostly 3-foliolate (occasionally some simple or 2-foliolate) [5]
4. Leaves mostly with more than 3 leaflets (occasionally a few with 3, e.g. Chapmannia, Dalbergia sissoo) [7]
5. Leaflets denticulate to crenulate, with the lateral veins markedly straight and subparallel or nearly so, and sometimes slightly exserted from the leaflet margin, reticulate venation not evident … Key D
5. Leaflets entire to lobed, lateral veins not straight and parallel, or if so then not exserted at the margin, reticulate venation sometimes evident [6]
6. Leaves palmately 3-foliolate, the petiolules of all 3 leaflets arising from the same point, no rachis evident beyond the pair of lateral leaflets, stipels lacking … Key E
6. Leaves pinnately 3-foliolate, the rachis extending beyond the pair of lateral leaflets and differentiated from and typically articulate with the petiolule of the terminal leaflet, the junction of the petiolule and rachis sometimes with stipels … Key F

7. Leaves palmately compound with 4-11 leaflets … Key G
7. Leaves pinnately compound [8]
8. Leaves 2-pinnately compound (sometimes the petiole and rachis highly reduced, e.g. Parkinsonia; rarely 3-pinnately compound), the primary rachis essentially branching with secondary rachises, leaflets borne on the lateral secondary rachises … Key H
8. Leaves once-pinnately compound, the leaflets borne directly on the central, primary rachis [9]
9. Leaves without a terminal leaflet straight with the rachis, the leaflets opposite or alternate, if alternate then fruit a loment … Key I
9. Leaves with a terminal leaflet usually straight with the rachis, or if without a terminal leaflet, then fruit not a loment [10]
10. Leaflets mostly (3-)4-10 per leaf … Key J
10. Leaflets mostly 10-60 per leaf … Key K

Key A: Leaves simple
1. Woody vine, shrub, or tree [2]
1. Herbs or subshrubs, prostrate to erect, or vining [5]
2. Leaves phyllodal, 5-12 times longer than wide; flowers actinomorphic, each with more than 20-100 stamens … Acacia
2. Leaves not phyllodal, 0.5-3 times longer than wide; flowers zygomorphic, each with 3-10 stamens [3]
3. Leaf blade bi-lobed to strongly emarginate … Bauhinia
3. Leaf blade not bilobed nor strongly emarginate [4]
4. Erect shrub to tree; leaf blade ovate-cordate, palmately 5- to 9- veined at the base; corolla pink; fruit dehiscent … Cercis
4. Low spreading shrub to scandent vine; leaf blade ovate to broadly elliptic, only pinnately veined; corolla white; fruit indehiscent … Dalbergia
5. Herbaceous, twining vine; petiole often winged; leaf blade deeply sagittate at the base … Centrosema sagittatum
5. Trailing to erect herb; petiole not winged or petiole absent; leaf blade cordate to cuneate at the base [6]
6. Leaf blades gland-dotted [7]
6. Leaf blades eglandular [8]
7. Leaf blades linear-oblong to narrowly lanceolate; fruit indehiscent … Orbexilum virgatum
7. Leaf blades reniform, oblate, to ovate; fruit dehiscent … Rhynchosia
8. Stem densely silver or tawny sericeous to villous … Lupinus
8. Stem glabrous to sparsely pilose [9]
9. Stipules persistent, papery, whitish to pale tan; corolla pale red to purple; fruit a loment … Alysicarpus
9. Stipules persistent or not, foliaceous in texture, green; corolla white to yellow, to blue; fruit not a loment [10]
10. Stipules absent; leaf blades broadly ovate to elliptic-orbicular; stamens free … Baptisia
10. Stipules often decurrent, or absent; leaf blades obovate, oblanceolate, elliptic, to linear-elliptic; stamens monadelphous, all connate … Crotalaria

Key B: Leaves compound; tendrils present
1. Leaves 2-foliolate … Lathyrus
1. Leaves with 2-18 leaflets, usually at least some leaves with more than 2 leaflets [2]
2. Stipules subequal to or larger than the leaflets; style longitudinally folded … Pisum sativum

2. Stipules much smaller than the leaflets; style terete … Vicia

Key C: Leaves 2-foliolate
1. Woody vine; axillary tendrils often present … Phanera yunnanensis
1. Herbs; tendrils absent [2]
2. Petioles 1-4 mm long, much shorter than the leaflets; flower solitary … Chamaecrista rotundifolia
2. Petioles 4-20 mm long, subequal to the leaflets or nearly so; inflorescence spiciform, of several flowers … Zornia latifolia

Key D: Leaves 3-foliolate, denticulate with straight veins
1. Inflorescence elongate, (0.5)1-15(25) cm long, the flowers separated or scarcely overlapping … Melilotus
1. Inflorescence a dense head, 0.2-5 cm long, the flowers densely congested and overlapping, or the inflorescence of a solitary flower [2]
2. Petals persistent, concealing the mature fruit … Trifolium
2. Petals deciduous, the fruit visible, not concealed by the flowers [3]
3. Fruit reniform to tightly, spirally coiled, 1-15 mm wide and long … Medicago
3. Fruit linear, 10-40 mm long, 2-5 mm wide … Trigonella

Key E: Leaves palmately 3-foliolate, not denticulate
1. Leaves and calyces glandular-punctate … Pediomelum
1. Leaves and calyces without glands [2]
2. Lateral veins close-set, straight and parallel or nearly so; fruit indehiscent, with 1 seed … Kummerowia
2. Lateral veins arcuate or generally not straight and parallel, typically well spaced; fruit dehiscent, usually with 2 or more seeds [3]
3. Flowers densely congested, except for 1 or 2 proximal flowers … Lotononis
3. Flowers well-spaced along a raceme or solitary [4]
4. Stamens, 10, free, not united … Baptisia
4. Stamens monadelphous, the 10 stamens united into a tube (only distally free) … Crotalaria

Key F:
1. Leaflets, stems, calyces, or fruit gland-dotted [2]
1. Leaflets, stems, and calyces not gland-dotted [11]
2. Shrub or small tree … Cajanus
2. Herbs [3]
3. Leaflets linear-lanceolate … Orbexilum pedunculatum
3. Leaflets orbicular to ovate … Rhynchosia
4. Stem often with prickles; corolla red; seeds black and red … Erythrina herbacea
4. Stems without prickles; corolla not red; seeds brown [5]
5. Leaflets filiform, sometimes some linear … Dalea pinnata var. trifoliata
5. Leaflets not filiform [6]
6. Fruit indehiscent, 1-seeded or a several-seeded loment [7]
6. Fruit dehiscent, (1)2 or more seeds [10]
7. Petiole fused most of its length with the stipules, the stipules making the petiole appear winged and lobed near the apex; inflorescence a spike; corolla yellow … Stylosanthes
7. Petiole free, the stipules not amplexicaul; inflorescence a raceme or pseudoraceme; corolla not yellow [8]

8. Fruit 1-seeded, without uncinate trichomes … Lespedeza
8. Fruit a segmented loment with uncinate trichomes [13]
9. Leaflets stipellate; loment stipe included or slightly exserted from the persistent calyx … Desmodium
9. Leaflets estipelllate; loment stipe long exserted from the persistent calyx … Hylodesmum
10. Fruit with 4 wings that are irregularly dentate to roughened entire … Psophocarpus
10. Fruit without wings or merely with ribs [11]
11. Leaflet coarsely dentate or the terminal leaflet lobate distally … Pachyrhizus
11. Leaflets entire, sometimes lobate basally [12]
12. Corolla resupinate, with the curvaceous keel petal (pouch-like, enveloping the stamens) in the top position and the broad standard petal in the bottom position [13]
12. Corolla not resupinate, the curvaceous keel petal (pouch-like, enveloping the stamens) in the bottom position or twisted to the sides [15]
13. Standard petal (in bottom position) 1-2 cm wide; fruit 1-3.5 cm wide … Canavalia
13. Standard petal (in bottom position) 2-4 cm wide; fruit 0.3-1.1 cm wide [14]
14. Calyx lobes subequal to longer than the tube; lateral wing petals tightly appressed around keel petal; style bearded around stigma … Centrosema
14. Calyx lobes shorter than the tube; lateral wing petals loosely arranged, not tightly appressed to the keel petal; style bearded along one side … Clitoria
15. Stipules medifixed (peltate or appendiculate); corolla yellow or pink to purple … Vigna
15. Stipules basifixed; corolla not yellow [16]
16. Flowers not bilaterally symmetrical, the keel twisted or angled to the left or right side (sometimes only slightly, if not then the keel petal darkened at the tip) and the keel petal usually elongate, conspicuous, and exserted, or one of the wing petals oriented upwards and the other downwards [17]
16. Flowers bilaterally symmetrical, the keel petal held mostly straight outwards on the bottom of the flower [21]
17. One wing petal oriented in the top position, one wing petal in the bottom position, the keel and reduced standard petals held laterally, the conspicuous corolla color nearly uniformly red to dark violet … Macroptilium
17. Standard petal held in the top position and not reduced, the keel petal more or less in the bottom position, and the wings petals held laterally, the conspicuous corolla colors mostly white, pink, to light purple [18]
18. Keel petal dark purplish at the tip, the rest of the keel and corolla lighter in color … Strophostyles
18. Keel petal generally lighter in color, not dark purple at the tip [19]
19. Leaves with uncinate trichomes … Phaseolus
19. Leaves without uncinate trichomes [20]
20. Fruit mildly to strongly curved, 7-12 mm wide … Leptospron
20. Fruit nearly straight, 2-5 mm wide … Sigmoidotropis
21. Larger leaflets <4.3 cm wide along fertile portion of stem [22]
21. Larger leaflets >4.0 cm wide along fertile portion of stem [24]
22. Corolla reddish when fresh; fruit linear, not flattened … Indigofera
22. Corolla white to purplish; fruit flattened (at least those aboveground ones) [23]
23. Aboveground fruits with multiple seeds, belowground fruits with 1 seed … Amphicarpaea
23. Aboveground fruits with multiple seeds, without belowground fruits … Galactia
24. Stipels linear-oblong >0.5 mm wide, persistent … Lablab
24. Stipels setaceous, <0.5 mm wide, persistent or deciduous [25]

25. Stems, petioles, and leaflets glabrate, strigose, to pubescent; inflorescence pendent; fruit sometimes with urticating hairs … Mucuna
25. Stems, petioles and leaflets pilose, hirsute, or ciliate; fruit without urticating hairs … Pueraria

Key G:
1. Leaves 4-foliolate … Zornia
1. Leaves 5-11-foliolate [2]
2. Leaflets linear-oblong, oblanceolate, to obovate … Lupinus
2. Leaflets linear-filiform, some proximal ones sometimes linear-oblong … Orbexilum lupinellus

Key H:
1. Leaflets oblong-elliptic, elliptic, ovate, obovate, to lanceolate 5-40 mm wide [2]
1. Leaflets linear-oblong to linear-lanceolate, 0.3-6 mm wide [13]
2. Bark, stem, petiole, and/or rachis with prickles or thorns (rarely lacking in Gleditsia) [3]
2. Bark, stem, petiole, and rachis without prickles or thorns [5]
3. Erect tree; trunk and stems usually with stout thorns, often branching; petiole and rachis without prickles; inflorescence catikin-like, flowers congested and not showy; calyx and corolla similar and greenish; stamens 6-8; fruit without prickles … Gleditsia
3. Scrambling to scandent shrub; trunk or stems with recurved prickles; petiole and rachis usually prickly; inflorescence not catkin-like; calyx and corolla dissimilar, the corolla yellow; stamens 10; fruit prickly [4]
4. Flowers bisexual, in racemes; fruits always glabrous; seeds laterally compressed, smooth, without fracture lines … Denisophytum
4. Flowers unisexual, segregated into female and male racemes; fruits usually covered in spinescent bristles; seeds globose, with parallel fracture lines concentric with the small apical hilum … Guilandina
5. Leaves with one pair of pinnae each … Pithecellobium
5. Leaves usually with 2 or more pinnae [6]
6. Flowers not in dense heads, the individual flowers discernible, with showy, colorful petals, the stamens not colorful and showy [7]
6. Flowers in dense heads, the individual flowers scarcely discernible, with showy, colorful, exserted stamens (sometimes petaloid and sterile), the corolla reduced and not showy [9]
7. Fruit samaroid … Peltophorum
7. Fruit not samaroid [8]
8. Fruit dehiscent, with valves twisting upon dehiscence, laterally-compressed and subligneous to woody … Caesalpinia
8. Fruit indehiscent, somewhat fleshy, turgid and coriaceous … Tara
9. Petiole and rachis eglandular [10]
9. Petiole or rachis glandular [11]
10. Leaflets with 1 primary vein; stamens 10 per flower; seed red … Adenanthera
10. Leaflets with 2-4 basal veins; stamens more than 10 per flower; seed brown … Calliandra
11. Gland at the base to middle of the petiole … Albizia
11. Gland between the proximal pinnae or slightly below them [12]
12. Stipules foliaceous, subequal to larger than the leaflets; stamens white, connate … Lysiloma
12. Stipules much smaller than the leaflets, or with stipular spines; stamens bright yellow, free … Vachellia
13. Stems, petiole, and/or rachis with prickles or stipular spines [14]
13. Stems, petiole, and rachis without prickles or spines, or with axillary thorns only from short branchlets [17]

14. Trailing or scandent herbs; stamens 4-10 per flower … Mimosa
14. Spreading to erect shrubs or tree; stamens 10 or more per flower [15]
15. Stems with prickles, not stipular … Senegalia
15. Stems with stipular spines [16]
16. Leaves subsessile, the pinnae congested on a short spur; lowers not in dense heads, the individual flowers discernible, with showy, colorful petals, the stamens not colorful and showy … Parkinsonia)
16. Leaves petiolate, the pinnae well-spaced; flowers in dense heads, the individual flowers scarcely discernible, with showy, colorful, exserted stamens (sometimes petaloid and sterile), the corolla reduced and not showy … Vachellia
17. Petiole and rachis eglandular or with scattered stipitate glands [18]
17. Petiole and/or rachis with glands or nectaries, especially between the lower pinnae [22]
18. Stipules pinnately divided; flowers not in dense heads, the individual flowers discernible, with showy, colorful petals, the stamens not colorful and showy [19]
18. Stipules not pinnately divided; flowers in dense heads, the individual flowers scarcely discernible, with showy, colorful, exserted stamens (sometimes petaloid and sterile), the corolla reduced and not showy [20]
19. Petiole and rachis glabrate; … Delonix
19. Petiole and rachis reddish pubescent; … Peltophorum
20. Shrub or tree to 3(5) m; stamens more than 10 per flower … Acaciella
20. Trailing or scandent herbs; stamens 4-10 per flower [21]
21. Head with monomorphic flowers, the stamens pink … Mimosa
21. Head with the apical flowers staminate and the basal flowers with showy, yellow petaloid staminodes … Neptunia
22. Stems with axillary thorns modified from short branchlets … Dichrostachys
22. Stems without thorns [23]
23. Leaves 3-14 cm long [24]
23. Leaves 12-45 cm long [25]
24. Herbs or shrubs to 3 m; leaflets <1.5 mm wide; stamens 5 or 10 … Desmanthus
24. Shrubs or trees to 15 m; leaflets >1.5 mm wide; stamens more than 10 per flower … Lysiloma
25. Fruit reniform, semi-circular, to coiled, indehiscent … Enterolobium
25. Fruit elongate, dehiscent [26]
26. Gland at the base to middle of the petiole; stamens more than 10 per flower … Albizia
26. Gland between the lower pinnae, just below the pinnae, or above the middle of the petiole; stamens 10 per flower … Leucaena

Key I:
1. Leaflets uniformly 4 or nearly so; fruit subterranean … Arachis
1. Leaflets more than 4, at least on some leaves; fruit aerial [2]
2. Twining, climbing vine; seeds red and black … Abrus
2. Herb, shrub, or tree, not twining; seeds brownish [3]
3. Trunk and stems often with thorns; inflorescence catikin-like, flowers congested and not showy; calyx and corolla similar and greenish; stamens 6-8 … Gleditsia
3. Plant lacking thorns; inflorescence not catkin-like; calyx and corolla dissimilar, the corolla brightly colored; stamens 10 [4]
4. Fruit a loment, segmented and breaking apart into 1-seeded units … Aeschynomene
4. Fruit not a loment, the entire fruit usually dehiscing with 1 or more seeds [5]
5. Corolla papilionaceous, with a pouch-like keel petal containing the stamens and flanked by the lateral wing petals with the standard petal above and largest … Sesbania

5. Corolla not papilionaceous, with 3 or 5 petals, without a keel petal [6]
6. Tree with blocky bark; petals 3 … Tamarindus
6. Herb, shrub, or tree with smooth bark; petals 5 [7]
7. Shrubs to trees; extrafloral nectaries absent; pedicels 2-bracteolate at or shortly above the base; filaments of 3 lower antesepalous stamens sigmoidally curved (S-shaped) and its anther introrsely dehiscent by slits, 5 stamens with anthers dehiscent mostly by basal pores; fruit elongate, cylindric or compressed, indehiscent, pulpy or pithy within; seeds 1- or 2-seriate, their funicle filiform; seed-coat smooth, exareolate … Cassia
7. Herb, shrubs, or trees; extrafloral nectaries present or absent; pedicels ebracteolate or with bracteoles almost always inserted above or near the middle of the pedicel; filaments of all stamens straight or simply incurved, the anthers terminally dehiscent by slits or pores; fruit variable; funicle and seed variable [8]
8. Herbs; extrafloral nectaries absent or dish- or cup-shaped, rarely flat, secreting nectar from a concave (flat) surface; leaflets to 3 cm long; bracteoles 2 on the pedicel; androecium (suberratically) actinomorphic, the 2 cycles of stamens bearing anthers of different lengths; anther thecae ciliolate along the sutures; funicle deltately dilated; fruit elastically dehiscent, the valves coiling; seed-coat smooth or pitted, but exareolate … Chamaecrista
8. Herbs, shrubs, or trees; extrafloral nectaries absent or mounded, claviform, or phalloid, secreting nectar from a convex surface; leaflets mostly 1.5-13 cm long; bracteoles 0 on the pedicel; androecium commonly zygomorphic, the stamens tending to dwindle from abaxial to adaxial side of thefl,the 3 adaxial members commonly staminodal, but sometimes all 10 subequal fertile; anther-thecae naked along the sutures; funicle filiform; fruit indehiscent or dehiscent but not coiling; seed-coat smooth or minutely rugulose, sometimes with a closed areole on the face or margin … Senna

Key J:
1. Leaflets conspicuously gland-dotted; 4 petals epistemonous (arising from the staminal tube), 1 petal from the receptacle … Dalea
1. Leaflets not glandular-punctate or inconspicuously pellucid-punctate; all petals arising from the receptacle [2]
2. Woody vines, shrubs, or trees [3]
2. Herbs, sometimes vining [8]
3. Leaflets alternate … Dalbergia
3. Leaflets mostly opposite to subopposite [4]
4. Woody vines; branchlets not white-lenticellate [5]
4. Shrubs to trees; branchlets conspicuously white-lenticellate [6]
5. Leaflet underside with conspicuous reticulate venation; inflorescence erect to spreading; corolla upper petal (standard) without basal callosities … Callerya
5. Leaflet underside generally with obscured reticulate venation; inflorescence pendent; corolla upper petal (standard) with basal callosities … Wisteria
6. Leaflet underside finely areolate from the reticulate venation, the lateral veins close-set, mostly 9-18 on each side of the leaflet midrib; fruit with 4 papery wings … Piscidia
6. Leaflet underside generally with obscure reticulate venation, the lateral veins well-spaced, mostly 5-10 on each side of the leaflet midrib; fruit somewhat flattened, without wings [7]
7. Leaflets finely pellucid-punctate; fruit 5-13 cm long, with 1-3 seeds … Lonchocarpus
7. Leaflets not pellucid-punctate; fruit 2-5 cm long, with 1 seed … Pongamia
8. Inflorescence rachis stipitate-glandular … Chapmannia
8. Inflorescence rachis without glands [9]
9. Leaves sessile, the proximal leaflet pair stipule-like; inflorescence umbellate … Lotus

9. Leaves petiolate, the proximal leaflet pair distant from the stem or not stipule-like; inflorescence a raceme or pseudoraceme, or the flower solitary [10]
10. Plant with some trichomes 2-armed; keel petal quickly articulating downwards upon provocation, causing the stamens to flick and release a puff of pollen … Indigofera
10. Plant without 2-armed trichomes; keel petal not quickly moving nor quickly releasing the stamens upon provocation [11]
11. Flower resupinate, the keel petal in the upper position, the lower petal (standard) 3.5-5 cm long or wide … Clitoria
11. Flower not resupinate, the keel petal in the lower position, the upper petal (standard) 0.5-2 cm long or wide [12]
12. Leaflets with close-set straight and parallel lateral veins … Tephrosia
12. Leaflets with branching, curving, or interconnecting lateral veins, sometimes obscure [13]
13. Leaflets ovate with an acute to acuminate apex; keel petal strongly curved reaching the top or base of the flower; inflorescence of congested flowers … Apios
13. Leaflets elliptic to ovate with a subacute, rounded, obtuse, to emarginate apex; keel petal curved at the apex only, held outward away from the flower center … Galactia

Key K:
1. Woody vines [2]
1. Herbs, shrubs, or trees [3]
2. Inflorescence erect to spreading, rarely pendent … Derris
2. Inflorescence pendent … Wisteria
3. Flower with only one petal (the standard) hooded over the stamens … Amorpha
3. Flower with 5 petals [4]
4. Leaflets gland-dotted; 4 petals epistemonous (arising from the staminal tube), 1 petal from the receptacle … Dalea
4. Leaflets not glandular-punctate; all petals arising from the receptacle [5]
5. Plant with some trichomes 2-armed; keel petal quickly articulating downwards upon provocation, causing the stamens to flick and release a puff of pollen … Indigofera
5. Plant without 2-armed trichomes; keel petal not quickly moving nor quickly releasing the stamens upon provocation [6]
6. Herbs [7]
6. Shrubs to trees [9]
7. Inflorescence umbellate … Coronilla
7. Inflorescence a raceme or pseudoraceme [8]
8. Leaflets with branching, curving, or interconnecting lateral veins, sometimes obscure … Astragalus
8. Leaflets with close-set straight and parallel lateral veins … Tephrosia
9. Corolla yellow; stamens free; fruit tightly shaped around the seeds … Sophora
9. Corolla white, pink, to purple; stamens diadelphous (9 mostly fused, 1 only basally fused with the other 9 and otherwise free) [10]
10. Stems without spines; leaflets acuminate at the apex; calyx truncate to toothed; fruit indehiscent; inflorescence ascending to erect … Gliricidia
10. Stems with or without stipular spines; leaflets rounded at the apex; calyx lobed; fruit dehiscent; inflorescence pendent … Robinia

Abrus

*****Abrus precatorius*** L. {AFP} —

Acacia

1. Phyllode 3(-5)-veined; inflorescence a spike … A. auriculiformis
1. Phyllode 1-veined; inflorescence of numerous globose heads [2]
2. Basal phyllodal gland <1 mm wide; flower head 5-7 mm wide … A. retinodes
2. Basal phyllodal gland 1-2 mm wide; flower head 7-12 mm wide … A. saligna

**Acacia auriculiformis* A.Cunn. ex Benth. {AFP} —
^*Acacia retinodes* Schltdl. {AFP} —
^*Acacia saligna* (Labill.)H.L.Wendl. {AFP} —

Acaciella

Acaciella angustissima (Mill.)Britton & Rose {AFP} — SE.

Adenanthera

Adenanthera pavonina L. {AFP} —

Aeschynomene

1. Stems floating … A. fluitans
1. Stems not floating, prostrate to erect [2]
2. Primary stems distinct from the thicker tuberous root; stipules basally attached, extending only above the node; calyx with 5 subequal lobes; fruit with 2-5 segments [3]
2. Primary stem more or less grading into a taproot; stipules peltate, extending below and above the node; calyx bilabiate, the upper lobe 2-fid, the lower 3-fid; fruit with 3-13 segments [4]
3. Plant pubescent, canescent, to hispid, occasionally glandular on the stem; leaflets 8-18(-30) per leaf, 3-6 mm long, the lateral venation obscure … C. histrix var. incana
3. Plant stipitate-glandular throughout, or occasionally glands not present on fruits; leaflets 3-9 per leaf, 4-18 mm long, the white lateral venation conspicuous below … C. viscidula
4. Leaflets with 2-4 longitudinal veins … A. americana
4. Leaflets with 1 longitudinal vein [5]
5. Wetland perennials with rather stout stems at the base; calyx lobes entire or nearly so; stipe below fruit (above pedicel) 10-15 mm long; fruit crenate-undulate on both margins … A. pratensis
5. Mostly weedy, short-lived plants; calyx lobes sometimes dentate; stipe below fruit (above pedicel) 3-10 mm long; fruit crenate-undulate only on the lower margin, the upper margin mostly straight [6]
6. Young stems often glabrate to sparsely hispidulose; calyx 4-6 mm long; corolla 7-10 mm long; stamens 6-8 mm long; loment segments 4-5 mm long … A. indica
6. Young stems often moderately hispid to pilose; calyx 5-8 mm long; corolla 8-15 mm long; stamens 9-13 mm long; loment segments 5-7 mm long; … A. rudis

Aeschynomene americana L. {AFP} —
Aeschynomene fluitans Peter {AFP} —
Aeschynomene indica L. {AFP} —
•***Aeschynomene pratensis*** Small var. ***pratensis*** {AFP} — SE.
Aeschynomene rudis Benth. {AFP} —

Albizia

1. (10-)13-30 pairs of leaflets per pinnae; leaflets 7-25 mm long, 2-6 mm wide [2]
1. 3-13 pairs of leaflets per pinnae; leaflets 20-40 mm long, 10-20 mm wide [3]
2. Calyx 2-4 mm long; corolla 7-11 mm long; stamens 25-35 mm long ... A. julibrissin
2. Calyx 1-2 mm long; corolla 4-5 mm long; stamens 2-8 mm long ... A. lebbekoides
3. Leaflets elliptic-oblong; calyx 4-6 mm long; corolla 7-14 mm long; stamens 10-25 mm long; fruit 3-4 cm wide ... A. lebbeck
3. Leaflets ovate; calyx 1-2 mm long; corolla 4-5 mm long; stamens 3-10 mm long; fruit 1.3-2.5 cm wide ... A. procera

****Albizia julibrissin*** Durazz. {AFP} —
****Albizia lebbeck*** (L.) Benth. {AFP} —
^*Albizia lebbekoides* (DC.)Benth. {AFP} —
^*Albizia procera* (Roxb.)Benth. {AFP} —

Alysicarpus

1. Stem pilose; leaf blade underside appressed-pilose; calyx 5-7 mm long; fruit constricted between the rugose segments ... A. rugosus
1. Stem glabrous to puberulent; leaf blade underside glabrous to puberulent; calyx 2-5 mm long; fruit not constricted between the smooth to faintly rugose segments [2]
2. Leaves mostly oblate to ovate-lanceolate, 1.2-2.3 times long as wide (the few below the inflorescence narrower); rachis internodes mostly subequal to longer than the flowers ... A. ovalifolius
2. Leaves mostly elliptic to oblong-lanceolate, mostly 2-3 times long as wide; rachis internodes mostly shorter than the flowers ... A. vaginalis

****Alysicarpus ovalifolius*** (Schumach. & Thonn.) J.Leónard {AFP} —
****Alysicarpus rugosus*** (Willd.)DC. {AFP} —
****Alysicarpus vaginalis*** (L.) DC. {AFP} —

Amorpha

1. Erect shrub 1-4 m tall; petiole and rachis eglandular or sparingly glandular; petioles mostly (8)10-40 mm long, usually longer than the width of the proximal leaflet; leaflets 9-31, eglandular to inconspicuously or conspicuously glandular with 10-150 glands per half-leaflet, the midvein often exserted 0.2-1.5 mm and tapered to slightly swollen at the tip; corolla usually purple to indigo; style ascending pilose; fruit (2)2.5-4.5 mm wide, 5-9 mm long ... A. fruticosa
1. Erect shrub 0.3-1.5 m tall; petiole and rachis glandular, more densely so near the base of the petiole; petioles mostly (0.5)1-15(18) mm long usually shorter than the width of the proximal leaflet; leaflets 15-63, conspicuously glandular with 40-225(425) glands per half-leaflet, the midvein often exserted 0-0.5(0.8) mm and globose-glandular at the tip; corolla usually white, rarely purplish; style retrorsely pubescent; fruit 1.8-2.5 mm wide, 4-6.5 mm long [2]
2. Plant glabrous to sparsely puberulent; leaflets mostly 2.8-3.5 times long as wide, the margin usually crenulate and revolute, the petiolule usually 1.5-2 mm long; corolla white ... A. crenulata
2. Plant glabrous to densely pubescent; leaflets usually 1.8-3 times long as wide, the margin entire to subcrenulate, the petiolule 1-1.5 mm long; corolla usually purplish to rarely white [3]
3. Plant glabrate ... A. herbacea var. floridana
3. Plant usually densely pubescent ... A. herbacea var. herbacea

Amorpha fruticosa L. {AFP} — A number of segregates were recognized by Small (1933).
•***Amorpha crenulata*** Rydb. {AFP} — FE. SE.
Amorpha herbacea Walter var. ***floridana*** (Rydb.)Wilbur {AFP} — According to Isley (1986), glabrate plants are disjunctly concentrated mostly around Hillsborough & Franklin cos.
Amorpha herbacea Walter var. ***herbacea*** {AFP} —

Amphicarpaea
Amphicarpaea bracteata (L.)Fernald {AFP} —

Apios
Apios americana Medik. {AFP} —

Arachis: A taxonomically difficult group, with some species not always clearly differentiated (Krapovickas & Gregory 2007). The most common taxa in cultivation are keyed below.

1. Tap-rooted only, without rhizomes or stolons (sometimes rooting at basalmost nodes) (sect. Arachis) [2]
1. Rhizomatous or stoloniferous, also with taproot [3]
2. Annual; leaflets 18-60 mm long, 15-30 mm wide; fruit usually strongly reticulate, only slightly narrowed between seeds (not articulated), the pedicel (peg) stout and stiff … A. hypogaea
2. Perennial; leaflets 18-35 mm long, 10-13 mm wide; fruit smooth to faintly reticulate, bi-articulate (seeds separated by a filiform or wiry isthmus <1/4 width of fruit), the pedicel (peg) weak and fragile … A. kempff-mercadoi
3. Stoloniferous, main stems prostrate, rooting, with regularly-spaced nodes with stipules where leaves or stems arise, without deep rhizomes; diploid (sect. Caulorrhizae) [4]
3. Rhizomatous, with erect leafy stems, the rhizomes lacking stipules and lacking regularly-spaced nodes, stipules present at base of and along erect stems; tetraploid (sect. Rhizomatosae) [5]
4. Plant with stiff bristles (stem, stipules, petiole, and often leaflet underside; appressed hairs may also be present); leaflets <2 times as long as wide … A. pintoi
4. Plants without bristles (appressed hairs may be present); leaflets >2.5 times as long as wide … A. repens
5. Leaflets oblong, elliptic, to obovoate, apex rounded, underside strigose to glabrate … A. glabrata var. glabrata
5. Leaflets narrow and acute, underside glabrate … A. glabrata var. hagenbeckii

****Arachis glabrata*** Benth. {AFP} — Widely cultivated (Krapovickas & Gregory 2007: 122), and persistent/spreading locally. It is possible the name is misapplied in Florida in some cases, e.g. as it was to 11 distinct species (Inglis et al. 2025).
^*Arachis hypogaea* L. {AFP} — Native to Bolivia (Krapovickas 2008). Commercially cultivated in north Florida, especially since the mid- to late 1800s (Peterson 1931).

Astragalus
1. Plant glabrate to strigose; leaflets usually cordate to broadly notched at the apex, (9-)15-27 per leaf; corolla pale pink to blue-lilac … A. obcordatus
1. Plant villous to pilose; leaflets obtuse to slightly emarginate at the apex, (3-)7-15 per leaf; corolla pale or greenish yellow … A. villosus

Astragalus obcordatus Elliott {AFP} —
Astragalus villosus Michx. {AFP} —

Baptisia

1. Stipules absent; leaves 1-foliolate [2]
1. Stipules present but often deciduous and absent from mature nodes, 0.1-15 mm long; leaves 3-foliolate (distalmost ones sometimes 1- or 2-foliolate) [3]
2. Leaves perfoliate; flowers axillary, solitary … B. perfoliata
2. Leaves sessile; flowers numerous in a raceme to 20 cm long … B. simplicifolia
3. Inflorescence with foliaceous bracts, 3-25 mm long, subtending pedicels; pedicels 1-4 cm long, with foliaceous bracteoles above the middle; corolla 10-14 mm long, yellow; leaflets 1-2.5(3) cm long, 0.5-1.3(1.5) cm wide [4]
3. Inflorescence with scale-like bracts subtending pedicels or bracts absent; pedicels 0.3-1.3 cm long, without bracteoles; corolla (11)13-24 mm long, yellow or white; leaflets 2-9 cm long, 0.4-4.5 cm wide [6]
4. Pedicel bracteoles 2-5(11) mm long; calyx 5-7(9) mm long, the lobes subequal to shorter than the calyx tube … B. lecontei
4. Pedicel bracteoles 10-16 mm long; calyx 9-13 mm long, the lobes much longer than the tube [5]
5. Plant glabrate … B. calycosa
5. Plant hirsute … B. hirsuta
6. Plant strigose to sericeous (esp. ovary and young fruit), sometimes sparsely so or glabrate; petioles 0.1-12 mm long; peduncle 0-1.7 cm long; inflorescence of 1-7 flowers; corolla yellow; ovary and fruit strigose (fruit glabrate in age); fruit woody, 1-2.5 cm long, 1-1.2 cm wide [7]
6. Plant glabrous to glabrate, except for dense tomentum at calyx lobe tips; petioles 5-20 mm long; peduncle 1.5-6 cm long; inflorescence of (4)8-40 flowers; corolla white to pale yellowish white; ovary and fruit glabrous or glabrate; fruit brittle to coriaceous, 2-4 cm long, 0.7-3 cm wide [8]
7. Petioles at mid-stem 4-12 mm long; leaflets (12)16-30(40) mm wide, 1.7-3.5(5) times as long as wide; inflorescence of 2-10 flowers, axillary and terminal … B. lanceolata var. elliptica
7. Petioles at mid-stem 0.1-2 mm long; leaflets 10-15(20) mm wide, 3-5 times as long as wide; inflorescence of 1-2(3) flowers, axillary … B. lanceolata var. lanceolata
8. Leaflets (3.5)4-9 cm long, (1.5)2-4.5 cm wide; inflorescence 5-15 cm long (incl. peduncle), ascending, spreading, to drooping, the inflorescence tip mostly level with overall plant height and the uppermost leaves (or shorter to slightly longer than overall plant height), of (5)7-22 flowers; corolla 20-25 mm long, white to pale yellowish; mature fruit brown, 3-4 cm long, 1.8-3 cm wide … B. megacarpa
8. Leaflets 2-6 cm long, 0.4-2 cm wide; inflorescence (12)15-50 cm long (incl. peduncle), mostly erect to laxly erect towards the tip, the inflorescence the tallest part of the overall plant height, at least the distal half conspicuously exserted and taller than the uppermost leaves, of (8)10-50 flowers; corolla 14-25 mm long, white; mature fruit black or brown, 1-4 cm long, 0.7-3 cm wide [9]
9. Stem base 5-10(13) mm wide; distal stipules 3-10 mm long, 1-3 mm wide, proximal ones 30 mm long, 15 mm wide; leaflets 35-60 mm long, 10-20 mm wide, 2.2-4 times as long as wide; corolla 20-25 mm long; mature fruit 1-2.5(3) cm wide, black … B. alba
9. Stem base 4-6(7) mm wide; distal stipules 1-2 mm long, 0.5-1.1 mm wide; leaflets 20-70 mm long, 4-18 mm wide, 2.5-7.6 times as long as wide; corolla 14-18 mm long; mature fruit 0.7-0.9 cm wide, yellow-brown to brown … B. albescens

Baptisia alba (L.)R.Br. {AFP} —
Baptisia albescens Small {AFP} —
•***Baptisia calycosa*** Canby {AFP} — SE.
Baptisia hirsuta Small {AFP} — ST.
Baptisia lanceolata (Walter)Elliott var. ***elliptica*** (Small)B.L.Turner {AFP} — Panh., Hern., Hillsb., Polk cos.
Baptisia lanceolata (Walter)Elliott var. ***lanceolata*** {AFP} — NE pen.
Baptisia lecontei Torr. & A.Gray {AFP} —
Baptisia megacarpa Chapm. ex Torr. & A.Gray {AFP} — SE.
Baptisia perfoliata (L.)R.Br. {AFP} —
•***Baptisia simplicifolia*** Croom {AFP} — ST.

Bauhinia
1. Stems with intrastipular spines; stamens 10 … B. aculeata
1. Stems without spines; stamens 3 or 5 … 2
2. Flower buds narrowly club-shaped and slightly winged to the apex; stamens 3 … B. purpurea
2. Flower buds spindle-shaped and tapering to the apex; stamens 5 … B. variegata

^*Bauhinia aculeata* L. {AFP} —
^*Bauhinia ×blakeana* Dunn (*purpurea* × *variegata*) — Commonly cultivated. Distinguished by the floral bud 5-winged distally, petals lanceolate to obovate, 5 stamens, 2-5 staminodes, and does not set fruit.
^*Bauhinia purpurea* L. {AFP} —
****Bauhinia variegata*** L. {AFP} —

Brachypterum
****Brachypterum scandens*** (Roxb.)Miq. {AFP} —

Caesalpinia
^*Caesalpinia pulcherrima* (L.)Sw. {AFP} —

Cajanus
^*Cajanus cajan* (L.)Huth {AFP} — Frequently cultivated; occasionally locally naturalized.

Callerya
****Callerya reticulata*** (Benth.)Schot {AFP} —

Calliandra
^*Calliandra haematocephala* Hassk. {AFP} — Sparingly naturalized.

Canavalia
1. Fruit 8-15 cm long, seeds 4-9; fresh seeds impermeable to water, buoyant, marbled; mostly restricted to maritime habitats … C. rosea
1. Fruit 15-30 cm long, seeds 8-20; fresh seeds permeable to water, not buoyant, marbled or not; not restricted to maritime habitats [2]

2. Stipules persistent; fruits 15-25 cm long, 2.5-3 cm wide; seeds 1.5 cm-2 long, pale gray to brown, sometimes marbled ... C. brasiliensis
2. Stipules caducous; fruits 25-30 cm long, 3.5-4 cm wide; seeds 2-2.5 cm long, white ... C. ensiformis
1. Stems with intrastipular spines; stamens 10 ... B. aculeata
1. Stems without spines; stamens 3 or 5 [2]
2. Flower buds narrowly club-shaped and slightly winged to the apex; stamens 3 ... B. purpurea
2. Flower buds spindle-shaped and tapering to the apex; stamens 5 ... B. variegata

**Canavalia brasiliensis* Mart. ex Benth. {AFP} —
^*Canavalia ensiformis* (L.)DC. {AFP} —
Canavalia rosea (Sw.)DC. {AFP} —

Cassia
^*Cassia fistula* L. {AFP} —

Centrosema
1. Leaves 1-foliolate; petiole often winged ... C. sagittatum
1. Leaves 3-foliolate; petiole not winged [2]
2. Leaflets ovate, generally chartaceous and the veins not prominent on the lower surface; lower calyx lobe 5-8 mm long, subulate to lanceolate, the upper bifurcate calyx lobe 3-4 mm long ... C. arenicola
2. Leaflets linear to ovate, often subcoriaceous, often the veins prominent on the lower surface; lower calyx lobe 8-11 mm long, subulate, the upper bifurcate calyx lobe 7-8 mm long ... C. virginianum

•***Centrosema arenicola*** (Small)F.J.Herm. {AFP} — SE.
****Centrosema sagittatum*** (Humb. & Bonpl. ex Willd.)Brandegee ex L.Riley {AFP} —
Centrosema virginianum (L.)Benth. {AFP} —

Cercis
Cercis canadensis L. {AFP} —

Chamaecrista
1. 2 leaflets per leaf ... C. rotundifolia
1. 4-50 leaflets per leaf [2]
2. Plants often <30 cm tall, sometimes to 1 m tall; stems prostrate, decumbent, spreading, or sometimes ascending to erect; 2-6(7) pairs of leaflets per leaf [3]
2. Plant 20-150 cm tall; stems mostly erect to erect-ascending; mostly 7-25 pairs of leaflets per leaf [5]
3. Leaflets 3-8 mm long, 2-4 mm wide; fruits 1.5-3 cm long ... C. serpens
3. Leaflets (5-)8-25 mm long, 3-10(-20) mm wide; fruits 2.5-4 cm long [4]
4. Root tuberous; stems pilosulous, the longest hairs <11 mm long; sepals 8-10 mm long; petals 12-15 mm long ... C. lineata var. keyensis
4. Root a slender taproot; stems pilose, the longest hairs >11 mm long; sepals 3-5 mm long; petals 4-6 mm long ... C. pilosa
5. Sepals 4-6 mm long; corolla 0.8-1 cm wide, the larger petals 4-8 mm long [6]
5. Sepals 9-12 mm long; corolla 2.5-3.5 cm wide, the larger petals 13-20 mm long [7]

6. Plant pilose ... C. nictitans var. aspera
6. Plant glabrate to incurved-puberulent ... C. nictitans var. nictitans
7. Plant usually monocarpic, 20–140(–240) cm tall, with a branched vertical taproot gradually reduced to finer roots, the taproot grading into the main stem; main stem usually solitary (rarely multiple) from the base of the plant, glabrous, sparsely to densely puberulent, pubescent, pilose, to hirsute, 2–13 mm wide at the base ... C. fasciculata
7. Plant perennial, 30–60 cm tall, the main root horizontal and generally perpendicular to the main stems; main stems usually several (rarely solitary) from the base of the plant, glabrous to sparsely puberulent, 1–7 mm wide at the base [8]
8. Horizontal root to ca. 20+ cm long; anthers dark red to purple-red, sometimes yellow towards the base; flowering year-round, but especially Mar-Aug; pine rocklands of southern Florida ... C. deeringiana
8. Horizontal root to ca. 46+ cm long; anthers yellow to yellow-brown; flowering late May-early Aug; sandy and clayey pine and oak woodlands of the western Florida panhandle ... C. horizontalis

•***Chamaecrista deeringiana*** Small & Pennell {AFP} — The seeds (3.8-4 mm long) may be larger than *C. fasciculata* (seeds 3-3.2 mm long) according to the protologue (Pennell 1917).
Chamaecrista fasciculata (Michx.)Greene {AFP} —
Chamaecrista horizontalis A.R.Franck {AFP} —
•***Chamaecrista keyensis*** Pennell {AFP} — SE.
Chamaecrista nictitans (L.)Moench var. ***aspera*** (Muhl. ex Elliott)H.S.Irwin & Barneby {AFP} —
Chamaecrista nictitans (L.)Moench var. ***nictitans*** {AFP} —
*****Chamaecrista pilosa*** (L.)Greene {AFP} —
*****Chamaecrista rotundifolia*** (Pers.)Greene {AFP} —
*****Chamaecrista serpens*** (L.)Greene {AFP} —

Chapmannia
•***Chapmannia floridana*** Torr. & A.Gray {AFP} —

Clitoria
1. Leaflets 5-7 per leaf; corolla usually blue-violet or sometimes white, and greenish white to white at the center ... C. ternatea
1. Leaflets 3 per leaf; corolla usually pinkish white to lilac with darker lines around a white patch near the center [2]
2. Leaflets mostly linear to linear-lanceolate, 4-6 times long as wide; apex of the gynophore and base of the fruit exserted from the calyx ... C. fragrans
2. Leaflets mostly ovate to ovate-lanceolate, 2-3 times long as wide; apex of the gynophore and base of the fruit usually included within the calyx ... C. mariana

•***Clitoria fragrans*** Small {AFP} — FT. SE.
Clitoria mariana L. {AFP} —
^*Clitoria ternatea* L. {AFP} —

Coronilla
*****Coronilla varia*** L. {AFP} —

Crotalaria

1. Leaves 3-foliolate [2]
1. Leaves 1-foliolate [8]
2. Leaflets linear to linear-lanceolate [3]
2. Leaflets elliptic to obovate [4]
3. Calyx 3-3.5 mm long; corolla 8-10 mm long; fruit 2-4 cm long, 0.6-0.8 cm wide, falcate … C. lanceolata
3. Calyx 6-8 mm long; corolla 18-20 mm long; fruit (3-)4-7 cm long, 1.5-2 cm wide, generally straight … C. ochroleuca
4. Petioles 1-10 mm long; leaflets 5-16(-30) mm long; fruit 8-15 mm long [5]
4. Petioles 12-45 mm long; larger leaflets 12-55 mm long; fruit 14-45 mm long [6]
5. Leaflet underside strigulose; inflorescence with 2-20 flowers; fruit 1.9-2.2 times long as wide … C. pumila
5. Leaflet underside glabrate to pilosulous; inflorescence with 1-3 flowers, sometimes fasciculate; fruit 1.3-1.7 times long as wide … C. virgulata subsp. grantiana
6. Younger stems pilose to pubescent; fruit pilose … C. incana
6. Younger stems strigose; fruit glabrate, puberulent, to strigulose [7]
7. Leaflets obovate, 1-2 times long as wide; bracts subtending flowers quickly deciduous; calyx strigulose; fruit 5-6 mm wide … C. pallida var. obovata
7. Leaflets elliptic, 3-4 times long as wide; ca. 1 mm-long bracts subtending flowers persistent; calyx glabrous to puberulent; fruit 8-12 mm wide … C. trichotoma
8. Leaf blade ovate, abruptly narrowed and cuneate at the base; corolla white to violet … C. verrucosa
8. Leaf blade linear, elliptic, oblong, to obovate, rounded to gradually narrowed to the petiole; corolla yellow [9]
9. Stipules absent or not decurrent; leaf blades 0.8-8 cm wide; corolla 1.7-3.5 cm long; mostly stout, erect herbs or subshrubs [10]
9. Stipules absent or present and decurrent-winged; leaf blades 0.2-4(5) cm wide; corolla 0.7-1.4 cm long; mostly prostrate to erect, weak herbs [12]
10. Leaf blade narrowly elliptic to linear-lanceolate, 6-8 times longer than wide; fruit pubescent … C. juncea
10. Leaf blade obovate, 2-4 times longer than wide; fruit glabrous [11]
11. Leaf blade to 3.5(4) cm wide; stipules quickly deciduous; bracts subtending flowers subulate, 1-2 mm long, often shed by anthesis … C. retusa
11. Leaf blade to 8 cm wide; stipules persistent, deltoid; bracts subtending flowers deltoid-ovate, 4-10 mm long, persistent … C. spectabilis
12. Leaf blades mostly 1-5 cm wide; fruit 3-4 cm long … C. alata
12. Leaf blades mostly 0.2-1.5 cm wide; fruit 1-3 cm long [13]
13. Leaf blades linear to lanceolate (sometimes ovate towards the base), glabrous on the upper surface … C. purshii
13. Leaf blades linear, elliptic, to obovate, strigose on the upper surface [14]
14. Stem hairs spreading to ascending, longest ones subequal to stem width; leaf blade lower surface pale or whitish … C. rotundifolia
14. Stem hairs antrorsely strigose, 0.4-0.7(1.0) mm long; leaf blade surfaces green [15]
15. Leaf blades linear, 1.5-3 mm wide; sepal lower side reddish … C. linaria
15. Leaf blades linear-lanceolate, elliptic, ovate, to orbicular, occasionally a few distal ones linear, 2-10 mm wide; sepal underside green [16]
16. Stems erect to ascending; stipules absent; upper petal subequal to slightly wider than lower (keel) petal; keel petal apices short, only slightly twisted distally, slightly incurved back towards

upper petal; style 3-3.5 mm long, curved at the base; mature fruit grayish to purplish brown; flowering Feb-Jun ... C. avonensis
16. Stems decumbent, procumbent, to ascending; stipules absent or persistent, decurrent-winged along the stem; upper petal usually distinctly wider than lower (keel) petal; keel petal apices elongate, spirally twisted distally, projected upward and outward; style 4-7 mm long, bent at near right angle at the base; mature fruit black; flowering Jan-Dec ... C. maritima

**Crotalaria alata* Buch.-Ham. ex D.Don {AFP} —
•***Crotalaria avonensis*** DeLaney & Wunderlin {AFP} — FE. SE.
**Crotalaria incana* L. {AFP} —
^*Crotalaria juncea* L. {AFP} —
**Crotalaria lanceolata* E.Mey. {AFP} —
Crotalaria linaria Small — Tentatively accepted following Ward (2010), but treated as a variety by Senn (1939).
Crotalaria maritima Chapm. — Accepted following Ward (2010), but alleged to intergrade with *C. rotundifolia* s.str. (Windler 1971).
**Crotalaria ochroleuca* G.Don {AFP} —
Crotalaria pallida* Aiton var. ***obovata* (G.Don)Polhill {AFP} —
Crotalaria pumila Ortega {AFP} —
Crotalaria purshii DC. {AFP} — Stems normally strigose, but alleged hybrids with *C. rotundifolia* said to have spreading pubescence (Isely 1998:490).
**Crotalaria retusa* L. {AFP} —
Crotalaria rotundifolia J.F.Gmel. {AFP} — In the strict sense, as here ventured, restricted to northern Florida. Isely (1998:489) treats this as one polymorphic species throughout Florida that is "reticulately confluent" with other segregates (*C. linaria, C. maritima*). Isely also speculated the existence of putative hybrids with *C. sagittalis* in the W panhandle (specimens long-pilose; however, *sagittalis* itself being unknown in Florida) and hybrids with *C. purshii* (glabrate upper leaf surface like *purshii* and spreading stem pubescence like *rotundifolia*).
**Crotalaria spectabilis* Roth {AFP} —
**Crotalaria trichotoma* Bojer {AFP} —
**Crotalaria verrucosa* L. {AFP} —
Crotalaria virgulata* Klotzsch subsp. ***grantiana* (Harv.)Polhill {AFP} —

Ctenodon
1. Plant pubescent, canescent, to hispid, occasionally glandular on the stem; leaflets 8-18(-30) per leaf, 3-6 mm long, the lateral venation obscure ... C. histrix var. incana
1. Plant stipitate-glandular throughout, or occasionally glands not present on fruits; leaflets 3-9 per leaf, 4-18 mm long, the white lateral venation conspicuous below ... C. viscidula

Ctenodon histrix* (Poir.)D.B.O.S.Cardoso et al. var. ***incana* (Benth.)D.B.O.S.Cardoso et al. {AFP} —
Ctenodon viscidulus (Michx.)D.B.O.S.Cardoso et al. {AFP} —

Dalbergia
1. Trees; leaflets 3-7 per leaf, the leaflets ovate to rhombic-orbicular with an abruptly acuminate apex; style stout ... D. sissoo

1. Spreading, scandent, or trailing shrub; leaflets 1(-3) per leaf, the blade ovate to oblong-ovate, the apex obtuse to acuminate; style slender [2]
2. Petiole slender, 0.6-1.0 mm wide, much longer than the differentiated petiolule; leaf blade or leaflet chartaceous, lustrous above; fruit ovate to oblong, with 1-4 seeds … D. brownei
2. Petiole stout, 1.2-1.6 mm wide, subequal to the differentiated petiolule; leaf blade coriaceous, dull to slightly lustrous above; fruit subrotund, with 1 seed … D. ecastaphyllum

Dalbergia brownei (Jacq.)Schinz {AFP} — SE.
Dalbergia ecastaphyllum (L.)Taub. {AFP} —
****Dalbergia sissoo*** Roxb. ex DC. {AFP} —

Dalea
1. Shrubs; leaflets 15-25 (as few as 5-13 next to inflorescence); stamens 10 … D. floridana
1. Herbs; leaflets 3-13; stamens 5 [2]
2. Inflorescence spike involucrate, subtended by a pseudowhorl of bracts; calyx lobes filiform-plumose [3]
2. Inflorescence spike compact, but not involucrate, not subtended by bracts; calyx lobes deltoid to lancoleate [5]
3. Stem tuberculate, especially towards the apex; leaflets elliptical … D. adenopoda
3. Stem not or only slightly tuberculate; leaflets linear to filiform [4]
4. Leaflets mostly 5-9(-15) on the upper portion of the stem … D. pinnata var. pinnata
4. Leaflets mostly 3 on the upper portion of the stem … D. pinnata var. trifoliata
5. Inflorescence spike globose; bracts shorter than the calyx tube; anthers exserted beyond the petal … D. feayi
5. Inflorescence spike cylindric to occasionally globose; bracts subequal to longer than the calyx tube; anthers subequal to petals [6]
6. Stems spreading to decumbent, usually less than 1.1 mm thick at the base; rachis between the last pair of leaflets and the terminal leaflet >0.8 mm; flower buds with bract tips recurved; peduncles short, often <5 cm long with bracts <2 mm long … D. carnea var. gracilis
6. Stems erect or ascending, usually greater than 1.1 mm thick at the base; rachis between the last pair of leaflets and the terminal leaflet <0.8 mm long; flower bud bracts straight to upcurved or occasionally some recurved; peduncles usually >5 cm long with bracts usually >2 mm long [7]
7. Leaflets 3-7, often 5; corolla white … D. carnea var. albida
7. Leaflets 5-11, often more than 5; corolla pink … D. carnea var. carnea

•***Dalea adenopoda*** (Rydb.)Isely {AFP} —
Dalea carnea (Michx.)Poir. var. ***albida*** (Torr. & A.Gray)Barneby {AFP} — Treated as a species by Ward (2004).
Dalea carnea (Michx.)Poir. var. ***carnea*** {AFP} —
Dalea carnea (Michx.)Poir. var. ***gracilis*** (Nutt.)Barneby {AFP} — Treated as a species by Ward (2004).
Dalea feayi (Chapm.)Barneby {AFP} —
•***Dalea floridana*** (Rydb.)J.Diggs & Weakley {AFP} — The Florida taxon has more numerous leaflets than the related *D. carthagenensis* (Barneby 1977). SE.
Dalea pinnata (J.F.Gmel.)Barneby var. ***pinnata*** {AFP} —
Dalea pinnata (J.F.Gmel.)Barneby var. ***trifoliata*** (Chapm.)Barneby {AFP} —

Delonix
^*Delonix regia* (Bojer ex Hook.)Raf. {AFP} —

Denisophytum
Denisophytum pauciflorum (Griseb.)Gagnon & G.P.Lewis {AFP} — SE.

Derris
*****Derris dlliptica*** (Roxb.)Benth. {AFP} —

Desmanthus: Monographed by Luckow (1993).
1. Pairs of pinnae 5-18 per leaf; stamens 5 per flower; fruit 1.5-2.5 cm long, falcate … D. illinoensis
1. Pairs of pinnae 2-8 per leaf; stamens 5 or 10 per flower; fruit 4-8 cm long, straight to falcate
2. Erect herb or shrub; petiole (3)5-16 mm long; pairs of pinnae 4-8 per leaf; leaflets yellow-green when fresh; nyctinastic movement of pinnae downward; hypocotyl >10 mm long on average, cotyledons aerial … D. leptophyllus
2. Prostrate, decumbent, or erect herb; petiole 1-5(6) mm long; pairs of pinnae 2-4(5) per leaf; leaflets blue-green and glaucous when fresh; nyctinastic movement of pinnae upward; hypocotyl <10 mm long on average, cotyledons close to the ground … D. virgatus

Desmanthus illinoensis (Michx.)MacMill. ex B.L.Rob. & Fernald {AFP} —
****Desmanthus leptophyllus*** Kunth {AFP} —
****Desmanthus virgatus*** (L.)Willd. {AFP} —

Desmodium: Series *Desmodium* treated by Schubert (1950).
1. Plant mostly <40 cm tall; stems viny, prostrate, stoloniferous, decumbent, to ascending, occasionally self-supporting 40-150 cm tall … Key A
1. Plant usually 50-200 cm tall; stems erect to ascending … Key B

Key A
1. Leaflets 0.5-1 cm long; flowers 1-4 in an axillary fascicle … Grona triflora
1. Terminal leaflets mostly >1 cm long; flowers numerous in an axillary or terminal raceme or panicle [2]
2. Larger terminal leaflets >1.6 cm wide, not variegated; fruit undulate or incised on top and bottom margin; associated with woodlands [3]
2. Terminal leaflets <2.1 cm wide, sometimes variegated; fruit straight on the top margin or 1-2 mm wide and undulate on both margins; often of weedy habits, or rocklands [5]
3. Stipules not clasping the stem, 2-8 mm long, sometimes quickly deciduous … D. lineatum
3. Stipules slightly to strongly clasping the stem, larger ones 6-12 mm long, persistent [4]
4. Leaflets mostly ovate, 1.2-1.9 times longer than wide; corolla white, pinkish, to yellowish; fruit uncinate mostly only on the margin … D. ochroleucum
4. Leaflets generally suborbicular, 0.8-1.1 times longer than wide; corolla pale pink to violet; fruit uncinate over the entire surface … D. rotundifolium
5. Stipules 2-4 mm long; fruit 1-2 mm wide, the top and bottom margins similar and shallowly undulate … D. scorpiurus
5. Stipules 3-8 mm long; fruit 2-4 mm wide, the top margin straight and the bottom margin undulate-incised [6]

6. Leaflet often emarginate at the apex, the terminal leaf obovate, the lateral veins mostly flat with the surface; primary bracts dense and entirely covering flower buds; fruit incised less than ½ the fruit width, the distal beak usually offset from the top margin … Grona heterocarpa
6. Leaflet obtuse at the apex, the terminal leaf elliptic, ovate, or elliptic-obovate, the lateral veins often impressed on the upper surface and prominulous on the lower surface; primary bracts not dense, not covering the flower buds; fruit incised ca. ½ or more the fruit width, the distal beak nearly continuous with the top margin [7]
7. Stem, petiole, leaf rachis, petiolules, leaflet midrib of upper surface, and/or inflorescence rachis often strongly crimson-reddish, or olive to greenish; stipules to 10 mm long; terminal leaflet of distal leaves rhombic-ovate, ovate-deltate, to oblong-lanceolate (infrequently obovate or elliptic), generally deltate-acute at the apex, uniformly green and lustrous and without pale variegation on the upper surface, reticulate venation conspicuous on the upper surface or conspicuous and prominent on the lower surface, to 9 cm long and 4.5 cm wide, the stipels to 5 mm long; corolla light pink, violet, to pale blue, the upper petal subreniform and faded whitish towards the middle, the base pale greenish white with a slightly dark pink border without a strongly contrasting midrib; of pyrogenic, calcareous pinelands and prairies … D. incanum
7. Stem, petiole, rachis, petiolules, and leaflet midrib of upper surface often greenish, brownish, to brown-red, rarely reddish (not crimson-reddish); stipules to 7 mm long; terminal leaflet of distal leaves elliptic, elliptic-lanceolate, elliptic-ovate, oblong-lanceolate, to obovate, generally rounded to obtuse at the apex, frequently with pale variegation on the upper surface often along the midrib and margins (under magnification a highly lustrous raised cuticle, contrasting with the dull leaf surface lacking the raised cuticle), reticulate venation mostly obscure or lightly apparent on the upper surface and usually not prominent on the lower surface, to 7 cm long and 3.5 cm wide, the stipels to 3 mm long; corolla bright to light pink, the upper petal upside-down U-shaped and uniformly colored except the base with a dark purple border around the midvein strongly contrasting and separating the pale greenish white spots on either side; of disturbed areas … D. mauritianum

Key B
1. Leaflet underside sparsely pilose; inflorescence densely sticky-glandular from trichomes especially glandular-swollen at the base; fruit often twisted … D. tortuosum
1. Leaflet underside usually uncinate, puberulent, strigose, to villous only; inflorescence non-glandular; fruit typically not twisted [2]
2. Leaflets linear to linear-lanceolate, the terminal one <14 mm wide [3]
2. Leaflets ovate, elliptic, to suborbicular, the terminal one >15 mm wide [6]
3. Leaflet venation scarcely or occasionally pronounced, the lateral veins mostly ascending or arcuate [4]
3. Leaflet venation pronounced, the lateral veins mostly nearly perpendicular to the midrib [5]
4. Stem conspicuously uncinate-puberulent; petioles 1-4 mm long; fruit segments rounded along the lower margin … D. sessilifolium
4 Stem glabrate; petioles mostly 4-60 mm long; fruit segments roughly triangular on the lower margin … D. paniculatum
5. Fruit nearly straight on the top margin, deeply incised on the bottom margin; of xeric sites … D. strictum
5. Fruit incised on both margins, slightly moreso on the bottom margin; of mesic to hydric sites … D. tenuifolium
6. Stipules persistent, 2-4 mm wide, 4-20 mm long [7]
6. Stipules often deciduous, 0.5-2 mm wide, 2-8 mm long [9]

7. Upper stem and inflorescence axis pilose to villous and uncinate … D. canescens
7. Upper stem and inflorescence axis glabrous to uncinate only [8]
8. Leaflets lacking conspicuous reticulate venation, acute-acuminate at the apex, basal leaves only 3-foliolate; corolla 8-12 mm long; loment segments 4-6, 9-11 mm long … D. cuspidatum
8. Leaflets with conspicuous reticulate venation that is prominulous on the lower surface, obtuse to subacute at the tip, basal leaves sometimes 1-foliolate; corolla 6-8 mm long; loment segments 2-4, each 5-7 mm long … D. floridanum
9. Loment segments 2-3, rounded on both margins and more strongly so on the bottom margin [10]
9. Loment segments 3-5, shallowly undulate on the top margin and somewhat triangular on the bottom margin [12]
10. Terminal leaflet 3-7 cm long, >1.5 times longer than the lateral leaflets (sometimes more similar in size on basal leaves) … D. obtusum
10. Terminal leaflet 1-3 cm long, <1.5 times longer than the lateral leaflets [18]
11. Petiole 1-4(5) mm long; stem and petiole usually pilose and uncinate; pedicel 3-8 mm long … D. ciliare
11. Petiole 2.5-10 mm long; stem and petiole glabrous to sparsely uncinate; pedicel 8-15 mm long … D. marilandicum
12. Stem densely pubescent; leaflet underside villous to cinereous [13]
12. Stem glabrate, pilose, to moderately uncinate-pubescent; leaflet underside glabrous to pubescent [14]
13. Leaflets 1.5-2.2 times longer than wide; fruit often curved, with 2-4 segments … D. nuttallii
13. Leaflets mostly 1-1.5 times longer than wide, the underside; fruit typically straight, with 3-6 segments … D. viridiflorum
14. Stem glabrous; leaflets glabrous … D. laevigatum
14. Stem glabrate to pubescent; leaflets pubescent on the lower surface [15]
15. Leaflets uncinate-pubescent only on the veins of the underside … D. fernaldii
15. Leaflets strigose, subappressed villous, or uncinate-pubescent on the lower surface [16]
16. Leaflets 1.5-4 times longer than wide, usually with moderate pubescence, sometimes only on the petioles, the hairs usually >0.5 mm long [17]
16. Leaflets mostly 3-10 times longer than wide, usually with scant or sparse pubescence, the hairs <0.5 mm long or occasionally with longer hairs [18]
17. Stem and petiole uncinate-pubescent … D. glabellum
17. Stem and petiole pilose … D. perplexum
18. Leaflets strigose to subappressed villous, lower surface sometimes uncinate-pubescent … D. paniculatum var. fernaldii
18. Leaflets uncinate-puberulent on veins, lower surface sparsely strigose … D. paniculatum var. paniculatum

Desmodium canescens (L.)DC. {AFP} —
Desmodium ciliare (Muhl. ex Willd.)DC. {AFP} —
Desmodium cuspidatum (Muhl. ex Willd.)DC. ex Loudon {AFP} —
Desmodium fernaldii B.G.Schub. {AFP} —
Desmodium floridanum Chapm. {AFP} —
Desmodium glabellum (Michx.)DC. {AFP} —
Desmodium incanum (Sw.)DC. {AFP} — Miami-Dade Co. Rare in prairies and pine rocklands. The weedy form is here known as *D. mauritianum*.
Desmodium laevigatum (Nutt.)DC. {AFP} —
Desmodium lineatum DC. {AFP} —

Desmodium marilandicum (L.)DC. {AFP} —
****Desmodium mauritianum*** (Willd.)DC. — Common weed of disturbed areas; often known as the misapplied *D. incanum*.
Desmodium nuttallii (Schindl.)B.G.Schub. {AFP} —
Desmodium obtusum (Muhl. ex Willd.)DC. {AFP} —
Desmodium ochroleucum M.A.Curtis ex Canby {AFP} — SE.
Desmodium paniculatum (L.)DC. var. ***fernaldii*** (B.G.Schub.)H.Ohashi —
Desmodium paniculatum (L.)DC. var. ***paniculatum*** {AFP} —
Desmodium perplexum B.G.Schub. {AFP} —
Desmodium rotundifolium DC. {AFP} —
****Desmodium scorpiurus*** (Sw.)Desv. {AFP} —
Desmodium sessilifolium Torr. & A.Gray {AFP} —
Desmodium strictum (Pursh)DC. {AFP} —
Desmodium tenuifolium Torr. & A.Gray {AFP} —
++***Desmodium tortuosum*** (Sw.)DC. {AFP} —
Desmodium viridiflorum (L.)DC. {AFP} —

Dichrostachys
****Dichrostachys cinerea*** (L.)Wight & Arn. subsp. ***africana*** Brenan & Brummitt {AFP} —

Enterolobium
^*Enterolobium contortisiliquum* (Vell.)Morong {AFP} —

Erythrina
Erythrina herbacea L. {AFP} —

Galactia
1. Vine; leaves 5-9 foliolate; corolla white … G. elliottii
1. Leaves 3-foliolate; corolla usually pink to purple, sometimes drying reddish, and a vine to prostrate, or corolla white and plant erect [2]
2. Plant erect, if twining, only at the distal tip of the stem; inflorescence sessile, subsessile, or pedunculate; petioles usually subequal to longer than the terminal leaflet at some or most mature nodes; corolla white to light pink, drying reddish [3]
2. Plant prostrate, decumbent, clambering, or twining; inflorescence pedunculate, or if sessile then plant not erect; petioles usually subequal to shorter than the terminal leaflet, if petioles longer than terminal leaflet then plant not erect; corolla pink to purple (drying reddish in G. mollis) [4]
3. Plant erect, sometimes twining distally, >36 cm long; most inflorescences pedunculate, mature peduncles >6 mm long … G. brachypoda
3. Plant erect, not twining, <37 cm long; most inflorescences sessile to subsessile, occasionally with mature peduncles 1-8.5 mm long … G. erecta
4. Inflorescence shoot-tip and immature fruits densely villous with spreading hairs; flowers 7-9 mm long; corollas abaxially pink to light pink when fresh, corolla and stamens distinctly reddish when dry or withered … G. mollis
4. Inflorescence shoot-tip and immature fruits villous, strigose, or glabrate with hairs mostly ascending to appressed or not dense; flowers 7-17 mm long; corolla abaxially light to dark pink or purplish, corollas and stamens light brown, whitish, to blue, pinkish, or purplish when dry or withered [5]

5. Stems and rachises often densely deflexed to erect pilosulous or villous; mature inflorescence often with more than 15 flowers, nodes numerous and congested throughout the upper half of the rachis or sometimes with flowers opposite or verticillate; banner (upper petal) typically with whitish striations, the base yellow to greenish yellow; fruit 5.5–9 mm wide; leaflet upper surface with prominent reticulate venation, the lower surface often with prominent pale secondary venation … G. striata
5. Stems strigose to villous; mature inflorescence usually with less than 15(–25) flowers, nodes not congested or only congested in the upper third of the rachis, nodes mostly with solitary to fasciculate flowers; banner usually without white stripes or only the midvein white, the base mostly white to pinkish; fruit < 6 mm wide; leaflet upper surface with obscure to prominent reticulate venation, the lower surface with secondary venation not prominent, or if prominent then somewhat reddish with reticulate venation conspicuous on the upper surface [6]
6. Stems villous, canescent, tomentose, or pilose (glabrate on older stems), the hairs mostly spreading to oblique, not appressed; hairs often persistent on calyx and on the upper surface of leaflets [7]
6. Stems strigose, pubescent, or hirsute, the hairs appressed or oblique, not spreading; hairs often deciduous on calyx and the upper surface of leaflets [11]
7. Mature leaflets with abaxial secondary venation usually not prominent, often white to yellow, and usually markedly reduced from midvein and generally discolorous and much paler, strongly glaucescent below, drying light-green to olive adaxially; reticulate venation usually inconspicuous adaxially without magnification, secondary venation usually not prominent adaxially; inflorescence to 15 cm long; fertile stems often less than 1 mm wide and not appearing leafy, i.e. internodes usually longer than the length of the terminal leaflet; plant often strongly twining, with stems sometimes inseparable and strongly intertwined; calyx 5-7 mm long; corollas 7-9 mm long … G. regularis
7. Mature leaflets usually with abaxial secondary venation prominent, often reddish, gradually reduced from midvein and generally concolorous and only slightly paler, only lightly glaucescent below, often drying dark brown-green to light green adaxially; reticulate venation usually conspicuous adaxially without magnification, secondary venation sometimes prominent adaxially; if venation not strongly pronounced then stems appearing leafy with short internodes subequal to the terminal leaflet length; inflorescence to 23 cm long; fertile stems ca. 1 mm wide; plant often not twining, with stems usually easily separable; calyx [8]
8. Most mature terminal leaflets usually >2.5 cm long [9]
8. Most mature terminal leaflets usually <2.5(–3.5) cm long [10]
9. Reticulate venation strongly prominent on both surfaces of the leaflets, usually conspicuous on both surfaces without magnification; leaflets with pellucid, whitish microscopic dots abundant on adaxial surface; distal secondary veins mostly at near right angles or descending … G. pinetorum
9. Reticulate venation prominent, but not strongly so, on both surfaces, usually not conspicuous abaxially without magnification and sometimes not conspicuous adaxially; leaflets with or without pellucid, whitish microscopic dots abundant on adaxial surface; distal secondary veins mostly ascending … G. floridana
10. Leaflets with appressed strigose hairs adaxially; inflorescence not exserted beyond the subtending leaf, inflorescence axis 10–20 mm … G. microphylla
10. Leaflets with erect to ascending hairs adaxially; inflorescence usually exserted beyond subtending leaf, inflorescence axis (5)20–60(90) mm … G. smallii
11. Most leaflets <15 mm wide, <25 mm long, leaves often overlapping with those of adjacent nodes, terminal leaflet often subequal or longer than stem internodes, leaves densely covered

with pellucid, whitish microscopic dots on adaxial surface; stem vestiture antrorsely or retrorsely strigose ... G. minor
11. Most leaflets >15 mm wide or >25 mm long, if smaller, then leaves mostly not overlapping with those of adjacent nodes, and terminal leaflet usually shorter than the stem internodes, or if leaves smaller then pellucid, whitish microscopic dots (<0.1 mm wide) mostly confined to veins and absent from outer leaf margin on adaxial surface; stem vestiture retrorsely hirsute or antorsely or retrorsely strigose [12]
12. Mature leaflets with abaxial secondary venation usually not prominent, often white to yellow, and usually markedly reduced from midvein and generally discolorous and much paler, strongly glaucescent below, drying light-green to olive adaxially; reticulate venation usually inconspicuous adaxially without magnification, secondary venation usually not prominent adaxially; inflorescence to 55 cm long; fertile stems often less than 1 mm wide; plant often strongly twining, with stems sometimes inseparable and strongly intertwined [13]
12. Mature leaflets usually with abaxial secondary venation prominent, often reddish, gradually reduced from midvein and generally concolorous and only slightly paler, only lightly glaucescent below, often drying dark brown-green to light green adaxially; reticulate venation usually conspicuous adaxially without magnification, secondary venation sometimes prominent adaxially; inflorescence to 23 cm long; fertile stems ca. 1 mm wide; plant often not twining, with stems usually easily separable [14]
13. Leaflets consistently linear-oblong, >4 times as long as wide (rarely with broadly elliptic leaflets), <7 mm wide ... G. austrofloridensis
13. Leaflets elliptic to ovate to narrowly ovate, some or most or all <4 times as long as wide or >7 mm wide, occasionally with some leaflets >4 times as long as wide and narrowly ovate ... G. volubilis
14. Reticulate venation strongly prominent on both surfaces, usually conspicuous on both surfaces without magnification; leaflets with pellucid, whitish microscopic dots abundant on adaxial surface; distal secondary veins often perpendicular, nearly so, or descending ... G. pinetorum
14. Reticulate venation prominent, but not strongly so, on both surfaces, usually not conspicuous abaxially without magnification and sometimes not conspicuous adaxially; leaflets with or without pellucid, whitish microscopic dots abundant on adaxial surface; distal secondary veins usually ascending ... G. purshii

•***Galactia austrofloridensis*** A.R.Franck {AFP} — Perhaps just a subspecies of *G. volubilis*.
Galactia brachypoda Torr. & A. Gray {AFP} — Rare putative hybrid of *G. erecta* and *G. mollis*.
Galactia elliottii Nutt. {AFP} —
Galactia erecta (Walter)Vail {AFP} —
Galactia floridana Torr. & A. Gray {AFP} —
Galactia microphylla (Chapm.) H.J Rogers ex D.W.Hall & D.B.Ward {AFP} —
Galactia minor W.H. Duncan {AFP} —
Galactia mollis Michx. {AFP} —
•***Galactia pinetorum*** Small {AFP} —
Galactia purshii Desv. {AFP} —
Galactia regularis (L.)Britton et al. {AFP} — Perhaps not actually found in Florida.
•***Galactia smallii*** H.J.Rogers ex Herndon {AFP} — FE. SE.
Galactia striata (Jacq.)Urb. {AFP} —
Galactia volubilis (L.)Britton {AFP} —

Gleditsia
1. Leaflets mostly glabrate, acute at the base, the lateral venation unapparent; fruits ovate or ellipsoid, 3-5(-8) cm long, without pulp, with 1(-3) seeds ... G. aquatica
1. Leaflets usually pubescent on the lower surface, mostly rounded at the base, the lateral venation apparent or obscure; fruit oblong, 20-40 cm long, pulpy, with numerous seeds ... G. triacanthos

Gleditsia aquatica Marshall {AFP} —
Gleditsia ×texana Sarg. (*aquatica* × *texana*) {AFP} —
Gleditsia triacanthos L. {AFP} —

Gliricidia
^*Gliricidia sepium* (Jacq.)Kunth ex Walp. {AFP} —

Grona

1. Terminal leaflets mostly >1 cm long; flowers numerous in an axillary or terminal raceme or panicle ... G. heterocarpos
1. Leaflets 0.5-1 cm long; flowers 1-4 in an axillary fascicle ... Grona triflora

****Grona heterocarpos*** (L.)K.Ohashi & H.Ohashi {AFP} —
****Grona triflora*** (L.)H.Ohashi & K .Ohashi {AFP} —

Guilandina
1. Stipules foliaceous with 1-4 leaflets, sometimes absent on immature stems or sometimes shed before leaf has dropped; floral bract narrowly ovate-lanceolate to deltate and generally gradually narrowed toward the apex, (5)6-12 mm long, descending to strongly recurved, subequal to exceeding pedicels of larger flower buds, mostly persistent with the mature flower; seeds gray ... G. bonduc
1. Stipules absent or scale-like, to 3 mm long; floral bract ovate at the base, abruptly contracted near mid-length and subulate toward the apex, 3-10 mm long, erect to spreading; seeds yellow, brown, to blackish [2]
2. Leaflets broadly elliptic, suborbicular, to subrhombic, the apex and base both rounded, larger leafets 1.7–3.5(4) cm long, 1.4–2.8 cm wide ... G. ciliata
2. Leaflets broadly to narrowly ovate (rarely elliptic), acute towards the apex and broadly acute to truncate at the base, the larger leaflets (3.5)4–8 cm long, (2.2)2.8–4 cm wide ... G. major

Guilandina bonduc L. {AFP} — Peninsula, rare in panhandle. Coastal areas.
Guilandina ciliata Bergius ex Wikstr — Monroe Co. keys (Caribbean Islands). Known only from a Chapman collection; presumed extirpated.
Guilandina major (Medik.)Small {AFP} — SE. Miami-Dade & Monroe Keys. Rockland hammocks. Possibly, the name *G. intermedia* may be more applicable and *G. major* might only apply to populations outside of the Neotropics.

Hylodesmum
1. Leaves alternate with well-spaced internodes 1.5-5 cm long; inflorescence often axillary and terminal; corolla white ... H. pauciflorum

1. Leaves subverticillate, tightly clustered in a 1-2 cm region; inflorescence appearing only terminal; corolla pink to purple, rarely white [2]
2. Leaflets long-acuminate at the tip; inflorescence terminal from the leafy stem … H. glutinosum
2. Leaflets obtuse to shortly acuminate at the tip; inflorescence on a separate, usually leafless stem borne from the base of the leafy stem … H. nudiflorum

Hylodesmum glutinosum (Muhl. ex Willd.)H.Ohashi & R.R.Mill {AFP} —
Hylodesmum nudiflorum (L.)H.Ohashi & R.R.Mill {AFP} —
Hylodesmum pauciflorum (Nutt.)H.Ohashi & R.R.Mill {AFP} —

Indigofera Indigo was briefly cultivated as a dye crop in Florida and nearby, primarily in the 1700s, utilizing the species *I. suffruticosa* and *I. tinctoria* (Holmes 1967; Rembert, Jr. 1979).

1. Leaves 3-foliolate … I. pilosa
1. Leaves mostly 5- or more foliolate [2]
2. Leaflets mostly alternate on the rachis [3]
2. Leaflets mostly opposite on the rachis [4]
3. Stipules subulate; leaflets mostly <4 mm wide; inflorescence of 3-10 flowers, at least the lower internodes easily visible … I. miniata
3. Stipules deltoid to lanceolate; larger leaflets >4 mm wide; inflorescence of 5-40 flowers, the internodes nearly concealed … I. spicata
4. Plant with glandular trichomes; leaflets <4 mm wide, <7 mm long … I. colutea
4. Plant lacking glandular trichomes; larger leaflets >5 mm wide or >8 mm long [5]
5. Plant hirsute to pilose … I. hirsuta
5. Plant mostly strigose to glabrate [6]
6. Stems decumbent to prostrate; leaves mostly 5-foliolate … I. trita subsp. scabra
6. Stems erect to spreading; at least some leaves more than 5-foliolate [7]
7. Inflorescence pedunculate, the peduncle (distance to first flower) 2.5-15 cm long; fruit indehiscent, <12 mm long, seeds 1-3 … I. caroliniana
7. Inflorescence subsessile or with a peduncle to 1 cm long; fruit dehiscent, >13 mm long, seeds >3 [8]
8. Shrubs 1-2.5 m tall, with ascending to erect stems; leaflets elliptic, broadly elliptic, to broadly obovate along fertile portions of the stem; upper petal rounded-mucronate at the tip; fruit <1.8 cm long, strongly curved … I. suffruticosa
8. Shrubs to 1 m tall, with spreading to ascending stems; leaflets narrowly elliptic along fertile portions of the stem; upper petal acute at the tip; fruit >2 cm long, straight to curved … I. tinctoria

Indigofera caroliniana Mill. {AFP} —
****Indigofera colutea*** (Burm.f.)Merr. {AFP} —
****Indigofera hirsuta*** L. {AFP} —
Indigofera miniata Ortega {AFP} —
Indigofera oxycarpa Desv. {AFP} — SE. Leivens (1992) used the name *I. oxycarpa* but also stated "I am, though, prepared to eventualy accept Meikle's (1951) conclusions" to apply the name *I. subulata* var. *scabra* to Florida material.
****Indigofera pilosa*** Poir. {AFP} —
****Indigofera spicata*** Forssk. {AFP} —

*__Indigofera suffruticosa__ Mill. {AFP} —
*__Indigofera tinctoria__ L. {AFP} —

Kummerowia
*__Kummerowia striata__ (Thunb.)Schindl. {AFP} —

Lablab
*__Lablab purpureus__ (L.)Sweet {AFP} —

Lathyrus
1. Stipules of upper nodes 1-2 mm wide; ovary and fruit pustulate-hirsute; corolla 10-14 mm long ... L. hirsutus
1. Stipules of upper nodes 2-5 mm wide; ovary and fruit glabrous; corolla 6-9 mm long ... L. pusillus

*__Lathyrus hirsutus__ L. {AFP} —
__Lathyrus pusillus__ Elliott {AFP} —

Leptospron
*__Leptospron adenanthum__ (G.Mey.)A.Delgado {AFP} —

Lespedeza: Commemorates Vicente Manuel de Céspedes, governor of Florida during Michaux's exploration, and the "L" was introduced probably by a transcription error (Ricker 1934).

1. Leaflets widest at or near the apex, cuneate from the tip to the base; axillary inflorescence of 1-3 flowers ... L. cuneata
1. Leaflets widest at or near the middle, generally elliptic to linear-elliptic; axillary inflorescence of 3-many flowers [2]
2. Stems prostrate, procumbent, decumbent, to spreading-ascending [3]
2. Stems erect [5]
3. Plant with spreading, curved trichomes ... L. procumbens
3. Plant with appressed hairs or glabrescent [4]
4. Stems sprawling to ascending; leaflets apiculate; keel petal usually longer than the lateral petals ... L. frutescens
4. Stems trailing or procumbent; leaflets scarcely to minutely apiculate; keel petal subequal to lateral petals ... L. repens
5. Leaflets linear to oblong-elliptic, 2-8(10) mm wide, mostly 2.3-8 times longer than wide [6]
5. Leaflets elliptic-oblong, ovate, to obovate, larger ones 8-25 mm wide, mostly 1.6-2.6 times longer than wide [8]
6. Petioles >½ as long as the lateral leaflets, to 28 mm long; calyx to ½ as long as the mature fruit; corolla pink to purple, rarely white ... L. virginica
6. Petioles <¼(½) as long as the lateral leaflets, to 3(10) mm long; calyx subequal to longer than the mature fruit; corolla white to cream with a purple throat [7]
7. Leaflets mostly 4-8(10) times longer than wide; calyx 5-8 mm long; corolla 5-7 mm long; fruit 3-5 mm long ... L. angustifolia
7. Leaflets mostly 2.3-3.5 times longer than wide; calyx 8-12 mm long; corolla 7-10 mm long; fruit 4-7 mm long ... L. capitata

8. Plant 1-3 m tall, woody or suffrutescent; petioles to 4 cm long; corolla 8-15 mm long [9]
8. Plant to 1.5(-2) m tall, herbaceous; petioles to 2.5 cm long; corolla 5-10 mm long [10]
9. Racemes stiffly erect to erect-ascending; corolla 8-11 mm long; seeds purple and green mottled … L. bicolor
9. Racemes laxly spreading to drooping; corolla 10-15 mm long; seeds purplish black … L. thunbergii
10. Leaflets elliptic-oblong; racemes to 2 cm long, included or scarcely exserted beyond the leaves; calyx to ½ as long as the fruit … L. stuevei
10. Leaflets ovate to obovate; racemes to 8 cm long, exserted beyond the leaves; calyx subequal to longer than the fruit [11]
11. Stems subappressed-puberulent to densely villosulous, hairs <1 mm long; petiole of medial leaves commonly <1 cm in length and subequal to rachis; leaflets 1-2 cm long, silvery, closely strigose on both surfaces with hairs 0.2-0.5 mm long (the longer ones primarily along midrib of lower surface) … L. hirta subsp. curtissii
11. Stems villous, some hairs >1 mm long; petiole of medial leaves 1-1.5(2) cm long, much exceeding the rachis; leaflets 1.5-4(5) cm long, green-cinereous or less commonly silvery, not closely strigose on both surfaces, upper surface glabrate or strigose, lower surface usually loosely strigose below (not closely appressed), and commonly with some hairs along veins >0.5 mm long … L. hirta subsp. hirta

Lespedeza angustifolia (Pursh)Elliott {AFP} —
*****Lespedeza bicolor*** Turcz. {AFP} —
Lespedeza capitata Michx. {AFP} —
*****Lespedeza cuneata*** (Dum.Cours.)G.Don {AFP} —
Lespedeza hirta (L.)Hornem. subsp. ***curtissii*** Clewell — Treated as a subspecies by Clewell (1964) and reassessed by Isely (1986).
Lespedeza hirta (L.)Hornem. subsp. ***hirta*** {AFP} —
Lespedeza ×oblongifolia (Britton)W.Stone (*angustifolia* × *hirta*) {AFP} —
Lespedeza procumbens Michx. {AFP} —
Lespedeza repens (L.)W.P.C.Barton {AFP} —
Lespedeza stuevei Nutt. {AFP} —
*****Lespedeza thunbergii*** (DC.)Nakai {AFP} —
Lespedeza frutescens (L.)Pers. {AFP} — Previously as the misapplied *L. violacea*.
Lespedeza virginica (L.)Britton {AFP} —

Leucaena
*****Leucaena leucocephala*** (Lam.)de Wit {AFP} —

Lonchocarpus
^*Lonchocarpus punctatus* Kunth {AFP} —

Lotononis
*****Lotononis bainesii*** Baker {AFP} —

Lotus
*****Lotus pedunculatus*** Cav. {AFP} —

Lupinus: Three species were recently described by Bridges & Orzell (2024) writing that "Even though their support may be weak, we feel that the four peninsular Florida entities within the *Lupinus cumulicola* subclade represent at least incipient speciation strongly correlated with the relatively recent geographic isolation of most populations. Alternatively, these could be considered as four varieties of *L. cumulicola*". Nevado et al. (2024) wrote "evidence of inter-variant hybrids, limited phylogenetic support for some of these sub-clades and evidence of significant gene flow indicative of incomplete reproductive isolation argue for recognition of these entities at intra-specific rather than species rank"; however, no infraspecific combinations were made. Of 72 samples analyzed, 13 showed morphological intermediacy or genetic admixture (Nevado et al. 2024).

1. Leaves 5- to 11-foliolate [2]
1. Leaves 1-foliolate [5]
2. Corolla yellow … L. luteus
2. Corolla lavender to blue-purple [3]
3. Leaflets mostly linear to oblong, 5-10 times long as wide … L. angustifolius
3. Leaflets mostly elliptic to obovate, 3-5 times long as wide [4]
4. Rhizomatous perennial; leaves mostly 7- to 11-foliolate; corolla blue-violet to white or pink … L. perennis
4. Taprooted annual; leaves mostly 5- to 7-foliolate; corolla dark blue … L. texensis
5. Stipules 0-5 mm long [6]
5. Stipules mostly 5-35 mm long [7]
6. Robust plants averaging 45-60 cm tall; leaf blades mostly 5.0-6.5 cm long, 2.5-3.0 cm wide; corolla white to pink, the upper petal with a blackish maroon spot … L. aridorum
6. robust plants averaging 60-85 cm tall; leaf blades mostly 7.5-9.0 cm long, 3.5-4.5 cm wide; corolla pale lavender to blue, the upper petal with a maroon to dark purplish blue spot … L. westianus
7. Corolla primarily of white, pink, and light blue colors, the upper petal with dark spots along the middle; fruit with hairs to 5 mm long … L. villosus
7. Corolla primarily of white and blue colors, the upper petal with light or white spots along the middle; fruit with hairs to 3 mm long [8]
8. Plant mat-forming, of small clumps, mostly 25-80 cm wide; petioles 6-8 cm long; leaf blades mostly 3-4(5) times longer than wide (L. diffusus s.str.) … L. diffusus
8. Plant erect and branched above ground or mat-forming of large clumps, typically 90-130 cm wide; petioles mostly 1.5-6 cm long (rarely to 10 cm); leaf blades mostly 1.8-2.9(3.5) times longer than wide (L. cumulicola s.lat.) [9]
9. Plants (20)26-45(72) cm tall, mat-forming, the main stems prostrate, branched at or near ground level, first branch 0-8(14) cm aboveground, branches mostly decumbent, ascending only at their leafy tips; free portion of stipules (13)17-25(39) mm long [10]
9. Plants (25)50-90(200) cm tall, erect, the main stem erect, branched above ground level, first branch (0)4-15(34) cm aboveground; free portion of stipules (0)8-14(23) mm long [11]
10. Plants with dense, short, appressed pubescence, the green surface of the leaves evident; petioles (40)50-65(100) mm long; mature fruit (17)20-27(35) mm long, (6)6.7-7.0(8) mm wide; central to north peninsula … L. ocalensis
10. Plants with dense, spreading, whitish-villous pubescence, mostly obscuring the leaf surface; petioles (18)32-45(70) mm long; mature fruit (18)36-44(54) mm long, (8)10-12(17) mm wide; central-west and southwest peninsula … L. pilosior

11. Leaf blades densely silvery-silky appressed pubescent, the hairs totally obscuring the leaf surface, larger proximal ones (26)34-44(58) mm wide, mostly 1.8-2.1(2.7) times longer than wide; Lake Wales Ridge region ... L. cumulicola
11. Leaf blades moderately appressed pubescent, the hairs not obscuring the green leaf surface, larger proximal ones (15)25-32(44) mm wide, mostly 2.4-2.9 times longer than wide; central-east and southeast peninsula ... L. floridanus

^*Lupinus angustifolius* L. {AFP} —
•***Lupinus aridorum*** McFarlin ex Beckner {AFP} — FE. SE.
Lupinus cumulicola Small —
Lupinus diffusus Nutt. {AFP} —
•***Lupinus floridanus*** E.L. Bridges & Orzell —
^*Lupinus luteus* L. {AFP} —
•***Lupinus ocalensis*** E.L. Bridges & Orzell —
Lupinus perennis L. var. ***gracilis*** Chapm. {AFP} — Florida plants are sometimes placed as a subsp. *gracilis* (Chapm.)Dunn, following Dunn (1965). Isley (1988) wrote "the change from one to another is clinal, reticulate, and irregular" such that the "The taxonomic segmentation of *L. perennis* does not seem practical"; he observed that plants of Florida show varied combinations of *gracilis* and *perennis*.
•***Lupinus pilosior*** E.L. Bridges & Orzell —
*****Lupinus texensis*** Hook. {AFP} —
Lupinus villosus Willd. {AFP} —
•***Lupinus westianus*** Small {AFP} — ST.

Lysiloma
1. Bark gray, smooth to platy; the pinnae each with 10-30 pairs of leaflets; leaflets oblong to oblong-lanceolate, 8-15 mm long; mature corolla usually red ... L. latisiliquum
1. Bark light brown and brownish gray, somewhat flaky with longitudinal plates; the pinnae each with 3-7 pairs of leaflets; leaflets ovate to obovate, 10-20 mm long; mature corolla green ... L. sabicu

Lysiloma latisiliquum (L.)Benth. {AFP} —
^*Lysiloma sabicu* Benth. {AFP} —

Macroptilium
1. Leaflets generally ovate, sometimes lobate, tomentose to sericeous on the lower surface, the secondary (and often tertiary) veins prominent and conspicuous on the lower surface, often impressed on the upper surface; seed ca. 4 mm long ... M. atropurpureum
1. Leaflets mostly linear-oblong to obovate, sometimes slightly lobate, glabrate to sparsely strigose on the lower surface, the secondary veins inconspicuous and not prominent or only partly so for the basal veins on the lower surface, obscure on the upper surface; seed ca. 3 mm long ... M. lathyroides

*****Macroptilium atropurpureum*** (Moç. & Sessé ex DC.)Urb. {AFP} —
*****Macroptilium lathyroides*** (L.)Urb. {AFP} —

Medicago
1. Corolla 2-3 mm long; fruit reniform, black, with 1 seed ... M. lupulina

1. Corolla 3-11 mm long; fruit spirally coiled, with multiple seeds [2]
2. Plant perennial with a stout taproot; corolla purplish (rarely yellow, green, or white), 6-11 mm long; fruit without prickles ... M. sativa
2. Plant annual with a slender taproot; corolla yellow; fruit with or without prickles [3]
3. Stems and leaves moderately to densely villous or villosulous [4]
3. Stems and leaves glabrous to sparsely pubescent [5]
4. Stipules entire to shallowly denticulate; fruit prickles 50-80, slender and grooved ... M. minima
4. Stipules strongly toothed or lobed or laciniate; fruit prickles 20-35, the prickles stout and subterete ... M. littoralis
5. Stipules deeply divided to nearly to the base; fruit without prickles, 10-15 mm wide, with papery edges; seed surface roughened or tuberculate ... M. orbicularis
5. Stipules strongly toothed or lobed or laciniate; fruit with prickles, the body 5-10 mm wide (excluding prickles), lacking papery edges; seed surface not roughened [5]
6. Leaflets sometimes with a central dark reddish spot; stipules toothed to shallowly laciniate, teeth or lobes triangular-acuminate and shorter than the body; fruit coil edge with central groove flanked by lateral grooves forming a pattern of 3 grooves separating 4 ridges ... M. arabica
6. Leaflets without a central spot; stipules deeply laciniate, the lobes filiform-acuminate, mostly subequal to longer than the body; fruit coil edge lacking a pattern of 3 grooves separating 4 ridges ... M. polymorpha

**Medicago arabica* (L.)Huds. {AFP} —
**Medicago littoralis* Rohde ex Loisel. {AFP} —
**Medicago lupulina* L. {AFP} —
**Medicago minima* (L.)Bartal. {AFP} —
**Medicago orbicularis* (L.)Bartal. {AFP} —
**Medicago polymorpha* L. {AFP} —
**Medicago sativa* L. {AFP} —

Melilotus
1. Corolla white; fruit 3-5 mm long, veins tending to form irregular reticulation ... M. albus
1. Corolla yellow; fruit 2-5 mm long [2]
2. Corolla 1.5-3 mm long; fruit 2-3 mm long, reticulate-veined ... M. indicus
2. Corolla 4-7 mm long; fruit 3-5 mm long, transverse-rugose with elongate areolae ... M. officinalis

**Melilotus albus* Medik. {AFP} —
**Melilotus indicus* (L.)All. {AFP} —
**Melilotus officinalis* Lam. {AFP} —

Mimosa
1. Plant without prickles ... M. strigillosa
1. Plant with prickles on stems, petioles, or leaf rachis [2]
2. Pinnae (1)2 pairs, clustered at the apex of the rachis ... M. pudica
2. Pinnae 3-12 pairs, diffuse along the rachis [3]
3. Pinnae usually 8–12; fruit segmented (each segment containing one seed), hispid, 8-12 mm wide ... M. pigra

3. Pinnae usually 3–5; fruit unsegmented, prickly, 2-5 mm wide [4]
4. Secondary venation of the leaflets conspicuous … M. floridana
4. Secondary venation of the leaflets obscure … M. microphylla

•***Mimosa floridana*** (Chapm.)Weakley & Flores-Cruz {AFP} — Peninsula (SE Georgia). Nearly endemic.
Mimosa microphylla Dryand. {AFP} — Throughout (SE USA).
*****Mimosa pigra*** L. {AFP} —
*****Mimosa pudica*** L. {AFP} —
Mimosa strigillosa Torr. & A.Gray {AFP} —

Mucuna
1. Leaflets obtuse to acute at the apex, sometimes mucronate to cuspidate; inflorescence racemose; corolla purple (rarely white); fruit without transverse ridges, 5-9 cm long, 1-1.5 cm wide; seed hilum protruding from the surface, much shorter than the length and width of the seed … M. pruriens
1. Leaflets acuminate at the apex; inflorescence umbellate; corolla yellow; fruit with transverse ridges, 9-16 cm long, 4-6 cm wide; seed hilum nearly continuous and smooth with the surface, longer than the length and width of the seed … M. sloanei

*****Mucuna pruriens*** (L.)DC. {AFP} —
++***Mucuna sloanei*** Fawc. & Rendle {AFP} — Seeds frequently washed ashore on beaches. Earliest alleged native record probably *Small & Mosier 5913* from "Goodburn Hammock" (unknown locality in Miami-Dade Co.), 17 March 1915. Otherwise known only from more recent collections in Broward (2001) and Miami-Dade (1997). Native status questionable.

Neptunia
Neptunia pubescens Benth. {AFP} —

Orbexilum
1. Leaves 1-foliolate … O. virgatum
1. Leaves with 3-7 leaflets [2]
2. Leaves with (3-)5-7 leaflets; leaflets linear-filiform to linear-oblanceolate, to 2(4) mm wide … O. lupinellus
2. Leaves 3-foliolate; leaflets elliptic to elliptic-lanceolate, 4-10 mm wide [3]
3. Bracts, calyces and fruits eglandular, or nearly so; bracts narrowly ovate, 5– 8 mm long, 1.0–2.5 mm wide … O. psoralioides
3. Bracts, calyces and fruits markedly glandular; bracts broadly ovate, 6–10 mm long, 2–5 mm wide … O. pedunculatum

Orbexilum lupinellus (Michx.)Isely {AFP} —
Orbexilum pedunculatum (Mill.)Rydb. {AFP} —
Orbexilum psoralioides (Walter)Vincent —
Orbexilum virgatum (Nutt.)Rydb. {AFP} — SE.

Pachyrhizus
^*Pachyrhizus erosus* (L.)Urb. {AFP} —

Parkinsonia
*****Parkinsonia aculeata*** L. {AFP} —

Pediomelum
Pediomelum canescens (Michx.)Rydb. {AFP} —

Peltophorum
1. Leaflets 0.5-1 cm long, usually acute-mucronate at the tip; corolla 2-3.5 cm wide; style 1.5-4 mm long; fruit 1-2 cm wide ... P. dubium
1. Leaflets 1-2 cm long, usually obtuse to emarginate at the tip; corolla 3-4 cm wide; style 2.5-9.5 mm long; fruit 1.7-3.4 cm wide ... P. pterocarpum

*****Peltophorum dubium*** (Spreng.)Taub. {AFP} —
*****Peltophorum pterocarpum*** (DC.)Backer ex K.Heyne {AFP} —

Phanera
^*Phanera yunnanensis* (Franch.)Wunderlin {AFP} —

Phaseolus
1. Leaflets to 12 cm long and 8 cm wide; raceme with a somewhat stiff, stout axis [2]
1. Leaflets to 10 cm long and 9 cm wide; raceme with a lax, slender axis [3]
2. Corolla usually white; fruit flattened ... P. lunatus
2. Corolla usually white to purple; fruit subterete ... P. vulgaris
3. Leaflets unlobed ... P. polystachios
3. Leaflets 2- or 3-lobed, sometimes shallowly so [4]
4. Leaflets to 4 cm long, 3.5 cm wide ... P. sinuatus
4. Leaflets to 9 cm long, 8 cm wide ... P. smilacifolius

*****Phaseolus lunatus*** L. {AFP} —
Phaseolus polystachios {AFP} —
Phaseolus sinuatus Nutt. ex Torr. & A.Gray {AFP} — Recognized as a species by Debouck (2021), Freytag & Debouck (2002) wrote that "this taxon apparently has an overlapping range with the type species, yet it is very distinct and there seems to be no intergradation [...] On the other hand, the similarities are so great that the senior author sees no reason at this time to maintain the specific rank."
Phaseolus smilacifolius Pollard {AFP} — Recognized as a species by Debouck (2021), Freytag & Debouck (2002) recognized this as a subspecies of *P. polystachios*, stating "there are many morphological differences, the most striking of which are the large lobed leaves [...] with no sign of intermediates, in addition to the different ranges".
^*Phaseolus vulgaris* L. {AFP} — Presumably cultivated in north Florida by indigenous peoples (Scarry & Scarry 2005; Moreno Palacios 2022; Park 2022), as this species is found in archaeological records of other eastern USA sites (Kaplan 1965).

Piscidia
Piscidia piscipula (L.)Sarg. {AFP} —

Pisum
^*Pisum sativum* L. {AFP} —

Pithecellobium

1. Petiole (from the base to the first split) usually shorter than the rachis (from the split to the leaflet pair) [2]
1. Petiole usually longer than the rachis [3]
2. Stems with stipular spines; leaflet tip usually with a mucro … P. bahamense
2. Stems without stipular spines; leaflet tip usually without a mucro … P. keyense
3. Leaflets mostly 1.7-2.4 times as long as wide; inflorescence of axillary heads along a stem >10 cm long, the heads often fasciculate with 2 or more fertile heads, the peduncles villosulus and <1.3 cm long; perianth pubescent … P. dulce
3. Leaflets mostly 1.2-1.6 times as long as wide; inflorescence of axillary heads along a stem usually <9 cm long, fertile heads usually solitary, the peduncles glabrous and the longer ones 1.5-7 cm long; perianth glabrous … P. unguiscati

Pithecellobium bahamense Northrop {AFP} — SE.
^*Pithecellobium dulce* (Roxb.)Benth. {AFP} —
Pithecellobium keyense Britton {AFP} — ST.
Pithecellobium unguis-cati (L.)Benth. {AFP} —

Pongamia

****Pongamia pinnata*** (L.)Pierre {AFP} — The genus was shown to be distinct (Song et al. 2025), and does not belong under *Millettia*.

Psophocarpus

^*Psophocarpus tetragonolobus* (L.)DC. {AFP} —

Pueraria

****Pueraria montana*** (Lour.)Merr. var. ***lobata*** (Willd.)Maesen & S.M.Almeida ex Sanjappa & Predeep {AFP} —

Rhynchosia

1. Leaves mostly with 1 leaflet (infrequently 3) [2]
1. Leaves mostly with 3 leaflets (infrequently 1) [3]
2. Plant prostrate or trailing, the leaves generally well-spaced and usually not overlapping; calyx 9-15 mm long; fruit scarcely exserted from the calyx … R. michauxii
2. Plant erect to 40 cm tall, the leaves generally clustered together and overlapping; calyx 7-10 mm long; fruit much exserted from the calyx … R. reniformis
3. Leaflets acuminate at the tip, sometimes only slightly; seeds black or red and black [4]
3. Leaflets acute to broadly rounded at the tip (very rarely slightly acuminate); seeds brown [5]
4. Stipules absent; leaflet stipels absent; seeds bicolored red and black … R. precatoria
4. Stipules persistent; leaflet stipels persistent; seeds red … R. swartzii
5. Terminal leaflets 0.8-1.3 times longer than wide [6]
5. Terminal leaflets 1.5-2.5 times longer than wide [8]
6. Most racemes exceeding the leaves, (1-)4-12 cm long; calyx 2.5-4 mm long … R. minima
6. Racemes usually shorter than the leaves, 1-4(-8) cm long; calyx 8-14 mm long [8]
7. Plant hairs generally <0.4 mm long; petiole pubescent; fruit puberulent … R. cinerea
7. Plant hairs commonly >0.7 mm long; petiole hirsute; fruit hirsute and puberulent … R. difformis

8. Plant trailing, prostrate, or vine-like [9]
8. Plant erect [10]
9. Fresh leaflets bluish or grayish green; leaflets elliptic to elliptic-obovate ... R. parvifolia
9. Fresh leaflets green to olive-green; leaflets generally ovate ... R. reticulata
10. Leaflets to 2 cm long, 1 cm wide; flowers 1(-3) in the leaf axils; corolla clearly exceeding the calyx ... R. cytisoides
10. Leaflets 2-5(-7) cm long, 1-4 cm wide; flowers numerous in a raceme; corolla subequal to slightly exceeding the calyx [11]
11. Stipules caducous; inflorescence a solitary raceme 5-20 cm long ... R. tomentosa var. mollissima
11. Stipules persistent; inflorescence of several racemes 1-3 cm long ... R. tomentosa var. tomentosa

•***Rhynchosia cinerea*** Nash {AFP} —
Rhynchosia cytisoides (Bertol.)Wilbur {AFP} —
Rhynchosia difformis (Elliott)DC. {AFP} —
Rhynchosia michauxii Vail {AFP} —
Rhynchosia minima (L.)DC. {AFP} —
Rhynchosia parvifolia DC. {AFP} — ST.
****Rhynchosia precatoria*** (Humb. & Bonpl. ex Willd.)DC. {AFP} —
Rhynchosia reniformis DC. {AFP} —
****Rhynchosia reticulata*** (Sw.)DC. {AFP} —
Rhynchosia swartzii (Vail)Urb. {AFP} — SE.
Rhynchosia tomentosa (L.)Hook. & Arn. var. ***mollissima*** (Elliott)Torr. & A.Gray {AFP} —
Rhynchosia tomentosa (L.)Hook. & Arn. var. ***tomentosa*** {AFP} —

Robinia
1. Shrub or small tree to 3(10) m; bark generally smooth (or hispid) and lenticellate; stems, peduncles, pedicels, and calyces stiffly hispid (hairs to 7 mm long) or occasionally glabrate; fruit often hispid; calyx 8-14 mm long, the lobes subequal to longer than the tube; corolla pink to purple, rarely white, 20-25 mm long ... R. hispida
1. Trees, to 25 m; bark forming criss-crossed ridges; stems, peduncles, pedicels, and calyces puberulent to glabrate; fruit glabrous; calyx 6-10 mm long, the lobes much shorter than the tube; corolla white, rarely pinkish, 15-20 mm long ... R. pseudoacacia

****Robinia hispida*** L. {AFP} —
****Robinia pseudoacacia*** L. {AFP} —

Senegalia
^*Senegalia pennata* (L.)Maslin subsp. *insuavis* (Lace)Maslin et al. {AFP} —

Senna
1. Leaf petiole and rachis without glands (extra floral nectaries sometimes present on stipules, bracts, or sepals) [2]
1. Leaf petiole or rachis with 1 or more spherical, cylindric, conic, or stipitate glands [4]
2. Petiole 2-3 mm wide; fruit 4-winged ... S. alata
2. Petiole 0.5-1.5 mm wide; fruit flat [3]
3. Leaf with (1)2-6 pairs of leaflets ... S. atomaria

3. Leaf with (8)9-16(18) pairs of leaflets … S. didymobotrya
4. Gland at the base of the petiole, before the first pair of leaflets [5]
4. Gland(s) on the rachis between the leaflet pair(s) [8]
5. Petiolar gland cylindric to narrowly conic, ca. 2-3 mm tall; leaflets 8-11 mm wide … S. ligustrina
5. Petiolar gland spherical, ca. 1 mm tall; leaflets 10-30 mm wide, at least the larger ones [6]
6. Leaf with 6-8 pairs of leaflets, strongly paler on the underside … S. marilandica
6. Leaf with 4-5(6) pairs of leaflets, only slightly paler on the underside [7]
7. Leaflets obtuse to subacute-mucronate; fruit lacking the marginal band (only light colored on the marginal ridged edge) … S. chapmanii
7. Leaflets acuminate at the apex; fruit with a conspicuous 1-3 mm wide marginal light band on the fruit body … S. occidentalis
8. Glands between the lower 2 or more pairs of leaflets … S. surattensis
8. Gland usually solitary between the lowermost pair of leaflets [9]
9. Rachis gland globose to bluntly short-conic, sometimes with a short stipe [10]
9. Rachis gland short-cylindric, stipe-like, or stipitate with the stipe nearly as long as the gland [11]
10. Leaflets not much paler below, usually with a conspicuous apical mucro; fruit flattened, dehiscent … S. chapmanii
10. Leaflets much paler below, without an apical mucro or the mucro inconspicuous; fruit cylindric, indehiscent and irregularly breaking apart … S. pendula var. glabrata
11. Leaf with 6-10 pairs of leaflets [12]
11. Leaf with 2-3 pairs of leaflets [13]
12. Leaves mostly spaced with clear internodes; leaflets 10-25 mm long, 5-12 mm wide; … S. angustisiliqua
12. Leaves often densely clustered on short shoots; leaflets 3.5-9(10) mm long, 2-5 mm wide; … S. polyphylla
13. Leaflets mostly acute at the apex, widest near the middle or base; fruit straight to slightly curved … S. corymbosa
13. Leaflets very broadly rounded at the apex, usually widest near the apex; fruit usually strongly curved … S. obtusifolia

****Senna alata*** (L.)Roxb. {AFP} —
****Senna angustisiliqua*** (Lam.)H.S.Irwin & Barneby {AFP} — Apparently var. *angustisiliqua* (of Hispaniola); 2 other vars. usually have glands between 1-3 proximalmost leaflet pairs.
****Senna atomaria*** (L.)H.S.Irwin & Barneby {AFP} —
Senna chapmanii (Isely)A.Barreto & Yakovlev {AFP} — ST. Miami-Dade & Monroe Keys (Bahamas, Cuba). Previously treated as a variety of *Senna mexicana* by Irwin & Barneby (1982: 415) who stated "We find them so closely related as to be best treated collectively as forming a megaspecies consisting of five geographical races, with contiguous but well differentiated ranges of dispersal."
****Senna corymbosa*** (Lam.)H.S.Irwin & Barneby {AFP} —
****Senna didymobotrya*** (Fresen.)H.S.Irwin & Barneby. {AFP} —
Senna ligustrina (L.)H.S.Irwin & Barneby {AFP} —
Senna marilandica (L.)Link {AFP} —
[++]***Senna obtusifolia*** (L.)H.S.Irwin & Barneby {AFP} —Likely an early introduction, with early Florida records at ports in the 1870s, e.g. Jacksonville (*Keeler s.n.*), St. Augustine (*Reynolds s.n.*), and Cedar Key (*Palmer s.n.*, *Garber s.n.*), and as "waste places" in Chapman (1860) who made some undated collections without specific locality.

*__Senna occidentalis__ (L.)Link {AFP} —
*__Senna pendula__ (Humb. & Bonpl. ex Willd.)H.S.Irwin & Barneby var. __glabrata__ (Vogel)H.S.Irwin & Barneby {AFP} —
*__Senna polyphylla__ (Jacq.)H.S.Irwin & Barneby {AFP} — Apparently var. *polyphylla* (of Puerto Rico, VI) (Irwin & Barneby 1982: 519).
^*Senna surattensis* (Burm.f.)H.S.Irwin & Barneby {AFP} —

Sesbania

1. Corolla 6-8(10) cm long, white, pink, or red; fruit (15)30-40 cm long … S. grandiflora
1. Corolla 0.8-2.5 cm long, yellow, orange, to reddish; fruit 3-20 cm long [2]
2. Foliaceous (usually eglandular), narrowly lanceolate stipels 0.2-0.7 mm long often subtending leaflets; peduncles 0.2-5 cm long, much shorter than the fruit body; flowers usually few and well-spaced; corolla upper petal (which envelops the other petals in bud) usually irregularly mottled or streaked dark purplish externally (abaxially); ovules 12-51; fruit 10-20 cm long, 3-5 mm wide; seeds mottled or not [3]
2. Filiform-terete to deltate gland 0.1-0.2(0.3) mm long often subtending leaflets; peduncles 0.6-12.2 cm long; flowers few to several, well-spaced to overlapping; corolla upper petal (which envelops the other petals in bud) not irregularly mottled nor streaked, sometimes the veins or space between veins darker or pale reddish; ovules 1-10; fruit 3-8 cm long, 6-15 mm wide; seeds not mottled [4]
3. Stem and leaves glabrous, or with hairs only when young; corolla 10-22 mm long, upper petal orange-red to pale yellow externally, internally usually yellow, lower petals usually yellow except sometimes orange-reddish distally … S. herbacea
3. Stem and leaves persistently sericeous to subappressed villosulous; corolla 8-11 mm long, upper petal pale yellow exernally, internally usually yellow, lower petals usually yellow … S. sericea
4. Peduncles 3.7-12.2 cm long, subequal to longer than the fruit body; flowers well spaced along rachis; corolla 8-10 mm long, upper and lower petals orange-red to yellow, usually at least lower petals orange-red distally but often other parts of corolla orange-reddish as well, upper petal not mottled externally; ovules 1-2(3); fruit inflated with air, easily flattened when compressed, dehiscent, with 1-2 seeds … S. vesicaria
4. Peduncles 0.6-4.1 cm long, subequal to shorter than the fruit body; flowers densely overlapping along rachis; corolla 9-25 mm long, color varied; ovules 4-10; fruit 4-winged, quadrangular, or subterete, fairly rigid, not inflated and not easily flattened, most fruits with 3-10 seeds [5]
5. Stems and leaflet undersides often persistently sericeous to subappressed pilose; corolla 9-12 mm long; fruit quadrangular to subterete … S. virgata
5. Stems and leaflet undersides glabrate; corolla 13-25 mm long; fruit strongly 4-winged [6]
6. Leaflet underside only with secondary veins discernible; corolla yellow, 13-17 mm long; stipe of fruit (11) 15-17(20) mm long; fruit margins often undulate-constricted (torulose) between the seeds, the beak pyramidal-short acuminate … S. drummondii
6. Leaflet underside reticulate venation usually distinct, discernible; corolla orange to red, 15-25 mm long; stipe of fruit (8)11-14(16) mm long; fruit margins mostly roughened-entire or irregularly undulate, the beak pyramidal-long acuminate … S. punicea

__Sesbania drummondii__ (Rydb.)Cory {AFP} —
^*Sesbania grandiflora* (L.)Poir. {AFP} —
__Sesbania herbacea__ (Mill.)McVaugh {AFP} —
*__Sesbania punicea__ (Cav.)Benth. {AFP} —

*__Sesbania sericea__ (Willd.)Link {AFP} —
__Sesbania vesicaria__ (Jacq.)Elliott {AFP} —
*__Sesbania virgata__ (Cav.)Poir. {AFP} —

Sigmoidotropis
1. Calyx 5-6 mm long; corolla 2-3 cm long, the keel petal curved upward or slightly back towards the upper petal … S. antillana
1. Calyx 8-10 mm long; corolla 3-4 cm long, the keel petal strongly curved pointing straight back towards the throat, pointing downwards, or nearly spirally coiled … S. speciosa

*__Sigmoidotropis antillana__ (Urb.)A.Delgado {AFP} —
*__Sigmoidotropis speciosa__ (Kunth)A.Delgado {AFP} —

Sophora
1. Stems, leaves, inflorescence rachis, and calyx sericeous to glabrate, the hairs appressed to ascending, to 0.2 mm long … S. tomentosa subsp. bahamensis
1. Stems, leaves, inflorescence rachis, and calyx tomentulose to pilosulous, the hairs erect to ascending, to 0.5 mm long … S. tomentosa subsp. occidentalis

__Sophora tomentosa__ L. subsp. __bahamanesis__ Yakolev {AFP} — Isely (1998) described the leaflets as (1.5)1.8-2.5(3) times as long as wide. (syn. var. *truncata*).
*__Sophora tomentosa__ L. subsp. __occidentalis__ (L.)Brummitt {AFP} — Isely (1998) described the leaflets as 1.5-2 times as long as wide. Introduced and naturalized in the early 1990s, probably escaped from cultivation.

Strophostyles
1. Leaflets distinctly sericeous, lanceolate, never deeply lobed; inflorescence peduncle slender, herbaceous, 0.2–0.7 mm wide, 11.5–110(-123) mm long; flowers 3.6–7.0(-8.3) mm long; keel petal with a slightly curved beak that is largely enveloped by the wing petals (keel beak asymmetry is not detectable in pressed specimens); fruit distinctly sericeous, 12.2–40.7 mm long; seed glabrous … S. leiosperma
1. Leaflets glabrate to sparsely strigose (rarely sericeous), linear-oblong to ovate, entire to deeply lobed; inflorescence peduncle stout, lignescent, 0.8–1.3 mm wide, (23.5-)50–300 mm long; flowers commonly 6.7–15 mm long; keel petal with a prominently curved beak that protrudes well above the wing petals (keel beak asymmetry is readily detectable in pressed specimens); fruit glabrate to sparsely strigose (rarely sericeous) (26) 30–96.1 mm long; seed pubescent [2]
2. Leaflets entire to shallowly lobed, rarely deeply lobed, the sinus 0.0–1.0 (6.0) mm deep, terminal leaflets (15.4) 20–40 (70) mm long, 2.0–21.8 (30.2) mm wide; bracteoles subtending the flower 0.8–2.4 mm long, generally shorter than the calyx tube; corolla keel beak erect, stout, slightly curved, measuring 1.5–2.0 mm in diameter at the base and remaining closely associated with the face of the standard petal; fruit subcylindrical, with a distinct lateral compression … S. umbellata
2. Leaflets deeply lobed to entire, the sinus 0.0–18.2 mm deep, terminal leaflets 17.9–71.5 mm long, 8.5–46.2 mm wide; bracteoles subtending the flower 1.5–4.2 mm long, generally as long or longer than the calyx tube; corolla keel beak slender, curved, measuring about 1 mm in diameter at the base and projected outward from the face of the standard petal; fruit cylindrical … S. helvola

Strophostyles helvola (L.)Elliott {AFP} —
Strophostyles leiosperma (Torr. & A.Gray)Piper {AFP} —
Strophostyles umbellata (Muhl. ex Willd.)Britton {AFP} —

Stylosanthes

1. Plant viscid, glandular … S. viscosa
1. Plant eglandular … [2]
2. Inflorescence bracts with stiff, spinescent pubescence; loment beak 0.5-1 mm long … S. biflora
2. Inflorescence bracts with soft pubescence; loment beak 1-2.5 mm long [3]
3. Stems mostly <20 cm long, stems nearly all from the base of the plant and with almost no branching above; loment usually with 1 seed only, in the distal segment; loment beak straight or slightly curved … S. calcicola
3. Stems usually >20 cm long, commonly branching; loment usually with 2 seeds, one in the proximal segment and one in the distal segment; loment beak incurved or hooked … S. hamata

Stylosanthes biflora (L.)Britton et al. {AFP} —
Stylosanthes calcicola Small {AFP} — SE.
Stylosanthes hamata (L.)Taub. {AFP} —
Stylosanthes viscosa (L.)Sw.

Tamarindus

****Tamarindus indica*** L. {AFP} —

Tara

****Tara vesicaria*** (L.)Molinari et al. {AFP} —

Tephrosia

1. Style (often persisten on fruit apex) glabrous; corolla 7-12 mm long [2]
1. Style barbellate or hispidulous; corolla 10–20 mm long [6]
2. Plants villous with spreading hairs; corolla mostly pale pink … T. angustissima var. corallicola
2. Plants strigose to glabrate, hairs appressed (sometimes a few spreading); corolla pale pink to purple [3]
3. Width of largest terminal leaflets usually 7 mm or more; corolla 10-12 mm long; longest hairs of fruit 0.3-0.8 mm long; corolla mostly pale pink … T. cinerea
3. Width of largest terminal leaflets usually 6 mm or less; corolla 7-11 mm long; longest hairs of fruits 0.1-0.4 mm long; corolla mostly purple, pink-purple, to reddish purple [4]
4. Leaflets 10-20 times longer than wide … T. angustissima var. angustissima
4. Leaflets 2-8 times longer than wide [5]
5. Stipules 1-3 mm long; flowering Jun-Oct … T. angustissima var. curtissii
5. Stipules 4-8 mm long; flowering Mar-Apr, Sep … T. seminole
6. Leaflets 9-35; corolla 15–20 mm long, 2-colored, the standard yellow, the wings pink [7]
6. Leaflets 5-17; corolla less than 15 mm long, not 2-colored, usually white to pink, turning red to purple in age [8]
7. Plant 10-15(20) cm tall; inflorescence of 4-12 flowers … T. virginiana var. mohrii
7. Plant 30-70 cm tall; inflorescence of 10-40 flowers … T. virginiana var. virginiana

8. Petiole 2-4 times the length of the lowest leaflet; peduncle conspicuously flattened … T. florida
8. Petiole subequal to shorter than the length of the lowest leaflet; peduncle terete or nearly so [9]
9. Stems monopodial, erect to ascendent; raceme foliose, with several reduced or undeveloped leaves that enlarge as the fruits mature, often with 2-3 flowers at a node; … T. rugelii
9. Stems sympodial, prostrate, decumbent to weakly ascendent; raceme not foliose (rarely with a single leaf), flowers usually singular at a node [10]
10. Plant prostrate; trichomes of fruit 0.1-0.4 mm long [11]
10. Plant decumbent to weakly ascendent; trichomes of fruit 0.5-1.5 mm long [12]
11. Leaflets (1)5-7, upper surface glabrous, semi-lustrous, bright green … T. chrysophylla
11. Leaflets (1)7-11(-13), upper surface microscopically tawny-hirsute, glabrate in age, dull (rarely glabrous or lustrous), olive-green or somewhat brownish olive-green … T. mysteriosa
12. Leaflets 3-7 mm wide; upper stem and leaf rachis with appressed trichomes; calyx 3-5 mm long … T. hispidula
12. Leaflets 6-12 mm wide; upper stem and leaf rachis with spreading trichomes; calyx 6-7 mm long … T. spicata

[xx]•***Tephrosia angustissima*** Shuttlew. ex Chapm. var. ***angustissima*** {AFP} — Miami-Dade Co. Pine rocklands. SE. Perhaps last specimen from 1947 (*Wood, Jr. & Clement 7492*, GH).
•***Tephrosia angustissima*** Shuttlew. ex Chapm. var. ***curtissii*** (Small ex Rydb.)Isely {AFP} — SE.
Tephrosia angustissima Shuttlew. ex Chapm. var. ***corallicola*** (Small)Isely {AFP} — SE.
Tephrosia chrysophylla Pursh {AFP} —
****Tephrosia cinerea*** (L.)Pers. {AFP} —
Tephrosia florida (F.Dietr.)C.E.Wood {AFP} —
Tephrosia hispidula (Michx.)Pers. {AFP} —
Tephrosia* ×*intermedia (Small)G.L.Nesom & Zarucchi (*chrysophylla* × *florida*) {AFP} —
•***Tephrosia mysteriosa*** DeLaney {AFP} —
•***Tephrosia rugelii*** Shuttlew. ex B.L.Rob. {AFP} —
•***Tephrosia seminole*** Shinners — Its recognition supported by von Wettberg et al. (2023, ined.).
Tephrosia spicata (Walter)Torr. & A.Gray {AFP} —
•***Tephrosia* ×*varioforma*** DeLaney (*florida* × *mysteriosa*) {AFP} —
Tephrosia virginiana (L.)Pers. var. ***mohrii*** (Rydb.)D.B.Ward {AFP} — Sometimes recognized as a species ("with some hesitation", Godfrey & Kral 1958) but also said to "integrade" (Nesom in FNA, vol. 11).
Tephrosia virginiana (L.)Pers. var. ***virginiana*** {AFP} —

Teramnus
****Teramnus labialis*** Spreng. — Miami-Dade Co. Unvouchered observation on iNaturalist.

Ticanto
****Ticanto crista*** (L.)R.Clark & Gagnon {AFP} —

Trifolium
1. Corolla bright yellow [2]
1. Corolla white, pink, to red [3]

2. Stipules 5-8 mm long; leaflets rhombic to obovate; corolla 4-6 mm long, the upper petal striate or ribbed, plane or nearly so; inflorescence 8-13 mm wide, mostly with 20-60 flowers … T. campestre
2. Stipules 3-5 mm long; leaflets obovate to elliptic-lanceolate; corolla 2.5-4 mm long, the upper petal scarcely striate or ribbed or not at all, longitudinally folded; inflorescence 5-8 mm wide, mostly with 3-20 flowers … T. dubium
3. Pedicels 1-10 mm long [4]
3. Pedicels 0-1 mm long [8]
4. Plant stoloniferous; peduncles arising from the stolon … T. repens
4. Plant not stoloniferous; peduncles arising from aboveground nodes of the stem [5]
5. Stipules lanceolate, subequal to the stem width, scarious, sometimes green only in the upper half; calyx glabrate (except for tufts at the base) [6]
5. Stipules ovate, often wider than the stem, most of the blade green when young, sometimes scarious at the base; calyx pilose (sometimes sparsely so) [7]
6. Leaflets 1-4 cm long; calyx lobes not scarious-margined … T. hybridum
6. Leaflets 0.6-2.5 cm long; calyx lobes scarious-margined … T. nigrescens
7. Calyx lobes lanceolate, foliaceous, 3-veined; inflorescence 1-1.5 cm wide; corolla 4-7 mm long … T. carolinianum
7. Calyx lobes subulate, setaceous, 1-veined; inflorescence 2-4 cm wide; corolla 8-12 mm long … T. reflexum
8. Inflorescence subsessile and involucrate, subtended by 2 broad stipules and 1-2 leaves [9]
8. Inflorescence pedunculate (occasionally subsessile, the peduncle mostly >2 mm long), without stipules and leaves directly under the head [10]
9. Stipules with an acuminate tip; calyx subappressed pubescent, the tube 20-nerved … T. hirtum
9. Stipules with a filamentous, awned tip; calyx sparsely pilose, the tube 10-nerved … T. pratense
10. Calyx bladder-like, becoming inflated in fruit [11]
10. Calyx not bladder-like, becoming inflated in fruit [13]
11. Calyx tube 4-6 mm long; corolla not resupinate; fruit with 4-6 mm long, (1-)3-4 seeds … T. spumosum
11. Calyx tube 1-2 mm long; corolla resupinate; fruit 1.5-2 mm long, with 1 seed [12]
12. Peduncle 6-60 mm long; calyx short-hairy to glabrate, the apical teeth prolonged and conspicuous, especially in fruit, the calyx tube 7-9 mm long in fruit … T. resupinatum
12. Peduncle to 15 mm long, often much shorter; calyx woolly, the apical teeth short and usually concealed, the calyx tube 4-5 mm long in fruit … T. tomentosum
13. Corolla 3-8 mm long, subequal to shorter than the calyx [14]
13. Corolla 9-18 mm long, subequal to longer than the calyx [15]
14. Leaflets mostly oblong to narrowly obovate, <3 mm wide; inflorescence head elongate, cylindric; calyx tube pubescent, 10-nerved, the lobes 1-nerved … T. arvense
14. Leaflets mostly obovate, >3 mm wide; inflorescence head globose; calyx tube glabrous, 20-nerved, the lobes with 2 or more nerves … T. lappaceum
15. Inflorescence 1-2 cm wide, without floral bracts; calyx pilose, 10-nerved, not cross-reticulate; corolla red (rarely white); calyx not inflated in fruit … T. incarnatum
15. Inflorescence 2.5-3 cm wide, with floral bracts; calyx glabrate to sparsely pilose at the tip, 20-nerved, cross-reticulate; corolla white; calyx inflated in fruit … T. vesiculosum

*****Trifolium arvense*** L. {AFP} —
*****Trifolium campestre*** Schreb. {AFP} —

Trifolium carolinianum Michx. {AFP} —
*****Trifolium dubium*** Sibth. {AFP} —
*****Trifolium hirtum*** All. {AFP} —
*****Trifolium hybridum*** L. {AFP} —
*****Trifolium incarnatum*** L. {AFP} —
*****Trifolium lappaceum*** L. {AFP} —
*****Trifolium nigrescens*** Viv. {AFP} —
*****Trifolium pratense*** L. {AFP} —
Trifolium reflexum L. {AFP} —
*****Trifolium repens*** L. {AFP} —
*****Trifolium resupinatum*** L. {AFP} —
*****Trifolium spumosum*** L. {AFP} —
*****Trifolium tomentosum*** L. {AFP} —
*****Trifolium vesiculosum*** Savi {AFP} —

Trigonella
^*Trigonella caerulea* (L.)Ser. {AFP} —

Vachellia
1. Pinnae 10-15(25) pairs along the rachis … V. macracantha
1. Pinnae 1-8(10) pairs along the rachis [2]
2. Stipular spines hollow, on young branches with a stout thick base >4 mm wide (above the fused base), rather abruptly tapered at the tip to a sharp point (the tip sometimes worn off), the fused base >5 mm long from the stem; leaflet tip sometimes with a gland (Beltian body) [3]
2. Stipular spines lacking a hollow cavity, on young branches mostly <4 mm wide (above the fused base) and rather evenly tapered to the sharp tip, the fused based mostly <5 mm long from the stem, or branches unarmed; leaflet tip lacking a gland [4]
3. Secondary venation of leaflets conspicuous; inflorescence a cylindric head; fruit usually not striate … V. cornigera
3. Secondary venation of leaflets obscure; inflorescence a subglobose head; fruit striate … V. sphaerocephala
4. Leaflets 15-30 mm long … V. choriophylla
4. Leaflets 2.5-6.5 mm long [5]
5. Petioles, rachises, and spines densely pubescent; petioles 3-7 mm long; leaflets strongly ciliate; calyx and corolla lobes densely puberulent; fruits 8-15 cm long, 5-9 mm wide, densely pubescent and constricted between the seeds … V. tortuosa
5. Petioles, rachises, and spines glabrous to lightly pubescent; petioles to 3-17 mm long; leaflets glabrous or slightly ciliate; calyx and corolla lobes glabrate; fruits 3-9 cm long, 10-18 mm wide, glabrate and not constricted between the seeds [6]
6. Mature shrub or tree 2-8 m tall; petiole often >6 mm long and sometimes pubescent; larger leaflets often >3 mm long; secondary venation of mature leaflets conspicuous … V. farnesiana var. farnesiana
6. Mature shrub to 0.7-2.5 m tall; petiole usually <7 mm long and glabrous; larger leaflets usually <3 mm long; secondary venation of mature leaflets obscure … V. farnesiana var. pinetorum

Vachellia choriophylla (Benth.)Seigler & Ebinger {AFP} — SE.
*****Vachellia cornigera*** (L.)Seigler & Ebinger {AFP} —
•***Vachellia farnesiana*** (L.)Wight & Arn. var. ***pinetorum*** (F.J.Herm.)Seigler & Ebinger {AFP} —

Vachellia farnesiana (L.)Wight & Arn. var. ***farnesiana*** {AFP} —
[x]***Vachellia macracantha*** (Humb. & Bonpl. ex Willd.)Seigler & Ebinger {AFP} —
*****Vachellia sphaerocephala*** (Schltdl. & Cham.)Seigler & Ebinger {AFP} —
Vachellia tortuosa (L.)Seigler & Ebinger {AFP} — SE.

Vicia

1. Inflorescence sessile to subsessile, of 1-4 flowers [2]
1. Inflorescence pedunculate, of 1-15 flowers [4]
2. Calyx lobes strongly unequal, the upper ones shorter than the tube, the lower ones subequal to longer than the tube and 2-4 mm longer than the upper ones; fruit hirsute, the trichomes often pustulate-based … V. lutea
2. Calyx lobes subequal, shorter than to subequal to the tube, the lowers ones 0-2 mm longer than the upper ones; fruit glabrous, puberulent, to strigulose [3]
3. Calyx lobes 2-5 mm shorter than the tube; corolla yellow, often with purple streaks, 2.3-3 cm long … V. grandiflora
3. Calyx lobes (at least the lower ones) subequal to the tube, 0-2 mm shorter than the tube; corolla pinkish white to purple, 1-2.5(3) cm long … V. sativa
4. Leaflest 2-8(-10) per leaf [5]
4. Leaflets 8-16 per leaf [9]
5. Flowers 1-2(-3) per raceme [6]
5. Flowers 2-12 per raceme [7]
6. Fruit 1.5-3 cm long, tapered to the tip, with (4-)6-8(-12) seeds … V. minutiflora
6. Fruit 1-1.5 cm long, rounded at the tip (except for the awn-like beak), typically with 4 seeds … V. tetrasperma
7. Leaflets 10-15 mm long; fruit 8-15 mm long, with 1-3 seeds … V. floridana
7. Leaflets 55 mm long; fruit 20-45 mm long, with 4-12 seeds [8]
8. Leaflets mostly 4, 15-30 mm long; fruits 2-3 cm long; seeds ca. 2 mm long … V. acutifolia
8. Leaflets mostly 6, 23-50 mm long; fruits 4-4.5 cm long; seeds 3-4 mm long … V. ocalensis
9. Inflorescence with 2-9(-12) flowers; corolla 3-8 mm long; fruit 6-25(-35) mm long [10]
9. Inflorescence with 8-25 flowers; corolla (7-)8-18 mm long; fruit 15-40 mm long [11]
10. Calyx 2-2.5 mm long; corolla 2.5-5 mm long; fruit hirsute to puberulent, 6-10 mm long, with 1-3 seeds … V. hirsuta
10. Calyx 2.8-4 mm long; corolla 4.5-8 mm long; fruit glabrous, 15-25(35) mm long, with 3-7 seeds … V. ludoviciana
11. Calyx 2-3 mm long, the lower lobe deltate; corolla white or tinged with lavender, (7)8-10(12) mm long; fruit … V. caroliniana
11. Calyx 5-6 mm long, the lower lobe lanceolate to acicular; corolla violet, violet and white, or rarely white, 10-18 mm long … V. villosa

Vicia acutifolia Elliott {AFP} —
Vicia caroliniana Walter {AFP} —
Vicia floridana S.Watson {AFP} —
*****Vicia grandiflora*** Scop. {AFP} —
*****Vicia hirsuta*** (L.)Gray {AFP} —
Vicia ludoviciana Nutt. ex Torr. & A.Gray {AFP} —
*****Vicia lutea*** L. {AFP} —
Vicia minutiflora D.Dietr. {AFP} —
•***Vicia ocalensis*** R.K.Godfrey & Kral {AFP} — SE.
*****Vicia sativa*** L. {AFP} —

*__Vicia tetrasperma__ (L.)Schreb. {AFP} —
*__Vicia villosa__ Roth {AFP} —

Vigna
1. Stipules 5-15 mm long; larger leaflets 6-15 cm long; corolla internally white, pink, to purple (externally sometimes yellowish); fruit 7-20 cm long … V. unguiculata
1. Stipules 1-5 mm long; leaflets 2-7(-9) cm long; corolla yellow; fruit 1-7 cm long [2]
2. Corolla 8-11 mm long; fruit 1-2 cm long … V. hosei
2. Corolla 15-17 mm long; fruit 4-7 cm long … V. luteola

*__Vigna hosei__ (Craib)Backer {AFP} —
__Vigna luteola__ (Jacq.)Benth. {AFP} —
*__Vigna unguiculata__ (L.)Walp. {AFP} —

Wisteria
1. Vine twining, from the basal lower left ascending distally to the upper right and turning away from the observer and wrapping behind; leaflet apex generally acuminate with an obtuse to subacute tip, margins usually mostly plane; inflorescence with tightly congested flowers; pedicels 5-10(-15) mm long; upper petal reflexed near the middle, the lateral (wing) petals together forming a rounded down-curving hood above the lower (keel) petal; ovary and fruit glabrous; seeds reniform … W. frutescens
1. Vine twining in either direction; leaflet apex generally acuminate with an acute to aristate tip, the margin often undulate; inflorescence with somewhat congested to spaced flowers; pedicels 15-20 mm long; upper petal reflexed near the base, the lateral (wing) petals facing each other and shielding the sides of the lower (keel) petal; ovary and fruit pubescent; seeds orbicular [2]
2. Vine twining, from the basal lower left ascending distally to the upper right and turning away from the observer and wrapping behind; leaflets (7-)9-11(-13) per leaf; raceme to 35 cm long, the mostly non-fragrant flowers opening nearly simultaneously; corolla 2-2.7 cm long … W. sinensis
2. Vine twining, from the basal lower right ascending distally to the upper left and turning away from the observer and wrapping behind; leaflets 7-19 per leaf; raceme to 160 cm long, the fragrant flowers opening nearly simultaneously or sequentially; corolla 1.5-2 cm long [3]
3. Leaflets (11-)13-19 per leaf; raceme to 80(160) cm long, the flowers opening sequentially from the base to the tip; auricles of the standard's callosity 0.7-0.8 mm long … W. floribunda
3. Leaflets 7-15(-17) per leaf; racemes to 36 cm long, the flowers opening nearly simultaneously; auricles of the standard's callosity 0.7-0.8 mm long … W. ×formosa

*__Wisteria floribunda__ (Willd.)DC. {AFP} —
*__Wisteria ×formosa__ Rehder (*floribunda* × *sinensis*) {AFP} —
__Wisteria frutescens__ (L.)Poir. {AFP} —
*__Wisteria sinensis__ (Sims)Sweet {AFP} —

Zornia
1. Leaves with 4 leaflets; floral bracts ovate to elliptic, 3.5-7.1 mm wide; loment with retrorsely barbed bristles but otherwise glabrous; loments with 2-4 segments, the segments lunulate and 3.4-4.2 mm long … Z. bracteata

1. Leaves with 2 leaflets; floral bracts lanceolate to narrowly elliptic, 1.3-1.7 mm wide; loment with retrorsely barbed bristles and hirtellous; loments with (3-)4-6(-7) segments, the segments mostly square-shaped and 1.9-2.1 mm long … Zornia latifolia

Zornia bracteata J.F.Gmel. {AFP} —
****Zornia latifolia*** Sm. {AFP} — The name *Z. diphylla* was sometimes misapplied, but *Z. diphylla* has leaflets essentially of one shape (becoming smaller distally). Contrarily, *Z. latifolia* has the proximal leaflets suborbicular to elliptic, distinctly shorter and wider than the distal leaflets which become narrowly lanceolate to linear. (syn. *Z. gmella*).

POLYGALACEAE

1. Lower petal (keel) lacking a terminal crest … Asemeia
1. Lower petal (keel) with a brush-like or multi-lobed crest … Senega

Asemeia

Asemeia grandiflora (Walter) Small {AFP} — An exceptionally variable species, Small (1933) distinguished four species, three restricted to south Florida, which were later synonymized (Pastore & Abbott 2012; Abbott 2021). Following Mota (2023), *A. grandiflora* is restricted to the USA, West Indies, and Costa Rica; distinguished by larger flowers, presence of rudimentary petals, and a longer style (vs. flowers and style smaller, rudimentary petals absent in *A. violacea* (Aubl.)J.F.B. Pastore & J.R. Abbott of Mexico thru South America, and some Caribbean Islands).

Senega: The colorful, showy perianth parts of the *Senega* flower are the two lateral sepals (reduced in *S. incarnata*), two upper petals, and a keeled lower petal exhibiting a multi-lobed or brush-like crest. All members of the former *Polygala* in Florida (except *Asemeia*) have been moved to the genus *Senega* (Pastore et al. 2023). The roots of many species have a wintergreen-like odor and taste, probably due to the presence of methyl salicylate (Wherry 1927).

1. Predominant, conspicuous perianth colors orange, yellow, to green … Key A
1. Predominant, conspicuous perianth colors purple, pink, white, or greenish white (petals sometimes yellow to greenish yellow) … Key B

Key A
1. Flowers in branched, compound cymes [2]
1. Flowers in solitary racemes [3]
2. Basal leaves 2-6 cm long, linear to linear-lanceolate, forming a persistent rosette during flowering; seeds glabrous … S. cymosa
2. Basal leaves 2 cm long or less, elliptic to spatulate, often witherend or few to none remaining during flowering; seeds pubescent … S. ramosa
3. Conspicuous lateral sepals (wings) long-acuminate [4]
3. Conspicuous lateral sepals (wings) cuspidate or mucronate [5]
4. Lateral sepals elliptic, involute at the apex; seed body (excluding the stipe) less than 1 mm long … S. nana
4. Lateral sepals oblong-lanceolate, the tip flat and not involute; seed body (excluding the stipe) 1.1-1.2 mm long… S. smallii

5. Lateral sepals and petals orange, drying pale yellow; peduncle (from uppermost leaf to the base of the inflorescence) (0.5)1-4(5.5) cm long; racemes <1.8 cm wide … S. lutea
5. Lateral sepals and petals yellow, drying greenish yellow; peduncle (from uppermost leaf to the base of the inflorescence) (3.5)4-16 cm long; racemes >1.5 cm wide … S. rugelii

Key B
1. Flowers in branched, compound cymes [2]
1. Flowers in solitary racemes [3]
2. Inflorescence of dense racemes; wings definitely white; seed <0.6 mm long; aril on seed usually 0.2 mm long, infrequently smaller … S. balduinii var. balduini
2. Inflorescence of more or less elongated racemes; wings cream to greenish white; seed >0.6 mm long; aril on seed a minute scale or absent … S. balduini var. carteri
3. Leaves whorled, at least those on the lower parts of the stem [4]
3. Leaves all alternate [9]
4. Bracts subtending flowers deciduous or inconspicuous; flowers sessile or the pedicel <1 mm long [5]
4. Bracts subtending flowers persistent and conspicuous, remaining after flowers and fruits have abscissed; flowers distinctly pedicellate (the pedicel sometimes hidden by the crowded flowers), the pedicel 1.2-4 mm long [7]
5. Longest internodes between leaves 4 cm long or longer; seeds glabrous or nearly so, fusiform … S. leptostachys
5. Longest internodes between leaves 3 cm long or less; seeds pubescent, ovoid to narrowly ovoid [6]
6. Leaves on the lower parts of the stem obovate, elliptic, to oblanceolate; lateral sepals 2-3 mm long … S. boykinii
6. Leaves on the lower parts of the stem linear-lanceolate; lateral sepals 1-1.5 mm long … S. verticillata
7. Leaf blades 0.5-1.2 mm wide; racemes sparsely flowered with small sepals, the pedicels mostly readily visible; wing sepals 1.3-2 mm wide … S. hookeri
7. Leaf blades 0.9-5(7) mm wide; racemes densely flowered with large sepals, the pedicels obscured by the crowded flowers; wing sepals 1.5-4 mm wide [8]
8. Racemes with a peduncle usually (0.8)1.2-8 cm long; lateral sepals ovate, 1.5-2.5 mm wide, the apex obtuse, acute, or minutely apiculate … S. brevifolia
8. Racemes with the peduncle 0-2(5) cm long; lateral sepals deltoid, 2.7-4 mm wide, the apex abruptly narrowed to an acuminate or cuspidate tip … S. cruciata
9. Petals with the brush-like crest exserted from the sepals, the lateral sepals less than half as long as the petals … S. incarnata
9. Petals not conspicuously exserted, subequal to or shorter than the lateral sepals [10]
10. Racemes densely flowered, the middle and upper flowers crowded and overlapping [11]
10. Racemes sparsely flowered, the flowers mostly well separated from one another [14]
11. Leaves scale-like and inconspicuous, ca. 1 mm long or less … S. setacea
11. Leaves conspicuous, most >3 mm long [12]
12. Bracts subtending the flowers deciduous; inflorescence broadly rounded at the apex, the growing tip only slightly exserted and nearly inconspicuous … S. mariana
12. Bracts subtending the flowers persistent after the flowers and fruits abscissed; inflorescence acute to tapered at the apex, the growing tip conspicuous [13]
13. Plants single-stemmed or few-branched above mid-stem; raceme 6-10 mm wide … S. chapmanii

13. Plants much branched near mid-stem, rarely single-stemmed; raceme 5-6 mm wide … S. nuttallii
14. Plant without subterranean inflorescences; flower (excluding the pedicel) ca. 1.5 mm long … S. appendiculata
14. Plant with subterranean inflorescences of cleistogamous flowers; aerial flowers 3-5 mm long [15]
15. Leaves of the mid-stem narrowly obovate; capsule margins crenately winged … S. crenata
15. Leaves of the mid-stem linear, elliptic, to narrowly oblanceolate; capsules margins entire [16]
16. Stems often appearing densely leafy; capsule oblong, 2-3 times longer than wide; seeds cylindric, the upper part of the arils bony like the caruncle … S. lewtonii
16. Stems with leaves visibly separated from one another; capsule ovoid, less than 2 times longer than wide; seeds ovoid to cylindric, the aril membranaceous … S. polygama

Senega appendiculata (Vell.)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega balduini (Nutt.)J.F.B.Pastore & J.R.Abbott var. ***balduini*** {AFP} —
•***Senega balduini*** (Nutt.)J.F.B.Pastore & J.R.Abbott var. ***carteri*** (Small)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega boykinii (Nutt.)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega brevifolia (Nutt.)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega chapmanii (Torr. & A.Gray)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega crenata (C.W.James)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega cruciata (L.)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega cymosa (Walter)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega hookeri (Torr. & A.Gray)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega incarnata (L.)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega leptostachys (Shuttlew. ex A.Gray)J.F.B.Pastore & J.R.Abbott {AFP} —
•***Senega lewtonii*** (Small)J.F.B.Pastore & J.R.Abbott {AFP} — FE. SE.
Senega lutea (L.)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega mariana (Mill.)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega nana (Michx.)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega nuttallii (Torr. & A.Gray)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega polygama (Walter)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega ramosa (Elliott)J.F.B.Pastore & J.R.Abbott {AFP} —
•***Senega rugelii*** (Shuttlew. ex Chapm.)J.F.B.Pastore & J.R.Abbott {AFP} —
Senega setacea (Michx.)J.F.B.Pastore & J.R.Abbott {AFP} —
•***Senega smallii*** (R.R.Sm. & D.B.Ward)J.F.B.Pastore & J.R.Abbott {AFP} — FE. SE.
Senega verticillata (L.)J.F.B.Pastore & J.R.Abbott {AFP} —

SURIANACEAE
Suriana
Suriana maritima L. {AFP} —

FAGALES
FAGACEAE
1. Branches terminating in clustered or crowded buds; male inflorescence a pendent ament; fruit an acorn, circular in cross-section, subtended by a scaly or tuberculate cup … Quercus

1. Branches with a solitary terminal bud, adjacent buds not crowded; male inflorescence a pedunculate heads or a spike of glomerulate clustuers; fruit one or few angular to rounded-angular nuts enclosed in a prickly or scaly-bristly cupule [2]
2. Buds ovoid, rounded to bluntly acute at the tip; leaf blade teeth awned to acuminate; male inflorescence a spike of glomerulate clusters; cupule spines 5-20 mm long; nut rounded-angular … Castanea
2. Buds elongate-fusiform, narrowly acute at the tip; leaf blade teeth acute; male inflorescence a pedunculate head; cupule scaly bristles curved, 1-5 mm long; nut triangular … Fagus grandifolia

Castanea *Castanea pumila* s.lat. (Johnson 1988) appears to form a well supported clade (Spriggs & Fertakos 2020; Perkins et al. 2021) that encompasses a wide range of growth forms that perhaps integrade. Kurz & Godfrey (1962) felt the two arborescent taxa were "reasonably clear-cut" and the stoloniferous taxon was definitely "not associated" with *C. floridana*. Further, *C. pumila* s.str. is possibly absent from Florida (Ashe 1922; Ward 2000), and Camus (1929) mapped it only as far south as northern Alabama and northern Georgia. Jaynes (1964) made successful crosses between *C. pumila* s.str. and both *C. alnifolia* and *C. ashei* (not attempted with *C. floridana*). Various hybrids were named by Camus (1929), such as *C.* ×*fleetii* (*crenata* × *pumila*), *C.* ×*endicottii* (*crenata* × *dentata*), C. ×*neglecta* (*dentata* × *pumila*), C. ×*burbankii* (*mollissima* × *pumila*), and *C.* ×*morrisii* , nom. nud. (*alnifolia* × *mollissima*).

1. Leaf blade undersides glabrous or sparsely puberulent along the veins, and with 4-celled sessile glands … C. dentata
1. Leaf blade undersides with simple and stellate hairs, and the glands either sessile and 9-celled, or stipitate [2]
2. Leaf blade undersides with 9-celled, sessile glands … C. crenata
2. Leaf blade undersides with stipitate glands [3]
3. Leaf blade undersides with stipitate glands only along the midrib or veins; cupule with (1-)3 nuts … C. mollissima
3. Leaf blade undersides with stipitate glands throughout; cupule with 1(-3) nuts [4]
4. Stoloniferous shrub, to 1 m tall; leaf blade underside with few secretory hairs; infructescence with 1-2 cupules (rarely more); of scrub and sandhills … C. alnifolia
4. Solitary shrub or small tree, 2-15 m tall; leaf blade underside usually without secretory hairs; infructescence with 2-10 cupules; primarily of open woodlands [5]
5. Leaf blade lower surface usually grayish white and densely tomentose, rarely glabrate, hairs with numerous arms 0.15-0.3 mm long; staminate inflorescence 7-10 mm wide, flowers densely crowded … C. ashei
5. Leaf blade lower surface pale green, finely tomentose, or glabrate (esp. shade leaves), hairs with 8-16 arms 0.6-0.12 mm long; staminate inflorescence 3-6 mm wide, flower clusters interrupted … C. floridana

Castanea alnifolia Nutt. —
Castanea ashei (Sudw.)Sudw. ex Ashe — Camus (1929) distinguished *C. ashei* by its cupules with few, spaced prickles, the leaf blades with 16-22 veins per dm, leaf underside hairs with many arms 0.15-0.3 mm long, and shade leaves obovate-obtuse (vs. *C. pumila* of cupules with numerous, dense prickles, the leaf blades with veins 9-12 per dm, the leaf underside

hairs with 4-6 arms 0.2-0.5 mm long, and all leaves acute-tipped). However, Camus (1929) mapped the entity only to southeastern Georgia, without including Florida.

^*Castanea crenata* Siebold & Zucc. {AFP} —

Castanea dentata (Marshall)Borkh. {AFP} — In Florida it was known from only one putative native population, collected by Harbison in 1917 from Crestview, Okaloosa Co. (GH). It was reported for Escambia Co. by Little, Jr. (1978), but no specimens are known. After detection of the Asian ascomycete *Cryphonectria parasitica* (chestnut blight) in the Bronx Zoo in 1904, in the following decades *C. dentata* was virtually lost from forests of eastern USA. Attempts to confer resistance to the fungus have utilized hybrids with *C. mollisima* backcrossed to *C. dentata* or inserting genes directly into *C. dentata* (esp. oxalate oxidase). Another pathogen, the oomycete *Phytopthora cinnamomi*, is also problematic for *C. dentata* (Steiner et al. 2016).

Castanea floridana (Sarg.)Ashe {AFP} — Camus (1929) distinguished *C. floridana* by its leaf blade undersides pubescent (or glabrous in the shade) and the cupule with pubescent prickles (vs. *C. alabamensis* of leaf blade undersides all glabrous and the cupule with glabrescent prickles). Three varieties were recognized by Camus (1929), two occurring in Florida: var. *floridana* with young stems glabrous and rarely 2 mm wide, petioles rarely 2 mm long, shade leaf blade base slightly attenuate, and var. *margaretta* with young stems slightly pubescent and 1.5-2.1 mm wide, shade leaf blade base attenuate and rounded, petioles 3-6 mm long.

^*Castanea mollissima* Blume {AFP} —

Fagus

Fagus grandifolia Ehrh. {AFP} —

Quercus: Compared to red oaks (sect. Lobatae), white oak acorns (sects. Quercus & Virentes) are relatively more palatable, lower in tannins (Ofcarcik & Burns 1971) and lipids (Short 1976). Hughes & Annis (in Weakley et al. 2024) reported *Q. similis* for Leon Co., which would be a surprising disjunct from its native range along the Mississippi River.

1. Mature buds somewhat conic and acute towards the tip; trichomes absent, simple, fasciculate (arms generally spreading or ascending from a central base, the base sometimes stipe-like), or stellate (arms generally horizontal and fused at a central point); leaf blades sometimes with a bristle or awn at the leaf tip or lobe tips; acorn cup scales flattened; acorns usually more bitter or astringent, maturing in the second year; bark of larger trees often with smoothish ridges only shallowly fissured, some species having blocky bark; section Lobatae (red oaks) … Key A

1. Mature buds somewhat globose-ellipsoid and rounded at the tip, or if conic and acute towards the tip then the leaf blades with numerous nearly straight and parallel secondary veins; trichomes absent, simple, fasciculate (arms generally spreading or ascending from a central base, the base sometimes stipe-like), or multi-radiate (arms generally spreading or ascending, arising from 2 or more points or bases, sometimes rosulate); leaf blades without bristles or awns, sometimes with a short mucro; acorn cup scales thickened, tuberculate; acorns usually sweeter, maturing in one year; bark of larger trees often platy, blocky, strongly ridged, or strongly fissured; sections Quercus and Virentes (white oaks) … Key B

Key A: red oaks

1. Leaf blades mostly deeply lobed, the sinuses ⅓ or more as long as the distance from the midrib to the leaf blade margin [2]
1. Leaf blades mostly entire to shallowly lobed, the sinuses ⅓ or less as long as the distance from the midrib to the leaf blade margin [6]
2. Lower surface of the mature leaf blade tomentose with yellowish gray trichomes [3]
2. Lower surface of the mature leaf blade glabrous to glabrate except for tufts of trichomes in the vein axils [4]
3. Bark with rough ridges; base of leaf blade typically U-shaped; leaf blade lobes 3-7 … Q. falcata
3. Bark with somewhat lustrous and platy or smooth ridges; base of leaf blade typically angular; leaf blade lobes typically 5-11 … Q. pagoda
4. Petiole 0-13 mm long; leaf blade base acute at a narrow V-shaped angle; young leaf blade often orange scurfy … Q. laevis
4. Petiole 13-70 mm long; leaf blade base truncate to broadly angular; young leaf blade pubescent or glabrous [5]
5. Buds glabrous or pubescent only at the tip; acorn cup covering ⅓ or less of the nut … Q. shumardii
5. Buds pubescent in distal half; acorn cup covering ½ or more of the nut … Q. velutina
6. Leaf blades broader towards the apex and much narrower towards the base, often somewhat lobed with the margins not evenly rounded nor straight on some parts [7]
6. Leaf blades mostly elliptic to obovate (at least in outline), not much broader towards the apex and not much narrower towards the base or only slightly so, generally without lobes, the margin mostly evenly rounded to straight [9]
7. Leaf blades usually pubescent on the lower surface … Q. marilandica
7. Leaf blades glabrous to glabrate on the lower surface, or only pubescent in the vein axils [8]
8. Leaf blade about as wide as long, or slightly longer than wide … Q. arkansana
8. Leaf blades 1.5-2.5 times longer than wide … Q. nigra
9. Mature leaf blades finely and densely tomentose on the lower surface [10]
9. Mature leaf blades glabrous to pubescent with scattered, spaced hairs, only densely pubescent in the vein axils on the lower surface or only densely pubescent with reddish hairs on young blades [11]
10. Trees, usually more than 2 m tall when mature; rays of stellate hairs to 0.3 mm long on stems; leaf blade apex rounded … Q. incana
10. Shrubs, usually less than 2 m tall when mature; rays of stellate hairs to 0.7 mm long on stems; leaf blade apex acute … Q. pumila
11. Leaf blades about 1-2 times as long as wide, revolute at least on the margins [12]
11. Leaf blades about 2-7 times as long as wide, not conspicuously revolute [13]
12. Leaf blades strongly revolute, often with yellow to reddish scurfy pubescence, elliptic to broadly elliptic, (1.7)1.8-2.2 times longer than wide, 2-12.5 cm long, 1.3-7.5 cm wide; 2-9(11) leaves per terminal twig; acorn 14-18.5 mm long; flowering Apr-May … Q. inopina
12. Leaf blades finely revolute only on the margins, usually without yellow to reddish pubescence, obovate to broadly elliptic, 1.3-1.9(2) times longer than wide, 1-5(7) cm long, 1-2.5(3.5) cm wide, 0.5-3 cm wide; (4)6-13(15) leaves per terminal twig; acorn 9.5-15.5 mm long; flowering mostly Feb-Mar(Apr) in peninsula, often April northward … Q. myrtifolia
13. Leaf blades 3.5-7 times as long as wide … Q. phellos
13. Leaf blades 2-4 times as long as wide [14]
14. Twigs often grayish; leaves essentially evergreen, blades 3.5-5.5 cm long, 0.7-1.6 cm wide, the base obtuse to rounded with the basal angle 94-244 degrees, the apex acute to acuminate with the apical angle 49-153 degrees, coriaceous, lustrous, often dentate, slightly revolute,

opaque, essentially glabrous, venation more prominent on the upper surface, petiole 0.7-1.8 mm, twigs grayish; mostly of drier sites … Q. hemisphaerica
14. Twigs often reddish; leaves tardily deciduous, blades 6.5-8.8 cm long, 1.8-2.6 cm wide, the base attenuate to cuneate with the basal angle 20-130 degrees, the apex obtuse to rounded with the apical angle 144-213 degrees, moderately coriaceous, moderately lustrous, never dentate, not revolute, translucent, venation more prominent on the lower surface, twigs reddish tinted; mostly of wetter site … Q. laurifolia

Key B: white oaks
1. Leaf blades mostly deeply lobed, the sinuses ⅓ or more as long as the distance from the midrib to the leaf blade margin (some leaves may be unlobed or nearly so, esp. more basal ones of a shoot; if most leaves unlobed, then lower surface glabrate) [2]
1. Leaf blades mostly entire to shallowly lobed, the sinuses ⅓ or less as long as the distance from the midrib to the leaf blade margin (lower surface usually hairy) [6]
2. Lobes of leaf blades mostly acute and mucronate; acorn cup enclosing ¾ or more of the nut … Q. lyrata
2. Lobes of leaf blades mostly rounded, scarcely or not mucronate; acorn cup covering ½ or less of the nut [3]
3. Mature leaf blades glabrous to glabrate on the lower surface (hairs may be dense during leaf expansion) [4]
3. Mature leaf blades densely to sparsely pubescent on the lower surface, hairs sometimes deciduous [5]
4. Petioles 7-15 mm long; leaf blade lower surface glabrous and whitish … Q. alba
4. Petioles 2-10 mm long; leaf blade lower surface with pubescent veins axils and not whitish … Q. austrina
5. Young twigs glabrous to sparsely pubescent; larger leaf blades 4-12 cm long, the stellate hairs of the lower surface with 2-6 rays … Q. margarettae
5. Young twigs densely pubescent; larger leaf blades (8)10-16 cm long, the stellate hairs of the lower surface with 6-10 rays … Q. stellata
6. Leaf blades with (4)6-20 teeth or shallow lobes at the terminus of nearly straight secondary veins along each side [7]
6. Leaf blades entire or with few lobes, the secondary veins irregular and branching [9]
7. Shrubs, usually less than 5 m tall when mature; leaf blades mostly with 3-8 secondary veins on each side of the midrib … Q. prinoides
7. Trees, taller than 5 m when mature; leaf blades with 8-20 secondary veins on each side of the midrib [8]
8. Larger leaf blades 12-28 cm long, the teeth usually rounded, secondary veins 15-20 on each side, with 1-4-rayed stellate hairs on the lower surface; nut 2.5-3.5 cm long … Q. michauxii
8. Larger leaf blades 10-18 cm long, the teeth mostly acute, secondary veins 9-15 on each side, with 6-10-rayed stellate hairs on the lower surface; nut 1.5-2.3 cm long … Q. muehlenbergii
9. Mature leaf blades pubescent on the lower surface with yellow to reddish hairs and only sparsely stellate, the blade shape somewhat obovate, broader towards the apex to faintly 3-lobed at the apex … Q. chapmanii
9. Mature leaf blades densely tomentose with stellate hairs on the lower surface, the blade shape mostly elliptic, sometimes slightly broader towards the apex, sometimes shallowly lobed along the margin (section Virentes) [10]
10. Shrubs, usually 1.5 m tall or less when mature … Q. minima
10. Trees, usually 3 m tall or more when mature [11]

11. Leaf blade margins strongly revolute; secondary veins impressed on the upper leaf blade surface; many rays of the stellate hairs spreading to ascending above the surface and not appressed, only some stellate hairs appressed ... Q. geminata
11. Leaf blade margins flat to slightly revolute; secondary veins flat to inconspicuously impressed on the upper leaf blade surface; all rays of the stellate hairs closely appressed to the lower leaf blade surface ... Q. virginiana

^*Quercus acutissima* Carruth —
Quercus alba L. {AFP} —
Quercus arkansana Sarg. {AFP} — ST.
Quercus austrina Small {AFP} — Lance (2022) concluded the type of *Q. austrina* is a specimen of *Q. durandii* Buckley. If so, proposal of a conserved type for *Q. austrina* consistent with modern usage would be desirable. The similar *Q. durandii* has been alleged to occur in Jackson & Okaloosa cos., Florida, without cited specimens (Lance 2022), a species which differs by pale brown to gray twigs, dark brown and obtuse buds 2-3 m long, mature leaf blades abaxially whitish and stellate-pubescent, acorn cup 1-5 mm deep, covering <1/3 of nut and the rim not tight against nut (vs., in *Q. austrina*, purplish, reddish, dark brown to dark gray twigs, brown or red-brown buds 3-5 mm long and acute, mature leaf blades abaxially green and glabrate, and acorn cup 6-10 mm deep, covering 1/3-1/2 of nut and the rim tight against nut).
Quercus chapmanii Sarg. {AFP} —
Quercus falcata Michx. {AFP} —
Quercus geminata Small {AFP} —
^*Quercus glauca* Thunb. —
Quercus hemisphaerica W.Bartram ex Willd. — Perhaps not as easily separable from *Q. laurifolia* as often made out to be. Numerous specimens appear intermediate and morphotypes of *Q. hemisphaerica* can be found in unequivocal swamp habitat. Hunt (1991: 200) felt that it was the "most difficult pair of taxa to assess" and that "It is possible that widespread introgression occurs".
Quercus incana W.Bartram {AFP} —
•***Quercus inopina*** Ashe {AFP} — Once cynonymized with *Q. myrtifolia*, but eventually reinstated (Johnson & Abrahamson (1982).
Quercus laevis Walter {AFP} —
Quercus laurifolia Michx. {AFP} —
Quercus lyrata Walter {AFP} —
Quercus margarettae Ashe ex Small {AFP} —
Quercus marilandica Münchh. {AFP} —
Quercus michauxii Nutt. {AFP} —
Quercus minima (Sarg.)Small {AFP} —
Quercus muehlenbergii Engelm. {AFP} —
Quercus myrtifolia Willd. {AFP} —
Quercus nigra L. {AFP} —
Quercus pagoda Raf. {AFP} —
Quercus phellos L. {AFP} —
Quercus prinoides Willd. {AFP} —
Quercus pumila Walter {AFP} — The name *Q. elliottii* Wilbur has been promoted (Wilbur 2002; Wilbur & Ho 2008), in favor of abandoning *Q. pumila*. Ward (2007, 2008) regarded *Q. elliottii* as a superfluous synonym, maintaining the application and his neotypification of *Q. pumila* are acceptable.

Quercus shumardii Buckley {AFP} —
Quercus stellata Wangenh. {AFP} —
Quercus velutina Lam. {AFP} —
Quercus virginiana Mill. {AFP} — Live oaks, especially from the Carolinas and Georgia, were critical materials for many ships in the 1500-1800s. The restoration of the USS Constitution in 1928-1931 used live oak from Pensacola that had been underwater for ca. 70 years (Thirgood 1971; Wood 1981; Fleetwood 1995; Amer 1998). Of the acorn, Bartram (1792: 83) wrote that it is "sweet and agreeable to the taste when roasted, and is food for almost all animals. The Indians obtain from it a sweet oil".

Named oak hybrids
Quercus ×***ashei*** Little (*incana* × *laevis*) {AFP} —
Quercus ×***atlantica*** Ashe (*incana* × *laurifolia*) {AFP} —
Quercus ×***beadlei*** Trel. ex E.J.Palmer (*alba* × *michauxii*) {AFP} —
Quercus ×***caduca*** Trel. (*incana* × *nigra*) {AFP} —
Quercus ×***comptoniae*** Sarg. (*lyrata* × *virginiana*) {AFP} —
Quercus ×***harbisonii*** Sarg. (*geminata* × *margarettae*) {AFP} —
Quercus ×***mellichampii*** Trel. ex Sarg. (*hemisphaerica* × *laevis*) {AFP} —
Quercus ×***neopalmeri*** Sudw. ex E.J.Palmer (*nigra* × *shumardii*) {AFP} —
Quercus ×***oviedoensis*** Sarg. (*incana* × *myrtifolia*) {AFP} —
Quercus ×***rolfsii*** Small (*chapmanii* × *minima*) {AFP} —
Quercus ×***rudkinii*** Britton (*marilandica* × *phellos*) {AFP} —
Quercus ×***sinuata*** Walter (*falcata* × *phellos*) {AFP} — The name has been applied to *Q. durandii* by some workers, but Ward (2007) neotypified *Q. sinuata* to represent a hybrid in the red oak group. This hybrid is so far not documented in Florida. Wilbur (2002; type annotation) and Lance (2022: 32) found Ward's application a poor match for Walter's description. Nonetheless, the neotype is fixed currently.
Quercus ×***subintegra*** (Engelm.)Trel. (*falcata* × *incana*) {AFP} —
Quercus ×***succulenta*** Small (*geminata* × *minima*) {AFP} —
Quercus ×***venulosa*** Ashe (*arkansana* × *incana*) {AFP} —
Quercus ×***walteriana*** Ashe (*laevis* × *nigra*) {AFP} —

BETULACEAE

1. Winter buds stalked (stalk 0.5-2.5 mm long); leaf blade broadly elliptic to obovate; female inflorescence persistent, woody and cone-like … Alnus serrulata
1. Winter buds sessile; leaf blade narrowly elliptic, narrowly ovate, lanceolate, to rhombic-ovate; female inflorescence deciduous, not woody nor cone-like [2]
2. Bark often platy, flaky, and gray, sometimes exfoliating into large, light brown to light gray papery sheets, adherent on old trunks; winter buds of few scales; petioles tomentose; leaf blades deltoid-ovate to elliptic-ovate … Betula nigra
2. Bark not as above; winter buds of several imbricate scales; petioles glabrate; leaf blades elliptic to lanceolate [3]
3. Trunk angular or fluted, bark smooth; leaf blade underside with tufts of trichomes in the vein axils; fruit subtended by a 3-lobed foliaceous bract … Carpinus caroliniana
3. Trunk terete, bark of longitudinal strips, sometimes peeling away; leaf blade underside puberulent; fruit enclosed in an inflated papery bract … Ostrya virginiana

Alnus

Alnus serrulata (Aiton)Willd. {AFP} —

Betula
Betula nigra L. {AFP} —

Carpinus
Carpinus caroliniana Walter {AFP} —

Ostrya
Ostrya virginiana (Mill.)K.Koch {AFP} —

CASUARINACEAE
Casuarina
1. Plant with both female and male inflorescences; scale-like leaves 6-8 per node, without a brown transverse band ... C. equisetifolia
1. Plant dioecious; scale-like leaves 7-14(17) per node, with a brown transverse band [2]
2. Green leafy branchlets 0.4-0.7 mm wide; scale-like leaves (7)8-10 per node, the brown transverse band above the leaf base; lateral staminate bracteoles subequal to the dehiscent inner ones, visible at anthesis ... C. cunninghamiana
2. Green leafy branchlets 0.8-1 mm wide; scale-like leaves 10-17 per node, the brown transverse band at the leaf base; lateral staminate bracteoles shorter than the dehiscent ones, not apparent at anthesis ... C. glauca

****Casuarina cunninghamiana*** Miq. {AFP} —
****Casuarina equisetifolia*** L. {AFP} —
****Casuarina glauca*** Sieb. ex Spreng. {AFP} —

JUGLANDACEAE
1. Twigs with solid and homogeneous pith; terminal leaflet largest; staminate catkins in fasciculate; stamens 3-10(-15) per flower; fruit husk dehiscent into 4 valves; nuts smooth, verrucose, or rugulose ... Carya
1. Twigs with chambered pith; terminal leaflet small or absent; staminate catkins solitary; stamens 7-50 per flower; fruit husk indehiscent; nuts grooved, ridged, furrowed, or smooth ... Juglans

Carya
1. Bud scales valvate; leaflets 5–13(17) (sect. Apocarya) [2]
1. Bud scales imbricate; leaflets 3–9; (sect. Carya) [4]
2. Lateral buds with paired lateral prophylls; leaflets 5–9(11), the underside with peltate scales, concentrated near margins of base and apex on fall specimens; fruit husks dehiscing to middle or slightly below; nuts rugulose ... C. cordiformis
2. Lateral buds with saclike prophyll; leaflets (5)9–13(17), the underside with peltate scales mainly lost by fall or at least not concentrated near margins of base and apex; fruit husks dehiscing to base; nuts smooth or verrucose [3]
3. Bark exfoliating in long strips or platelike scales; lateral petiolules 0–2 mm; leaflets (5)9–11(13), margins serrate to entire, the midrib villous near base above; nuts compressed, angled, verrucose; seeds bitter ... C. aquatica

3. Bark ridged or with appressed scales or exfoliating with small platelike scales; lateral petiolules 0–7 mm; leaflets (7)9–13(17), margins serrate, the midrib mostly glabrous above, rarely hirsute near base; nuts not compressed, not angled, smooth; seeds sweet … C. illinoinensis
4. Leaflets (5)7–9(11), the underside hirsute, with abundant unicellular, fasciculate, and multiradiate hairs; husks 4–13 mm thick; nuts strongly angled toward the apex … C. tomentosa
4. Leaflets 3–7(9), the underside glabrous except near midrib, occasionally hirsute with unicellular and fasciculate hairs; husks 2–5 mm thick; nuts not strongly angled toward the apex [5]
5. Leaflets (5–)7(9), the underside glabrate, with a dense covering of small 4-lobed, irregular, and round peltate scales in spring and the midrib hirsute near the base … C. pallida
5. Leaflets 3–7(9), the underside with hairs in the vein axils, with a sparse to dense covering of small irregular and round peltate scales in spring, 4-lobed scales uncommon, and the midrib glabrate [6]
6. Young tissues densely golden to rusty brown lepidote … C. floridana
6. Young tissues sparsely tan, reddish, to dark brown lepidote … C. glabra

Carya aquatica (F.Michx.)Nutt. {AFP} —
Carya cordiformis (Wangenh.)K.Koch {AFP} —
•***Carya floridana*** Sarg. {AFP} —
Carya glabra (Mill.)Sweet {AFP} —
^*Carya illinoinensis* (Wangenh.)K.Koch {AFP} —
Carya pallida (Ashe)Engl. & Graebn. {AFP} —
Carya tomentosa Nutt. {AFP} —

Juglans
Juglans nigra L. {AFP} —

MYRICACEAE
Morella
1. Leaf blade entire (very rarely toothed), glabrous to glabrate, glands clear to white, lacking odor when crushed; stamens (3-)6-10; fruit 4-8 mm long, densely pubescent … M. inodora
1. Leaf blade entire to toothed, pilose, glands yellow to orange, aromatic when crushed; stamens 3–5(–7); fruit 2-4.5 mm long, glabrous [2]
2. Leaf blade gland-dotted only on the underside, larger blades often >2 cm wide, mostly 2-4 times longer than wide; inflorescence bracts eglandular to sparsely glandular, at the least the basal ones, sometimes the distal bracts densely glandular … M. caroliniensis
2. Leaf blade gland-dotted on both surfaces, usually <2(3.3) cm wide, mostly 3-6 times longer than wide; inflorescence bracts densely glandular [3]
3. Colonial or not, fertile at (1.5)2-7 m tall; basal part of main stem 1.2-50 cm wide (rarely fertile 0.4-1 m tall and basal stem 0.6-1.1 cm wide in brackish flatwoods); leaves of fertile part of stem (1.5)2.5-10.5(13) cm long, 0.4-3.3 cm wide, the teeth and tips often acute, surfaces densely glandular and often green to dark green (browning when dry); of mesic to hydric sites … M. cerifera
3. Colonial, <1 m tall; basal part of main stem 0.5-1.0 cm wide; leaves of fertile part of stem 1.5-3.5(5) cm long, 0.3-1.0(1.3) cm wide, the teeth and tips often bluntly acute to rounded-obtuse, surfaces very densely glandular and often yellowish to green (browning when dry); of xeric to xeric-mesic sites … M. pusilla

Morella caroliniensis (Mill.)Small {AFP} —
Morella cerifera (L.)Small {AFP} —
Morella inodora (W. Bartram)Small {AFP} —
Morella pusilla (Raf.)Weakley & D.B. Poind. {AFP} —

CUCURBITALES

BEGONIACEAE

Begonia

1. Plant glabrous to sparsely hairy ... B. cucullata
1. Plant brownish villous ... B. hirtella

^*Begonia coccinea* Hook. —
*__*Begonia cucullata*__ Willd. {AFP} —
^*Begonia heracleifolia* Schltdl. & Cham. —
^*Begonia hirtella* Link {AFP} —
^*Begonia maculata* Raddi —
^*Begonia nelumbiifolia* Schltdl. & Cham. —
^*Begonia obliqua* L. —
^*Begonia rex* Putz. —
^*Begonia semperflorens* Hook. —

CUCURBITACEAE

1. Fruit 1-2.5 cm long [2]
1. Fruit 2.5-50 cm long [3]
2. Tendrils unbranched or branched; leaf blades mostly 5-15 cm long, the central lobe with 5-15 minute teeth per side; corolla white to green; staminate flowers solitary; fruit brown, orange, to red; seeds dark brown to black,1-12 per fruit ... Cayaponia
2. Tendrils unbranched; leaf blades mostly 2-6 cm long, the central with 2-6 minute or shallow teeth per side; corolla yellow; staminate flowers 2-6 in a corymboid cluster or raceme; fruit green to black; seeds white, 30-60 per fruit ... Melothria pendula
3. Tendrils unbranched (rarely branched) [4]
3. Tendrils branched (rarely unbranched) [6]
4. Plant hispid to setose ... Cucumis
4. Plant glabrous to sparsely pubescent [5]
5. Plant dioecious; leaf blades with 3-8 glands along each side of the midrib near the base of the underside, shallowly lobed, the sinuses <½ the blade length; corolla white; fruit red, smooth, indehiscent ... Coccinia grandis
5. Plant monoecious; leaf blades eglandular, deeply lobed, the sinuses >½ the blade length; corolla yellow; fruit yellow-orange to orange-red, muricate or tuberculate, dehiscent ... Momordica
6. Leaf blade with the central lobe pinnately lobed ... Citrullus lanatus
6. Leaf blade only palmately lobed [7]
7. Stems stipitate-glandular ... Sicyos angulatus
7. Stems eglandular or with sessile glands [8]
8. Corolla margin fimbriate ... Trichosanthes cucumerina
8. Corolla margin entire to toothed [9]
9. Staminate flowers solitary [10]

9. Staminate flowers several in a raceme [11]
10. Tendrils 2- to 7-fid; petiole eglandular or with numerous stipitate glands; corolla yellow to white and yellowish towards the base, lobed to only about the middle or less … Cucurbita
10. Tendrils 2-fid; petiole with a pair of prominent glands at the apex; corolla white (greenish at the very base), deeply lobed with only the very base connate … Lagenaria siceraria
11. Corolla yellow (rarely pale yellow), the lobes <1 cm long; fruit cylindric, with 100-300 seeds … Luffa aegyptiaca
11. Corolla white to pale yellow, the lobes 1.5-5 cm long; fruit globose to pyriform, with 1 seed … Sicyos edule

Cayaponia
1. Petiole glabrous; fruiting peduncles 8–15(–30) mm … C. americana
1. Petiole villous and glandular; fruiting peduncles 1–4 mm … C. quinqueloba

Cayaponia americana (Lam.)Cogn. {AFP} —
Cayaponia quinqueloba (Raf.)Shinners {AFP} —

Citrullus
^*Citrullus lanatus* (Thunb.)Matsum. & Nakai {AFP} —

Coccinia
****Coccinia grandis*** (L.)Voigt {AFP} —

Cucumis
1. Fruit smooth [2]
1. Fruit prickly to hispid [3]
2. Leaf lobes elliptic or oblong to ovate; staminate flowers: corolla tube 0.8–2 mm; pistillate flowers: corolla tube 1–1.6(3) mm … C. melo
2. Leaf lobes triangular; staminate flowers: corolla tube 3.5–5(6) mm; pistillate flowers: corolla tube 3.5–6.5 mm … C. sativus
3. Plants dioecious; leaf blade often deeply lobed; pedicels of pistillate flowers distally dilated; staminate flowers 3–10 in racemes … C. anguria
3. Plants monoecious; leaf blade shallowly lobed; pedicels of pistillate flowers not distally dilated; staminate flowers 1–7, usually in fascicles or panicles, rarely racemes [4]
4. Fruit with prickles 0.5-1.5 cm long … C. metulifer
4. Fruit hispid or minutely prickly, sometimes smooth … C. sativus

****Cucumis anguria*** L. {AFP} —
****Cucumis melo*** L. {AFP} —
^*Cucumis metulifer* E.Meyer ex Naudin {AFP} —
^*Cucumis sativus* L. {AFP} —

Cucurbita
1. Petiole stipitate-glandular; leaf blade deltoid, longer than wide … C. foetidissima
1. Petiole eglandular; leaf blade suborbicular to ovate, about as wide as long [2]
2. Corolla cream; calyx lobes 0.5-0.8 cm long … C. okeechobeensis
2. Corolla bright yellow to orange; calyx lobes 0.8-4 cm long [3]

3. Stems villous-hirsute with a mixture of longer, thick, vitreous hairs with conspicuous cross-walls and puberulent understory of much shorter hairs, without pustulate-based hairs... C. moschata
3. Stems puberulent, hirsutulous, to hispid, with or without pustulate-based hairs [4]
4. Stems densely puberulent to hirsutulous, scattered longer hairs with strongly to weakly pustulate bases absent or present ... C. melopepo
4. Stems hispid with persistent, strongly pustulate-based hairs and hispidulous-hirsutulous understory ... C. pepo

^*Cucurbita foetidissima* Kunth {AFP} —
^*Cucurbita moschata* Duchesne {AFP} — Cultivated by indigenous groups (Andres 2004).
^*Cucurbita melopepo* L. — Cultivated by indigenous groups (Newsom et al. 1993, as *C. pepo* subsp. *ovifera* and subsp. *texana*).
Cucurbita okeechobeensis (Small) L.H.Bailey {AFP} — FE. SE. Nearly endemic. St. Johns River and Lake Okeechobee (also vouchered in Dominican Republic, K, NY).
^*Cucurbita pepo* L. —

Lagenaria
^*Lagenaria siceraria* (Molina)Standl. {AFP} — This plant was identified in archaeological remains in Florida indicating indigenous cultivation and use (Hutchinson et al. 2016). American cultivars are apparently derived from African lineages, and perhaps were first introduced to the Americas from Africa by oceanic currents (Kistler et al. 2014; Domic et al. 2024).

Luffa
1. Fruit 15-30 cm long, smooth ... L. aegyptiaca
1. Fruit 4-8 cm long, prickly ... L. quinquefida

****Luffa aegyptiaca*** Mill. {AFP} —
****Luffa quinquefida*** (Hook. & Arn.)Seem. {AFP} —

Melothria
Melothria pendula L. {AFP} —

Momordica
1. Bract of staminate flower near the peduncle apex, <8 mm from the flower, usually denticulate; fruit 2.5-4(7) cm long ... M. balsamina
1. Bract of the staminate flower near the middle of the peduncle, >8 mm from the flower, entire; fruit 2-35 cm long [2]
2. Fruit 2-7 cm long, 1.4-2 cm wide; seeds 5-9 mm long, 2.5-6 mm wide (wild form) ... M. charantia var. abbreviata
2. Fruit (4)7-35 cm long, 4-8 cm wide; seeds 10-16 mm long, 7-10 mm wide (domesticated form) ... M. charantia var. charantia

****Momordica balsamina*** L. {AFP} —
^*Momordica charantia* L. var. *abbreviata* Ser. — This name is sometimes used to denote the wild form (the name var. *muricata* (Willd.)Chakrav. does not have priority at the varietal rank

if synonymous). Morphological comparisons of the fruits and seeds were done by Walter & Decker-Walters (1988).

*__Momordica charantia__ L. var. __charantia__ {AFP} — This name is sometimes used to distinguish the cultivated, consumed variety. Domestication of larger fruits probably occurred in Asia (Renner 2020).

Sicyos

1. Stems stipite-glandular; fruit prickly … S. angulatus
1. Stems eglandular; fruit smooth … S. edulis

__Sicyos angulatus__ L. {AFP} —
^*Sicyos edulis* Jacq. {AFP} —

Trichosanthes

*__Trichosanthes cucumerina__ L. {AFP} —

ROSALES

ROSACEAE

1. Herb [2]
1. Vine, shrub, or tree [6]
2. Leaves simple, the blade palmately lobed; petals absent … Alchemilla
2. Leaves compound with 3 or more leaflets; petals usually present [3]
3. Leaves 3-foliolate; fruit succulent and red, with several attached achenes [4]
3. Leaves usually with more than 3 leaflets; fruit dry, of several achenes [5]
4. Stolons not leafy; flowers arising from leaf rosette; petals white … Fragaria
4. Stolons leafy; flowers arising from the stolons; petals yellow … Potentilla indica
5. Leaves pinnately compound; achenes 2 per fruit, surrounded by a hypanthium with hooked bristles … Agrimonia
5. Leaves palmately compound; achenes several per fruit, inserted on an enlarged receptacle … Potentilla
6. Stems usually armed with prickles; leaves compound [7]
6. Stems without prickles, sometimes with thorns; leaves simple [8]
7. Lateral veins of leaflet underside usually obscure or scarcely pronounced; fruit with a smooth, continuous surface formed from the hypanthium, fleshy, encasing the achenes … Rosa
7. Lateral veins of leaflet underside pronounced and obvious; fruit an aggregate of individual succulent drupes, all attached to the central receptacle … Rubus
8. Glandular, reddish to dark trichomes present along the midrib of the leaf blade upper surface … Aronia
8. Without glandular trichomes along the midrib of the leaf blade upper surface [9]
9. Young tissues with stellate hairs; leaf blade palmately 3(-5)-veined at the base, the veins generally arising at the blade and petiole junction … Physocarpus
9. Stellate hairs lacking; leaf blade not palmately veined at the base, principal lateral veins usually borne on the blade above the petiole [10]
10. Leaf blades mostly 12-30 cm long; seeds 13-18 mm long … Eriobotrya
10. Leaf blades mostly 1.5-13 cm long; seeds <10 mm long [11]
11. Leaf blade ovate, deltoid, spatulate, to obovate, sometimes lobed, coarsely toothed (sometimes only in the upper half) [12]

11. Leaf blade oblong, spatulate, broadly ovate, to lanceolate, unlobed, finely toothed to entire or coarsely prickly (if coarsely toothed, then the blade ovate to lanceolate) [13]
12. Plant sometimes with branched thorns; stems mostly not glaucous; endocarp hard and bony, separating with difficulty from the seed … Crataegus
12. Plant without thorns or with unbranched thorns; stems glaucous; endocarp cartilaginous to membranaceous, easily separated from the seed … Malus angustifolia
13. Leaf blade oblong, narrowly elliptic, to spatulate … Pyracantha
13. Leaf blade broadly ovate to narrowly lanceolate [14]
14. Leaf blade generally broadly ovate, 0.8-1.6 times longer than wide … Pyrus
14. Leaf blade ovate, narrowly lanceolate, to lanceolate, 1.5-3 times longer than wide [15]
15. Leaf blade entire to coarsely toothed or lobate [16]
15. Leaf blade finely toothed [17]
16. Larger leaf blades to 5.2 cm long, to 2.6 cm wide, entire to coarsely toothed … Malus angustifolia
16. Larger leaf blades 5-10 cm long, 2-4 cm wide, entire to coarsely prickly … Prunus
17. Leaf blade base mostly broadly rounded, truncate, to cordate … Amelanchier arborea
17. Leaf blade base mostly acute [18]
18. Leaf blade entire, prickly, serrate-dentate, to finely sharply serrate; style 1 per flower; ovary superior; fruit a drupe … Prunus
18. Leaf blade crenate-dentate; styles 5 per flower; ovary inferior; fruit a pome … Photinia ×fraseri

Agrimonia
1. Terminal leaflet of larger leaves with 6-7 teeth per side, 2-3.5 cm long; lower leaf surface and hypanthium with sessile, amber glands … A. incisa
1. Terminal leaflet of larger leaves with 8-12 teeth per side, 3-7.5 cm long; lower leaf surface and hypanthium eglandular … A. microcarpa

Agrimonia incisa Torr. & A.Gray {AFP} — ST.
Agrimonia microcarpa Wallr. {AFP} —

Alchemilla
****Alchemilla australis*** (Rydb.)Bomble {AFP} — Previously placed in *Aphanes*, a genus now subsumed into *Alchemilla* (Morales-Briones et al. 2022).

Amelanchier
Amelanchier arborea (F.Michx.)Fernald {AFP} —

Aronia
Aronia arbutifolia (L.)Pers. {AFP} —

Crataegus: This treatment recognizes 12 species in Florida, which is felt to be more equitable with the taxonomy of other genera in the flora. Generally similar species concepts in *Crataegus* were set forth by regional botanists, Chapman (1860, 1883, 1897), Godfrey (1991), and Ward (2009), drastically different from the extremely finely split species concepts of Beadle, Ashe, Sargent, Murrill, Phipps, and Lance, which for Florida affects primarily the taxa *C. michauxii* s.lat. and *C. sargentii* s.lat. The evolution of its taxonomy in the SE USA proceeded from ~11-15 spp in Chapman's floras, to an absurd 185 spp. (Beadle in Small 1903,

1913), down to 33 spp. (Tidestrom in Small 1933), and upwards to ~60+ (Phipps 1988, Lance 2014). In Florida, 18 species were recognized in Kurz & Godfrey (1962), 42 by Phipps (2014), and ~30 by Lance (2014). It has been supposed that frequent hybridization, variable ploidy, and apomixis are the cause of great morphological ('taxonomic') diversity in *Crataegus*, although these processes may be common in many plant groups.

subg. Crataegus, sect. Crataegus
- ser. Apiifoliae: C. marshallii
- ser. Cordatae: C. phaenopyrum
- ser. Microcarpae: C. spathulata

subg. Crataegus, sect. Coccineae
- Coccineae, ser. Aestivales: C. aestivalis, C. opaca, C. rufula
- Coccineae, ser. Apricae: [=ser. Lacrimatae] [C. annosa, C. egregia, C. galbana, C. leonensis, C. mira, C. segnis, C. visenda] (revised by Phipps & Dvorsky 2007).
- Coccineae, ser. Crus-Galli: C. crus-galli [C. beberifolia]
- Coccineae, ser. Intricatae: C. flava
- Coccineae, ser. Lacrimatae: C. michauxii s.lat. [=ser. Apricae] [C. alabamensis, C. attrita, C. condigna, C. crocea, C. dispar, C. egens, C. florens, C. floridana, C. furtiva, C. integra, C. lacrimata, C. lanata, C. lancei, C. lassa, C. lepida, C. meridiana, C. munda, C. quaesita, C. senta] (revised by Phipps & Dvorsky 2008).
- Coccineae, ser. Parvifoliae: C. uniflora
- Coccineae, ser. Pulcherrimae: C. sargentii s.lat. [C. gilva, C. incilis, C. mendosa, C. pulcherrima, C. tecta, C. venusta] (revised by Phipps et al. 2006).
- Coccineae, ser. Virides: C. viridis

1. Proximal vein axils of leaf blade undersides cavernous, forming pubescent (rarely glabrate) pockets (domatia) [2]
1. Proximal vein axils of leaf blades undersides flush with the rest of the blade, glabrous (midrib and secondary veins sometimes sparsely pilose) [9]
2. Leaf blade underside vein axils (and elsewhere) densely rufous-pubescent (blade teeth glandular); pedicels 0-3 mm long; fruits 8-15 mm wide [3]
2. Leaf blade underside veins axils (and elsewhere) mostly with whitish or pale pubescent, sometimes some leaves with pale rufuous hairs (blade teeth glandular or eglandular); pedicels 0-15 mm long; fruits 5-20 mm wide [4]
3. Leaf blade 5-7 cm long, lateral veins 5-9 per side; pedicels glabrous; fruits (8)12-15 mm wide … C. opaca
3. Leaf blade 2.5-5 cm long, lateral veins 3-5 per side; pedicels glabrous to rufous-pubescent; fruits 10-12 mm wide … C. rufula
4. Leaf blades mostly dentate to serrate, the teeth generally triangular, the blades mostly 3-7 cm long; pedicels 5-15 mm long; fruit 5-8 mm wide [5]
4. Leaf blades mostly subentire to crenate, the teeth generally rounded, the blades mostly 1-5 cm long; fruit 8-20 mm wide [6]
5. Leaf blades lanceolate, narrowly elliptic to narrowly obovate or oblong, lobes 0(1) per side, 3-7 veins per side … C. viridis var. lanceolata
5. Leaf blades broadly lanceolate to narrowly rhombic, lobes 2-3 per side and distinct, veins 4-5 per side … C. viridis var. viridis
6. Leaf blade upperside glabrous to scabridulous, underside midribs and veins sparsely strigose, sparsely pubescent, to glabrous except for pale pubescence around domatia; leaf blade and

bracteole marginal glands obscure; fruits 8-20 mm wide; of hydric to mesic-hydric areas … C. aestivalis
6. Leaf blade upperside (esp. midrib) and underside sparsely strigose to densely pubescent; fruits (5)6-12(15) mm wide; of xeric to mesic-xeric areas [7]
7. Leaf blade margins without glands or these obscure … C. uniflora
7. Leaf blade and bracteole marginal glands usually prominent [8]
8. Branches weeping or pendent; leaf blade narrowly spatulate (sometimes broader on young shoots) … C. michauxii var. lacrimata
8. Branches spreading, not pendent; leaf blade broadly spatulate to obovate … C. michauxii var. michauxii
9. Leaf blades broadest near the base [10]
9. Leaf blades broadest above the middle [13]
10. Leaf blades pinnately dissected-lobed, sinuses nearly reaching midrib … C. marshallii
10. Leaf blades shallowly lobed, sinus less than halfway to midrib [11]
11. Leaf blades with 2 lateral lobes, the lobe tips acuminate; ovary 4-5 mm wide, fruits 8-10 mm wide … C. phaenopyrum
11. Leaf blades weakly lobed, the lobe tips acute; ovary 2-3 mm wide, fruits 4-5 mm wide
12. Terminal shoot leaf blades rhombic-ovate; stamens 10 … C. flava
12. Terminal shoot leaf blades mostly ovate; stamens 20 … C. sargentii
13. Pedicels 1-3 mm long; sepals often coarsely dentate with teeth >0.5 mm long … C. uniflora
13. Pedicels (4)8-25 mm long; sepals entire to weakly dentate with teeth <0.5 mm long [14]
14. Pedicel glabrous; sepals deltoid, 1-2 mm long; fruit 3-4 mm wide … C. spathulata
14. Pedicel pubescent; sepals narrowly acute, 3-4 mm long; fruit >4 mm wide (ser. Crus-Galli, C. crus-galli s.lat.) [15]
15. Leaf blade upper side hairy when young, becoming glabrate or scabrous; inflorescence branches densely pubescent … C. crus-galli subsp. beberifolia
15. Leaf blade upper side glabrous to sparsely hairy when young (midvein may be densely hairy); inflorescence branches usually glabrous [16]
16. Leaf blades 1.5-2.5 times as long as wide, larger ones usually >2 cm wide … C. crus-galli var. crus-galli
16. Leaf blades 2.5-5 times as long as wide, largers ones usually <2 cm wide … C. crus-galli var. pyracanthifolia

Crataegus aestivalis (Walter)Torr. & A.Gray {AFP} —
Crataegus crus-galli L. subsp. ***berberifolia*** (Torr. & A.Gray)A.E.Murray — Panh. "little differentiated from some forms of *C. crus-galli*, except in indumentum […] Intermediates with hairy leaves and glabrous inflorescences may represent hybrids with *C. crus-galli*" (Phipps 2014).
Crataegus crus-galli L. var. ***crus-galli*** {AFP} —
Crataegus crus-galli L. var. ***pyracanthifolia*** Aiton —
Crataegus flava Aiton {AFP} — Leon Co.? (*Rugel s.n.*, MO). Taken by Ward to be synonymous with ser. *Pulcherrimae* but the type clearly has 10 stamens, "virtually unknown" in ser. *Pulcherrimae* (Lance 2014: 453-454).
Crataegus marshallii Eggl. {AFP} —
Crataegus michauxii Pers. var. ***lacrimata*** (Beadle)D.B.Ward — C & W panh. & a few counties of N pen. (type from Okaloosa Co., FL).
Crataegus michauxii Pers. var. ***michauxii*** {AFP} — Fide Lance (2014), *C. lassa* s.lat. is most like *C. michauxii* but "not promoting actual synonymy". Fide Ward 2009, =*C. condigna* (name unplaced by Phipps).

Crataegus opaca Hook. & Arn. {AFP} —
Crataegus phaenopyrum (L.f.)Medik. {AFP} — SE.
Crataegus rufula Sarg. — Treated as a hybrid of *C. aestivalis* and *C. opaca* by Phipps and Lance.
Crataegus sargentii Beadle —Panh.
Crataegus spathulata Michx. {AFP} —
Crataegus uniflora Münchh. {AFP} —
Crataegus viridis L. var. ***lanceolata*** (Sarg.)E.J.Palmer{AFP} —
Crataegus viridis L. var. ***viridis*** {AFP} —

Addendum: The taxa attributed to Florida by Lance are keyed out below for those wanting a more speciose taxonomy, while the even narrower concepts of Phipps are published in the FNA.
Key to ser. *Apricae* & *Lacrimatae* sensu Lance and Phipps
1. Mature shrubs or trees 2-7 m tall; twigs sometimes slightly pendulous and/or slightly flexuous; leaf blade upper side glabrous to scabrous (esp. when young), blades of fertile shoots mostly rhombic to broadly obovate; bracteoles stipitate-glandular; stamens 10 or 20, anthers ivory, cream, pink, purple, to red … ser. Apricae
1. Mature shrubs 0.5-7 m tall; twigs usually flexuous, pendulous or not; leaf blade upper side glabrous to woolly-tomentose (esp. when young), blades of fertile shoots mostly spatulate, cuneate, to obovate; bracteoles sessile to short-stipitate-glandular; stamens 20, anthers ivory to cream … ser. Lacrimatae

ser. *Apricae* sensu Lance: "It is possible that many of the taxa in this series arose by hybridization, perhaps with a ser. *Lacrimatae* parent when they would have flexuous twigs." (Phipps 2014). (=*C. michauxii* s.lat.)
1. Leaf blades distinctly toothed and/or lobed, mostly broadly ovate & >3.5 cm long … C. mira
1. Leaf blades with small or blunt teeth, mostly unlobed, mostly obovate and <3.5 cm long [2]
2. Branches ascending or recurved; terminal shoot leaf blades mostly orbicular … C. sororia var. segnis
2. Branches usually drooping; terminal shoot leaf blades mostly obovate to rhombic … C. sororia var. visenda

Crataegus egregia Beadle — Clay, Liberty, & Wakulla cos. (type from Liberty Co., FL). "possible interserial hybrid of *sororia* × *floridana*" (Lance 2014).
Crataegus mira Beadle — E panh. & N pen. (type from Cobb Co., GA). Treated as a var. of *C. alleghaniensis* by Lance (2014), "with some hesitation".
Crataegus sororia Beadle var. *segnis* (Beadle)Lance — Panh. (type from Butler Co., AL). Fide Lance 2014, =*C. leonensis* Beadle (type from Leon Co., FL).
Crataegus sororia Beadle var. *visenda* (Beadle)Lance — E panh. & N pen. (type from Liberty Co., FL). =*C. annosa* Beadle (type from Russell Co., AL), =*C. galbana* Beadle (type from Gadsden Co., FL).

ser. *Lacrimatae* sensu Lance (=*C. michauxii* s.lat.)
1. Leaf blades mostly <2 cm long, <1 cm wide [2]
1. Leaf blades mostly >2 cm long, >1 cm wide [6]
2. Leaf blades 1-1.5 times as long as wide [3]
2. Leaf blades 1.5-2 times as long as wide [4]

3. Shrub usually <50 cm tall; petiole glabrate; leaf blade denticulate or remotely toothed, rarely lobed … C. lepida
3. Shrub usually >50 cm tall; petiole hairy; leaf blade sharply toothed, often lobed … C. quaesita var. egens
4. Leaves and pedicels glabrous … C. lacrimata
4. Leaves and pedicels pubescent [5]
5. Leaf blade base attenuate, margin obscuredly toothed distally … C. lassa var. recurva
5. Leaf blade base cuneate, margin distinctly toothed distally … C. munda
6. Leaf blade margin subentire, distally denticulate [7]
6. Leaf blade toothed distally or along most of margin, distal teeth finely acute or dentate [11]
7. Terminal shoot leaf blades with lobes or blunt teeth distally [8]
7. Terminal shoot leaf blades with obscure lobes or teeth distally [9]
8. Leaf blades persistently tomentose; fruit subglobose … C. lassa var. lanata
8. Leaf blades glabrate to pubescent; fruit pyriform … C. lassa var. lassa
9. Thorns >3 cm long, abundant, present at most nodes … C. lassa var. colonica
9. Thorns mostly <3 cm long, infrequent [10]
10. Leaf blade elliptic-obovate, mostly >1 cm wide, blade base attenuate for ~1/2 of petiole … C. lassa var. integra
10. Leaf blade generally spatulate, mostly <1 cm wide, blade base attenuate for most of petiole … C. lassa var. recurva
11. Leaf blade unlobed or obscurely lobate, apex rounded to abruptly acuminate, margins finely to sharply toothed [12]
11. Leaf blade with 3-5 lobes or large teeth [14]
12. Leaves and inflorescence glabrate to sparsely hairy … C. alabamensis var. florens
12. Leaves and inflorescence densely hairy [13]
13. Leaf blade teeth small, fine, or partly crenate … C. alabamensis var. alabamensis
13. Leaf blade teeth sharp with large glands … C. senta
14. Fruit usually <10 mm wide, with calyx elevated [15]
14. Fruit usually >10 mm wide, calyx sessile [16]
15. Leaf blade mostly spatulate, lobes or teeth blunt to subacute … C. quaesita var. floridana
15. Leaf blade mostly narrowly obovate, marginal teeth dentate or sharp … C. quaesita var. quaesita
16. Leaf blades broadly obovate, ~1.2-1.4 times as long as wide, with 3 blunt lobes … C. furtiva
16. Leaf blades >1.4 times as long as wide, unlobed or lobes acute [17]
17. Terminal shoot leaf blades broadly ovate, tomentose, marginal teeth sharply, deeply acute … C. dispar
17. Terminal shoot leaf blades obovate, glabrate, marginal teeth blunt to subacute … C. lancei

Crataegus alabamensis Beadle var. *alabamensis*— Leon Co. (type from Montgomery Co., AL).
Crataegus alabamensis Beadle var. *florens* (Beadle)Lance — E panh. & Hamilton Co. (type from Lowndes Co., MS). Fide Lance (2014), =*C. attrita* Beadle (type from Dale Co., AL).
Crataegus condigna Beadle — E panh. & N pen. (type from Gadsden Co., FL). Fide Ward (2009), =*C. michauxii*. Fide Lance (2014), "possible interserial hybrid of *ravenelii* × *recurva*".
Crataegus dispar Beadle — Reported for Jackson Co. by Phipps (type from Aiken Co., SC).
Crataegus furtiva Beadle — E panh. & N pen. (type from Gadsden Co., FL).
Crataegus lacrimata Beadle — Panh. (type from Okaloosa Co., FL).
Crataegus lancei J.B.Phipps — Alachua & Clay cos. (type from Buncombe Co., NC).
Crataegus lassa Beadle var. *colonica* (Beadle)Lance — E panh. (type from Beaufort Co., SC).

Crataegus lassa Beadle var. *integra* (Nash)Lance — E panh. to N/C pen. (type from Lake Co., FL).
Crataegus lassa Beadle var. *lanata* (Beadle)Lance — E panh. & N pen. (type from Gwennett Co., GA).
Crataegus lassa Beadle var. *lassa* — E panh. & N pen. (type from Dale Co., AL). "there is a pool of suspected intermediates" with *C. quaesita* (Lance 2014). Fide Lance (2014), *C. michauxii* is mostly likely placed here.
Crataegus lassa Beadle var. *recurva* (Beadle)Lance — E panh. & N pen. (type from Dale Co., AL). "There can be difficulty separating some of these *recurva* types from the *integra* complex, compounded in cases of intermediate plants." (Lance 2014). Fide Lance (2014), =*C. crocea* Beadle (type from Marion Co., FL), =*C. meridiana* Beadle (type from Dale Co., AL), =*C. vicana* Beadle (type from Lake Co., FL).
Crataegus lepida Beadle —N & C pen. (type from Ware Co., GA).
Crataegus munda Beadle — E panh. to C pen. (type from Lexington Co., SC).
Crataegus quaesita Beadle var. *quaesita* — E panh. & N pen. (type from Gadsden Co., FL). "Intermediates between *quaesita* and other members of the *Lacrimatae* appear to have been named by Beadle as additional species" (Lance 2014).
Crataegus quaesita Beadle var. *egens* (Beadle)Lance — E panh. & N pen. (type from Liberty Co., FL).
Crataegus quaesita Beadle var. *floridana* (Sarg.)Lance — E panh. & N pen. (type from Duval Co., FL).
Crataegus senta Beadle — Liberty & Suwannee cos. (type from Buncombe Co., NC). "It is possible that a variation or descendent of *senta* has become today's representative *lancei* in the region [...] This hawthorn's foliage also suggests an affiliation to *ravenelii*, and these entities could prove to be closely related" (Lance 2014).

ser. *Pulcherrimae* sensu Lance (=*C. sargentii* s.lat.)
1. Inflorescence shoot leaf blades unlobed, terminal shoot leaf blades unlobed or shallowly lobed, apex obtuse ... C. mendosa
1. Leaf blades shallowly to distinctly lobed on all shoots, apex usually acute [2]
2. Leaf blades ovate-lanceolate, mostly deltate distally [3]
2. Leaf blades elliptic, ovate, to broadly ovate, mostly convex distally [5]
3. Shrub, often clonal; terminal shoot leaf blades usually with 4-5 lobes ... C. pulcherrima var. incilis
3. Small tree to large shrub; terminal shoot leaf blades with 3-4 lobes [4]
4. Leaf blades shallowly lobed, teeth sharply acuminate; fruit mostly 6-8 mm wide ... C. sargentii var. gilva
4. Leaf blades moderately lobed, teeth blunt to acute; fruit mostly 10-13 mm wide ... C. sargentii var. sargentii
5. Petioles of smaller leaves winged ~1/2 length; leaf blade lobes mostly with straight margins; fruit mostly 10-15 mm wide ... C. venusta
5. Petioles of smaller leaves winged 1/3 or less of length; leaf blade lobes mostly with convex margins; fruit mostly <10 mm wide [6]
6. Terminal shoot leaf blade length and width subequal, lobes usually rounded ... C. pulcherrima var. opima
6. Terminal shoot leaf blade longer than wide, lobes blunt to acute ... C. pulcherrima var. pulcherrima

Crataegus mendosa Beadle —E panh. (type from Marshall Co., AL).

Crataegus pulcherrima Ashe var. *incilis* (Beadle)Lance —E panh. (type from Autauga Co., AL).
Crataegus pulcherrima Ashe var. *opima* (Beadle)Lance — Gadsden Co. (type from Butler Co., AL).
Crataegus pulcherrima Ashe var. *pulcherrima* —Panh. (type from Gadsden Co., FL). Fide Lance 2014, =*C. tecta* Beadle (type from Marshall Co., AL).
Crataegus sargentii Beadle var. *gilva* (Beadle)Lance —E panh. (type from Marshall Co., AL).
Crataegus sargentii Beadle var. *sargentii* —Holmes & Leon cos. (type from DeKalb Co., AL).
Crataegus venusta Beadle —Absent from FL, fide Lance (2014) (type from Jefferson Co., AL).

Eriobotrya
****Eriobotrya japonica*** (Thunb.)Lindl. {AFP} —

Fragaria
1. Leaflets dark green to bluish green, slightly glaucous, sometimes dull; achenes in shallow pits or embedded, dark reddish brown to dark brown, 1.4–2 mm … F. ×ananassa
1. Leaflets usually dark green to slightly bluish green, sometimes bright green, not glaucous; achenes usually deeply embedded, rarely in pits or superficial, yellowish green to reddish brown, 1.2–1.8 mm … F. virginiana subsp. virginiana

^*Fragaria* ×*ananassa* (Duchesne ex Weston)Duchesne ex Rozier (*chiloensis* × *virginiana*) —
Fragaria virginiana Duchesne subsp. ***virginiana*** {AFP} —

Malus
Malus angustifolia (Aiton)Michx. {AFP} — ST.

Photinia
^*Photinia* ×*fraseri* Dress (*glabra* × *serratifolia*) {AFP} —

Physocarpus
Physocarpus opulifolius (L.)Maxim. {AFP} — SE.

Potentilla
1. Leaves mostly 3-foliolate; mature fruit red and succulent … P. indica
1. Leaves mostly 5-7-foliolate; mature fruit green to brown, mostly dry [2]
2. Stem erect; leaflets linear-oblanceolate, toothed nearly throughout … P. recta
2. Stem prostrate to erect; leaflets obovate, toothed in the upper two-thirds [3]
3. Plant primarily stoloniferous; larger leaflets 1-2 cm long … P. reptans
3. Plant primarily rhizomatous; larger leaflets 2-5 cm long … P. simplex

****Potentilla indica*** (Andrews)T.Wolf {AFP} —
****Potentilla recta*** L. {AFP} —
****Potentilla reptans*** L. {AFP} —
Potentilla simplex Michx. {AFP} —

Prunus
1. Petiole lacking conspicuous glands; leaves evergreen, the blades entire, undulate, to prickly, sometimes with apparent cherry odor when crushed [2]

1. Petiole eglandular or with conspicuous glands near the apex; leaves deciduous, the blades serrate, cherry odor lacking [3]
2. Petiole mostly 3-8 mm long, often reddish; leaf blades entire or with weak-spinose teeth; fruit ovoid ... P. caroliniana
2. Petiole mostly 6-13 mm long, usually green; leaf blades entire; fruit globose ... P. myrtifolia
3. Stem zigzagged; leaf blades 0.5-2.5 cm long ... P. geniculata
3. Stems not zigzagged or only scarcely so; leaf blades mostly 3-12 cm long [4]
4. Leaf blade underside glabrous to densely reddish tomentose along the midrib; flowers typically 10-40 in a raceme ... P. serotina
4. Leaf blade underside glabrous to pale pubescent along the veins; flowers 1-6 in umbellate fascicles [5]
5. Pedicel 0-3 mm long; ovary and fruit densely pubescent ... P. persica
5. Pedicel (3-)5-50 mm long; ovary and fruit glabrous [6]
6. Flowers 8-20 mm wide [7]
6. Flowers 20-30 mm wide [8]
7. Leaf blade teeth with a deciduous gland leaving a callus thickening; ripe fruit yellow to red ... P. angustifolia
7. Leaf blade teeth eglandular; fruit yellow to red to darker blue ... P. umbellata
8. Pedicels glabrous; sepals green to brownish; fruit yellow to red; stone with evident circumferential edge ... P. americana
8. Pedicels pubescent; sepals pink to purplish; fruit red to blackish; stone lacking an evident edge ... P. subhirtella

Prunus americana Marshall {AFP} —
Prunus angustifolia Marshall {AFP} —
Prunus caroliniana (Mill.)Aiton {AFP} —
•***Prunus geniculata*** R.M.Harper {AFP} — FE. SE.
Prunus myrtifolia (L.)Urb. {AFP} — Miami-Dade Co. Rockland hammocks. ST. Vegetatively similar to *Ilex krugiana*, but *P. myrtifolia* has smoothish brown to gray bark with longitudinal undulate lines (lacking lenticels), twigs purplish brown, brownish, or sometimes gray, often lustrous, leaf blades light to medium green, elliptic to elliptic-ovate (2-2.5 times longer than wide), underside with visible reticulate venation.
^*Prunus persica* (L.)Batsch {AFP} —
Prunus serotina Ehrh. {AFP} —
****Prunus subhirtella*** Miq. {AFP} —
Prunus umbellata Elliott {AFP} —

Pyracantha

1. Leaf blade margins on most or all leaves conspicuously toothed along most of the margin (below the middle to the distal end), apices mostly acute or obtuse to rounded or truncate, rarely retuse ... P. fortuneana
1. Leaf blade margins mostly entire, sometimes with a few teeth near the distal end, apices rounded to truncate, usually retuse ... P. koidzumii

****Pyracantha fortuneana*** (Maxim.)H.L.Li {AFP} —
****Pyracantha koidzumii*** (Hayata)Rehder {AFP} —

Pyrus

1. Calyx lobes densely woolly-pubescent on the inner surface, deciduous in fruit; styles (2)3; fruit globular, brownish with white speckles, 1-1.5 cm long … P. calleryana
1. Calyx lobes sparsely woolly-pubescent on the inner surface towards the base, persistent in fruit; styles 5; fruit pyriform, green to yellow to red, sometimes brownish, usually with darker speckles, 3-16 cm long … P. communis

*****Pyrus calleryana*** Decne. {AFP} —
^*Pyrus communis* L. {AFP} —

Rosa
1. Leaflets 3(5) per leaf [2]
1. Leaflets (3)5-9 per leaf [3]
2. Stipules adnate to the petiole for ½ or less of its length; petiole eglandular; leaflet margins with shallow teeth <0.7 mm long; petals white (sect. Laevigatae) … R. laevigata
2. Stipules adnate to the petiole for most of its length; petiole glandular-hispid; leaflet margins with pronounced teeth, some >0.7 mm long; petals pink (sect. Systylae) … R. setigera
3. Stipule margins pectinate, lacerate, or strongly toothed, persistent [4]
3. Stipule margins entire or shallowly toothed (may be stipitate-glandular), persistent or caducous [6]
4. Stems tomentose, stipitate-glandular; stipules adnate to the petiole for ½ or less of its length; leaflets with shallow teeth, the terminal leaflet with a rounded apex … R. bracteata
4. Stems glabrate to pubescent; stipules adnate to the petiole for most of its length; leaflets with conspicuous exserted teeth, the terminal leaflet usually with an acute or strongly toothed apex (sect. Systylae) [5]
5. Leaflets glabrous on the lower surface; style pubescent … R. lucieae
5. Leaflets pubescent to glabrate on the lower surface; style glabrous … R. multiflora
6. Stipules adnate to the petiole for ½ or less of its length, sometimes caducous; petals white or yellow (sect. Banksiae) … R. banskiae
6. Stipules adnate to the petiole for most of its length, persistent; petals variously colored, including white or yellow [7]
7. Native, wild species (sect. Rosa) [8]
7. Cultivated taxa (sect. Chinensis) [9]
8. Mature shrub often <1 m tall; stem with the major prickles straight and nearly perpendicular to the stem, often with smaller straight prickles also; stipule auricles flared; margins of larger leaflets with 8-14(18) teeth per side; of upland sites … R. carolina
8. Mature shrub usually >1 m tall; stem with the major prickles recurved, lacking smaller straight prickles; stipule auricles erect, rarely flared; margins of larger leaflets with 16-30 teeth per side; of wetland areas … R. palustris
9. Petals more than 5 (flowers double or more); complex cultivated hybrids … R. sect. Chinensis complex
9. Petals 5 (flowers single); wild-type [10]
10. Shrub; stipules glandular-pubescent along margin; leaflets (3)5; flowers (1)4-5, slightly fragrant or not; sepals often pinnately lobed … R. chinensis var. spontanea
10. Liana; stipules eglandular or only glandular at margin of free part; leaflets (3)5-9; flower 1-3, 5-10 cm wide, fragrant; sepals entire to slightly incised … R. odorata var. gigantea

*****Rosa bracteata*** J.C.Wendl. {AFP} —
Rosa carolina L. {AFP} —

^*Rosa* sect. *Chinensis* complex — Widely cultivated with an intractable taxonomy at present.
*__*Rosa laevigata*__ Michx. {AFP} —
*__*Rosa lucieae*__ Franch. & Rochebr. ex Crép. {AFP} —
*__*Rosa multiflora*__ Thunb. {AFP} —
__*Rosa palustris*__ Marshall {AFP} —
__*Rosa setigera*__ Michx. {AFP} —

Rubus
1. Leaves pinnately compound, the leaflets usually 5-7; petals pink … R. niveus
1. Leaves palmately compound, the leaflets 3-5; petals white to pink [2]
2. Stem prostrate or trailing; leaflet surface usually glabrate or sometimes moderately pubescent below, the veins pubescent [3]
2. Stem erect, ascending, to arching; leaflet surface usually moderately to densely pubescent below, the veins pubescent [4]
3. Stem with prickles, without hispid-glandular trichomes; leaflets dull above; inflorescence with 1-3(-8) flowers; petals white … R. flagellaris
3. Stem with prickles and usually with hispid glandular trichomes; leaflets lustrous above; inflorescence with 1(-3) flowers; petals white to pink … R. trivialis
4. Leaflets pale green underneath, sericeous-pilose to sericeous-villous, the apex acute, the terminal leaflets ovate to lanceolate, 5–15 cm long, 3–13 cm wide … R. argutus
4. Leaflets gray-white underneath, densely white-gray tomentose, the apex obtuse to rounded, the terminal leaflets cuneate to obovate, 2–6 cm long, 3–4 cm wide … R. cuneifolius

__*Rubus cuneifolius*__ Pursh {AFP} —
__*Rubus flagellaris*__ Willd. {AFP} —
*__*Rubus niveus*__ Thunb. {AFP} —
__*Rubus pensilvanicus*__ Poir. {AFP} —
__*Rubus trivialis*__ Michx. {AFP} —

ELAEAGNACEAE
Elaeagnus
1. Young stems with brown scales; leaves evergreen, the blade coriaceous, the underside with grayish white and brown scales; calyx with silvery and reddish brown scales; flowering usually fall-winter, fruiting usually spring-summer … E. pungens
1. Young stems with silvery scales; leaves deciduous, the blade chartaceous, the underside with silvery (sometimes yellow) scales; calyx with silvery scales; flowering spring-summer, fruiting summer-fall … E. umbellata

*__*Elaeagnus pungens*__ Thunb. {AFP} —
*__*Elaeagnus umbellata*__ Thunb. {AFP} —

RHAMNACEAE
1. Leaves mostly opposite to subopposite, sometimes some alternate [2]
1. Leaves all alternate [4]
2. Stems mostly lax to scandent and often thorny; leaf blades toothed along the margins; inconspicuous petals present and shorter than the sepals … Sageretia minutiflora
2. Stems generally erect and without thorns; leaf blades entire (often notched at the apex); sepals present but petals lacking [3]

3. Bark becoming fissured and cracking; leaf blades chartaceous to subcoriaceous, with the lateral veins ascending-arcuate, the midrib light green and only lightly contrasting with the blade surface; sepals keeled … Krugiodendron ferreum
3. Bark nearly smooth, only lightly fissured; leaf blades coriaceous, with the lateral veins nearly straight and ascending-perpendicular, the midrib white to pale yellow and strongly contrasting with the blade surface; sepals not keeled … Reynosia septentrionalis
4. Vines, twining or with tendrils [5]
4. Shrubs (sometimes scandent) to trees [6]
5. Twining vine; leaf margins entire to undulate-crenate; fruit a drupe … Berchemia scandens
5. Vine with tendrils; leaf margins with distinctly notched or protruding teeth; fruit a winged schizocarp … Gouania lupuloides
6. Stems armed with thorns or stipular spines [7]
6. Stems unarmed [8]
7. Stems with axillary, often leafy thorns; leaf blades not trinerved, only with a midrib … Pseudoziziphus celata
7. Stems often with stipular spines; leaf blades trinerved from the base … Ziziphus
8. Leaf blades trinerved from the base, the veins reaching beyond mid-blade, the blade 0.1-6 cm long … Ceanothus
8. Leaf blades pinnately veined or if appearing trinerved, the veins merging with the margin or evanescent by mid-blade, the blade mostly 4-16 cm long [9]
9. Leaf blade margin entire, obscurely crenulate to serrulate, to strongly serrate, sometimes glandular, glabrous to densely pubescent on the lower surface; inflorescence a thyrse; ovary semi-inferior; fruit leathery to dry, dehiscent … Colubrina
9. Leaf blade margin obscurely crenulate to serrulate, eglandular, sparsely pubescent along the veins of the lower surface; inflorescence a corymbiform fascicle; ovary superior; fruit fleshy, indehiscent … Frangula caroliniana

Berchemia
Berchemia scandens (Hill)K.Koch {AFP} —

Ceanothus
1. Leaf blades serrate to serrulate, mostly 20-100 mm long … C. americanus
1. Leaf blades entire, mostly 1-5 mm long … C. microphyllus

Ceanothus americanus L. {AFP} —
Ceanothus microphyllus Michx. {AFP} —

Colubrina
1. Leaf blade crenate-serrate, the secondary veins mostly 3-5 on each side of the midrib; seeds relatively dull, brown to brownish black … C. asiatica
1. Leaf blade entire, the secondary veins mostly 5-12 on each side of the midrib; seeds lustrous, black [2]
2. Leaf blade secondary veins 6–12 on each side of the midrib, relatively straight to slightly curving, strongly impressed on the upper surface (the reticulate veins also often impressed); inflorescences 20–50(–70)-flowered; peduncles 8–15 mm long … C. cubensis var. floridana
2. Leaf blade secondary veins 5–9 on each side of the midrib, moderately to strongly curving, generally flat with the blade surface or slightly impressed or slightly raised; inflorescences 8–30-flowered; peduncles 1–10 mm long [3]

3. Young stems reddish tomentose; petiole 1-2 mm wide; leaf blade generally ovate-oblong, 4-17 cm long, 2-9 cm wide, the base rounded to subcordate, with glands on the lower blade surface, sometimes near the margin and rarely one or few marginal (the glands as a light discoloration when fresh, darkened and conspicuous when dry); pedicels and peduncles reddish pubescent ... C. arborescens
3. Young stems strigose to glabrate (in Florida); petiole 0.5-1 mm wide; leaf blade generally ovate-elliptic, 2.5-9 cm long, 1.5-5 cm wide, the base rounded to broadly cuneate, with marginal glands, some at least 1-10 mm from the petiole (the glands as a light discoloration when fresh, darkened and more conspicuous when dry); pedicels and peduncles glabrate (in Florida) ... C. elliptica

Colubrina arborescens (Mill.)Sarg. {AFP} — SE.
*****Colubrina asiatica*** (L.)Brongn. {AFP} —
Colubrina cubensis (Jacq.)Brongn. var. ***floridana*** M.C.Johnst. {AFP} — SE.
Colubrina elliptica (Sw.)Brizicky & W.L.Stern {AFP} — SE.

Frangula
Frangula caroliniana (Walter) A. Gray {AFP} —

Gouania
Gouania lupuloides (L.)Urb. {AFP} —

Krugiodendron
Krugiodendron ferreum (Vahl)Urb. {AFP} —

Pseudoziziphus
•***Pseudoziziphus celata*** (Judd & D.W.Hall)Hauenschild {AFP} — FE. SE.

Reynosia
Reynosia septentrionalis Urb. {AFP} — ST.

Sageretia
Sageretia minutiflora (Michx.)C.Mohr {AFP} —

Ziziphus
1. Stems, leaf blade lower surfaces, and inflorescence glabrate ... Z. jujuba
1. Stems, leaf blade lower surfaces, and inflorescence densely tomentose ... Z. mauritiana

^*Ziziphus jujuba* Mill. {AFP} —
^*Ziziphus mauritiana* Lam. {AFP} —

CANNABACEAE
1. Annual herbs; leaves palmately compound; fruit an achene ... Cannabis sativa
1. Vines or shrubs to trees; leaves simple; fruit various [2]
2. Vines; leaf blades often palmately lobed; fruit an achene ... Humulus
2. Shrubs to trees; leaf blades unlobed; fruit a drupe [3]

3. Leaf blade glabrous or nearly so on the lower surface, the margin entire to coarsely serrate; flowers and fruits solitary or few in unbranched cymes … Celtis
3. Leaf blade pubescent on the lower surface, the margin finely serrate; flowers and fruits 12-20 in branching cymes … Trema

Cannabis The genus *Cannabis* is here treated as containing one extant polymorphic species (Small & Cronquist 1976; Small 2015).

^*Cannabis sativa* L. {AFP} —

Celtis
1. Stems often with supranodal thorns; leaf blades mostly ovate-oblong to elliptic [2]
1. Stems lacking thorns; leaf blades mostly broadly ovate to ovate-lanceolate [3]
2. Leaf blade tip mostly acute to acute-mucronate, the upper surface strongly scabrous, the lower surface with domatia mostly in the distal veins axils, to 13 cm long; ovary pilose; fruit 8-14 mm long, 7-13 mm wide; pyrene 4-8 mm long, 4-6 mm wide … C. iguanaea
2. Leaf blade tip mostly rounded-mucronate to retuse, the upper surface usually smooth (in Florida), the lower surface with domatia mostly confined to the basal vein axils, to 7 cm long; ovary glabrous to glabrate; fruit 4-6 mm long, 3-4 mm wide; pyrene 2-3 mm long, 1.5-2.5 mm wide … C. pallida
3. Leaf blades mostly elliptic-lanceolate to ovate-lanceolate, the surfaces green to yellowish green, the margin entire or with up to 15 irregular teeth per side, the base slightly oblique, the apex acute to gradually acuminate … C. laevigata
3. Leaf blades mostly ovate, the surfaces often grayish green and often darker above, the margin with (6)9-39 teeth per side, the base mostly strongly oblique, the apex abruptly acuminate … C. occidentalis

Celtis iguanaea (Jacq.) Sarg. {AFP} — SE.
Celtis laevigata Willd. {AFP} —
Celtis occidentalis L. {AFP} —
Celtis pallida Torr. {AFP} — SE.

Humulus
^*Humulus lupus* L. — Increasing interest in local hops has motivated local cultivation of 'Cascade' cultivars, with usage of artificial lighting to prolong day-length to inhibit flowering until significant growth allows for better yield during shorter day-length (Acosta-Rangel 2024).

Trema
1. Mature fruits purple to black … T. orientale
1. Mature fruits pink to orange-red [2]
2. Larger leaf blades 1-2.3 cm wide, <6.5 cm long, the margins sometimes revolute, the basal pair of veins generally without pronounced lateral veins extending to the margin or these few and short, the greatest distance between the basal vein and the blade margin to 4 mm, the area between the basal veins and the leaf margin conspicuously smaller than the area between the basal vein and midrib, the blade base symmetric to subtly asymmetric and usually rounded to truncate, the blade tip obtuse to acute … T. lamarckianum

2. Larger leaf blades 2.5-6 cm wide, usually >5 cm long, the margins not revolute, the basal pair of veins with pronounced lateral veins extending to the margin, the greatest distance between the basal veins and the blade margin usually >4 mm, the area between the basal veins and the leaf margin generally subequal to larger than (or not much smaller than) the area between the basal vein and midrib, the blade base usually asymmetric, sometimes cordate, the blade tip usually acuminate [3]
3. Leaf blades 1.4-2.4 times longer than wide, the apex shortly acuminate with the portion of the blade tip <4 mm wide 3-8 mm long, the marginal teeth pronounced with the sinus mostly 0.5-1.5 mm deep, the reticulate venation conspicuous and apparent throughout on the blade underside ... T. floridanum
3. Leaf blades 2.4-3.5 times longer than wide, the apex long-acuminate with the portion of the blade tip <4 mm wide 10-25 mm long, the marginal teeth shallow and the sinus mostly <0.5 mm deep, the reticulate venation inconspicuous or moderately apparent on part of the blade underside ... T. micranthum

Trema floridanum Britton ex Small {AFP} — South Florida (Central America).
Trema lamarckianum (Schult.)Blume {AFP} — SE.
*****Trema micranthum*** (L.)Blume {AFP} —
^*Trema orientale* (L.)Blume {AFP} —

MORACEAE

1. Herbs [2]
1. Woody vines, shrubs, to trees [3]
2. Acaulescent; inflorescence subequal to exceeding the petioles ... Dorstenia contrajerva
2. Caulescent; inflorescence shorter than the petioles ... Fatoua villosa
3. Leaf blades dentate to serrate [4]
3. Leaf blades entire, or sometimes coarsely undulate to coarsely dentate [5]
4. Bark often with horizontal bicolored banding or spotting; pistillate inflorescence globose; style unbranched ... Broussonetia papyrifera
4. Bark usually uniform in color, without distinct horizontal banding; pistillate inflorescence cylindrical; style 2-branched ... Morus
5. Inflorescence a synconium, with the flowers hidden inside the inner surface of an urceolate receptable with a small opening at the apex ... Ficus
5. Inflorescence with the flowers visible and exposed on the outer surface of the receptacle [6]
6. Leaf blade secondary veins nearly straight, spreading to nearly perpendicular, with a conspicuous undulate marginal vein ... Brosimum alicastrum
6. Leaf blade secondary veins ascending or arcuate, the marginal vein inconspicuous or coarse and irregularly undulate [7]
7. Stems without spines; leaf blades mostly broadly elliptic, sometimes lobed ... Artocarpus heterophyllus
7. Stems often with axillary spines; leaf blades mostly ovate ... Maclura pomifera

Artocarpus

1. Leaf blades lobed ... A. altilis
1. Leaf blades with entire margins ... A. heterophyllus

^*Artocarpus altilis* (Parkinson)Fosberg —
^*Artocarpus heterophyllus* Lam. {AFP} —

Brosimum
^*Brosimum alicastrum* Sw. {AFP} —

Broussonetia
****Broussonetia papyrifera*** (L.)Vent. {AFP} —

Dorstenia
^*Dorstenia contrajerva* L. {AFP} —

Fatoua
****Fatoua villosa*** (Thunb.)Nakai {AFP} —

Ficus
1. Climbing or trailing vine; leaf blades dimorphic, those of sterile climbing stems closely spaced and 2-4 cm long and becoming larger with those of fertile stems 4-10 cm long, the lower surface finely reticulate with prominent venation … F. pumila
1. Erect shrub or tree, sometimes starting out epiphytic; leaves monomorphic, the reticulate veins not prominent or only scarcely so [2]
2. Leaf blades palmately 3- to 5-lobed, the surfaces scabrous-pubescent, often with some margins coarsely undulate to coarsely dentate … F. carica
2. Leaf blades unlobed (occasionally lobate or compound in F. benghalensis var. krishnae), entire and glabrous to finely pubescent [3]
3. Leaf blade apex long caudate or long acuminate, the tip 1/2 or more as long as the blade body … F. religiosa
3. Leaf blade apex rounded, obtuse, to acute or if acuminate or caudate the tip less than a 1/4 as long as the blade body [4]
4. Leaf blade obdeltoid to obovate, the midrib abruptly terminating and/or branching near the distal 1/4th of the blade … F. natalensis subsp. leprieurii
4. Leaf blade ovate to elliptic, the midrib extending to the apex or terminating past the distal 1/4th of the blade [5]
5. Leaf blades usually 8-30 cm long and 5-20 cm wide, appearing strongly 3-5-(7-)nerved at the base or just above the base, the dominant basal lateral veins nearly as pronounced as the midrib and prominent on the lower leaf surface (leaf blade also with an outer pair of less conspicuous lateral veins that border the blade margin) [6]
5. Leaf blades usually 3-18 cm long and 1.5-8 cm wide, not appearing strongly 3-nerved at the base, the basal lateral veins weak and not prominent, or if the blade appearing strongly trinerved with prominent basal lateral veins then the blades mostly <8 cm long and <5 cm wide [7]
6. Leaf blades usually with 1 pair of pronounced and prominent basal lateral veins, the apex with a small blunt acumen … F. altissima
6. Leaf blade usually with 2 pronounced and prominent basal lateral veins, the apex usually obtuse or rarely with an acumen … F. benghalensis
7. Petiole usually >1/4 the length of the blade on mature leaves; leaf blade base usually broadly rounded, truncate, to cordate, or sometimes acute; peduncle 5-15 mm long … F. citrifolia
7. Petiole usually <1/4 the length of the blade; leaf blade base usually cuneate to broadly acute; synconium sessile or the peduncle to 5 mm long [8]

8. Lateral veins scarcely pronounced or apparent, even when dry (except for the basal pair which is sometimes apparent) ... F. benjamina
8. Lateral veins pronounced or apparent, especially on the lower surface when dry [9]
9. Petiole usually 1.5-6 cm long; larger leaf blades usually 7.5-18 cm long, 3.5-10 cm wide ... F. aurea
9. Petiole 0.3-1.5 cm long; larger leaf blades usually 2-9.5 cm long, 1-4.5 cm wide [10]
10. Leaf blade usually without pronounced basal lateral veins; synconium pedunclate, the peduncle 2-5 mm long ... F. americana
10. Leaf blade usually with a somewhat pronounced pair of basal lateral veins that extend as the marginal vein; synconium sessile ... F. microcarpa

****Ficus altissima*** Blume {AFP} —
^*Ficus americana* Aubl. {AFP} —
Ficus aurea Nutt. {AFP} —
^*Ficus benghalensis* L. {AFP} —
^*Ficus benjamina* L. {AFP} — Divided by Barrett (1951: 128) into five infraspecific entities.
^*Ficus carica* L. {AFP} —
Ficus citrifolia Mill. {AFP} —
^*Ficus elastica* Roxb. ex Hornem. —
^*Ficus krishnae* C.DC. {AFP} —
^*Ficus lyrata* Warb. —
****Ficus microcarpa*** L.f. {AFP} —
^*Ficus natalensis* Hochst. subsp. *leprieurii* (Miq.)C.C.Berg {AFP} —
****Ficus pumila*** L. {AFP} —
^*Ficus racemosa* Willd. —
****Ficus religiosa*** L. {AFP} —

Maclura
****Maclura pomifera*** (Raf.)C.K.Schneid. {AFP} —

Morus
1. Leaf blade upper surface glabrous to sparsely pubescent, relatively smooth, the lower surface glabrous or pubescent along the veins and vein axils ... M. alba
1. Leaf blade upper surface scabridulous to merely punctate, the lower surface pubescent to puberulent ... M. rubra

****Morus alba*** L. {AFP} —
Morus rubra L. {AFP} —

ULMACEAE
1. Leaf blade ovate to ovate-oblong, usually widest below the middle; inflorescence with mostly unisexual flowers, a few bisexual; fruit nut-like ... Planera aquatica
1. Leaf blade narrowly ovate to rhombic-elliptic, usually widest near the middle; inflorescence with bisexual flowers; fruit a samara ... Ulmus

Planera
Planera aquatica J.F.Gmel. {AFP} —

Ulmus
1. Leaf blade mostly simply serrate; flowering late summer-fall (sect. Microptelea) … U. parvifolia
1. Leaf blade mostly doubly serrate (the larger teeth with small teeth along the margin); flowering late summer-fall or winter-spring [2]
2. Stems sometimes corky-winged; petiole 0-3 mm long; leaf blades obtuse to acute, subtly acuminate at the tip; flowering late summer-fall or winter-spring (sect. Chaetoptelea) [3]
2. Stems not corky-winged; petiole 3-10 mm long; leaf blades acuminate to cuspidate at the tip; flowering winter-spring [4]
3. Leaf blades usually smooth on the upper surface, mostly acute to acute-acuminate at the tip; samaras long-ciliate, 6-8 mm long; pedicel 2-7 mm long; calyx lobes 5; flowering Jan-Apr, before leafing out … U. alata
3. Leaf blades scabrous on the upper surface, mostly bluntly acute to obtuse at the tip; samaras ciliolate, 8-10 mm long; pedicel 7-10 mm long; calyx lobes 6-9; flowering Jul-Oct, among fully developed leaves … U. crassifolia
4. Young stems often densely pubescent; buds long-pubescent; leaf blades strongly scabrous on the upper surface; pedicel 1-2 mm long; samaras orbicular, 14-17 mm long, the margin not ciliate (sect. Ulmus) … U. rubra
4. Young stems glabrous to pubescent; buds glabrous to shortly pubescent (hairs mostly 0.1-0.5 mm long); leaf blades smooth to lightly scabrous on the upper surface; pedicel 10-20 mm long; samaras ovate, 10-13 mm long, ciliate on the margin (sect. Blepharocarpus)
5. Leaf blade bases strongly asymmetric, larger blades to 15 cm long, to 6.5 cm wide, primary marginal teeth long-acuminate and curved upward and inward (hook-like), teeth to 4-8 mm long … U. americana var. americana
5. Leaf blade bases symmetric to strongly asymmetric, larger blades to 10 cm long, to 5 cm wide, primary marginal teeth acute to abruptly acuminate and straight to slightly curved inward … U. americana var. floridana

Ulmus alata Michx. {AFP} —
Ulmus americana L. var. ***americana*** {AFP} — C- to W-panhandle.
Ulmus americana L. var. ***floridana*** (Chapm.)Little {AFP} — Of questionable merit. Delimited by Kurz & Godfrey (1962: 109-113) but mostly abandonded by later authors, including Godfrey (1988).
Ulmus crassifolia Nutt. {AFP} —
****Ulmus parvifolia*** Jacq. {AFP} —
Ulmus rubra Muhl. {AFP} —

URTICACEAE: A Rugel specimen of *Phenax sonneratii* (Poir.)Wedd. bears a printed label hailing from Cuba, but oddly, in pencil, Florida is written and Cuba crossed out. This species is not known from either area.

1. Trees; leaf blades palmately lobed … Cecropia palmata
1. Herbs to shrubs; leaf blades unlobed [2]
2. Leaves mostly opposite, sometimes solitary at a fertile node [3]
2. Leaves alternate [7]
3. Plant with stinging trichomes with a distinct bulbous base and translucent apex … Urtica
3. Plant without stinging trichomes [4]
4. Leaf blades entire [5]
4. Leaf blades toothed [6]

5. Leaf blades <1 cm long … Pilea
5. Leaf blades 1-6 cm long … Pouzolzia zeylanica
6. Petiole 0.1-0.5 times as long as the leaf blade; inflorescence spiciform with separated dense glomerules … Boehmeria cylindrica
6. Petiole 0.3-1.2 times as long as the leaf blade; inflorescence short and dense or paniculate … Pilea
7. Leaf blades dentate to serrate [8]
7. Leaf blades entire [9]
8. Plant without stinging trichomes and without glandular trichomes; leaf blade lower surface densely white tomentose; inflorescence spiciform with separated dense glomerules … Boehmeria nivea
8. Plant often with stinging trichomes or stipitate-glandular trichomes; leaf blade lower surface sparsely to densely pubescent, not white tomentose; inflorescence paniculate, diffuse … Laportea
9. Root tuberous; petiole 0.1-0.3 times as long as the leaf blade; sepals connate, appressed and enclosing the achene … Pouzolzia zeylanica
9. Rhizomatous, stoloniferous, or fibrous-rooted; petiole 0.3-1.2 times as long as the leaf blade; sepals free or basally connate, loosely enclosing the achene [10]
10. Leaf blades mostly 8-60 mm long; stigma short, penicillate … Parietaria
10. Leaf blades <8 mm long; stigma long, filiform … Rousselia humilis

Boehmeria
1. Leaves opposite or mostly so, the blade lanceolate to narrowly ovate, rounded to cordate at the base, the lower surface glabrate to pubescent … B. cylindrica
1. Leaves alternate, the blade broadly ovate, abruptly acute at the base, the lower surface densely white tomentose when young … B. nivea

Boehmeria cylindrica (L.)Sw. {AFP} —
*****Boehmeria nivea*** (L.)Gaudich. {AFP} —

Cecropia Apparently *C. palmata* is restricted to eastern South America and scarcely (if at all) cultivated.

1. Upper leaf surface scabrous, hispidulous; leaf lobe apex short-acuminate to rounded, lateral vein pairs of unfused portion usually 10-15; stipules 3-12 cm long … C. peltata
1. Upper leaf surface smooth (rarely scabridulous); leaf lobe apex obtuse, lateral vein pairs of unfused portion 15-25; stipules 20-35 cm long … C. polystachya

^*Cecropia peltata* L. {AFP} —
^*Cecropia polystachya* Trécul —

Laportea
1. Annual with fibrous, weak roots; plant stipitate-glandular, stinging trichomes sometimes wanting; fruiting pedicel not winged; of disturbed sites … L. aestuans
1. Perennial with thickened main roots; plant not stipitate-glandular, stinging trichomes palpable; fruiting pedicel distinctly winged; of rich woods … L. canadensis

*****Laportea aestuans*** (L.)Chew {AFP} —

Laportea canadensis (L.)Wedd. {AFP} —

Parietaria

1. Leaf blades mostly ovate-orbicular, broadly ovate, ovate-deltate, to lance-ovate, the basal pair of lateral veins arising at the base of the blade near the petiole [2]
1. Leaf blades mostly lance-ovate to lance-rhombic, the lower pair of lateral veins mostly arising above the blade base with conspicuous midrib below the lower pair of veins [3]
2. Leaf blades 1-1.3 times as long as wide, ovate-orbicular to broadly ovate; achene stipe flared and widest at base, achene apex with a near-central mucro … P. floridana
2. Leaf blades (1.1)1.5-2.1 times as long as wide (esp. distal ones), ovate-deltate to lance-ovate; achene stipe cylindric, not noticeably wider at base, achene apex with an off-centered mucro … P. praetermissa
3. Perennial; achene dark brown to nearly black, apex acute, mucro absent or minute … P. judaica
3. Annual; achene light to dark brown, apex obtuse with an apical to subapical distinct mucro … P. pensylvanica

Parietaria floridana Nutt. {AFP} —
*****Parietaria judaica*** L. {AFP} —
Parietaria pensylvanica Muhl. ex Willd. {AFP} —
Parietaria praetermissa Hinton {AFP} —

Pilea

1. Leaf blades <1 cm long, the margins entire [2]
1. Leaf blades 1-10 cm long, the margins toothed [3]
2. Pair of leaves at a node subequal in size; petiole filamentous and weak, often as long as the leaf blade; leaf blade about as long as wide … P. herniarioides
2. Pair of leaves at a node usually strongly unequal in size; petiole relatively stiff, much shorter than the blade; leaf blade mostly longer than wide … P. microphylla
3. Leaf blade orbicular to broadly ovate with a rounded apex [4]
3. Leaf blade lanceolate to ovate with an acute apex [5]
4. Petiole much shorter than the leaf blade; leaf blade strongly rugose … P. nummulariifolia
4. Petiole subequal to much longer than the leaf blade; leaf blade smooth … P. peperomioides
5. Leaf blade coriaceous, variegated, cross-veins scarcely impressed … P. cadieri
5. Leaf blade chartaceous, not variegated, cross-veins strongly impressed [6]
6. Achene dark brown to black with paler margins, slightly roughened without lines or mottling, about as long as wide … P. fontana
6. Achene light brown, often with slightly raised darker lines or mottling, longer than wide … P. pumila

^*Pilea cadieri* Gagnep. & Guillaumin —
Pilea fontana (Lunell)Rydb. {AFP} —
Pilea herniarioides (Sw.)Lindl. {AFP} —
Pilea microphylla (L.)Liebm. {AFP} —
^*Pilea nummulariifolia* (Sw.)Wedd. {AFP} —
^*Pilea peperomioides* Diels —
Pilea pumila (L.)A.Gray {AFP} —

Pouzolzia
*****Pouzolzia zeylanica*** (L.)Benn. {AFP} —

Rousselia
*****Rousselia humilis*** (Sw.)Urb. {AFP} —

Urtica
1. Perennial, rhizomatous; leaf blades mostly lanceolate to lanceolate-ovate, the teeth usually angular or deltate, to 15 cm long; inflorescence unisexual, 1.5-7 cm long … U. dioica
1. Annual; leaf blades mostly ovate to suborbicular, the teeth mostly rounded or curvaceous or ovate, to 6 cm long; inflorescence bisexual, to 2 cm long [2]
2. Flower clusters sub-globose to short-spicate; mature achenes ovate, 1-1.5 mm long, less than 1 mm … U. chamaedryoides
2. Flower clusters lax and elongate; mature achenes triangular, 1.5-2.5 mm long, 1-1.5 mm … U. urens

Urtica chamaedryoides Pursh {AFP} —
*****Urtica dioica*** L. {AFP} — Alachua Co. (waif). Plants with leaf blade upper surfaces essentially without stinging hairs are referred to as *U. gracilis* and could occur in Florida (Boufford, FNA vol. 3).
Urtica urens L. {AFP} —

MALVIDS

Figure: Estimated phylogeny of extant malvids. Black font=contains taxa native to Florida; Gray font=not native, not included.

PICRAMNIALES

PICRAMNIACEAE

1. Leaflets 11-31 per leaf, the leaflets 1-2.5 cm long, 0.5-1.5 cm wide; fruit a samara ... Alvaradoa amorphoides
1. Leaflets 3-9 per leaf, the leaflets 3-12 cm long, 1-5 cm wide; fruit a berry ... Picramnia pentandra

Alvaradoa

Alvaradoa amorphoides Liebm. {AFP} — SE.

Picramnia

Picramnia pentandra Sw. {AFP} — SE.

CELASTRALES

CELASTRACEAE

1. Leaves alternate [2]
1. Leaves opposite or whorled, sometimes some nodes alternate [4]

2. Scandent shrub to vine; leaf blade margin crenate to dentate; flowers in racemose thyrses … Celastrus paniculatus
2. Erect shrub or tree; leaf blade entire to obscurely crenate; flowers solitary or in fascicles [3]
3. Leaf blade venation evident on the upper surface; flowers 4-merous; fruit a 2-stoned drupe … Schaefferia frutescens
3. Leaf blade venation obscure on the upper surface; flowers 5-merous; fruit a 3-valvate leathery capsule … Tricerma phyllanthoides
4. Vines; flowers in corymbiform-paniculiform cymes; seeds winged … Hippocratea volubilis
4. Shrubs or small trees; flowers in simple or branches cymes; seeds not winged [5]
5. Leaves deciduous, usually at least some >4.5 cm long, the blade acute to acuminate at the apex; seeds with a yellow to red aril … Euonymus
5. Leaves persistent, <4.5 cm long, the blade rounded, emarginate, or prickly at the apex; aril absent [6]
6. Young stems terete; pedicel 1-3 mm long; flowers bisexual; ovaries 4-locular; stigmas 4; fruits red drupes … Crossopetalum
6. Young stems 4-angled; pedicel 0-1 mm long; flowers unisexual; ovaries 2-locular; stigmas 2; fruits bluish black drupes … Gyminda latifolia

Celastrus
*****Celastrus paniculatus*** Willd. {AFP} —

Crossopetalum
1. Shrub to 30 cm tall; leaf blade margins prickly … C. ilicifolium
1. Shrub to tree 1-8 m tall; leaf blade margins entire to crenulate … C. rhacoma

Crossopetalum ilicifolium (Poir.)Kuntze {AFP} — ST.
Crossopetalum rhacoma Crantz {AFP} — ST.

Euonymus
1. Young stems terete; petioles 10-20 mm long; petals maroon to greenish and maroon … E. atropurpureus
1. Young stems 4-angled or winged; petioles 0-25 mm long; petals yellowish white to yellowish green [2]
2. Petioles 0-3 mm long; flowers 5-merous; fruit surface muricate-wart … E. americanus
2. Petioles 10-25 mm long; flowers 4-merous; fruit surface smooth … E. maackii

Euonymus americanus L. {AFP} —
Euonymus atropurpureus Jacq. {AFP} — SE.
*****Euonymus maackii*** Rupr. {AFP} —

Gyminda
Gyminda latifolia (Sw.)Urb. {AFP} — SE.

Hippocratea
Hippocratea volubilis L. {AFP} —

Schaefferia
Schaefferia frutescens Jacq. {AFP} — SE.

Tricerma
Tricerma phyllanthoides (Benth.)Lundell {AFP} — ST.

PARNASSIACEAE
1. Annual herb, 0.5-3 cm tall; leaf blades 2-6 mm long; petals 0–0.4 mm long, much shorter than the sepals; stigmas 3; capsules 3-valved … Lepuropetalon spathulatum
1. Perennial herb, 20-60 cm tall; leaf blades 20-100 mm long; petals 3–22 mm, usually longer than the sepals; stigmas 4; capsules 4-valved … Parnassia

Lepuropetalon
Lepuropetalon spathulatum Elliott {AFP} — SE.

1. Plants with creeping rhizomes; leaves 1–2 per node on rhizomes; staminode glands lanceolate, 1–1.7 mm long; stamens yellow; ovaries white … P. caroliniana
1. Plants without rhizomes; leaves 4-20 in basal rosettes; staminode glands elliptic to subglobose, 0.4–0.6 mm long; stamens reddish; ovaries green, sometimes whitish at base … P. grandifolia

Parnassia
Parnassia caroliniana Michx. {AFP} — SE.
Parnassia grandifolia DC. {AFP} — SE.

MALPIGHIALES
CALOPHYLLACEAE
Calophyllum
1. Young stems quadrangular, 2-4 mm wide; leaf blades (1.7)2-3.2 times as long as wide, (5)6-14(15) cm long, (2)3-6(7) cm wide; flowers polygamodioecious, staminate flowers with 30-50 stamens and a reduced ovary, bisexual flowers with a fertile ovary and 5-10 stamens; tepals (2)4-6(8) mm long and wide; fruit 2-2.5 cm wide … C. antillanum
1. Young stems terete, (3)4-6(7) mm wide; leaf blades 1.4-2 times as long as wide, (6)9-17(20) cm long, (4)6-9(11) cm wide; terminal bud papillate; flowers bisexual, with (150)200-360 stamens; tepals (3)5-8(15) mm long and wide; fruit 2.5-4 cm wide … C. inophyllum

****Calophyllum antillanum*** Britton {AFP} —
****Calophyllum inophyllum*** L. {AFP} —

CLUSIACEAE
Clusia
1. Leaf blade lanceolate to oblanceolate, mostly widest near the middle, the apex bluntly acute … C. lanceolata
1. Leaf blade spatulate, widest near the apex, the apex rounded [2]
2. Bracteoles subtending flower 6-14(30); petals 4; ovary and fruit 10-14(16)-locular … C. flava
2. Bracteoles subtending flower 2-4; petals 5-8; ovary and fruit 5-9-locular [3]
3. Petals 5; ovary and fruit 5-locular … C. fluminensis
3. Petals 6-8; ovary and fruit 6-9-locular … C. rosea

^*Clusia flava* Jacq. —

^*Clusia fluminensis* Planch. & Triana —
^*Clusia lanceolata* Cambess. —
Clusia rosea Jacq. {AFP} — Monroe Co. (also Neotropics). Native only to the lower keys (Blodgett collections from Key West & Big Pine Key, NY). Native stock presumed extirpated; now extensively cultivated and naturalized.

HYPERICACEAE

Hypericum: A large, cosmopolitan genus of ~500 species.
subg. *Brathys*
sect. *Brathys* (Robson 1990): drummondii, gentianoides
sect. *Elodea*: tubulosum, virginicum, walteri
sect. *Myriandra* (Robson 1996): apocynifolium, brachyphyllum, chapmanii, cistifolium, crux-andreae, edisonianum, exile, fasciculatum, frondosum, galioides, hypericoides, limosum, lissophloeus, microsepalum, myrtifolium, nitidum, nudiflorum, prolificum, suffruticosum, tenuifolium, tetrapetalum
sect. *Trigynobrathys* (Robson 1990): canadense, cumulicola, denticulatum, gymnanthum, harperi, mutilum, setosum
subg. *Hypericum*
sect. *Graveolentia* (Robson 2006): pseudomaculatum, punctatum

1. Corolla pink, sometimes greenish; stamens 9, in 3 fascicles alternating with staminode fascicles (sect. Elodea; formerly genus Triadenum) … Key A
1. Corolla yellow; stamens >9, in 3-5 fascicles or in a continuous or interrupted ring without staminode fascicles [2]
2. Sepals and petals 4 (rarely 5) … Key B
2. Sepals and petals 5 (rarely 4) [3]
3. Leaves scale-like, inconspicuous, 1-4 mm long, appressed to strict-ascending [4]
3. Leaves well-developed (acicular or with flat blades), conspicuous and numerous, leaves 3.5-70 mm long, mostly spreading to ascending, sometimes strict-ascending [5]
4. Plant with several, short non-flowering leafy branches … H. cumulicola
4. Plant lacking short, non-flowering leafy branches … H. gentianoides
5. Leaves acicular (needle-like, rarely dimorphic with a few shoots with expanded blades and otherwise primarily with acicular leaves), 0.5-1.5 mm wide … Key C
5. Leaves with an expanded, flat blade, sometimes linear but not acicular, 0.5-25 mm wide [6]
6. Stems becoming woody, especially towards the base of the plant … Key D
6. Stems herbaceous, not woody … Key E

Key A:
1. Petioles conspicuous, 2-15 mm long … H. walteri
1. Petioles absent or inconspicuous, <2 mm long [2]
2. Leaf blade with intramarginal gland-dots only … H. tubulosum
2. Leaf blade with gland-dots on the surface and intramarginally … H. virginicum

Key B:
1. Larger leaves 3-9(15) mm long, 1-2(3) mm wide [2]
1. larger leaves 10-36 mm long, 2-15 mm wide [3]
2. Plant 15-70 mm tall; stamens 60-70; styles 3(4) … H. microsepalum
2. Plant 4-12(20) mm tall; stamens 25-35; styles 2 … H. suffruticosum

3. Leaves mostly 2-4 mm wide, 4.5-8 times as long as wide; stamens 25-35; styles 2 … H. hypericoides
3. Leaves mostly 4-12(15) mm wide, 1.2-4 times as long as wide; stamens 60-100; styles 3(4) [5]
4. Leaf base subcordate to cordate-clasping … H. tetrapetalum
4. Leaf base cuneate to rounded-truncate, rarely sub-clasping [5]
5. Leaf bases without gland-like auricles; outer sepals 9-18 mm wide, conspicuously 5-9-veined … H. crux-andreae
5. Leaf bases with gland-like auricles; outer sepals 5-10 mm wide, obscurely 3-5-veined … H. edisonianum

Key C
1. Largest leaves <12 mm long [2]
1. Largest leaves >13 mm long [4]
2. Stem internodes between leaf fascicles 6-lined at first, becoming 4-lined, then terete; leaf surface dull; capsules 6-10 mm long; of xeric habitats … H. tenuifolium
2. Stem internodes between leaf fascicles sometimes 4-lined at first, becoming 2-winged, not terete; leaf surface glossy; capsules 3.5-5.5 mm long; of hydric to mesic habitats [3]
3. Sepals articulated, deciduous; inflorescence overall mostly cylindric, from up to 7 nodes, branching dichasial … H. brachyphyllum
3. Sepals not articulated, persistent; inflorescence overall obconic, from terminal node only, branching mixed dichasial/pseudo-dichotomous … H. limosum
4. Plant <1 m tall, with few branches and a narrow crown … H. exile
4. Plant >1 m tall with many branches [5]
5. Bark smooth and metallic-silvery, exfoliating in thin, curled plates; young stems, leaves, and sepals glaucous … H. lissophloeus
5. Bark not smooth, not metallic-silvery; plant not glaucous [6]
6. Bark tight, adherent, not exfoliating or only few narrow strips peeling away … H. nitidum
6. Bark flaking in papery sheets or plates or wide strips, corky to spongy [7]
7. Plants 2-4 m tall, stems and trunk 2.5-15 cm wide at the base of the plant; stem internodes 4-lined at first, soon 4-angled, then terete; terminal inflorescence 1–3-flowered … H. chapmanii
7. Plants 1-2 m tall, stems and trunk 0.4-2 cm wide at the base of the plant; stem internodes 6-lined at first, soon 2-winged, then terete; terminal inflorescence (3)7–32-flowered … H. fasciculatum

Key D
1. Mid-stem leaves ovate-deltoid, subcordate to cordate, somewhat clasping … H. myrtifolium
1. Mid-stem leaves generally elliptic to linear [2]
2. Leaves lacking a definite articulation zone at the base [3]
2. Leaves with a definite articulation zone, as a minute, narrow, horizontal line or groove between the leaf base and stem [5]
3. Leaves stiff, subcoriaceous, not glaucous, usually with fascicles of leaves in the axils … H. cistifolium
3. Leaves chartaceous, often glaucous below, lacking leaf fascicles in the axils [4]
4. Inflorescences terminal, (1)3–5(8)-flowered; sepals tardily deciduous, 1.5–2.3 mm wide; capsules 6–15 × 4.5–8 mm … H. apocynifolium
4. Inflorescences from 1–3 nodes, the terminal 7–45-flowered; sepals deciduous, 1–1.5 mm wide; capsules 3.5–7 × 3–5 mm … H. nudiflorum
5. Inflorescence usually with 1-3 flowers; petals 12-25 mm long … H. frondosum

5. Inflorescence usually with 3-25 flowers; petals 5-15 mm long [6]
6. Leaf blades 15–32(37) mm long; flowers 9–14 mm wide; capsules 4.5–6 mm long; seeds 0.7–0.8 mm long … H. galioides
6. Leaf blades 30–70 mm long; flowers 15–30 mm wide; capsules 7–13 mm long; seeds 1.5–2 mm long … H. prolificum

Key E
1. Leaves linear-subulate; inflorescence racemose … H. drummondii
1. Leaves linear to obovate; inflorescence cymose [2]
2. Stem and leaves scabrous-tomentose to pilose; sepal margin setulose-ciliate … H. setosum
2. Stems and leaves glabrate; sepal margin not ciliate [3]
3. Leaves, sepals, and/or petals with black punctae [4]
3. Leaves, sepals, and petals without black punctae [5]
4. Petals 6-14 mm long; anther glands amber or pellucid; styles 5-8 mm long … H. pseudomaculatum
4. Petals 3-6 mm long; anther glands black; styles 1-4 mm long … H. punctatum
5. Leaf blades leathery; petals golden yellow or orange-yellow; stamens (35)50–80 [6]
5. Leaf blades papery to membranous; petals usually bright, golden, or pale yellow, rarely salmon-orange; stamens 5–25 [7]
6. Plant with numerous branches at the middle and upper nodes; seeds 0.5-0.6 mm long; of seasonally inundated sites … H. harperi
6. Plant unbranched or sparingly branched in the upper nodes; seeds 0.6-0.8 mm long; of dry upland sites … H. virgatum
7. Leaves linear to linear-oblanceolate, 1(3)-nerved … H. canadense
7. Leaves ovate, deltoid-ovate, to elliptic, (3)5-7-nerved [8]
8. Upper and mid-stem leaves deltoid-ovate, the apex usually acute … H. gymnanthum
8. Upper and mid-stem leaves ovate-oblong to elliptic, the apex rounded to obtuse … H. mutilum

Hypericum apocynifolium Small {AFP} —
Hypericum brachyphyllum (Spach)Steud. {AFP} —
Hypericum canadense L. {AFP} —
•***Hypericum chapmanii*** W.P.Adams {AFP} —
Hypericum cistifolium Lam. {AFP} —
Hypericum crux-andreae (L.)Crantz {AFP} —
•***Hypericum cumulicola*** (Small)W.P.Adams {AFP} — FE. SE.
Hypericum drummondii (Grev. & Hook.)Torr. & A.Gray {AFP} —
•***Hypericum edisonianum*** (Small)W.P.Adams & N.Robson {AFP} — SE.
•***Hypericum exile*** W.P.Adams {AFP} —
Hypericum fasciculatum Lam. {AFP} —
Hypericum frondosum Michx. {AFP} —
Hypericum galioides Lam. {AFP} —
Hypericum gentianoides (L.)Britton et al. {AFP} —
Hypericum gymnanthum Engelm. & A.Gray {AFP} —
Hypericum harperi R.Keller {AFP} —
Hypericum hypericoides (L.)Crantz {AFP} —
Hypericum aff. ***limosum*** — Described from Cuba, this was tentatively placed as a synonym of *H. brachyphyllum* (Adams 1962: 27-31) but reinstated by Robson (1996) for Cuba. See here.
•***Hypericum lissophloeus*** W.P.Adams {AFP} — SE.

Hypericum microsepalum (Torr. & A.Gray)A.Gray ex S.Watson {AFP} —
Hypericum mutilum L. {AFP} —
Hypericum myrtifolium Lam. {AFP} —
Hypericum nitidum Lam. {AFP} —
Hypericum nudiflorum Michx. ex Willd. {AFP} —
Hypericum prolificum L. {AFP} —
Hypericum pseudomaculatum Bush {AFP} —
Hypericum punctatum Lam. {AFP} —
Hypericum setosum L. {AFP} —
Hypericum suffruticosum W.P.Adams & N.Robson {AFP} —
Hypericum tenuifolium Pursh {AFP} —
Hypericum tetrapetalum Lam. {AFP} —
Hypericum tubulosum Walter {AFP} —
Hypericum virgatum Lam. {AFP} — Sometimes subsumed under *H. denticulatum*.
Hypericum virginicum L. {AFP} —
Hypericum walteri J.F.Gmel. {AFP} —

OCHNACEAE

Ochna

1. Leaf blades mostly 1-2.5 cm wide, 16-40 major lateral veins on each side of the midrib … O. serrulata
1. Leaf blades mostly 2.5-5 cm wide, 7-20 major lateral veins on each side of the midrib [2]
2. Young stem strongly lenticellate; leaf blade base subcordate, the margin setose, some setae ca. 1 mm long … O. thomasiana
2. Young stem lacking conspicuous lenticels; leaf blade base cuneate to truncate, the margin entire or toothed, teeth <0.6 mm long … O. atropurpurea

****Ochna atropurpurea*** DC. {AFP} —
****Ochna serrulata*** (Hochst.)Walp. {AFP} —
****Ochna thomasiana*** Engl. & Gilg {AFP} —

EUPHORBIACEAE

1. Inflorescence a cyathium (a female flower, often pedicellate, surrounded by individual stamens, often pedicellate, subtended by an involucre often bearing glands and petaloid appendages) … Euphorbia
1. Flowers solitary, in spiciform or paniculiform inflorescences, or in a pseudanthium with 3 female flowers [2]
2. Leaf blades lobed, sometimes obscurely, usually at least some blades lobed on the plant, or if unlobed then the larger blades broadly ovate (>4 cm wide) and entire or irregularly toothed [3]
2. Leaf blades unlobed, if broadly ovate (>4 cm wide) then regularly undulate, crenate, to serrate, rarely entire [11]
3. Leaves peltate … Ricinus communis
3. Leaves not peltate [4]
4. Vines; inflorescence subtended by 2 foliaceous bracts 2-3 cm long … Dalechampia scandens
4. Herbs, shrubs, to trees; inflorescence bracts not foliaceous, 0.1-1 cm long [5]
5. Leaf blade margins regularly, finely crenate to serrate … Astraea lobata
5. Leaf blade margins entire or with coarse lobate teeth-like projections [6]
6. Plant with stellate hairs [7]

6. Plant without stellate hairs [8]
7. Leaf blade secondary and tertiary veins curving, branching, or reticulate, not straight … Aleurites moluccanus
7. Leaf blade secondary and cross-veins straight or nearly so … Mallotus japonicus
8. Tree to 20 m; petals 2-3 cm long; seeds 2-2.5 cm long … Vernicia fordii
8. Herb, shrub, or small tree to 6 m; petals 0.3-1.5 cm long or absent with petaloid sepals; seeds 0.5-2 cm long [9]
9. Calyx green; petals pale green, red, to purple … Jatropha
9. Calyx petaloid, white to reddish white; petals absent [10]
10. Herb or regularly branched shrub to tree; stinging trichomes present or absent; stamens connate … Cnidoscolus
10. Sparingly branched shrub; stinging trichomes absent; stamens free … Manihot
11. Plant with stinging trichomes … Tragia
11. Plant without stinging trichomes [12]
12. Staminate (and sometimes pistillate) flowers with conspicuous petals, rarely absent (if absent then plant with stellate trichomes or scales) [13]
12. Flowers without petals (sepals usually present but not petaloid; plant without stellate trichomes or scales) [15]
13. Leaf blades with 8-25 straight secondary veins … Caperonia
13. Leaf blades with arcuate, irregular, or branching secondary veins or few straight secondary veins [14]
14. Plant with malpighiaceous trichomes … Argythamnia argothamnoides
14. Plant with stellate trichomes or scales … Croton
15. Petiole apex with 2 glands [16]
15. Petiole apex without glands or glands inconspicuous (blade sometimes with glands) [19]
16. Petioles 0-0.9 cm long; leaf blades linear-lanceolate, <2.5 cm wide … Sapium haematospermum
16. Petioles mostly 1-6 cm long; leaf blades ovate, ovate-elliptic, to rhomboid, mostly >3 cm wide [17]
17. Petiole apex with a single gland; fruit a drupe … Hippomane mancinella
17. Petiole apex with 2 glands; fruit a dehiscent capsule [18]
18. Leaf blade crenate-serrulate; fruit a woody capsule, with 5-20 carpels; seeds flattened discs … Hura crepitans
18. Leaf blade entire; fruit a brittle capsule, with 2-3 carpels; seeds ovoid-angular … Triadica sebifera
19. Two glands subtending each inflorescence bract [20]
19. Without glands subtending the inflorescence bracts [22]
20. Plants without hairs; larger leaf blades mostly >4 cm long, linear, linear-lanceolate, elliptic, oblanceolate, to obovate, crenulate to serrulate; staminate sepals 2; stamens 2; capsule base persisting as a 3-lobed gynobase … Stillingia
20. Plants with hairs; leaf blades mostly <6 cm long, lanceolate, ovate, to elliptic, entire to finely serrulate; staminate sepals 3; stamens 3; capsule base not persisting [21]
21. Shrub to 3 m; latex not evident; stem and leaves puberulent to glabrous; leaf blade entire … Ditrysinia fruticosa
21. Annual herb to 0.5 m; latex milky; stem and sometimes leaves hirsute; leaf blade minutely crenulate-serrulate … Microstachys corniculata
22. Leaf blade entire, often variegated … Codiaeum variegatum
22. Leaf blade toothed (usually at least some blades on the plant), sometimes the teeth few and obscure near the apex [23]

23. Leaf blade usually toothed throughout, usually widest at or below the middle; sepals 3-6; styles usually multifid or laciniate, rarely 2-fid or unbranched; stamens 4–8 … Acalypha
23. Leaf blade obscurely toothed at the distal end, usually widest at or above the middle; sepals absent; styles unbranched; stamens (2–)4(–5) … Gymnanthes lucida

Acalypha
1. Shrubs, 2-5 m tall; leaf blades 9-20 cm long, often variegated … A. wilkesiana
1. Herbs, to 1 m tall; leaf blades 1-10 cm long, green [2]
2. Plant to 25 cm tall; petioles 1-5 mm long; leaf blades 0.3-2.1 cm long, 0.3-1.4 cm wide … A. chamaedrifolia
2. Plant 15-100 cm tall; petioles 4-70 mm long; leaf blades 2-12 cm long, 1.2-6.5 cm wide [3]
3. Repent, stoloniferous herb; axillary pistillate inflorescence without bracts, the terminal inflorescence staminate, pistillate with bracts, or bright red of densely congested styles lacking ovaries and lacking bracts … A. herzogiana
3. Erect to ascending annual herb; pistillate flowers axillary or terminal, with bracts, staminate ones distal to the pistillate flowers in the same inflorescence or in a separate axillary inflorescence [4]
4. Pistillate bracts densely crowded, bracts unlobed with linear tips, with hairs to 2 mm long, the inflorescence having a bottlebrush appearance [5]
4. Pistillate bracts distant to somewhat crowded, bracts each with several lobes or teeth, the inflorescence unlike a bottlebrush in appearance [6]
5. Petiole 0.6-1.8 times as long as the leaf blade; stems, petioles, peduncles, and pistillate bracts stipitate-glandular; staminate inflorescence axillary, pistillate inflorescence terminal; styles unbranched or rarely 2-fid … A. alopecuroidea
5. Petiole 0.1-0.4 times as long as the leaf blade; stems, petioles, and peduncles not stipitate-glandular (pistillate bracts stipitate-glandular); inflorescences axillary, pistillate and bisexual; styles multifid or laciniate … A. arvensis
6. Inflorescence bisexual, axillary, pistillate portion basal typically with 1-3 pistillate bracts with deltate to lanceolate lobes, staminate portion distal [7]
6. Inflorescence unisexual, staminate one axillary, pistillate one terminal with up to 60 pistillate bracts with linear lobes [8]
7. Petiole 0.2-1.2(1.8) cm long; leaf blade oblong-lanceolate to linear-lanceolate; pistillate bracts sessile-glandular, sometimes with some stipitate glands … A. gracilens
7. Petiole 0.4-7 cm long; leaf blade ovate to broadly rhombic; pistillate bracts stipitate-glandular … A. rhomboidea
8. Plant stipitate-glandular (stem, petiole, inflorescence); leaf blade bases cordate; pistillate bracts 13- to 17-lobed, subequal to the fruit; fruit pubescent and the surface with ligulate-deltate protuberances to 0.5 mm long, the protuberances not terminating in a hair (stipitate-glandular hairs may be present); seeds verrucose … A. ostryifolia
8. Plant eglandular; leaf blade bases obtuse, rounded, truncate, to subcordate; pistillate bracts 6- to 9-(13-)lobed, exceeding the fruit; fruit pubescent, the hairs often atop raised, subconic protuberances; seeds smoothish to minutely pitted … A. setosa

*****Acalypha alopecuroidea*** Jacq. {AFP} —
*****Acalypha arvensis*** Poepp. {AFP} —
Acalypha chamaedrifolia (Lam.)Müll.Arg. {AFP} —
Acalypha gracilens A.Gray {AFP} —
^*Acalypha herzogiana* Pax & K.Hoffm. {AFP} —
Acalypha ostryifolia Riddell ex J.M.Coult. {AFP} —

Acalypha rhomboidea Raf. {AFP} —
^***Acalypha setosa*** A.Rich. {AFP} —
^*Acalypha wilkesiana* Müll.Arg. {AFP} —

Aleurites
^*Aleurites moluccanus* (L.)Willd. {AFP} —

Argythamnia
•***Argythamnia blodgetii*** Torr. ex Chapm. {AFP} — Miami-Dade & Monroe Co. keys. FT. SE. According to Webster (1967), Florida material is an endemic species (*A. blodgettii*) distinguished by broader petals, ciliate-tipped staminodia, and its seed sculpturing. Ramírez-Amezcua (in FNA, vol. 12) applied *A. argothamnoides* to Florida material and stated it was morphologicallly indistinguishable from plants of northern South American and adjacent islands.

Astraea
Astraea lobata (L.)Klotzsch {AFP} —

Caperonia
1. Stems glabrescent to sparsely strigose; staminate flower petals 2-2.3 mm long, well exserted from calyx … C. castaneifolia
1. Stems moderately to densely hirsute with erect gland-tipped hairs, also strigose; staminate flower petals ca. 1.4 mm long, not exserted or only slightly from calyx … C. palustris

Caperonia castaneifolia (L.)A.St.-Hil. {AFP} —
Caperonia palustris* (L.)A.St.-Hil. {AFP} —

Cnidoscolus
1. Shrubs or trees with shallow roots, stems succulent and easily rerooting, with or without stinging hairs … C. aconitifolius
1. Herbs with a tuberous root and the finer roots deeply buried, stems not succulent, with stinging hairs … C. stimulosus

^*Cnidoscolus aconitifolius* (Mill.)I.M.Johnst. {AFP} —
Cnidoscolus stimulosus (Michx.)Engelm. & A.Gray {AFP} —

Codiaeum
^*Codiaeum variegatum* (L.)A.Juss. {AFP} —

Croton
1. Leaf blade coarsely serrate to crenate [2]
1. Leaf blade entire, undulate, rarely with teeth [5]
2. Leaf blade deltate-lanceolate … C. trinitatis
2. Leaf blade ovate to elliptic [3]
3. Larger leaf blades 0.5-2 cm long, glabrate; fruit glabrate … C. glandulosus var. floridanus
3. Larger leaf blades 1.8-7 cm long, stellate-pubescent; fruit stellate-pubescent.
4. Leaf blades firm and thick in appearance, ~2 times as long as wide, marginal teeth rounded … C. glandulosus var. arenicola

4. Leaf blades membranaceous, ~3 times as long as wide, marginal teeth acute … C. glandulosus var. septentrionalis
5. Leaf blade underside densely silvery lepidote, the scales ciliate, silvery and often brownish centrally, the underside appearing brown-speckled silvery [6]
5. Leaf blade underside stellate-pubescent, lacking scales, not appearing brown-speckled silvery [9]
6. Leaf blade 2-7 mm wide, linear to linear-lanceolate; fruit 1-seeded [7]
6. Leaf blade 7-45 mm wide, elliptic to ovate; fruit 3-seeded [8]
7. Leaf blade upper surface trichomes not overlapping; inflorescence 1-3 cm long; fruit scales with a minute central disc with long radial arms … C. michauxii
7. Leaf blade upper surface trichomes overlapping; inflorescence 0.2-1 cm long; fruit scales with a broad central disc with very short radial arms … C. willdenowii
8. Herbs to subshrubs to 60 cm tall; petioles <½ length of the blade; leaf blades primarily elliptic; staminate petals 5, pistillate petals absent … C. argyranthemus
8. Shrubs to 1 m tall; petioles mostly >½ length of the blade; leaf blades primarily ovate; staminate and pistillate petals absent … C. punctatus
9. Leaf blades primarily ovate to lanceolate with deltoid-acute apices, the lateral veins usually conspicuous on the blade underside [10]
9. Leaf blades primarily linear, elliptic, to oblong, infrequently ovate-lanceolate, with rounded, obtuse, to rounded-acute apices, the lateral veins obscured to inconspicuous, rarely a few conspicuous on the blade underside [11]
10. Shrub with generally sparse pubescence, not densely woolly, sometimes glandular; leaf blade with only 1 pair of basal lateral veins, the midrib scarcely prominent to flat on the underside … C. humilis
10. Annual herb with densely woolly pubescence especially on young tissue, eglandular; leaf blade usually with 2-3 pairs of basal lateral veins, the midrib stout and prominent on the underside … C. lindheimeri
11. Shrubs; petiole with 2 glands at the apex [12]
11. Annual herbs; petiole lacking glands [13]
12. Leaf blade elliptic to oblong, with a somewhat stout cuspidate (sometimes involute) apex … C. discolor
12. Leaf blade linear to oblong with a minute mucro at the flat apex … C. linearis
13. Plant monoecious; inflorescence bisexual; staminate petals 5, 0.8-1 mm long; pistillate petals absent; fruit smooth; seeds 4-4.5 mm long, 3-4 mm wide … C. elliottii
13. Plant dioecious; inflorescence unisexual; staminate and pistillate petals absent; fruit verrucose; seeds 3.5-4 mm long, 2.5-3 mm wide … C. texensis

Croton argyranthemus Michx. {AFP} —
****Croton discolor*** Willd. {AFP} —
Croton elliottii Chapm. {AFP} —
•***Croton glandulosus*** L. var. ***arenicola*** (Small)van Ee et al. —
•***Croton glandulosus*** L. var. ***floridanus*** (A.M.Ferguson)R.W.Long {AFP} —
Croton glandulosus L. var. ***septentrionalis*** Müll.Arg. {AFP} —
Croton humilis L. {AFP} — SE.
Croton lindheimeri (Engelm. & A.Gray)Engelm. & A.Gray ex A.W.Wood {AFP} —
Croton linearis Jacq. {AFP} —
Croton michauxii G.L.Webster {AFP} —
Croton punctatus Jacq. {AFP} —
****Croton texensis*** (Klotzsch)Müll.Arg. {AFP} —

*__Croton trinitatis__ Millsp. {AFP} —
__Croton willdenowii__ G.L.Webster {AFP} —

Dalechampia
*__Dalechampia scandens__ L. {AFP} —

Ditrysinia
__Ditrysinia fruticosa__ (W.Bartram)Govaerts & Frodin {AFP} —

Euphorbia
1. Stems spiny (sect. Goniostema, subg. Euphorbia) … E. milii
1. Stems without spines [2]
2. Trees; stems succulent, with few or no leaves (sect. Tirucalli, subg. Euphorbia) … E. tirucalli
2. Herbs to shrubs; stems succulent or not, generally leafy (if not leafy, then stem ziz-zag) [3]
3. Stems zig-zag and succulent; involucres strongly zygomorphic, spurred and forming tube that encloses glands (sect. Crepidaria, subg. Euphorbia, formerly of genus Pedilanthus) … E. tithymaloides subsp. smallii
3. Stems succulent or not, not zig-zag; involucres mostly actinomorphic, not spurred [4]
4. Leaves all opposite, usually conspicuously asymmetric especially near the base, the blades <3.5 cm long, <1.5 cm wide; stipules interpetiolar (sect. Anisophyllum, subg. Chamaesyce, formerly of genus Chamaesyce) … Key A
4. Leaves alternate to opposite, mostly symmetric at the base, the larger blades usually >2 cm long (if smaller, then some leaves alternate); stipules at base of petiole or absent [5]
5. Leaf blades subtending inflorescence often pale green, white, pink, or red at the base or throughout the blade (sect. Poinsettia, subg. Chamaesyce, formerly of genus Poinsettia) … Key B
5. Leaf blades subtending inflorescence uniform in color (or with white margins in E. marginata) [6]
6. Stems often relatively thin, gracile, 0.5-3 mm thick; (2-)5(-10) glands per cyathium, the glands usually with petaloid appendages (sect. Alectoroctonum, subg. Chamaesyce) … Key C
6. Stems relatively thick, stout, 2-5 mm thick; 4-5(7) glands per cyathium, the glands without petaloid appendages or with horn-like appendages [7]
7. Larger leaf blades >2 cm long; seeds ecarunculate (sect. Nummulariopsis, subg. Euphorbia) … Key D
7. Larger leaf blades <4 cm long; stipules usually absent; seeds usually carunculate [8]
8. Leaf blade serrulate, venation conspicuous (sect. Helioscopia, subg. Esula) … E. spathulata
8. Leaf blade entire, venation obscure (sect. Paralias, subg. Esula) … E. trichotoma

Key A: sect. Anisophyllum, subg. Chamaesyce
1. Leaves mostly ascending and imbricate, the blade often involute; usually restricted to shoreline habitats … E. mesembrianthemifolia
1. Leaves mostly spreading and not imbricate, the blade flat, revolute, to involute; habitats various, from inland to shoreline habitats [2]
2. Larger leaf blades usually 10-45 mm long, 4-15 mm wide, generally elliptic to rhombic, typically with evident lateral basal veins [3]
2. Larger leaf blades 2-10 mm long, 2-5 mm wide, generally elliptic to ovate, lateral basal veins usually obscure or absent [9]
3. Ovary and fruit pubescent [4]

3. Ovary and fruit glabrous [7]
4. Leaf blades mostly entire to roughened, teeth inconspicuous; cyathia solitary or in small, cymose clusters at distal nodes, on congested, axillary branches, or at branch tips … E. humistrata
4. Leaf blades mostly conspicuously serrate to dentate; cyathia in capitate glomerules (with reduced, bractlike leaves subtending cyathia) [5]
5. Stems pilose to tomentose; stipules distinct when young, connate into deltate scales when older, often with dark glands along margins or at base; styles 0.6–0.9 mm; seeds plumply ovoid, 0.7–0.8 mm wide, dark reddish brown to almost black … E. lasiocarpa
5. Stems usually both strigillose and hirsute; stipules distinct or connate only at base, deltate, subulate, or linear- or filiform-subulate, without dark glands along margins or at base; styles 0.1–0.6 mm; seeds narrowly ovoid or ovoid-oblong, 0.5–0.7 mm wide, not dark reddish brown to almost black [6]
6. Glomerules of cyathia terminal or axillary, axillary glomerules sessile or at tips of elongated, leafless stalks; petaloid gland appendages white to pink, flabellate, subcircular, or transversely oblong, rarely absent, (0–)0.1–0.6 × (0–)0.1–0.7 mm … E. hirta
6. Glomerules of cyathia terminal on main stems or on short, leafy, axillary branches with reduced, bractlike leaves; petaloid gland appendages absent or white to pink, forming thin rim around edge of gland or oblong, 0.1–0.2 × 0.1–0.3 mm … E. ophthalmica
7. Stems sparsely to moderately pilose to villous or with short, incurved hairs, pubescence often concentrated at nodes and distally (hairs occasionally in 2 bands along opposite sides of stem); leaf blades usually sparsely to moderately pilose, especially toward base, sometimes glabrous; seeds finely and irregularly wrinkled or with indistinct shallow, rounded cross ridges … E. nutans
7. Stems glabrous, sparsely to densely pilose, or pilose-crinkled proximally, usually glabrous distally; leaf blades glabrous or sparsely pilose toward base; seeds with prominent transverse ridges, coarsely and inconspicuously pitted-reticulate, or with shallow irregular depressions alternating with low, smooth ridges [8]
8. Stipules mostly 1-2.2 mm long, longer than wide or length and width subequal; capsules 1-1.6 mm long or wide; seeds 0.9-1.1 mm long, ca. 0.5 mm wide … E. hypericifolia
8. Stipules 0.5-1 mm long, usually wider than long; capsules 1.5-1.8 mm long or wide; seeds 1-1.4 mm long, 0.7-1.1 mm wide … E. hyssopifolia
9. Leaf blades mostly deltate to ovate, rarely elliptic, often cordate at the base, often revolute, usually 1-1.5 times longer than wide; restricted to pine rocklands [10]
9. Leaf blades mostly oblong, elliptic, narrowly ovate, to oblate-orbicular, mostly rounded, cuneate, to truncate at the base, flat to revolute, usually 1.5-5.5 times longer than wide (or 1-2 times longer than wide and occasionally cordate at the base in E. serpens); habitats various including sandy soils, disturbed areas, and pine rocklands [13]
10. Leaves and stems villous-hirsute, hairs straight and spreading, to 0.7 mm long; leaf blades silver-green … E. deltoidea subsp. pinetorum
10. Leaves and stems villous, canescent, to glabrate, hairs appressed, uncinate, or irregularly twisted, to 0.5 mm long; leaf blades green to silver-green [11]
11. Leaves and stems glabrous or very sparsely hairy, hairs 0.1–0.2 mm, appressed, uncinate; leaf blades adaxially bright green … E. deltoidea subsp. deltoidea
11. Leaves and stems canescent or villous, hairs either less than 0.1 mm or 0.2–0.5 mm, uncinate or irregularly twisted; leaf blades green or silver-green [12]
12. Leaves and stems villous, hairs uncinate or irregularly twisted, 0.2–0.5 mm; leaf blades green … E. deltoidea subsp. adhaerens

12. Leaves and stems canescent, hairs less than 0.1 mm; leaf blades silver-green … E. deltoidea subsp. serpyllum
13. Ovary and fruit pubescent [14]
13. Ovary and fruit glabrous to slightly pubescent on the angles [22]
14. Petaloid gland appendages of a cyathium strongly unequal, often one pair >2 times as large as the other pair [15]
14. Petaloid gland appendages of a cyathium subequal or scarcely unequal, appendages inconspicuous or absent [17]
15. Stem hairs mostly spreading and exserted, pilose to hirsute; petaloid appendages pink to reddish … E. conferta
15. Stem hairs mostly appressed, ascending, curled, or short, strigose, sericeous, to tomentulose; petaloid appendages white to pink [16]
16. Leaf blade surface puberulent, strigose, to sericeous; cyathial gland oblong to reniform; petaloid appendages 0.3-1 mm long, 0.8-1.6 mm wide; capsules well exserted from involucre at maturity; seeds with 3 or 4 transverse sulci alternating with low transverse ridges … E. pergamena
16. Leaf blade surface glabrous to sparsely tomentulose; cyathial gland elliptic to oval; petaloid appendages to 0.4 mm long or wide; capsules scarcely exserted from involucre, base often remaining inside the involucre and splitting one side of it during maturity; seeds with 4 low transverse ridges, but not sulcate … E. thymifolia
17. Root rather thick, to 5 mm wide; stems ascending to ascending-erect, becoming woody towards the base, younger stems usually pubescent on all sides … E. garberi
17. Root slender to 3 mm wide, stems prostrate, decumbent, to ascending, herbaceous to somewhat woody towards the base, younger stems pubescent on the upper side and glabrate below [18]
18. Stems often rooting at the nodes … E. humistrata
18. Stems usually without adventitious roots [19]
19. Capsules usually with pubescence concentrated along keels or toward base, often glabrous between keels [20]
19. Capsules mostly evenly hairy or pubescence at least not concentrated only along keels and base, not glabrous between keels [21]
20. Plant hairs to 0.6 mm long; petioles, leaf blade abaxial surfaces, ovaries, and capsules glabrous or sparsely sericeous, pilose, or villous; seeds reddish brown to orange or gray-pink, almost smooth or with faint transverse ridges … E. mendezii
20. Plant hairs to 0.3 mm long; petioles, leaf blade abaxial surfaces, ovaries, and capsules crisped-villous to glabrate; seeds white but with barely concealed brown surface beneath, with sharp transverse ridges … E. prostrata
21. Leaf blades usually entire or the teeth obscure; styles clavate, bifid at the apex, 0.3-0.4 mm long; capsules well exserted from involucre at maturity; seeds 1-1.2 mm long … E. maculata
21. Leaf blades typically conspicuously toothed; styles slender, bifid half the length, 0.4-0.6 mm long; capsules scarcely exserted from involucre, base often remaining inside involucre and splitting one side of it during maturity; seeds 0.7-0.9 mm long … E. thymifolia
22. Stipules (at least those of upper side of stem) connate, forming deltate, ligulate, or ovate scales [23]
22. Stipules usually distinct, occasionally connate basally, not forming conspicuous, deltate, ligulate, or ovate scales [27]
23. Stems erect to ascending [24]
23. Stems prostrate to decumbent [26]

24. Leaf blades (2.2)3.0-6.0(8.3) times longer than wide, narrowly lanceolate to linear elliptic, 1-veined, glands of the cyathia narrower than or equal to the gland appendages in radial dimension; cyathia, glands, gland appendages, capsules, and stems light to deep red to purple; mainland southern Florida … E. hammeri
24. Leaf blades 0.01-3.0(3.5) times longer than wide, ovate to lanceolate, 1- to 3-veined, glands of the cyathia radially wider than the gland appendages; cyathia, glands, gland appendages, capsules, and stems light green to light red; mainland southern Florida, or Florida Keys [25]
25. Leaf blades (1.0)1.8-2.5(3.5) times longer than wide, 1-veined to weakly 3-veined, the apex acute; glands of the cyathia 0.4-0.6 mm wide; Florida Keys … E. ogdenii
25. Leaves ovate-elliptic, 1.0-1.7(2) times longer than wide, 3-veined, the apex obtuse to rounded; glands of the cyathia 0.6-1.0 mm wide; mainland southern Florida … E. porteriana
26. Stems prostrate to decumbent; petaloid gland appendages unequal (pair near sinus lunate to oblong, 0.1–0.2 × 0.1–0.3 mm, distal margins entire, crenulate, or irregularly sinuate, other pair rudimentary, 0–0.1 × 0.1–0.3 mm, distal margins crenulate or entire) … E. blodgettii
26. Stems prostrate; petaloid gland appendages equal, forming narrow rim at edge of gland, 0.1–0.2 × 0.2–0.3 mm, distal margins entire or crenulate … E. serpens
27. Leaf blades toothed … E. serpillifolia
27. Leaf blades mostly entire or the teeth obscure [28]
28. Seeds (2)2.2–2.8 mm, weakly dorsiventrally compressed in cross section … E. polygonifolia
28. Seeds 0.7–2.1 mm, terete to bluntly sub- or 3-angled in cross section [29]
29. Leaf blades 1-2 times longer than wide, generally broadly elliptic to ovate-oblong, often cordate at the base, generally not involutely folded along the midrib; styles 0.5-0.8 mm long … E. cordifolia
29. Leaf blades 1.5-3.5 times longer than wide, generally elliptic and rounded to subcordate at the base, often involutely folded along the midrib; styles 0.2-0.3 mm long [30]
30. Leaf blades oblong or elliptic-oblong, 2-3 mm wide; petaloid gland appendages (0)0.1–0.5(0.7) mm; seeds 1.5-1.9 mm long … E. bombensis
30. Leaf blades narrowly elliptic to lanceolate, 1-2 mm wide; petaloid gland appendages 0.1–0.2 mm, often rudimentary; seeds 1–1.3 mm … E. cumulicola

Key B: sect. Poinsettia
1. Leaves mostly opposite to subopposite, occasionally some alternate, the blade margins mostly regularly crenate-dentate; caruncle of the seed 0.4-0.6 mm wide … E. dentata
1. Leaves primarily alternate, occasionally a few opposite near the base, the blade margins entire, subentire, lobate, or obscurely serrulate; caruncle of the seed absent or to 0.1 mm wide [2]
2. Leaf blades 0.8-7 mm wide, linear (very rarely lobed), lateral veins not evident; cyathium often with purplish colors throughout, rarely without; glands (1)3-5 per cyathium, reddish or purplish (rarely green) … E. pinetorum
2. Leaf blades 2-100 mm wide, linear to obovate, sometimes lobed, lateral veins usually evident; cyathium generally lacking purplish colors; gland 1(-2) per cyathium, yellow-green [3]
3. Leaf blades subtending the inflorescence (pleiochasial bracts) white to red at the base to throughout, rarely only green; cyathial gland elliptic to oblong; seed rounded in cross-section … E. cyathophora
3. Leaf blades subtending the inflorescence (pleiochasial bracts) white to green at the base; cyathial gland circular; seed angular in cross-section … E. heterophylla

Key C: sect. Alectoroctonum, subg. Chamaesyce; monographed by Huft (1979) and Park (1995, 1998).

1. Short-lived plants mostly of disturbed sites, the taproot grading into the main stem [2]
1. Perennial plants mostly of woodlands, the main root thicker than the main stems [3]
2. Usually some proximal leaf blades toothed; inflorescence bracts without conspicuous white margins … E. graminea
2. Leaf blades entire; bracts below inflorescence with conspicuous white margins or nearly wholly white … E. marginata
3. Leaves usually numerous and overlapping along the whole stem below the inflorescence branches of mature plants; leaves 0.5-2 mm wide … E. polyphylla
3. Often at least some portion of the main stem conspicuously with few to no leaves below the inflorescence branches of mature plants; larger leaves 2-30 mm wide [4]
4. Peduncles 10–50(70) mm long; involucre and glands usually reddish; petaloid gland appendages absent or inconspicuous, 0–0.2 mm wide … E. exserta
4. Peduncles 1–17(40) mm long; involucre and glands usually greenish or reddish; petaloid gland appendages usually apparent, 0.3–3.5(4.5) mm wide [5]
5. Plant (10)18-45 cm tall; stem glabrous or pubescent at nodes, nodes below umbel (2)4-10(17); cyathia unisexual, 1-1.2 mm long, 1.3-1.5(1.7) mm wide including appendages; petaloid gland appendages 0.3–0.6 mm long (including gland); mautre gynophore exserted <1 mm; fruit 2.5-3.2 mm long, columella (internal axis) 2.4-3.1 mm long … E. curtisii
5. Plant (15)30-60(100) cm tall; stem glabrous to sparsely or densely puberulent, sericeous, or villous, nodes below umbel (7)15-60(75); cyathia bisexual, 1.2-1.7 mm long, (3.3)4.2-7(11) mm wide including appendages; petaloid gland appendages (0.5)1–3.5 mm long (including gland); mature gynophore exserted >1.4 mm; fruit 1.8-3 mm long, columella (internal axis) 1.8-2.5 mm long [6]
6. Stem and petiole usually sparsely to densely puberulent or sericeous, rarely glabrous; leaf blade 1-4 mm wide; fruit 1.8-3 mm long; seed 2 mm long, 1.2-1.3 mm wide … E. discoidalis
6. Stem and petiole glabrous to pilose or villous; leaf blade 2-30 mm wide; fruit 2-2.4 mm long; seed 2.2-2.4 mm long, 1.6-1.8 mm wide … E. pubentissima

Key D: sect. Nummulariopsis, subg. Euphorbia
1. Larger leaf blades usually >9 mm wide, the blade apex rounded to obtuse (sometimes with a mucro) [2]
1. Larger leaf blades usually <14 mm wide, the blade apex acute [3]
2. Involucre 2.4–3.6 × 2.5–3.6 mm; cyathial glands yellow-green, sometimes with a light red margin; styles 3.3–3.6 mm, connate 1/2 length … E. rosescens
2. Involucre 1.3–2.3 × 1.6–2.5 mm; cyathial glands dark purple; styles (1)1.3–1.5 mm, connate 1/4 length … E. telephioides
3. Peduncles (except for that of 1st cyathium at base of pleiochasia) 2–5 mm long; cyathial lobes green; seeds depressed-globose, wider than long … E. floridana
3. Peduncles 6–24 mm long; cyathial lobes reddish along the apex; seeds ovoid-globose, longer than wide [4]
4. Leaf blades narrowly linear, linear, or narrowly linear-lanceolate, 1.5–3.5(4.5) mm wide, length 15–20(50) times width … E. inundata var. garrettii
4. Leaf blades usually linear to narrowly elliptic or narrowly lanceolate, rarely oblanceolate, (3)4–14(15) mm wide, length usually 5–10(25) times width … E. inundata var. inundata

Euphorbia blodgettii Engelm. ex Hitchc. {AFP} —
Euphorbia bombensis Jacq. {AFP} —
Euphorbia commutata Engelm. ex A.Gray {AFP} — SE.
•***Euphorbia conferta*** (Small)Oudejans {AFP} —

Euphorbia cordifolia Elliott {AFP} —
•***Euphorbia cumulicola*** (Small)Oudejans {AFP} — SE.
Euphorbia curtisii Engelm. ex Chapm. {AFP} — Generally a shorter, more glabrous plant than *E. discoidalis*.
++***Euphorbia cyathophora*** Murray {AFP} — Possibly an early introduction (Chapman 1897, as var. *graminfolia*).
•***Euphorbia deltoidea*** Engelm. ex Chapm. subsp. ***deltoidea*** {AFP} — FE. SE.
•***Euphorbia deltoidea*** Engelm. ex Chapm. subsp. ***pinetorum*** (Small)Oudejans {AFP} — SE.
•***Euphorbia deltoidea*** Engelm. ex Chapm. subsp. ***serpyllum*** (Small)Y. Yang {AFP} — SE.
*****Euphorbia dentata*** Michx. {AFP} —
Euphorbia discoidalis Chapm. {AFP} —
Euphorbia exserta (Small)Coker {AFP} —
Euphorbia floridana Chapm. {AFP} — Panhandle (adjacent counties of Alabama & Georgia).
•***Euphorbia garberi*** Engelm. ex Chapm. {AFP} — FT. SE.
*****Euphorbia graminea*** Jacq. {AFP} —
•***Euphorbia hammeri*** K.Bradley & Sadle {AFP} —
++***Euphorbia heterophylla*** L. {AFP} — Probably an early introduction (Chapman 1897).
Euphorbia hirta L. {AFP} —
Euphorbia humistrata Engelm. ex A.Gray {AFP} —
Euphorbia hypericifolia L. {AFP} —
Euphorbia hyssopifolia L. {AFP} —
•***Euphorbia inundata*** Torr. ex Chapm. var. ***garrettii*** E.L.Bridges & Orzell {AFP} —
Euphorbia inundata Torr. ex Chapm. var. ***inundata*** {AFP} —
^*Euphorbia lactea* Haw. —
*****Euphorbia lasiocarpa*** Klotzsch {AFP} —
Euphorbia maculata L. {AFP} —
^*Euphorbia marginata* Pursh {AFP} —
*****Euphorbia mendezii*** Boiss. {AFP} —
Euphorbia mesembrianthemifolia Jacq. {AFP} —
^*Euphorbia milii* Des Moul. {AFP} —
Euphorbia nutans Lag. {AFP} —
•***Euphorbia ogdenii*** K.Bradley & Sadle {AFP} —
Euphorbia ophthalmica Pers. {AFP} —
Euphorbia pergamena Small {AFP} — ST.
•***Euphorbia pinetorum*** (Small)G.L.Webster {AFP} — SE.
Euphorbia polygonifolia L. {AFP} —
•***Euphorbia polyphylla*** Engelm. ex Chapm. {AFP} —
•***Euphorbia porteriana*** (Small)Oudejans {AFP} — SE.
Euphorbia prostrata Aiton {AFP} —
Euphorbia pubentissima Michx. {AFP} — Unclear if this actually occurs in Florida. The type has broad, veiny leaf blades and villous stems.
^*Euphorbia pulcherrima* Willd. ex Kotzsch —
^*Euphorbia punicea* Sw. —
•***Euphorbia rosescens*** E.L.Bridges & Orzell {AFP} — SE.
Euphorbia serpens Kunth {AFP} —
*****Euphorbia serpillifolia*** Pers. {AFP} —
Euphorbia spathulata Lam. {AFP} —
•***Euphorbia telephioides*** Chapm. {AFP} — FT. SE.
Euphorbia thymifolia L. {AFP} —

^*Euphorbia tirucalli* L. {AFP} —
Euphorbia tithymaloides L. subsp. ***smallii*** (Millsp.)V.W.Steinm. {AFP} — Maybe introduced and naturalized, or native and extirpated.
Euphorbia trichotoma Kunth {AFP} — Southern, coastal peninsula. Rare, disappearing throughout most of its Florida range.
^*Euphorbia trigona* Mill. —

Gymnanthes
Gymnanthes lucida Sw. {AFP} —

Hippomane
Hippomane mancinella L. {AFP} — SE.

Hura
^*Hura crepitans* L. {AFP} —

Jatropha
1. Leaves peltate … J. podagrica
1. Leaves not peltate [2]
2. Leaves deeply (7)9-11(13)-lobed, the sinuses nearly reaching the petiole, appearing nearly palmately compound … J. multifida
2. Leaf blades simple or with 3-5(7) lobes, the sinuses only reaching 3/4 way to the petiole [3]
3. Stipules, petioles, and/or leaf margins stipitate-glandular; stipules persistent, filiform-divided; stamens 8; styles distinct or connate to 1/4 of length … J. gossypiifolia
3. Stipules and petioles eglandular, leaf blade margins occasionally with few glands; stipules caducous and narrowly lanceolate, or absent; stamens 10; styles connate 1/2 to most of length [4]
4. Leaf blades mostly 5-lobed and palmately 5-7 veined, blade tips blunt to acute; corollas pale green to greenish yellow; capsules drupaceous … J. curcas
4. Leaf blades mostly simple or 3-lobed and palmately 3-veined, blade tips abruptly acuminate; corollas red to pink; capsules explosively dehiscent … J. integerrima

^*Jatropha curcas* L. {AFP} —
^*Jatropha gossypiifolia* L. {AFP} —
^*Jatropha integerrima* Jacq. {AFP} —
^*Jatropha multifida* L. {AFP} —

Mallotus
^*Mallotus japonicus* (L.f.)Müll.Arg. {AFP} —

Manihot
1. Leaf blade lobes without secondary lobes; stipules lanceolate, entire; stem nodes conspicuously swollen; leaf and stipule scars elevated, especially on older stems; fruit usually winged … M. esculenta
1. Median and adjacent leaf blade lobes with secondary lobes, lateral lobes without secondary lobes; stipules linear, remotely serrate; stem nodes not swollen; leaf and stipule scars not elevated; fruit not winged … M. grahamii

^*Manihot esculenta* Crantz {AFP} —
^*Manihot grahamii* Hook. {AFP} —

Microstachys
*__*Microstachys corniculata*__ (Vahl)A.Juss. ex Griseb. {AFP} —

Ricinus
*__*Ricinus communis*__ L. {AFP} —

Sapium
^*Sapium haematocarpum* Müll.Arg. {AFP} —

Stillingia
1. Shrub, the main stem usually solitary and grading into the taproot; stems 8-20 mm wide at the base above the taproot; caruncle of seed minute … S. aquatica
1. Herb to subshrub, the main stems often several and arising from a woody rhizome; stems 2-5 mm wide at the base above the rhizome; caruncle of the seed 1-1.3 mm wide [2]
2. Leaves 9-35 mm wide, (1.3)2.3-5.5(9.1) times as long as wide, typically widest above the middle; median bract subtending the pistillate cymule with an obtuse apex (rarely widely acute) … S. sylvatica
2. Leaves 1.5-9 mm wide, (5)10-17.5(28) times as long as wide, typically widest near the middle; median bract subtending the pistillate cymule with an acute apex … S. tenuis

Stillingia aquatica Chapm. {AFP} —
Stillingia sylvatica L. {AFP} —
•***Stillingia tenuis*** Small —

Tragia
1. Petiole 0-2.5(8.5) mm long, 1/5th or less the length of the blade, rarely longer; calyx lobes of the staminate flowers usually 4-5(6); stamens 2 (very rarely 3) [2]
1. Petiole 3.5-35 mm long (at least for the larger leaves, as short as 2 mm along the inflorescence), 1/5th-1/2 the length of the blade; calyx lobes of the staminate flowers usually 3, infrequently 4; stamens 3-4 [3]
2. Leaf blades elliptic to orbiculate, toothed throughout the margin, truncate to semi-broadly cuneate at the blade base; inflorescence opposite the leaves throughout; seeds 4-4.5 mm long … T. smallii
2. Leaf blades linear to obovate, entire, irregularly toothed, or toothed throughout the margin, attenuate, cuneate, to acute at the blade base; inflorescence axillary, terminating leafy lateral branches or main stems, and/or opposite the leaves distal on the main stem; seeds 3-4 mm long … T. urens
3. Vine; leaf blade strongly cordate at the base … T. cordata
3. Erect to decumbent herb; leaf blade truncate to shallowly cordate at the base [4]
4. Erect to decumbent herbs 8-30 cm tall; leaf blade suborbicular to broadly ovate, to 3 cm long; stigmas undulate … T. saxicola
4. Erect herbs 20-70 cm tall; leaf blade triangular-lanceolate, to 7 cm long; stigmas papillate … T. urticifolia

Tragia cordata Michx. {AFP} —

•***Tragia saxicola*** Small {AFP} — ST.
Tragia smallii Shinners {AFP} —
Tragia urens L. {AFP} —
Tragia urticifolia Michx. {AFP} —

Triadica
****Triadica sebifera*** (L.)Small {AFP} —

Vernicia
****Vernicia fordii*** (Hemsl.)Airy-Shaw {AFP} — Was briefly explored for production of 'tung oil' in the 1900s (Snow 2013).

LINACEAE
Linum
1. Sepals eglandular; corolla bluish, red, to pink; stigmas elongate and introrse [2]
1. Sepals (at least some) with marginal glands; corolla yellow; stigmas terminal and capitate [3]
2. Sepals 8-12 mm long; petals red (drying pinkish), 15-35 mm long … L. grandiflorum
2. Sepals 5-9 mm long; petals blue to white, 8-12 mm long … L. usitatissimum
3. Style solitary at the base, branching into 5 stigmas [4]
3. Styles 5, not united at the base, each style with one stigma [6]
4. Style branches ca. 1.5-3 mm long below each stigma, the styles connate ca. 0.5-2 mm at the base … L. sulcatum var. harperi
4. Style branches to ca. 1 mm long below each stigma, the styles connate ca. 4-7 mm at the base [5]
5. Plant (11)17-28(33) cm tall, branching throughout; stem puberulent or scabrous throughout; stipules glandular; petals 9-11 mm long, 7-9 mm wide; anthers placed near stigma; style 4.4-6.1 mm long … L. carteri
5. Plant (17)28-45(64) cm tall, branching in upper half; stem glabrous, otherwise puberulent or scabrous only near the base; stipules eglandular; petals 11.5-17 mm long, 10-13 mm wide; anthers divergent from stigma; style 5.1-9.1 mm long … L. smallii
6. Capsules 1.3–2.3 mm long, depressed-globose or globose, apices not pointed [8]
6. Capsules 2–3.9 mm long, either pyriform to ovoid or subglobose, apices short-pointed [9]
7. Margins of inner sepals usually with conspicuous stipitate glands; capsule segments usually persistent … L. medium var. texanum
7. Margins of inner sepals eglandular or with inconspicuous sessile glands; capsule segments usually deciduous … L. striatum
8. Leaves mostly opposite until just below the inflorescence branches … L. westii
8. Leaves alternate, or opposite only in the basal third or less and alternate distally on most of the stem [9]
9. Stipular glands reddish; leaf blade 5-15 mm long, 0.5-1.2 mm wide; petals 4-6 mm long … L. arenicola
9. Stipular glands absent; leaf blade 10-25 mm long, 1-4 mm wide; petals 5-11 mm long [10]
10. Margins of inner sepals glandular-toothed; capsules 2–3.4 mm long; seeds 1.6–2.5 mm long … L. floridanum
10. Margins of inner sepals entire; capsules 3.4–3.9 mm long; seeds 2.8–3 mm long … L. macrocarpum

•***Linum arenicola*** (Small)H.J.P.Winkler {AFP} — SE.

•***Linum carteri*** Small {AFP} — SE.
Linum floridanum (Planch.)Trel. {AFP} —
^*Linum grandiflorum* Desf. {AFP} —
Linum macrocarpum C.M.Rogers {AFP} — SE.
Linum medium (Planch.)Britton var. ***texanum*** (Planch.)Fernald {AFP} —
•***Linum smallii*** (C.M.Rogers)K.Bradley & Weakley {AFP} — SE.
Linum striatum Walter {AFP} —
Linum sulcatum Riddell var. ***harperi*** (Small)C.M.Rogers {AFP} — Plants dry dark and purple-spotted. Perhaps, var. *sulcatum* (plants pale green when dry, sepals mostly 3.6-5 mm long) does not occur in Florida (Rogers 1963).
^*Linum usitatissimum* L. {AFP} —
Linum westii C.M.Rogers {AFP} — SE.

MALPIGHIACEAE

1. Vines; fruit a schizocarp [2]
1. Shrubs or small trees; fruit a drupe or schizocarp [4]
2. Stems subverrucose with whitish lenticels; leaf blade secondary veins obscure, not impressed on the upper surface; petals pink to reddish ... Heteropterys brachiata
2. Stems verrucose with brownish lenticels or lenticels obscure; leaf blade secondary veins apparent, impressed on the upper surface; petals yellow [3]
3. Leaf blade base and apex acute ... Callaeum
3. Leaf blade base and apex obtuse, rounded, to truncate ... Stigmaphyllon sagraeanum
4. Fruit a schizocarp; calyx eglandular or with one gland [5]
4. Fruit a drupe; calyx (and sometimes the leaf underside) with multiple glands [6]
5. Leaf blade lateral veins apparent to obscure, flat on the lower surface; calyx lacking glands; fruit dehiscing into unwinged mericarps ... Galphimia gracilis
5. Leaf blade lateral veins pronounced, prominent on the lower surface; calyx with a solitary gland; fruit dehiscing into winged mericarps ... Hiptage benghalensis
6. Leaf blade lower surface without glands, the blade often widest above the middle, the blade base usually acute and the apex more broadly rounded to sometimes broadly acute, margins not prickly; fruit with 1 pyrene; stem nodes often with encircling scars ... Byrsonima
6. Leaf blade lower surface with glands, the blade widest below middle, near middle, or above middle, the blade base acute to broadly rounded and the apex similar or slightly more broad or emarginate, margin prickly or not; fruit with (1)2-3 pyrenes; stem nodes generally lacking encircling scars [7]
7. Petals yellow; styles fused for most of their length; leaf blades not prickly, not emarginate; stems usually not with conspicuous white lenticels ... Bunchosia
7. Petals white to pink; styles free or fused only at the base; leaf blades prickly or emarginate in some species; stems with conspicuous white lenticels in some species ... Malpighia

Bunchosia

^*Bunchosia argentea* (Jacq.)DC. —

Byrsonima

^*Byrsonima crassifolia* (L.)Kunth —
Byrsonima lucida (Mill.) DC. {AFP} — ST.

Callaeum: Revised by Johnson (1986).

1. Lateral petal lower surface glabrous to sparsely pilose; mericarp dorsal wing 1.9-3.3 cm wide, 5/6 to subequal to lateral wings in length, sometimes fused to lateral wings at base … C. macropterum
1. Lateral petal lower surface sericeous; mericarp dorsal wing 0.4-0.8 cm wide, 1/2-3/5 as long as lateral wings, not fused at base … C. septentrionale

^*Callaeum* spp. —

Galphimia
^*Galphimia gracilis* Bartling {AFP} —

Heteropterys
*****Heteropterys brachiata*** (L.)DC. {AFP} —

Hiptage
*****Hiptage benghalensis*** (L.)Kurz {AFP} —

Malpighia
1. Leaf blade margin prickly … Malpighia coccigera
1. Leaf blade margin entire [2]
2. Leaf blade mostly emarginate to broadly obtuse, margin with hairs (at least when young) … Malpighia emarginata
2. Leaf blade apex mostly acute to acuminate, margin glabrous … M. glabra

^*Malpighia coccigera* L. {AFP} —
^*Malpighia emarginata* Sessé & Moç. ex DC. {AFP} —
^*Malpighia glabra* L. —

Stigmaphyllon
*****Stigmaphyllon sagraeanum*** A.Juss. {AFP} —

PHYLLANTHACEAE
1. Herbs … Phyllanthus
1. Shrubs to trees [2]
2. Leaves 3-foliolate; trees to 30 m … Bischofia javanica
2. Leaves simple (on deciduous lateral branches in some Phyllanthus); herbs, shrubs, or small trees to 10 m [3]
3. Ultimate branchlet flat and widened into cladodes with multiple parallel veins and numerous nodes towards the apex; leaves scale-like, caducous, and inconspicuous … P. angustifolius
3. Ultimate branches terete with well developed leaves, not developed into cladodes [4]
4. Plants dioecious; leaf blade broadly rounded, obtuse, to subemarginate at the apex; fruit a dry capsule … Heterosavia bahamensis
4. Plants monoecious; leaf blade acute at the apex; fruits fleshy and berry-like [5]
5. Lateral branches not deciduous; leaf blade acute at the base … Flueggea virosa subsp. melanthesoides
5. Lateral branchlets deciduous; leaf blade broadly rounded to broadly acute at the base [6]
6. Leaf blades green or variegated; staminate sepals connate for most of their length; nectary disk absent … Breynia disticha

6. Leaf blades green; staminate sepals connate at the base; nectary disk present … Phyllanthus acidus

Antidesma
^*Antidesma bunius* Wall. —

Bischofia
****Bischofia javanica*** Blume {AFP} —

Breynia
^*Breynia androgyna* (L.)Chakrab. & N.P.Balakr. —
^*Breynia disticha* J.R.Forst. & G.Forst. {AFP} —

Flueggea
****Flueggea virosa*** (Roxb. ex Willd.)Royle subsp. ***melanthesoides*** (F.Muell.)G.L.Webster {AFP} —

Glochidion
****Glochidion puberum*** (L.)Hutch. —

Heterosavia
Heterosavia bahamensis (Britton)Petra Hoffm. {AFP} — SE.

Phyllanthus : The genus has been split with an aim towards monophyletic genera, retaining *Breynia* and *Glochidion* (Bouman et al. 2022), but in that scheme *Phyllanthus* s.str. remains morphologically variable and very poorly distinguished from many proposed genera. Most of our taxa were placed in *Moeroris*. The traditional *Phyllanthus* is retained here for the timebeing.

1. Ultimate branchlet flat and widened into cladodes with multiple parallel veins and numerous nodes towards the apex; leaves scale-like, caducous, and inconspicuous … P. angustifolius
1. Plant without cladodes; leaves well developed [2]
2. Floating aquatic; leaf blades corrugated … P. fluitans
2. Terrestrial herb, shrub, or tree; leaf blade flat [3]
3. Shrubs; fruit fleshy … P. acidus
3. Herbs; fruit a dry capsule [4]
4. Nodes of the main stem bearing well developed leaves, flowers, and fruits, without deciduous lateral branchlets [5]
4. Nodes of the main stem bearing scales (rarely well-developed leaves) and deciduous lateral branchlets that bear well developed leaves [7]
5. Rhizomatous; leaves spirally arranged; pedicels 1.6-8 mm long; staminate sepals 1.2-1.8 mm long; pistillate sepals 2.8-3.5 mm long, 1.2-2.5 mm wide; seeds 1.7-1.8 mm long … P. liebmannianus subsp. platylepis
5. Fibrous-rooted, without rhizomes; leaves distichous; pedicels 0.5-1.5 mm long; staminate sepals 0.5-0.7 mm long; pistillate sepals 0.6-1.4 mm long, 0.2-0.7 mm wide; seeds 0.7-1.1 mm long [6]

6. Pistillate sepals 0.2–0.3 mm wide; leaf blade vein reticulum clearly visible abaxially; stems glabrous; cymules with 1 staminate and (1)2–3(5) pistillate flowers; pistillate nectary cupular, unlobed, enclosing ovary 1/3–1/2 length … P. caroliniensis subsp. caroliniensis
6. Pistillate sepals (0.2)0.3–0.5(0.7) mm wide; leaf blade vein reticulum obscure or invisible abaxially; stems usually sparsely to densely scabridulous; cymules with 1–2 staminate and 1–2 pistillate flowers; pistillate nectary annular, unlobed or 6-lobed, enclosing ovary basally … P. caroliniensis subsp. saxicola
7. Leaf blades hispidulous along the margins of the lower surface, with the basal and marginal veins prominent on the lower surface; staminate pedicels 0.1-0.2 mm long; pistillate pedicels 0.3-0.5 mm long; ovary and capsules tuberculate; seeds transversely ribbed … P. urinaria
7. Leaf blades glabrous or scabridulous on the lower surface, with the basal and marginal veins obscure or not prominent on the lower surface; staminate pedicels 0.2–1.8 mm, pistillate (1–)1.2–7 mm; capsules smooth; seeds verrucose or longitudinally ribbed [8]
8. Leaf blade typically with an acute tip and obovate to broadly elliptic; stamens 5, filaments distinct; pistillate pedicels 2.5-8 mm long, flexuous and pendent in fruit; seeds papillate … P. tenellus
8. Leaf blade obtuse to rounded at the tip, if acute at the tip then narrowly elliptic; stamens 2-3, filaments connate; pistillate pedicels 1-3(3.5) mm long, spreading in fruit [9]
9. Plant with long internodes and few lateral branches; leaf blade densely but minutely pubescent; stipules of main stems dark brown, auriculate; capsules 1.7–1.9 mm wide; seeds 0.8–0.9 mm … P. pentaphyllus
9. Plant with shorter internodes and several lateral branches; leaf blades glabrous to glabrate; stipules of main stems pale green to pale brown, not auriculate; capsules 1.9–2.7 mm wide; seeds 0.9–1.5 mm [10]
10. Distal inflorescences of solitary pistillate flowers [11]
10. Distal inflorescences of 1 pistillate flower and 1-3 staminate flowers [12]
11. Stems terete or angles obscure; ultimate branchlets scabridulous or not scabridulous; pistillate nectaries subentire; styles mostly appressed … P. debilis
11. Stems usually conspicuously angled; lateral branchlets scabridulous; pistillate nectaries deeply 6-9-lobed; styles ascending to erect … P. fraternus
12. Secondary venation obscure on the leaf blade underside; pistillate nectaries of 3 glands; capsules 2.3-2.7 mm long; seeds 1.1-1.5 mm long … P. abnormis
12. Secondary venation conspicuous on the leaf blade underside; pistillate nectary annular, 5-7-lobed; capsules 1.9-2.1 mm long; seeds 0.9-1.1 mm long … P. amarus

Phyllanthus abnormis Baill. {AFP} — The Florida plants were named *P. garberi* (treated as a subspecies by Levin & Weakley 2023) and differ from *P. abnormis* s.str. by having one staminate flower with 3 stamens and smooth stems. Placed in *Moeroris* (Bouman et al. 2022).
****Phyllanthus acidus*** (L.)Skeels {AFP} — Also placed in *Cicca*.
****Phyllanthus amarus*** Schumach. & Thonn. {AFP} — Placed in *Moeroris*.
^*Phyllanthus angustifolius* (Sw.)Sw. {AFP} — Retained in *Phyllanthus* s.str.
Phyllanthus caroliniensis Walter subsp. ***caroliniensis*** {AFP} — Retained in *Phyllanthus* s.str.
Phyllanthus caroliniensis Walter subsp. ***saxicola*** (Small)G.L.Webster {AFP} — Retained in *Phyllanthus* s.str.
****Phyllanthus debilis*** Klein ex Willd. {AFP} — Placed in *Moeroris*.
^*Phyllanthus emblica* L. — Placed in *Emblica* as *E. officinalis* .
****Phyllanthus fluitans*** Benth. ex Müll.Arg. {AFP} — Retained in *Phyllanthus* s.str.
****Phyllanthus fraternus*** G.L.Webster {AFP} —

•***Phyllanthus liebmannianus*** Müll.Arg. subsp. ***platylepis*** (Small)G.L.Webster {AFP} — Placed in *Nellica*. SE.
Phyllanthus pentaphyllus C.Wright ex Griseb. {AFP} — Placed in *Moeroris* .
*****Phyllanthus tenellus*** Roxb. {AFP} — Placed in *Moeroris*.
*****Phyllanthus urinaria*** L. {AFP} — Placed in *Emblica*.

CHRYSOBALANACEAE

1. Shrubs to small trees, usually 1-6 m tall when mature; leaf blade length 1.2-1.5 times width; inflorescence axillary; filaments densely hairy at the base; endocarp longitudinally ribbed Chrysobalanus icaco
1. Suffruticose plants usually <50 cm tall when mature, rarely to 1.6 m tall; leaf blade length 2.5-3.5 times width; inflorescence terminal; filaments glabrous; endocarp not longitudinally ribbed Geobalanus oblongifolius

Chrysobalanus

Chrysobalanus icaco L. {AFP} —

Geobalanus

Geobalanus oblongifolius (Michx.)Small {AFP} —

ERYTHROXYLACEAE

Erythroxylum

1. Leaf blades obovate to broadly elliptic, 1.1-2.2 times as long as wide, the margin sometimes revolute, the upper side rather dark green with the lateral veins conspicuous and the reticulate and branching segments less pronounced or obscure, the lower side usually lacking a clearly longitudinally demarcated whitish medial area along both sides of the midrib; fruiting pedicels 1-4(5) mm long, shorter than the fruits and shorter than the petioles … E. confusum
1. Leaf blades elliptic, 2-3.1 times as long as wide, the margin plane, the upper side color and venation variable, the lower side usually with a clearly longitudinally demarcated whitish medial area along both sides of the midrib; fruiting pedicels (3.5)4-8 mm long, subequal to the fruits and usually subequal to longer than the petioles [2]
2. Leaf blade upper side green to pale, with conspicuous lateral, branching, and reticulate veins; bark mostly smooth to striate … E. areolatum
2. Leaf blade upper side pale to dark green, with obscure venation; bark various [3]
3. Bark verrucose; stipules persistent, the keel minutely fimbriate; flowering stems leafless to leafy; leaf blade dark green, the upper side midrib sharply raised; staminal cup margin denticulate to crenulate … E. coca
3. Bark smooth; stipules disintegrating, marcescent, or persistent, the keel entire; flowering stems leafy; leaf blade green to yellowish, the upper side midrib flat; staminal cup margin entire … E. novogranatense

^*Erythroxylum areolatum* Britton —
^*Erythroxylum coca* Lam. —
^*Erythroxylum confusum* Britton {AFP} —
^*Erythroxylum novogranatense* (D.Morris)Hieron. —

RHIZOPHORACEAE

1. Adventitious prop-roots absent; leaf blade apex sharply acute, the larger blades >11 cm long; sepals and petals 8-14, petals bilobed … Bruguiera gymnorhiza
1. Adventitious prop-roots present; leaf blade apex obtuse, the larger blades mostly <11 cm long; sepals and petals 4, entire … Rhizophora mangle

Bruguiera
*****Bruguiera gymnorhiza*** (L.)Lam. ex Savigny {AFP} —

Rhizophora
Rhizophora mangle L. {AFP} —

PUTRANJIVACEAE
Drypetes
1. Bark lenticellate, but otherwise smooth (often covered in crustose lichens); petiole sometimes yellow-orange; blade entire or spinose, usually rounded to obtuse at the apex, midrib sometimes yellow, conspicuosly coarsely reticulate; sepals 5, densely hairy; male flowers with 8-10 stamens subequal to the sepals; female flowers with 1 stigma; fruit white, 1.5-2.4 cm wide, the endocarp ca. 1.5 mm thick and rigid … D. diversifolia
1. Bark finely furrowed to somewhat platy; petiole mostly green to yellow-green; blade entire, often acuminate at the apex, midrib light green, finely reticulate (often obscure when fresh); sepals 4, ciliate along the margin; male flowers with 4-5 stamens much exserted beyond the sepals; female flowers with 2 stigmas; fruit pinkish orange to red, ca. 1-1.5 cm wide, the endocarp ca. 0.5 mm thick and leathery … D. lateriflora

Drypetes diversifolia Krug & Urb. {AFP} — Miami-Dade & Monroe keys. Rockland hammocks. SE.
Drypetes lateriflora (Sw.)Krug & Urb. {AFP} — Central coastal eastern and southern peninsula. Hammocks. ST. Its raised, prominent midrib on the leaf blade is a helpful character for ID-ing vegetative material.

PASSIFLORACEAE
Passiflora: The flower is sometimes subtended by 3 bracts. The sepals (outer whorl of the flower) are often nearly identical to the petals. The next inner whorl(s) consists of the corona, linear or filamentous segments that are often showy and colorful. The fertile parts are often elevated on an elongate column (androgynophore), which bear the stamens subtending the ovary, style, and stigma.

subg. Decaloba
- sect. Cieca: P. pallida, P. suberosa
- sect. Decaloba: P. biflora, P. lutea, P. sexflora
- sect. Multiflora: P. multiflora

subg. Passiflora
- sect. Coccinea: P. miniata, P. vitifolia
- sect. Dysosmia: P. ciliata, P. foetida, P. lanuginosa
- sect. Granadillastrum: P. caerulea, P. pallens
- sect. Passiflora: P. cincinnata × incarnata, P. edulis, P. incarnata
- sect. Quadrangulares: P. alata, P. quadrangularis

1. Petiole without glands; leaf blades mostly entire … Key A
1. Petiole with glands, or glands inconspicuous; leaf blades entire or toothed [2]
2. Stipules and involucral bracts strongly dissected into linear to filiform segments, these usually terminating in a gland (these often present on leaves) … Key B
2. Stipules and involucral bracts simple or toothed, without gland-tipped segments or cilia [3]
3. Leaf blade margin toothed … Key C
3. Leaf blade margin entire to undulate (sometimes a few teeth at base of lobes)
4. Stem quadrangular-winged or -edged; leaf blade unlobed … P. quadrangularis
4. Stem terete; leaf blade lobed … Key D

Key A
1. Stems, tendrils, leaves, and fruit tomentulose to pubescent … P. sexflora
1. Stems, tendrils, leaves, and fruit glabrate [2]
2. Leaf blade usually bilobed or occasionally obscurely 3-lobed, with conspicuous rows of nectaries; flowers often paired; corolla white … P. biflora
2. Leaf blade usually 3-lobed, lacking nectaries; flower usually solitary; corolla greenish yellow … P. lutea

Key B
1. Stems, peduncles, petioles, and leaf veins glabrous; sepals and petals pink to white; outer corona filaments usually pink mature fruit red … P. ciliata
1. Stems, peduncles, petioles, and leaf veins densely hirsute, pilose, villous, or lanuginose [2]
2. Leaf lobe tips generally obtuse to acute with a stipitate gland; involucral bracts sparse-moderately glandular, bracts and lobes mostly free from each other, stipitate glands mostly 1-4 mm long; petals and sepals pink to white; outer corona filaments 8-15 mm long, the basal portion purple, pink, to white, middle portion white, and distal portion lilac, pink, to white; mature fruit red … P. lanuginosa
2. Leaf lobe tips mostly acuminate-stipitate glandular; involucral bracts densely glandular, bracts and lobes entangled, stipitate glands mostly 4-8 mm long; petals and sepals white (sometimes lightly pink tinged distally); outer corona filaments 10-18 mm long, the basal portion purple to pale lilac, distal portion white to pale lilac; mature fruit yellow to orange … P. vesicaria

Key C
1. Leaf blade unlobed … P. miniata
1. Leaf blade usually lobed (at least some), sometimes some unlobed [2]
2. Petiolar glands conspicuous; petals and outer corona white to purple [3]
2. Petiolar glands inconspicuous or conspicuous; petals and outer corona purple, red to dark reddish [5]
3. Petiolar gland ca. mid-petiole; leaf blade usually 5-lobed … Passiflora cincinnata × incarnata
3. Petiolar gland in the distal third; leaf blade usually 3-lobed [4]
4. Leaf blade lustrous on the upper surface; bracts subtending flower 15-25 mm long; androgynophore with a 5-lobed swelling at the opening of the floral tube; fruit green-yellow to purple, the pulp yellow to orange … P. edulis
4. Leaf blade dull on the upper surface; bracts subtending flower 3-8 mm long; androgynophore lacking an evident swelling at the opening of the floral tube; fruit green to greenish yellow, the pulp whitish to pale yellow … P. incarnata

5. Petiolar glands conspicuous; petals purple to red, oblong-elliptic, apices rounded to obtuse; outer corona filaments often variegated with purple to red and white or lighter colors … P. miniata x incarnata
5. Petiolar glands inconspicuous; petals red, lanceolate, apices acute; outer corona filaments red to dark purplish red [6]
6. Leaf blade 3-lobed, sometimes shallowly so or with unlobed or irregularly lobed ones; involucral bracts oblong-elliptic, 1-4 cm long; inner corona filaments white … P. miniata x vitifolia
6. Leaf blade 3-lobed; involucral bracts ovate-lanceolate, 0.6-1.5 cm long; inner corona filaments usually red, pink, to white … P. vitifolia

Key D
1. Stipules linear to subulate; petiolar gland sessile, globular or inconspicuous [2]
1. Stipules foliaceous, clasping; petiolar gland stalked, capitate to cylindric [4]
2. Stems and leaves densely tomentulose-puberulent; leaf blade reticulate venation pronounced and prominent on the lower surface; sepals 5, petals 5; ovary sessile … P. multiflora
2. Stems and leaves glabrate to puberulent; leaf blade reticulate venation mostly obscure to apparent and flat on the lower surface; sepals 5 (petaloid), petals absent; ovary borne on a gynophore [3]
3. Leaf blade nectaries absent, the blade base cuneate to acute; sepals (2.3)4.0-7.0(8.3) mm long; hypanthium 2.8-4.1 mm wide; androgynophore (1.7)2.2-3.5 mm long; outer coronal filaments 1.2-4.0 mm long; inner coronal filaments less than 1.4 mm long; staminal filaments 1.4-3.0 mm long, pollen yellow; fruits globose or ellipsoid; peninsular Florida … P. pallida
3. Leaf blade nectaries present or absent, the blade base commonly cordate or cuneate to acute; sepals 4.0-14.6(20.5) mm long; hypanthium (3.0-)4.0–8.8 mm wide; androgynophore (2.1)2.7-6.1(12.6) mm long; outer coronal filaments 2.5-8.1 mm long; inner coronal filaments more than 1.4 mm long; staminal filaments 1.6-6.0(6.8) mm long, pollen whitish or yellow; fruits ovoid, ellipsoid or transversely ellipsoid; considered absent from Florida … P. suberosa
4. Leaf blades sinuses shallow or obscure (less than halfway to petiole) and fairly narrow (lobes appear larger relative to sinus) [5]
4. Leaf blades sinuses deep (more than halfway to petiole) and wide (lobes generally narrower than sinus) [6]
5. Petiolar gland capitate; leaf blade sinuses mostly deeply acute … P. ×alatocaerulea
5. Petiolar gland cylindric; leaf blade sinuses mostly shallowly rounded … P. pallens
6. Leaf blade usually 5-lobed … P. caerulea
6. Leaf blade usually 3-lobed … P. kewensis

^*Passiflora ×alatocaerulea* Lindl. (*alata* × *caerulea*) {AFP} — (syn. *P. ×belottii*).
****Passiflora biflora*** Lam. {AFP} —
^*Passiflora caerulea* L. —
^*Passiflora cincinnata* × *P. incarnata* —
****Passiflora ciliata*** Aiton {AFP} — This, *P. lanuginosa*, and *P. vesicaria* were previously subsumed under *P. foetida* (this species so far unknown in Florida, characterized by pubescent or pilose stems and leaves, white sepals and petals, purple, blue, to violet outer corona filaments, pilose ovary, and dull green [sometimes red?], pilose, mature fruits). The group revised by Vanderplank (2014 [as 2013]) and Svoboda (2023).
****Passiflora edulis*** Sims {AFP} —
Passiflora incarnata L. {AFP} —
^*Passiflora incarnata* × *miniata* —

^*Passiflora ×kewensis* "Hort." — Perhaps, parentage involved *P. caerulea, P. kermesina, P. mucronata,* and/or *P. racemosa*.
****Passiflora lanuginosa*** (Killip)H.T. Svoboda —
Passiflora lutea L. {AFP} —
^*Passiflora miniata* Vanderpl. {AFP} —
^*Passiflora miniata × vitifolia* —
Passiflora multiflora L. {AFP} — SE.
^*Passiflora quadrangularis* L.—
Passiflora pallens Poepp. ex Mast. {AFP} — SE.
Passiflora pallida L. {AFP} — Allegedly, *P. suberosa* L. s.str. does not occur in Florida, but does occur in the Bahamas. Both taxa are said to be pantropical weeds. The type of *P. pallida* is an illustration. From an ITS phylogeny, a cultivated specimen of *P. pallida* from the Everglades (*Porter-Utley P-65*, FLAS) fell within a strongly supported monophyletic clade of *P. pallida* + *P. suberosa* with *pallida* aff., the specimen identified as "*P. suberosa* with *pallida* aff." being from Sarasota Co. (*Abbott 14284*, FLAS) and having four different ITS copies falling in multiple clades (Porter-Utley 2014).
Passiflora sexflora Juss. {AFP} — SE.
****Passiflora vesicaria*** L. {AFP} —
^*Passiflora vitifolia* Kunth {AFP} —

TURNERACEAE

Piriqueta

1. Herbs; petiole lacking glands; corolla tube a fimbriate corona … Piriqueta
1. Subshrub to shrubs; petiole apex with 2 glands; corolla tube lacking a corona … Turnera

Piriqueta cistoides (L.)Griseb. subsp. ***caroliniana*** (Walter)Arbo {AFP} — Here following (Arbo 1995: 137) as a variable taxon, widespread from the SE USA to South America. Small (1933) recognized 4 species. The taxonomy could be more finely tuned, but a thorough study is needed.

Turnera

1. Leaf blades to 6(10) cm long; flowers heterostylous, dimorphic; petals white to pale yellow in the distal half, becoming yellow towards the base, the base dark purple … T. subulata
1. Leaf blades to 10(15) cm long; flowers homostylous, monomorphic; petals yellow, becoming yellow-orange at the base … T. ulmifolia

****Turnera subulata*** Sm. {AFP} —
****Turnera ulmifolia*** L. {AFP} —

SALICACEAE

1. Leaf blades gland-dotted with pellucid punctae; flowers bisexual … Casearia
1. Leaf blades not gland-dotted; flowers unisexual [2]
2. Plant dioecious; stems without spines; inflorescence a catkin; perianth absent; fruit a capsule; seeds comose [3]
2. Plants monoecious; stems often with some spines; sepals present, petals present or absent; seeds not comose [4]
3. Leaf buds with several imbricate scales; leaf blades deltoid to broadly ovate; inflorescence pendulous … Populus

3. Leaf buds with a single scale; leaf blades oblong-elliptic to lance-linear; inflorescence erect spreading, to pendulous ... Salix
4. Leaf margin prickly or entire ... Xylosma buxifolia
4. Leaf margin toothed [5]
5. Leaf teeth 3-7 between the lateral veins; flower bisexual; petals present; fruit a woody capsule ... Oncoba spinosa
5. Leaf teeth 1-3 between the lateral veins; flower unisexual; petals absent; fruit a berry or drupe [6]
6. Leaf blade tip rounded, obtuse, to acute; fruit a drupe with multiple endocarps
... Flacourtia indica
6. Leaf blade tip acuminate; fruit a berry with multiple seeds ... Xylosma congesta

Casearia
^*Casearia nitida* (L.)Jacq. {AFP} —

Flacourtia
*__*Flacourtia indica*__ (Burm.f.)Merr. {AFP} —

Oncoba
^*Oncoba spinosa* Forssk. {AFP} —

Populus
1. Leaf blades white tomentose on the lower surface ... P. alba
1. Leaf blades glabrous or hairy only along the veins [2]
2. Petiole flattened near the blade; leaf blade deltoid, the apex acute to acuminate ... P. deltoides
2. Petiole mostly terete; leaf blade broadly ovate, the apex obtuse ... P. heterophylla

^*Populus alba* L. {AFP} —
Populus deltoides W.Bartram ex Marshall {AFP} —
Populus heterophylla L. {AFP} —

Salix
1. Leaf blade margin entire, undulate, to obscurely toothed near the apex ... S. humilis
1. Leaf blade margin regularly toothed [2]
2. Mature leaf blades oblong to broadly lanceolate, the tip acute to abruptly acuminate, 2.5-5 cm wide, 2.4-3 times longer than wide ... S. floridana
2. Mature leaf blades linear-lanceolate to lanceolate, the tip tapered-acue, 0.5-3.5 cm wide, 3-14 times longer than wide [3]
3. Shrub to 6 m, with several main stems; foliaceous stipules often present; leaf blade base rounded to subcordate, larger blades 2-3.5 cm wide ... S. eriocephala
3. Shrub or tree to 20 m, mostly with one to few trunks or main stems; foliaceous stipules present or absent; leaf blade base usually cuneate, acute, to obtuse, larger blades 0.5-2.5 cm wide [4]
4. Bud-scale margins connate; catkin 0.9-3.5 cm long, branchlet 0-6 mm long; stamens usually 2, sometimes 1; pistillate bracts persistent ... S. babylonica

4. Bud-scale margins distinct, overlapping; catkin 2.5-10 cm long, branchlet 4-35 mm long; stamens 3-7(-9); pistillate bracts deciduous after flowering [5]
5. Shrubs to trees to 10 m; largest medial blades: abaxial surface glaucous; pistillate bracts deciduous or persistent after flowering; pistillate stipe 1.3-5.3 mm long ... S. caroliniana
5. Trees to 20+ m; largest medial blades: abaxial surface not glaucous, occasionally thinly glaucous; pistillate bracts deciduous after flowering; pistillate stipe 0.5-1.5 mm long ... S. nigra

^*Salix babylonica* L. {AFP} — Most specimens identified as *Salix babylonica* in North America are probably hybrids partly derived from *S. babylonica*, such as *S. ×sepulcralis* or *S. ×pendulina* (Argus in FNA, vol. 7). Given the difficulty of identification, and for simplicity, the name *S. babylonica* is here used.
Salix caroliniana Michx. {AFP} —
Salix eriocephala Michx. {AFP} — SE.
Salix floridana Chapm. {AFP} — SE.
Salix humilis Marshall {AFP} —
Salix nigra Marshall {AFP} —

Xylosma
1. Leaf blade entire or with few spinose prickles, the tip spinose ... X. buxifolia
1. Leaf blade regularly serrate ... X. congesta

Xylosma buxifolia A.Gray {AFP} — SE.
^*Xylosma congesta* (Lour.)Merr. {AFP} —

VIOLACEAE
1. Herb, 5-45 cm tall; leaf blade ovate, reniform, deltate, or divided, mostly 0.5-2 times longer than wide; sepals auriculate; upper and lateral petals >5 mm long, subequaling the lower spurred petal; stamens free ... Viola
1. Herb, 20-100 cm tall; leaf blade lanceolate to oblanceolate, mostly 3.5-5.5 times longer than wide; sepals not auriculate; upper and lateral petals 3-5 mm long, smaller than the lower gibbous petal; stamens connate
2. Larger leaf blades 9-17 cm long; corolla greenish white to green ... Cubelium concolor
2. Larger leaf blades 2-7.5 cm long; corolla white with green throat and purplish markings ... Pombalia attenuata

Cubelium
Cubelium concolor (T.F.Forst.)Raf. ex Britton & A.Br. {AFP} — SE.

Pombalia
****Pombalia attenuata*** (Humb. & Bonpl. ex Willd.)Paula-Souza {AFP} —

Viola : Its taxonomy is a topic of active research and species concepts appear bound to become very finely split.

1. Plant caulescent [2]
1. Plant acaulescent [6]
2. Stipules usually entire; corolla yellow with dark veins especially on the lower petal ... V. tripartita

2. Stipules pectinate or lobed; corolla white to blue to purple [3]
3. Stipules deeply lobed [4]
3. Stipules pectinate [5]
4. Corolla pale violet with darkened branched veins especially on the lower 3 petals … V. bicolor
4. Corolla variable (e.g. white, yellow, red, violet in various combinations) with darkened unbranched streaks especially on the lower 3 petals … V. tricolor
5. Aerial stems ascending to erect, not rooting at nodes; leaf blades venation generally concolorous with rest of blade … V. labradorica
5. Aerial stems stoloniferous; leaf blades often with darkened venation … V. walteri
6. Corolla mostly white with a yellow throat and darkened veins on the lower petal [7]
6. Corolla mostly pale blue to violet with a white to pale yellowish white throat and darkened veins on the lower petal [8]
7. Leaf blades linear to lanceolate, (2-)2.8-25 times longer than wide, the base generally gradually tapered … V. vittata
7. Leaf blades narrowly ovate to ovate-deltate, 1.5–2.5 times longer than wide, the base mostly abruptly rounded to subcordate and then often tapering … V. primulifolia
8. Inner leaf blades cleft, deeply toothed, or lobed (outer leaf blades sometimes undivided)
8. Leaf blades all undivided [11]
9. Leaves and peduncles glabrate; mid-season blades with 7-9 lobes, the middle lobes narrowly elliptic, lanceolate, spatulate, or obovate, (rarely linear), lateral lobes lanceolate or spatulate to falcate, margins usually entire, sometimes serrate, sometimes with narrowly deltate or falcate appendages or teeth, ciliate or eciliate, apex acute to mucronulate … V. septemloba
9. Leaves and peduncles pubescent or glabrous; mid-season blades with 3-9 lobes, the middle lobes usually ovate or elliptic to widely obovate, sometimes narrowly elliptic, narrowly ovate, lanceolate, or spatulate to narrowly obovate, lateral lobes elliptic, obdeltate, or spatulate to falcate, smaller lobes similar, apex acute, rounded, blunt, or obtuse [10]
10. Leaves and peduncles usually pubescent, rarely glabrous; apex of middle leaf lobe acute; plants of dry to mesic habitats … V. palmata var. palmata
10. Leaves and peduncles usually glabrous, rarely pubescent; apex of middle leaf lobe rounded, blunt, or obtuse; plants of wet ground. … V. palmata var. heterophylla
11. Leaf blades densely pubescent throughout … V. villosa
11. Leaf blades glabrous to sparsely or unevenly pubescent [12]
12. Leaf blades deltate, 1.5-3 times longer than wide … V. inconspicua
12. Leaf blades generally ovate, mostly 1-1.5 times longer than wide [13]
13. Sepal auricles 1-2 mm long … V. sororia
13. Sepal auricles 2-6 mm long … V. cucullata

Viola cucullata Aiton {AFP} —
^*Viola inconspicua* Blume {AFP} —
^*Viola labradorica* Schrank {AFP} —
Viola palmata L. {AFP} —
Viola primulifolia L. {AFP} —
Viola rafinesquei Greene {AFP} —
Viola septemloba Leconte
Viola sororia Willd. {AFP} —
^*Viola tricolor* L. {AFP} —
Viola tripartita Elliott {AFP} — SE.
Viola villosa Walter {AFP} —
Viola vittata Greene {AFP} —

Viola walteri House {AFP} —

OXALIDALES

ELAEOCARPACEAE

Elaeocarpus

^*Elaeocarpus decipiens* F.B.Forbes & Hemsl. — Sometimes subsumed under *E. sylvestris* which has smaller fruits (1-1.2 cm long, 0.5-0.8 cm wide) and leaf blades more obovate with 4-5 lateral vein pairs (Tang & Phengklai 2007).

OXALIDACEAE

1. Plants caulescent, stoloniferous; sepals without orange-brown callosities; petals yellow (O. corniculata group) … Key A
1. Plants acaulescent, with a bulb, rhizome, or taproot; sepals typically with orange-brown callosities; petals white to pink to purple … Key B

Key A:
1. Petals 4-8 mm long, mostly subequal to shorter than the leaflets [2]
1. Petals 6-20(23) mm long, mostly subequal to longer than the leaflets [5]
2. Rhizomes and stolons absent; stem herbaceous, prostrate or decumbent, rooting at nodes, sparsely and loosely strigose to strigose-villous or villous; stipules oblong, margins with wide, free flanges, apical auricles free; seeds brown, transverse ridges brown … O. corniculata
2. Rhizomes or stolons usually present; stems herbaceous or becoming woody proximally, erect to ascending, sometimes decumbent, rarely rooting at nodes, glabrous, glabrate, strigillose, strigose, or sometimes sparsely villous proximally; stipules rudimentary or apparently absent, or, if oblong, margins narrowly to very narrowly flanged or without free portions, apical auricles slightly free or absent; seeds brown to blackish brown, transverse ridges brown, white, or with grayish or white lines [3]
3. Stems herbaceous, glabrous, glabrate, or sparsely to moderately strigose, sometimes sparsely villous proximally, hairs slightly curved, antrorse … O. florida
3. Stems usually evenly strigose to strigillose, hairs straight, antrorsely appressed to closely ascending [4]
4. Inflorescence of 1-3(8) flowers; flowers mostly homostylous; petals (2.5)4-8 mm long … O. dillenii
4. Inflorescence of (2)3-5(8) flowers; flowers distylous; petals 6-15 mm long … O. texana
5. Plants 20-60(90) cm tall; petioles, and usually stems, with septate and nonseptate hairs; inflorescences regular, irregular, or umbelliform cymes; flowers exserted above or at level of leaves … O. stricta
5. Plants 5-20(40) cm tall; petioles and stems with nonseptate hairs; inflorescences umbelliform cymes; flowers well exserted above level of leaves [6]
6. Plants cespitose or weakly colonial; pedicels strigose, hairs short, curved antrorsely; petals 9-15 mm long; fruit glabrate to puberulent or sparsely hirsute-strigose, hairs short; wide variety of habitats, including limestone … O. colorea
6. Plants strongly colonial; pedicels villous, hairs long, spreading; petals (13)15-20(23) mm long; fruit sparsely to densely hirsute-pilose, hairs long; calcareous habitats … O. macrantha

Key B:
1. Leaflets obdeltoid [2]
1. Leaflets obcordate [3]

2. Plant with a scaly bulb or bulblets; petals 8-12 mm long; fruit 3-8 mm long ... O. intermedia
2. Plant with a scaly rhizome; petals 15-22 mm long; fruit 12-18 mm long ... O. triangularis
3. Plant with a segmented rhizome, scaly when young; leaf blades pilose on the upper surface; sepals moderately to densely pilose ... O. articulata
3. Plant with a scaly bulb or bulblets; leaf blades glabrous on the upper surface; sepals glabrous to pubescent only at the tip [4]
4. Leaflets without orange-brown callosities; inflorescence with 1-3 flowers ... O. hispidula
4. Leaflets with orange-brown callosities, at least on the margins or at the sinus; inflorescence usually with 2-14 flowers [5]
5. Leaflets 2.5-4.5 cm long, with orange-brown callosities along the margins and sometimes elsewhere; inflorescence usually with 3-14 flowers ... O. debilis
5. Leaflets 0.8-1.5 cm long, with orange-brown callosities only at the sinus; inflorescence usually with 2-8 flowers ... O. violacea

Oxalis
*****Oxalis articulata*** Savigny {AFP} —
Oxalis corniculata L. {AFP} —
*****Oxalis debilis*** Kunth {AFP} —
*****Oxalis hispidula*** Zucc. {AFP} —
*****Oxalis intermedia*** A.Rich. {AFP} —
Oxalis macrantha (Trel.)Small {AFP} —
^*Oxalis triangularis* A.St.-Hil. {AFP} —
Oxalis violacea L. {AFP} —

SAPINDALES

SAPINDACEAE
1. Vines, with axillary tendrils ... Cardiospermum
1. Shrubs or trees, without tendrils [2]
2. Leaves opposite [3]
2. Leaves alternate [4]
3. Leaves simple or trifoliolate or pinnately compound; fruit a samaroid schizocarp ... Acer
3. Leaves palmately compound, with 5-7 leaflets; fruit a loculicidal capsule ... Aesculus pavia
4. Leaves simple; plant sometimes viscid ... Dodonaea
4. Leaves compound; plant not viscid [5]
5. Leaves trifoliolate ... Hypelate trifoliata
5. Leaves pinnately or bipinnately compound or bifoliolate [6]
6. Leaves usually with 2-4 leaflets in 1-2 pairs [7]
6. Leaves usually with more than 4 leaflets [8]
7. Petiole ca. <1/3 length of the lower leaflet; petiole or rachis not winged; inflorescence branches corymbiform cymes; flowers 5-merous; ovules 2 per locule ... Exothea paniculata
7. Petiole >1/2 length of the lower leaflet; petiole or rachis sometimes winged; inflorescence branches racemose; flowers 4-merous; ovules 1 per locule ... Melicoccus
8. Leaves bipinnately compound ... Koelreuteria
8. Leaves pinnately compound [9]
9. Leaflets crenate ... Cupania glabra
9. Leaflets entire to sinuate or obscurely crenate-sinuate [10]

10. Fruit a dehiscent capsule [11]
10. Fruit indehiscent [12]
11. Leaflet secondary veins spreading to ascending into a conspicuous submarginal vein; locules 1-seeded … Cupaniopsis anacardioides
11. Leaflet secondary veins arcuate; locules 2- to several-seeded … Harpullia arborea
12. Petiole subequal to rachis internodes; petiole or rachis sometimes winged; petals clawed, with or without 1-2 basal scales; fruit smooth or nearly so, saponiferous; seed only with tufts of hair at the base … Sapindus
12. Petiole longer than rachis internodes; petiole or rachis not winged; petals not clawed, without basal scales; fruit rugose to tuberculate, not saponiferous; seed covered in a fleshy, sweet arillode [13]
13. Leaflets with distinct lateral veins, the underside generally with visible reticulate venation, apices truncate, rounded, to obtuse, sometimes with an abrupt short-acumen to 5 mm long; fruit brownish and roughened to obscurely tuberculate … Dimocarpus longan
13. Leaflets glaucescent with obscure lateral veins, the underside lacking conspicuous reticulate venation, apices obtuse and with an acumen 5-12 mm long; fruit usually red and strongly tuberculate … Litchi chinensis

Acer

1. Young twigs green to purplish, often glaucous; bud scales white tomentose to villous, especially near the apex; leaves pinnately compound, with 3-7(9); flowers 4-merous; dioecious … A. negundo
1. Young twigs mostly red, brown, to gray, sometimes green at first; bud scales pubescent, strigose, or glabrous and ciliate along the margin; leaves simple; flowers 5(6)-merous; monoecious [2]
2. Buds and the bud scales acute at the tip; leaf blade margin mostly with few rounded or blunt lobes, otherwise subentire; flowers in terminal clusters, appearing with the leaves [3]
2. Buds and the bud scales rounded at the tip; leaf blade margin mostly regularly dentate, serrate, to doubly serrate, sometimes margins subentire or with few, regular obscure teeth in tri-lobed forms; flowers in axillary clusters, appearing before the leaves [4]
3. Larger leaf blades 9-13 cm long, 11-18 cm wide, with the lower surface glaucous to pallid, the lobes parallel-sided, slightly narrowed or incurved, or only slightly wider toward the base … A. floridanum
3. Larger leaf blades 5-9 cm long, 3-11 cm wide, the lower surface pale green, the lobes usually widest and flared toward the base … A. leucoderme
4. Leaf blade sinus more than half the length from the midvein to the lobe tip, the sinus base rounded; sepals connate; petals absent; fruit 3.5-8 cm long … A. saccharinum
4. Leaf blade sinus mostly half or less the length from the midvein to the lobe tip, the sinus base acute to obtuse; sepals distinct; petals present (similar to the sepals); fruit 1.5-5 cm long (A. rubrum) … Key A

Key A: varieties of A. rubrum (adapted from Ellis 1963).
1. Young stems and leaf blade lower surface mostly persistently tomentose; fruit 2.7-5 cm long, 0.8-1.5 cm wide; seeds 6.3-8.2 mm long … A. rubrum var. drummondii
1. Young stems and leaf blade lower surface glabrous to pubescent or tomentose, dense pubescence usually not persistent; fruit 1-2.8 cm long, 0.4-0.9 cm wide; seeds 3.9-6.6 mm long [2]
2. Leaf blade with 5 major veins and usually 5 major lobes (basal ones sometimes reduced) … A. rubrum var. rubrum

2. Leaf blade with 3 major veins and (0)3 major lobes ... A. rubrum var. trilobum

Acer floridanum (Chapm.)Pax {AFP} — Sometimes placed as a subspecies of *A. saccharum* (e.g. by Desmarais).
Acer leucoderme Small {AFP} — Sometimes placed as a subspecies of *A. saccharum* (e.g. by Desmarais).
Acer negundo L. {AFP} —
Acer rubrum L. var. ***drummondii*** (Hook. & Arn. ex Nutt.)Sarg. — Treated as a species by Ellis (1963), who observed chromosome counts of 2n ~65 and was unable to cross it with var. *rubrum* during one attempt in Tennessee. Ellis did mention that a few specimens were intermediate with *A. rubrum*.
Acer rubrum L. var. ***rubrum*** {AFP} — Ellis observed chromosome counts of 2n=78 for vars. *rubrum* and *trilobum* (as var. *tridens*). Phylogeography was investigated by Saeki et al. (2011). Ellis (1963) cited for each variety of *A. rubrum* a series of specimens nearly throughout Florida.
Acer rubrum L. var. ***trilobum*** Torr. & A.Gray ex K.Koch —
Acer saccharinum L. {AFP} — Ellis (1963) observed hybrids with *A. rubrum* (*A.* ×*freemanii* A.E. Murray) north of the Ohio River.

Aesculus
Aesculus pavia L. {AFP} — Generally considered poisonous, and may be used as a fish-poison (Batchelor 1873; Cary 1922).

Blighia
^*Blighia sapida* K.D.Koenig —

Cardiospermum
1. Fruit 0.9-1.3 cm long; seed 3-4 mm wide, the hilum cordate ... C. microcarpum
1. Fruit 2-4 cm long; seed 3-6 mm wide, the hilum semi-circular to cordate [2]
2. Seed hilum semi-circular and emarginate to only slightly cordate, 2/5-3/5 as wide as the seed; seed 3-4 mm wide ... C. corindum
2. Seed hilum broadly to strongly cordate with 2 distinct lobes, as wide as or nearly as wide as the seed; seed 5-6 mm wide ... C. halicacabum

Cardiospermum corindum L. {AFP} —
****Cardiospermum halicacabum*** L. {AFP} —
Cardiospermum microcarpum Kunth {AFP} —

Cupania
Cupania glabra Sw. {AFP} — SE. Monroe Co. keys.

Cupaniopsis
****Cupaniopsis anacardioides*** (A.Rich.)Radlk. {AFP} —

Dimocarpus
^*Dimocarpus longan* Lour. {AFP} —

Dodonaea

1. Leaf blade tip mostly broadly rounded to truncate, the lateral veins adaxially mostly not more pronounced than the often visible reticulate veins; flower unisexual; fruit with (2)3-4 wings, 4-7 mm long, the wings 2-4 mm wide … D. elaeagnoides
1. Leaf blade tip mostly bluntly acute to apiculate (sometimes truncate to emarginate), the lateral veins adaxially mostly more pronounced than the obscure reticulate veins; flower unisexual or bisexual; fruit usually with 2-4 wings, 7-13 mm long, the wings 3.5-6 mm wide [2]
2. Stems, leaves, inflorescence rachis, and fruit often glandular, occasionally sparsely puberulent; leaves (3)4.2-7.7(12) times longer than wide, to 2 cm wide, often varnished; flowers unisexual or bisexual; anthers 1.5-3 mm long; fruit mostly 1-2 cm wide, often reddish … D. angustifolia
2. Stems, leaves, inflorescence rachis, and fruit usually eglandular to weakly glandular, glabrous; leaves (2.2)3.5-4.1 times longer than wide, to 4 cm wide; flowers bisexual; anthers 1.1-1.7 mm long; fruit mostly 2-3 cm wide, usually pale brownish … D. viscosa

Dodonaea angustifolia L.f. {AFP} — Lippold (1978) preferred the name *D. bialata* (type from Venezuela) for this entity, since the type of *D. angustifolia* is from India. "The demarcation between *D. angustifolia* and *D. viscosa* is weakest in America" (Leenhouts 1983). Harrington & Gadek (2009) found little correlation between morphology and ITS sequences, primarily focusing on Australian material.
Dodonaea elaeagnoides Rudolphi ex Ledeb. & Alderst. {AFP} — SE. Monroe Co. keys; cultivated and sparingly naturalized elsewhere (Lee Co.).
Dodonaea viscosa Jacq. {AFP} — Type in Sloane 1725.

Exothea

Exothea paniculata (Juss.)Radlk. {AFP} — South Florida.

Filicium

^*Filicium decipiens* (Wight. & Arn.)Thwaites —

Harpullia

^*Harpullia arborea* (Blanco)Radlk. {AFP} —

Hypelate

Hypelate trifoliata Sw. {AFP} — SE.

Koelreuteria

Sometimes 1. Leaves 1-pinnate (rarely bipinnate), the leaflets coarsely crenate-serrate to pinnatisect-lobulate; capsule valves ovate to ovate-lanceolate, tip acute, immature greenish to tawny, mature dark lustrous brown … K. paniculata
1. Leaves bipinnate, the leaflets entire to serrate; capsule valves broadly elliptic to suborbicular, immature reddish purple, mature brown to tawny [2]
2. Leaflets weakly oblique, entire to regularly serrate; petals 4(5); calyx lobes fimbriate-glandular; capsule valves 3.7-6.6 cm long, 3-5 cm wide … K. bipinnata
2. Leaflets strongly oblique, entire to irregularly crenate-serrate (proximal leaflets sometimes pinnatisect); petals 4-5(6); calyx lobes ciliate-glandular; capsule valves 3.4-5(6) cm long, (2.5)3-4.6 cm wide … K. elegans

*__Koelreuteria bipinnata__ Franch. {AFP} —
*__Koelreuteria elegans__ (Seem.)A.C.Sm. subsp. __formosana__ (Hayata)F.G.Mey. {AFP} —
^*Koelreuteria paniculata* Laxm. — Rare in cultivation in FL, but often misapplied.

Litchi
^*Litchi chinensis* Sonn. —

Melicoccus
1. Leaflet tip obscurely acuminate, the acumen 1-7 mm long; perianth 4-merous; stamens extrorse; ovary not septate … M. bijugatus
1. Leaflet tip abruptly acuminate, the acumen 8-30 mm long; perianth 5-merous; stamens introrse; ovary septate … M. pedicellaris

^*Melicoccus bijugatus* Jacq. {AFP} — Sparingly naturalized in south Florida.
^*Melicoccus pedicellaris* (Sagot ex Radlk.)Acev.-Rodr. {AFP} — Putatively naturalized historic record from Miami-Dade Co. (NY).

Sapindus
1. Petiolule and leaflet lower surface along base of midrib densely villous; leaflets 10–20, the blade 0.6-3 cm wide, 2.5-17 times longer than wide; mature fruit lobe (mericarp) 8-14 mm wide; seed 6-9 mm wide … S. drummondii
1. Petiolule and leaflet lower surface along base of midrib sparsely to moderately pubescent or glabrous; leaflets 6–14(16), the blade 1.5-8.5 cm wide, 2.5-6 times longer than wide; mature fruit lobe (mericarp) 14-25 mm wide; seed 9-15 mm wide [2]
2. Leaf rachis winged or unwinged, sometimes the wings wider than the rachis; leaflets 4-8(12) per leaf, 1.8-3.5(4.5) times longer than wide; upper surface of petal lacking a basal appendage; freeze-intolerant, evergreen or only briefly deciduous just before the new flush of leaves, shoots lacking foliaceous cataphylls (only non-foliaceous bud scales present); flowering Sep-Feb; germination hypogeal and cryptocotylar, first true leaves simple … S. saponaria
2. Leaf rachis unwinged, or very narrowly winged, very rarely strongly winged; leaflets 6-15 per leaf, 3-6 times longer than wide; upper surface of petal with 2 densely pilose appendages 0.5-1.5 mm long arising near the petal blade base or claw apex; freeze-tolerant, winter deciduous, in the following spring new shoots with 2-3 oblong to obovate green, foliaceous cataphylls; flowering Apr-June; germination and first true leaves varied [3]
4. Petiolule 0-3 mm long; leaflet blade lanceolate to ovate-lanceolate, 1.5-4 cm wide, 3-6 times longer than wide, adaxially the blade usually not sunken along the midrib, at mid-blade the midrib to 0.2 mm high, the midrib and secondary veins pale green, tertiary and quaternary veins nearly concolorous with the blade surface; exduates lacking or these clear adaxially along the rachis, leaflet midrib, and abaxially on the blade surface (also present ephemerally on developing leaves); mature fruit lobe (mericarp) 14-18 mm wide; germination hypogeal and cryptocotylar; first true leaves 1-3 simple and scale-like … S. marginatus
4. Petiolule 1-10 mm long; leaflet blade ovate-lanceolate to ovate-elliptic, 1.5-8.5 cm wide, 2.5-5 times longer than wide, adaxially the blade often sunken along the midrib, at mid-blade the midrib to 0.4 mm high, the midrib and secondary veins whitish green to pale green, tertiary and quaternary veins conspicuous and discolorous from the blade surface; reddish, orangish, to yellowish exudates present adaxially along the rachis and leaflet midrib, usually abaxially on the leaflet blade surface especially near the base of the midrib (also present ephemerally on

developing leaves); mature fruit lobe (mericarp) (15)20-25 mm wide; germination epigeal and phanerocotylar; first true leaves compound … S. mukorossi

^*Sapindus drummondii* Hook. & Arn. {AFP} — Collection from Walton Co. (FLAS) probably from cultivation.

Sapindus marginatus Willd. {AFP} — Central and north Florida (Mississippi to South Carolina). Calcareous forests. Further study finds the germination hypogeal (Vincent Morris, pers. comm.) like *S. drummondii*, and probably the description of epigeal germination was based on seedlings of *S. mukorossi*.

^*Sapindus mukorossi* Gaertn. {AFP} — Locally naturalizes, otherwise mostly in cultivation.

Sapindus saponaria L. {AFP} — South Florida (Neotropics). Coastal hammocks.

ANACARDIACEAE

1. Leaves simple … Mangifera indica
1. Leaves compound [2]
2. Leaves all trifoliolate [3]
2. Leaves 3- to 25-foliolate, usually some leaves not trifoliolate [4]
3. Leaflets regularly crenate above the base; fruit red and glandular-pubescent; sap not blackening … Rhus aromatica
3. Leaflets usually entire, lobate, or with irregular and few teeth; fruit white to greenish white and glabrate; sap blackening … Toxicodendron
4. Leaflets 3-7 and petiolules mostly 1-2 cm long; sap blackening … Metopium toxiferum
4. Leaflets 3-25 and petiolules 0-1 cm long; sap blackening or not [5]
5. Fruit 1.5-3.5 cm long [6]
5. Fruit 0.2-0.7 cm long [7]
6. Leaflets entire, 2.5-30 cm long; petiolule 0.5-1 cm long … Sorindeia madagascariensis
6. Leaflets crenate to serrulate near the tip, 2.5-6 cm long; petiolule 0-0.4 cm long … Spondias purpurea
7. Leaflets mostly 9-25, mostly 0.8-2.4 cm wide; fruit glandular-pubescent … Rhus
7. Leaflets mostly 3-11, or 5-51 and 0.2-1 cm wide; fruit glabrous [8]
8. Petioles 2-4 cm long; rachis sometimes winged; leaflets acuminate, acute, to rounded-obtuse at the tip, the margin serrate or entire; fruit red; sap not blackening … Schinus
8. Petioles 2.5-11 cm long; rachis not winged; leaflets acute to acuminate at the tip, the margin entire; fruit white to greenish white; sap blackening … Toxicodendron vernix

Mangifera

^*Mangifera indica* L. {AFP} — Native to SE Asia. Widely cultivated in the central and southern peninsula, where it sets fruit and sparingly naturalizes. The mango industry in Florida became especially prevalent in the early 1900s, with the birth of the 'Haden' cultivar that originated in south Florida (Steffani 1954; Wolfe 1962; Knight, Jr. & Schnell 1994).

Metopium

Metopium toxiferum (L.)Krug &. Urb. {AFP} —

Rhus

1. Leaves with 3 leaflets (subg. Lobadium) … R. aromatica
1. Leaves mostly with 9-25 leaflets [2]
2. Stem, petiole, and leaf rachis glabrous … R. glabra

2. Stem, petiole, and leaf rachis pubescent [3]
3. Leaflets entire or sometimes a few with crenate margins, narrowly lanceolate to narrowly ovate ... R. copallinum
3. Leaflets regularly dentate, broadly lanceolate to broadly ovate ... R. michauxii

Rhus aromatica Aiton {AFP} —
Rhus copallinum L. {AFP} —
Rhus glabra L. {AFP} —
[X]***Rhus michauxii*** Sarg. {AFP} —Alachua Co. FE. SE. Known from only male plants from one location in 1961.

Schinus
1. Leaflets (5)15-35(51), linear to narrowly lanceolate, 0.2-1 cm wide ... S. molle
1. Leaflets (3)5-15, ovate to obovate, 0.8-3 cm wide ... S. terebinthifolia

^*Schinus molle* L. — Fruits sometimes used as pink peppercorns.
*****Schinus terebinthifolia*** Raddi {AFP} — Peninsula, primarily. Widespread, in numerous habitats, especially disturbed ones.

Sorindeia
^*Sorindeia madagascariensis* DC. {AFP} —

Spondias : Neotropical members revised by Mitchell & Daly (2015).

1. Leaflet apex usually obtuse to retuse, occasionally acute; usually flowering before leaf flush; inflorescence pseudoracemose (botryoid); sepals rotund to ovate; petals red to purple (rarely yellow), spreading to suberect at anthesis; stigmas slightly introrse as ovary develops; fruit maturing red to purple (rarely yellow) ... S. purpurea
1. Leaflet apex acute to acuminate; flowering with or after leaf flush; inflorescence a much-branched panicle; sepals deltoid, less often triangular or ovate; petals white to cream to greenish-yellow, patent to reflexed at anthesis; stigmas extrorse as ovary develops; fruit maturing yellow to orange(-brown) to green [2]
2. Leaves glabrous, the lateral leaflets usually medially symmetrical, the base usually symmetrical; anthers not entirely exceeding pistil at anthesis; stone continuous with pedicel, the endocarp lacking a fibrous matrix, provided with spiny projections ... S. dulcis
2. Leaves usually with some hairs on the petiolules or leaflet base, the lateral leaflets usually medially asymmetrical. the base usually oblique; anthers entirely exceeding pistil at anthesis; stone free from pedicel at maturity, endocarp with a fibrous matrix, lacking spiny projections ... S. mombin

^*Spondias dulcis* Parkinson —
^*Spondias mombin* L. —
^*Spondias purpurea* L. {AFP} —

Toxicodendron: Revised by Gillis (1971).

1. Shrubs to small trees, clonal (without stolons); leaves mostly with 7-15 leaflets; anthers strongly exserted, filaments filiform ... T. vernix

1. Vines or low shrubs, stoloniferous; leaves with 3 leaflets; anthers included, filaments subulate towards the base [2]
2. Leaflets mostly broadly elliptic to obovate in outline, widest at or above the middle, the tip truncate, rounded, to obtuse, without tufts of trichomes in the vein axils ... T. pubescens
2. Leaflets mostly ovate, widest below the middle, the tip acute to acuminate, with tufts of trichomes in the vein axils of the lower surface ... T. radicans

Toxicodendron pubescens Mill. {AFP} — Hybrids with *T. radicans* are thought to occur, though none are known in Florida (Gillis 1971: 416-420, 439).
Toxicodendron radicans (L.)Kuntze {AFP} — Only subsp. *radicans* is known in Florida (Gillis 1971).
Toxicodendron vernix (L.)Kuntze {AFP} —

BURSERACEAE
Bursera
Bursera simaruba (L.) Sarg. {AFP} —

MELIACEAE
1. Leaves 2- or 3-pinnately compound; leaflet margin serrate, dentate, or lobed ... Melia azedarach
1. Leaves once pinnately compound; leaflet margin entire [2]
2. Leaflets mostly elliptic, symmetric or nearly so ... Khaya senegalensis
2. Leaflets ovate to lanceolate, strongly asymmetric with the blade on the distal side of the midrib much larger than the proximal portion ... Swietenia

Azadirachta
^*Azadirachta indica* A.Juss. {AFP} —

Khaya
^*Khaya senegalensis* (Desr.)A.Juss. {AFP} —

Melia
****Melia azedarach*** L. {AFP} —

Swietenia
1. Leaflets 6-18 cm long, 3-7 cm wide; petals and sepals ciliolate; fruit 12-15 cm long; seed (including the wing) 7.5-10 cm long ... S. macrophylla
1. Leaflets 2-6.5 cm long, 1-3.5 cm wide; petals and sepals glabrous; fruit 6-10 cm long; seed (including the wing) 2-5 cm long ... S. mahagoni

^*Swietenia macrophylla* King {AFP} — The Pensacola shipwreck of *Nuestra Señora del Rosario y Santiago Apostól* in 1705 was composed presumably of this wood from the Yucatán (Henderson 2020).
Swietenia mahagoni (L.)Jacq. {AFP} — ST. Native to hammocks of southern Everglades and Monroe Co. keys; widely cultivated and sometimes naturalizing.

RUTACEAE

1. Herb or subshrub; leaves mostly bi- to tripinnately compound or divided, usually glaucous ... Ruta
1. Shrub or trees; leaves simple, 1-foliolate, 3-foliolate, or pinnately compound, usually not glaucous [2]
2. Leaves simple or 1-foliolate [3]
2. Leaves mostly 3-foliolate or pinnately compound, sparingly 1-foliolate [4]
3. Petiole sometimes winged; largest leaf blade usually >4 cm long; stamens 15 or more; fruit green to yellow to orange to pink, usually >1.5 cm long or wide ... Citrus
3. Petiole not winged; largest leaf blade usually <5 cm long; stamens 10; fruit black, <1.5 cm long or wide ... Atalantia buxifolia
4. Leaves and branches mostly opposite to subopposite ... Amyris
4. Leaves and branches alternate [5]
5. Leaflets mostly 4 or more [6]
5. Leaflets mostly 4 or less [7]
6. Fruit indehiscent, a berry ... Murraya paniculata
6. Fruit dehiscent, of 1-5 follicles ... Zanthoxylum
7. Stems unarmed [8]
7. Stems with spines or thorns [9]
8. Petiole shorter than proximal leaflets; fruit a berry ... Glycosmis parviflora
8. Petiole length subequal to proximal leaflets; fruit a samara ... Ptelea trifoliata
9. Petiole winged; stamens ca. 20; fruit 4-5 cm wide ... Citrus trifoliata
9. Petiole not winged; stamens 6-10; fruit to 1.5 cm wide ... Triphasia trifolia

Amyris
1. Leaflets 3-7, mostly 5-7, the largest ones usually >6 cm long; inflorescence and ovary puberulent; fruit 9-14 mm long ... A. balsamifera
1. Leaflets 3-5, mostly 3, the largest ones usually <6 cm long; inflorescence and ovary glabrous (or minutely puberulent, hairs <0.2 mm long); fruit 5-8 mm long ... A. elemifera

[x]***Amyris balsamifera*** L. {AFP} —Miami-Dade Co. & Monroe keys (Neotropics). Rockland hammocks. Last wild specimen perhaps from 1969 (*Avery 592*).
Amyris elemifera L. {AFP} —

Atalantia
Atalantia buxifolia* (Poir.)Oliv. ex Benth. {AFP} —

Bergera
^*Bergera koenigii* L. —

Casimiroa
^*Casimiroa edulis* La Llave —

Citrus: Numerous taxa and cultivars are cultivated, many of which may naturalize.

1. Leaflets 3 ... C. trifoliata
1. Leaves simple or leaflets 1 [2]
2. Leaves lacking an apparent articulation between the petiole and the blade; fruit to 25 cm long, the rind (pericarp) wider than the pulp (sarcocarp) ... C. medica

2. Leaves with an evident articulation between the petiole and the blade; fruit rind (pericarp) narrower than the pulp (sarcocarp) [3]
3. Flower bud and petal outer surface pinkish or purplish [4]
3. Flower bud and petal outer surface white or cream [5]
4. Fruit with a truncate to depressed, sunken nipple at the apex … C. ×taitensis
4. Fruit with a prominent apical nipple … C. ×limon
5. Flowers to 25 mm wide, petals 8-12 mm long; fruit to 4(-5) cm wide [6]
5. Flowers >25 mm wide, petals 14-25 mm long; fruit 3-15 cm wide [7]
6. Mature fruit with an apical nipple, the rind green to yellow … C. ×aurantiifolia
6. Mature fruit depressed or rounded at the apex, the rind orange … C. ×microcarpa
7. Petiole wings absent, or wing on one side subequal to narrower than the petiole; leaf blade apex usually emarginate; fruit rind 1(4) mm thick, easily removed, scarcely adherent to sarcocarp (mandarin orange) … C. ×aurantium
7. Petiole wing on one side usually subequal to wider than the petiole; leaf blade apex obtuse to acuminate; fruit rind 5-12 mm thick, adherent to sarcocarp, not easily removed or somewhat easily removed but leaving whitish fibrous remnants [8]
8. Cotyledons green; fruit 8-14 cm wide, pulp whitish to pink, bitter (grapefruit) … C. ×aurantium
8. Cotyledons white; fruit 4.5-8 cm wide, pulp mostly orange, sour to sweet [9]
9. Crushed leaf with a camphor-like odor; fruit often depressed globose, the rind rough, the juice sour (sour orange) … C. ×aurantium
9. Crushed leaf without a camphor-like odor; fruit subglobose, the rind smooth, the juice sweet (sweet orange) … C. ×aurantium

^*Citrus ×aurantiifolia* (Christm.)Swingle (*hystrix* × *medica*) {AFP} — Key lime, name promulgated by Gifford (1905). Early introduction, collected from Key West by Blodgett (NY01239940).
****Citrus ×aurantium*** L. (*maxima* × *reticulata*) cv. 'grapefruit' {AFP} — Native to Asia. Originated in Caribbean. Hybrid of sweet orange and pomelo (*C. maxima*).
****Citrus ×aurantium*** L. cv. 'mandarin orange or satsuma' {AFP} — Native to Asia. (misapplied to *C. reticulata* Blanco).
****Citrus ×aurantium*** L. cv. 'sour oange' {AFP} — Native to Asia.
****Citrus ×aurantium*** L. cv. 'sweet orange' {AFP} — Native to Asia. Introduced to St. Augustine in the 1500s during Spanish occupation, further developed by the British in the 1760s and by the USA in the early 1800s (Weeks 1977).
^*Citrus hystrix* DC. —
^*Citrus ×latifolia* (Yu.Tanaka)Yu.Tanaka (×*aurantiifolia* × ×*aurantium*) — Persian lime. Commercialized in central and south Florida to some degree, at least historically (Krome 1967).
^*Citrus ×limon* (L.)Osbeck (×*aurantium* × *reticulata*) {AFP} —
^*Citrus medica* L. {AFP} —
^*Citrus ×microcarpa* Bunge (*deliciosa* × *japonica*) {AFP} —
^*Citrus ×taitensis* Risso (*medica* × *reticulata*) {AFP} —
^*Citrus trifoliata* L. {AFP} —

Glycosmis

****Glycosmis parviflora*** (Sims)Little {AFP} —

Murraya
^*Murraya paniculata* (L.)Jack {AFP} — Primarily cultivated, but sometimes naturalizing.

Ptelea
Ptelea trifoliata L. {AFP} —

Ruta
1. Distalmost leaflet apices usually obtuse and similar in width to more proximal ones; petal margin fimbriate-ciliate, the fimbriae ⅓ to ½ as wide as the petals; locules bluntly acute to mucronate at the tip … Ruta chalepensis
1. Distalmost leaflet apices usually rounded to emarginate and wider than more proximal ones; petal margin entire to shallowly fimbriate, the fimbriae short and rarely to ¼ as wide as the petals; locules obtuse to rounded at the tip … Ruta graveolens

^*Ruta chalepensis* L. — Often confused with *R. graveolens* (which appears rare to absent in Florida).

Triphasia
****Triphasia trifolia*** (Burm.f.)P.Wilson {AFP} —

Zanthoxylum
1. Leaf paripinnate, without a terminal leaflet … Z. spinosum
1. Leaf imparipinnate, with a terminal leaflet [2]
2. Petiole and leaf rachis winged … Z. fagara
2. Petiole and leaf rachis not winged [3]
3. Plant lacking prickles or spines … Z. flavum
3. Plant usually with prickles and/or spines [4]
4. Stem with a pair of spines at the base of the leaf often present, stems otherwise smooth; leaf pubescent; inflorescence axillary … Z. americanum
4. Stem with prickles distributed along the stem and becoming enlarged on the trunk, without spines in distinct pairs at the leaf base; inflorescence terminal … Z. clava-herculis

Zanthoxylum americanum Mill. {AFP} — SE.
Zanthoxylum coriaceum A.Rich. {AFP} — SE. According to the latest revision (Reynel 2017), this is *Z. spinosum* (Sw.)Sw. s.lat. (=*Z. sapindoides* DC.), but due to seemingly differing morphologies and biogeography, *Z. coriaceum* is retained.
Zanthoxylum clava-herculis L. {AFP} —
Zanthoxylum fagara (L.)Sarg. {AFP} —
Zanthoxylum flavum Vahl {AFP} — SE.

SIMAROUBACEAE
1. Leaves simple; inflorescence a bracteate catkin … Leitneria floridana
1. Leaves compound; inflorescence a panicle with inconspicuous bracts [2]
2. Leaves with a terminal leaflet arising straight from the end of the rachis, the leaflets opposite to alternate, lanceolate-ovate, the tip sharply acute to acuminate, and the margins with gland-tipped teeth; fruit samaroid … Ailanthus altissima

2. Leaves without a terminal leaflet or the terminal leaflet oblique to the rachis, the leaflets subopposite to alternate, broadly elliptic, the tip rounded to bluntly acute, and the margins entire; fruit a drupe … Simarouba glauca

Ailanthus

^*Ailanthus altissima* (Mill.)Swingle {AFP} — Sparingly cultivated, and rarely naturalized (unlike northern USA, where it is widely naturalized).

Leitneria

Leitneria floridana Chapm. {AFP} — ST.

Simarouba

Simarouba glauca DC. {AFP} —

BRASSICALES

CARICACEAE

Carica

1. Plants dioecious; fruits globose, <6 cm wide and long (wild/native form) … C. papaya
1. Plant trioecious; fruits elongate, >6 cm wide or long (domesticated form) … C. papaya

Carica papaya L. 'wild form' {AFP} —This species is considered native to the state, as seeds of papaya dated to around the year 300 AD were found in Lee Co. (Ward 2011). Small-fruited specimens of coastal and southern Florida (e.g. Franck 2615, Judd 5970) are thought to represent native forms (Ward 2011).

^*Carica papaya* L. cv. 'domesticated form' {AFP} — The domestication of the papaya probably began in southern Mexico and Central America (Carvalho & Renner 2012). Papapya is widely cultivated in Florida and may naturalize from some of the cultivated strains.

MORINGACEAE

Moringa

^*Moringa oleifera* Lam. {AFP} — Sparingly naturalized.

BATACEAE

Batis

Batis maritima L. {AFP} —

BRASSICACEAE

subf. Brassicoideae, supertribe Arabodae
  Arabideae: Abdra, Arabis, Draba, Tomostima
subf. Brassicoideae, supertribe Brassicodae
  Brassiceae: Brassica, Cakile, Diplotaxis, Eruca, Erucastrum, Mutarda, Raphanus, Sinapis
  Conringeae: Conringia
  Sisymbrieae: Sisymbrium
  Thlaspideae: Thalspi
  Thelypodieae: Warea
subf. Brassicoideae, supertribe Camelinodae
  Boechereae: Boechera

Camelineae: Capsella
Cardamineae: Cardamine, Nasturtium, Planodes, Rorippa
Descuraineae: Descurainia
Lepideae: Lepidium
Physarieae: Erysimum
subf. Brassicoideae, supertribe 'unplaced'
Anastaticeae: Lobularia

1. Petals (4)5-25 mm long … Key A
1. Petals 0-5.5 mm long, or absent … Key B
Key A
1. Petals white to pink or purple [2]
1. Petals pale yellow to yellow [9]
2. All leaf blades simple and entire (if sinuate then cordate-clasping) [3]
2. At least some (especially more basal) leaf blades lobed (sometimes obscurely), compound, pinnatisect, or toothed to sinuate [4]
3. Stamens (at least some) included; ovary/fruit sessile (without a distinct gynophore) on the pedicel … Conringia orientalis
3. Stamens exserted; ovary/fruit stipitate on distinct gynophores, distinct from the subtending pedicel … Warea
4. Cauline leaves palmately compound or the blade palmately lobed with deep sinuses … Cardamine concatenata
4. Cauline leaves simple and unlobed or pinnately compound, pinnately lobed, to pinnatisect [5]
5. Petals 15-25 mm long, the veins often conspicuously discolorous and darker than the rest of the petal … Raphanus
5. Petals 5-12(16) mm long, the veins inconspicuous to slightly discolorous from the rest of the petals [6]
6. Fruit terete [7]
6. Fruit flattened [8]
7. Fruit 2-segmented with a transverse fragmentation into an apical and a basal fragment; primarily of maritime habitats … Cakile
7. Fruit not fragmenting transversely into 2 segments; primarily of disturbed sites … Sisymbrium altissimum
8. Leaves obscurely lobed, toothed, to sinuate … Cardamine bulbosa
8. Leaves pinnatisect or pinnately lobed … Erucastrum gallicum
9. Fruit truncate at tip, scarcely if at all tapered … Sisymbrium altissimum
9. Fruit tapered at tip to a persistent style base [10]
10. Lower flowers/fruits each subtended by a leaf or leafy bract … Erucastrum gallicum
10. Lower flowers/fruits usually ebracteate or, rarely, proximalmost 1 or 2 flowers bracteate [11]
11. Plant often hispid or scabrous; petal veins often conspicuously discolorous and darker than the rest of the petal; fruit with subtle veins between the seeds … Raphanus raphanistrum
11. Plant glabrous to hispid; petal veins inconspicuous to slightly discolorous from the rest of the petals; fruit with subtle to strong primary venation [12]
12. Fruit valves 3-veined … Sinapis arvensis
12. Fruit longitudinally 1-veined [13]
13. Sepals usually erect or ascending, rarely spreading; seeds in 1 row per locule … Brassica
13. Sepals usually ascending to spreading; seeds in 2 rows per locule … Diplotaxis

Key B

1. Fruit 0.5-1.5 as long as wide, the fruit septum parallel or contiguous with the gynophore or pedicel (angustiseptate) or with 1-2 seeds if latiseptate [2]
1. Fruit 2-40 times longer than wide, the fruit septa perpendicular to the gynophore or pedicel (latiseptate) and with >2 seeds [5]
2. Fruit obdeltoid to obcordate and acute towards the base ... Capsella bursa-pastoris
2. Fruit generally rounded or bi-orbicular [3]
3. Cauline leaves petiolate and unlobed ... Lobularia maritima
3. Cauline leaves sessile or pinnate to pinnatisect [4]
4. Fruit 1-6 mm long, with 1 seed per locule ... Lepidium
4. Fruit 6-20 mm long, with >1 seed per locule ... Thlaspi arvense
5. Leaves simple, entire to dentate [6]
5. At least some leaves pinnatifid, lobate (sometimes obscurely), or dissected [9]
6. Trichomes simple or absent; fruit 4-10 cm long ... Boechera canadensis
6. Trichomes cruciform or stellate with 2-8 rays; fruit 0.2-4 cm long [7]
7. Herb to 150 cm tall; fruit cylindric, 1-4 cm long ... Erysimum cheiranthoides
7. Herb to 40 cm tall; fruit flattened, 0.2-1.6 cm long [8]
8. Leaf blade surfaces with cruciform trichomes; petals 2-3 mm long; fruit 2-6 mm long ... Abdra brachycarpa
8. Leaf blade surfaces with simple and 2-7-rayed trichomes; petals 3.5-4 mm long; fruit 5-15 mm long ... Tomostima cuneifolia
9. Trichomes dendritic ... Descurainia pinnata
9. Trichomes simple or absent [10]
10. Fruit truncate at tip, scarcely if at all tapered ... Sisymbrium
10. Fruit tapered at tip (sometimes abruptly) to a persistent style base [11]
11. Fruit flattened [12]
11. Fruit cylindric or roughly so [13]
12. Fruit valves dehiscing elastically, replum flattened; seeds not winged ... Cardamine
12. Fruit valves not dehiscing elastically, replum rounded; seeds winged ... Planodes virginica
13. Pedicel 5-17(24) mm long; petals white; fruit (0.6)1-3 cm long ... Nasturtium
13. Pedicel 1-15 mm long; petals absent, white, or yellow; fruit 0.4-1.4(2.1) cm long ... Rorippa

Abdra
Abdra brachycarpa (Nutt. ex Torr. & A.Gray)Greene {AFP} —

Boechera
Boechera canadensis (L.)Al-Shehbaz {AFP} — SE.

Brassica
1. Cauline leaves auriculate or amplexicaul at the base [2]
1. Cauline leaves tapered at the base, not auriculate and not amplexicaul [4]
2. Biennial to perennial; petals (15)18-25(30) mm; terminal segments of fruits (3)4-11 mm long ... B. oleracea
2. Annual to biennial; petals 6-16 mm; terminal segments of fruits (5)8-22 mm long [3]
3. Flowers usually not overtopping buds, rarely at same level, when open; petals pale yellow, 10-16 mm long; terminal segments of fruits (5)9-16 mm long ... B. napus
3. Flowers overtopping or equaling buds when open; petals deep yellow, 6-11(13) mm long; terminal segments of fruits 8-22 mm long ... B. rapa

4. Plant glabrous to glabrate; pedicels elongate, slender; silique terete, loosely ascending, (2)3-6 cm long ... B. juncea
4. Plant hirsute; pedicels short, thick; silique 4-angled, closely appressed to rachis, 1-2.7 cm long ... Mutarda nigra

**Brassica juncea* (L.)Czern. {AFP} —
^*Brassica napus* L. {AFP} —
^*Brassica oleracea* L. —
**Brassica rapa* L. {AFP} —

Cakile It is quite possible that essentially all populations in Florida are within a continuum of one interbreeding taxon, and alternative taxonomies could be considered.

1. Petal claw not distinct; fruit 8-ribbed, (3)5-9 mm wide, beak somewhat flattened, the apex retuse or blunt (rarely acute) ... C. edentula subsp. harperi
1. Petal claw distinct; fruit terete to 4-angled, 3-4 mm wide, beak conic to fusiform, the apex acute [2]
2. Stems erect to ascending; leaves usually fleshy; petals lavender to white, 1.3-3 mm wide; infructescence usually 10-20 cm long; fruiting pedicel 2.5-7 mm long (mostly north of Lake Okeechobee) ... C. constricta
2. Stems erect to prostrate; leaves not especially fleshy; petals white, rarely lavender, 3-4.5 mm wide; infructescence usually 20-30 cm long; fruiting pedicel 1.5-4 mm long (Pinellas and Brevard counties southward) [3]
3. Leaf blade margins usually sinuately or crenately lobed, rarely pinnatisect; fruits lanceoloid, apex not tapering abruptly, terminal segment at least 2 times length of proximal segment (southeastern coast) ... C. lanceolata subsp. lanceolata
3. Leaf blade margins pinnatifid or entire; fruits fusiform or lanceoloid, apex tapering abruptly, terminal segment less than 2 times length of proximal segment [4]
4. Fruits fusiform, not constricted at articulation, 4- or 8-sulcate (southern coast) ... C. lanceolata subsp. fusiformis
4. Fruits lanceoloid, usually constricted at articulation, weakly 4-angled or terete (western coast) ... C. lanceolata subsp. pseudoconstricta

Cakile constricta Rodman —
Cakile edentula (Bigel.)Hook. subsp. ***harperi*** (Small)Rodman {AFP} —
Cakile lanceolata (Willd.)O.E.Schulz {AFP} —

Capsella
**Capsella bursa-pastoris* (L.)Medik. {AFP} —

Cardamine
1. Cauline leaves simple, not lobed (or only scarcely lobed), not pinnatisect ... C. bulbosa
1. Cauline leaves (usually at least some) pinnately or palmately compound, or lobed, or pinnatisect [2]
2. Rhizomatous perennial; cauline leaves palmately compound or the blade palmately lobed with deep sinuses ... C. concatenata
2. Annual or short-lived, without rhizomes; cauline leaves pinnately compound, or the blade pinnately lobed to pinnatisect [3]

3. Basal leaves rosulate, persistent to anthesis; stem base and petiole hirsute; stamens typically 4 per flower ... C. hirsuta
3. Basal leaves often withered by anthesis; stem base and petiole glabrous to sparsely hirsute; stamens 6 per flower [4]
4. Lateral leaflets of cauline leaves narrowly oblong, linear or filiform, 1-3 mm wide; fruits 0.6-0.9 mm wide ... C. parviflora
4. Lateral leaflets of cauline leaves orbicular, ovate, elliptic, or oblong, 4-25 mm wide; fruits 0.8-1.5 mm wide [5]
5. Often rather robust herbs; cauline leaves often with generally ovate, obovate, elliptic, to oblong segments or leaflets, cuneate to decurrent at the base, petiolulate or not petiolulate ... C. pensylvanica
5. Usually rather weak herbs; cauline leaves often with generally obovate to elliptic leaflets or segments, often somewhat petiolulate [6]
6. Middle stem leaflets strikingly hairy on the upper surface; basal leaves rosulate; stem markedly hairy; terminal leaflet of the middle stem leaf 1-7(9)-lobed with both deep and shallow sinuses; petals <2 times as wide as sepals ... C. flexuosa
6. Middle stem leaflets predominantly glabrous on the upper surface; basal leaves not rosulate; stem hairy or glabrous basally, glabrous or rarely sparsely hairy distally; terminal leaflet of the middle stem leaf (1)3-5(7)-lobed with deep and sharp sinuses; petals >2 times as wide as sepals ... C. occulta

Cardamine bulbosa (Schreb. ex Muhl.)Britton et al. {AFP} —
Cardamine concatenata (Michx.)O.Schwarz {AFP} —
*****Cardamine hirsuta*** L. {AFP} —
*****Cardamine occulta*** Hornem. —
Cardamine parviflora L. {AFP} —
Cardamine pensylvanica Muhl. ex Willd. {AFP} —

Conringia
*****Conringia orientalis*** (L.)Dumort. {AFP} —

Descurainia
Descurainia pinnata (Walter)Britton {AFP} —

Diplotaxis
1. Annuals to short-lived perennials, without buds on roots; stems frequently scapose, moderately pubescent; gynophores obsolete or to 0.5 mm long ... D. muralis
1. Perennials with adventitious buds on roots; stems frequently foliose, glabrescent, or sparsely pubescent basally; gynophores 0.5-3 mm ... D. tenuifolia

*****Diplotaxis muralis*** (L.)DC. {AFP} —
*****Diplotaxis tenuifolia*** (L.)DC. {AFP} —

Eruca
^*Eruca vesicaria* (L.)Cav. —

Erucastrum
*****Erucastrum gallicum*** (Willd.)O.E.Schulz {AFP} —

Erysimum
*****Erysimum cheiranthoides*** L. {AFP} —

Lepidium
1. Cauline leaves pinnatisect; fruit schizocarpic, separating at the septum into 2 halves, strongly rugose-veined … L. didymum
1. Cauline leaves mostly simple and entire to dentate, rarely pinnatisect; fruit not schizocarpic, smooth to obscurely veined [2]
2. Cauline leaves clasping the stem, the base sagittate to auriculate; fruit (4)5-6.5 mm long … L. campestre
2. Cauline leaves not clasping, the base acute to attenuate; fruit 2-4 mm long [3]
3. Petals absent or 0-0.9 mm long; rachises with straight, slender to subclavate trichomes; fruits obovate to obovate-suborbicular, widest beyond middle … L. densiflorum
3. Petals usually present, rarely rudimentary, 1-2(2.5) mm long; rachises usually with curved, cylindrical trichomes, rarely glabrous; fruits orbicular, widest at middle … L. virginicum

*****Lepidium campestre*** (L.)R.Br. {AFP} —
*****Lepidium densiflorum*** Schrad. {AFP} —
*****Lepidium didymum*** L. {AFP} —
Lepidium virginicum L. {AFP} —

Lobularia
^*Lobularia maritima* (L.)Desv. {AFP} —

Mutarda
^*Mutarda nigra* (L.)Bernh. {AFP} — Moved from *Brassica* by German (2022).

Nasturtium
1. Leaflets to 2(2.5) cm long; petiole not or scarcely clasping; fruit 1-1.5 mm wide; fruit with seeds in 1 row in each loculus; face of seed very finely alveolate-reticulate (100-150 alveoli per side), dull amber … N. floridanum
1. Leaflets to 4.5 cm long; petiole auriculate-clasping; fruit 2-3 mm wide; fruit with seeds in 2 rows in each loculus; face of seed coarsely alveolate-reticulate (25-50 alveoli per side), shiny amber-brown … N. officinale

•***Nasturtium floridanum*** (Al-Shehbaz & Rollins)Al-Shehbaz & R.A.Price {AFP} —
*****Nasturtium officinale*** W.T.Aiton {AFP} —

Planodes
Planodes virginica (L.)Greene {AFP} —

Raphanus
1. Petals white to yellow; fruits (2.5)3-8(11) mm wide, strongly constricted between seeds and usually breaking, strongly ribbed, beak narrowly conical … R. raphanistrum

1. Petals white, pink, to purple; fruits (5)7-13(15) mm wide, rarely slightly constricted between seeds and usually not breaking, not ribbed, beak narrowly to broadly conical to linear … R. sativus

**Raphanus raphanistrum* L. {AFP} —
**Raphanus sativus* L. {AFP} — Naturalized occasionally and cultivated.

Rorippa
1. Rhizomatous, primarily submerged with emergent inflorescences; basal leaves lacking; submerged cauline leaves dissected into filiform segments; petals white … R. aquatica
1. Lacking rhizomes, primarily emergent; basal leaves present or lacking; cauline leaves usually not submerged, pinnatisect to toothed or lobed; petals yellow or absent [2]
2. Pedicels 0.5-2(4) mm long; petals absent (sepals present, yellowish) … R. sessiliflora
2. Pedicels 1.5-14 mm long; petals present, yellow (sepals present, yellowish) [2]
3. Fruit 2.5-10 mm long, usually subequal to shorter than pedicel … R. palustris
3. Fruit 8-14 mm long, usually >2 times the pedicel length … R. teres

Rorippa aquatica (Eaton)E.J.Palmer & Steyerm. {AFP} —
Rorippa palustris (L.)Besser {AFP} —
Rorippa sessiliflora (Nutt.)Hitchc. {AFP} —
Rorippa teres (Michx.)Stuckey {AFP} —

Sinapis
**Sinapis arvensis* L. {AFP} —

Sisymbrium
1. Fruiting pedicel 1.5-3 mm long, closely appressed to the rachis; fruit 1-2 cm long … S. officinale
1. Fruiting pedicel 5-20 mm long, ascending to spreading; fruit 2.5-12 cm long [2]
2. Stem sparsely to densely hirsute towards the base; fruiting pedicel nearly as thick as the fruit and appearing somewhat indistinct from the fruit … S. altissimum
2. Stem glabrous to sparsely pubescent towards the base; fruiting pedicel thinner than the fruit and obviously distinct from the fruit … S. irio

**Sisymbrium altissimum* L. {AFP} —
**Sisymbrium irio* L. {AFP} —
**Sisymbrium officinale* (L.)Scop. {AFP} —

Thlaspi
**Thlaspi arvense* L. {AFP} —

Tomostima
Tomostima cuneifolia (Nutt. ex Torr. & A.Gray)Al-Shehbaz et al. {AFP} —

Warea
1. Cauline leaves sessile, the blade rounded or rounded-auriculate at the base [2]
1. Cauline leaves petiolate or the blade cuneate at the base [3]

2. Leaf blade base clasping the stem, amplexicaul to strongly auriculate; central peninsula ... W. amplexifolia
2. Leaf blade base not clasping the stem, obtuse to minutely auriculate; panhandle ... W. sessilifolia
3. Petal claws coarsely papillate to pubescent, margins crisped; gynophores 3-6(7) mm, shorter than the pedicel; peninsula ... W. carteri
3. Petal claws nearly smooth or obscurely papillate, margins entire; gynophores (5)7-11 mm, longer than the pedicel; panhandle ... W. cuneifolia

•***Warea amplexifolia*** (Nutt.)Nutt. {AFP} — FE. SE.
•***Warea carteri*** Small {AFP} — FE. SE.
Warea cuneifolia (Muhl. ex Nutt.)Nutt. {AFP} — SE.
Warea sessilifolia Nash {AFP} —

CAPPARACEAE The genera proposed are rather distinctive, although it had been proposed to place them all in an expanded *Morisonia*.

1. Plant glabrous to puberulent; young stems roughly terete; stamens 60-160 per flower; seed embedded in a white pulp ... Cynophalla flexuosa
1. Plant lepidote, especially the young branches and lower leaf surface; young stems usually angular-ridged; stamens 15-50 per flower; seed embedded in a reddish pulp ... Quadrella jamaicensis

Cynophalla
Cynophalla flexuosa (L.)J.Presl {AFP} —

Quadrella
Quadrella jamaicensis (Jacq.)J.Presl {AFP} —

CLEOMACEAE : Some opt to include all under an expansive *Cleome*, while others recognize several genera as done here.

1. Leaflets linear, 0.5-2 mm wide ... Polanisia tenuifolia
1. Leaflets ovate, lanceolate, to oblanceolate, 5-35 mm wide [2]
2. Stem with stipular spines 1-5 mm long ... Tarenaya
2. Stems without stipular spines [3]
3. Ovary and fruit sessile on pedicel (gynophore obsolete) ... Arivela viscosa
3. Ovary and fruit stipitate on pedicel (gynophore subtending fruit, distinct from pedicel) [4]
4. Bracts or leaves subtending flower unifoliolate ... Cleoserrata speciosa
4. Bracts or leaves subtending flower trifoliolate [5]
5. Stem leaves usually 5-foliolate; inflorescence distinct, with the subtending bracts strongly reduced relative to stem leaves ... Gynandropsis gynandra
5. Stem leaves usually trifoliolate; inflorescence indistinct and flowers appearing singly, with the subtending leaves scarcely if at all reduced relative to stem leaves ... Sieruela rutidosperma

Arivela
****Arivela viscosa*** (L.)Raf. {AFP} —

Cleoserrata
*****Cleoserrata speciosa*** (Raf.)Iltis {AFP} —

Gynandropsis
*****Gynandropsis gynandra*** (L.)Briq. {AFP} —

Polanisia
Polanisia tenuifolia Torr. & A.Gray {AFP} —

Sieruela
*****Sieruela rutidosperma*** (DC.)Roalson & J.C.Hall {AFP} —

Tarenaya
1. Sepals, ovary, and fruit glabrous (other plant parts may be glandular-pubescent); petals usually pink or purple, sometimes white … T. hassleriana
1. Sepals, ovary, and fruit glandular-pubescent; petals white or greenish white … T. spinosa

*****Tarenaya hassleriana*** (Chodat)Iltis {AFP} —
*****Tarenaya spinosa*** (Jacq.)Raf. {AFP} —

MALVALES

CISTACEAE
1. Leaf blades 1-35 mm wide; flowers conspicuous 10-20 mm wide with 5 yellow petals (petals absent in cleistogamous flowers) … Crocanthemum
1. Leaf blades 0.5-8 mm wide; flowers inconspicuous, 1-2 mm wide with 3 greenish to purplish petals … Lechea

Crocanthemum Previously, all species here had been placed in *Helianthemum*.

1. Larger leaf blades 9-35 mm wide, 1.5-3.5 times longer than wide, the lower surface and lateral veins usually plainly visible … C. carolinianum
1. Larger leaf blades 2-9(13) mm wide, 2.5-10 times longer than wide, the lower surface and often the lateral veins concealed or obscured by the dense tomentum [2]
2. Ovary and fruit densely stellate-pubescent, at least in the upper half [3]
2. Ovary and fruit glabrous (persistent inner sepals may be pubescent) [4]
3. Flowers in terminal umbellate clusters; fruit 2-valved … C. arenicola
3. Flowers in leafy thyrses; fruit 3-valved … C. nashii
4. Leaf blade attenuate-cuneate at the base; flowers in leafy thyrses … C. rosmarinifolium
4. Leaf blade cuneate to rounded-cuneate at the base; flowers mostly terminal or subterminal [5]
5. Basal rosette-like leaves absent; flowers usually 5-45 per cluster or cyme (including both chasmogamous and cleistogamous flowers) … C. corymbosum
5. Basal rosette-like leaves sometimes present; flowers usually 1-3(7) per cluster or cyme (including both chasmogamous and cleistogamous flowers) … C. georgianum

Crocanthemum arenicola (Chapm.)Barnhart {AFP} —
Crocanthemum carolinianum (Walter)Spach {AFP} —

Crocanthemum corymbosum (Michx.)Britton {AFP} —
Crocanthemum georgianum (Chapm.)Barnhart {AFP} —
Crocanthemum nashii (Britton)Barnhart {AFP} —
Crocanthemum rosmarinifolium (Pursh)Janch. {AFP} —

Lechea: See treatment by Spaulding (2013) with numerous diagnostic photos.
1. Flowers 1-3 in fascicles (young stems villous, becoming strigose) … L. cernua
1. Flowers solitary (stems varied) [2]
2. Stems villous [3]
2. Stems glabrous to strigose [4]
3. Leaves <1 cm long; sepals uniformly pubescent; inner broad sepals not bowed or only slightly so; capsule ellipsoid, indehiscent and distinctly exserted from calyx (obviously longer than the sepals); fruit usually 1-seeded … L. divaricata
3. Leaves often >1.5 cm long; sepals sparsely pubescent to glabrous; inner broad sepals distinctly bowed (U- or V-shaped in cross-section); capsule subglobose, splitting to 3 valves at maturity and about equal to the calyx in length or slightly exserted; fruit usually with 2-4 seeds … L. mucronata
4. Inner broad sepals usually densely cinereous, the surface occluded (scarcely any surface visible or accessible) [5]
4. Inner broad sepals glabrous to strigose, the surface visible or accessible [6]
5. Inflorescence compact, dense; inner sepals rust-colored in fruit; seeds 3 … L. torreyi var. congesta
5. Inflorescence loose, open; inner sepals brown in fruit; seeds 4-6 … L. torreyi var. torreyi
6. Leaves to 30 mm long, with an indurate, callous tip (light brown to reddish, 0.1-0.5 mm long); outer sepals moderately strigose, inner sepals shorter … L. pulchella var. ramosissima
6. Leaves to 10 mm long (rarely to 20 mm long), lacking an indurate, callous tip; outer sepals glabrous to sparsely strigose, inner sepals shorter, subequal, to longer [7]
7. Outer slender sepals shorter than the broad inner sepals [8]
7. Outer slender sepals subequal to longer than the broad inner sepals [9]
8. Stems woody at base; sepals spreading when in fruit; fruit subglobose and strongly exserted (1/3–1/2 of length) … L. deckertii
8. Stems mostly herbaceous to slightly woody; sepals not spreading in fruit or only slightly so; fruit cylindric to ovoid and included to slightly exserted … L. lakelae
9. Leaves usually >1.5 mm wide; outer slender sepals distinctly longer than the inner broad sepals and often equaling mature capsule (slender sepals sometimes a little shorter or a little longer than fruit); mature capsule brownish (remnants of the stigmas on top are not as distinct because of the darker capsule) … L. minor
9. Leaves usually <1.5 mm wide; outer slender sepals only a little longer or subequal to the inner broad sepals and shorter than mature capsule; mature capsule usually straw-colored (the reddish brown stigmas are easily seen capping the fruit because they contrast with the lighter capsule) … L. sessiliflora

•***Lechea cernua*** Small {AFP} — ST.
Lechea deckertii Small {AFP} —
•***Lechea divaricata*** Shuttlew. ex Britton {AFP} — SE.
XX•***Lechea lakelae*** Wilbur {AFP} — Collier Co. Coastal pinelands and scrub. SE. Known only from Marco Island, with the last specimen perhaps being from 1987 (*Richardson s.n.*).
Lechea minor L. {AFP} —
Lechea mucronata Raf. {AFP} —

Lechea pulchella Raf. var. ***ramosissima*** (Hodgdon)Sorrie & Weakley {AFP} —
Lechea sessiliflora Raf. {AFP} —
Lechea torreyi (Chapm.)Legg. ex Britton var. ***congesta*** Hodgdon ex Lemke — Combination validated by Lemke (2014).
Lechea torreyi (Chapm.)Legg. ex Britton var. ***torreyi*** {AFP} —

MALVACEAE

subf. Byttnerioideae
- Byttnerieae: Ayenia
- Hermannieae: Melochia, Waltheria
- Theobromatae: Guazuma, Theobroma

subf. Grewioideae
- Apeibeae: Corchorus, Triumfetta
- Grewieae: Grewia

subf. Tilioideae: Tilia
subf. Dombeyoideae: Dombeya
subf. Sterculioideae: Brachychiton, Firmiana, Sterculia
subf. Bombacoideae
- Adansonieae: Adansonia
- Bombaceae: Bombax, Ceiba, Pachira, Pseudobombax

subf. Malvoideae
- Gossypieae: Cienfuegosia, Gossypium
- Hibisceae: Abelmoschus, Hibiscus, Kosteletzkya, Malachra, Malvaviscus, Pavonia, Talipariti, Thespesia, Urena
- Malveae, Abutilinae: Abutilon, Anoda, Callianthe, Herissantia, Sida, Wissadula
- Malveae, Malvinae: Callirhoe, Malva, Malvastrum, Modiola

1. Trees; leaves palmately compound … Key A
1. Herbs, shrubs, or trees; leaves simple [2]
2. Leaf blade margins entire (the blade sometimes lobed or leaves compound) … Key B
2. Leaf blade margins toothed or undulate, sometimes obscurely so (the blade sometimes lobed) [3]
3. Calyx without a subtending epicalyx … Key C
3. Calyx subtended by an epicalyx of bracts … Key D

Key A: Trees; leaves palmately compound
1. Trunk massively enlarged relative to branches, not strongly buttressed, trunk and branches lacking prickles; flowers pendulous on elongate pedicels; calyx lobed (stamens numerous); fruit indehiscent; endocarp spongy … Adansonia digitata
1. Trunk enlarged, buttressed at base, or not much enlarged, trunk or branches with or without prickles; flowers not pendulous, the pedicels shorter than the flower; calyx truncate or lobed (stamens numerous or 5-10); fruit dehiscent; endocarp with kapok (cottony fibers) [2]
2. Trunk and branches lacking prickles; petals linear-oblong, recurved to recurved-coiling; anthers numerous, strongly exserted [3]
2. Trunk or branches with prickles (the main trunk sometimes becoming smooth); petals elliptic to ovate, incurved, plane, to recurved; anthers 5 or numerous, not exserted or scarcelys so [5]
3. Leaflet venation eucamptodromous … Pseudobombax ellipticum
3. Leaflet venation brochidodromous [4]
4. Stamens red distally; fruit brown, surface roughened … Pachira aquatica

4. Stamens white; fruit green, smooth … Pachira glabra
5. Petals and filaments red to pale red; fertile stamens numerous per flower … Bombax ceiba
5. Petals and filaments white to pink; fertile stamens 5 (sometimes with staminodes) per flower … Ceiba

Key B: Leaves simple, entire
1. Leaf blades usually all lobed [2]
1. Leaf blades usually unlobed [4]
2. Leaf blades deeply palmately divided (sometimes only on the distal leaves), usually at least some sinuses halfway to the midrib or nearly reaching the petiole … Callirhoe)
2. Leaf blades unlobed to shallowly lobed, the sinuses usually less than halfway to the midrib [3]
3. Leaf blades 16-50 cm wide; flowers unisexual, with white to red sepals, the petals absent; fruit a foliaceous follicle; seeds ecomose … Firmiana
3. Leaf blades 4-15 cm wide; flowers bisexual, with an epicalyx, calyx, and petals; fruit a loculicidal capsule; seeds comose (cotton) … Gossypium
4. Herbs to shrubs <1 m tall; leaf blades narrowly oblong-lanceolate, rarely a few lobed … Cienfuegosia
4. Shrubs to trees >1 m tall; leaf blades ovate to orbicular [5]
5. Leaf blade orbicular to orbicular-ovate, abruptly acuminate; fruit dehiscent … Talipariti
5. Leaf blade ovate-deltate, gradually acuminate; fruit indehiscent … Thespesia

Key C: Leaves simple, not entire, without an epicalyx
1. (Key C) Shrubs to trees to 20 m, developing a definite trunk [2]
1. Herbs or shrubs to 2.5 m, scarcely developing a definite trunk [3]
2. Leaf blade base symmetric to slightly asymmetric; peduncle free, without a large foliaceous bract; fruit a drupe … Grewia
2. Leaf blade base conspicuously asymmetric; peduncle adnate to a large foliaceous bract; fruit nutlike … Tilia
3. Leaf blades <2 cm long [4]
3. Leaf blades >2 cm long [5]
4. Leaf blades coriaceous, with conspicuous reticulate venation, with bristle-tipped teeth; stamens 5 per flower; mericarps muricate … Ayenia
4. Leaf blades chartaceous, with inconspicuous reticulate venation, the teeth not bristle-tipped; stamens 10 or more per flower; mericarps not muricate … Sida
5. Stamens 5 per flower [6]
5. Stamens 10 or more per flower [7]
6. Corolla white, pink, to purple; fruit usually with 4-10 seeds; styles 5 per flower … Melochia
6. Corolla yellow to orange; fruit with 1 seed; style 1 per flower … Waltheria
7. Flowers subtended by foliaceous bracts with dark veins bordered by pale areas (Pavonia s.lat.) … Malachra
7. Flowers not subtended by foliaceous bracts with darkened veins and pale areas [8]
8. Stamens free [9]
8. Stamens monadelphous, joined along a staminal column [10]
9. Leaf blades unlobed, <3.1 cm wide; fruit dehiscent, lacking hooked spines … Corchorus
9. Leaf blades sometimes lobed, >2 cm wide; fruit indehiscent, with hooked spines (adherent to clothing) … Triumfetta
10. Fruit bladder-like … Herissantia
10. Fruit dehiscent, not bladder-like [10]
11. Corolla white, pink, lavender, to violet … Anoda

11. Corolla pale yellow, yellow, pinkish yellow, orange-yellow, to pinkish red [12]
12. Each mericarp with 1 seed … Sida
12. Each mericarp usually with 2-5 seeds [13]
13. Mericarps 5-25, each mericarp undivided, usually with 3-5 seeds … Abutilon
13. Mericarps 3-5, each mericarp divided into 2 cells, one cell indehiscent with 1 seed and the other cell dehiscent with 2 seeds … Wissadula

Key D: Leaves simple, not entire, with an epicalyx
1. Corolla tubular in shape with the petals erect and appressed to one another, sheathing the staminal column (Pavonia s.lat.) … Malvaviscus
1. Corolla open, the petals generally spreading and exposing the staminal column [2]
2. Fruit a schizocarp with mericarps that individually split apart from each other at maturity [3]
2. Fruit a loculicidal capsule with the mericarps remaining united at maturity [8]
3. Epicalyx bracts 5-7 per flower [4]
3. Epicalyx bracts 2-3 per flower [5]
4. Leaf blade lower surface lacking glands at the base of the major veins … Pavonia
4. Leaf blade lower surface with 1-3 prominent glands at the base of the major veins … Urena
5. Leaf blades unlobed, truncate to cuneate at the bse … Malvastrum
5. Usually at least some leaf blades lobed, or if unlobed then the blade cordate to subcordate at the base
6. Leaf blades shallowly lobed, the sinuses usually less than halfway to the midrib, the margins regularly toothed … Malva
6. Usually at least some leaf blades deeply palmately divided (sometimes only on the distal leaves) with sinuses halfway to the midrib or nearly reaching the petiole, or the blade with irregularly incised sinuses, or the leaf blades unlobed and deltate-ovate [7]
7. Leaf blade lobes linear and widely separated from each other, or the leaf blades unlobed and deltate-ovate; petals erose-margined, purple, 2-4 cm long; fruits lacking bristles and spines … Callirhoe)
7. Leaf blade lobes not linear, not widely separated, the blades mostly suborbicular; petals entire, orange to red, to 1 cm long; fruits bristly and with apical bifurcate spines … Modiola
8. Annual herbs; calyx deciduous in fruit … Abelmoschus
8. Perennial herbs, shrubs, to trees; calyx persistent in fruit [9]
9. Fruit apically acute to obtuse; seeds usually 2 or more per locule … Hibiscus
9. Fruit apically depressed; seeds usually 1 per locule … Kosteletzkya

Abelmoschus
^*Abelmoschus esculentus* (L.)Moench {AFP} —

Abutilon
1. Petioles and stems not pilose, longest hairs < 1 mm long [2]
1. Petioles and stems pilose, hairs 2–3.5 mm long [3]
2. Carpels 10-12; fruits ca. 1 cm wide, mericarps acute or aristae to 2 mm long … A. permolle
2. Carpels 13-15; fruit ca. 2 cm wide, mericarps aristate, the tips 3–5 mm long … A. theophrasti
3. Stems viscid, with stalked glands; petals orange-yellow with a darkened reddish base … A. hirtum
3. Stems eglandular; petals yellow to to pinkish [4]
4. Lower leaf blade surface appearing light green; petals yellow; fruits ca. 1.5 cm wide, mericarps < 13 mm long … A. grandifolium

4. Lower leaf blade surface appearing whitish tomentose; petals pink to pinkish pale yellow; fruits ca. 2 cm wide, mericarps > 12 mm long ... A. hulseanum

**Abutilon grandifolium* (Willd.)Sweet {AFP} —
**Abutilon hirtum* (Lam.)Sweet {AFP} —
Abutilon hulseanum (Torr. & A.Gray)Torr. ex A.Gray {AFP} —
Abutilon permolle (Willd.)Sweet {AFP} —
**Abutilon theophrasti* Medik. {AFP} —

Adansonia
^*Adansonia digitata* L.—

Anoda
**Anoda cristata* (L.)Schltdl. {AFP} —

Ayenia
1. Leaf blade suborbicular to elliptic, 0.8-1.4 times longer than wide ... A. euphrasiifolia
1. Leaf blade elliptic-lanceolate, 1.8-2.4 times longer than wide ... A. insulicola

Ayenia euphrasiifolia Griseb. {AFP} —
**Ayenia insulicola* Cristóbal {AFP} — Waif, Hillsborough Co.

Bombax
^*Bombax ceiba* L. —

Brachychiton
^*Brachychiton acerifolius* Macarthur & C.Moore —

Callianthe
^*Callianthe picta* (Gillies ex Hook. & Arn.)Donnell —

Callirhoe
1. Proximal leaf blades ovate-lanceolate, the distal ones sometimes deeply divided; pedicels subequal to shorter than the flowers ... C. triangulata
1. Usually all leaf blades deeply divided; pedicels elongate and much longer than the flowers [2]
2. Stems usually hirsute; calyx lobes divergent in bud, not forming a point ... C. involucrata var lineariloba
2. Stems glabrate to appressed-pubescent; calyx lobes valvate in bud, forming apiculate or acuminate point ... C. papaver

Callirhoe involucrata* (Torr. & A.Gray)A.Gray var. ***lineariloba* (Torr. & A.Gray)A.Gray {AFP} —
Callirhoe papaver (Cav.)A.Gray {AFP} — SE.
Callirhoe triangulata (Leavenw.)A.Gray {AFP} —

Ceiba
1. Leaflet entire; flowers mostly in fascicles; petals 2-3.5 cm long; filaments fused into a tube surrounding the ovary, lacking appendages, filaments free above the ovary ... Ceiba pentandra

1. Leaflets toothed; flowers solitary; petals 5-9 cm long; filaments united into a tube throughout or nearly so, with lobed appendages, with 5 sinuous anthers at the tip ... Ceiba speciosa

^*Ceiba pentandra* (L.)Gaertn. —
^*Ceiba speciosa* (A.St.-Hil. et al.)Ravenna —

Cienfuegosia
Cienfuegosia yucatanensis Millsp. {AFP} — SE.

Corchorus
1. Stems, leaves, and fruits densely pubescent to tomentose, hairs stellate; capsules subglobose to short-ellipsoid ... C. hirsutus
1. Stems, leaves, and fruits glabrous to hirsute, hairs simple; capsules cylindric [2]
2. Leaf blade sometimes with setaceous-awned teeth at the base; sepals awned; fruit 3-4 locular, each part terminated by a bifid awn ... C. aestuans
2. Leaf blade without setaceous-awned teeth; sepals without awns; fruit 2-locular, awnless or each part 2-awned [3]
3. Stems puberulent in lines, hairs retrorse, blunt-tipped; capsules terete, sparsely to moderately strigose to strigulose, distally abruptly constricted to beaklike apex, awnless; sepals hirsute; stamens 15-25 ... C. hirtus
3. Stems short-pilose in 1(-2) lines, hairs erect, sharp-tipped; capsules flattened, minutely hirtellous to hispidulous, distally subtruncate, each valve 2-awned; sepals glabrous; stamens 50-70 ... C. siliquosus

****Corchorus aestuans*** L. {AFP} —
****Corchorus hirsutus*** L. {AFP} —
Corchorus hirtus L. {AFP} —
Corchorus siliquosus L. {AFP} —

Dombeya
^*Dombeya wallichii* (Lindl.)Benth. ex Baill. —

Firmiana
****Firmiana simplex*** (L.)W.Wight {AFP} —

Gossypium
1. Leaf blades shallowly to moderately deeply lobed, the lobes acuminate and usually broadest at their base; bracts of the involucel 5-19-laciniate, free; tetraploid (subgenus Karpas) [2]
1. Leaf blades moderately to deeply lobed, the lobes acute to acuminate and usually narrowed or constricted at their base; bracts of the involucel entire, 3-7-laciniate, or 5-13-dentate, free or sometimes connate basally; diploid (subgenus Gossypium) [3]
2. Stipules 1-5 cm long; leaf blades with 3-7 lobes, the central lobe ovate to lanceolate and usually >1.5 times as long as wide; bracts of the involucel 5-17-laciniate, the teeth acuminate from the base, separated by rounded sinuses; calyx usually truncate, to 10 mm long (excluding teeth); petals usually yellow at anthesis with a reddish or purplish basal spot; fruit usually with 3 locules, narrowly ovoid, mostly elongate, pitted; cultivated ... G. barbadense

2. Stipules 0.5-1.5(2) cm long; leaf blade with 3-5 lobes, the central lobe triangular to ovate and usually 1-1.5 times as long as wide; bracts of the involucel 3-19-laciniate, the teeth triangular and acute or lanceolate and acuminate distally, separated by mostly acute sinuses; calyx truncate or with acute lobes or long-acuminate teeth, usually <6 mm long (excluding teeth); petals cream to pale yellow at anthesis, with or without a dark reddish spot at base; fruit with 3-5 locules, ovoid or subglobose (rarely elongate), smooth; native and cultivated … G. hirsutum
3. Involucel bracts entire or 3-7-laciniate, enclosing bud, sometimes basally connate; petals usually yellow at anthesis with a reddish or purplish basal spot, sometimes white or flushed purplish or basal spot absent; fruit elongated, flaring widely, releasing cotton; cultivated … G. arboreum
3. Involucel bracts 5-13-dentate, often flaring, usually free; petals yellow at anthesis with a reddish or purplish basal spot; fruit subglobose, not flaring on dehiscence (cotton removed with difficulty); cultivated … G. herbaceum

Gossypium hirsutum L. {AFP} — ST. Native to coastal south Florida (d'Eeckenbrugge & Lacape 2014). Wild cotton was reportedly found in Hudson in Pasco Co. and Grant in Brevard Co. (Noble 1969). An important crop of north Florida (Ouzts 1996). Although *G. hirsutum* is now considered a state-threatened species, wild cotton was once called "a worthless plant" in south Florida and wild and cultivated plants of south Florida were purposely destroyed from 1932-1971 with the intent of the "final eradication of all wild cotton in Florida" in order to reduce the impact of the boll weevil to commercial cotton (Henneberry et al. 1980; USDA 1950, 1955, 1956). It was claimed that from 1933-1950, "over 17 million such plants" were destroyed (USDA 1950). The cotton boll weevil (*Anthonomus grandis*) is thought to be native primarily to southern Mexico (Jones 2001), and was detected in Texas in 1892 and in wild cotton plants of Florida in 1932. The host plants of the weevil may include *Cienfuegosia, Gossypium, Hampea, Hibiscus*, and *Thespesia* (Jones 2001).

Grewia
^*Grewia asiatica* L. {AFP} —
^*Grewia occidentalis* L. —

Guazuma
^*Guazuma ulmifolia* Lam.—

Herissantia
Herissantia crispa (L.)Brizicky {AFP} —

Hibiscus
1. Largest leaf blades to 6.5 cm long, to 7 cm wide; corolla 1.6-3(4) cm long; fruit 1-1.5 cm long [2]
1. Largest leaf blades to 30 cm long, to 30 cm wide; corolla 3-14 cm long; fruit 1.2-3.5 cm long [3]
2. Plants perennial; leaf blades shallowly 3-lobed to unlobed, coarsely dentate; flower nodding or pendulous; primary veins of calyx not zigzag; corolla red … H. poeppigii
2. Plants annual; most leaf blades 3-5 lobed, the lobes pinnately undulate to lobed; flowers ascending to erect; primary veins of calyx zigzag; corolla cream, yellow, to purplish with purple-brown basal spot (sect. Trionum) … H. trionum
3. Leaf blade lower surface conspicuously tomentose or scabrous [4]

3. Leaf blade lower surface glabrous or with few hairs or prickles along veins [9]
4. Leaf blade scabrous (Sabdariffa) … H. aculeatus
4. Leaf blade tomentose [5]
5. Stems densely tomentose; calyx often hispid; epicalyx bract bifid at the apex (Sabdariffa) … H. furcellatus
5. Stems glabrous to densely tomentose; calyx tomentose; epicalyx bract not bifid at the apex [6]
6. Leaf blade unlobed to lobed, the margins coarsely, irregularly crenate-dentate, the inner pair of lateral veins divergent from the midrib >45 degrees [7]
6. Leaf blade usually unlobed, the margin regularly sinuate to dentate, the inner pair of lateral veins ascending at an angle <45 degrees to the midrib [8]
7. Pedicel and calyx eglandular; free portion of filaments secund; capsule apex apiculate; seeds verrucose-papillose (sect. Muenchhusia) … H. grandiflorus
7. Pedicels and calyx glandular-hairy; free portion of filaments not secund; capsule apex impressed; seeds with long straight hairs dorsally and dorsolaterally … H. mutabilis
8. Upper and lower leaf blade densely tomentose and usually concolorous; epicalyx densely coarsely pubescent with both short-stellate hairs and longer spreading simple hairs especially near the margins; capsules densely pubescent throughout … H. lasiocarpos
8. Upper leaf surface glabrous or sparsely pubescent, darker than the tomentose lower surface especially when dry; epicalyx uniformly, minutely stellate-canescent; capsules glabrous or sparsely pubescent on sutures (sect. Muenchhusia) … H. moscheutos
9. Epicalyx bract setose, lobed, or bifid [10]
9. Epicalyx bract entire (may be pubescent or ciliate) [12]
10. Nectary absent on leaves and calyx … H. radiatus
10. Nectary present on midrib of leaf blade lower surface and calyx lobe midrib [11]
11. Stems and leaves often dark red; epicalyx bract sometimes appendaged; corolla reddish with darker veins and base … H. acetosella
11. Stems and leaves generally green, sometimes with red veins; epicalyx bracts without an appendage; corolla yellowish, often with a dark purple center (Sabdariffa) … H. cannabinus
12. Leaf blade unlobed [13]
12. Leaf blade lobed, usually at least some [14]
13. Flowers horizontal to declinate; petals not pinnatifid-laciniate, spreading or slightly reflexed; epicalyx bract 0.3-3 cm long … H. rosa-sinensis
13. Flowers pendulous; petals pinnatifid-laciniate, strongly reflexed; epicalyx bract to 0.2 cm long … H. schizopetalus
14. Usually at least some leaf blades 3-lobed with lateral lobes perpendicular to the midrib (sect. Muenchhusia) … H. laevis
14. Leaf blades with 3-5 palmately radiating lobes or the inner lateral lobes ascending [15]
15. Leaf blades with 3-5 palmately radiating lobes; petals red (sect. Muenchhusia) … H. coccineus
15. Leaf blades unlobed to shallowly 3-lobed; petals white to pink or bluish … H. syriacus

^*Hibiscus ×archeri* W.Watson (*rosa-sinensis* × *schizopetalus*)—
Hibiscus coccineus Walter {AFP} —
Hibiscus grandiflorus Michx. {AFP} —
Hibiscus laevis All. {AFP} —
Hibiscus lasiocarpos Cav. {AFP} — There has been ample disagreement on whether to treat this as a variety (Turner 2008), subspecies (Blanchard 2008), or species (Hill 2009).
Hibiscus moscheutos L. {AFP} —

^*Hibiscus mutabilis* L. {AFP} —
Hibiscus poeppigii (Spreng.)Garcke {AFP} — SE.
^*Hibiscus ×rosa-sinensis* L. (*cooperi* × *kaute*) {AFP} — Very common in cultivation, mostly sterile, probably a prehistoric hybrid derived from *H. cooperi* (of Vanuatu) and *H. kaute* (of Tahiti) (Braglia et al. 2024).
^*Hibiscus schizopetalus* (Mast.)Hook.f. {AFP} —
^*Hibiscus syriacus* L. {AFP} —
****Hibiscus trionum*** L. {AFP} —

Kosteletzkya

1. Petals 5–14 mm long, usually white, sometimes with pink blush, sometimes drying yellowish; calyx 3.2–6 mm long; fruits variously hairy but with long, curved or hooked, simple hairs on sutures; seeds minutely hairy … K. depressa
1. Petals 15–45 mm long, usually pink, rarely white; calyx 7–11 mm long; fruits hairy throughout, sometimes minutely so; seeds glabrous [2]
2. Leaf blades linear-lanceolate, 0.5-1.5(2) cm wide, margin without serrations for proximal half of blade, lobes reflexed … K. virginica var. smilacifolia
2. Leaf blades hastate to lanceolate, (1.5)3.5-16 cm wide, margin serrate or biserrate, unlobed or with lobes not reflexed … K. virginica var. virginica

Kosteletzkya depressa (L.)O.J.Blanchard et al. {AFP} — SE.
•***Kosteletzkya virginica*** (L.)Ledeb. var. ***smilacifolia*** Chapm. {AFP} — Southern peninsula. Also said to differ also by an unbranched inflorescence (Alexander et al. 2012).
Kosteletzkya virginica (L.)C.Presl ex A.Gray var. ***virginica*** {AFP} — Populations in the Americas had been called *K. virginica* but that name was synonymized with *K. pentacarpos* since the American populations seem morphologically indistinguishable from the Eurasian populations (Blanchard 2008). Given the vast disjunction, *K. virginica* is tentatively retained, but perhaps infraspecific status is useful.

Malachra

1. Leaf blade lower surface (and stems) with stellate and simple hairs [2]
1. Leaf blade lower surface with simple hairs only (stellate hairs may be present on stems) [3]
2. Peduncle 1-4(6) cm long; bracts acute to acuminate; mericarps pubescent, smooth … M. alceifolia
2. Peduncle 1-16 cm long; bracts mostly obtuse to rounded; mericarps glabrous, reticulate … M. capitata
3. Stems with only smaller hairs that ar 2-4 radiate (also with simple hairs); petals white; mericarps glabrous or glabrate, reticulate … M. fasciata
3. Stems with some longer hairs 2-3 radiate and some smaller hairs 2-4 radiate (also with simple hairs); petals yellow to reddish; mericarps pubescent, smooth or with prominent nerves … M. urens

****Malachra alceifolia*** Jacq. —
****Malachra capitata*** (L.)L. {AFP} —
****Malachra fasciata*** Jacq. {AFP} —
****Malachra urens*** Poit. ex Ledeb. —

Malva

*__Malva parviflora__ L. {AFP} —

Malvastrum

1. Leaves and stems with usually dense, 5–12-rayed, often tufted, stellate hairs; inflorescences dense terminal spikes 3–10 cm … M. americanum
1. Leaves and stems with sparse, 3–6-rayed, appressed, bilateral and stellate hairs; inflorescences solitary flowers, axillary or congested or loose terminal spikes 1–2 cm [2]
2. Leaf blade upper surface with only stellate hairs; mericarp mucros/cusps 0.1–0.4 mm; 2-fid floral bracts usually present; filament tubes sparsely puberulent … M. corchorifolium
2. Leaf blade upper surface with simple or stellate hairs; mericarp mucros/cusps 0.5–2.3 mm; 2-fid floral bracts absent; filament tubes glabrous … M. coromandelianum

__Malvastrum americanum__ (L.)Torr. {AFP} —
__Malvastrum corchorifolium__ (Desr.)Britton ex Small {AFP} —
*__Malvastrum coromandelianum__ (L.)Garcke {AFP} —

Malvaviscus

1. Leaf blade mostly broadly ovate, cordate at the base, conspicuously stellate-pubescent on the lower surface … M. arboreus var. drummondii
1. Leaf blade mostly ovate-lanceolate to lanceolate, truncate to broadly cuneate at the base, glabrate on the lower surface … M. penduliflorus

*__Malvaviscus arboreus__ Cav. var. __drummondii__ (Torr. & A.Gray)Schery {AFP} —
*__Malvaviscus penduliflorus__ DC. {AFP} —

Melochia

1. Leaf blades tomentose and canescent with stellate hairs … M. tomentosa
1. Leaf blades sericeous to glabrate with mostly simple hairs [2]
2. Inflorescence a dense, globose head [3]
2. Inflorescence of solitary to few flowers per node, not in dense heads [4]
3. Inflorescence mostly solitary and terminal; bracts and calyx lobes linear-lanceolate, longer than the mature fruit, glandular-stipitate … M. corchorifolia
3. Inflorescence usually of numerous axillary heads; bracts and calyx lobes lanceolate to deltate, shorter than the mature fruit, eglandular … M. nodiflora
4. Peduncle usually evident below each flower or flower cluster; bracteoles at base of pedicel; pedicel 1-5 mm long; fruits pyramidal, 5-winged, 7–14 mm diam … M. pyramidata
4. Peduncle usually absent or obscure below each flower or flower cluster; bracteoles immediately subtending flower; pedicel 0-1 mm long; fruits subglobose, not winged, 2.5–6 mm diam … M. spicata

*__Melochia corchorifolia__ L. {AFP} —
*__Melochia nodiflora__ Sw. {AFP} —
__Melochia pyramidata__ L. {AFP} —
__Melochia spicata__ (L.)Fryxell {AFP} —
[x]__Melochia tomentosa__ L. {AFP} —

Modiola

__Modiola caroliniana__ (L.)G.Don {AFP} —

Pachira
^*Pachira aquatica* Aubl. —

Pavonia
1. Leaf blades margins obscurely dentate to entire; inflorescence a terminal raceme … P. paludicola
1. Leaf blade margins regularly crenate to dentate; flowers solitary, axillary [2]
2. Leaf blades narrowly lanceolate, often hastate; petals lavender to pink; mericarps without awns … P. hastata
2. Leaf blades ovate; petals yellow; mericarps each with 3 retrorsely barbed, 6-7 mm long awns … P. spinifex

*__*Pavonia hastata*__ Cav. {AFP} —
__*Pavonia paludicola*__ Nicolson ex Fryxell {AFP} — SE.
__*Pavonia spinifex*__ (L.)Cav. {AFP} —

Pseudobombax
^*Pseudobombax ellipticum* (Kunth)Dugand —

Sabdariffa: Monographed by Barrett et al. (2025); previously included in *Hibiscus* s.lat.
1. Stems and leaf blade surface scabrous (aculeate) … H. aculeatus
1. Stems and leaf blade surface not scabrous, sometimes with prickles [2]
2. Stems and leaf blade lower surface densely tomentose; calyx often hispid (nectary present on midrib of calyx and leaf blade lower surface) … H. furcellatus
2. Stems and leaf blade lower surface glabrous to sparsely pubescent; calyx glabrous to hispid [3]
3. Nectary present on midrib of leaf blade lower surface (usually near petiole) and calyx lobe midrib [4]
3. Nectary absent on leaves and calyx [5]
4. Stems and leaves often dark red, sometimes green; stems and petioles without prickles; epicalyx bract sometimes appendaged; corolla cream, yellow, pink, to reddish with darker veins and maroon at base … H. acetosella
4. Stems and leaves generally green, sometimes with red veins; petioles and/or stems often with antrorse prickles epicalyx bracts without an appendage; corolla yellowish, often with a dark purple center … H. cannabinus
5. Calyx red, fleshy; epicalyx lobes simple … H. gossypifolia
5. Calyx green, not fleshy; epicalyx lobes simple to bifurcate … H. radiatus

^*Sabdariffa acetosella* (Welw. ex Hiern)M.M. Hanes & R.L. Barrett {AFP} —
__*Sabdariffa aculeata*__ (Walter)M.M. Hanes & R.L. Barrett {AFP} —
* __*Sabdariffa cannabina*__ (L.)M.M. Hanes & R.L. Barrett {AFP} —
__*Sabdariffa furcellata*__ (Desr.)M.M. Hanes & R.L. Barrett. {AFP} —
^ *Sabdariffa gossypifolia* (Mill.)M.M. Hanes & R.L. Barrett — (syn. *Hibiscus sabdariffa* L.)
*__*Sabdariffa radiata*__ (Cav.)M.M. Hanes & R.L. Barrett {AFP} —

Sida
1. Stems procumbent; leaf blades <2 cm long [2]

1. Stems erect, ascending, or occasionally reclining; leaf blades 1-9 cm long, at least the larger ones [3]
2. Leaves fairly evenly distributed along the stem; leaf blades crenate throughout the margin; petals white; mericarps slightly rugose … S. abutifolia
2. Leaves crowded at the stem tips; leaf blades dentate in the upper half; petals reddish, orangeish, to yellowish; mericarps prominently muricate or tuberculate … S. ciliaris
3. Style branches and mericarps 5 [4]
3. Style branches and mericarps 7-14 [6]
4. Stems usually viscid, glandular-puberulent; calyx usually glandular … S. glabra
4. Stems eglandular, not viscid; calyx eglandular [5]
5. Stems and petioles minutely stellate-hairy, hairs to 0.5 mm; stems sometimes with a ca. 1 mm long spinose tubercle at the petiole base; pedicels apparent, >3 mm long … S. spinosa
5. Stems and petioles with simple 1.5–3 mm long hairs mixed with shorter stellate hairs, rarely only stellate-hairy; stems lacking a spinose tubercules; pedicels inconspicuous, <4 mm long … S. urens
6. Petioles of larger mature leaves 7-25 mm long; leaf blades cordate at the base … S. cordifolia
6. Petioles 0.5-10 mm long; leaf blades cuneate to truncate at the base [7]
7. Leaf blades linear to oblong (S. elliottii s.lat.) … Key A
7. Leaf blades lanceolate, ovate, to rhomboid [8]
8. Stems pilose with simple hairs 1-2 mm long … S. planicaulis
8. Stems only stellate-pubescent, the hairs 0.5 mm long or less [9]
9. Leaf blades glabrate or sparsely pubescent on the lower surface; pedicels unjointed or jointed at the base, usually <1 cm long, occasionally to 2 cm long [10]
9. Leaf blades sparsely pubescent or moderately to densely tomentose on the lower surface; pedicels jointed, usually >1 cm long, at least the longer ones [11]
10. Leaves and branches spirally arranged; stipules 2-5 mm long; mericarp prickles to 1.5 mm long … S. antillensis
10. Leaves and branches often distichous; stipules 6-12 mm long; mericarp prickles to 0.5 mm long … S. ulmifolia
11. Leaf blades glabrate or sparsely pubescent on the lower surface … Sida aff. acuta
11. Leaf blades moderately to densely tomentose on the lower surface [12]
12. Stem hairs to 0.1 mm long; pedicels (1)3–4 cm long; petals yellow, lacking a reddish spot … S. rhombifolia
12. Stem hairs to 0.5 mm long; pedicels to 2 cm long; petals cream or pale yellow with a reddish spot at the base … S. santaremensis

Key A: segregates of *Sida elliottii*
1. Stipules 1.5-2 times as long as adjacent petiole, linear; leaf blade 4-6 times as long as wide; seeds … S. rubromarginata
1. Stipules 0.5-1 times as long as adjacent petiole, falcate to subulate; leaf blade 4-21 times as long as wide [2]
2. Leaf blade crenulate-serrate, teeth more dense towards apex, lower surface with prominent venation and sparsely, minutely stellate-pubescent to glabrate; calyx lobe apex acuminate to weakly caudate, yellowish to greenish cream at base to medially green and distally dark green … S. littoralis
2 Leaf blade evenly serrate, lower surface stellate-pubescent; calyx lobe apex acute to weakly acuminate, evenly green [3]
3. Plants 0.5-1 m tall; calyx villous-hirsute at base and along costae; mericarp prickles to 1 mm long … S. elliottii var. elliottii

3. Plants to 0.5 m tall; calyx without villous-hirsute hairs; mericarp prickles 0.2-0.7 mm long … S. elliottii var. parviflora

Sida abutifolia Mill. {AFP} —
++***Sida*** aff. ***acuta*** — Monroe Co. keys (USF acc no. 271454, similar to morphotype *Duss 2338*, NY). Known from one record. Allied with other Caribbean forms (going under *S. acuta*, nearly certainly misapplied), but no clear name applicable (even considering the numerous Gandoger names). Type of *S. acuta* from India and quite different. Apparently an undescribed taxon.
Sida ciliaris L. {AFP} —
****Sida cordifolia*** L. {AFP} —
Sida elliottii Torr. & A.Gray var. ***elliottii*** {AFP} —
Sida elliottii Torr. & A.Gray var. ***parviflora*** Chapm. —
****Sida glabra*** Mill. {AFP} —
•***Sida littoralis*** Siedo —
****Sida planicaulis*** Cav. {AFP} —
Sida rhombifolia L. {AFP} —
•***Sida rubromarginata*** Nash — See Siedo (2014).
****Sida santaremensis*** Monteiro {AFP} —
****Sida spinosa*** L. {AFP} —
Sida ulmifolia Mill. {AFP} —
****Sida urens*** L. {AFP} —

Sterculia
^*Sterculia foetida* L. —

Talipariti
1. Stems and petioles stellate-pubescent; epicalyx bracts 12-17 mm long, ca. ½ the length of the calyx … T. tiliaceum var. pernambucense
1. Stems and petioles glabrate or with few stellate hairs; epicalyx bracts 8-10 mm long, ca. ⅓ the length of the calyx … T. tiliaceum var. tiliaceum

****Talipariti tiliaceum*** (L.)Fryxell var. ***pernambucense*** (Arruda)Fryxell {AFP} —
****Talipariti tiliaceum*** (L.)Fryxell var. ***tiliaceum*** {AFP} —

Theobroma
^*Theobroma cacao* L. —

Thespesia
****Thespesia populnea*** (L.)Sol. ex Corrêa {AFP} —

Tilia
1. Leaf blade lower surface sparsely to moderately stellate-hairy, hairs often caducous … T. americana var. caroliniana
1. Leaf blade lower surface stellate-tomentose persistently moderately to densely stellate-hairy … T. americana var. heterophylla

Tilia americana L. var. ***caroliniana*** (Mill.)Castigl. {AFP} —

Tilia americana L. var. ***heterophylla*** (Vent.)Loudon {AFP} —

Triumfetta
1. Capsules glabrate, the prickles retrorsely hispidulous … T. semitriloba
1. Capsules densely tomentose, the prickles pubescent [2]
2. Stems with stellate and simple trichomes; leaf blades mostly with 3 pronounced major veins at the base; capsule prickles pubescent throughout … T. pentandra
2. Stems with stellate trichomes; leaf blades mostly with 5-7 pronounced major veins at the base; capsule prickles pubescent only at the base … T. rhomboidea

*****Triumfetta pentandra*** A.Rich. {AFP} —
*****Triumfetta rhomboidea*** Jacq. {AFP} —
*****Triumfetta semitriloba*** Jacq. {AFP} —

Urena
1. Leaf blades shallowly lobed with broadly rounded sinuses … U. lobata
1. Leaf blades lobed with narrowly acute or deeply incised sinuses … U. sinuata

*****Urena lobata*** L. {AFP} —
*****Urena sinuata*** L. {AFP} —

Waltheria
1. Plant to 0.6(–1) m tall; stems prostrate, decumbent, to spreading, several from the base of the plant; leaf blades 1–2 times longer than wide, to 3.4 cm long and 2.7 cm wide, the stellate hairs of the upper blade surface not overlapping or scarcely so, the arms of the stellate hairs 0–0.3(–0.5) mm long (rarely a few arms longer) … W. bahamensis
1. Plant to 2 m tall; stems generally erect to ascending, usually solitary at the base of the plant; leaf blades (1.4–)1.8–2.2 (–3.5) times longer than wide, to 12 cm long and 6.5 cm wide, the stellate hairs of the upper blade surface strongly overlapping, the arms of the stellate hairs mostly 0.4–1 mm long … W. indica

Waltheria bahamensis Britton {AFP} — Coastal strand, sandy pinelands or scrub, and pine rocklands.
Waltheria indica L. {AFP} — Generally of disturbed sites.

Wissadula
*****Wissadula hernandioides*** (L'Hér.)Garcke {AFP} —

MUNTINGIACEAE
Muntingia
^*Muntingia calabura* L. {AFP} — Cultivated, primarly for edible fruit; sparingly naturalized.

THYMELAEACEAE
Dirca
Dirca palustris L. {AFP} — SE.

ASTERIDS

CORNALES

CORNACEAE

Cornus: A genus of ~50 species (sensu Eyde 1987), sometimes split into more genera.

1. Leaves alternate, sometimes with short internodes (subg. Mesomora or genus Swida) … C. alternifolia
1. Leaves opposite [2]
2. Tree; bark finely blocky with distinct fissures; leaf underside whitish; 4 white petaloid bracts subtending inflorescence; fruit red, rarely yellowish (subg. Cynoxylon or genus Bethamidia) … C. florida
2. Shrubs to small trees; bark smooth to longitudinally splitting with faint furrows; leaf underside pale green to yellowish; inflorescence bracts minute and inconspicuous, not petaloid; fruit white to blue or violet (subg. Kraniopsis or genus Swida) [3]
3. Leaf blade with (4)5-9 secondary veins per side, broadly ovate to broadly elliptic, larger blades 8-15 cm long and 4-9 cm wide … C. amomum
3. Leaf blade with 3-4(5) secondary veins per side, ovate to narrowly elliptic or lanceolate, larger blades 3.5-11 cm long and 1-6 cm wide [4]

4. Rhizomatous, with solitary stems; petiole 2-7 mm long; leaf blade with upcurved erect hairs on the lower surface and sometimes upper surface, some appressed hairs may be present; sepals 0.2-0.8 mm long; petals 1.7-2.4 mm long … C. asperifolia
4. Stems clustered, without rhizomes; petiole 5-16 mm long; leaf blade surfaces only with appressed hairs; sepals 0.4-1 mm long; petals 2.6-3.8 mm long … C. foemina

Cornus alternifolia L.f. {AFP} — SE.
Cornus amomum Mill. {AFP} —
Cornus asperifolia Michx. {AFP} —
Cornus florida L. {AFP} —
Cornus foemina Mill. {AFP} —

HYDRANGEACEAE
1. Stems with simple and stellate trichomes; petioles 0-4 mm long … Deutzia scabra
1. Stems glabrous or with simple trichomes only; petioles 1-120 mm long [2]
2. Petioles mostly 10-120 mm long; inflorescence sometimes with larger sterile flowers; stamens 10-30 … Hydrangea
2. Petioles mostly 1-10 mm long; inflorescence of bisexual flowers only; stamens 60-90 … Philadelphus inodorus

Deutzia
*****Deutzia scabra*** Thunb. {AFP} —

Hydrangea
1. Vine; stems glabrous; leaf blade entire to coarsely toothed, unlobed; flowers bisexual … H. barbara
1. Shrubs; stems hirsute, or tomentose; leaf blade toothed, lobed or unlobed; some flowers larger and sterile [2]
2. Leaf blades unlobed, the lower surface glabrate or pubescent along the veins; inflorescences dome-shaped to hemispheric … H. arborescens
2. Leaf blades with 3-7 lobes, the lower surface tomentose to pilose; inflorescences ovoid to conic … H. quercifolia

Hydrangea arborescens L. {AFP} — SE.
Hydrangea barbara (L.)Bernd Schulz {AFP} —
Hydrangea quercifolia W.Bartram {AFP} —

Philadelphus
Philadelphus inodorus L. {AFP} —

LOASACEAE
Mentzelia
Mentzelia floridana Nutt. ex Torr. & A.Gray {AFP} —

NYSSACEAE
Nyssa
1. Petiole 2.5-6 cm long; fruit lenticellate … N. aquatica
1. Petiole 0.5-2.5(3.5) cm long; fruit smooth [2]

2. Larger leaf blades 10-30 cm long; staminate flowers sessile; ovaries hairy; ripe fruits red to yellowish red, 2-3 cm long … N. ogeche
2. Larger leaf blades 5-15 cm long; staminate flowers pedicellate; ovaries glabrous; ripe fruits black to blue, 0.7-1.5 cm long [3]
3. Leaf blades chartaceous, obovate to elliptic, apices acute to acuminate, margins entire or occasionally with 1-3 coarse teeth distally; bark generally regularly longitudinally and transversely fissured; pistillate and bisexual flowers or fruits (2)3-5(8) per cluster … N. sylvatica
3. Leaf blades subcoriaceous to coriaceous, usually oblanceolate to narrowly elliptic, rarely ovate, apices obtuse to acute, margins entire; bark irregularly fissured; pistillate and bisexual inflorescences or fruits 1-3 per cluster [4]
4. Trees, 3-30 m tall, generally with a stout trunk; larger leaf blades 5-12 cm long; fruiting peduncle 1.5-4 cm long … N. biflora var. biflora
4. Shrubs or trees to 5 m tall, generally lacking a trunk and often branching or leafy nearly throughout; larger leaf blades 3-6(7) cm long; fruiting peduncle 0.5-2(2.5) cm long … N. biflora var. ursina

Nyssa aquatica L. {AFP} —
Nyssa biflora Walter var. ***biflora*** {AFP} —
Nyssa biflora Walter var. ***ursina*** (Small)D.B. Ward— Panhandle, Baker Co. Flatwoods and their ecotones. It has been viewed as a fire-adapted form, similar to what others have observed of fire-adapted, fertile, shrubby forms of *Magnolia virginiana* (Kurz & Godfrey 1962; Godfrey 1988). Recent studies did not find *N. ursina* to form a distinct lineage among samples of *N. biflora*, based on RAD-seq data (Zhou et al. 2018) and 48 nuclear loci (Zhou et al. 2022). The authors afforded subspecific status but made no such combination.
Nyssa ogeche W.Bartram ex Marshall {AFP} —
Nyssa sylvatica Marshall {AFP} —

ERICALES

BALSAMINACEAE

Impatiens

1. Leaf blade margin with 4-8 teeth per side; seed ellipsoidal … I. capensis
1. Leaf blade margin with 10-30 teeth per side; seed ovoid to spheroidal [2]
2. Petioles 1-5 cm long; leaf blade mostly ovate … I. walleriana
2. Petioles 0-1 cm long; leaf blade mostly lanceolate [3]
3. Leaves alternate; flower plus pedicel <1/2 as long as the subtending leaf… I. balsamina
3. Leaves pseudowhorled; flower plus pedicel >1/2 as long as subtending leaf … I. hawkeri

****Impatiens balsamina*** L. {AFP} —
Impatiens capensis Meerb. {AFP} —
^*Impatiens hawkeri* W.Bull
**Impatiens walleriana* Hook.f. {AFP} —

EBENACEAE

Diospyros

1. Leaf blade lower surface with one or few punctate glands on each side of the midrib at the base of the blade; ovary pubescent … D. maritima
1. Leaf blade lower surface lacking glands; ovary glabrous [2]

2. Petiole stout, 1.5-3 mm wide; leaf blade leathery, apex rounded to obtuse, the upper surface mostly without glands, the lower surface glaucescent with obscure venation; mature fruit green turning nearly black ... D. nigra
2. Petiole slender, 0.5-1.5 mm wide; leaf blade chartaceous, acute to acuminate, with microscopic yellowish or orangeish, to black sessile to short-stipitate glands on the upper surface especially along the midrib, the lower surface finely reticulate-veined; mature fruit orange, yellow, or reddish or purplish, often glaucous, turning brownish or off-orange [3]
3. Stems and leaves pubescent, especially along the veins; fruit (2)5-8.5(10) cm wide ... D. kaki
3. Stems and leaves glabrous to ephemerally pubescent when young, the veins usually glabrous to glabrate; fruit (2)3-5(7.5) cm wide ... D. virginiana

^*Diospyros kaki* Thunb. —
****Diospyros maritima*** Blume {AFP} —
^*Diospyros nigra* (J.F.Gmel.)Perr. {AFP} — The name *D. ebenum* has been misapplied to this species. The leaf blades of *D. ebenum* have prominent, strongly reticulate veins and the irregular lateral veins tend to branch and fork well before the margin (unlike *D. nigra* with regularly arcuate lateral veins nearly reaching the margin and reticulate venation obscure).
Diospyros virginiana L. {AFP} — Sterile specimens may bear a superficial similarity to *Nyssa*, diagnostic are the microscopic glands of *D. virginiana* on the upper surface along the petiole and midrib and its pith chambered (not solid) between the diaphragms (McKenney 1967; Godfrey 1988).

POLEMONIACEAE
1. Leaves pinnatifid with linear segments ... Ipomopsis rubra
1. Leaves entire and unlobed ... Phlox

Ipomopsis
Ipomopsis rubra (L.)Wherry {AFP} —

Phlox
1. Most or all leaves alternate, the blade elliptic to lanceolate ... P. drummondii
1. Most or all leaves opposite, the blade linear, elliptic, to lanceolate [2]
2. Stems often densely leafy, the nodes with fascicles of leaves; leaves <2.5 cm long [3]
2. Stem nodes usually with one pair of leaves [4]
3. Anthers included; style 1.5-4 mm long, included, the stigma up to 2/3 of style length ... P. nivalis
3. Anthers (at least some) exserted from corolla tube; style 5-12 mm long, exserted, the stigma <1/5 of style length ... P. subulata
4. Leaf blade underside with conspicuous secondary veins ... P. paniculata
4. Leaf blade underside lacking noticeable secondary veins or these very obscure [5]
5. Sepal lobes lanceolate, united for >1/2 of length, glabrous to puberulent; apex of the uppermost anther even to protruding from the corolla throat; styles 10-19(26) mm long, longer than the calyx [6]
5. Sepal lobes linear, united <5/8 of length, glabrous, pilose, to stipitate-glandular; apex of the uppermost anther below the corolla tube; styles 1.5-4 mm long, shorter than the calyx [7]
6. Distal leaves lanceolate to ovate; calyx 6-11 mm long ... P. carolina
6. Distal leaves linear to lanceolate; calyx 6-8 mm long ... P. glaberrima

7. Stems sometimes decumbent and rooting; leaf blades with long, spreading trichomes, the margin flat … P. divaricata subsp. laphamii
7. Stems usually not rooting; leaf blades glabrous or with short trichomes, the margin sometimes revolute (especially when dry) [8]
8. Leaf blades linear, oblong-elliptic, to lanceolate; bracts and calyx eglandular to sparsely glandular [9]
8. Leaf blades linear to lanceolate; bracts and calyx moderately to densely glandular [10]
9. Leaves and bracts oblong, obtuse; involucral bracts sometimes concealing the calyx; pedicels to 3 mm long … P. amoena subsp. amoena
9. Leaves and bracts linear, acuminate; involucral bracts lax, not concealing the calyx; pedicles to 5 mm long … P. amoena subsp. lighthipei
10. Distal leaves mostly ascending to strict, reduced and grading into inflorescence bracts … P. floridana
10. Distal leaves mostly spreading to ascending, not reduced or only slightly so, the ones below the inflorescence large and generally very different from the inflorescence bracts [11]
11. Leaves and corolla tube glabrous to glabrescent, sepals glabrous to pubescent; corolla lobe width subequal to length, often overlapping adjacent ones … P. pilosa subsp. detonsa
11. Leaves, sepals, and corolla tube pubescent, often glandular; corolla lobes longer than wide, not overlapping … P. pilosa subsp. pilosa

Phlox amoena Sims subsp. ***amoena*** {AFP} —
Phlox amoena Sims subsp. ***lighthipei*** (Small)Wherry —
Phlox carolina L. — Sometimes subsumed under *P. glaberrima*.
Phlox divaricata L. subsp. ***laphamii*** (Alph.Wood)Wherry {AFP} —
****Phlox drummondii*** Hook. {AFP} —
Phlox floridana Benth. {AFP} —
Phlox glaberrima L. {AFP} —
Phlox nivalis Lodd. ex Sweet {AFP} —
Phlox pilosa L. subsp. ***detonsa*** (A.Gray)Wherry —
Phlox pilosa L. subsp. ***pilosa*** {AFP} —

PRIMULACEAE

1. Herbs [2]
1. Shrubs or trees [4]
2. Leaves in a basal rosette; inflorescence an umbel … Primula meadia
2. Leaves cauline or basal; inflorescence a raceme, panicle, or flowers solitary [2]
3. Flowers solitary … Lysimachia
3. Flowers in a raceme or panicle … Samolus
4. Leaf blade spinose at the tip … Bonellia macrocarpa
4. Leaf blade generally rounded, obtuse, or emarginate at the tip, sometimes with a mucro [5]
5. Inflorescences in numerous subsessile fascicles along 3-30 cm of the stem, all to nearly half of it occurring below the leafy parts of the stem, the flowers subsessile … Myrsine cubana
5. Inflorescences pedunculate and/or the flowers pedicellate, terminal or axillary, above or interspersed with the leaves or below the leafy parts of the stems [6]
6. Inflorescence umbellate or paniculate; staminodes absent; fruit drupaceous, seed … Ardisia
6. Inflorescence racemose; staminodes at apex of corolla tube; fruit a berry, seeds 2-8 … Jacquinia

Ardisia: A genus in need of revision, only the native species, *A. escallonioides*, will likely remain in *Ardisia* s.str.

1. Leaf blade crenate or serrulate [2]
1. Leaf blade entire [3]
2. Leaf blade crenate-undulate (harboring Burkholderia bacteria), reticulate venation obscure or unapparent; inflorescence with 5-18 flowers (subg. Crispardisia) ... A. crenata
2. Leaf blade serrulate, reticulate venation conspicuous; inflorescence with 3-5 flowers (subg. Bladhia) ... A. japonica
3. Inflorescence a terminal panicle or raceme, the racemes elongate and not subumbellate, with 10-70 flowers; fruit 4-7 mm wide ... A. escallonioides
3. Inflorescence axillary or terminal on a lateral branch in a subumbellate raceme, with 4-10 flowers; fruit 7-10 mm wide (subg. Tinus) [4]
4. Leaf blades subcoriaceous; peduncle longer than the pedicels; sepals ca. 1 mm long; fruit minutely black-punctate ... A. elliptica
4. Leaf blades chartaceous; peduncle subequal to the pedicels; sepals ca. 3 mm long; fruit densely and coarsely black-punctate ... A. solanacea

****Ardisia crenata*** Sims {AFP} —
****Ardisia elliptica*** Thunb. {AFP} — Petioles are often reddish.
Ardisia escallonioides Schltdl. & Cham. {AFP} — Petioles typically brown to pale yellow.
****Ardisia japonica*** (Thunb.)Blume {AFP} —
****Ardisia solanacea*** Roxb. {AFP} —

Bonellia
****Bonellia macrocarpa*** (Cav.)Ståhl & Källersjö {AFP} —

Jacquinia
1. Petiole glabrous or sparsely puberulous; leaves usually distinctly pseudoverticillate, the blade 3-8(12) cm long, 1.5-5 cm wide; fruit orange to red ... J. arborea
1. Petiole puberulous-lepidote; leaves alternate or indistinctly pseudoverticillate, the blade 1-4.5 cm long, 0.5-2.5 cm wide; fruit yellow-green to orange-brown ... J. keyensis

****Jacquinia arborea*** Vahl {AFP} —
Jacquinia keyensis Mez {AFP} — ST.

Lysimachia
1. Larger leaves 0.5-3 cm long [2]
1. Larger leaves 4-18 cm long [4]
2. Pedicel 0-1 mm long ... L. minima
2. Pedicels 2.5-35 mm long [3]
3. Pedicel 3-35 mm long, recurved in fruit; calyx 3.5-6 mm long, equaling or shorter than the corolla; petals (2)3-7(10) mm long ... L. arvensis
3. Pedicel 2.5-4 mm long, erect in fruit; calyx 1.5-3 mm long, equaling or longer than the corolla; petals 1.4-2.3 mm long ... L. ovalis
4. Leaf blades broadly lanceolate to ovate-lanceolate, 1.5-6.5 cm wide; petioles ciliate the entire length ... L. ciliata

4. Leaf blades narrowly elliptic, elliptic-lanceolate, to linear-lanceolate, 0.2-3 cm wide; petioles ciliate proximally or the entire length, or petioles indistinct [5]
5. Stems usually branching proximally; leaves appearing monomorphic, sometimes lacking marginal cilia, blades 0.5-3 cm wide; sepals conspicuously veined; fruit 4-6.5 mm long … L. lanceolata var. hybrida
5. Stem simple or branching distally; leaves appearing dimorphic, the proximal ones more elliptic-oblong, with proximal marginal cilia, blades 0.2-1.8 cm wide; sepals not conspicuously veined; fruit 2-5 mm long … L. lanceolata var. lanceolata

*****Lysimachia arvensis*** (L.)U.Manns & Anderb. {AFP} —
Lysimachia ciliata L. {AFP} —
Lysimachia lanceolata Walter var. ***hybrida*** (Michx.)A.Gray {AFP} —
Lysimachia lanceolata Walter var. ***lanceolata*** {AFP} —
Lysimachia minima (L.)U.Manns & Anderb. {AFP} —
Lysimachia ovalis (Ruiz & Pav.)U.Manns & Anderb. {AFP} —

Myrsine
Myrsine cubana A.DC. {AFP} —

Primula
Primula meadia (L.)A.R.Mast & Reveal {AFP} — SE. Revised by Fassett (1944).

Samolus
1. Leaves often mostly basal, sometimes also cauline; peduncle (from the subtending leaf to the first pedicel) 5-25 cm long; pedicels ebracteate; calyx 2-3 mm long; corolla 3-7.5 mm long; staminodes absent; fruit 3-4 mm long … S. ebracteatus
1. Leaves basal and cauline; peduncle (from the subtending leaf to the first pedicel or branch) 0-4 cm long; pedicel with a small bract near the middle; calyx 1-1.5(2) mm long; staminodes 5; corolla 1.2-3 mm long; fruit 2-3 mm long … S. parviflorus

Samolus ebracteatus Kunth {AFP} —
Samolus parviflorus (Raf. {AFP} — Sometimes treated as a subspecies of *S. valerandi* which is restricted to the eastern hemisphere.

SAPOTACEAE
1. Pedicels 10-25 mm long; sepals 6 or 8 in 2 whorls, the outer whorl valvate [2]
1. Pedicels 2-10(16) mm long; sepals 4-6 in 1 whorl, imbricate [3]
2. Sepals 6 in 2 whorls of 3; fruit with a roughened, scurfy brown surface, with 2-10 seeds; seed hilum linear … Manilkara
2. Sepals 8 in 2 whorls of 4; fruit smooth, with 1(2) seeds; seed hilum circular … Mimusops
3. Leaf blade with close-set, nearly perpendicular lateral veins, the lower surface densely brown to silvery tomentose; staminodes absent … Chrysophyllum
3. Leaf blade mostly with spaced, ascending lateral veins, the lower surface glabrous to densely brown or silvery tomentose; staminodes present [4]
4. Stems with or without thorns, with or without short shoots; leaf blade lower surface glabrous, sericeous, pubescent, or tomentose; flowers 3-40 per fascicle; corolla lobes divided into a median and 2 lateral segments or the lateral segments absent … Sideroxylon

4. Stems lacking thorns, lacking short shoots; leaf blade lower surface glabrous to pubescent; flowers 1-9 per fascicle; corolla lobes undivided [5]
5. Leaf blade apex obtuse to rounded; fruit red … Synsepalum
5. Leaf blade apex acute, acuminate, to mucronate; fruit yellow or brown [6]
6. Leaf blade tertiary venation oblique; corolla margins papillate; staminodes papillate; stamens inserted near orifice of corolla tube; mature fruit and pulp yellow… Lucuma campechiana
6. Leaf blade tertiary venation reticulate; corolla margins ciliolate; staminodes glabrous; stamens inserted near middle of corolla tube; mature fruit brown, pulp orange … Pouteria sapota

Chrysophyllum
1. Pedicels (4)8-15 mm long; fruits 4-8 cm wide with 4-10 seeds … C. cainito
1. Pedicels 3-6(8) mm long; fruit 0.7-1 cm wide with 1 seed … C. oliviforme

^*Chrysophyllum cainito* L. — The domesticated form is thought to have originated in Panama (Petersen et al. 2014)
Chrysophyllum oliviforme L. {AFP} — ST.

Lucuma: Recently removed from *Pouteria* s.lat. (Swenson et al. 2023).
^*Lucuma campechiana* Kunth {AFP} —

Manilkara
1. Leaf blade lightly glaucous green, the adaxial lateral veins somewhat obscure when dry, the apex sometimes splitting but not folded in dried specimens, the base rounded to truncate (rarely acute); flower solitary or in fascicles of 2-5; sepals and corolla lobes spreading to recurved; corolla tube shorter than the lobes; fruiting pedicel enlarged and thickened towards apex; fruits 2.5-4 cm long or wide; seeds 14-18 mm long … M. jaimiqui subsp. emarginata
1. Leaf blade green, the adaxial lateral veins discernible when dry, the apex often folded in dried specimens, the base acute; flower solitary; sepals and corolla lobes erect to ascending; corolla tube subequal to exceeding the lobes; fruiting pedicel thickened throughout, barely thicker towards the apex; fruits 3.5-8 cm long or wide; seeds 15-25 mm long … M. zapota

Manilkara jaimiqui (C.Wright ex Griseb.)Dubard subsp. ***emarginata*** (L.)Cronquist {AFP} — Cronquist (1945, 1946) enumerated four subspecies, this one (as *M. emarginata* subsp. *typica*) restricted to Florida and the Bahamas, with broad leaf blades (1.5-2.5 times as long as wide), long corollas (6-10.5 mm long), and 6-celled ovaries. ST.
****Manilkara zapota*** (L.)P.Royen {AFP} — Occasionally naturalized, commonly cultivated for edible fruits. The sap was traditionally a source of chicle to make chewing gum (Landon 1935).

Mimusops
1. Petiole 5-15 mm long, 2-3 mm wide; leaf blade apex round to emarginate … M. coriacea
1. Petiole 8-30 mm long, 1-2 mm wide; leaf blade apex obtuse and acuminate … M. elengi

****Mimusops coriacea*** (A.DC.)Miq. {AFP} —
****Mimusops elengi*** L. {AFP} —

Pouteria

^*Pouteria sapota* (Jacq.)H.E.Moore & Stearn —

Sideroxylon

1. Petiole (9)15-40(50) mm long (shorter on immature plants); leaf blade mostly 7-20 cm long, the margin often undulate; corolla lobes light yellow, lacking lateral segments; mature fruit 10-30 mm long, yellow to orange; seeds 15-20 mm long … S. foetidissimum
1. Petiole 1-11(14) mm long; leaf blade mostly 0.5-13 cm long, the margin usually plane; corolla lobes mostly white, with 2 lateral segments; mature fruit purple, 3-13 mm long; seeds 3-12 mm long [2]
2. Mature stems lacking thorns and short shoots; leaf blades acute-acuminate towards the apex; inflorescence nodes often crowded with the inflorescences touching or overlapping or nearly so; ovary glabrous … S. salicifolium
2. Mature stems with thorns and/or short shoots, the short shoots sometimes with pseudowhorled leaves; leaf blades rounded to rounded-acute at the apex (or often acute-acuminate in S. lycioides); inflorescence nodes usually well-spaced with the inflorescences not touching or occasionally somewhat overlapping; ovary pubescent [3]
3. Stem and leaves glaucous; leaf blade midvein often indistinct near the tip and branching or sinuous, reticulate venation sometimes obscure … S. celastrinum
3. Stem and leaves not glaucous; leaf blade midvein mostly straight and distinct to the tip, reticulate venation generally apparent (unless obscured by pubescence) [4]
4. Leaf blade underside lustrous with dense pubescence, the green color of the blade surface not apparent [5]
4. Leaf blade underside generally not lustrous, glabrous to moderately pubescent, the green color of the blade surface generally apparent [7]
5. Young stems glabrate, the stem bark green to cream-white becoming light gray (rarely with some purplish hues); mature leaf blade underside with appressed silvery white trichomes; pedicels 4-5 mm long; corolla tube 1-1.6 mm long, median lobe 1.2-1.6 mm long, lateral segments 1.5-2.1 mm long (from junction with adjacent lateral segment); filament 1.3-1.6 mm long … S. alachuense
5. Young stems moderately to densely pubescent, the stem bark green to green-brown becoming dark brown, red-brown, purple, to purple-gray; mature leaf blade underside with red-brown to only slightly tawny to silvery white trichomes, some trichomes villous or ascending; pedicels 6-12 mm long; corolla tube 1.5-2 mm long, median lobe 1.4-2.2 mm long, lateral segments 2-2.5 mm long (from junction with adjacent lateral segment); filament 1.5-2.5 mm long [6]
6. Stoloniferous; leaf blades pannose and less sericeous, hairs duller, sinuous and often curling, mostly obscuring the lateral veins and apical area of midrib (at least when young); corolla tube membranceous, semi-opaque, finer veins obscure, median lobe clawed … B. lacuum
6. Solitary trunk; leaf blades moderately to densely sericeous, hairs lustrous, mostly straight, lateral veins somewhat discernible; corolla chartaceous, translucent, median lobe not clawed … S. tenax
7. Leaf blades 1-5(7, very rarely to 11) cm long, the lower surface glabrous to hairy, apices rounded (if hairy, then low shrub or in south Florida) [8]
7. Leaf blades (3)5-12 cm long, the lower surface hairy with rounded apices (glabrate on older leaves) or glabrous with mostly acuminate apices (matue plants 2-15 m tall) [10]
8. Mature shrub 0.2-1 m tall; young stems, petiole (often), young leaf blades, pedicels, and young sepals densely villous, strigose-villous, to strigose with red-brown to whitish hairs

(becoming glabrate in age, hairs generally persistent on twigs, usually at least some hairs reddish); fruit usually 8-13 mm long … S. rufohirtum
8. Mature shrub or tree 1.5-5 m tall; young stems, petiole, young leaf blades, pedicels, and sepals strigose to glabrate, occasionally sparsely villous, with whitish to tawny hairs; fruit 4-9 mm long [9]
9. Leaf blade lower surface usually persistently pubescent, sometimes glabrate, epidermal cell outlines marked by a distinct impressed groove, surface reticulate-ornamented; sepals and ovary usually densely strigose, sometimes glabrate … S. reclinatum subsp. austrofloridense
9. Leaf blade lower surface glabrate, pubescent only along the midvein, epidermal cell outlines indistinct often, surface mostly smooth and irregularly undulating; sepals and ovary glabrate … S. reclinatum subsp. reclinatum
10. Young stems strigose to glabrate; leaf blade with the tip acute-acuminate (rarely rounded), the lower surface glabrous or glabrate (hairs scattered along midribs); pedicels glabrous … S. lycioides
10. Young stems villous to glabrate; leaf blade with the tip rounded to bluntly acute (rarely acute-acuminate), the lower surface hairy; pedicels glabrate to villous [11]
11. Pedicels lanate, villous, or glabrous; inflorescence with (2)6-25 flowers; sepals villous, 1.8-2.8 mm long, 1.4-1.9 mm wide; stamens 2.5-2.8 mm long; styles 1-1.5 mm long … S. lanuginosum
11. Pedicels glabrous or glabrate; inflorescence with 1-9 flowers; sepals glabrous to villous, 1.4-1.8 mm long, 1.3-1.5 mm wide; stamens 1-1.3 mm long; styles 0.8-1 mm long … S. thornei

•***Sideroxylon alachuense*** L.C.Anderson {AFP} — SE.
Sideroxylon celastrinum (Kunth)T.D.Penn. {AFP} —
Sideroxylon foetidissimum Jacq. {AFP} —
Bumelia lacuum Small {AFP} — Tentatively recognized (Clark 1942; Lakela 1963; Corogin 2015: 130).
Sideroxylon lanuginosum Michx. {AFP} — SE.
Sideroxylon lycioides L. {AFP} — SE.
•***Sideroxylon reclinatum*** Michx. subsp. ***austrofloridense*** (Whetstone)Kartesz & Gandhi {AFP} — FT. SE. See Lange et al. (2023).
Sideroxylon reclinatum Michx. subsp. ***reclinatum*** {AFP} —
•***Sideroxylon rufohirtum*** Herring & Judd {AFP} —
Sideroxylon salicifolium (L.)Lam. {AFP} —
Sideroxylon tenax L. {AFP} — Some forms with pale pubescence are sometimes confused with *S. alachuense*, but the twigs are very different.
Sideroxylon thornei (Cronquist)T.D.Penn. {AFP} — SE.

Synsepalum
^*Synsepalum dulcificum* (Schumach. & Thonn.)Baill. —

PENTAPHYLACACEAE
Ternstroemia
^*Ternstroemia gymnanthera* (Wight & Arn.)Bedd. {AFP} —

CLETHRACEAE
Clethra

1. Young stems puberulent; leaf blade lower surface sparsely hairy, upper surface glabrous; petioles 2.5-3.5(6) cm long; styles 6-7 mm long, hairy in proximal 1/2; filaments 0.2-0.3(0.4) mm wide … C. alnifolia
1. Young stems woolly-tomentose; leaf blade lower surface woolly-tomentose, upper surface sparsely hairy; petioles 0.5-1(1.5) cm long; styles 3.5-5 mm long, hairy throughout; filaments 0.4-0.5(0.7) mm wide … C. tomentosa

Clethra alnifolia L. {AFP} — Name conserved with a new type, as its original type actually belonged to *C. tomentosa* (McMillan & Hackney Blackwell 2015).
Clethra tomentosa Lam. — Sometimes subsumed under or treated as var. *pubescens* (Wilbur & Hespenheide 1967) of *C. alnifolia*.

CYRILLACEAE

1. Petiole usually indistinct or absent; leaf blade venation obscure, the underside surface often whitish; inflorescence produced before new shoot growth of current season, often interspersed with the leaves, 2-6 cm long, bracts subtending flowers caducous; petals 6-8 mm long; stamens 10; filaments basally flattened; fruits samaralike, 2-5-winged, 5-7 mm long … Cliftonia monophylla
1. Petiole usually distinct, 1-3 mm long; leaf blade venation mostly visibly apparent, the underside surface pale green; inflorescence produced after new showth of current season, often without leaves below on the stem, 6-18 cm long, bracts subtending flowers persistent; petals 2.5-3.5 mm long; stamens 5; filaments terete; fruits berrylike, unwinged, 2-2.5 mm long … Cyrilla

Cliftonia: Commemorates William Clifton, British chief justice of West Florida in the late 1700s, partly responsible for the earliest known extant herbarium specimens from Florida (at BM herbarium).

Cliftonia monophylla (Lam.)Sarg. {AFP} —

Cyrilla: Although it is easy to dismiss recognizing segregates from *C. racemiflora* because of the difficulty in separating taxa and potential overlap, there are some striking contrasts among forms and habitats. It is here tentatively deemed worthwhile to recognize three entities at some level lest they be overlooked without regard. A thorough study is needed to truly to tackle the issue.

1. Leaves 4-10 cm long (including petiole), (10)12-25 mm wide; swamps, forested wetlands … C. racemiflora
1. Leaves 1–4 cm long, 5–12(14) mm wide [2]
2. Leaves 3-6(7) mm wide; central FL scrub … C. arida
2. Leaves (4)8-12(14) mm wide; open pineland/prairie – wetland ecotones … C. parviflora

Cyrilla arida Small — Thomas (1960: 103-104) did not find *C. arida* to be distinct morphologically or by habitat. See also: https://www.inaturalist.org/observations/19201688
Cyrilla parviflora Raf. — According to Thomas (1960: 99-103), this taxon and *C. racemiflora* "intergrade completely in certain local populations, and there is evidence of considerable gene exchange throughout the area of overlap" (see also Godfrey & Wooten 1981; FNA, vol. 8).

Cyrilla racemiflora L. {AFP} — Panhandle to central FL (SE USA, Neotropics).

ERICACEAE

1. Non-photosynthetic, mycoheterotrophic ephemeral herb; leaves non-green, scale-like [2]
1. Photosynthetic, persistent vine, subshrub, shrub, or tree; leaves green, with an expanded blade or needle-like [4]
2. Flower or fruit solitary on the stem … Monotropa
2. Flower or fruit 2 or more (rarely solitary) per stem [3]
3. Stem white to red, rarely purplish red; petals free, usually hairy; ovaries (4)5(6)-locular; fruits capsular; inflorescence axes fibrous, persistent after seed dispersal … Hypopitys lanuginosa
3. Stem dark purple, violet, to brownish purple; petals connate most of their length, glabrous; ovaries 1-locular; fruits baccate (fleshy); inflorescence axes not fibrous, not persistent … Monotropsis reynoldsiae
4. Plant prostrate or trailing … Epigaea repens
4. Plant erect, ascending, or vining [5]
5. Plant dioecious; leaves linear; flower unisexual, with 2-3 sepals and 2-3 petals, free … Ceratiola ericoides
5. Plant monoecious; leaves with an expanded blade, not linear; flower bisexual or unisexual, with 4-8 sepals and 4-8 petals, sometimes connate [6]
6. Mature plant usually <50 cm tall; stem usually with <13 leaves; leaf blade often starkly pale to whitish along veins; peduncle nearly half the height of the plant … Chimaphila maculata
6. Mature plant 20 cm to 35 m tall; stem usually with >13 leaves; leaf blade uniformly colored; peduncle not evident or only a very small portion of the plant height [7]
7. Ovary inferior; fruit a fleshy berry or drupe [8]
7. Ovary superior; fruit a dry capsule [9]
8. Leaf blade lower surface gland-dotted, or stipitate-glandular and margins entire; pistil 5-10-carpellate; ovary 5- or 10-locular; fruit drupaceous … Gaylussacia
8. Leaf blade lower surface eglandular, or stipitate-glandular and usually at least some margins serrate; pistil 4-5-carpellate; ovary 4-5-locular; fruit a berry … Vaccinium
9. Stem often persistently pilose; petals free, sticky … Bejaria racemosa
9. Stem glabrous, pubescent, to pilose; petals connate for ca. ½ or more of their length, not markedly sticky [10]
10. Leaf blades 0.5-1.4 cm long … Kalmia hirsuta
10. Leaf blades 2-20 cm long [11]
11. Leaf blades ferrugineous-lepidote [12]
11. Leaf blades not lepidote [13]
12. Corolla urceolate (urn-shaped); capsules loculicidal … Lyonia
12. Corolla rotate or not urceolate; capsules septicidal … Rhododendron chapmanii
13. Leaf blade margins entire, the tip mostly obtuse, acute, to acuminate, sometimes stipitate-glandular [14]
13. Leaf blade margins toothed (usually at least some on plant, sometimes subtly toothed) or entire with an abrupt to tapered fine-pointed acuminate apex, if stipitate-glandular then leaf blades toothed [16]
14. Corolla urceolate (urn-shaped); capsules loculicidal … Lyonia
14. Corolla rotate or not urceolate; capsules septicidal [15]
15. Branching mostly alternate and spaced; corolla radially symmetric, scarcely forming free lobes, tube indistinct; anthers included; fruit width and length subequal or shorter than wide … Kalmia latifolia

15. Branching often pseudoverticillate; corolla bilaterally symmetric, with spreading free lobes, forming a tube below the lobes; anthers strongly exserted ... Rhododendron
16. Trees to 25(35) m tall; petioles 0.8-2.8 cm long; larger leaf blades 9-20 cm long, 3.5-6.5 cm wide; ... Oxydendrum arboreum
16. Vines, or shrubs to small trees to 7 m tall; petioles 0.1-1 cm long; leaf blades 5-11 cm long, 1.5-5 cm wide [17]
17. Vines or shrubs; petiole stout, thicker than the blade midrib; leaf blade margins revolute ... Pieris phyllyreifolia
17. Shrubs; petiole stout or slender; leaf blade margins not revolute or scarcely so [18]
18. Pith chambered; leaf blade secondary veins and reticulate veins similarly pronounced and scarcely differentiated; pedicels 5-13 mm long ... Agarista populifolia
18. Pith solid; leaf blade secondary veins pronounced and unlike obscure reticulate venation; pedicels 1-4 mm long [19]
19. Leaves persistent; petiole 5-10 mm long; leaf blade margin thickened or slightly revolute, larger blades mostly with 6-12 major secondary veins on each side; inflorescence to 4 cm long; fruit 4-6 mm wide ... Leucothoe axillaris
19. Leaves deciduous to semi-persistent; petiole 1-4 mm long; leaf blade margin not thickened, larger blades mostly with 4-7 major secondary veins on each side; inflorescence to 25 cm long; fruit 2-4 mm wide [20]
20. Leaf blade lower surface much paler than the upper surface; inflorescence often leafy; corolla 2-4.5 mm long, subequal to the pedicel; anther without awns; capsules with clearly thickened sutures; seeds ca. 100-300 per fruit ... Lyonia ligustrina var. foliosiflora
20. Leaf blade lower surface slightly paler than the upper surface; inflorescence not leafy; corolla 6-9 mm long, longer than the pedicel; anthers 4-awned; capsule sutures not noticeably thickened; seeds ca. 5-10 per fruit ... Eubotrys racemosus

Agarista
Agarista populifolia (Lam.)Judd {AFP} —

Bejaria
Bejaria racemosa Vent. {AFP} —

Ceratiola
Ceratiola ericoides Michx. {AFP} —

Chimaphila
Chimaphila maculata (L.)Pursh {AFP} —

Epigaea
Epigaea repens L. {AFP} — SE.

Eubotrys
Eubotrys racemosus (L.)Nutt. {AFP} —

Gaylussacia
1. Leaves (esp. the lower surface), hypanthium, and fruit stipitate-glandular; leaves with or without sessile glands; inflorescence bracts subequal to longer than pedicels, persistent [2]

1. Leaves, hypanthium, and fruit without stipitate glands (or stipes <0.2 mm long); leaf blades with sessile glands below only; inflorescence bracts shorter than pedicels, early-deciduous (G. frondosa s.lat.) [3]
2. Plant 10-30(40) cm tall; lower surface of the leaves uniformly dotted with sessile glands, sometimes absent; hypanthium and fruit with stipitate glands to ca. 0.5 mm long; corolla 3-5.5 mm long … G. dumosa
2. Plant 30-100(150) cm tall; lower surface of the leaves not gland-dotted, with stipitate glands only; hypanthium and fruit hirsute with stipitate glands to ca. 1 mm long; corolla 6.5-8.5 mm long … G. mosieri
3. Twigs of current season glabrous or glabrate; leaf blade lower surface glabrous or hairy, glaucescent, sessile glands yellowish or orangish brown (panhandle; G. frondosa s.str.) … G. frondosa
3. Twigs of current season densely hairy with short unicellular hairs; leaf blade lower surface sparsely to densely hairy, glaucous or glaucescent, sessile glands yellowish, orangish, or reddish (widespread) [4]
4. Plants 0.2-0.6(1) m tall; larger leaf blades 2-4 cm long, 1-2 cm wide, surfaces glabrous or sparsely short-hairy with the longer hairs ca. 0.1-0.25 mm long, glaucous on the lower surface, the sessile glands usually reddish or reddish brown; calyx glaucous (widespread) … G. nana
4. Plants 0.75-2.0 m tall; larger leaf blades 3-6 cm long, 2-3 cm wide, surfaces semi-moderately to densely short-hairy with the longer hairs ca. 0.25-0.65 mm long, glaucescent on the lower surface, the sessile glands usually yellowish or orangish brown; calyx not glaucous (widespread) … G. tomentosa

Gaylussacia dumosa (Andrews)A.Gray {AFP} —
Gaylussacia frondosa (L.)Torr. & A.Gray {AFP} —
Gaylussacia mosieri Small {AFP} —
Gaylussacia nana (A.Gray)Small —
Gaylussacia tomentosa (A.Gray)Pursh ex Small —

Hypopitys
Hypopitys lanuginosa (Michx.) Raf. {AFP} — SE.

Kalmia
1. Plants to 1.2 m tall; leaf blade surfaces usually hairy, 0.5-1.4 cm long; inflorescences solitary flowers or sometimes fascicles or racemes scattered along stem in leaf axils … K. hirsuta
1. Plants to 8(12) m tall; leaf blade surfaces glabrous to glabrescent (midrib often puberulent), 4-12 cm long; inflorescences terminal panicles … K. latifolia

Kalmia hirsuta Walter {AFP} —
Kalmia latifolia L. {AFP} — ST.

Leucothoe
Leucothoe axillaris (Lam.)D.Don {AFP} —

Lyonia
1. Leaf blade lower surface, pedicels, and calyx ferrugineous-lepidote [2]
1. Leaf blade lower surface, pedicels, and calyx glabrous to hairy, not lepidote [3]

2. Irregular shrub or tree to 6(12) m tall, with branches often spreading; leaf blades not reduced in size or only slightly so towards the inflorescence apex, the blade usually revolute, the secondary veins often impressed; flowers mostly restricted to stem of previous year … L. ferruginea
2. Shrub to 2(3) m tall, with branches often strict to ascending; leaf blades reduced in size towards the inflorescence apex, the blade not revolute or only slightly so, the secondary veins usually not noticeably impressed; flowers frequent on current year's shoot and some on stem of previous year … L. fruticosa
3. Leaf blade margins serrulate (sometimes obscurely so); calyx lobes 0.5-1.5 mm long; corolla about as wide as long, 2-4(4.5) mm long; fruit subglobose, generally broadly rounded at the apex similar to the base, 2-4 mm wide and long … L. ligustrina var. foliosiflora
3. Leaf blade margins entire; calyx lobes 2-9.5 mm long; corollas longer than wide, 5-14 mm long; fruit ovoid to ovoid-globose, generally narrowed at the apex (before dehiscing) and truncate to broadly rounded at the base, 3-6.5 mm wide and long [4]
4. Leaf blade persistent, stiffly coriaceous, lower surface with obscure or faint venation, the margin revolute; corolla 2-5 mm wide, subtly conic, flared at the base, white, pink, to red; filaments roughened; sepals usually persistent with fruit … L. lucida
4. Leaf blade deciduous, membranous, lower surface with conspicuous secondary and reticulate venation, the margin not revolute or scarcely so; corolla 4-9 mm wide, broadly cylindric, not flared at the base, white, rarely pink; filaments hairy; sepals deciduous, usually absent from fruit … L. mariana

Lyonia ferruginea (Walter)Nutt. {AFP} —
Lyonia fruticosa (Michx.)G.S.Torr. {AFP} —
Lyonia ligustrina (L.)DC. var. ***foliosiflora*** (Michx.)Fernald {AFP} —
Lyonia lucida (Lam.)K.Koch {AFP} —
Lyonia mariana (L.)D.Don {AFP} —

Monotropa
1. Petals 16-24 mm long, 7-12 mm of it being hairy; tip of nectar spur (at base of ovary) angled downward to upcurved towards the flower apex, angle of 45-140; longest stamen (10)14-17(18) mm long, the filament hairs 0.35-1.15 mm long; filament width distally 0.5-0.8(1) times as wide as width at base of filament; ovary (6)10-12 mm long; scrub, scrubby flatwoods, or mesic-xeric uplands, mycorrhizal with Lactifluus deceptivus complex, rarely with Russula mutabilis … M. brittonii
1. Petals 13-23 mm long, 3-9 mm of it being hairy; tip of nectar spur (at base of ovary) pointed straight down to angled downward, angle of 0-50(80); longest stamen 7-15 mm long, the filament hairs 0.2-0.7(0.8) mm long; filament width distally 0.7-1.2(1.5) times as wide as width at base of filament; ovary 5-11.5 mm long; mesic habitats, mycorrhizal with Russula or Lactarius … M. uniflora

•***Monotropa brittonii*** Small — Scrub, primarily.
Monotropa uniflora L. {AFP} — Upland hammocks, primarily.

Monotropsis
•***Monotropsis reynoldsiae*** (A.Gray)A.Heller {AFP} — SE.

Oxydendrum

Oxydendrum arboreum (L.)DC. {AFP} —

Pieris
Pieris phyllyreifolia (Hook.)DC. {AFP} —

Rhododendron:
subg. Azaleastrum, sect. Tsutsui, subsect. Tsutsusi: R. indicum, R. mucronatum, R. obtusum, R. pulchrum, R. scabrum, R. simsii
subg. Hymenanthes, sect. Pentanthera, subsect. Pentanthera (revised by Kron 1993): R. alabamense, R. austrinum, R. canescens, R. viscosum
subg. Rhododendron, sect. Rhododendron, subsect. Caroliniana: R. chapmanii

1. Plant ferruginous-lepidote with glandular-peltate scales; leaves evergreen, often revolute; corolla upper lobe with spots; stamens 10 per flower … R. chapmanii
1. Plant glabrous, hairy, or stipitate-glandular, not lepidote, without peltate scales; leaves evergreen or deciduous, plane; corolla upper lobe lacking spots; stamens 5 per flower [2]
2. Leaves evergreen or nearly so; corolla upper lobe with or without spots or flecks; stamens 5 - 10 per flower; cultivated, often not forming fruit (cultivated Asian taxa) … Key A
2. Leaves deciduous; corolla upper lobe lacking spots; stamens 5 per flower; native, sometimes cultivated, usually forming fruit [3]
3. Bud scale margin and leaf blade margin (also stems, petiole, leaf blade surface, pedicels, calyx, ovary, and fruit) stipitate-glandular; bud scale outer surface canescent; flowers usually inodorous or slightly fragrant; corolla lobes usually yellow, orange, to orange-red, rarely pink (tube often orange-red or red), upper lobe with indistinct darker yellow, orange, or red blotch; leaves mostly appearing simultaneous with or after flowers (usually some leaves still folded or curled), vegetative bud scales often present; flowers opening before or with appearance of leaves; flowering Feb-Apr; fruit maturing May-Jul … R. austrinum
3. Bud scale margin and leaf blade margin usually eglandular (stems, petiole, leaf blade surface, pedicels, calyx, ovary, and fruit sometimes eglandular; bud scale margin glandular in R. canescens in central GA); bud scale outer surface glabrous to canescent; flowers fragrant; corolla white to pink, outer surface hairs varied; leaf unfurling and flowering and fruiting times variable [4]
4. Bud scales lacking a strongly contrasted dark band at the apex or the band obscured by hairs, the outer surface glabrous to canescent; leaves mostly appearing simultaneous with or after flowers (usually some leaves still folded or curled), vegetative bud scales often present; flowers opening before or with appearance of leaves; corolla white, pink, or yellow to orange, the upper lobe with or without contrasting or darker colored areas, the outer surface hairs often continuing in lines up lobes; flowering Feb-Apr; fruit maturing May-Jul [5]
4. Bud scales with a distinct dark reddish brown band at the apex, the outer surface glabrous; leaves mostly fully developed, unfolded or nearly so before flowers open, vegetative bud scales all abscised; flowers opening after appearance of leaves; corolla white, rarely pinkish, without blotches or spots on the upper lobe; flowering and fruit maturing varied [6]
5. Bud scale outer surface glabrous to sparsely puberulent; corolla lobes usually white (sometimes pink-tinged), upper lobe with contrasting yellowish area, the tube white to greenish or pale pinkish. corolla outer surface unicellular, eglandular hairs sparse to dense (glandular hairs also present), often continuing in lines up lobes; usually in mesic-xeric woodlands … R. alabamense

5. Bud scale outer surface canescent; corolla lobes white to pink, the tube darker colored and pinkish, upper lobe without contrasting or darker colored area, the corolla outer surface unicellular, eglandular hairs dense (glandular hairs also present), not continuing in lines up lobes; usually in mesic-hydric woodlands … R. canescens
6. Mature shrubs 2-7 m tall; twigs red-brown, usually densely strigose (esp. distally); leaf blade lower surface often pubescent; floral bud scales usually 15-20, aristate-mucronate; corolla tube 2.5-3.3 cm long, glabrous inside, 2-2.3 times as long as the lobes; flowering Jun-Sep; fruit maturing (Jun)Sep-Dec … R. serrulatum
6. Mature shrubs 1-3(5) m tall; twigs pale brown, strigillose, hispid, or glabrescent; leaf blade lower surface usually glabrous, strigose on midrib; floral bud scales usually (8)12-18, obtuse to acute; corolla tube 1.5-2.5 cm long, slightly pubescent inside distally, 1.5-1.9 times as long as the lobes [7]
7. Leaf blades to 3.5 cm wide, glaucescent below; flowering Mar-Apr; fruit maturing May-Jun … R. viscosum var. aemulans
7. Leaf blades to 2 cm wide, green to pallid below; flowering May-Jul; fruit maturing Jul-Sep … R. viscosum var. viscosum

Key A: common Asian taxa potentially cultivated and hybridized
1. Young stems villous, glandular; corolla white (infrequently pale red), upper lobe lacking flecks; stamens 10, longer than the corolla … R. mucronatum
1. Young stems strigose, eglandular; corolla variously colored, sometimes white, upper lobe with darker colored spots or flecks; stamens 5 or 10, shorter than to subequal to corolla [2]
2. Leaf blades 1.7-3.2(4.5) cm long, 0.5-1.2 cm wide; corolla pink to red; stamens (4)5(6) [3]
2. Leaf blades 1.5-5(9) cm long, 0.5-3 cm wide; corolla variously colored, including red; stamens (6)7-10 [4]
3. Pedicel white-strigose; corolla 3-4 cm long … R. indicum
3. Pedicel ferruginous-strigose; corolla 1.2-2.5 cm long … R. obtusum
4. Corolla variously colored, 3.5-4(4.5) cm long; stamens subequal to corolla … R. simsii
4. Corolla pink to rose-purple, (4.5)4.8-5.2(6) cm long; stamens subequal to shorter than the corolla [5]
5. Eglandular; stamens subequal to the corolla … R. pulchrum
5. Sometimes glandular; stamens shorter than the corolla … R. scabrum

Rhododendron alabamense Rehder {AFP} — Jac-Jef Cos. SE. May hybridize with *R. canescens* (e.g. Leon Co.).

Rhododendron austrinum (Small)Rehder {AFP} — Panhandle (report from Baker Co. cultivated presumably). SE. Hybrids with *R. canescens* are intermediate in corolla color and usually more eglandular like *R. canescens* (Kron 1993).

Rhododendron canescens (Michx.)Sweet {AFP} — Panhandle to N pen. (S to Marion Co.). CE. In addition to the above two species, *R. canescens* may hybridize with *R. viscosum* (Chappell et al. 2008).

•***Rhododendron chapmanii*** Alph. Wood {AFP} — Gul-Leo Cos., & Clay Co. FE. SE. Wilbur & Pullen (1962) concluded that only the short petioles (mostly 3-5 mm long) reliably distinguished this as a variety, but obtuse leaf apices and erect, rigid branches were usually distinctive. Seeds are more ornamented in this taxon (Weakley et al. 2015).

Rhododendron serrulatum (Small)Millais — Panhandle to C pen. (S to DeSoto Co.). Recognized following morphological descriptions by Rehder (1921: 118, 153-155), but whether truly well differentiated remains nebulous. However, Kron (1993) wrote "Since correlated or geographically coherent sets of characters (showing gaps in the pattern of

variation) could not be discerned, subspecies are not recognized within this complex. Therefore *R. viscosum* is recognized as a widespread and highly variable species which includes *R. serrulatum*, *R. oblongifolium* and *R. coryi*. The entities which these names represent are morphological 'types' found at the southern and western limits of the geographic range of *R. viscosum*, and are most likely derived from different populations within the range of variability of 'typical' *R. viscosum*. Therefore, recognizing these entities at the specific level, in addition to being phenetically arbitrary and unworkable from a practical identification standpoint, would also make *R. viscosum* a paraphyletic species".

Rhododendron viscosum (L.)Torr. var. ***aemulans*** {AFP} — W panh. Described by Rehder (1921: 165) and potentially worth recognizing.

Rhododendron viscosum (L.)Torr. var. ***viscosum*** {AFP} — W panh.

^*Rhododendron* subsect. *Tsutsusi* — Various cultivars of Asian taxa of this subsect. can be found and their taxonomy is intractable; many are probably hybrids or mutant strains. Some of these taxa allegedly cultivated are keyed above. See Chamberlain & Rae (1990) and Mingyuan et al. (2005).

Vaccinium

1. Larger leaf blades 0.5-3(3.7) cm long (leaf blade underside usually only with secondary venation apparent, tertiary or reticulate venation obscure or scarcely discernible) … Key A
1. Larger leaf blades (2.5)3-7 cm long (new leaves in spring may be small and not yet fully expanded, if so, then leaf blade underside usually with readily visible tertiary and sometimes reticulate venation) [2]
2. Young stems, usually by the second- to fifth-year, roughened-verrucose (often obscure) … Key B
2. Young stems not verrucose … Key C

Key A
1. Shrubs to 3 m tall; young stems, usually by the second- to fifth-year, roughened-verrucose (often obscure); larger leaf blades (1.5)2-3(3.7) cm long, dentate to entire (the teeth often with stipitate to discoid glands), secondary veins 3-7 per side, lower surface eglandular or glands confined to basal part of midrib, deciduous (diploid; panhandle and northern peninsula) … V. elliottii
1. Low shrubs to 1.5 m tall; young stems not verrucose; larger leaf blades <1.5(2) cm long, crenulate-serrate to entire (teeth may have glands), lower surface eglandular or with stipitate glands, secondary veins 2-4 per side, evergreen-persistent [2]
2. Leaf blade lower surface eglandular (or glands very rare on few leaves, marginal teeth may have glands); young stems, leaves, hypanthium, and fruit usually glaucous (diploid; widespread) … V. darrowii
2. Leaf blade lower surface stipitate-glandular; young stems, leaves, hypanthium, and fruit usually not glaucous (tetraploid; widespread) … V. myrsinites

Key B
1. Leaf blade lower surface eglandular [2]
1. Leaf blade lower surface stipitate-glandular (sometimes glands few along distal secondary veins) [3]
2. Stems and leaves glabrous to pubescent; leaves 6-8 cm long, 2.5-4 cm wide (tetraploid; panhandle and northern peninsula; V. australe, V. arkansanum) … V. corymbosum
2. Stems and leaves pubescent; leaves 3.5-5 cm long, 1.5-2.5 cm wide (tetraploid; widespread) … V. fuscatum

3. Plants <1.3 m tall; stipitate glands mostly with protracted heads, heads clavate, ellipsoid-cylindrical, to linear-oblong, heads often 1/3-1/2 of total trichome length, heads often dark in color (diploid) … V. tenellum
3. Plants 0.3-4(7) m tall; stipitate glands mostly with distinct heads, heads mostly globose, obovoid, to obconic-truncate, heads mostly <1/3 of total trichome length, heads often light in color (hexaploid) [4]
4. Plants 1-4.5(7) m tall; leaf blades coriacous, bluish or glaucous, lower surface sparsely stipitate-glandular (often few along distal secondary veins), occasionally moderately dense, eglandular hairs 0.3-0.5(0.6) mm long; hypanthium usually glaucous; fruits 8-16 mm wide … V. ashei
4. Plants 0.3-2.5 m tall; leaf blades chartaceous, green, lower surface usually moderately densely stipitate-glandular, eglandular hairs 0.4-1 mm long; hypanthium not glaucous; fruit 4-12 mm wide … V. virgatum

Key C
1. Bark often becoming flaky-rectangular; leaf blade upper surface lustrous with conspicuous venation, the lower surface light green, the blade base often acute, often stipitate glandular; hypanthium jointed with the pedicel; corolla closed in bud; anthers included (widespread) … V. arboreum
1. Bark usually tight to peeling in strips; leaf blade upper surface dull with obscure venation, the lower surface glaucous or not, the blade base often rounded to subcordate, stipitate-glandular or not; hypanthium continuous with the pedicel; corolla open in bud; anthers exserted (widespread) (V. stamineum) [2]
2. Stems and pedicels densely stipitate-glandular (panhandle and northwestern peninsula) … V. stamineum var. glandulosum
2. Stems and pedicels eglandular or sparsely stipitate-glandular [3]
3. Hypanthium and fruit glabrous [4]
3. Hypanthium and fruit pubescent [5]
4. Leaf blade lower surface usually whitened-glaucous; flowers solitary, scattered, subtended by slightly reduced to normal-sized leaves (widespread in Florida) … V. stamineum var. caesium
4. Leaf blade lower surface not whitened-glaucous; flowers in distinct inflorescences, subtended by greatly reduced leaves (panhandle) … V. stamineum var. stamineum
5. Flowers in axils of normal-sized leaves; calyx and hypanthium sparingly pubescent, eglandular (panhandle) … V. stamineum var. multiflorum
5. Flowers usually in axils of greatly reduced leaves; calyx and hypanthium densely hirsute and often stipitate-glandular (panhandle, rare in peninsula) … V. stamineum var. sericeum

Vaccinium arboreum Marshall {AFP} —
Vaccinium ashei Reade —
Vaccinium darrowii Camp {AFP} —
Vaccinium elliottii Chapm. —
Vaccinium formusum Andrews—
Vaccinium fuscatum L. {AFP} —
Vaccinium myrsinites Lam. {AFP} —
Vaccinium stamineum L. var. ***caesium*** (Greene)D.B. Ward {AFP} —
Vaccinium stamineum L. var. ***glandulosum*** (Ashe)D.B. Ward {AFP} —
Vaccinium stamineum L. var. ***multiflorum*** (Ashe)D.B. Ward {AFP} —
Vaccinium stamineum L. var. ***sericeum*** (Mohr)D.B. Ward {AFP} —
Vaccinium stamineum L. var. ***stamineum*** {AFP} —

Vaccinium tenellum Aiton —
Vaccinium virgatum Aiton —
^*Vaccinium* cv. group 'Southern Highbush' — Tetraploid; derivative of northern highbush with some elements of *V. darrowi*, *V. elliottii*, etc. Young shoots not glaucous and leaf blades subentire.
^*Vaccinium* cv. group 'Rabbiteye' — Hexaploid; mostly *V. ashei*, may have elements of *V. constablei*, etc. Leaf blades toothed and glaucous; stems and leaves glabrous to sparsely pubescent (vs. sparsely to moderately pubescent in wild-type *V. ashei*).

SARRACENIACEAE

Sarracenia

1. Pitchers with white areolae on hoods and/or distal portions of tubes [2]
1. Pitchers without white areolae on hoods and tubes [4]
2. Pitchers sprawling, decumbent, or sometimes ascending; orifices opening laterally beneath subglobose hoods; petals maroon-red … S. psittacina
2. Pitchers erect; orifices opening terminally, from in front of erect or recurved hoods; petals maroon to red or yellow [3]
3. Pitchers with areas of white areolae all around distal portion of tube and throughout hood; hoods recurved adaxially, held well beyond orifices; sepals maroon; petals maroon to red … S. leucophylla
3. Pitchers with prominently circular, white areolae distally opposite orifice; hoods convex, arching-recurved closely over orifices; sepals yellowish green; petals yellow … S. minor
4. Pitchers urceolate, decumbent or sprawling to ascending; hoods erect or with lobes arched together over orifices, orifices gaping … S. rosea
4. Pitchers tubiform, erect, rarely decumbent; hoods recurved adaxially, covering orifices [5]
5. Pitchers soft, external surface densely fine-pubescent; orifice rim yellow-green, rarely red, loosely revolute; major veins of distal pitcher tube maroon to red-purple on internal surface, indistinctly colored on external surface; major veins of hoods, if distinctly colored at all, colored mostly on adaxial proximal half of hood … S. rubra subsp. wherryi
5. Pitchers firm, waxy, glabrous or puberulent; orifice rim green, yellow-green, to red or maroon, loosely to tightly revolute; major veins of external and internal surfaces of distal portion of tube and both surfaces of hood red, maroon, or red-purple [6]
6. Pitchers 25-100 cm long, glabrous, orifice 2-7 cm wide, hood 3(5-14) cm wide; petals yellow … S. flava
6. Pitchers 20-57 cm long, usually puberulent, orifice 2.4-3.5 cm wide, hood 2-4 cm wide; petals maroon to red … S. rubra subsp. gulfensis

Sarracenia flava L. {AFP} —
Sarracenia leucophylla Raf. {AFP} — SE.
Sarracenia minor Walter {AFP} — ST.
Sarracenia psittacina Michx. {AFP} — ST.
Sarracenia rosea Naczi et al. {AFP} — ST.
•***Sarracenia rubra*** Walter subsp. ***gulfensis*** D.E.Schnell {AFP} — ST.
Sarracenia rubra Walt. subsp. ***wherryi*** (Case & R.B.Case)D.E.Schnell {AFP} — ST.

Named hybrids:
Sarracenia ×***bellii*** Mellich. (*leucophylla* × *rubra* subsp. *gulfensis*) {AFP} —

Sarracenia* ×*chelsonii H.J.Veitch (*rosea* × *rubra*) {AFP} — The name *S. flavopurpurea* has been allied with this later name.
Sarracenia* ×*courtii G.F.Wilson (*psittacina* × *rosea*) {AFP} —
Sarracenia* ×*formosa H.J.Veitch (*minor* × *psittacina*) {AFP} —
Sarracenia* ×*gilpinii C.R.Bell & Case (*psittacina* × *rubra* subsp. *gulfensis*) {AFP} —
Sarracenia* ×*mitchelliana W.Bull. (*leucophylla* × *rosea*) {AFP} —
Sarracenia* ×*moorei Veitch (*flava* × *leucophylla*) {AFP} —
Sarracenia* ×*naczii Mellich. (*flava* × *rosea*) {AFP} —
Sarracenia* ×*wrigleyana Anon. (*leucophylla* × *psittacina*) {AFP} —

STYRACACEAE

1. Buds with scales; pith chambered; petiole 11-35 mm long; leaf blade marginal teeth glands numerous and well developed; inflorescences borne on shoots of previous growing season; fertile shoots of current growing season without fully developed leaves (rarely fully developed); articulation between pedicels and flowers present; corolla lobes 4; ovaries completely inferior; fruits winged … Halesia
1. Buds without scales; pith continuous; petiole 2-12 mm long; leaf blade marginal teeth glands often few or poorly developed; inflorescences borne on shoots of current growing season; fertile shoots of current growing season with fully developed leaves; articulation between pedicels and flowers absent; corolla lobes 5-6(8); ovaries partly inferior; fruits not winged … Styrax

Halesia

1. Leaf blade 1.5-3.3 times longer than wide, margin mosty with 25-80 teeth per side; sepals 2-5 mm long; corollas glabrous, tube 7-26 mm; stamens 12-16; filaments adnate to corolla 2-3 mm; styles glabrous; fruits 4-winged, wings roughly equal … H. carolina
1. Leaf blade 1.2-2.2 times longer than wide, margin mostly with 12-26 teeth per side; sepals 4-8 mm long; corollas pubescent, the free lobes half or more the flower length; stamens 7-10; filaments adnate to corolla to 1 mm; styles hairy; fruits 2- or 4-winged, if 4-winged then 2 broad wings alternate with 2 much narrower wings … H. diptera

Halesia carolina L. {AFP} —
Halesia diptera J.Ellis {AFP} —

Styrax

1. Petiole 2-6 mm long; largest leaf blades on sterile shoots 2-5.7 cm wide, the longest arms of leaf hairs 0.1-0.2 mm long; calyx 2.5-4 mm long; corolla tube 1.5-3 mm; false-terminal racemes 2-3.5 cm; fruit capsular, dehiscent nearly or completely to base, broadly exposing seeds … S. americanus
1. Petiole 4-12 mm long; largest leaf blades on sterile shoots 5-20 cm wide, the longest arms of leaf hairs 0.2-0.6 mm long; calyx 4-6 mm long; corolla tubes 3-5 mm; false-terminal racemes 3-11.5 cm; fruit nutlike, indehiscent or at most with 1-3 narrow longitudinal fissures, barely exposing seeds … S. grandifolius

Styrax americanus Lam. {AFP} — Panh. to s-c pen. Gonsoulin (1974) recognized two varieties, which overlap geographically and morphologically to such an extent that they do not seem worth recognizing.
Styrax grandifolius Aiton {AFP} —

SYMPLOCACEAE

Symplocos

Symplocos tinctoria (L.)L'Hér. {AFP} —

THEACEAE

1. Shrubs or small trees to 4 m tall; leaves evergreen; seeds wingless … Camellia
1. Shrubs or trees 2-30 m tall; leaves deciduous or evergreen; seeds winged or wingless [2]
2. Petiole gracile, ca. 1 mm thick or less; leaf blade chartaceous, 1.5-2.3 times longer than wide, often aging yellow or purplish; filaments red to purplish, anthers blue to grayish; inflorescence bracts usually persistent; capsules conic, columellla absent … Stewartia malacodendron
2. Petiole stout, ca. 1-2 mm thick; leaf blades coriaceous, 2.2-3.5 times longer than wide, often aging red; filaments yellow, anthers yellow to orangeish; inflorescence bracts deciduous; capsules ovoid, columella present
3. Pollen malformed … Gordlinia
3. Pollen normal [4]
4. Stem and petiole pubescent; leaves deciduous, the blade usually toothed below the middle, venation conspicuous; pedicels 0.2-1.5(4) cm long; sepals deciduous; capsule dehiscence loculicidal from apex and septicidal from base; seeds reniform, apical wing relatively narrow or absent … Franklinia altamaha
4. Stem and petiole glabrate; leaves evergreen, the blade toothed to near middle, venation relatively obscure; pedicels (3)5-7 cm long; sepals persistent; capsule dehiscence loculicidal from apex only; seeds ovoid, apical wing prominent … Gordonia lasianthus

Camellia

1. Leaf blades 2.5-3.5 times as long as wide; flowers pedicellate; bracteoles differentiated from sepals; sepals persistent, coriaceous … C. sinensis
1. Leaf blades 1.8-2.6 times as long as wide; flower subsessile; bracteoles indistinct from sepals; sepals caducous, scale-like [2]
2. Petiole 7-12 mm long; leaf blades 6-12 cm long, 3-7 cm wide; petals connate basally; filaments connate into a tube; ovary glabrous; fruit rarely if ever forming in cultivars … C. japonica
2. Petiole 2-5 mm long; leaf blades 3-5(7) cm long, 1-3 cm wide; petals scantily connate at base; filaments slightly connate base; ovary villous; fruit often formed … C. sasanqua

^*Camellia japonica* L. —
^*Camellia sasanqua* Thunb. —
^*Camellia sinensis* (L.)Kuntze —

Franklinia

^*Franklinia alatamaha* Marshall —

Gordlinia

^×*Gordlinia grandiflora* Ranney & Fantz (*Franklinia alatamaha* × *Gordonia lasianthus*) —

Gordonia

Gordonia lasianthus (L.)J.Ellis {AFP} —

Stewartia
Stewartia malacodendron L. {AFP} — SE.

LAMIIDS

Figure: Estimated phylogeny of extant lamiids. Black font=contains taxa native to Florida; Asterisk=introduced to Florida; Gray font=not native, not included.

AQUIFOLIALES

AQUIFOLIACEAE

Ilex: Historically, *Ilex paraguariensis* has been cultivated in Florida and is keyed below. Forms of *Ilex cassine* have been extensively passed off/misidentified as *I. paraguariensis* throughout the USA.

1. Leaf blade apex with a rigid prickle 1 mm long or longer, the margins entire or spinose like the leaf apex [2]
1. Leaf blade apex unarmed, bristle-tipped, or with a weak prickle less than 1 mm long, the margins entire, crenate, dentate, serrate, to spinulose-serrate [4]
2. Twigs mostly persistenly green; leaf blade upper side lustrous, green to dark green, margin entire or strongly lobed into spines; inflorescence on older part of branch … I. cornuta

2. Twigs usually gray, young shoots may be somewhat greenish; leaf blade upper side dull, green, margin entire or subtly undulate-mucronate with prickles; inflorescence on recent growth [3]
3. Leaf blades light green, 1-2.5 cm wide, the margin distinctly revolute … I. arenicola
3. Leaf blades dark green, mostly 2.5-5.5 cm wide, the margin flat or only slightly revolute … I. opaca
4. Leaf blade coriaceous, upperside typically lustrous, margins entire, subentire, or with few, sparse teeth mostly above the middle (or regularly dentate in I. latifolia), secondary venation nearly concolorous with the blade surface, unapparent, or obscure (esp. the underside), blade glabrate to minutely pubescent [5]
4. Leaf blade chartaceous to subcoriaceous, upperside dull to semi-lustrous, margins crenate, dentate, or serrate at or below the middle and towards the apex, sometimes teeth below middle subtle, sometimes subentire, blade glabrate, scabridulous, hispidulous, pilosulous, to villosulous (esp. the underside along midrib) [11]
5. Leaf blade margin regularly dentate … I. latifolia
5. Leaf blade margin entire to distally toothed [6]
6. Twigs glabrous; petioles 8-20 mm long; leaf blades mostly ovate; fruit red, rarely otherwise [7]
6. Twigs usually pubescent (hairs 0.02-0.4 mm long), sometimes glabrous; petioles 2-10 mm long; fruit red to purple-black, rarely otherwise [8]
7. Leaf blade underside with minute black punctations, blade tip usually acuminate, base subtruncate, rounded, to cuneate … I. krugiana
7. Leaf blade underside without punctations, blade tip acute to rounded, base cuneate to cuneate-attenuate … I. rotunda
8. Leaf blade mostly obovate to oblanceolate, 1.6-4 times as long as wide, the midvein often markedly reduced or evanescent near or just above the middle, the underside with minute black punctations; calyx and corolla with 5-9 lobes; fruit dark red to purple-black; erupting buds and very young shoots often lustrous-viscous; hairs 0.02-0.06 mm long [9]
8. Leaf blade mostly elliptic, narrowly elliptic, to linear-oblong, 3-11 times as long as wide, the midvein mostly distinct to the apex or evanescent only at the very tip, the underside without minute black punctations; calyx and corolla with 4 lobes; fruit yellow to red; erupting buds and very young shoots not viscous; hairs 0.05-0.4 mm long [10]
9. Leaf blades 1.6-3 times as long as wide, margin entire to subentire with minutely serrulate teeth above the middle … I. coriacea
9. Leaf blades 2-4 times as long as wide, margin distinctly notched with crenate-serrulate teeth above the middle (rarely entire) with 1-3 teeth per side … I. glabra
10. Hairs 0.15-0.4 mm long, antrorse to spreading; leaf blades 10-40 mm wide, 32-100 mm long, glabrous to moderately hairy … I. cassine
10. Hairs 0.05-0.15(0.2) mm long, mostly antrorse; leaf blades 3-10(13) mm wide, 15-40 mm long, 3.5-11 times as long as wide, glabrous to sparsely hairy … I. myrtifolia
11. Leaf blade margins subentire to distally minutely serrulate, base truncate, rounded, to cuneate-subtruncate, upperside becoming reticulate-rugose, underside with prominent, conspicuous secondary and usually reticulate venation and mostly copiously pilosulous … I. amelanchier
11. Leaf blade margins mostly regularly crenate, serrulate, to serrate, base attenuate to truncate, upperside generally smooth, underside with obscure to conspicuous secondary venation, reticulate venation mostly subtle, hairs mostly confined to midrib and secondary veins or hairs frequent in I. verticillata [12]

12. Leaf blade relatively narrowly elliptic, oblanceolate, to obovate, margin mostly crenate (teeth sometimes also mucronulate), the blade tip obtuse (sometimes on an acumen), hairs 0.01-0.03 mm wide or glabrous [13]
12. Leaf blade relatively broadly ovate, lanceolate, obovate, to oblanceolate, margin mostly dentate to serrate, sometimes crenate, the blade tip acute to acuminate, hairs 0.01-0.06 mm wide [16]
13. Petiole stout, 1-2 mm wide; leaf blades 5 –15 cm long, 2.3–7 cm wide; plant glabrous … I. paraguariensis
13. Petiole slender, 0.5-1 mm wide; leaf blades 1-9 cm long, 0.4-4 cm wide; plant usually with minute hairs [14]
14. Leaves evergreen, coriaceous, with a subtruncate base; without spur branches; twigs and petioles densely minutely scabridulous (hairs ~0.03-0.1 mm long), hairs continuing only shortly onto blade midrib … I. vomitoria
14. Leaves deciduous, subcoriaceous, with a narrow cuneate base; often with spur branches; twigs glabrous, glabrate, to sparingly minutely hispidulous, petioles scabridulous proximally and distally becoming pilosulous to villosulous including blade base, esp. on the blade underside midrib, hairs 0.1-1.0 mm long [15]
15. Larger, mature leaf blades 2-5.5 cm long, 0.4-1.3(2) cm wide, (1.7)2.5-6.5 times as long as wide, the apex rounded, the underside midrib glabrous, ciliolate, to sparsely pilose proximally and the secondary veins glabrous or with a few hairs, hairs 0.1-0.5 mm long; rarely a few leaves more densely pilose) … I. curtissii
15. Larger, mature leaf blades 3.5-9 cm long, 1.4-4 cm wide, 2-3.2 times as long as wide, the apex rounded to deltate, the underside midrib densely pilose to villosulous proximally, and the secondary veins sparsely pilose, rarely glabrate on all leaves, older leaves glabrate, hairs 0.3-0.7(1.0) mm long … I. decidua
16. Petiole and leaf blade base antrorsely scabridulous to ciliolate, hairs 0.04-0.06 mm wide, stiff; staminate pedicels 8-12 mm long, pistillate pedicels 10-27 mm long; calyx lobes 4, eciliate; corolla lobes eciliate; pyrene with a hard, ribbed endocarp … I. longipes
16. Petiole and leaf blade glabrous, ciliolate, pilosulous, to villosulous, hairs 0.01-0.03 mm wide, weakly straight to wavering; staminate pedicels 2-10 mm long, pistillate pedicels 2-8 mm long; calyx lobes 5-8, margins usually ciliate; corolla lobes ciliolate to entire; pyrene with a soft, smooth or hard, ribbed endocarp [17]
17. Leaf blade generally narrowly ovate, lance-elliptic, to oblanceolate, margin mostly finely serrate, veins often impressed on mature ones; calyx lobe margins copiously ciliate, faces often pilosulous; pyrene with a soft, smooth endocarp; of hydric to mesic-hydric areas … I. verticillata
17. Leaf blade generally ovate, margin more coarsely serrate, veins not strongly impressed; calyx lobe margins pyrene with a hard, ribbed endocarp; of xeric to mesic-xeric areas [18]
18. Diffuse shrubs, branching more elongate, divergent; petioles (where blade is <1 mm wide) 3-5 mm long; leaf blades chartaceous, (1.4)2-2.8 times as long as wide; inflorescences mostly along elongate branches; fruit 4-12 mm long … I. ambigua
18. Compact shrubs, denser branching, shorter internodes, branching more strict to ascending, previous year twig with gray bark 1.5-2.3 mm wide; petioles 1-3.5 mm long; leaf blades subcoriaceous, (1)1.2-2 times as long as wide, blade base acute; inflorescence fascicles often in dense clusters on old thick wood, often sparingly branched on short (spur shoots); staminate pedicel 1-2.2 mm long; fruit 8-12 mm long … I. buswellii

Ilex ambigua (Michx.)Torr. {AFP} —
Ilex amelanchier M.A.Curtis ex Chapm. {AFP} — ST.

•***Ilex arenicola*** Ashe {AFP} — *Ilex arenicola* was published in an August issue in 1924, *while I. cumulicola* Small was published in a September issue of the same year.
^*Ilex ×attenuata* Ashe (*cassine* × *opaca*) {AFP} — First found in the wild, but now common in cultivation.
Ilex buswellii Small —
Ilex cassine L. {AFP} —
Ilex coriacea (Pursh)Chapm. {AFP} —
^*Ilex cornuta* Lindl. & Paxton {AFP} —
Ilex curtissii (Fernald)Small — North and central peninsula (adjacent counties in Georgia).
Ilex decidua Walter {AFP} —
Ilex glabra (L.)A.Gray {AFP} —
Ilex krugiana Loes. {AFP} — Miami-Dade Co. Rockland hammocks. ST. Vegetatively similar to *Prunus myrtifolia* but *I. krugiana* has a smoothish gray bark with lenticels (often with horizontal patterning), twigs gray and fairly dull, leaf blades medium green to dark green, 1.6-2(2.5) times longer than wide, ovate, the underside generally lacking clear venation.
^*Ilex latifolia* Thunb. —
Ilex longipes Chapm. ex Trel. {AFP} —
Ilex myrtifolia{AFP} — Interfertile with *I. cassine*.
Ilex opaca Aiton {AFP} —
^*Ilex paraguariensis* A.St.-Hil. — Historically cultivated; has been recently misapplied to *I. cassine*.
^*Ilex rotunda* Thunb. —
Ilex verticillata (L.)A.Gray {AFP} —
Ilex vomitoria Aiton {AFP} — Panhandle to C FL (SE USA, MX). Woodlands. Traditional usage of this caffeine-containing plant (i.e. black drink) sometimes involved emesis (Merrill 1979; Crown et al. 2012). Other accounts indicate its regular use as a beverage, including by early immigrants (Hann 1986; Carriger, Jr. 2020; Folch 2021). Croom remarked that the epitheth *vomitoria* was "oddly applied to a plant which is used as a wholesome and pleasant tea, as this is by many on the coast of North Carolina" (letter to Torrey, 10 Feb 1836). A blind taste test of the tea comparing it with yerba mate (*I. paraguariensis*) found *I. vomitoria* was more favorably rated (Wainwright & Putz 2014). Historically, this species was sometimes referred to as "cacina" or "cassina" (Alston & Schultes 1951) but Linnaeus used that name for a different species, *I. cassine* (Schultes 1950; Edwin 1963).

SOLANALES

CONVOLVULACEAE

1. Plant parasitic; stems yellowish to orange; leaves absent or reduced to scales … Cuscuta
1. Plant photosynthetic; stems usually green distally; leaves with expanded blades present [2]
2. Stem prostrate, rooting at nodes; leaf blade base cordate and 7-20 mm wide or long; corolla subequal to shorter than the calyx, deeply 5-lobed, the sinuses >½ the corolla lobe length; fruit deeply 2-lobed … Dichondra
2. Stem prostrate, twining, to erect, rarely rooting at nodes; leaf blade base cordate and usually >20 mm wide or long or leaf blade not cordate; corolla longer than the calyx, unlobed or to moderately 5-lobed, the sinuses <½ the corolla lobe length [3]
3. Flowers 5-7 mm long, numerous in elongate panicles … Poranopsis paniculata
3. Flowers 5-80 mm long, solitary or in cymes [4]
4. Styles 2 per flower, free or fused only at the base; generally all trailing to procumbent and leaves small, to 40 mm wide [5]

4. Style 1 per flower; many species twining vines, some trailing or shrubs, and leaves small to large, to 250 mm wide [7]
5. Calyx 15-28 mm long; corolla 80 mm wide or long; fruit 12-20 mm wide or long … Bonamia grandiflora)
5. Calyx 2-9(11) mm long; corolla 7-20(25) mm wide and long; fruit 2-9 mm wide or long [6]
6. Each style 2-cleft or 2-fid for ½ or more of its length; stigmas 4, linear to subclavate … Evolvulus
6. Each style not split or scarcely so; stigmas 2, capitate or peltate … Stylisma
7. Stigma or the lobes elongated (cylindric to linear) [8]
7. Stigma or the lobes capitate or globose [9]
8. Stems hairy, hairs usually branched, glandular, or stellate, sometimes simple … Jacquemontia
8. Stems glabrous to hairy, hairs unbranched, eglandular, not stellate … Convolvulus
9. Anthers twisted after dehiscence; pollen usually 3-9-colpate [10]
9. Anthers straight after dehiscence; pollen rugate or echinate [11]
10. Leaves unlobed, not compound (the blade basally cordate); inflorescence usually with 3-20 flowers in an umbelliform cluster … Camonea umbellata
10. Leaves compound or palmately lobed; inflorescence with 2-9 flowers in cymes or flower solitary … Distimake
11. Sepals accrescent, completely enclosing undehisced fruit or nearly so; corolla 25-30 mm long … Aniseia martinicensis
11. Sepals not accrescent, not completely enclosing fruit; corolla 20-80(15) mm long … Ipomoea

Aniseia
****Aniseia martinicensis*** (Jacq.)Choisy {AFP} —

Bonamia
•***Bonamia grandiflora*** (A.Gray)Hallier f. {AFP} — FT. SE.

Camonea
****Camonea umbellata*** (L.)A.R.Simões & Staples {AFP} —

Convolvulus: *Calystegia* is subsumed here, nested in *Convolvulus* (Williams et al. 2014).

1. Sepals 3-5 mm long; stigma lobes cylindric to spatulate, apices acute; ovary 2-locular … Convolvulus arvensis
1. Sepals 12-34 mm long; stigma lobes linear to oblong, apices blunt; ovary 1-locular [2]
2. Stems erect to trailing, occasionally sparsely twining, the flowers produced in the basal nodes … C. catesbeianus
2. Stems strongly twining, the flowers produced in the distal nodes … C. americanus subsp. limnophilus

Convolvulus americanus (Sims)J.W. Loudon subsp. ***limnophilus*** (Greene)A. Haines {AFP} —
****Convolvulus arvensis*** L. {AFP} —
Convolvulus catesbeianus (Pursh)Elliott {AFP} — SE.

Cuscuta
1. Styles united and appearing as one for most of their length [2]

1. Styles 2, distinct [3]
2. Calyx lobes entire; style <1 mm long … C. exaltata
2. Calyx lobes minutely erose; style >1 mm long … C. japonica
3. Corolla lobe with a flap-like subapical appendage … C. boldinghii
3. Corolla lobe without a subapical appendage [4]
4. Corolla (and sometimes the calyx and pedicel) papillate; capsule with a thickened and raised stylopodium … C. indecora
4. Corolla not papillate; capsule lacking an evident stylopodium [5]
5. Flower densely bracteate, bracts erose-fimbriate to roughened entire; usually parasitic on woody species … C. compacta
5. Flowers with 0-2 entire bracts; parasitic on herbaceous or woody species [6]
6. Corolla lobes acute at the tip [7]
6. Corolla lobes obtuse to rounded at the tip [9]
7. Calyx lobe acute at the tip; corolla lobe narrowly deltate; capsule circumscissile dehiscent … C. umbellata
7. Calyx lobe obtuse at the tip; corolla deltate; capsule indehiscent [8]
8. Flower 2.1-4.6(5) mm long; calyx rounded, enclosing the corolla tube, 1-2.1 mm long, lobes ovate-deltate, not auriculate; corolla tube 1.1-2.5 mm long; anthers 0.4-0.7 mm long; fruit 1.3-2.8 mm long, 1.9-3.9 mm wide … C. campestris
8. Flower 1.4-2.1(2.5) mm long; calyx angled, loose around the corolla tube, 0.3-1.1 mm long, lobes broadly ovate-rhombic, auriculate; corolla tube 0.5-1.2 mm long; anthers 0.2-0.35 mm long; fruit 1.9-2.4 mm long, 1.2-2.5 mm wide … C. pentagona
9. Calyx enclosing corolla tube; capsule circumscissile dehiscent; usually parasitic on woody species … C. americana
9. Corolla tube exserted from calyx lobes; capsule indehiscent; parasitic on herbaceous or woody species [9]
10. Corolla lobes, when reflexed, not or barely meeting calyx lobe tips; capsule conic, longer than broad … C. gronovii
10. Corolla lobes, when reflexed, conspicuously overlapping calyx lobe tips; capsule depressed globose, length and width subequal or broader than long … C. obtusiflora var. glandulosa

Cuscuta americana L. {AFP} —
++***Cuscuta boldinghii*** Urb. {AFP} — Disturbed areas. Perhaps a recent introduction.
Cuscuta campestris Yunck.— Type from Virginia. Had been subsumed in *C. pentagona*. Its occurrence in Florida and relationship with *C. pentagona* rather unclear.
Cuscuta compacta Juss. ex Choisy {AFP} —
Cuscuta exaltata Engelm. {AFP} —
Cuscuta gronovii Willd. ex Schult. {AFP} —
Cuscuta indecora Choisy {AFP} —
*****Cuscuta japonica*** Choisy {AFP} —
Cuscuta obtusiflora Kunth var. ***glandulosa*** Engelm. {AFP} —
Cuscuta pentagona Engelm. {AFP} —
Cuscuta umbellata Kunth {AFP} —

Dichondra

Dichondra repens J.R.Forst. & G.Forst. {AFP} — It has been proposed that *D. carolinensis* and *D. micrantha* should be considered synonyms of the earlier species name *D. repens* (Delgado 2019).

Distimake

1. Leaves simple, entire to deeply palmately lobed, but not compound; corolla yellow or white with a purple throat [2]
1. Leaves palmately compound, the leaflets 5; corolla white [3]
2. Leaf lobes with the margin sinuate-dentate; corolla white with a purple throat, 3-4 cm long; fruit 1-3 cm long … D. dissectus
2. Leaf lobes with the margin entire; corolla yellow, 5-6 cm long; fruit 3-6 cm long … D. tuberosus
3. Leaf blade margin entire … D. aegyptius
3. Leaf blade margin serrulate [4]
4. Stem and leaves with glandular trichomes … D. cissoides
4. Stem and leaves glabrous to pilose, lacking glandular trichomes … D. quinquefolius

**Distimake aegyptius* (L.)A.R.Simões & Staples {AFP} —
++*Distimake cissoides* (Lam.)A.R.Simões & Staples {AFP} — At times claimed to be native, but nearly all habitat occurrences in exclusively disturbed areas argues it's likely an old introduction.
**Distimake dissectus* (Jacq.) A.R.Simões & Staples {AFP} —
**Distimake quinquefolius* (L.)A.R.Simões & Staples {AFP} —
**Distimake tuberosus* (L.) A.R.Simões & Staples {AFP} —

Evolvulus

1. Peduncle and pedicel together 7-20 mm long, usually clearly exceeding the subtending leaf, the peduncle 5-18 mm long, longer than the pedicel [2]
1. Peduncle and pedicel together 1-6 mm long, usually subequal to shorter than the subtending leaf, the peduncle 0-3 mm long, subequal to shorter than the pedicel [3]
2. Lower surface of leaf blade pubescent to villous … E. alsinoides
2. Lower surface of leaf blade glabrous … E. convolvuloides
3. Leaves mostly orbicular, ovate, oblong, or elliptic, 1-3 times longer than wide [4]
3. Leaves generally linear, 3-20 times longer than wide [6]
4. Stems decumbent, ascending, to erect; larger leaves 8-40 mm long; corolla blue to purple, 12-18 mm wide … E. glomeratus subsp. grandiflorus
4. Stems prostrate; larger leaves 3-8 mm long; corolla white, 5-9 mm wide [5]
5. Leaf blade narrowly ovate to elliptic, densely hairy … E. grisebachii
5. Leaf blade orbicular to elliptic, glabrous to sparsely hairy … E. nummularius
6. Leaf upper side and lower side pubescent … E. sericeus var. averyi
6. Leaf upper side glabrous [7]
7. Leaf underside glabrous … E. sericeus var. glaberrimus
7. Leaf underside pubescent … E. sericeus var. sericeus

Evolvulus alsinoides (L.)L. {AFP} —
Evolvulus convolvuloides (Willd. ex Schult.)Stearn {AFP} — SE.
^*Evolvulus glomeratus* Nees & Mart. subsp. *grandiflorus* (Parodi)Ooststr. {AFP} —
Evolvulus grisebachii Peter {AFP} — SE.
X***Evolvulus nummularius*** (L.)L. — Known only from a Rugel specimen (at US), usually interpreted as a labeling error and more likely from Cuba (Ward 1968). Yet, the possibility

exists it was in a place like Key West, from which many species have been extirpated. Further, the species is rather widespread and weedy.

•***Evolvulus sericeus*** Sw. var. ***averyi*** D.B. Ward {AFP} —
Evolvulus sericeus Sw. var. ***glaberrimus*** Robins. {AFP} —
Evolvulus sericeus Sw. var. ***sericeus*** {AFP} —

Ipomoea : Within the genus Ipomoea, some species are known to be infected by an ascomycete related to *Periglandula*. The endophytic fungus produces ergot alkaloids which likely protect the seed, seedling, and mature plant from herbivory. It appears the fungal alkaloids can be transported by the plants to certain tissues (Amor-Prats & Harborne 1993; Beaulieu et al. 2013).

1. Stems densely white-tomentose and leaf blades pinnately veined; fruit indehiscent … I. nervosa
1. Stems glabrous to pubescent, or if densely tomentose then leaf blades palmate-pinnately veined; fruit dehiscent or circumscissile [2]
2. Leaves pinnately divided into linear segments … I. quamoclit
2. Leaves entire or with broad lobes, or palmately dissected [3]
3. Leaves palmately dissected, appearing palmately compound [4]
3. Leaves entire or with broad lobes, the sinuses not reaching the petiole (nearly reaching the petiole sometimes in I. batatas or I. imperati) [5]
4. Leaves of axillary buds developed and stipulelike … I. cairica
4. Leaves of axillary buds not developed … I. wrightii
5. Leaf blade distally oblong to broadly rounded, the apex truncate, emarginate, to broadly obtuse [6]
5. Leaf blade distally broadly to narrowly deltoid and gradually narrowed to an acute, acuminate, or mucronulate tip [8]
6. Leaves chartaceous … I. asarifolia
6. Leaves somewhat fleshy, semi-succulent [7]
7. Leaf blade not lobed, with conspicuous reticulate venation between the secondary veins; corolla pinkish to lavender throughout, darker in the throat … I. pescaprae subsp. brasiliensis
7. Leaf blade sometimes lobed, with inconspicuous or faint reticulate venation between the secondary veins; corolla white with yellow to purple throat … I. imperati
8. Plant an erect shrub, the flowering portions of the stem mostly > 4 mm in width; leaves lanceolate … I. carnea subsp. fistulosa
8. Plant herbaceous, repent, clambering, or twining, the flowering portions of the stem mostly < 4 mm wide, if thicker, then leaves not lanceolate [9]
9. Leaf blade tomentose abaxially, secondary veins usually branching with additional conspicuous veins … I. macrorhiza
9. Leaf blade glabrous, sericeous, pilose, to villous abaxially, secondary veins usually not branching or forking once or with 1-2 branches [10]
10. Plant with filiform prickles … I. setosa
10. Plant without prickles or prickles not filiform [11]
11. Calyx lobe body obtuse with a subapical filiform prolonged tip; corolla red, rarely white … I. hederifolia
11. Calyx lobe tip terminal, not subapical; corolla white, light blue, or purple [12]
12. Calyx lobe tip linear to filiform, typically subequal to the body in length [13]
12. Calyx lobe tip obtuse, acute, to acuminate, less than half the length of the body [14]

13. Plant glabrate; corolla white ... I. alba
13. Plant densely pilose; corolla light blue, the throat white to pale yellow ... I. hederacea
14. Leaf blade lanceolate, the base broadly to shallowly acute or rounded-truncate to truncate-acute; corolla red (rarely white) ... I. microdactyla
14. Leaf blade not lanceolate, the base cordate to sagittate, or truncate; corolla white to purple [15]
15. Plant repent or stems floating [16]
15. Plant twining, stems sinuous [18]
16. Sepals with bristle-like tips ... I. batatas
16. Sepals without bristle-like tips [17]
17. Leaf blade apex deltoid, with an acute to acuminate tip ... I. aquatica
17. Leaf blade apex rounded, acute to obtuse with a mucro ... I. asarifolia
18. Midvein region green or darker, strongly contrasting with margin of sepal [19]
18. Midvein region not pronouncedly darker or scarcely darker than margin of sepal [20]
19. Stem without prickles; sepal tip obtuse to acute; fruit circumscissile at base, with 1-2 seeds ... I. corymbosa
19. Stem sometimes with deltate prickles; sepal tip caudate-acuminate; fruit not circumscissile, with 1-4 seeds ... I. muricata
20. Sepal tips rounded, obtuse, sometimes mucronate [21]
20. Sepal tips acute to acuminate [23]
21. Leaf blades sagittate; corolla purple to lavender ... I. sagittata
21. Leaf blades cordate; corolla white or white with a purple throat [22]
22. Corolla with a purple throat; sepals 12-15 mm long ... I. pandurata
22. Corolla without a purple throat; sepals 15-25 mm long ... I. violacea
23. Plant usually with some leaves sagittate ... I. tenuissima
23. Plant mostly without sagittate leaves [24]
24. Pedicel without papillae or subtly papillate; corolla (3.5)4-8 cm long [25]
24. Pedicel often subtly papillate; corolla 0.5-5 cm long [27]
25. Stems sometimes fleshy (i.e. sweet potato), sometimes rooting; sepals with bristle-like tips ... I. batatas
25. Stems not fleshy, not rooting; sepals merely acute to acuminate at the tip [26]
26. Pedicel shorter than the calyx ... I. indica
26. Pedicel subequal to longer than the calyx ... I. purpurea
27. Corolla 0.5-2.5 cm long; sepals glabrous; pedicel usually to 6 mm long (rarely to 11 mm) ... I. leucantha
27. Corolla 1.5-5 cm long; sepals ciliate-margined; pedicels 5-14 mm long [28]
28. Longest sepals 5-8 mm long, oblong to narrowly elliptic-oblong; corolla 1.8-2 cm long; largest dimension (length or width) of fruit 5-6 mm ... I. triloba
28. Longest sepals 8-14 mm long, glabrous or ciliate-margined; corolla 0.5-4 cm long; largest dimension (length or width) of fruit 7-13 mm long [29]
29. Corolla pinkish to lavender (rarely white), 2.5-5 cm long; sepals ovate-lanceolate to lanceolate-acuminate, 8-14 mm long; largest dimension (length or width) of fruit 7--10 mm; pedicels 6 mm or more long ... I. cordatotriloba
29. Corolla white to pale pink, 1.5-3 cm long; sepals lanceolate, 10-15 mm long; corolla; largest dimension (length or width) of fruit 10-13 mm; pedicel to 7 mm long ... I. lacunosa

Ipomoea alba L. {AFP} —
****Ipomoea aquatica*** Forssk. {AFP} —
****Ipomoea asarifolia*** (Desr.)Roem. & Schult. {AFP} —

*__Ipomoea batatas__ (L.)Lam. {AFP} —
*__Ipomoea cairica__ (L.)Sweet {AFP} —
^*Ipomoea carnea* Jacq. subsp. *fistulosa* (Mart. ex Choisy)D.F.Austin {AFP} —
__Ipomoea cordatotriloba__ Dennst. {AFP} —
*__Ipomoea corymbosa__ (L.)Roth ex Roem. & Schult. {AFP} —
*__Ipomoea hederacea__ Jacq. {AFP} —
__Ipomoea hederifolia__ L. {AFP} —
__Ipomoea imperati__ (Vahl)Griseb. {AFP} —
__Ipomoea indica__ (Burm.)Merr. {AFP} —
__Ipomoea lacunosa__ L. {AFP} —
__Ipomoea leucantha__ Jacq. {AFP} —
__Ipomoea macrorhiza__ Michx. {AFP} —
__Ipomoea microdactyla__ Griseb. {AFP} — SE.
*__Ipomoea muricata__ (L.)Jacq. {AFP} —
*__Ipomoea nervosa__ (Burm.f.)J.R.I.Wood & Scotland {AFP} —
__Ipomoea pandurata__ (L.)G.Mey. {AFP} —
__Ipomoea pes-caprae__ (L.)R.Br. subsp. __brasiliensis__ (L.)Ooststr. {AFP} — St. John (1970) treated this taxon at the species rank and characterized it as pantropical (absent from northern Indian Ocean) with leaf blades mostly longer than wide, unlobed or with lobe sinus less than 1/5 the length of the blade, lobes ascending, outer sepals 5-13 mm long, and cymes 1-20 flowered. *Ipomoea pes-caprae* subsp. *pes-caprae* is restricted to the northern Indian Ocean and has leaf blades wider than long, the lobe sinus 1/3-1/5 of the length of the blade, lobes divergent, outer sepals 7-12 mm long, and cymes 1-2 flowered. The two taxa apparently do not hybridize, or perhaps only rarely, based on analysis of seven DNA loci (Miryeganeh et al. 2014). Others treat *I. brasiliensis* as a synonym of *I. pes-caprae* and state "some intermediates occur and the issue is not yet fully resolved" (Wood et al. 2020).
*__Ipomoea purpurea__ (L.)Roth {AFP} —
*__Ipomoea quamoclit__ L. {AFP} —
__Ipomoea sagittata__ Poir. {AFP} —
*__Ipomoea setosa__ Ker Gawl. {AFP} —
__Ipomoea tenuissima__ Choisy {AFP} — SE.
*__Ipomoea tiliifolia__ (Desr.)Roem. & Schult. {AFP} —
*__Ipomoea triloba__ L. {AFP} —
__Ipomoea violacea__ L. {AFP} —
*__Ipomoea wrightii__ A.Gray {AFP} —

Jacquemontia

1. Inflorescence subtended by foliaceous bracts, 1-2.5 cm long; sepals 8-15 mm long, densely long-hirsute ... J. tamnifolia
1. Inflorescence subtended by reduced bracts, 0.1-0.8 cm long; sepals 2-5 mm long, glabrous, pubescent, or ciliolate [2]
2. Inflorescence 0.4-0.8 cm long ... J. verticillata
2. Inflorescence 1-10 cm long [3]
3. Inflorescence a densely flowered corymbose cyme, the pedicels nearly inconspicuous, the peduncle 1-10 cm long; corolla blue to pinkish ... J. pentanthos
3. Inflorescence a sparsely flowered cyme, the pedicels clearly evident, the peduncle 0.5-2.5 cm long; corolla white [4]
4. Outer sepals acute or mucronate ... J. havanensis

4. Outer sepals rounded to obtuse [5]
5. Lower surface of outer sepals glabrous; of calcareous pinelands ... J. curtissii
5. Lower surface of outer sepals ciliolate or pubescent; of coastal dunes ... J. reclinata

•***Jacquemontia curtissii*** Peter ex Hallier f. {AFP} — ST.
Jacquemontia havanensis (Jacq.)Urb. {AFP} — SE.
Jacquemontia pentanthos (Jacq.)G.Don {AFP} — SE.
•***Jacquemontia reclinata*** House ex Small {AFP} — FE. SE.
Jacquemontia tamnifolia (L.)Griseb. {AFP} —
****Jacquemontia verticillata*** (L.)Urb. {AFP} — Hillsborough Co. (waif).

Poranopsis
****Poranopsis paniculata*** (Roxb.)Roberty {AFP} —

Stylisma
1. Stems <31 cm long, often ¼ or more of the length of scaly buried stems; longest leaves <15(20) mm long, <2.6 mm wide; corolla 1-2 times long as the sepals ... S. abdita
1. Stems >40 cm long, usually leafy throughout or <⅕ the length of scaly buried stems; longest leaves >14 mm long, >1.9 mm wide; corolla >2 times long as the sepals [2]
2. Sepals glabrous to pubescent [3]
2. Sepals moderately to densely villous [4]
3. Cotyledonar petioles fused; leaves 0.2-0.5 cm wide, 6-22 times longer than wide; bracteoles alternate or unequal; inflorescence of 1(-5) flowers ... S. patens var. angustifolia
3. Cotyledonary petioles free; leaves 1-3 cm wide, 1.5-4 times longer than wide; bracteoles subopposite and equal; inflorescence of (1)3-7(12) flowers ... S. humistrata
4. Petioles 1-3 mm long; corolla 1-1.5 cm long, pink, maroon, lavender, or red; filaments glabrous or rarely with scattered hairs near base; stylar base with short hairs ... S. aquatica
4. Petioles 0-10 mm long; sepals 6-9 mm long, 3-4 mm wide; corolla 1.4-2.5 cm long, white; filaments villous towards base; stylar base with short to long hairs [5]
5. Cotyledonar petioles fused; petioles 0-4(6) mm long; leaves 3-7 times longer than wide, 0.3-1.2 cm wide; inflorescence of 1(-5) flowers; bracteoles alternate or unequal ... S. patens var. patens
5. Cotyledonary petioles free; petioles 3-10 mm long; leaves 1.5-3.5 times longer than wide, (0.6)1-2 cm wide; inflorescence of 1-5 flowers; bracteoles subopposite and equal ... S. villosa

•***Stylisma abdita*** Myint {AFP} — SE.
Stylisma angustifolia Nash {AFP} —
Stylisma aquatica (Walter)Raf. {AFP} —
Stylisma humistrata (Walter)Chapm. {AFP} —
Stylisma patens (Desr.)Myint {AFP} —
Stylisma villosa (Nash)House {AFP} —

HYDROLEACEAE
Hydrolea
1. Flowers in axillary fascicles or cymes; ovary and fruit glabrous ... H. quadrivalvis
1. Flowers in terminal corymbs or leafy panicles; ovary and fruit glabrous to glandular-pubescent [2]

2. Stems and often leaves usually densely glandular-pubescent, sometimes glabrous; sepals 6-14 mm long ... H. capsularis
2. Stems and leaves pubescent, with few to no glandular hairs; sepals 4.5-9 mm long [3]
3. Stems without axillary thorns or rarely with 1 at a node; leaf blades lanceolate, 0.3-1 cm wide; style 5-10 mm long ... H. corymbosa
3. Stems with or without axillary thorns; leaf blades ovate, 1-2.5 cm wide; style 10-15 mm long ... H. ovata)

*****Hydrolea capsularis*** (L.)Druce {AFP} — Although the name *H. spinosa* is widely used, the basionym of *Hydrolea capsularis* was published in 1756 and has priority over *H. spinosa*.
Hydrolea corymbosa J.Macbr. ex Elliott {AFP} —
Hydrolea ovata Nutt. ex Choisy {AFP} —
Hydrolea quadrivalvis Walter {AFP} —

SOLANACEAE

1. Fruits berries, sometimes hardened ... Key A
1. Fruits capsules ... Key B

Key: Fruits berries
1. Corolla >15 cm long ... Solandra
1. Corolla <16 cm long [2]
2. Inflorescence of of panicles or cymose, subumbellate, to umbellate clusters [3]
2. Inflorescence of solitary flowers or in fascicles of 2-8 [4]
3. Inflorescence of panicles; corolla tubular ... Cestrum
3. Inflorescence of cymose, subumbellate, to umbellate clusters; corolla rotate, campanulate, to stellate ... Solanum
4. Shrubs; leaves linear-spatulate to linear-oblanceolate, succulent ... Lycium carolinianum
4. Herbs or shrubs; leaves chartaceous, not linear [5]
5. Calyx not enclosing the fruit [6]
5. Calxy accrescent and more than double in size in fruit, partly to completely enclosing the fruit, the major ribs of the fruit formed from the sepal lobe midribs and sometimes with a distinct rib forming between the sepal lobes [7]
6. Erect herb or shrub; flower and fruit 1-8 at a node; corolla rotate to campanulate ... Capsicum
6. Sprawling, scandent, or vine-like herb; flower and fruit solitary at the node; corolla urceolate ... Salpichroa origanifolia
7. Calyx lobes with sagittate to cordate base, the lobes accrescent and surrounding the fruit ... Nicandra
7. Calyx lobes lacking lobed bases, the calyx tube accrescent and surrounding the fruit [8]
8. Plants tap-rooted perennials, 60-75(100) cm tall; flowers and fruits in fascicles of 2-6; fruitng calyx not inflated ... Calliphysalis
8. Plants tap-rooted annuals or rhizomatous perennials, 5-200 cm tall; flowers and fruits solitary; fruiting calyx inflated ... Physalis

Key B: Fruits capsules
1. Shrub or small tree; leaf blade to 40 cm long; corolla >15 cm long ... Brugmansia
1. Herbs or shrubs; leaf blade to 22 cm long; corolla <16 cm long [2]
2. Leaves 2-6(10) mm long ... Calibrachoa parviflora
2. Leaves 1-22 cm long [3]
3. Corollas with 5 long-acuminate lobes; fruits sometimes with prickles or tubercles ... Datura

3. Corolla lobes not long-acuminate; fruits withoug prickles or tubercles [4]
4. Leaf blade margins toothed or lobed; fruit circumscissile fruit ... Hyoscyamus albus
4. Leaf blade margins generally entire; fruit with 2-4 valves [5]
5. Corolla bilaterally symmetric; stamens 4, sometimes 5; calyx enclosing fruit ... Browallia americana
5. Corolla bilaterally or radially symmetric; stamens 5 [6]
6. Flowers and fruits in cymose, pseudoracemose, or pseudoglomerulate clusters; calyx lobes deltate or triangular ... Nicotiana
6. Flowers and fruits solitary; calyx lobes linear ... Petunia

Browallia
*****Browallia americana*** L. {AFP} —

Brugmansia A key to all known species is provided since several are in cultivation, including numerous hybrids.

1. Flowers not noticeably scented; corolla tubular, abruptly expanded into the limb, the limb spreading to tightly recurved; seeds reniform, not or only slightly corky [2]
1. Flowers scented (nocturnally); corolla funnelform, gradually expanded into the limb, the limb spreading; seeds angular to flattened, corky or not [3]
2. Flowers mostly all pendent; calyx usually with 2 or more slits, the tube inflated; fruit smooth, calyx often persistent ... B. sanguinea
2. Flowers subhorizontal, descending, or some pendent; calyx usually with 1 slit, the tube mostly nearly appressed; fruit rugose, calyx usually deciduous ... B. vulcanicola
3. Flower 12-17 cm long; style hairy ... B. arborea
3. Flower 15-50 cm long; style glabrous [4]
4. Flower pendent; calyx long acuminate and slit on one side ... B. versicolor
4. Flowers subhorizontal, descending, or some pendent; calyx bluntly acute, with 1 or more slits [5]
5. Flower 15-25 cm long, the calyx nearly completely enclosing the unflared portion of the corolla tube; corolla lobe tips long-acuminate to caudate-acuminate ... B. aurea
5. Flower 25-40 cm long, the calyx much shorter than the unflared portion of the corolla tube; corolla lobe tips various [6]
6. Corolla lobe tips caudate-acuminate ... B. insignis
6. Corolla lobe tips acute to short-acuminate ... B. suaveolens

^*Brugmansia arborea* (L.)Lagerh. —
^*Brugmansia insignis* (Barb.Rodr.)Lockwood ex R.E.Schult. —
^*Brugmansia suaveolens* (Humb. & Bonpl. ex Willd.)Bercht. & J.Presl {AFP} —

Brunfelsia
^*Brunfelsia pauciflora* (Cham. & Schltdl.)Benth. —

Calibrachoa
*****Calibrachoa parviflora*** (Juss.)D'Arcy {AFP} —

Calliphysalis
Calliphysalis carpenteri (Riddell)Whitson {AFP} — SE.

Capsicum
1. Flower solitary at the node (very rarely 2) after the first flowering node; corollas white, bluish white, to rarely violet, not as waxy ... C. annuum var. glabriusculum
1. Flowers 2-6 at the node after the first flowering node (very rarely 1); corollas greenish white, waxy ... C. frutescens

Capsicum annuum L. var. ***glabriusculum*** (Dunal)Heiser & Pickersgill {AFP} —
^*Capsicum chinense* Jacq. —
Capsicum frutescens L. {AFP} —

Cestrum
1. Calyx lobes mostly rounded to obtuse; corolla white to greenish white, lobes reflexed; fruit purplish black ... C. diurnum
1. Calyx lobes mostly acute; corolla greenish white, white, yellowish, or orange, the lobes erect to spreading; fruit purplish black or white [2]
2. Corolla white to greenish white; fruit white ... C. nocturnum
2. Corolla yellowish to orange; fruit purplish black ... C. parqui

****Cestrum diurnum*** L. {AFP} —
****Cestrum nocturnum*** L. {AFP} —
^*Cestrum parqui* L'Her. {AFP} —

Datura Two species included in the key (*D. ferox* and *D. quercifolia*) might be expected.

1. Leaf blade margins sinuate-dentate to pinnately lobed; corolla 4-11 cm long, with 5 long-acuminate lobe tips alternating with shallow sinuses or notches or a nearly entire margin between; capsules erect, prickly, dehiscent by 4 valves [2]
1. Leaf blade margins entire to irregularly sinuate-dentate; corolla 10-26 cm long, with 10 short-acuminate to acute lobe tips (equal or unequal); capsules pendent (curved pedicel), prickly or tuberculate, irregularly dehiscent [4]
2. Leaf blade elliptic to narrowly ovate, usually pinnately lobed, sometimes sinuate-dentata; capsule prickles ca. 5-25 on each of the 4 valves, 1.5-7 mm wide at base, some 10-30 mm long ... D. quercifolia
2. Leaf blade broadly ovate, usually sinuate-dentate, sometimes pinnately lobed; capsules various [3]
3. Corolla 4-6 cm long; capsule prickles ca. 5-25 on each of the 4 valves, 1.5-7 mm wide at base, some (10)15-30 mm long ... D. ferox
3. Corolla (5)6-11 cm long; capsule prickles ca. 30-70 on each of the 4 valves, mostly 0.5-3 mm wide at base, <10(15) mm long ... D. stramonium
4. Stems glabrescent, sparsely hairy; corolla white, yellow, or purple, sometimes with a 2nd or 3rd corolla; capsules tuberculate, tubercles mostly blunt (few sharp like a prickle), 1-4 mm wide and long ... D. metel
4. Stems usually villous-pubescent or canescent, sometimes glabrate; corolla white, sometimes lavender or purple-tinged, singular; capsules prickly, the prickles acicular, 3-10 mm long, 1-3 mm wide at base [5]
5. Leaf blade lower surface and calyx villous; corolla limb lobules subequal to acuminate lobes ... D. inoxia

5. Leaf blade lower surface and calyx canescent; corolla limb lobules shorter than acuminate lobes … D. wrightii

*****Datura inoxia*** Mill. {AFP} —
*****Datura metel*** L. {AFP} —
Datura stramonium L. {AFP} —
*****Datura wrightii*** Regel {AFP} —

Hyoscyamus
*****Hyoscyamus albus*** L. {AFP} —

Lycium
Lycium carolinianum Walter {AFP} —

Nicandra
*****Nicandra physalodes*** (L.)Gaertn. {AFP} —

Nicotiana
1. Shrub or tree; leaf blades glabrous … N. glauca
1. Annual or short-lived perennial; leaf blades viscid-pubescent or hispid [2]
2. Cauline leaves petiolate; corolla yellow to greenish yellow … N. rustica
2. Cauline leaves sessile or subsessile; corolla white, grayish, greenish-gray tinged, greenish white, pink, or red [3]
3. Cauline leaves large, scarcely reduced below inflorescence; inflorescence compact; corolla pale greenish white to pink or red, throat ~5 mm wide; stamens inserted below middle of tube; stems viscid-pubescent … N. tabacum
3. Cauline leaves reduced towards inflorescence, rosette leaves sometimes present; inflorescence rather elongate; corolla white, grayish, or greenish-gray tinged, throat 1-6 mm wide; stamens inserted just below mouth of tube; stems tuberculate, sparsely pubescent or hispid, usually not viscid [4]
4. Calyx 1.5-2.5 cm long; corolla 4-12 cm long; fruit 1.1-1.6 cm long … N. longiflora
4. Calyx 0.8-1.3 cm long; corolla 1.5-3.5 cm long; fruit 0.8-1.1 cm long … N. plumbaginifolia

^*Nicotiana glauca* Graham {AFP} —
^*Nicotiana longiflora* Cav. {AFP} —
*****Nicotiana plumbaginifolia*** Viv. {AFP} —
^*Nicotiana rustica* L. —
^*Nicotiana tabacum* L. {AFP} —

Petunia
1. Corolla white, tube long and slender (abruptly expanded into limb, measuring 2.8-5.2 cm long, limb 2.5-5.5 cm wide); anthers and pollen yellow … P. axillaris
1. Corolla white, pink, purple, to red, tube funnelform (more gradually expanded into limb); anthers and pollen blue, violet, or yellow [2]
2. Corolla rose-purple (drying deep violet), tube 1-3 cm long, limb 1-4 cm wide; anthers and pollen blue to violet … P. integrifolia
2. Corolla white, pink, purple, to red, tube 1.1-5.5 cm long, limb 1.3-7 cm wide; anthers and pollen blue, violet, or yellow … P. ×atkinsiana

^*Petunia axillaris* (Lam.)Britton et al. —
^*Petunia ×atkinsiana* (Sweet)D.Don ex W.H.Baxter (*axillaris* × *inflata*) {AFP} —
^*Petunia integrifolia* (Hook.)Schinz & Thell. —

Physalis
1. Pubescence of branched, dendritic, or stellate hairs, especially on leaf margins and the calyx; rhizomatous [2]
1. Pubescence of simple hairs only or glabrous; with or without rhizomes [5]
2. Petiole 0.2-1 times as long as the leaf blade; leaf blades broadly elliptic to ovate, 1.5-4(7.5) cm wide; plant pubescent … P. walteri
2. Petiole absent or to 0.2 times as long as the leaf blade; leaf blades linear-lanceolate to narrowly spatulate, 0.2-1.5(2) cm wide; plant glabrate to pubescent [3]
3. Plant pubescent only on leaf margins and calyx; petiole absent; leaf blades linear-lanceolate, 0.2-0.8(1) cm wide; western to east-central panhandle … P. angustifolia
3. Plant pubescent only on leaf margins and calyx or throughout; petiole absent or to 0.2 times as long as the leaf blade; leaf blades linear-lanceolate to spatulate, 0.2-1.5(2) cm wide; eastern panhandle, gulf coast, southern counties [4]
4. Plant sparsely to densely pubescent … P. elliottii var. elliottii
4. Plant pubescent only on leaf margins and calyx, otherwise glabrous … P. elliottii var. glabra
5. Annuals or perennials with taproots, without rhizomes; anthers 1-3 mm long, pale yellow and blue-tinged or blue [6]
5. Perennials with rhizomes (these sometimes deeply buried and rarely seen); anthers 2-4.5 mm long, yellow or sometimes blue-tinged [11]
6. Plants glabrous to sparsely pubescent, hairs 0.1-0.2(0.5) mm long, antrorse to spreading, eglandular; annuals [7]
6. Plants mostly villous, hairs 0.4-2 mm long, spreading, sometimes gland-tipped; annual or perennial [9]
7. Leaf blade with 4-9 teeth, teeth mostly acute to acuminate; corolla lacking dark spots or only tinged purple; fruiting pedicel 15-30 mm long … P. angulata
7. Leaf blade (0)3-20, teeth mostly obtuse to bluntly acute; corolla with 5 dark purple-black spots or smudges; fruiting pedicel 3-35 mm long [8]
8. Leaf blade margins with 9-20 teeth per side; fruiting pedicel (10)15-35 mm; fruiting calyx loosely enclosing berry … P. cordata
8. Leaf blade margins with 4-9 teeth; anthers strongly twisted after dehiscence; fruiting pedicel 3-8(11) mm long; fruiting calyx often turgid from berry, sometimes splitting open … P. philadelphica
9. Plant perennial; leaf blades mostly subentire … P. peruviana
9. Plant annual; leaf blade margins coarsely toothed [10]
10. Leaf blades to 13 cm long, to 9 cm wide, gray-green when fresh, often drying with orangish spots or zones … P. grisea
10. Leaf blades to 9 cm long, to 6.5 cm wide, green when fresh, drying green, gray-green, to brownish … P. pubescens
11. Hairs retrorse (at least mostly), to 1.5 mm long; leaf blades mostly 1.4-3 times as long as wide … P. virginiana
11. Hairs spreading to antrorse, to 2 mm long; leaf blades varied [12]

12. Plants eglandular, glabrous to sparsely (antrorsely) strigose, hairs to 0.5 mm long; leaf blades mostly 1.8-2.2 times as long as wide, ovate, elliptic, lanceolate, to oblanceolate; stem base stout and erect, 4-10 mm wide; plants (10)20-60 cm tall … P. longifolia
12. Plants eglandular or glandular, glabrous to densely pubescent, hairs to 2 mm long; leaf blades ovate-lanceolate, ovate, to orbicular; stem base and plant height varied [13]
13. Rhizomes stout, deeply buried (rarely seen, slender horizontal rhizomes infrequent); leaf blades (2)4-11(13) cm long, 3-9(10) cm wide, 1-1.4(1.8) times as long as wide; stem base stout and erect, 4-10 mm wide, mostly villous, hairs 0.5-2 mm long, sometimes gland-tipped; plants (10)20-100 cm tall … P. heterophylla
13. Rhizomes slender, shallow; leaf blades 1.5-6(6.5) cm long, 1-5 cm wide, length:width ratio varied; stem base decumbent to weakly erect, slender, 2-4 mm wide, hairs varied; plants 5-30 cm tall [14]
14. Stems, petioles, and leaf blades stipitate-glandular (sand often adherent), the glandular hairs 0-0.2(0.5) mm long, antrorsely strigose, or nearly completely glabrous in SE peninsula; leaf blades broadly ovate, light green, tertiary veins impressed on upper surface, prominent to prominulous on lower surface; xeric habitats [15]
14. Stems, petioles, and leaf blades eglandular to glandular (sand usually not adherent), antrorsely strigose to villous with septate hairs; leaf blades ovate-lanceolate, medium to deep green, tertiary veins not or slightly impressed on upper surface, not or slightly prominent on lower surface; mesic habitats
15. Plant glandular … P. arenicola var. arenicola
15. Plant nearly completley glabrous … P. arenicola var. 'glabrous'
16. Plant ciliate, mostly eglandular to sparsely glandular … P. arenicola var. ciliosa
16. Plant ciliate-glandular … P. arenicola var. 'ciliato-glandular'

Physalis angulata L. {AFP} —
Physalis angustifolia Nutt. {AFP} —
Physalis arenicola Kearney var. ***arenicola*** {AFP} — Peninsula.
Physalis arenicola Kearney var. ***ciliosa*** (Rydb.)Waterf. {AFP} — North peninsula and panhandle. Distinct in many places, but intergrading as well.
Physalis cordata Mill. {AFP} —
Physalis elliottii Kunze var. ***elliottii*** —
Physalis elliottii Kunze var. ***glabra*** (Waterf.)J.R. Sullivan —
^*Physalis grisea* (Waterf.)M.Martínez —
Physalis heterophylla Nees {AFP} — Unconfirmed
Physalis longifolia Nutt. {AFP} —
^*Physalis peruviana* L. —
^*Physalis philadelphica* L. —
Physalis pubescens L. {AFP} —
Physalis virginiana Mill. {AFP} — Panhandle, uncommon.
Physalis walteri Nutt. {AFP} —

Salpichroa
****Salpichroa origanifolia*** (Lam.)Thell. {AFP} —

Solandra
^*Solandra maxima* (Sessé & Moc.)P.S. Green —

Solanum

1. Leaf blade pinnately lobed throughout (sinuses at least ½ or more to midrib) or leaf compound … Key A
1. Leaf blade entire to shallowly lobed (sinus <½ way to midrib, rarely few basal lobes deeply lobed), or lobes few at the leaf base only [2]
2. Mature plant with stiff prickles on stems or leaves (includes S. elaeagnifolium, S. torvum, which occasionally may appear to lack prickles) … Key B
2. Mature plant without prickles on stems or leaves, or these few, rare, and weak (includes S. americanum s.lat., S. donianum, S. melongena, all of which rarely have prickles in Florida) … Key C

Key A: Leaves compound or pinnately lobed

1. Plant with stiff prickles on stems or leaves [2]
1. Plant without prickles on stems or leaves [4]
2. Stem with only stellate hairs [3]
2. Stem with mostly simple, usually glandular hairs, sometimes a few stellate haris [4]
3. Stellate hairs mostly with 4 lateral arms; corolla white to pale blue or violet, actinomorphic; anthers subequal; fruit yellow, greenish, or mottled, calyx slightly accrescent and only sparsely prickly at most; seeds yellow … S. carolinense var. floridanum
3. Stellate hairs mostly with 6-10 lateral arms; corolla yellow, zygomorphic; anthers strongly unequal; fruit brown, accrescent calyx tighly adhering and densely prickly; seeds dark brown … S. rostratum
4. Corolla violet or blue, zygomorphic; anthers strongly unequal; fruit brown, dry, accrescent calyx tighly covering with dense radiating prickles; seeds black to dark brown … S. citrullifolium
4. Corolla white to pale blue, actinomorphic; anthers subequal; fruit red, fleshy, accrescent calyx loosely covering with spacious prickles; seeds yellowish … S. sisymbriifolium
5. Woody vine, glabrate; inflorescence branched … S. seaforthianum
5. Erect or lax herb, moderately to densely pubescent; inflorescence unbranched or rarely forked [6]
6. Forming underground tubers; leaflets entire; anthers opening by terminal pores; corolla white, pink, to pale blue; fruit yellow; seed glabrous; potato … S. tuberosum
6. Without tubers; leaflets toothed, at least some; corolla yellow; anthers opening by longitudinal slits; fruit yellow, red, to dark purple; seed pubescent; tomato [7]
7. Stems robust with occasional long trichomes up to 3 mm long; leaves when crushed without citrus odour; leaflet margins shallow to deeply lobed along whole margin; inflorescence recurved or coiled; corolla shallowly stellate, the lobes divided 1/3 to 1/2 way to base; fruit 1-10(20) cm wide … S. lycopersicum
7. Stems slender with occasional long trichomes up to 2.2 mm long; leaves when crushed with citrus odour; leaflet margins subentire, sinuate, to coarsley dentate, only occasionally shallowly lobed mainly towards the base; inflorescence generally straight, flexuous, or broadly curving, not strongly recurved; corolla deeply stellate, the lobes divided almost to the base; fruit 0.8-1.6 cm wide … S. pimpinellifolium

Key B: Prickles present; leaf blades mostly unlobed or with few lobes

1. Stem and upper leaf blade surface of simple hairs or glabrous (lower blade surface with stellate hairs in S. viarum) [2]
1. Stem and upper leaf blade surface with stellate hairs [3]
2. Pubescence eglandular or plant glabrate; fruit orange to red; seed winged … S. capsicoides

2. Pubescence glandular and eglandular; fruit yellow or mottled green; seed unwinged … S. viarum
3. Stems glabrate to sparsely stellate-pubescent … S. tampicense
3. Stems moderately to densely stellate-pubescent [4]
4. Leaves sessile (rarely petiole to 1 cm) … S. jamaicense
4. Leaves petiolate, longer petioles 1-10 cm long [4]
5. Pubescence silvery- or bright white-canescent, especially on leaf blade lower surface … S. elaeagnifolium
5. Pubescence not silvery or bright-white canescent [6]
6. Leaf blade entire (rarely with shallow lobes), narrowly elliptic to elliptic-lanceolate … S. bahamense
6. Leaf blade with teeth or lobes (at least some), lanceolate to ovate [7]
7. Leaves to 35 cm wide; fruit hirsute, the trichomes 2-5 mm long … S. candidum
7. Leaves to 18(20) cm wide; fruit glabrous or sparsely pubescent, trichomes 0.3-1 mm long [8]
8. Shrub or small tree 1-4 m tall; inflorescence with simple, glandular hairs … S. torvum
8. Herb to 1.2 m tall; inflorescence with stellate hairs [9]
9. Leaf blade lower surface with stellate trichomes with mostly 4 lateral arms; calyx 5-7 mm long; corolla 2-3 cm wide … S. carolinense var. carolinense
9. Leaf blade lwoer surface with stellate trichomes with mostly 6-8 lateral arms; calyx 8-12 mm long; corolla 3-4 cm wide … S. dimidiatum

Key C: Prickles absent, or few and weak; leaf blades mostly unlobed or with few lobes
1. Sprawling, scrambling, or climbing vine; often some leaves with 1-3 basal lobes … S. dulcamara
1. Herb or shrub; leaves without basal lobes [2]
2. Plant with stellate trichomes, sometimes few or sparse [3]
2. Plant glabrous or with simple or glandular trichomes [9]
3. Herb; fruit 15-50 cm long; eggplant … S. melongena
3. Shrub or small tree; fruit to 3 cm long or wide [4]
4. Ovary and fruit pubescent [5]
4. Ovary and fruit glabrous or glabrate [7]
5. Young stem often with highly reduced, stipule-like leaves; corolla purple … S. mauritianum
5. Young stem without stipule-like leaves; corolla white [6]
6. Leaf blade mostly ovate to ovate-elliptic, acute to rounded-truncate at the base; calyx and corollla densely stellate with short-armed trichomes … S. erianthum
6. Leaf blade mostly narrowly lanceolate to lanceolate-elliptic, tapering at the base; calyx and corolla shaggy with long-armed trichomes … S. umbellatum
7. Inflorescence axillary, of 1-3 flowers; fruit 12-18 mm long or wide … S. pseudocapsicum
7. Inflorescence terminal, leaf-opposed, or supra-axillary, of (3)5-20(30) flowers; fruit 3-8 mm long or wide [8]
8. Not rhizomatous; leaf blades coriaceous, often lustrous, elliptic to elliptic-lanceolate; corolla white to violet, the lobes linear-lanceolate; anther adaxial surface with stellate hairs … S. bahamense
8. Rhizomatous; leaf blades chartaceous, dull, broadly elliptic to ovate-lanceolate; corolla white, the lobes lanceolate; anther adaxial surface without stellate hairs … S. donianum
9. Shrub or small tree, 1-3 m tall; fruit yellow, orange, or red [10]
9. Herbs; fruit green, white, purple, to purplish black or orange to red [11]
10. Stem often with a reduced leaf in the axil of a larger leaf; leaf blade mostly broadly elliptic to ovate, not glaucous … S. diphyllum

10. Stem lacking reduced leaves in the axils; leaf blade narrowly lanceolate to elliptic, glaucous … S. glaucophyllum
11. Young stems densely pubescent, sometimes glandular; calyx sinuses light to nearly transparent, relative to the lobes; mature fruit yellow, orange, to red (immature green), globose to subelliptic, without stone cells … S. villosum
11. Young stems glabrous to sparsely to densely pubescent (sometimes glandular in S. nigrum); calyx sinuses usually generally similar in color to the lobes and opaque; mature fruit green, purple to black (immature green) [12]
12. Fruit with 0(2) sclerotic granules (stone cells); anthers 2-3 mm long [13]
12. Fruit with (0)2-9(13) sclerotic granules (stone cells); anthers 0.7-3 mm long [15]
13. Plant sometimes glandular; inflorescence raceme-like; pedicels mostly spreading; fruit without stone cells (or usually 2, rarely 8, elsewhere like in Asia); anthers 1.8-2.5 mm long; seeds 1.8-2 mm long, 1.5-1.6 mm wide … S. nigrum
13. Plant eglandular; inflorescence umbel-like; pedicels mostly recurved to reflexed; anthers 2-2.8 mm long; seeds 1-1.5 mm long, 0.8-1.5 mm wide [14]
14. Fruiting peduncle sharply reflexed downard; calyx lobes short-triangular, apex acute, appressed in fruit; style extending to 1.5 mm beyond anther cone … S. chenopodioides
14. Fruiting peduncle recurved to reflexed; calyx lobes long-rectangular to obovate, apex rounded to acute, reflexed in fruit; style extending (1)2-2.5 mm beyond anther cone … S. pseudogracile
15. Pedicels disarticulating with fruit; anthers 2-3 mm long; mature fruit dull, the calyx lobes appressed to spreading; seeds 1.2-1.5 mm long … S. nigrescens
15. Pedicels disarticulating or persistent; anthers 0.7-1.5 mm long; mature fruit dull to lustrous, calyx lobes and seeds various [14]
16. Pedicels mostly erect to spreading, persistent after fruit removal; filament usually <1 mm long; fruit lustrous, with (0)2-4(6) sclerotic granules, the calyx lobes reflexed; seeds 1-1.5 mm long … S. americanum
16. Pedicels mostly reflexed or recurved, disarticulating with fruit; fruit dull or slightly lustrous, with 6-9 sclerotic granules, the calyx lobes appressed to spreading; seeds 1.5-2 mm long … S. emulans

Solanum americanum Mill. {AFP} — Said to hybridize with *S. nigrescens*.
Solanum bahamense L. {AFP} —
****Solanum candidum*** Lindl. {AFP} —
****Solanum capsicoides*** All. {AFP} — The presumed native region is Brazil, probably introduced to Florida (Bohs 2023). Early Florida specimens include those by William Marriott Canby from Hibernia in March 1869 (NY) and by Louis R. Gibbes from Tampa in May 1886 (NY).
Solanum carolinense L. var. ***carolinense*** {AFP} —
Solanum carolinense L. var. ***floridanum*** Chapm. {AFP} —
Solanum chenopodioides Lam. {AFP} —
****Solanum citrullifolium*** A.Br. {AFP} —
Solanum dimidiatum Raf. {AFP} —
****Solanum diphyllum*** L. {AFP} —
Solanum donianum Walp. {AFP} — ST.
****Solanum dulcamara*** L. {AFP} —
****Solanum elaeagnifolium*** Cav. {AFP} —
Solanum erianthum D.Don {AFP} —
****Solanum glaucophyllum*** Desf. {AFP} —
****Solanum jamaicense*** Mill. {AFP} —

^*Solanum lycopersicum* L. {AFP} — The so-called cv. 'Everglades tomato' is a form of *S. lycopersicum* var. *cerasiforme* that often sparingly naturalizes, but sometimes goes by the misapplied name *S. pimpinellifolium*.
*__*Solanum mauritianum*__ Scop. {AFP} —
^*Solanum melongena* L. {AFP} —
*__*Solanum pseudocapsicum*__ L. {AFP} —
^*Solanum quitoense* Lam. —
*__*Solanum rostratum*__ Dunal {AFP} —
*__*Solanum seaforthianum*__ Andrews {AFP} —
*__*Solanum sisymbriifolium*__ Lam. {AFP} —
*__*Solanum tampicense*__ Dunal {AFP} —
*__*Solanum torvum*__ Sw. {AFP} —
^*Solanum tuberosum* L. {AFP} —
*__*Solanum umbellatum*__ Mill. {AFP} —
*__*Solanum viarum*__ Dunal {AFP} —
*__*Solanum villosum*__ Mill. {AFP} —
^*Solanum wrightii* Benth. {AFP} —

Solandra
^*Solandra grandiflora* Sw. {AFP} —

SPHENOCLEACEAE
Sphenoclea
*__*Sphenoclea zeylanica*__ Gaertn. {AFP} —

BORAGINALES

BORAGINACEAE: A recent phylogeny using the Angiosperms353 loci proposed nine families in the Boraginales, and highlighted the paraphyly of *Cordia* and *Varronia* (Vasile et al. 2025).

1. Leaves palmately or pinnately lobed or divided (basal leaves sometimes simple and unlobed or undivided) … Hydrophylloideae or Hydrophyllaceae
1. Leaves simple, undivided and unlobed [2]
2. Annual, prostrate to decumbent; inflorescence a solitary flower; fruit usually many-seeded (Hydrophylloideae or Hydrophyllaceae) … Nama jamaicensis
2. Annual or perennial, usually erect, rarely prostrate to decumbent; inflorescence usually many-flowered, rarely a solitary flower; fruit usually with 1-4 seeds, rarely to 8 [3]
3. Inflorescence elongate, racemiform, scorpioid, of densely clustered flowers directly adjacent or overlapping (flowers distant and not overlapping in the vine Myriopus); flowers small, the corolla 1.5-6 mm wide and long; style terminal and undivided, the stigma basal and roughly circular with a sterile, sometimes 2-lobed apex … Heliotropioideae or Heliotropiaceae
3. Inflorescence usually cymose, thyrsoid, umbellate, dichasial, monochasial, or racemiform, the flowers typically distant and not overlapping, or flowers solitary; flowers large to small, the corolla 1.5-14 mm wide or long; style gynobasic and embedded or terminal, undivided to divided [4]
4. Herbs; style gynobasic; fruit dry nutlets … Boraginoideae or Boraginaceae s.str.
4. Woody vine, shrub, or tree; fruit drupaceous [5]
5. Stigmatic branches 4; fruit white, pink, orange, to red; ovules orthotropous; cotyledons plicate … Cordioideae or Cordiaceae

5. Stigmatic branches 2; fruit orange to red; ovules anatropous; cotyledons not plicate … Ehretoideae or Ehretiaceae

Key to Boraginoideae or Boraginaceae s.str.
1. Fruit with hooked bristles [2]
1. Fruit without hooked bristles [3]
2. Leaves hirsute; corolla white; fruit with persistent style inconspicuous … Andersonglossum virginianum
2. Leaves sericeous; corolla bluish; fruit with persistent style conspicuous … Cynoglossum zeylanicum
3. Calyx with uncinate trichomes … Myosotis macrosperma
3. Calyx without uncinate trichomes [4]
4. Annual; corolla white to bluish; fruit verrucose-tuberculate … Buglossoides arvensis
4. Perennial; corolla white to yellow or orange; fruit smooth, shiny, with pits or rugose … Lithospermum

Key to Cordioideae or Cordiaceae
1. Trees; inflorescence corymbose-cymose … Cordia
1. Shrubs; inflorescence spicate or capitate … Varronia

Key to Ehretoideae or Ehretiaceae
1. Leaf blade entire … Bourreria
1. Leaf blade toothed … Ehretia

Key to Heliotropioideae or Heliotropiaceae
1. Vine; flowers distant and not overlapping … Myriopus volubilis
1. Prostrate to erect herb or shrub, or vines; flowers densely clustered adjacent or overlapping [2]
2. Flowers bracteate; anthers coherent at apex; fruit of 4 1-seeded nutlets … Euploca
2. Flowers ebracteate; anthers free; fruit of 2 2-seeded nutlets … Heliotropium

Key to Hydrophylloideae or Hydrophyllaceae
1. Leaves simple, undivided and unlobed … Nama
1. Leaves palmately or pinnately lobed or divided (basal leaves sometimes simple and unlobed or undivided) [2]
2. Overall leaf blade mostly as wide as or wider than long; flowers usually solitary … Nemophila aphylla
2. Overall leaf blade mostly much longer than wide; inflorescence of several flowers … Phacelia dubia

Andersonglossum
Andersonglossum virginianum (L.) J.I.Cohen {AFP} — SE.

Bourreria
1. Largest leaf blades 0.5-1.7 cm wide, scabrid on the upper surface; inflorescence of 1-5(10) flowers; calyx 4-7 mm long; anthers even with corolla opening or just barely exserted; style 2-4(5) mm long … B. havanensis

1. Largest leaf blades 2-6 cm wide, scabrid to glabrous on the upper surface; inflorescence of 5-30 flowers; calyx 6-10 mm long; anthers and sometimes the distal part of filament exserted from corolla; style (5)6-11(13) mm long [2]
2. Mature leaf blade usually glabrous on the upper surface, rarely scabrid with dilated multicellular bases, the larger blades 3-6 cm wide with 4-9 primary lateral veins per side, the blade base cuneate-attenuate, the apex acute, mucronulate to obtuse (occasionally a few emarginate) … B. succulenta
2. Mature leaf blades scabrid on upper surface, the trichomes with dilated multicellular bases, the larger blades 2-3 cm wide with 3-5 primary lateral veins per side, the blade base acute-subtruncate, the apex retuse to obtuse … B. virgata

Bourreria havanensis (Willd. ex Roem. & Schult.)Miers {AFP} — SE. Long known as *B. cassinifolia*.
Bourreria succulenta Jacq. {AFP} — SE.
Bourreria virgata (Sw.)G.Don {AFP} — SE. Long known as *B. radula*. Sparsely persisting on Key West, as remnants of what certainly were larger populations.

Buglossoides
****Buglossoides arvensis*** (L.)I.M.Johnst. {AFP} —

Cordia
1. Upper leaf blade surface glabrous; corolla white, the tube 4-6 mm long … C. dichotoma
1. Upper leaf blade surface scabrous; corolla orange, the tube 20-30 mm long … C. sebestena

^*Cordia dichotoma* G.Forst. {AFP} —
++***Cordia sebestena*** L. {AFP} — South peninsula (native to Caribbean islands, Mesoamerica to Venezuela). Coastal forests. There is uncertainty about its nativity in south Florida (Tomlinson 1974, 1980; Bradley & Gann in Jones & Gamble 1999; Hammer 2000). The accounts by Audobon (1834, vol. 2:448), Melvill (1882:108, 1884:148), Millspaugh (1907:237), and Browne (1917:16) indicate it was also cultivated in south Florida. One of the earliest collections may be of Chapman from "Jew-fish Key" (GH01957687).

Cynoglossum
****Cynoglossum zeylanicum*** (Lehm.)Brand {AFP} —

Ehretia
1. Tree to 8 m; leaf blade regularly serrate throughout the margin, surface glabrate … E. acuminata
1. Shrub to 3 m; leaf blade apically coarsely toothed, some blades may be entire, surface scabrous … E. microphylla

****Ehretia acuminata*** R.Br. {AFP} —
****Ehretia microphylla*** Lam. {AFP} —

Euploca
1. Stems 5-15(30) cm long; inflorescence leafy, the bracts not markedly differentiated from other leaves, the flowers sometimes appearing solitary, internodes plainly visible … E. fruticosa

1. Stems 10-60 cm long; inflorescence bracteate, the bracts markedy smaller than cauline leaves [2]
2. Plant canescent, the hairs dense, laxly-appressed, 0.4-1 mm long; leaf blades obovate to narrowly oblanceolate, often distincly petiolate; corolla 1.5-2 mm long … E. procumbens
2. Plant strigose, the hairs sparse to moderate, stiffly appressed, 0.2-0.5; leaves linear-lanceolate to narrowly oblanceolate, mostly sessile to subsessile; corolla 4-6 mm long [3]
3. Stems erect, often strict … E. polyphylla var. polyphylla
3. Stems spreading-decumbent or prostrate (coastal strand, pine rocklands, Pinellas and Martin Cos. southward, and Polk Co.) … E. polyphylla var. horizontale)

[x]***Euploca fruticosa*** (L.)J.I.M.Melo & Semir {AFP} — Monroe keys. (AZ, TX; Neotropics). Open rocklands. SE.
Euploca polyphylla (Lehm.)J.I.M.Melo & Semir {AFP} —
*****Euploca procumbens*** (Mill.)Diane & Hilger {AFP} —

Heliotropium

1. Woody shrubs or vines; fruit a fleshy drupe or drupaceous and corky [2]
1. Herbs to subshrubs; fruit of dry nutlets, not drupaceous [4]
2. Plant glabrate … H. laevigatum
2. Plant pubescent [3]
3. Plant grayish or silvery-canescent; leaves sessile, linear-spatulate; fruit corky, yellowish to brownish … H. gnaphalodes
3. Plant green and hirsute to hispidulous; leaves petiolate, the blade lanceolate to ovate; fruit fleshy, white … H. verdcourtii
4. Leaves glabrous, succulent … H. curassavicum
4. Leaves variously hairy, chartaceous [5]
5. Leaves sessile … H. amplexicaule
5. Leaves petiolate or the blade with an attenuate or decurrent base [6]
6. Leaf base rounded to acute or cuneate … H. europaeum
6. Leaf base attenuate or decurrent, rarely cuneate [7]
7. Stem glabrate to hispidulous, hairs <1 mm long; leaves ovate-lanceolate to lanceolate; corolla 2.5-3.5 mm long … H. angiospermum
7. Stem hispid, some hairs >1 mm long; leaves ovate to broadly ovate; corolla 3.5-5 mm long … H. indicum

*****Heliotropium amplexicaule*** Vahl {AFP} —
Heliotropium angiospermum Murray {AFP} —
Heliotropium curassavicum L. {AFP} —
*****Heliotropium europaeum*** L. {AFP} —
Heliotropium gnaphalodes L. {AFP} — SE. Previously placed in the genus *Argusia* or *Tournefortia*.
*****Heliotropium indicum*** L. {AFP} —
*****Heliotropium laevigatum*** (Lam.)Feuillet {AFP} —
Heliotropium verdcourtii Craven {AFP} — SE.

Lithospermum

1. Mid-stem leaf blades linear, 0.5-3 mm wide; with cleistogamous and chasmogamous flowers, chasmogamous corolla 15-40 mm long, cleistogamous corolla (0)2-6 mm long … L. incisum

1. Mid-stem leaf blade linear-lanceolate, lanceolate, ovate, to obovate, 3.5-20 mm wide; flowers chasmogamous, corolla 4-25 mm long [2]
2. Leaf blade lateral veins not readily apparent; corolla heterostylous ... L. caroliniense
2. Leaf blade with conspicuous lateral veins extending through much of the blade length; corolla not heterostylous [3]
3. Fleshy fusiform roots several at the base of the plant; corolla 4-7 mm long, lobes spreading, style 2-3 mm long, included ... L. tuberosum
3. Mostly one taproot at the base of the plant; corolla 8-14 mm long, lobes erect to appressed, style 10-19 mm long, exserted ... L. virginianum

Lithospermum caroliniense (J.F.Gmel.)MacMill. {AFP} —
Lithospermum incisum Lehm. {AFP} —
Lithospermum tuberosum Rugel ex DC. {AFP} —
Lithospermum virginianum L. {AFP} —

Myosotis
Myosotis macrosperma Engelm. {AFP} —

Myriopus
Myriopus volubilis (L.)Small {AFP} —

Nama
[++]***Nama jamaicensis*** L. {AFP} —

Nemophila
Nemophila aphylla (L.)Brummitt {AFP} —

Phacelia
*****Phacelia dubia*** (L.)Trel. ex Branner & Coville {AFP} —

Varronia
1. Leaf blade entire, rarely with a few teeth ... V. bahamensis
1. Leaf blade margin regularly toothed, teeth sometimes subtle [2]
2. Leaf blade finely crenate to finely dentate; inflorescence spicate ... V. curassavica
2. Leaf blade coarsely dentate; inflorescence capitate ... V. globosa

[X]***Varronia bahamensis*** (Urb.)Millsp. {AFP} —
*****Varronia curassavica*** Jacq. {AFP} —
Varronia globosa Jacq. {AFP} — SE.

GENTIANALES

APOCYNACEAE
subf. Apocynoideae
- Apocyneae: Apocynum
- Echiteae: Angadenia, Echites, Pentalinon
- Mesechiteae: Mandevilla
- Nerieae: Adeniu, Nerium

Odontadenia: Thyrsanthella
Rhabdadenieae: Rhabdadenia
Wrighteae: Wrightia
subf. Asclepiadoideae
Asclepiadeae: Araujia, Asclepias, Calotropis, Chthamalia, Cynanchum, Funastrum, Gonolobus, Matelea, Metastelma, Orthosia, Pattalias
Ceropegieae: Huernia, Leptadenia, Stapelia
Marsdenieae: Hoya
subf. Periplocoideae: Cryptostegia
subf. Rauvolfioideae
Alstonieae: Alstonia
Amsonieae: Amsonia
Aspidospermateae: Vallesia
Carisseae: Carissa
Plumerieae: Allamanda, Cascabela, Plumeria
Tabernaemontaneae: Tabernaemontana
Vinceae: Catharanthus, Ochrosia, Vinca

Key, partly, to subfamilies
1. Flower without a corona, without a gynostegium, stamens distinct; pollen free, sometimes in tetrads; fruits follicles, capsules, drupes, or berries … Apocynoideae, Periplocoideae, and Rauvolfioideae
1. Flower with a corona of 5 hoods each with an appendage-like horn and with the 5 anthers fused to the stigma as a column-like gynostegium; pollen massed into rigid pollinia; fruits follicles … Asclepiadoideae

Key to genera
1. Leaves alternate, pseudowhorled, or rarely subopposite … Key A
1. Leaves opposite or whorled [2]
2. Leaves whorled, 3 or more leaves at least at some nodes … Key B
2. Leaves opposite, rarely whorled [3]
3. Erect to decumbent stiff herbs, shrubs, or trees … Key C
3. Twining, scrambling, or clambering vines, or weak trailing herbs [4]
4. Flower to 100 mm long, without a corona, without a gynostegium, stamens distinct; pollen free, sometimes in tetrads; fruits follicles … Key D
4. Flower to 13 mm wide or long, with a corona of 5 hoods each with an appendage-like horn and with the 5 anthers fused to the stigma as a column-like gynostegium; pollen massed into rigid pollinia; fruits follicles, capsules, drupes, or berries … Key E

Key A: Leaves alternate
1. Herbs [2]
1. Shrubs to trees [3]
2. Inflorescence racemose; flower without a corona, without a gynostegium; seed lacking coma (tuft of hairs) … Amsonia
2. Inflorescence umbelliform; flower with a corona of 5 hoods each with an appendage-like horn and with the 5 anthers fused to the stigma as a column-like gynostegium; seed with a coma (conspicuous tuft of hairs) … Asclepias
3. Stems stout, 5-20 mm wide near the apex; leaves usually clustered near the stem apex … Plumeria

3. Stems slender to moderately thick, 1-6 mm wide near the apex; leaves usually scattered along the distal portion of the stem [4]
4. Leaf blades linear to linear-oblanceolate, attenuate towards the base, the petiole indistinct, the blade mostly 9-12 cm long; corolla 5-7 cm long … Cascabela
4. Leaf blades elliptic to obovate, acute to rounded at the base with a distinct petiole, the blade 3-7 cm long; corolla 0.6-1 cm long … Vallesia antillana

Key B: Leaves whorled
1. (Key B) Herbs; leaves 0.5-6 mm wide … Asclepias verticillata
1. Woody vines, shrubs, or trees; leaves (some or all) 6-50 mm wide [2]
2. Corolla 4-12 cm long, yellow to red-violet; fruit spiny … Allamanda
2. Corolla 0.4-6 cm long; fruit not spiny [3]
3. Fruit a follicle [4]
3. Fruit a drupe [5]
4. Leaf blade secondary veins 1-15 mm apart; corolla lobes 3-7 mm long … Alstonia
4. Leaf blade secondary veins 0.5-1.5 mm apart; corolla lobes 15-25 mm long … Nerium
5. Leaf coriaceous, the blade secondary veins numerous and dense, straight or nearly so; fruit 3-4 cm long, red … Ochrosia
5. Leaf chartaceous, the blade secondary veins several but widely spaced, curvaceous; fruit 0.5-1 cm long, red maturing black … Rauvolfia

Key C: Erect to decumbent; leaves opposite
1. Herbs, or <1.2 m tall if shrubby [2]
1. Shrubs to trees, >1 m tall when mature [5]
2. Flower with a corona of 5 hoods each with an appendage-like horn and with the 5 anthers fused to the stigma as a column-like gynostegium … Asclepias
2. Flower without a corona, without a gynostegium [8]
3. Leaf blades 2-10 mm wide; corolla yellow to yellowish white … Angadenia berteroi
3. Leaf blades 10-60 mm wide, at least the larger ones; corolla white to pink to red [9]
4. Mature plants usually 0.8-2.5 m tall; corolla 1-7 mm wide; fruit 12-21 cm long; seed with a coma (conspicuous tuft of hairs) … Apocynum
4. Mature plants 0.2-1 m tall; corolla 1.5-3.5 cm wide; fruit 1-3 cm long; seeds without a coma … Catharanthus roseus
5. Leaf blades 6-14 cm wide … Calotropis
5. Leaf blades 0.1-6 cm wide [6]
6. Stems with axillary spines … Carissa
6. Stems without spines [12] … Tabernaemontana

Key D: Vine or trailing herb; leaves opposite; flowers large
1. Leaf blades <3 cm long, <1 cm wide … Angadenia berteroi
1. Leaf blades (all or some) >3 cm long, >1 cm wide [2]
2. Corolla pale green, yellowish, to yellow (sometimes with red lines) [3]
2. Corolla white, pink, bluish, or purplish [4]
3. Stem and leaves glabrous to densely pubescent; leaves persistent; leaf blade margins often revolute; corolla 3.5-5.5 cm long; fruit 12-18 cm long … Pentalinon
3. Stem and leaves glabrous to sparsely pubescent; leaves deciduous; leaf blade margin plane or not revolute; corolla 0.5-1 cm long; fruit 1-2.3 cm long … Thyrsanthella
4. Corolla 0.5-3.5 cm long [5]
4. Corolla 3.5-8 cm long [6]

5. Leaf blade elliptic to obovate; corolla white; fruit 10-15 cm long … Trachelospermum
5. Leaf blade elliptic, lanceolate, to ovate; corolla blue, purple, violet, rarely white; fruit 2-6 cm long … Vinca
6. Leaf blade tip obtuse to short-acuminate, without a mucro; pollen shed onto translators; fruit 3-sided, fusiform … Cryptostegia
6. Leaf blade tip usually mucronate or apiculate to spinose; translators absent; fruit terete or compressed [7]
7. Leaf blades elliptic-ovate to orbiculate; calyx lobes 1.5-5 mm long; corolla lobes with a distinct narrow limb at the base and expanded blade at the apex, the limbs not overlapping adjacent limbs or only slightly so, the lobe blade margin often ruffled, undulate, or somewhat irregular … Echites
7. Leaf blades elliptic to oblanceolate or oblong, rarely broadly elliptic-obovate; calyx lobes 5-6 mm long; corolla lobes lacking a distinct limb, basal part of the lobes overlapping adjacent lobes, the lobe margin mostly entire … Rhabdadenia

Key E: Vine or trailing herb; leaves opposite; flowers small
1. Leaves 1-3(7) mm wide, >7 times longer than wide [2]
1. Leaves 4-100 mm wide, at least the larger ones, 0.8-7 times longer than wide [4]
2. Leaf blade gradually narrowed to the base without a distinct petiole, the base about as thick as the stem (stems usually with leaves); peduncle 1-4 cm long … Pattalias palustre
2. Leaf blade usually distinct from the petiole, the petiole distinctly thinner than the stem (stems sometimes nearly leafless); peduncle 0-1 cm long [3]
3. Stems leafy; leaf blade narrowly lanceolate, gradually narrowed towards the apex; peduncle 2.5-10 mm long; corolla lobes pubescent on the inner surface; corona lobes narrow … Metastelma blodgettii
3. Stems leafy or nearly leafless; leaf blade linear, rounded to abruptly acuminate or apiculate at the apex; peduncle 0-3 mm long; corolla lobes glabrous on the inner surface; corona lobes broad … Orthosia scoparia
4. Plant with long eglandular and minute glandular trichomes [5]
4. Plant with eglandular trichomes [6]
5. Interpetiolar colleters absent; fruit angled, smooth, not muricate … Gonolobus
5. Interpetiolar colleters present; fruit muricate, not angled … Matelea
6. Distal leaf blades 3-7 cm wide, conspicuously cordate to lobate or hastate at the base [7]
6. Distal leaf blades 0.4-4(5.5) cm wide, truncate, rounded, to scarcely subcordate or rarely cordate at the base [8]
7. Interpetiolar colleters absent; basal leaf blades cordate at the base, distal ones deltate or hastate at the base … Araujia odorata
7. Interpetiolar colleters present; leaf blade bases cordate … Cynanchum laeve
8. Leaf blades 1-2 cm long … Metastelma bahamense
8. Leaf blades 2-10 cm long [8]
9. Stems often with few leaves or with long internodes exceeding the leaves; wet habitats … Funastrum clausum
9. Stems leafy, the internodes generally shorter to slightly exceeding the leaves; upland habitats … Leptadenia lanceolata

Adenium

^*Adenium obesum* (Forssk.)Roem & Schult. —

Allamanda
1. Corolla reddish or violet (cultivated only) ... Allamanda blanchetii
1. Corolla yellow [2]
2. Leaf blade lateral veins mostly flat to slightly raised near midvein on lower surface; corolla tube below stamen insertion 2-4 cm long; colleters absent between calyx base and corolla tube base; seeds winged ... A. cathartica
2. Leaf blade lateral veins mostly prominently raised on lower surface; corolla tube below stamen insertion 1-1.8 cm long; colleters present between calyx base and corolla tube base; seeds not winged ... A. schottii

^*Allamanda blanchetii* A.DC. —
****Allamanda cathartica*** L. {AFP} — Occasionally naturalized; frequently cultivated.
^*Allamanda schottii* Pohl {AFP} —

Alstonia
1. Nodes with 3-4 leaves, rarely more; lateral veins curving or branching well before the leaf blade margin, the veins generally 5-15 mm apart from one another ... A. macrophylla
1. Nodes with 3-10 leaves, usually some with 5 or more; lateral veins straight to very slightly curved to the leaf blade margin, uniting with the marginal vein ca. within 1 mm of the margin, the veins generally 1-5 mm apart from one another ... A. scholaris

****Alstonia macrophylla*** Wall. ex G.Don {AFP} —
****Alstonia scholaris*** (L.)R.Br. {AFP} —

Amsonia
1. Petioles (1)2-5(6) mm long; leaf blades (4)8-18(23) mm wide ... A. rigida
1. Petioles 0-4 mm long, usually absent in distal leaves; leaf blades 0.3-10 mm wide [2]
2. Distal leaf blades 3-10 mm wide, margins slightly to strongly revolute ... A. ciliata var. ciliata
2. Distal leaf blades 0.3-1(2.4) mm wide, margins revolute ... A. ciliata var. filifolia

Amsonia ciliata Walter {AFP} —
Amsonia rigida {AFP} —

Angadenia
Angadenia berteroi (A.DC.) Miers {AFP} — ST.

Apocynum
Apocynum cannabinum L. {AFP} — Oddly disjunct in southern peninsula.

Araujia
****Araujia odorata*** (Hook. & Arn.)Fontella & Goyder {AFP} —

Asclepias: The floral corona segments are also called hoods (whorl interior to corolla), and corona appendages are also known as horns. The inner column is the gynostegium, which is topped with a stigmatic disc. On the sides of the gynostegium are stigmatic slits, which have a corpusculum at the apex. On either side of the slit are the anthers. Inside the anther is the pollinium. The corpusculum attaches (via the translator) to two pollinia that flank the slit.

1. Leaves mostly or all alternate, especially distally, occasionally some subopposite to opposite especially on proximal nodes … Key A
1. Leaves opposite, subopposite, or whorled … Key B

Key A: Leaves alternate
1. Sap clear; corolla reddish orange to orange, rarely yellow in Florida [2]
1. Sap white; corolla white, pink, purple, to greenish [4]
2. Leaf blade base usually hastate with cripsate-revolute margins … A. tuberosa subsp. rolfsii
2. Leaf blade base cuneate, obtuse, rounded, truncate, to subcordate, the margins plane [3]
3. Leaf blade base truncate or obtuse to cordate, the apex acute to attenuate … A. tuberosa subsp. interior
3. Leaf blade base cuneat to subcordate, the apex rounded to acute … A. tuberosa subsp. tuberosa
4. Leaf blades ovate to lance-oblong … A. viridis
4. Leaf blades linear to linear-lanceolate [5]
5. Basal branches often ascending to erect; leaves not secund; stems with 1-many inflorescence nodes of 1-3 umbels; corona segments compressed and laminar, appendages absent; fruiting pedicel upcurved … A. longifolia
5. Basal branches often spreading; leaves sometimes secund; stems with 1 inflorescence node of 1-3 umbels; corona segments cupulate, the appendages exserted; fruiting pedicel straight and erect … A. michauxii

Key B: Leaves opposite or whorled
1. Corolla lobes erect at anthesis [2]
1. Corolla lobes spreading to reflexed at anthesis [3]
2. Leaves 2-6 mm wide; corolla greenish yellow … A. pedicellata
2. Leaves 15-30 mm wide; corolla greenish white … A. viridis
3. Corolla lobes yellow, orange, orange-red, to scarlet [4]
3. Corolla lobes white, pink, purple, to greenish [5]
4. Leaves 4-10 times longer than wide, (0.3)1.1-4.5 cm wide, at least larger ones … A. curassavica
4. Leaves 16-70 times longer than wide, 0.2-1(1.7) cm wide … A. lanceolata
5. Leaves oblong to ovate [6]
5. Leaves linear to lanceolate [13]
6. Leaves sessile or subsessile; umbels pedunculate, the peduncle subequal to longer than the pedicels [7]
6. Leaves petiolate, or if subsessile, the umbels sessile [9]
7. Leaves broadly cuneate at base; corolla greenish yellow … A. connivens
7. Leaves auriculate-clasping at base; corolla purple or purplish green [8]
8. Leaves elliptic; corolla lobes 9-11 mm long … A. amplexicaulis
8. Leaves ovate-deltoid; corolla lobes 5-6 mm long … A. humistrata
… A. cinerea
9. Umbel peduncle subequal to longer than the pedicels [10]
9. Umbel peduncle shorter than the pedicels [11]
10. Larger leaves 1.8-3.5(5) cm long; inflorescence lateral; corona hood narrowly lanceolate … A. curtissii
10. Larger leaves 5.5-15 cm long; inflorescence terminal; corona hood broadly rounded … A. variegata

11. Corolla lobes 6-7 mm long, corona appendage absent or obscure ... A. viridiflora
11. Corolla lobes 9-10 mm long, corona appendage present [12]
12. Petioles 1-3.5(4) mm long; corona segments longer than the appendage ... A. obovata
12. Petioles (2)4-9 mm long; corona segments shorter than the appendage ... A. tomentosa
13. Leaves whorled ... A. verticillata
13. Leaves opposite to subopposite [14]
14. Corona segments shorter than the gynostegium [15]
14. Corona segments longer than the gynostegium [17]
15. Larger leaves (1.5)2-10 mm wide; inflorescence of 13-28(36) flowers; corolla lobes reflexed, 2-5 mm long ... A. longifolia
16. Larger leaves 0.8-1.3(1.5) mm wide; inflorescence of 2-8 flowers; corolla lobes spreading or reflexed, 4-10 mm long [16]
16. Flowers ascending to drooping; corolla lobes 4-5 mm long; corona segments white to grayish or pinkish, conduplicate, apex toothed; anthers green ... A. cinerea
16. Flowers erect to spreading; corolla lobes, 6-8 mm long; corona segments white, cupulate, apex edentate; anthers lavender ... A. feayi
17. Leaves 1-3(4) mm wide [18]
17. Leaves 5-10 mm wide [19]
18. Stems 1-4, spreading, decumbent, to ascending; inflorescence umbels terminal, rarely a few axillary ... A. michauxii
18. Stems 1(2), erect; inflorescence umbels axillary (and pseudoterminal) ... A. viridula
19. Leaves sessile or subsessile, petiole 0-1(2) mm long ... A. rubra
19. Leaves petiolate, petiole (1)2-15 mm long [20]
20. Leaf blade base rounded to short-tapering; corolla dull rose-purple ... A. incarnata
20. Leaf blade base long tapering; corolla white to pale pink ... A. perennis

Asclepias amplexicaulis Sm. {AFP} —
Asclepias cinerea Walter {AFP} —
Asclepias connivens Baldwin {AFP} —
****Asclepias curassavica*** L. {AFP} — Naturalized and also cultivated.
•***Asclepias curtissii*** A.Gray {AFP} — SE.
•***Asclepias feayi*** Chapm. ex A.Gray {AFP} —
Asclepias humistrata Walter {AFP} —
Asclepias incarnata L. {AFP} —
Asclepias lanceolata Walter {AFP} —
Asclepias longifolia Michx. {AFP} —
Asclepias michauxii Decne. {AFP} —
Asclepias obovata Elliott {AFP} —
Asclepias pedicellata Walter {AFP} —
Asclepias perennis Walter {AFP} —
Asclepias rubra L. {AFP} —
Asclepias tomentosa Elliott {AFP} —
Asclepias tuberosa L. {AFP} —
Asclepias variegata L. {AFP} —
Asclepias verticillata L. {AFP} —
Asclepias viridiflora Raf. {AFP} — SE.
Asclepias viridis Walter {AFP} —
Asclepias viridula Chapm. {AFP} — ST.

Calotropis
1. Corolla lobes 10-15 mm long, mostly narrowly deltate-oblong and spreading to recurved; staminal corona segments 5-12.5 mm long, shorter than the gynostegial head … C. gigantea
1. Corolla lobes 6-8 mm long, mostly ovate and erect to spreading; staminal corona segments 1-4 mm long, subequal to longer than the gynostegial head … C. procera

^*Calotropis gigantea* (L.)W.T. Aiton —
^*Calotropis procera* (Aiton)W.T.Aiton {AFP} —

Carissa
1. Leaf blade apex often mucronate or spinose, the lateral veins all mostly spreading-divergent and straight; left side of corolla lobe upper surface overlapping atop adjacent lobe … C. macrocarpa
1. Leaf blade apex rounded to acuminate, the proximal veins of leaf blade ascending-arcuate and a few distal veins at a different angle, spreading-diveregent and somewhat straight; right side of corolla lobe upper surface overlapping atop adjacent lobe … C. spinarum

****Carissa macrocarpa*** (Eckl.)A.DC. {AFP} —
****Carissa spinarum*** G.Lodd. —

Cascabela
^*Cascabela thevetia* (L.)Lippold {AFP} —

Catharanthus
****Catharanthus roseus*** (L.)G.Don {AFP} — Peninsula, and sporadically elsewhere (native to Madagascar). Also cultivated. See also (Plaizier 1981; Snoeijer 1996; van Bergen 1996).

Chthamalia
Chthamalia pubiflora Decne. {AFP} — SE.

Cryptostegia: The differences between the two species are still a bit muddled and clear assignment of plants is not always possible.

1. Stem, leaf blade, and fruit glabrous; calyx lobes (13)14-20 mm long, margins partly revolute; corona lobes deeply bifurcate to bifid only at the apex; translator spathes orbiculate, obtuse at apex; fruit 8-14(16) cm long … C. grandiflora
1. Stem, leaf blade, and fruit glabrous or hairy; calyx lobes 5.7-13(14) mm long, margins plane; corona lobes entire; translator spathes lanceolate to ovate, acute at apex; fruit 5-9(10) cm long … C. madagascariensis

****Cryptostegia grandiflora*** R.Br. {AFP} —
****Cryptostegia madagascariensis*** Bojer ex Decne. {AFP} —

Cynanchum
Cynanchum laeve (Michx.)Pers. {AFP} —

Echites

Echites umbellatus Jacq. {AFP} —

Funastrum
Funastrum clausum (Jacq.)Schltr. {AFP} —

Gomphocarpus
^*Gomphocarpus physocarpus* E.Mey. —

Gonolobus
1. Pubescence of stem internodes evenly distributed, not in lines; calyx colleters 1 per sinus, calyx lobes 0.2-1 mm wide; corolline corona (faucal annulus) glabrous; fruit ovoid, <½ as wide as long … G. suberosus
1. Pubescence of stem internodes in 2 lines, or glabrate; calyx colleters 2 per sinus, calyx lobes 1.3–2 mm wide; corolline corona (faucal annulus) with unicellular hairs 0.1-0.3 mm long; fruit broadly ovoid to suborbicular, >½ as wide as long … G. taylorianus

Gonolobus suberosus (L.)R.Br. {AFP} —
****Gonolobus taylorianus*** W.D.Stevens & Montiel {AFP} —

Hoya
^*Hoya carnosa* (L.f.)R.Br. —
^*Hoya pubicalyx* Merr. —

Huernia
^*Huernia schneideriana* A. Berger —

Leptadenia
****Leptadenia lanceolata*** (Poir.)Goyder {AFP} —

Mandevilla
^*Mandevilla sanderi* Woodson —

Matelea: These flowers have a complex anatomy. See Krings (2011).
1. Trailing to weakly climbing herb; leaf blade 0.5-4 cm long; of sandhills … Chthamalia pubiflora
1. Elongate, climbing vines; leaf blade 3-17 cm long (at least larger ones); of hammocks and forests [1]
2. Corolla pale green to yellow-green, lobes strongly reticulate-veined with darkened lines; coronas yellow to pale green (rarely maroon) [3]
2. Corolla white or maroon, lobes not reticulate-veined, rarely yellow-green and obscurely reticulate-veined; coronas whitish to cream or dark purple [4]
3. Corolla lobes ovate, the free margins overlapping at the base; … M. alabamensis
3. Corolla lobes oblong, the free margins scarcely or not overlapping … M. flavidula
4. Inflorescence of 4-20 flowers; corolla white … M. baldwyniana
4. Inflorescence of 4-8 flowers; corolla maroon, rarely yellow-green … M. floridana

Matelea alabamensis (Vail)Woodson {AFP} — SE.
Matelea baldwyniana (Sweet)Woodson {AFP} — SE.

Matelea flavidula (Chapm.)Woodson {AFP} — SE.
Matelea floridana (Vail)Woodson {AFP} — SE.

Metastelma

1. Leaves 5-15 mm wide, at least the larger ones; corolla lobe upper surface villous … M. bahamense
1. Leaves 1-3 mm wide; corolla lobe upper surface puberulent … M. blodgettii

Metastelma bahamense Griseb. {AFP} —
Metastelma blodgettii A.Gray {AFP} — ST.

Nerium

^*Nerium oleander* L. {AFP} — Commonly cultivated, but also occasionally naturalized.

Ochrosia

*****Ochrosia elliptica*** Labill. {AFP} —

Orthosia

Orthosia scoparia (Nutt.)Liede & Meve {AFP} —

Pachypodium

^*Pachypodium lamerei* Drake —

Pattalias

Pattalias paluster (Pursh)Fishbein {AFP} —

Pentalinon

Pentalinon luteum (L.)B.F.Hansen & Wunderlin {AFP} —

Plumeria

1. Leaf blade abruptly spatulate, expanded in the distal portion … P. pudica
1. Leaf blade oblong to elliptic [2]
2. Leaf blade apex usually rounded to emarginate; inflorescence branches densely congested; corolla white … P. obtusa
2. Leaf blade apex usually acute to acuminate; inflorescence branches spreading; corolla with at least some pink, red, orange, or yellow, very rarely only white … P. rubra

^*Plumeria obtusa* L. {AFP} —
^*Plumeria pudica* Jacq. —
^*Plumeria rubra* L. —

Rauvolfia

^*Rauvolfia tetraphylla* L. {AFP} —

Rhabdadenia

Rhabdadenia biflora (Jacq.)Müll.Arg. {AFP} —

Stapelia
^*Stapelia gigantea* N.E.Br. —

Tabernaemontana
1. Calyx lobes glabrous; corolla lobes 7-14 mm long; seeds 10-50 … T. alba
1. Calyx lobes usually ciliate; corolla lobes 15-27 mm long; seeds 2-10 … T. divaricata

^*Tabernaemontana alba* Mill. {AFP} —
^*Tabernaemontana divaricata* (L.)R.Br. ex Roem. & Schult. {AFP} —

Thyrsanthella
Thyrsanthella difformis (Walter)Pichon {AFP} —

Trachelospermum
^*Trachelospermum jasminoides* (Lindl.)Lem. {AFP} — Commonly cultivated, rarely forming fruit; sparingly naturalizing.

Vallesia
Vallesia antillana Woodson {AFP} — SE.

Vinca
1. Petiole 5-15 mm long; leaf blade 2-6 cm wide, margins ciliate; calyx lobes ciliate, 7-15 mm long; corolla lobes 15-20 mm long; seeds 7-10 mm long … V. major
1. Petiole 1-2(10) mm long; leaf blade 0.5-2.5 cm wide, margins not ciliate; calyx lobes not ciliate, 3-4 mm long; corolla lobes 10-15 mm long; seeds 5-7 mm long … V. minor

****Vinca major*** L. {AFP} —
****Vinca minor*** L. {AFP} —

Wrigthia
^*Wrightia antidysenterica* J.Graham —

GELSEMIACEAE
Gelsemium
1. Leaf blade lower surface with small patch of spreading trichomes at base; pedicel mostly ebracteate in the upper half, the bracts not or scarcely overlapping the sepals; flower generally lacking fragrance; base of the corolla lobe usually overlapping adjacent corolla lobe; sepal tip acuminate, sepals usually persistent in fruit; fruit 9-16 mm long, beak 2.4-4.2 mm long; seed not winged; of bottomlands … G. rankinii
1. Leaf blade lower surface glabrous to slightly scabridulous at base; pedicel usually bracteate in the upper half, the bracts imbricate with the sepals; flower pleasantly fragrant; sepal tip obtuse to acute, sepals not persistent in fruit; base of the corolla lobes usually not overlapping adjacent lobe; fruit 14-25 mm long, beak 1-2 mm long; seed winged; of uplands to lowlands … G. sempervirens

Gelsemium rankinii Small {AFP} —
Gelsemium sempervirens (L.)J.St.-Hil. {AFP} —

GENTIANACEAE

1. Leaves scale-like, 0.5-5 mm long [2]
1. Leaves linear to expanded, larger ones 5-100 mm long, these sometimes placed as bracts subtending flowers [3]
2. Stem green to purplish; corolla narrowly campanulate, lobes 4, longer than the tube … Bartonia
2. Stem whitish to pale yellowish; corolla salverform, lobes 5, shorter than the tube … Voyria parasitica
3. Stem leaves scale-like, much smaller than those subtending flower; flower subtended by 2 foliaceous bracts or leaves and the calyx absent … Obolaria virginica
3. Stem leaves foliaceous, larger than to subequal to those below the flower; calyx of 4-12(14) sepals, some or all connate at least at the base [4]
4. Corolla lobes shorter than the tube, with tooth-like or fringed projections between the lobes … Gentiana
4. Corolla lobes longer than the tube, lacking projections between the lobes [5]
5. Stem and leaves often blue-green, strongly glaucous; flowers 5-merous; style not cleft or split … Eustoma exaltatum
5. Stem and leaves green and non-glaucous or blue-green and glaucous; flowers 5-12-merous; style apically split at least 1 mm … Sabatia

Bartonia

1. Inflorescence often unbranched with a solitary flower, or with up to 8(10) flowers; petal spreading; corolla lobes (4)5-11 mm long, 2.5-3.5 times as long as the calyx; flowering Nov-Apr … B. verna
1. Inflorescence usually with 3-40 flowers, rarely 1-2; petals usually erect to ascending, sometimes spreading; corolla lobes 2-4 mm long, 1-2 times as long as the calyx; flowering Jul-Nov(Mar) [2]
2. Leaves and branching mostly opposite, the nodes numerous and crowded at the base of the stem; corolla lobes oblong, apically apiculate, erose to entire; stigmas connivent, style slender; fruit dehiscing medially below the style … B. virginica
2. Leaves and branching mostly alternate, the nodes few and sparse at the base of the stem; corolla lobes lanceolate, apex acute not apiculate, entire; stigmas spreading, style stout; fruit dehiscing apically by separation from the style [3]
3. Stem stiff or stout, often thickened distally, purple; filaments usually purple; anthers often purple, sometimes yellow, 0.5-1 mm long … B. paniculata subsp. iodandra
3. Stem lax, slender, sometimes twining, mostly green; filaments green to yellow; anthers usually yellow, 0.5 mm long … B. paniculata subsp. paniculata

Bartonia paniculata (Michx.)Muhl. {AFP} —
Bartonia verna (Michx.)Raf. ex Barton {AFP} —
Bartonia virginica (L.)Britton et al. {AFP} —

Centaurium

****Centaurium pulchellum*** (Sw.)Hayek ex Hand.-Mazz. et al. {AFP} —

Eustoma

Eustoma exaltatum (L.)Salisb. ex G.Don {AFP} —

Gentiana

1. Leaves 2-8 mm wide, lacking basal lateral veins; flower solitary; corolla white, externally sometimes suffused with purple, internally with green or yellow in the throat … G. pennelliana
1. Leaves 7-24 mm wide, usually a pair of basal lateral veins apparent; flowers 1-5; corolla bluish to purplish or white with bluish or purplish coloration [2]
2. Leaves obovate, widest above the middle; corolla appendages obliquely deltoid; seeds not winged … G. villosa
2. Leaves elliptic to ovate, widest near the middle or base; corolla appendages bifid, laciniate; seeds winged [3]
3. Leaves mostly ovate, widest near the base; calyx lobes longer than the tube; corolla lobes spreading usually 2-4 mm longer than the appendages … G. catesbaei
3. Leaves mostly elliptic, widest near the midde; calyx lobes subequal to shorter than the tube; corolla lobes usually incurved, rarely exceeding the appendages by more than 2 mm … G. saponaria

Gentiana catesbaei Walter {AFP} —
•***Gentiana pennelliana*** Fernald {AFP} — SE.
Gentiana saponaria L. {AFP} —
Gentiana villosa L. {AFP} —

Obolaria

Obolaria virginica L. {AFP} —

Sabatia

1. Sepals and petals with 7-14 lobes [2]
1. Sepals and petals with 5-7 lobes [5]
2. Flowers sessile or pedicel to 2.5 mm long … S. gentianoides
2. Flowers pedicellate, the pedicel 8-80 mm long [3]
3. Leaves succulent, linear in distal half of stem, basal ones often present at flowering and dissimilar from distal ones; calyx lobes subulate, succulent … S. decandra
3. Leaves chartaceous, distally lanceolate, elliptic, to linear, basal ones often absent at flowering and similar to distal ones; calyx lobes linear, chartaceous [4]
4. Not or only weakly stoloniferous; internodes mostly >1.25 times as long as subtending leaves; mostly brackish areas … S. dodecandra
4. Stoloniferous; internodes moslty <1.25 times as long as subtending leaves; mostly freshwater areas … S. foliosa
5. Upper branches or peduncles opposite [6]
5. Upper branches or peduncles alternate [10]
6. Stem terete; calyx lobes 0.1-3(4) mm long; leaves and distal stem glaucous [7]
6. Stem 4-angled, at least distally; calyx lobes (4)5-15 mm long; not glaucous or only slightly so [8]
7. Calyx lobes erect to spreading, subequal to shorter than the tube … S. macrophylla var. macrophylla
7. Calyx lobes recurved, longer than the tube … S. macrophylla var. recurvans
8. Pedicels 0.5-6 cm long; corolla pink, rarely white … S. angularis
8. Pedicels 0.2-1 cm long; corolla white [8]
9. Stem subterete proximally, not winged … S. difformis

9. Stem 4-angled and winged proximally, wings 0.1-0.5 mm ... S. quadrangula
10. Calyx lobes oblanceolate to spatulate, foliaceous ... S. calycina
10. Calyx lobes linear, subulate, filiform, to setaceous, not foliaceous [11]
11. Calyx lobes setaceous to subulate, 3-8 mm long, <½ as long as corolla; corolla white ... S. brevifolia
11. Calyx lobes linear, (4)6-25(30) mm long, >½ as long as corolla; corolla pink [12]
12. Perennial, stems 1-many, often the stems and branches erect and densely clustered in the basal part of the plant, distal branches strict to divaricate; leaves generally wider than the adjacent stem; calyx lobes usually >0.8 times as long as corolla; corolla lobes 6-24 mm long ... S. campanulata
12. Annual or biennial, stems single to uncommonly multiple, the branches primarily divaricate to ascending and slightly arching; leaves narrower to wider than the stem; calyx lobes usually <0.8 times as long as corollas [13]
13. Stems single and usually unbranched below the middle; leaves 0.5-2(5) mm wide, linear to linear-lanceolate or linear-oblanceolate and narrowly acute at the tip, usually subequal to narrower than the adjacent stem, thick and rugose, venation obscure; corolla lobes (13)17-30 mm long; of inland areas ... S. grandiflora
13. Stems single to multiple, and often some plants branched below the middle; leaves (1)2-10(15) mm wide, linear-oblong to narrowly elliptic with rounded to obtuse apices, usually wider than the adjacent stem (at least in proximal half), thin and smooth, venation often visible on larger leaves; corolla lobes 5-20 mm long; of coastal areas ... S. stellaris

Sabatia angularis (L.)Pursh {AFP} —
Sabatia brevifolia Raf. {AFP} —
Sabatia calycina (Lam.)A.Heller {AFP} —
Sabatia campanulata (L.)Torr. {AFP} —
Sabatia decandra (Walter)R.M.Harper {AFP} —
Sabatia difformis (L.)Druce {AFP} —
Sabatia dodecandra (L.)Britton et al. {AFP} —
Sabatia foliosa Fernald {AFP} — Sometimes included under *S. dodecandra*.
Sabatia gentianoides Elliott {AFP} —
Sabatia grandiflora (A.Gray)Small {AFP} —
Sabatia macrophylla Hook. {AFP} —
Sabatia quadrangula Wilbur {AFP} —
Sabatia stellaris Pursh {AFP} —

Voyria
Voyria parasitica (Schltdl. & Cham.)Ruyters & Maas {AFP} — SE.

LOGANIACEAE
1. Trees or shrubs; fruit a berry with a hardened exocarp ... Strychnos
1. Herbs; fruit a small capsule ... [2]
2. Leaf blades pinninerved; inflorescence pedunculate; corolla 2-3 mm long; style not articulated; fruit emarginate to acuminate, separating into 2 hornlike structures, lacking a woody remnant ... Mitreola
2. Leaf blades often appearing trinerved or triplinerved at the base; inflorescence sessile; corolla 5-50 mm long; style articulated; fruit cleft into 2 rounded lobes apically, a woody cuplike remnant persistent after dehiscence ... Spigelia

Mitreola

1. Cauline leaves to 7(8) cm long, the petiole 1-15(30) mm long, the blade base abruptly narrowed-decurrent, the apex acute-acuminate, distal leaves usually spreading to ascending … M. petiolata
1. Cauline leaves to 2.5(3.3) cm long, petiole 0-1 mm long, the blade base mostly rounded to truncate, the apex abruptly acute, distal leaves ascending to erect-appressed [2]
2. Leaves lanceolate-elliptic to linear, 3-5 times longer than wide; capsule horns papillose-warty on inner and outer faces; seeds iridescent, alveolate-reticulate … M. angustifolia
2. Leaves ovate to elliptic, 1.3-2 times longer than wide; capsule horns lightly tuberculate mostly on inner faces; seeds lustrous but not iridescent, smooth … M. sessilifolia

Mitreola angustifolia (Torr. & A.Gray)J.B.Nelson {AFP} —
Mitreola petiolata (J.F.Gmel.)Torr. & A.Gray {AFP} —
Mitreola sessilifolia (J.F.Gmel.)G.Don {AFP} —

Spigelia

1. Annual; stem below inflorescence with 1-3 nodes, mostly leafless; inflorescence with 22-45 flowers, subtended by a pseudowhorl of leaves, these leaves the largest on the plant … S. anthelmia
1. Perennial, rhizomatous; stem below inflorescence leafy with several nodes; inflorescence with 2-17 flowers, subtended by a pair of leaves or occasionally a pseudowhorl, these leaves smaller, subequal, or not much larger than cauline leaves [2]
2. Rhizomes stout; cauline leaf blades 4-12 cm long, 1-5 cm wide; corolla (3)4-5 cm long, externally scarlet (rarely white), internally yellow to greenish (rarely pink) … S. marilandica
2. Rhizomes slender; cauline leaf blades 2-6(7) cm long, 1-2 cm wide; corolla (0.7)1-3 cm long, white or pink [3]
3. Inflorescence elongate, with (2)3-8 flowers; corolla 25-30 mm long … S. gentianoides
3. Inflorescence subsessile with 2 flowers; corolla (7)10-17 mm long … S. loganioides

Spigelia anthelmia L. {AFP} —
Spigelia gentianoides Chapm. ex A.DC. {AFP} — FE. SE.
•***Spigelia loganioides*** (Torr. & A.Gray ex Endl. & Fenzl)A.DC. {AFP} — SE.
Spigelia marilandica (L.)L. {AFP} —

Strychnos

^*Strychnos spinosa* Lam. {AFP} —

RUBIACEAE

subf. Cinchonoideae
- Chiococceae: Catesbaea, Chiococca, Erithalis, Exostema
- Guettardeae: Arachnothryx, Guettarda
- Hamelieae: Hamelia
- Naucleeae: Cephalanthus, Nauclea
- Strumpfieae: Strumpfia

subf. Ixoroideae
- Coffeeae: Coffea
- Gardenieae: Casasia, Gardenia, Randia

Ixoreae: Ixora
Mussaendeae: Mussaenda, Pseudomussaenda
subf. Rubioideae
Coussareeae: Coccocypselum
Knoxieae: Pentas
Mitchelleae: Mitchella
Morindeae: Morinda
Paederieae: Paederia, Serissa
Rubieae: Galium, Sherardia
Spermacoceae: Borreria, Diodia, Edrastima, Ernodea, Hexasepalum, Houstonia, Mitracarpus, Oldenlandia, Oldenlandiopsis, Pentodon, Richardia, Spermacoce

1. Herbs, sometimes suffrutescent or vine-like; leaf blades 0.1-3 cm wide ... Key A
1. Woody vines, subshrubs, shrubs, or trees; leaf blades 0.1-25 cm wide ... Key B

Key A: Herbs; leaf blades small
1. Leaves whorled, 4-8 per node [2]
1. Leaves opposite, 2 per node [3]
2. Inflorescence axillary or terminal, pedunculate or flowers pedicellate ... Galium
2. Inflorescence terminal with sessile flowers subtended by a whorl of leaves ... Sherardia arvensis
3. Leaf blades 1-5 mm long ... Oldenlandiopsis callitrichoides
3. Leaf blades (3)5-50 mm long [4]
4. Flowers pedicellate, pedicel (2)3-15 mm long [5]
4. Flowers sessile to subessile, pedicel 0-3 mm long [7]
5. Calyx lobes, corolla lobes, and stamens usually 5 ... Pentodon pentandrus
5. Calyx lobes, corolla lobes, and stamens 4 [6]
6. Seeds crateriform (with a ventral depression and a linear hilar ridge within or a ventral subglobose cavity lacking a hilar ridge), or if noncrateriform then leaves linear ... Houstonia
6. Seeds noncrateriform (leaves linear-lanceolate, elliptic, to ovate) ... Oldenlandia
7. Leaves distinctly petiolate, the petiole 2-10 mm long, the blade 1.3-5 times as long as the petiole; fruit a drupe or berry [8]
7. Leaves sessile or subsessile, the petiole 0-3 mm long, the blade 10 times or more the length of the petiole; fruit a capsule [9]
8. Leaf blade 2-6.5 cm long; inflorescence of separate flowers, the ovaries not fused; fruit blue or purplish, with the remant of one calyx and one corolla scar ... Coccocypselum hirsutum
8. Leaf blade 0.8-2 cm long; inflorescence a pair of flowers with the ovaries fused; fruit red, with remnants of 2 calyces and 2 corolla scars ... Mitchella repens
9. Leaf blade lacking conspicuous secondary veins [10]
9. Leaf blade with conspicuous lateral veins [15]
10. Carpels with 2 or more seeds [11]
10. Carpels 1-seeded [12]
11. Stipules with inconspicuous marginal teeth to 2 mm long; leaves ovate to elliptic, 3-11 mm wide; flowers both axillary and terminal ... Edrastima uniflora
11. Stipules with conspicuous marginal teeth to 5 mm long; leaves linear to narrowly elliptic, 1-3(5) mm wide; flowers all axillary ... Oldenlandia boscii
12. Inflorescence with 5-70 flowers densely clustered per stem node; fruit not separating into 2 parts [14
12. Inflorescence of 1-6 flowers per stem node; fruit separating into 2 parts [13]

13. Stipular bristles flattened-linear, to 5 mm long, shorter than the flower and fruit; corolla lobe upper surface hirsute; fruit 5-9 mm long … Diodia
13. Stipular bristles filiform, to 8 mm long, longer than the flower and fruit; corolla lobe upper surface glabrous; fruit 2-3(4.5) mm long … Hexasepalum teres
Borreria
14. Stamens and stigmas exserted from the corolla tube; stems and leaves glabrous to sparingly pubescent pilose; calyx lobes 0.2-0.7 mm wide, 0.3-1.5 mm long … Borreria
14. Stamens and stigmas included in the corolla tube; stems and leaves glabrous to sparingly pubescent, or pilose to hispid; calyx lobes 0.2-2 mm wide, 0.3-2.3 mm long… Spermacoce
15. Inflorescence sessile or pedunculate, <6 flowers in the inflorescence; fruit separating into 2 parts … Diodia
15. Inflorescence sessile with 6-50 sessile flowers densely clustered at one stem node (only one or some flowers may be open at a time); fruit not separating into 2 parts [16]
16. Calyx and corolla lobes 4 or 5-6 … Richardia
16. Calyx and corolla lobes 4 [17]
17. Stem or leaf base frequently hispid or pilose; calyx lobes to 2 mm long, conspicuously exserted; carpels opening transversely … Mitracarpus hirtus
17. Stem or leaf base glabrate, pubescent, hispid, or pilose; calyx lobes to 1.5 mm long, conspicuously exserted or not; carpels opening longitudinally [18]
18. Stamens and stigmas included in the corolla tube … Spermacoce
18. Stamens and stigmas exserted from the corolla tube [19]
19. Stems and leaves glabrous to sparingly pubescent; stems not winged or scarcely so [3]
Borreria
19. Stems and leaves copiously short-pilose, pilose, or hispid; stems winged … Spermacoce latifolia

Key B: Woody; leaf blades small to large
1. Flowers sessile in dense heads [2]
1. Flowers pedicellate [4]
2. Leaves opposite or whorled; fruit dry … Cephalanthus occidentalis
2. Leaves opposite; fruit fleshy [3]
3. Only a few flowers open simultaneously; style short-exserted; stigma bilobed, the lobes strap-like; mature fruit white to yellow … Morinda
3. All or nearly all flowers open simultaneously; style long-exserted; stigma conic or cylindric; mature fruit brown to red … Nauclea latifolia
4. Fruit a capsule [5]
4. Fruit a berry [7]
5. Inflorescence with some sepals petaloid and greatly enlarged, white to pink to reddish … Pinckneya bracteata
5. Sepals green, not petaloid, not enlarged [6]
6. Plant glabrous or glabrate … Exostema caribaeum
6. Plant hirsute, villous, or pilose, especially on younger parts … Pentas lanceolata
7. Leaves 1-10 mm wide with inconspicuous lateral veins or the lateral veins extending to the leaf apex, margins revoluate or plane [8]
7. Leaves 3-150 mm wide, usually with conspicuous lateral veins extending to the margin or evanescent, the margins usually plane [9]
8. Scrambling shrub or vine-like; internodes mostly >7 mm long, leaves distributed along the stem … Ernodea

8. Erect shrub; internodes <7 mm long, leaves often densely clustered at the stem apex ... Strumpfia maritima
9. Axillary spines present or absent; mature main stems usually axillary fascicles of leaves or with short shoots of a scarcely elongated stem of densely clustered nodes where the leaves arise [10]
9. Axillary spines absent; stems lacking short shoots [11]
10. Leaves 3-10 mm long; corolla lobes 4; fruit 2-4 mm long ... Catesbaea parviflora
10. Leaves 5-50 mm long; corolla lobes 5; fruit 6-13 mm long ... Randia aculeata
11. Inflorescence axillary [12]
11. Inflorescence terminal, new stems sometimes produced laterally below the inflorescence and well exserted beyond the inflorescence [15]
12. Stipules 5-12 mm long; leaves 6-15 cm long; fruit 5-8 cm long ... Casasia clusiifolia
12. Stpules 0.5-8 mm long; leaves 1-17 cm long; fruit 0.3-1 cm long [13]
13. Leaves with a fetid or unpleasant odor; base of the corolla lobes and inside of the tube pink to purple; fruit orangeish, brown, or blackish ... Paederia
13. Leaves with an insignificant or neutral odor; corolla lobes and tube white, yellow, to green inside; fruit white or red [14]
14. Sprawling or vine-like, sometimes shrubby; stems and leaves glabrous to glabrate; inflorescence of elongate racemes or panicles; fruit white ... Chiococca
14. Shrubs or trees, rarely sprawling; stems and leaves pubescent; inflorescence a pedunculate capitate cyme; fruit red ... Guettarda
15. Leaves opposite or whorled; inflorescence racemose; corolla yellow to reddish orange, the outer surface pubescent ... Hamelia patens
15. Leaves opposite; inflorescence subcaptiate; corolla white to greenish, the outer surface glabrous [16]
16. Stipules usually stiff-pointed or spinose; corolla tube 6-45 mm long ... Ixora
16. Stipules chartaceous or coriaceous, rounded to acute; corolla tube 1-4 mm long [17]
17. Leaf blade secondary veins plane, not impressed; stigma with 5-10 lobes, the ovary of 5-10(22) locules; fruit with 5-10 seeds ... Erithalis fruticosa
17. Leaf blade secondary veins often impressed with the blade tissue raised between the veins; stigma with 2 lobes, the ovary of 2 carpels; fruit with 2 seeds ... Psychotria

Arachnothryx

^*Arachnothryx leucophylla* (Kunth)Planch. —

Borreria

1. Stems, leaves, calyx-lobes, and-or flower buds commonly suffused with red or pink, sometimes plain green without red; stem nodes usually with a pair of leaves only; calyx lobes 4, 0.2-0.4 mm wide; corolla lobes short-pilose ... B. remota
1. Stems, leaves, calyx-lobes, and-or flower buds generally plain green without red coloration; stem nodes commonly with sessile axillary fascicles of reduced leaves; calyx lobes 2-4, 0.4-0.7 mm wide; corolla lobes glabrate [2]
2. Leaves 0.8-2 cm wide, 2-4(4.5) times longer than wide ... B. dasycephala
2. Leaves 0.1-1 cm wide, (3.5)4-10 times longer than wide [3]
3. Corolla lobes 0.4-0.8 mm wide, 0.4-1 mm long; anthers 0.4-0.7 mm long; fruit (including persistent calyx lobe) 1.5–2.5 mm long ... B. verticillata
3. Corolla lobes 0.8-1.2 mm wide, 1-2.5 mm long; anthers 0.8-1.1 mm long; fruit (including persistent calyx lobe) 2.5-5 mm long [4]

4. Stems and branches many from the base of the plant, weakly lax to erect; deltoid prickles (0.1–0.5 mm long) along leaf blade midvein usually absent or 1-2 at the blade base; corolla lobe 1.5-2.5 mm long; fruit (including persistent calyx lobe) 2.5-4 mm long, dehiscent, somewhat open or cylindric, usually 2-seeded … B. terminalis
4. Stems single or many (especially when mowed) from the base of the plant, typically few to unbranched in the basal 1⁄2 of the plant, mostly erect (unless mowed); corolla lobe 1-1.5 mm long; fruit (including persistent calyx lobe) 4-5 mm long, indehiscent, flattened, usually 1-seeded with the other locule abortive … Borreria diacrodonta

*****Borreria dasycephala*** (Cham. & Schltdl.)Bacigalupo & E.L. Cabral {AFP} — (*B. densiflora*, misapplied)
*****Borreria diacrodonta*** L.M.Miguel & E.L.Cabral — Southern peninsula (native to Brazil). Disturbed, well-drained sands.
Borreria remota (Lam.)Bacigalupo & E.L. Cabral {AFP} — The species is somewhat similar to *S. keyensis*, which has the stems glabrous; corolla lobes 0.5-1 mm long, only slightly longer than the calyx lobes; fruit 1-2 mm long, glabrous to pubescent. Then, *S. remota* has the stems usually pubescent below the nodes; corolla lobes 2-4 mm long, more than 2 times longer than the calyx lobes; fruit 2-3 mm long, pubescent.
•***Borreria terminalis*** Small {AFP} —
*****Borreria verticillata*** (L.)G.Mey. {AFP} —

Casasia
Casasia clusiifolia (Jacq.)Urb. {AFP} —

Catesbaea
Catesbaea parviflora Sw. {AFP} — SE.

Cephalanthus
Cephalanthus occidentalis L. {AFP} —

Chiococca
1. Mature plant 1–4 m tall (very rarely shorter esp. at its northern limit), compact or scandent shrubs to high-climbing vines, rarely rooting where stems touch the ground; the central stem 1.2-5.4 cm wide at the plant base, becoming much wider than distal stems, strongly rigid, often trunk-like; bark of older stems becoming light gray below newer green (rarely purplish) growth; leaves to 10 cm long and 4 cm wide, the petiole usually distinct and to 15 mm long, the secondary veins 3-6 on each side of the midrib, the secondary veins often relatively conspicuous on the upper surface and discolorous (whitish to yellow-green) from the green blade surface, reticulate veins sometimes apparent, the upper blade surface lustrous; peduncle, rachis, pedicel, and ovary usually green (rarely purplish); peduncle 7-25 mm long, the peduncle+rachis 2-9 cm long; calyx and corolla (4)5-merous; corolla yellow to whitish … C. alba
1. Mature plant 0.1-3.5 m tall, sprawling, procumbent, to scandent subshrubs to vines, commonly rooting where stems touch the ground; the central stem 0.1-1(2) cm wide at the plant base, not much wider than distal portions of the stems, weakly stiffened; bark of older stems becoming dark purplish gray to gray-black below newer green to purplish growth or if gray then the mature plant <1 m tall; leaves to 6 cm long and 1.8 cm wide, the petiole often indistinct or to 4 mm long, the secondary veins unapparent or 1-3 on each side of the midrib and sometimes concolorous with the blade surface, reticulate veins usually unapparent, the

upper blade surface dull; peduncle, rachis, pedicel, and ovary green to purplish; peduncle 2–10 mm long, the peduncle+rachis 0.5–4 cm long; calyx and corolla 4–5-merous; corolla yellow to purplish [2]
2. Plant 0.1–3.5 m tall, sprawling or climbing, vine-like; longer stems usually >1.5 m long; larger leaves >3 cm long, >13 mm wide, mostly 2.5-5 cm long; inflorescence peduncle+rachis 0.5-4 cm long ... C. parvifolia
2. Plant 0.1–0.5(1) m tall, sprawling subshrub; longer stems <1(1.5) m long; larger leaves <3.1(3.8) cm long, <13 mm wide, mostly 1-3 cm long; inflorescence peduncle+rachis 0.5-2 cm long; of pine rocklands ... C. pinetorum

Chiococca alba (L.)Hitchc. {AFP} — Peninsula. Well-drained hammocks. Possibly those of the upper west peninsula are nearer to populations of Texas.
Chiococca parvifolia Wullschl. ex Griseb. {AFP} — Southern peninsula. Mesic to wet hammocks, swamps, pinelands, and prairies.
Chiococca pinetorum Britton ex Millsp. {AFP} — Miami-Dade & Monroe Co. keys. Pine rocklands.

Coccocypselum
*****Coccocypselum hirsutum*** Bartl. ex DC. {AFP} —

Coffea
^*Coffea arabica* L. —

Diodia
1. Leaves 15-36 mm long at mid-stem; corolla tube 4-7.5 mm long; fruit 4-6(6.5) mm long ... D. harperi
1. Leaves 30-65 mm long at mid-stem; corolla tube 6.5-9 mm long; fruit 6.5-9 mm long ... D. virginiana

Diodia harperi Small — Usually subsumed under *D. virginiana* but sometimes accepted as a species (Fernald & Griscom 1937; Sorrie 2016) and hesitantly done so here.
Diodia virginiana L. {AFP} —

Edrastima
Edrastima uniflora (L.)Raf. {AFP} —

Erithalis
Erithalis fruticosa L. {AFP} — ST.

Ernodea
1. Leaf blade with 1(2) vein(s) (very rarely 3), 1-2.4 mm wide, (5)7-50 times longer than wide; corolla usually white ... E. cokeri
1. Leaf blade with 3-7 veins, sometimes some blades with 1 vein or appearing 1-veined, sometimes the lateral veins subtle, 2.5-9.4 mm wide, 2-14(20) times longer than wide; corolla white to red ... E. littoralis

Ernodea cokeri Britton ex Coker {AFP} — SE.
Ernodea littoralis Sw. {AFP} —

Exostema

Exostema caribaeum (Jacq.)Roem. & Schult. {AFP} — SE.

Galium

1. Leaves 5–8 per stem node, at least on some or most nodes [2]
1. Leaves 4 per stem node (rarely more) [4]
2. Leaves 4-6 per stem node; ovary and fruit glabrous or with few uncinate trichomes … G. tinctorium
2. Leaves 6 or 8 per stem node; ovary and fruit moderately to densely uncinate-hispid [3]
3. Annual; leaves mostly 8 per stem node; leaves 2.5-15 times longer than wide … G. aparine
3. Perennial; leaves mostly 6 per stem node; leaves 2.3-4 times longer than wide … G. triflorum
4. Ovary and fruit moderately to densely uncinate-hispid [5]
4. Ovary and fruit glabrous or with few uncinate trichomes [6]
5. Stems to 40(60) cm tall; 3-6 nodes with green leaves per main stem; inflorescence relatively short, few-flowered … G. circaezans
5. Stems to 110 cm tall; 6-20 nodes with green leaves per main stem; inflorescence elongate, diffuse, compound … G. pilosum
6. Fruit dry [7]
6. Fruit fleshy [8]
7. Stem angles glabrous, somewhat rounded; leaves 4 per node (rarely 5); corolla lobes 4, apex acute … G. obtusum subsp. filifolium
7. Stem angles glabrous to scabrid, somewhat sharp; leaves 4-6 per node; corolla lobes 3-4, apex obtuse … G. tinctorium
8. Leaves mostly 2-3 times longer than wide; fruit blue … G. bermudense
8. Leaves mostly 5-7 times longer than wide; fruit black … G. uniflorum

Galium aparine L. {AFP} —
Galium bermudense L. {AFP} —
Galium circaezans Michx. {AFP} —
Galium obtusum Bigel. subsp. ***filifolium*** (Wiegand)Puff {AFP} —
Galium pilosum Aiton {AFP} —
Galium tinctorium L. var. ***floridanum*** Wiegand {AFP} — Puff (1976) recognized Florida material (and more broadly the southeastern USA) as subsp. *floridanum* (generally larger with plants to 75 cm, leaves usually 12-20 by 2-3 mm, partial inflorescences of 3 or more flowers, fruiting pedicels usually 5-8 mm long, and mericarps usually 3-5 mm long) but noted that it seems to intergrade with subsp. *tinctorium*. Lawson (1976) did not recognize infraspecific taxa.
Galium triflorum Michx. {AFP} —
Galium uniflorum Michx. {AFP} —

Gardenia

^*Gardenia jasminoides* J. Ellis —

Guettarda

1. Upper surface of leaf blade not scabrous, the trichomes not bullate, secondary and tertiary venation prominulous or slightly impressed on; tertiary venation flat or slightly prominulous on

leaf blade underside, sparse to moderately covered in trichomes and the surface visible; leaf blade usually <4 cm long … G. elliptica
1. Upper surface of leaf blade scabrous, the trichomes bullate at the base, secondary and tertiary venation often impressed; tertiary venation prominent on leaf blade underside, densely pubescent and obscuring the surface; leaf blade usually >3 cm long … G. scabra

Guettarda elliptica Sw. {AFP} —
Guettarda scabra (L.)Vent. {AFP} —

Hamelia
1. Dense, compact shrub; leaves 2-4 per node; petioles and midrib pale greenish; leaf blades glabrous to pubescent, often lustrous, 4.5-9 cm long, 1.5-3.6 cm wide; inflorescence with 20-50 flowers; corolla tubes yellow to orange, with a distinct basal constriction; non-native, primarily cultivated … H. patens var. glabra
1. Open shrub; leaves 2-3 per node; petioles and midribs reddish; leaf blades pubescent (esp. lower suface), relatively dull, mostly 6-18 cm long, 3-8 cm wide; inflorescence mostly with 20-30 flowers; corolla tubes pubescent, yellow-orange to red, with a subtle basal constriction; native and cultivated … H. patens var. patens

Hamelia patens Jacq. var. ***glabra*** Oerst. — Commonly cultivated; native primarily to northern South America; rarely escapes if at all.
Hamelia patens Jacq. var. ***patens*** {AFP} — Hammocks, and commonly cultivated.

Hexasepalum
Hexasepalum teres (Walter)J.H.Kirkbr. {AFP} —

Houstonia
1. Leaf blade 0.2-2(8) mm wide, 10-40 times longer than wide; seeds not crateriform (at most with a shallow indistinct depression) [2]
1. Leaf blade 2-20 mm wide (at least larger ones), 1.5-15 times longer than wide; seeds crateriform with an obvious ventral depression or cavity [3]
2. Corolla 3-5(6) mm long; capsule subglobose, 1.2-2.5 mm long, 1-1.3 times longer than wide … H. nigricans var. floridana
2. Corolla (2.5)3-8 mm long; capsule turbinate, 1.5-4.5 mm long, 1.3-2 times longer than wide … H. nigricans var. nigricans
3. Leaves 15-45 mm long (at least larger ones) [4]
3. Leaves 2-15 mm long [5]
4. Lower or median cauline leaves 0.3-8.5 mm wide, linear to elliptic … H. longifolia
4. Basal or median cauline leaves 3-35(45) mm wide, ovate to narrowly lanceolate … H. purpurea
4. Annual; stems erect to spreading, not rooting at nodes, internodes 2-5 per stem [5]
4. Perennial; stems prostrate, sometimes rooting at nodes, internodes usually >4 per stem [6]
5. Calyx lobes 0.8-1.2 times as long as corolla tube; corolla white, 2-5.5 mm long, the tube 0.8-2.5 mm long … H. micrantha
5. Calyx lobes 0.2-1.2 times as long as corolla tube; corolla purple, violet, pink, to white, 3.5-10(12.5) mm long, the tube 2-5.5 mm long … H. pusilla
6. Plants short-hirsute … H. procumbens var. hirsuta
6. Plants glabrous to sparsely pubescent … H. procumbens var. procumbens

Houstonia longifolia Gaertn. {AFP} —
Houstonia micrantha (Shinners)Terrell {AFP} —
Houstonia nigricans (Lam.)Fernald var. ***floridana*** (Standl.)Terrell {AFP} —
Houstonia nigricans (Lam.)Fernald var. ***nigricans*** {AFP} —
Houstonia procumbens (J.F.Gmel.)Standl. var. ***hirsuta*** (W.H.Lewis)D.B.Ward {AFP} —
Houstonia procumbens (J.F.Gmel.)Standl. var. ***procumbens*** {AFP} —
Houstonia purpurea L. {AFP} —
Houstonia pusilla Schoepf {AFP} —

Ixora
1. Petiole 0-4 mm long; leaf blade 1.3-2.1 times longer than wide; corolla tube orange to red, 15-45 mm long ... I. coccinea
1. Petiole 2-7 mm long; leaf blade 2.5-4 times longer than wide; corolla tube white, 3-7 mm long ... I. pavetta

^*Ixora coccinea* L. {AFP} —
*****Ixora pavetta*** Andrews {AFP} —

Mitchella
Mitchella repens L. {AFP} —

Mitracarpus
*****Mitracarpus hirtus*** (L.) DC. {AFP} —

Morinda
1. Erect shrub or tree; leaves broadly elliptic to ovate, 7-30 cm long; compound fruit 5-10 cm long ... M. citrifolia
1. Weak to vine-like shrub; leaves elliptic-lanceolate to narrowly oblanceolate; compound fruit 1-2.5 cm long ... M. royoc

^*Morinda citrifolia* L. {AFP} —
Morinda royoc L. {AFP} —

Mussaenda
^*Mussaenda erythrophylla* Schumach. & Thonn. —
^*Mussaenda philippica* A. Rich. —

Nauclea
^*Nauclea latifolia* Sm. {AFP} —

Oldenlandia
1. Flowers sessile ... O. boscii
1. Flowers pedicellate [2]
2. Annual, erect, spreading, to decumbent; leaves 8-35(40) mm long ... O. corymbosa
2. Perennial, creeping or prostrate; leaves 4 mm long ... O. salzmannii

Oldenlandia boscii (DC.)Chapm. {AFP} —
*****Oldenlandia corymbosa*** L. {AFP} —
*****Oldenlandia salzmannii*** (DC.)Benth. & Hook.f. ex B.D.Jacks. {AFP} —

Oldenlandiopsis
*****Oldenlandiopsis callitrichoides*** (Griseb.)Terrell & W.H.Lewis {AFP} —

Paederia
1. Corolla tube tubular, gradually narrowed into ovary; fruit strongly laterally compressed … P. cruddasiana
1. Corolla tube campanulate, rounded and constricted at base above the calyx; fruit globose … P. foetida

*****Paederia cruddasiana*** Prain {AFP} —
*****Paederia foetida*** L. {AFP} — A form with leaf blade undersides strikingly purplish and the veins and stems villous sometimes is cultivated (sometimes by the misapplied name *P. lanuginosa*, which has leaf blade underside surfaces densely tomentose, cross-veins and reticulate veins completely obscured, and inflorescence bracts subequal to the side branches).

Pentas
^*Pentas lanceolata* (Forssk.)Deflers {AFP} —

Pentodon
Pentodon pentandrus (Schumach. & Thonn.)Vatke {AFP} —

Pinckneya
Pinckneya bracteata (W.Bartram)Raf. {AFP} — ST.

Pseudomussaenda
^*Pseudomussaenda flava* Verdc. —

Psychotria
1. Leaf blade broadly rounded to widely acute at the apex, sometimes with an abrupt acumen, with scattered dark dots visible on the lower surface (hosting symbiotic bacteria) … P. punctata
1. Leaf blade narrowly acute and becoming acuminate at the apex, without scattered dots on the lower surface [2]
2. Plant densely hispid-puberulent, especially along the veins of the lower leaf surface, with stiff hairs to 0.1 mm, without domatia; leaf blades typically glaucous bluish green; flowering June-October … P. tenuifolia
2. Plant glabrate to moderately pilose, especially pilose with wavy hairs 0.3--0.7 mm long around vein axils of the lower leaf surface (domatia); leaf blades typically lustrous light to dark green; flowering mostly March-July, less often in other months [3]
3. Leaf blades green to dark green, the veins flat or slightly impressed relative to the upper surface, tertiary veins obscure on the lower surface; calyx lobes conspicuous … P. ligustrifolia
3. Leaf blades light green to green, the veins impressed relative to the upper surface, tertiary veins conspicuous on the lower surface; calyx lobes inconspicuous, minute … P. nervosa

^*Psychotria alba* Ruiz & Pav. —
Psychotria ligustrifolia (Northr.)Millsp. {AFP} — SE.
Psychotria nervosa Sw. {AFP} — This species has no known usage as a coffee substitute (Pinkley 1969; Austin 2004), and its common name is more likely a reference to some morphological similarity to coffee, which is in the same plant family. Neither caffeine nor DMT are known from this species.
****Psychotria punctata*** Vatke {AFP} —
Psychotria tenuifolia Sw. {AFP} —
^*Psychotria viridis* Ruiz & Pav. —

Randia
Randia aculeata L. {AFP} —

Richardia
1. Corolla 4-merous; fruit units (mericarps, appearing seed-like, the actual seed within and alveolate) smooth … R. humistrata
1. Corolla 5-merous; fruit units (mericarps, appearing seed-like, the actual seed within and alveolate) tuberculate or hirsute [2]
2. Fruit units (mericarps) hirsute, the inner surface broad with a median keel … R. brasiliensis
2. Fruit units (mericarps) tuberculate, the inner surface with a narrow groove [3]
3. Corolla 12-20 mm long … R. grandiflora
3. Corolla 5-7 mm long … R. scabra

****Richardia brasiliensis*** Gomes {AFP} —
****Richardia grandiflora*** (Cham. & Schltdl.)Steud. {AFP} —
****Richardia humistrata*** (Cham. & Schltdl.)Steud. {AFP} —
****Richardia scabra*** L. {AFP} —

Serissa
^*Serissa japonica* (Thunb.)Thunb. —

Sherardia
****Sherardia arvensis*** L. {AFP} —

Spermacoce
1. Stems and leaves copiously short-pilose, pilose, or hispid [2]
1. Stems and leaves glabrous to sparingly pubescent [3]
2. Stems conspicuously winged, the wings 0.3-0.5 mm wide; leaves 1.5-4 times longer than wide, with 4-8 lateral veins; trichomes white to red … S. latifolia
2. Stems not winged; leaves (2.5)3-6 times longer than wide, with 1-3(4) lateral veins; trichomes white … S. tetraquetra
3. Leaf blades usually with evident, impressed lateral veins; calyx lobes 1-2 mm wide, 1.5-2.3 mm long … S. glabra
3. Leaf blades with obscure or faint lateral veins; calyx lobes 0.2-0.7 mm wide, (0.7)1-1.3 mm long … S. prostrata
4. Stems, leaves, calyx-lobes, and-or flower buds commonly suffused with red or pink, sometimes plain green without red; leaves commonly with evident lateral veins; calyx lobes

0.3-0.8 mm long, inconspicuous, the corolla exserted beyond the calyx lobes; fruit glabrous to pubescent … S. keyensis
4. Stems, leaves, calyx-lobes, and-or flower buds generally plain green without red coloration; leaves usually lacking evident lateral veins; calyx lobes (0.7)1-1.3 mm long, conspicuous, enclosing the corolla or exserted beyond the corolla; fruit glabrous … S. prostrata

Spermacoce glabra Michx. {AFP} —
Spermacoce keyensis Small {AFP} —
****Spermacoce latifolia*** Aubl. {AFP} — Not part of *Spermacoce* s.str. but currently lacking an alternate genus.
Spermacoce prostrata Aubl. {AFP} —
Spermacoce tetraquetra A.Rich. {AFP} —

Strumpfia
Strumpfia maritima Jacq. {AFP} — SE.

LAMIALES

Figure: Estimated phylogeny of extant Lamiales. Black font=contains taxa native to Florida; Asterisk=introduced to Florida; Gray font=not native, not included.

OLEACEAE

1. Leaves compound [2]
1. Leaves simple [3]
2. Trees; leaves compound; corolla absent or not showy (in Florida species); fruit a samara ... Fraxinus
2. Vines or shrubs; corolla showy, evident; fruit a berry ... Jasminum
3. Leaf blade underside densely whitish or grayish tomentose ... Olea europaea
3. Leaf blade underside generally greenish, glabrous to pubescent [4]
4. Leaf blade upper side scabrous; corolla tube inside bright orange ... Nyctanthes
4. Leaf blade upper side glabrous to hairy, not scabrous; corolla tube inside white, green, to yellow, or corolla tube lacking [5]
5. Flowers without a corolla ... Forestiera
5. Flowers with 4-9-lobed corollas [6]
6. Petioles 2-3 mm wide, lignescent; leaf blade base truncate and distinct from petiole ... Noronhia emarginata
6. Petioles 1-2 mm wide, not lignescent; leaf blade base rounded, cuneate, acute, or partly attenuate with the petiole [7]
7. Vines or mostly low or weak shrubs; corolla lobes 4-9, 8-25 mm long ... Jasminum
7. Trees or mostly tall or robust shrubs; corolla lobes 4, 1-4 mm long [8]
8. Inflorescence terminal ... Ligustrum
8. Inflorescence axillary [9]
9. Leaf blades mostly with obscure secondary venation; inflorescence bracts scale-like, 1-2 mm long; corolla lobes 1-4 mm long ... Cartrema
9. Leaf blades mostly with readily apparent secondary venation, often the reticulum visible on the underside; inflorescence bracts foliaceous, 7-20 mm long; corolla lobes 7-30 mm long ... Chionanthus

Cartrema

1. Mature fruit 7-15 mm wide; of xeric to hydric sites ... C. americanum
1. Mature fruit 14-25 mm wide; of xeric sites ... C. floridanum

Cartrema americanum (L.)G.L.Nesom {AFP} —
•***Cartrema floridanum*** (Chapm.)G.L.Nesom {AFP} —

Chionanthus

1. Leaf blades 1-2(2.2) times longer than wide, the apex broadly rounded and often retuse or notched, margins entire to subtly toothed ... C. retusus
1. Leaf blades (1.9)2-4 times longer than wide, the apex rounded to acute, margins entire [2]
2. Corolla lobes 7-15 mm long; anther tip abruptly obtuse to rounded; fruit 2-2.5 cm long; of xeric sites ... C. pygmaeus
2. Corolla lobes 15-30 mm long; anther tip acuminate; fruit 1-2 cm long; of xeric to hydric sites ... C. virginicus

•***Chionanthus pygmaeus*** Small {AFP} — FE. SE.
^*Chionanthus retusus* Lindl. & Paxton —
Chionanthus virginicus L. {AFP} —

Forestiera
1. Leaf blade glabrous, the margins entire [2]
1. Leaf blade glabrous or pubescent at least near the base or on the veins, the margins toothed, at least some, sometimes only subtly [3]
2. Leaves (3.5)3.8-14 times longer than wide ... F. segregata var. pinetorum
2. Leaves 2-3(3.5) times longer than wide ... F. segregata var. segregata
3. Petiole 7-20 mm long; leaf blades mostly lanceolate to ovate-lanceolate, the apex long-acute to long-acuminate; peduncle 8-11(14) mm long; pedicel 1-2 mm long; fruits 11-12 mm long ... F. acuminata
3. Petiole 0-6(7) mm long; leaf blades mostly ovate, elliptic, to rhombic, the apex rounded, short-acute, to abruptly short-acuminate; peduncle 0-5 mm long; pedicel 4-7(10) mm long; fruits 6-9 mm long [4]
4. Young stems evenly pubescent; petiole moderately pubescent; flowering Jan-Feb, before emergence of leaves, fruiting Mar-May ... F. godfreyi
4. Young stems pubescent in 2 longitudinal lines; petiole glabrous to sparsely pubescent; flowering Jun-Oct, with mature leaves present, fruiting Jul-Nov ... F. ligustrina

Forestiera acuminata (Michx.)Poir. {AFP} —
Forestiera godfreyi L.C.Anderson {AFP} — SE.
Forestiera ligustrina (Michx.)Poir. {AFP} —
Forestiera segregata (Jacq.)Krug & Urb. {AFP} —

Fraxinus: See treatment by Campbell (2017).
1. Stem sometimes with flaking waxy surface, especially 2nd year; terminal buds dark reddish-brown to blackish, mostly obtuse-deltoid and apiculate, about as wide as twig; leaf-scar often broadly U-shaped and deeply concave along upper edge; leaflet upper surface plain green to olive or bluish when dried, lower surface whitish or uniformly fine-textured bluish-silvery (with dense minute 1–10 um wide waxy papillae and reticulating ridges visible at 25X), the ultimate veinlets usually somewhat obscured; leaves turning golden yellow, pinkish, reddish or purplish in fall, their hairs usually whitish; fruit with wing decurrent only to distal 1/3 of body or less, the wings 3-7(10) mm wide with 3-5 veins on each side of the wing, the body plump and sub-terete, distinctly thicker the surrounding wing, or in F. pauciflora the fruit more like the second lead below; of well-drained mesic hammocks and forests, or hydric sites in F. pauciflora; Americana group [2]
1. Stem without flaking waxy surface; terminal buds brown to reddish-brown, usually acute and longer than wide, often narrower than twig when viewed on edge; leaf-scar nearly hemispheric and slightly convex or truncate to slightly concave along upper edge; leaflet upper surface dark green to dull orange-brown or reddish green when dried, lower surface pale to medium green beneath (without minute waxy reticulating papillae), the ultimate veinlets usually prominent; leaves turning yellowish or orange-brown in fall, their hairs often slightly yellowish to reddish; fruit with wing decurrent to middle or below of body, the wings 8-22 mm wide with 5-19 veins on each side of the wing, the body relatively flattened, not much thicker than surrounding wing; mesic-hydric to hydric hammocks, forests, and swamps; Pennsylvanica Group [4]
2. Fruit wings 8-22 mm wide with 5-19 veins on each side of the wing, the body relatively flattened, not appreciably thicker than surrounding wing; mesic-hydric to hydric hammocks, forests, and swamps; tetraploid ... F. pauciflora

2. Fruit wings 3-7(10) mm wide with 3-5 veins on each side of the wing, the body plump and sub-terete, distinctly thicker the surrounding wing; of well-drained mesic hammocks and forests [3]
3. Young stems and rachises usually glabrous; petiole bases deeply notched (mostly 30-50% of width) around buds, the margins often sharply angled; upper leaflet surfaces usually plain yellowish-green, lower surfaces usually with hairs restricted to midrib and proximal parts of primary veins, sometimes more widespread to dense; fruit 25-38(45) mm long, 3-5.5(7) mm wide, body mostly 6-11 mm long, 1.5-2.5 mm wide; diploid, rarely tetraploid or pentaploid … F. americana
3. Young stems and rachis densely pubescent to glabrate; petiole bases slightly notched (mostly 0-20% of width) around buds, the margins usually blunt; upper leaflet surfaces usually somewhat bluish-green, lower surfaces with hairs often widespread and usually dense along veins, sometimes glabrate; fruit mostly 30-50 mm long, 5-7 mm wide, body mostly 10-15 mm long, 2-4 mm wide; tetraploid or hexaploid … F. biltmoreana var. subcoriacea
4. Shrub to tree, to 20 m, single to multi-trunked; petiolules of lateral leaflets <1 cm long; leaflets usually 5 (occasionally 3 or 7), 1.8-4 cm wide, thin textured, obtuse to acute; fruit 7-20 mm wide, broadly elliptic to narrowly oblanceolate or spatulate, the body lateral edges indistinct from the wing [5]
4. Large tree, to 30 m, generally with a single trunk; petiolules of lateral leaflets 0.5-2 cm long; leaflets usually 7 (occasionally 5), 2.5-7 cm wide, firm textured, of uniform shape, acute to acuminate; fruit 4-12 mm wide, rhombic to narrowly spatulate or linear, the body edges distinct, slightly thicker than surrounding wing [6]
5. Fruit 35-46 mm long, (10)12-20(22) mm wide, rhombic to broadly elliptic, elliptic-obovate, oblong-obovate, or rhombic-ovate, the body usually >½ the length, wings 2-3, lateral veins (11)13-19 on each side of the wing; diploid or tetraploid … F. caroliniana var. caroliniana
5. Fruit (25)30-50(54) mm long, 6-10(12) mm wide, obovate-oblanceolate. narrowly obovate, to narrowly elliptic-obovate, the body usually <½ the length, wings 2, lateral veins 5-9 on each side of the wing; diploid … F. caroliniana var. cubensis
6. Young stems and leaves usually densely pubescent, infrequently glabrous; leaflets mostly 9-15 cm long, 3.5-7 cm wide, usually truncate to rounded at base, the distal pair of petiolules (3)4-14(20) mm long; female flowers with calyx (1)2.5–5(7) mm long; anthers with slender terminal cusp 0.5-1 mm long; fruit (32)42-65(74) mm long, (5.5)6-11(12) mm wide, wing decurrent to 50-100% below apex of body, apex usually emarginate with a notch ca. 1 mm, the mature body usually 18-30 mm long, 2.5-4.5 mm wide, plump with obscure ridges and channels, pale to dark reddish-brown; octoploid … F. profunda
6. Young stems and leaves glabrous to moderately pubescent; leaflets mostly 7.5-11 cm long, 2.5-5 cm wide, usually cuneate, the distal pair of petiolules (0)1-5(9) mm long; female flowers with calyx 0.5-2(2.5) mm long; anthers with an apiculate tip 0.2-0.4 mm long; fruit 25-50(60) mm long, 3-8(11) mm wide, the wing decurrent to 20-50% below apex of body, the apex usually rounded to slightly emarginate with a notch rarely to 1 mm, the mature body usually 12-22 mm long, 1-2.5 mm wide, not plump, with distinct ridges and channels, pale yellowish-brown to dark brown but rarely reddish; diploid [7]
7. Young stems, rachises, and leaflets glabrous or glabrate, except along midrib on lower leaflet surfaces; leaflets mostly 3.5-4.5 cm wide, often weakly serrate, especially those of vigorous shoots; fruit mostly 4-5 mm wide … F. pennsylvanica var. subintegerrima
7. Young stems, rachises, and lower leaflet surfaces densely pubescent; leaflets mostly 4-5 cm wide, usually subentire; fruit mostly 5-6 mm wide … F. pennsylvanica var. pennsylvanica

Fraxinus americana L. {AFP} —

Fraxinus biltmoreana Beadle var. ***subcoriacea*** (Sarg.)J.J.N.Campb.—
Fraxinus caroliniana Mill. var. ***caroliniana*** {AFP} —
Fraxinus caroliniana var. ***cubensis*** **(**Griseb.)Lingelsh. — Sometimes treated as a species but not appearing to be sharply distinct from *F. caroliniana*.
Fraxinus pauciflora Nutt. —
Fraxinus pennsylvanica Marshall var. ***pennsylvanica*** {AFP} —
Fraxinus pennsylvanica Marshall var. ***subintegerrima*** (Vahl)Fernald—
Fraxinus profunda (Bush)Bush —

Jasminum: All species below have been cultivated to some degree.
1. Leaves compound with 3-7 leaflets, occasionally a few leaves simple [2]
1. Leaves simple [4]
2. Leaflets 5-9 per leaf ... J. grandiflorum
2. Leaflets (1-)3 per leaf [3]
3. Young stems pubescent to glabrate; leaflets broadly rounded to truncate at the base with a distinct petiolule 2-20 mm long; corolla white ... J. fluminense
3. Young stems glabrous; leaflets cuneate to attenuate at the base and sessile to subsessile; corolla yellow ... J. mesnyi
4. Young stems glabrous [5]
4. Young stems pubescent to villous [6]
5. Leaf blades broadly ovate to orbicular, broadly rounded at the tip with an abrupt acumen; calyx lobes deltoid, 2-3 mm long ... J. dichotomum
5. Leaf blades ovate to lanceolate, acute towards the acuminate tip; calyx lobes linear to filiform, 5-7 mm long ... J. laurifolium
6. Young stems densely villous; leaf blades ovate-deltoid to lanceolate, pubescent below; inflorescence of 5-14 flowers, subsessile; pedicels 1-3 mm long ... J. multiflorum
6. Young stems pubescent; leaf blades broadly elliptic to ovate, with tufts of pubescence in the vein axils; inflorescence of a solitary pedicellate flower or 3(-5) flowers with a 5-20 mm long peduncle; pedicels 5-10 mm long ... J. sambac

****Jasminum dichotomum*** Vahl {AFP} —
****Jasminum fluminense*** Vell. {AFP} —
^*Jasminum grandiflorum* L. {AFP} —
^*Jasminum laurifolium* Roxb. ex Hornem. {AFP} —
****Jasminum mesnyi*** Hance {AFP} —
^*Jasminum multiflorum* (Burm.f.)Andrews {AFP} —
^*Jasminum sambac* (L.)Aiton {AFP} —

Ligustrum
1. Leaves of fertile stems (4)5-13(15) cm long, at least the larger ones, coriaceous, evergreen [2]
1. Leaves of fertile stems 1.5-5(6.5) cm long, thinly coriaceous, deciduous to evergreen [3]
2. Larger leaves 5-9 cm long, the apex obtuse to abruptly acuminate, lateral veins generally obscure and concolorous with the blade surface; corolla tube subequal to lobes, tube scarcely exserted from the calyx ... L. japonicum
2. Larger leaves 7-13 cm long, the apex acute to acute-acuminate, the lateral veins generally evident on both sides and discolorous from the blade surface; corolla tube ca. 2 times longer than the lobes, conspicuously exserted from the calyx ... L. lucidum

3. Stem glabrous to rarely hirtellous in lines, often glossy; corolla tube (1.5)2-3 times longer than the lobes ... L. ovalifolium
3. Stems hirtellous, puberulent, to substrigose, evenly or in 2 lines, dull; corolla tube subequal to the lobes [4]
4. Leaf blade (2.8)3-4.6(5) times longer than wide; pedicels 0-1.5(2) mm long ... L. quihoui
4. Leaf blade (1.5)1.6-2.5(3) times longer than wide; pedicels 1.5-4 mm long ... L. sinense

**Ligustrum japonicum* Thunb. {AFP} —
**Ligustrum lucidum* W.T.Aiton {AFP} —
**Ligustrum ovalifolium* Hassk. {AFP} —
**Ligustrum quihoui* Carrière {AFP} —
**Ligustrum sinense* Lour. {AFP} —

Noronhia
^*Noronhia emarginata* (Lam.)Poir. {AFP} —

Nyctanthes
^*Nyctanthes arbor-tristis* L. —

Osmanthus
^*Osmanthus fragrans* Lour. —

GESNERIACEAE
Achimenes
^*Achimenes grandiflora* (Schiede)DC. —

Chrysothemis
^*Chrysothemis pulchella* (Donn ex Sims)Decne. —

Episcia
^*Episcia cupreata* (Hook.)Hanst.

Seemannia
^*Seemannia sylvatica* (Kunth)Hanst.

PLANTAGINACEAE
1. Perianth absent ... Callitriche
1. Perianth present [2]
2. Leaves all basal ... Plantago
2. Leaves basal and cauline, or all cauline [3]
3. Corolla spurred (sometimes subtle) [4]
3. Corolla not spurred [5]
4. Leaves broadly ovate; corolla yellow and purple ... Kickxia spuria
4. Leaves generally linear; corolla pink, blue, to violet ... Linaria
5. Leaves (at least some) whorled [6]
5. Leaves opposite, subopposite, to alternate [9]
6. Leaves scale-like, highly reduced relative to the size of the plant ... Russelia equisetiformis
6. Leaves not scale-like, not highly reduced [7]

7. Flowers in elongate spikes ... Veronicastrum virginicum
7. Flowers axillary [8]
8. Proximally the leaves dissected, usually submerged, or if not then the pedicel longer than the flower ... Limnophila
8. Leaves never dissected, pedicel shorter than the flower ... Stemodia
9. Vines ... Maurandya
9. Herbs [10]
10. Pedicel with 2 foliaceous bracts at its base ... Mecardonia
10. Pedicel with 1 bract at its base and 1 distal just below sepals [11]
11. Annuals, emergent aquatics, or prostrate to decumbent herbs [12]
11. Stiffly ascending to erect perennials [15]
12. Fruit compressed, the apex notched or with a sinus ... Veronica
12. Fruit globose to cylindric, the apex tapering [13]
13. Leaves pinnatifid ... Leucospora multifida
13. Leaves entire to toothed [14]
14. Sepals unequal, distinctly dissimilar ... Bacopa
14. Sepals subequal and similar ... Gratiola
15. Caulines leave alternate distally, opposite proximally ... Misopates orontium
15. Cauline leaves opposite [16]
16. Stamens 2 [17]
16. Stamens 4 [18]
17. Leaf blade upper surface not papillose, not revolue; flowers pedicellate ... Gratiola
17. Leaf blade upper surface papillose, margin revolute often; flowers sessile or subsessile ... Sophronanthe
18. Plant somewhat subscapose, the basal leaves often rosette-forming, basal and proximal-most leaves typically petiolate with somewhat elliptic or obovate blades, the cauline or distal leaves epetiolate and somewhat elongate or linear, internodes rather elongate ... Penstemon
18. Plant not scapose, the leaves all generally similar, not rosette-forming, internodes not particularly elongate [19]
19. Corolla 10-20 mm long ... Angelonia gardneri
19. Corolla 2-5 mm long ... Scoparia

Angelonia

^*Angelonia gardneri* Hook. {AFP} —

Bacopa: So far as is known, *B. rotundifolia* has not been documented in Florida but is keyed out given its potential occurrence and frequent confusion with other taxa. See Pennell (1935) and Schuyler (1989).

1. Stem glabrous; leaves 1-veined, the base cuneate to ligulate ... B. monnieri
1. Stem pubescent to glabrate; leaves with 3-9 veins, the base cordate to truncate or broadly cuneate [2]
2. Stems often densely hispidulous; leaves with lemon-like odor when crushed; corolla blue ... B. caroliniana
2. Stems finely hispidulous, pubescent, to glabrate; leaves lacking lemon-like odor; corolla white [3]
3. Leaves usually ovate and broadest below the middle, with 3-5(7) veins (veins mostly faint to slightly contrasted with rest of blade), the base cordate to truncate, 3-10 mm wide; pedicels

(3)5-10 mm long; outer sepal cordate ovate-orbiculate, sometimes drying reticulate-veined, to 3 mm wide; corolla 2-5 mm long; stamens 2-4, equal, anthers white; fruit ellipsoid to ovoid, much shorter than the sepals … B. innominata
3. Leaves usually orbiculate to broadly obovate (occasionally broadly ovate) and broadest at or above the middle, with 5-11 veins (veins mostly strongly contrasted with rest of blade), the base broadly cuneate to truncate (sometimes scarcely slightly cordate), 8-20 mm wide; pedicels 1.5-15 mm long; outer sepal oblong-ovate to elliptical to orbicular, parallel-veined or with reticulate venation, 1-4 mm wide; stamens 2-4, equal or didynamous, bluish; fruit globose or ovoid, subequal to the sepals [4]
4. Larger leaf blades 3-10 mm wide or long; pedicels (1.5)5-10(15) mm long; outer sepal oblong-ovate to elliptical, 1-2 mm wide, parallel-veined or nearly veinless; corolla 3-5 mm long; stamens 4, didynamous; fruit 2.5-3.5 mm long, perhaps only loculicidal … B. repens
4. Larger leaf blades mostly 12-20 mm wide or long; pedicels 10-15(18) mm long; outer sepal nearly orbicular, 2-4 mm wide, sometimes drying reticulate-veined; corolla 5-10 mm long; stamens 2–4, equal; fruit 4-5 mm long, both septicidal and loculicidal … B. rotundifolia

Bacopa caroliniana (Walter)B.L.Rob. {AFP} —
Bacopa innominata (M.Gómez)Alain {AFP} —
Bacopa monnieri (L.)Pennell {AFP} —
****Bacopa repens*** (Sw.)Wettst. {AFP} —

Callitriche

1. Stems 0.4-1 mm wide; leaves 3.7-24.7 mm long, (0.3)1.5-3.5 mm wide, submersed or proximal ones linear, becoming spatulate distally or in emergent ones; inflorescence bracts caducous; flowers usually solitary at a node; schizocarp width and length subequal, 0.5-1 mm; mericarp not swollen at base; plant sometime submersed, sometimes stranded or terrestrial … C. heterophylla
1. Stems 0.1-0.4 mm wide; leaves 1.4-5.7 mm long, 0.4-2 mm wide; inflorescence bracts absent; flowers usually 3 per node, 1 axil with a staminate and pistillate and 1 axil with a pistillate; schizocarp 0.4-0.7 mm long, 0.7-0.9 mm wide; mericarp swollen or not swollen at base; plant terrestrial [2]
2. Pedicels 0-5 mm long; schizocarp 0.8-1 mm long, 0.9-1.3 mm wide; mericarp 0.06-0.15 mm wide, with curved wings throughout appearing as a thickened margin … C. pedunculosa
2. Pedicels absent; schizocarp 0.4-0.7 mm long, 0.7-0.9 mm wide; mericarp 0.01-0.03 mm wide, not winged or with straight wings only at apex, swollen at base … C. peploides

Callitriche heterophylla Pursh {AFP} —
****Callitriche pedunculosa*** Nutt. {AFP} —
Callitriche peploides Nutt. {AFP} —

Gratiola

1. Leaves with (3)5-10(12) pairs of conspicuous teeth … G. viscidula
1. Leaves entire or with 1-4(5) pairs of low blunt teeth [2]
2. Bracteoles subtending calyx 0(1) … G. ramosa
2. Bracteoles subtending calyx (1)2 [3]
3. Pedicels 20-45(55) mm long; corolla 14-25 mm long … G. floridana
3. Pedicels 5-25(30) mm long; corolla 8-15 mm long [4]
4. Corolla usually longer than the pedicel … G. virginiana

4. Corolla usually shorter than the pedicel [5]
5. Pedicels densely glandular-puberulent to glandular-pubescent; corolla lobes white … G. brevifolia
5. Pedicels sparsely glandular-puberulent; corolla lobes yellow (rarely white) … G. lutea

Gratiola aurea Pursh {AFP} —
Gratiola brevifolia Raf. {AFP} —
Gratiola floridana Nutt. {AFP} —
Gratiola ramosa Walter {AFP} —
Gratiola virginiana L. {AFP} —
Gratiola viscidula Pennell {AFP} —

Kickxia
****Kickxia spuria*** (L.)Dumort. {AFP} — Walton Co., single collection from 1885 by A.H. Curtiss.

Leucospora
****Leucospora multifida*** (Michx.)Nutt. {AFP} —

Limnophila
1. Leaves opposite or in whorls of 3, 10-55 mm long, submerged and emersed leaves toothed, not deeply divided; calyx with >5 prominent veins, sometimes obscure … L. aromatica
1. Leaves usually in whorls 3-13, occasionally 2-3 nodes with opposite leaves, (2.5)4-12(22) mm long, submerged leaves deeply divded, emersed leaves divded to toothed [2]
2. Stem usually glandular; pedicels (1)3-8 mm in flower, (3)5-12 mm in fruit; bracteoles 1–3.5 mm; corolla tubes 4-5(8) mm long; cleistogamous flowers absent … L. indica
2. Stems usually eglandular; pedicels 0-1.5(2) mm in flower, 0-4 mm in fruit; bracteoles 0(1.5) mm long; corolla tubes 8-10 mm long; submerged cleistogamous flowers present … L. sessiliflora

****Limnophila aromatica*** (Lam.)Merr. {AFP} —
****Limnophila indica*** (L.)Druce {AFP} —
****Limnophila sessiliflora*** Blume {AFP} —

Linaria : The native taxa have been segregated into the genus *Nuttallanthus*, which renders *Linaria* paraphyletic as currently circumscribed (Ogutcen & Vamosi 2016).

1. Corolla lower and upper lip subequal or one slightly longer; filaments usually hairy proximally; fruit 9-12 mm long … L. maroccana
1. Corolla lower lip greatly exceeding upper lip; filaments glabrous; fruit 2-5 mm long; seeds prismatic with longitudinal ridges [2]
2. Inflorescence rachis, pedicels, and sepals densely to sparsely glandular-pubescent (rachis hairs to 0.6 mm long, pedicel & sepal hairs to 0.3 mm long), pedicel 6-14 mm long in fruit, 2-10 times longer than calyx; corolla spur 0.1-0.5 mm long, shorter than calyx … L. floridana
2. Inflorescence rachis, pedicels, and sepals glabrous to sparsely glandular-pubescent (rachis hairs to 0.3 mm long, pedicel & sepal hairs to 0.1 mm long); pedicel 1.8-7(9) mm long in fruit, 0.8-2 times as long as calyx; corolla spur 2-11 mm long, subequal to longer than calyx [3]
3. Corolla (5)8-14 mm long (including spur), spur 2-7 mm long; seed edges sharply anged, faces smoot to obscurely tuberculate … L. canadensis

3. Corolla (11)14-22 mm long (including spur), spur 4.5-11 mm long; seed edges rounded to obscurely angled or dentate, faces densely tuberculate ... L. texana

Linaria canadensis (L.)Chaz. {AFP} —
Linaria floridana Chapm. {AFP} —
^*Linaria maroccana* Hook.f. {AFP} —
Linaria texana Scheele {AFP} —

Maurandya
1. Calyx glabrous; corolla with a raised yellow palate ... M. antirrhiniflora
1. Calyx glandular-pilose; corolla without a raised palate ... M. barclaiana

^*Maurandya antirrhiniflora* Humb. & Bonpl. ex Willd. {AFP} — Levy & Miami-Dade cos.
^*Maurandya barclaiana* Lindl. {AFP} — Pasco Co., single collection by J.K. Small in 1925.

Mecardonia: Revised by Rossow (1988).
1. Stems prostrate to decumbent, often mat-forming; leaves 2-3 times longer than wide; corolla yellow with darker veins; seed radial wall reticulum mamillate ... M. procumbens
1. Stems erect; leaves 3.2-7 times longer than wide; corolla white with darker veins; seed radial wall reticulum smooth [2]
2. Branched at the plant base; larger leaves 10-20(25) mm long ... M. acuminata subsp. peninsularis
2. Branched above the plant base; larger leaves 20-30 mm long [3]
3. Flowering pedicels 10-18 mm long, fruiting pedicels 17-35 mm long; sepals <2 mm wide ... M. acuminata subsp. acuminata
3. Flowering pedicels 4-10 mm long, fruiting pedicels 10-18 mm long; sepals >2 mm wide ... M. acuminata subsp. microphyla

Mecardonia acuminata (Walter)Small subsp. ***acuminata*** {AFP} —
Mecardonia acuminata (Walter)Small subsp. ***microphyla*** (Raf.)Rossow {AFP} —
•***Mecardonia acuminata*** (Walter)Small subsp. ***peninsularis*** (Pennell)Rossow {AFP} —
++***Mecardonia procumbens*** (Mill.)Small {AFP} — Nearly throughout; disturbed areas. Probably introduced, the earliest collections from S FL (e.g. Blodgett & Rugel in Key West), progressively spreading northward.

Misopates
****Misopates orontium*** (L.)Raf. {AFP} — Escambia Co.

Penstemon
1. Stem and sometimes leaves stipitate-glandular ... P. australis
1. Stem and leaves eglandular [2]
2. Leaves usually toothed; corolla throat internally with pinkish colored lines; pollen sacs opposite or divergent, navicular, subexplanate, or explanate, dehiscing completely ... P. laevigatus
2. Leaves entire to obscurely undulate-crenate; corolla throat internally lacking darkened or colored lines; pollen sacs parallel, saccate, dehiscing incompletely, distal 2/3rd indehiscent ... P. multiflorus

Penstemon australis Small {AFP} —
Penstemon laevigatus Aiton {AFP} —
Penstemon multiflorus (Benth.)Chapm. ex Small {AFP} —

Plantago: Psyllium or ispaghol, seed husk predominantly from *P. ovata* Forssk., is a widely used enteric treatment (Roxburgh 1832; Chopra 1930).

1. Leaves with the blade generally ovate and the base abruptly contracted to a mostly distinct petiole [2]
1. Leaves withe the blade linear, lanceolate, oblanceolate, to narrowly obovate, and the blade base attenuate and indistinct from the petiole [3]
2. Floral bracts ovate, 0.5-1 mm long; fruit (2)4-5 mm long, dehiscing near the middle; seeds 5-35 per fruit, 0.5-1 mm long … P. major
2. Floral bracts lanceolate, ca. 2 mm long; fruit 4-6(8) mm long, dehiscing below the middle; seeds 4-5(8) per fruit, 1.5-2 mm long … P. rugelii
3. Plant strongly woolly or lanate … P. floccosa
3. Plant villous, short-pilose, to glabrate [4]
4. Floral bracts conspicuously exserted and much longer than the flowers or fruits … P. aristata
4. Floral bracts subequal to shorter than the flowers or fruits, not exserted [5]
5. Fertile part of scape <1/5 of its total length; floral bracts scarious except near the midrib; sepals appearing as 3, the 2 next to bract united into 1 with a double midvein … P. lanceolata
5. Fertile part of scape >1/5 of its total length; floral bracts scarious only on the margin near the base; sepals 4, free or nearly so [6]
6. Leaves mostly >8 mm wide, 3-15 times longer than wide [7]
6. Leaves mostly <8(10) mm wide, 15-50 times longer than wide
7. Spikes with visible internodes throughout, the flowers sparsely distributed; rachis, bracts, and sepals glabrous to sparsely short-pilose … P. sparsiflora
7. Spikes lacking visible internodes, internodes apparent only at the very base, the flowers densely congested; rachis, bracts, and sepals densely short-pilose … P. virginica
8. Leaves 3-5 mm wide; spike with the flowers densely congested throughout; sepals 3-4 mm long; stamens 4 per flower; seeds 2 per fruit … P. wrightiana
8. Leaves 1-3(4) mm wide; spike with the flowers sparsely distributed at the base; sepals 1-2 mm long; stamens 2 per flower; seeds 4 or 10-25(30) per fruit [9]
9. Leaves 1-3(4) mm wide; seeds 10-25(30) per fruit … P. heterophylla
9. Leaves 1-2 mm wide; seeds 4 per fruit … P. pusilla

Plantago aristata Michx. {AFP} —
****Plantago floccosa*** Decne. {AFP} —
Plantago heterophylla Nutt. {AFP} —
****Plantago lanceolata*** L. {AFP} —
****Plantago major*** L. {AFP} —
Plantago pusilla Nutt. {AFP} —
Plantago rugelii Decne. {AFP} — SE.
Plantago sparsiflora Michx. {AFP} —
Plantago virginica L. {AFP} —
Plantago wrightiana Decne. {AFP} —

Russelia

^*Russelia equisetiformis* Schltdl. & Cham. {AFP} — Sparingly naturalized, otherwise primarily cultivated.

Scoparia

1. Leaves toothed or entire; corolla white to pale lavender; calyx lobes 4 … S. dulcis
1. Leaves usually pinnatifid or pinnately lobed; corolla yellow to orange-yellow; calyx lobes 5 … S. montevidensis var. glandulifera

Scoparia dulcis L. {AFP} — Throughout; native or perhaps an early introduction.
****Scoparia montevidensis*** (Spreng.)R.E.Fr. var. ***glandulifera*** (Fritsch)R.E.Fr. {AFP} —

Sophronanthe

1. Basal and proximal leaves linear to linear-lanceolate, 0.7-3 mm wide, margins entire and revolute; corolla salverform, 7-16 mm long … S. hispida
1. Basal and proximal leaves ovate to ovate-lanceolate, (3)4-11 m wide, margins dentate to entire and plane to revolute; corolla campanulate, 5-9 mm long … S. pilosa

Sophronanthe hispida Benth. ex Lindl. {AFP} —
Sophronanthe pilosa (Michx.)Small {AFP} —

Stemodia

1. Erect herb; leaves 2.5-5 cm long, sessile, the blade base cuneate to truncate, subclasping the stem … S. durantifolia
1. Low-growing herb; leaves 1-3 cm long, the blade contracted to a fairly distinct (winged) petiole … S. verticillata

****Stemodia durantifolia*** (L.)Sw. {AFP} —
****Stemodia verticillata*** (Mill.)Hassl. —

Veronica

1. Flowers in axillary racemes … V. anagallis-aquatica
1. Flowers in terminal racemes or solitary in distal leaf axils [2]
2. Pedicel shorter than the calyx [3]
2. Pedicel at least 2 times as long as calyx [4]
3. Leaf blade ovate; corolla white … V. arvensis
3. Leaf blade oblanceolate to linear; corolla blue … V. peregrina
4. Leaves palmately 3- to 5-lobed; fruit only slightly notched … V. hederifolia
4. Leaves toothed; fruit usually distinctly notched [5]
5. Mature pedicel 1.5-4 cm long; corolla 8-14 mm wide [6]
5. Mature pedicel 0.6-1.5(2) cm long; corolla 4-8 mm wide [7]
6. Pedicels 2-5 times as long as subtending bract; fruit absent or almost smooth, sinus angle 50–90 … V. filiformis
6. Pedicels 1-2(3) times as long as subtending bract; fruit reticulate with prominent veins, sinus angle (80)90–120(150) … V. persica
7. Calyx lobes 2.2-2.6 mm wide; corolla white to pale pink or pale blue; fruit 2.5-4 mm long, with long glandular hairs only … V. agrestis
7. Calyx 2.6-3.8 mm wide; corolla dark to bright blue (rarely pale or white); fruit 4-6 mm long, with both long and short eglandular hairs … V. polita

*__Veronica agrestis__ L. {AFP} —
*__Veronica anagallis-aquatica__ L. {AFP} —
*__Veronica arvensis__ L. {AFP} —
*__Veronica filiformis__ Sm. {AFP} —
*__Veronica hederifolia__ L. {AFP} —
__Veronica peregrina__ L. {AFP} — Throughout.
*__Veronica persica__ Poir. {AFP} —
*__Veronica polita__ Fr. {AFP} —

Veronicastrum
__Veronicastrum virginicum__ (L.)Farw. {AFP} —

LINDERNIACEAE
1. Calyx conspicuously winged ... Torenia
1. Calyx not winged or scarcely so [2]
2. Leaf margin strongly aristate-ciliate ... Bonnaya ciliata
2. Leaf margin entire to toothed [3]
3. Sepals and petals 5; stamens 4 and staminodes absent, or stamens 2 and staminodes 2 ... Lindernia
3. Sepals and petals 4; stamens 2, staminodes absent ... Micranthemum

Bonnaya
*__Bonnaya ciliata__ (Colsm.)Spreng. {AFP} — Hillsborough Co.

Lindernia
1. Plant subscapose, basal leaves rosette-forming, cauline leaves reduced ... L. monticola
1. Plant scapose, lacking rosettes, cauline leaves not much reduced [2]
2. Leaf blades broadly ovate to orbicular ... L. grandiflora
2. Leaf blades linear-lanceolate to narrowly ovate
3. Leaves usually much reduced distally, the blades mostly lanceolate to ovate, with a rounded- to cuneate-clasping base; pedicels exceeding the length of the subtending leaves ... L. dubia var. anagallidea
3. Leaves only slightly reduced distally, usually at least some blades narrowing to an attenuate- or cuneate-clasping; pedicels often shorter than the subtending leaves ... L. dubia var. dubia

__Lindernia dubia__ (L.)Pennell var. __anagallidea__ {AFP} — Sometimes recognized as a distinct species, but morphological studies found ample intergradation (Cooperrider & McCready 1975; Lewis 2000).
__Lindernia dubia__ (L.)Pennell var. __dubia__ {AFP} —
__Lindernia grandiflora__ Nutt. {AFP} — Peninsula, eastern panhandle (southern GA).
__Lindernia monticola__ Nutt. {AFP} —

Micranthemum
1. Leaf blades elliptic, oblanceolate, to spatule; corolla longer than the calyx ... M. glomeratum
1. Leaf blades suborbicular; corolla shorter than the calyx ... M. umbros

•__Micranthemum glomeratum__ (Chapm.)Shinners {AFP} —

Micranthemum umbros (J.F.Gmel.)S.F.Blake {AFP} —

Torenia
1. Larger leaves 1-2 cm long; corolla 3-9 mm long ... T. crustacea
1. Larger leaves 3-5 cm long; corolla 20-30 mm long ... T. fournieri

****Torenia crustacea*** (L.)Cham. & Schltdl. {AFP} —
^*Torenia fournieri* Linden ex E.Fourn. {AFP} — Sparingly naturalized.

SCROPHULARIACEAE
1. Shrubs or trees [2]
1. Herbs [2]
2. Leaves alternate; flowers 5-merous ... Bontia daphnoides
2. Leaves opposite; flowers 4-merous ... Buddleja
3. Basal leaves rosette-forming, reduced distally; inflorescence a terminal spike or raceme ... Verbascum
3. Basal leaves not rosette-forming, not strongly reduced distally; inflorescence a terminal panicle or flowers axillary [4]
4. Leaves sessile, petiole unapparent ... Capraria biflora
4. Leaves petiolate, the petiole very distinct ... Scrophularia marilandica

Bontia
^*Bontia daphnoides* L. {AFP} — Miami-Dade Co.

Buddleja
1. Leaf blade broadly elliptic, broadly ovate, to suborbicular; inflorescence of axillary cymes, much shorter than the leaves ... B. indica
1. Leaf blade ovate-lanceolate to lanceolate; inflorescence a terminal raceme [2]
2. Leaf blade lower surface appressed-pubescent ... B. lindleyana
2. Leaf blade lower surface densely white to brown tomentose ... B. madagascariensis

^*Buddleja indica* Lam. {AFP} — Sparingly naturalized.
^*Buddleja lindleyana* Fortune ex Lindl. {AFP} — Sparingly naturalized.
^*Buddleja madagascariensis* Lam. {AFP} — Sparingly naturalized.

Capraria
Capraria biflora L. {AFP} —

Scrophularia
Scrophularia marilandica L. {AFP} —

Verbascum
1. Stems and leaves densely villous-tomentose, the trichomes stellate ... V. thapsus
1. Stems and leaves glabrous or stipitate-glandular [2]
2. Stems and leaves stipitate-glandular; bracteoles 2; pedicels 0-3 mm long ... V. blattaria
2. Stems and leaves glabrous to glabrate; bracteoles absent; pedicels 5-10(15) mm long ... V. virgatum

*__Verbascum blattaria__ L. {AFP} —
*__Verbascum thapsus__ L. {AFP} —
*__Verbascum virgatum__ Stokes {AFP} —

ACANTHACEAE

1. Pneumatophores present (erect, aboveground, arising from subterranean roots below); leaf blade upper surface salt-excreting, densely gray-pubescent on the underside; mangrove; Avicennioideae … Avicennia germinans
1. Pneumatophores absent; leaf blade not salt-excreting, glabrate to pubescent on the underside; not a mangrove [2]
2. Leaf blades with cystoliths, or without cystoliths and anthers monothecous; seed subtended by a hooked, persistent retanicula; Acanthoideae … Key A
2. Leaf blades without cystoliths; seed without a retinacula [3]
3. Vines or shrubs; inflorescence a fascicle, raceme, or solitary flower; flower subtended by clasping or connate foliaceous bracteoles; Thunbergioideae … Thunbergia
3. Herbs; inflorescence a many-flowered spike; flower not subtended by large foliaceous bracteoles; Nelsonioideae [4]
4. Leaves primarily basal and rosette-forming; peduncle with numerous stiff, clasping, scale-like bracts below the flower spike … Elytraria caroliniensis
4. Leaves cauline; peduncle lacking numerous scale-like bracts … Nelsonia canescens

Key A: Acanthoideae
1. Leaves primarily basal and rosette-forming, without cystoliths; stamens 4, monothecous; Acantheae … Stenandrium dulce
1. Leaves basal or caulilne, with or without a rosette, with cystoliths; stamens 2 or 4, if 4 then at least 2 bithecous [2]
2. Corolla with left-contort aestivation in bud; Ruellieae … Key B
2. Corolla with quincuncial or ascending-cochlear aestivation [3]
3. Shrubs, sometimes with spines or prickly sepals; outer pair of sepals enlarged and foliaceous; corolla with quincuncial aestivation; Barlerieae … Barleria
3. Herbs or shrubs, lacking spines or prickles; outer pair of sepals foliaceous or not; corolla with ascending-cochlear aestivation; Justicieae … Key C

Key B: Acanthoideae, Ruellieae
1. Larger leaves >10 cm long; flower subtended by foliaceous bracts with pale surfaces and dark veins and edges; stamens 2, staminodes 2 … Eranthemum pulchellum
1. Larger leaves 1-20 cm long; foliaceous bracts if present not as above; stamens 4 [2]
2. Anther thecae (at least one) with basal awns or appendages … Dyschoriste
2. Anther thecae without basal awns or appendages [3]
3. Corolla bilabiate, usually <10 mm long; mostly of aquatic or hydric habitats, sometimes submerged … Hygrophila
3. Corolla subactinomorphic, usually >10 mm long; mostly of xeric to hydric terrestrial habitats … Ruellia

Key C: Acanthoideae, Justicieae
1. Shrubs; stamens 2, staminodes 2 [2]
1. Shrubs, or herbs, sometimes suffrutescent; stamens 2 and staminodes absent, or stamens 4, rarely stamens 2 and staminodes 2 [3]

2. Leaves often variegated; corolla bilabiate with the upper lobe erect and exserted and the lower lobes reflexed … Graptophyllum pictum
2. Leaves not variegated; corolla salverform, the tube 15-25 mm long, the lobes 2-5 mm long … Odontonema
3. Corolla 8-35 mm long; stamens 4 … Asystasia
3. Corolla 2-50 mm long; stamens 2 [4]
4. Basal and proximal leaves petiolate, distal leaves often sessile to subsessile; corolla salverform, the tube much longer than the lobes … Pseuderanthemum
4. Leaves and petioles variable; corolla bilabiate, funnelform, or subsalverform and tube not much longer than the lobes [5]
5. Corolla resupinate with ca. 180° twist in corolla tube, the more heavily spotted and lobate lip positioned above, the 2 stamens held closer to the bottom of the flower, or corolla red and not resupinate [6]
5. Corolla not resupinate, the often lobate lip positioned below, the 2 stamens often held closer to the upper corolla part, corolla not red [7]
6. Leaves not variegated; anthers bithecous … Dicliptera
6. Leaves often variegated; anthers monothecous … Hypoestes phyllostachya
7. Anther thecae unevenly attached with one theca above the other; corolla white, pink, purple, reddish, or orange … Justicia
7. Anther thecae evenly attached and parallel; corolla white or mostly so [8]
8. Leaves 1-3 cm long; inflorescence of 1-3 axillary flowers … Carlowrightia texana
8. Leaves 4-12 cm long; inflorescence a spike with foliaceous bracts … Yeatesia viridiflora

Asystasia

1. Calyx lobes 6-9 mm long in flower; corolla cream, yellow, pinkish, to violet, the tube 2.5-3.5 cm long; anther ca. 3 mm long; style 15-22 mm long; fruit 3.5-4 mm long … A. gangetica
1. Calyx lobes 4-6 mm long in flower; corolla white with purple spot on lower lip, the tube 0.8-1.8 cm long; anther ca. 1.5 mm long; style 5-10 mm long; fruit 1.5-2.5 mm long … A. intrusa

*__Asystasia gangetica__ (L.)T.Anderson {AFP} —
*__Asystasia intrusa__ (Forssk.) Blume {AFP} — According to Westaway et al. (2016), unpublished genetic analyses strongly support this taxon as distinct. Further, putatively, this taxon is diploid, whereas *A. gangetica* s.str. is tetraploid. Treated as a subspecies of *A. gangetica*, the epithet is subsp. *micrantha*.

Avicennia

Key to native mangrove species
1. Bark of longitudinal strips somewhat interwoven; petiole with 2 glands near the apex; leaves alternate, the lower surface with domatia along the midrib; flowers densely aggregated into a globose head; petals absent; fruiting structure cone-like, a dense aggregate of scaly fruits … Conocarpus erectus
1. Bark various; petiole with or without glands; leaves opposite, without domatia (one species with pits near the margin); flowers individually apparent and spaced from one another; petals present; fruit solitary, not aggregated [2]
2. Pneumatophores present (erect, aboveground, arising from subterranean roots below); bark of trunk becoming cracked with fissures forming smallish blocks; young stems and inflorescence grayish scurfy-pubescent; leaf blade upper surface often covered with salt

crystals from excretions, the lower surface grayish scurfy-pubescent; corolla 4-lobed, white with yellow throat; fruit an asymmetric smooth (but hairy) capsule … Avicennia germinans
2. Pneumatophores absent; bark of trunk smooth or becoming longitudinally striate; leaf blade without noticeable salt crystals or salt excretion very minute, the lower surface glabrate; corolla 4- or 5-merous; fruit symmetric and ribbed or with a protruding hypocotyl [3]
3. Prop roots absent; bark of longitudinal strips; stipules absent; petiole with 2 glands near the apex; leaf blade with pits near the margin (likely for salt excretion); calyx 5-lobed, tubular, greenish; petals 5, minute; fruit greenish, compressed, roughly obovate, without a protruding hypocotyl while still attached to the tree … Laguncularia racemosa
3. Prop roots present (root arising from trunk aboveground and descending into soil); bark mostly remaining smooth or becoming lightly cracked in age; interpetiolar stipules enclosing the developing leaf, deciduous; petiole lacking glands; leaf blade without pits; calyx 4-lobed, with spreading lobes (only slightly tubular at the base), yellowish; petals 4, conspicuous, villous; fruit brownish leathery-woody, with a green to reddish brown protruding and descending hypocotyl developing and becoming much longer than the fruit while still attached to the tree … Rhizophora mangle

Avicennia germinans (L.)L. {AFP} —

Barleria
1. Stem nodes with spines; corolla yellow or orange … B. lupulina
1. Stem nodes lacking spines; corolla reddish, bluish, or purplish [2]
2. Outer sepals with prickly margins; corolla purplish or bluish … B. cristata
2. Outer sepals entire; corolla reddish … B. repens

****Barleria cristata*** L. {AFP} —
****Barleria lupulina*** Lindl. {AFP} —
****Barleria repens*** Nees {AFP} —

Carlowrightia
****Carlowrightia texana*** Henrickson & T.F.Daniel {AFP} — Known only from a Sauleda specimen in Miami-Dade Co. Highly likely to be a label mix-up since Sauleda was collecting that same month in its native area in Texas.

Crossandra
^*Crossandra infundibuliformis* (L.)Nees —

Dicliptera
1. Bracteoles boradly obovate to spatulate-oblong, 4-7 mm long; corolla resupinate, white, pink, to purple, 15-20 mm long … D. brachiata
1. Bracteoles linear-lanceolate to spatulate-mucronate, 8-15 mm long; corolla not resupinate, pale to dark red, 20-25 mm long … D. sexangularis

Dicliptera brachiata Spreng. {AFP} —
Dicliptera sexangularis (L.)Juss. {AFP} —

Dyschoriste
1. Larger leaves 6-18(25) mm long, 2-4(5) mm wide … D. angusta

1. Larger leaves (16)19-45 mm long, (5)6-20 mm wide [2]
2. Leaf blade base contracted, strongly to moderately narrowed to a fairly distinct petiole; calyx 7-11 mm long; corolla 9-15 mm long, lobes 3-5 mm long … D. humistrata
2. Leaf blade base cuneate, generally gradually narrowed from mid-blade to a short, indistinct petiole; calyx 14-18 mm long; corolla 24-27 mm long, lobes 5-10 mm long … D. oblongifolia

Dyschoriste angusta (A.Gray)Small {AFP} —
Dyschoriste humistrata (Michx.)Kuntze {AFP} —
Dyschoriste oblongifolia (Michx.)Kuntze {AFP} —

Elytraria: Because of morphological and geographical overlap, varieties were not recognized by Daniel (2013). At least var. *angustifolia* seems worthwhile to give notice to.

1. Leaves 30-100 mm wide, 1.5-3.5 times longer than wide, the lower surface usually pubescent … E. caroliniensis var. caroliniensis
1. Leaves 2-30 mm wide, 3.5-70 times longer than wide, the lower surface glabrous or pubescence mostly restricted to major veins [2]
2. Leaves 2-11 mm wide, 8.5-70 times longer than wide, the lower surface glabrous … E. caroliniensis var. angustifolia
2. Leaves 10-30 mm wide, 3.5-10 times longer than wide, the lower surface glabrous or pubescence mostly restricted to major veins … E. caroliniensis var. vahliana

•***Elytraria caroliniensis*** (J.F.Gmel.)Pers. var. ***angustifolia*** (Fernald)S.F. Blake {AFP} —
Elytraria caroliniensis (J.F.Gmel.)Pers. var. ***caroliniensis*** {AFP} —
Elytraria caroliniensis (J.F.Gmel.)Pers. var. ***vahliana*** (Nees)D.B. Ward {AFP} —

Eranthemum
^*Eranthemum pulchellum* Andrews {AFP} —

Fittonia
^*Fittonia albivenis* (Lindl. ex Veitch.)Brummitt —

Graptophyllum
^*Graptophyllum pictum* (L.)Griff. {AFP} —

Hygrophila
1. Emergent leaves coarsely dentate, the submerged leaves pinnately dissected … H. difformis
1. Emergent and submerged leaves entire to subtly undulate [2]
2. Petiole usually distinct from the blade, 1-6 cm long; inflorescence pedunculate; flowers pedicellate … H. corymbosa
2. Petiole absent or grading into the blade, 0-1 cm long; inflorescence and flowers sessile to subsessile [3]
3. Larger leaves 1-6 cm long, mostly elliptic to elliptic-oblanceolate and the apex rounded to obtuse; stamens 2 per flower … H. polysperma
3. Larger leaves 6-20 cm long, mostly lanceolate to oblanceolate and the apex subacute to acuminate; stamens 4 per flower [4]

4. Bracteoles subulate, lanceolate, to linear, 2.2-5.6(7) mm long, lower surface glabrous; calyx 5-7 mm long in anthesis (to 9 mm in fruit), lower surface glabrous or hairs to 0.2 mm long; corolla white, 5.5-9 mm long (common form) ... H. costata
4. Bracteoles lance-ovate, narrowly elliptic, to linear, 6-15 mm long, lower surface hairy, esp. along midvein; calyx 9-14 mm long in anthesis (to 15 mm in fruit), lower surface pubescent, most hairs 0.2-0.6 mm long; corolla purplish with white or yellow markings on lower lip, (10)12-17 mm long (Escambia Co. form) ... H. aff. costata

*****Hygrophila corymbosa*** (Blume)Lindau {AFP} —
Hygrophila costata Nees et al. {AFP} — The type of *H. lacustris* is from Mexico, and possibly applies to plants of Florida, if *H. costata* were to be broken up. Daniel (2013) treated USA plants as part of *H. costata* s.lat.
Hygrophila aff. ***costata*** Nees et al. — Daniel (2013) highlighted the uniqueness of plants in Escambia Co., possibly another South American introduction localized around Pensacola.
*****Hygrophila difformis*** (L.f.)Blume {AFP} —
*****Hygrophila polysperma*** (Roxb.)T.Anderson {AFP} —

Hypoestes
^*Hypoestes phyllostachya* Baker {AFP} —

Justicia
1. Bracts enlarged, foliaceous and overlapping, concealing flower buds ... J. brandegeeana
1. Bracts small, not foliaceous, not overlapping, not concealing flower buds [2]
2. Corolla orange, 3.5-5 cm long ... J. spicigera
2. Corolla white, pink, purple, to reddish, 0.8-3 cm long [3]
3. Stem densely pubescent and glandular ... J. cooleyi
3. Stem glabrous to glabrate, eglandular [4]
4. Inflorescence a dense capitate spike, internodes not visible or scarcely apparent ... J. americana
4. Inflorescence an elongate spike or panicle, the internodes plainly apparent [5]
5. Inflorescence usually a panicle, the proximal internodes longer than the adjacent calyx [6]
5. Inflorescence a spike, the proximal internodes subequal to shorter than the adjacent calyx [7]
6. Inflorescence branches verticillate to subverticillate; corolla 2-6 mm long; fruit 4-5 mm long ... J. comata
6. Inflorescence branches opposite or alternate; corolla 8-9 mm long; fruit 7-8 mm long ... J. pectoralis
7. Leaves narrowly lanceolate; corolla purple, 15-30 mm long [8]
7. Leaves lanceolate to ovate; corolla pale lavender to white, 8-13 mm long [9]
8. Leaves chartaceous ... J. angusta
8. Leaves fleshy ... J. crassifolia
9. Leaves narrowly lanceolate; flowers usually secund ... J. lanceolata
9. Leaves lanceolate to ovate; flowers usually not secund ... J. ovata

Justicia americana (L.)Vahl {AFP} —
Justicia angusta (Chapm.)Small {AFP} —
^*Justicia aurea* Schltdl.—
***Justicia brandegeeana* Wassh. & L.B.Sm. {AFP} —
^*Justicia carnea* Schltdl. —

*__Justicia comata__ (L.)Lam. {AFP} —
•__Justicia cooleyi__ Monach. & Leonard {AFP} — FE. SE. Tentatively retained as distinct from *J. pringlei*, although perhaps morphologically indistinguishable (Daniel 2013). DNA analyses found segregates (*J. cooleyi*, *J. galapagana*, & *J. saltensis*) mostly forming separate clades (Kiel et al. 2018).
•__Justicia crassifolia__ (Chapm.)Chapm. ex Small {AFP} — SE.
__Justicia lanceolata__ (Chapm.)Small {AFP} —
__Justicia ovata__ (Walter)Lindau {AFP} —
**Justicia pectoralis* Jacq. {AFP} —
**Justicia spicigera* Schltdl. {AFP} —

Megaskepasma
^*Megaskepasma erythrochlamys* Lindau —

Nelsonia
**Nelsonia canescens* (Lam.)Spreng. {AFP} — Sarasota Co.

Nicoteba
^*Nicoteba betonica* (L.)Lindau — Historically included in *Justicia*, but probably best placed in *Nicoteba*, a small clade (Kiel et al. 2017).

Odontonema
1. Rachis densely and evenly pubescent; corolla pink to purple, subzygomorphic; pollen 3-colporate … O. callistachyum
1. Rachis glabrous, or sparsely pubescent, the hairs sometimes concentrated in lines; calyx lobes 1.5-4 mm long; corolla red, sometimes slightly pinkish, subactinomorphic, the lower lip spreading [2]
2. Inflorescence with pedunculate dichasia, alternate or opposite at nodes, the rachis evenly pubescent with erect, flexuous, to antrorse hairs 0.05-0.3(0.5) mm long; corolla tube 2.5-4 mm wide at mid-point; filament 1.5-5 mm long; staminodes 0.5-1.3 mm long; pollen 4-colporate … O. cuspidatum
2. Inflorescence with sessile dichasia, at least some whorled at nodes, the rachis pubescent with flexuose, retrorse, to appressed hairs 0.2-1 mm long with the hairs often concentrated in lines; corolla tube 3-6 wide mm at mid-point; filmaents 5-15 mm long; staminodes 1-4 mm long; pollen 3-colporate … O. tubaeforme

^*Odontonema callistachyum* (Schltdl. & Cham.)Kuntze —
^*Odontonema cuspidatum* (Nees)Kuntze {AFP} —
^*Odontonema tubaeforme* (Bertol.)Kuntze —

Pachystachys
^*Pachystachys lutea* Nees —

Pseuderanthemum
1. Basal leaves with a winged petiole and a cordate blade base, the distal leaves sessile to subsessile; corolla pink to purple … Pseuderanthemum alatum

1. Basal leaves with a cuneate or attenuate blade base grading into a petiole, distal leaves sessile to subsessile; corolla usually white, often pink-spotted, sometimes pinkish or blue-violet … Pseuderanthemum variabile

*****Pseuderanthemum alatum*** (Nees)Radlk. ex Lindau {AFP} —
^*Pseuderanthemum laxiflorum* (A.Gray)F.T.Hubb. —
*****Pseuderanthemum variabile*** (R.Br.)Radlk. ex Lindau {AFP} —

Ruellia

1. Floral bracts enlarged, overlapping, foliaceous, concealing the flower buds … R. blechum
1. Floral bracts not densely overlapping, not concealing the flower buds [2]
2. Inflorescence pedunculate, elongate and many-flowered, the bracts <1/6 as long as the subtending leaves, bracts not foliaceous [3]
2. Inflroescence sessile or subsessile or generally appearing so, few-flowered, the bracts foliaceous and >1/6 as long as the subtending leaves [5]
3. Corolla red to orangish red … R. brevifolia
3. Corolla bluish, purple, pink, to white [4]
4. Leaves 1.6-3.8 times longer than wide; distal inflorescence branches and calyx densely stipitate-glandular … R. ciliatiflora
4. Leaves 3.5-22 times longer than wide; distal inflorescence branches and calyx eglandular to sparsely stipitate-glandular … R. simplex
5. Branches straight or nearly so, mostly at 30-60 angles, the flowers on a distinct branch from the main stem … R. pedunculata subsp. pinetorum
5. Branches mostly irregular or not straight, the flowers on the main stem or clustered and nearly sessile along the main stem [6]
6. Calyx 25-45 mm long; corolla white often with pinkish lines or spots, 6-11 cm long, the tube 4.5-8 cm long … R. noctiflora
6. Calyx 13-25 mm long; corolla bluish, purple, to pink, rarely white, 2-5 cm long, the tube 1-3 cm long [7]
7. Plant leafy and expansive, the internodes mostly shorter than the adjacent leaves, densely hirsute-villous; petiole 4-25 mm long, fairly distinct; leaf blades (2.5)3.5-6 times as long as wide … R. dipteracanthus
7. Plant leafy but usually rather small or sparingly branched, the internodes mostly subequal to longer than the adjacent leaves, or subscapose with few leaves, sparingly pubescent to densely villous-hirsute; petiole 0-8 mm long, mostly indistinct and confluent with the leaf blade; leaf blades 1.6-3.8(4.2) times as long as wide [8]
8. Plant <20 cm tall or long, with 5(8) or less nodes, usually unbranched, copiously villous-hirsute; leaves chartaceous … R. ciliosa
8. Plant 5-100 cm tall or long, with 4-20+ nodes, often with branches, glabrate to villous-hirsute; leaves chartaceous to semi-succulent [9]
9. Plant sparingly pubescent, erect, to 100 cm tall; leaf blades chartaceous, veins mostly green … R. caroliniensis
9. Plant glabrate to villous-hirsute at least on young parts, trailing or erect to 40 cm tall; leaf blades semi-succulent, veins green to reddish; of southern Florida [10]
10. Plant glabrate to sparingly pubescent; leaf veins usually reddish … R. succulenta
10. Plant mostly villous-hirsute, at least on young parts; leaf veins greenish … R. caroliniensis var. heteromorpha

*****Ruellia blechum*** L. {AFP} —

^*Ruellia brevifolia* (Pohl)C.Ezcurra {AFP} —
Ruellia caroliniensis (J.F.Gmel.)Steud. {AFP} —
*****Ruellia ciliatiflora*** Hook. {AFP} —
Ruellia ciliosa Pursh {AFP} —
^*Ruellia dipteracanthus* (Nees)Hemsl. {AFP} —
Ruellia noctiflora (Nees)A.Gray {AFP} — SE.
Ruellia pinetorum Fernald {AFP} —
*****Ruellia simplex*** C.Wright {AFP} —
•***Ruellia succulenta*** Small {AFP} —

Sanchezia
^*Sanchezia tigrina* Leonard —

Stenandrium
Stenandrium dulce (Cav.)Nees {AFP} — A wide-ranging species, those in Florida have been called var. *floridanum*, leaf blades ovate to oblong-ovate, 30-40 mm long, 12-30 mm wide; peduncles 4-7 cm long; inflorescence spike (excluding corolla) >20 mm long. And var. *dulce* has leaf blades oblong-elliptic, 15-30 mm long, 7-12 mm wide; peduncles 1-4 cm long; inflorescence spike (excluding corolla) to 20 mm long.

Strobilanthes
1. Plant not rosulate, leafy throughout … S. alternata
1. Plant subrosulate, leaves mostly basal … S. reptans

*****Strobilanthes alternata*** (Burm.f.)Moylan ex J.R.I.Wood {AFP} —
^*Strobilanthes auriculata* Nees —
^*Strobilanthes hamiltoniana* (Steud.)Bosser & Heine —
*****Strobilanthes reptans*** (G.Forst.)Moylan ex Y.F.Deng & J.R.I.Wood {AFP} —

Thunbergia: Phylogenetic analyses by Borg et al. (2008).

1. Erect or scandent shrub; leaf blade base acute to cuneate … T. erecta
1. Trailing or climbing vines; leaf blade base subtruncate to cordate [2]
2. Petioles winged; corolla lobes yellow to orange, occasionally white, throat dark purplish … T. alata
2. Petioles not winged; corolla lobes white to bluish, throat usually pale, yellow, or green, or corolla yellow and red [3]
3. Leaf blades strongly 3-veined, additional basal veins obscure; sepals reddish; corolla yellow and red … T. mysorensis
3. Leaf blades palmately 3- to 7-veined, the basal veins sometimes slightly weaker; sepals greenish; corolla lobes white to bluish, throat usually pale, yellow, or green [4]
4. Leaf blades 4-10 cm long; floral bracts 12-15 mm long; corolla 2-3 cm long, 3-5 cm wide, the lobes white; fruit 7-9 mm wide, with a beak 10-15 mm long … T. fragrans
4. Leaf blades 5-22 cm long; floral bracts 20-40 mm long; corolla 4-8 cm long, 3-8 cm wide, the lobes white, pink, purple, to bluish; fruit 9-18 mm wide, with a beak 10-25 mm long [5]
5. Sprawling to weak vining herb; bracteoles pubescent, with pronounced reticulate venation; anthers open by short slits in the lower half of the thecae; stigma with a tuft of trichomes emerging on each side … T. battiscombei

5. Woody climbers; bracteoles glabrate, without visible reticulate venation; anther thecae opening by long slits; stigmas without trichomes [6]
6. Stems and leaves pubescent or scabrid; leaf blades broadly ovate-cordate, 0.8-1.2 times as long as wide ... T. grandiflora
6. Stems and leaves glabrate; leaf blades lanceolate to ovate, 1.4-2 times as long as wide ... T. laurifolia

**Thunbergia alata* Bojer ex Sims {AFP} —
^*Thunbergia battiscombei* Turrill —
^*Thunbergia erecta* (Benth.)T.Anderson {AFP} —
**Thunbergia fragrans* Roxb. {AFP} —
^*Thunbergia grandiflora* Roxb. {AFP} —
^*Thunbergia laurifolia* Lindl.
^*Thunbergia mysorensis* Roxb.

Yeatesia
Yeatesia viridiflora (Nees)Small {AFP} —

PEDALIACEAE
Sesamum
1. Leaf blades ovate, oblong, lanceolate, or rarely obovate; basal leaf blades often >7 cm long or wide, sometimes deeply 3-lobed or occasionally leaves trifoliolate, if <7 cm long then shallowly 3-lobed or not broadly subcordate; flowers with a staminode; fruit not or hardly subtruncate at apex, without angular horns but with a conspicuous terminal beak; plant not malodorous ... Sesamum indicum
1. Leaf blades broadly ovate-subcordate to less often rotund, elliptical, or slightly obovate; basal leaf blades <7 cm long or wide, sometimes broadly subcordate or only shallowly 3-lobed; flowers without a staminode; fruit subtruncate at apex, with a subdeltoid to linear horn at each of the outer edges of the apex, terminal beak inconspicuous or absent; plant malodorous ... Sesamum trilobum

Sesamum indicum L. {AFP} —
Sesamum trilobum (Bernh.)Byng & Christenh. {AFP} —

LAMIACEAE
1. Vines, subshrubs, shrubs, or trees, woody ... Key A
1. Herbs to subshrubs, not woody, sometimes suffrutescent [2]
2. Calyx strongly bilabiate, the upper part of calyx forming a cap or flap, entire to obscurely lobed [3]
2. Calyx bilabiate or not, the upper part of calyx not forming a cap or flap, often lobed and with acute apices [4]
3. Calyx of an upper and lower lobe, the upper part often with a protuberance, the calyx mouth closing (usually completely so) during fruit maturation (before dehiscing) ... Scutellaria
3. Calyx lower lip distinctly 3-lobed, the upper lacking a protuberance, the mouth remaining wide open and not closing ... Ocimum
4. Fertile stamens 2 ... Key B
4. Fertile stamens 4 ... Key C

Key A: woody vines, shrubs, trees
1. Leaves compound, usually at least some; leaf blade lower surface and calyx canescent … Vitex
1. Leaves simple or 1-foliolate; leaf blade lower surface and calyx glabrous, pubescent, or canescent [2]
2. Fruit a schizocarp [3]
2. Fruit a drupe [6]
3. Leaf blades 1-15 cm wide … Coleus
3. Leaf blades 0.1-1 cm wide [4]
4. Inflorescence spiciform, the pedicels, calyx, and flower buds hidden by the bracts … Piloblephis rigida
4. Inflorescence racemiform or paniculiform, the pedicels (if present), calyx, and flower buds visible [5]
5. Anthers with a spur-like or horn-like appendage; plants generally glabrate … Dicerandra
5. Anthers lacking an appendage; plants glabrate to densely pubescent [6]
6. Lower surface of leaves glabrate or with erect hairs; stigma branches distinctly unequal … Calamintha
6. Lower surface of leaves with appressed hairs; stigma branches subequal … Conradina
7. Corolla 2-5 mm long [8]
7. Corolla 5-40 mm long [10]
8. Leaves with stellate hairs … Callicarpa americana
8. Leaves with simple hairs or glabrous [9]
9. Leaf blades elliptic to lanceolate, entire … Petitia domingensis
9. Leaf blades broadly ovate to ovate, entire to toothed … Premna odorata
10. Leaf blade pinnately veined, lacking a basal pair of lateral veins; fertile stamens 2 … Cornutia
10. Leaf blade pinni-palmately veined, with a basal pair of lateral veins extending to near or beyond mid-blade [11]
11. Calyx disc-shaped and spreading, forming a broad shield, brightly colored orange to reddish, lacking any discernible lobes … Holmskioldia sanguinea
11. Calyx not disc-shaped or shield-like [12]
12. Trees; leaf blade broadly ovate; corolla yellow and reddish … Gmelina arborea
12. Vines or shrubs; leaf blade linear, elliptic, lanceolate, to ovate; corolla white, pink, red, to purple [13]
13. Corolla 10-150 mm long; fruiting calyx usually larger than the fruit, brightly colored and contrasting with the dark fruit … Clerodendrum
13. Corolla 5-10 mm long; fruiting calyx … Volkameria glabra

Key B: herbs, fertile stamens 2
1. Flower clusters in spiciform or racemiform inflorescences with reduced leaves [2]
1. Flower clusters in the axils of well-developed leaves [3]
2. Corolla yellow, the lower lip fringed … Collinsonia
2. Corolla blue, lavender, red, or white, the lower lip not fringed … Salvia
3. Flower clusters subtended by large, colored or whitish bracts … Monarda
3. Flower clusters lacking colored bracts [4]
4. Flowers sessile; calyx actinomorphic or nearly so … Lycopus
4. Flowers pedicellate; calyx 2-lipped [5]
5. Stem with retrorse hairs; leaves linear to narrowly elliptic, the margin entire … Hedeoma hispida
5. Stem with erect hairs; leaves ovate, the margin toothed … Stachydeoma graveolens

Key C: herbs, fertile stamens 4
1. Flowers in a pedunculate dense, involucral head of numerous flowers, pedicels absent or unapparent [2]
1. Flowers in pedunculate or sessile spikes (sometimes interrupted), racemes, or cymes, sometimes with pedicellate flowers, or in sessile axillary clusters [3]
2. Pedunculate inflorescence heads arising from leaf axils; involucral bracts spreading to descending; calyx slightly oblique at mouth, 2-lobed, lobes subequal … Hyptis
2. Pedunculate inflorescence heads terminating stems; involucral bracts tightly appressed; calyx bilabiate, the lower lip 2-lobed … Macbridea alba
3. Flowers in axillary clusters or solitary in the axils [4]
3. Flowers in terminal racemes, cymes, or spikes (these sometimes interrupted and appearing axillary but in the axils of reduced leaves or bracts distinctly dissimilar from cauline leaves) racemes, or cymes [7]
4. Leaves palmately lobed with 3-5 lobes, the lobes often pinnatifid or lobed … Leonurus japonicus
4. Leaves unlobed [5]
5. Flowers solitary in the leaf axils, pedicellate, the pedicel as long or longer than the flower … Clinopodium brownei
5. Flowers 1-many in the leaf axils, sessile to short-pedicellate, the pedicel shorter than the flower [6]
6. Cauline and bracteal leaves petiolate, petioles not strongly reduced distally … Glechoma hederacea
6. Cauline leaves sessile or petiolate, distal bracteal leaves sessile or short-petiolate and the petioles distinctly reduced distally relative to the cauline leaves … Lamium
7. Inflorescence of umbellliform, congested cymes … Pycnanthemum
7. Inflorescence of racemes or spikes, sometimes paniculiform [8]
8. Corollas orange … Leonotis nepetifolia
8. Corollas not orange [9]
9. Corolla appearing 1-lipped, with 2 proximal lobes and an exserted 3-lobed lip … Teucrium
9. Corolla bilabiate [10]
10. Calyx of 5 subequal lobes [11]
10. Calyx bilabiate [16]
11. Flowers solitary in the axil of each bract … Physostegia
11. Flowers many in the axil of each bract [12]
12. Corolla lower lip of 3 subequal lobes; plant usually pleasantly fragrant … Mentha
12. Corolla lower lip with the middle lobe larger than the lateral ones; plant typically obscurely aromatic or not distinctly pleasantly fragrant [13]
13. Annual or perennial with rhizomes or tubers; middle lobe of lower lip plane or nearly so … Stachys
13. Annual or perennial, without rhizomes or tubers; middle lobe of lower lip saccate [14]
14. Flower clusters in sessile axillary fascicles (flowers may be pedicellate) … Condea
14. Flower clusters of short-pedunculate cymes, sometimes densely clustered and spike-like [15]
15. Stem scabrid; calyx lacking tufts of white hairs between the lobes … Cantinoa
15. Stem pubescent; calyx with short tufts of white hairs between the lobes … Mesosphaerum
16. Lower lip of the corolla fimbriate [17]
16. Lower lip of corolla not fimbriate [18]
17. Flowers pedicellate, the bracts not concealing the flower bud … Collinsonia

17. Flowers sessile, the bracts foliaceous and concealing the flower bud … Prunella vulgaris
18. Stamens included [19]
18. Stamens exserted [20]
19. Leaf blades 1-3.5 cm long; fruit smooth … Clinopodium
19. Leaf blades 3.5-14 cm long; fruit reticulate … Perilla frutescens
20. Stamens downwardly curved, held atop the flower … Trichostema
20. Stamens straight to upcurved [21]
21. Leaves linear and entire … Dicerandra
21. Leaves not linear, toothed [22]
22. Bracts foliaceous, exceeding to subequal to the flowers; … Ajuga reptans
22. Bracts minute … Coleus

Ajuga
*****Ajuga reptans*** L. {AFP} — Leon Co.

Calamintha
1. Leaves mostly distinctly petiolate, glabrate, the petiole 1.5-5(8) mm long, the blade toothed (usually at least some, sometimes obscurely so) to entire, margins not revolute, obscurely punctate, the lower surface with distinct secondary veins; calyx (including teeth) 4-6 mm long … C. georgiana
1. Leaves mostly subsessile, densely pubescent to glabrate, the petiole 0-1(2.5) mm long, the blade strongly punctate and often revolute, obscurely to strongly punctate, the lower surface with obscure to unapparent secondary veins; calyx (including teeth) 6-9 mm long [2]
2. Leaves mildly revolute to not revolute, mostly narrowly obovoate, pubescent to glabrate; calyx (including teeth) (8)9-14(18) mm long; corolla 27-50 mm long, red or yellow … C. coccinea
2. Leaves revolute (usually at least some), mostly narrowly obovate to linear, densely pubescent; calyx (including teeth) 6-9 mm long; corolla 10-20 mm long, white to pink or lavender [3]
3. Leaves toothed (usually at least some, sometimes obscurely so) or entire, mostly narrowly obovate to narrowly oblanceolate and tapered at the base or nearly petiolate … C. dentata
3. Leaves entire, usually nearly linear to narrowly oblong-lanceolate without a tapered base … C. ashei

Calamintha ashei (Weath.)Shinners {AFP} — ST.
Calamintha coccinea (Nutt. ex Hook.)Benth. {AFP} —
Calamintha dentata Chapm. {AFP} — ST.
Calamintha georgiana (R.M.Harper)Shinners {AFP} — SE.

Callicarpa
Callicarpa americana L. {AFP} — There has been considerable interest in its terpenes and their arthropod repellent properties (Mealor 2017).

Cantinoa
1. Leaf blades lanceolate to ovate-lanceolate; inflorescence a dense spike of cymes, internodes unapparent (Hyptis spicigera) … C. americana
1. Leaf blades ovate; inflorescence of separated cymes, internodes long and obvious … C. mutabilis

*__Cantinoa americana__ (Aubl.)Harley & J.F.B.Pastore {AFP} —
*__Cantinoa mutabilis__ (Rich.)Harley & J.F.B.Pastore {AFP} —

Clerodendrum
1. Leaf blades (1.5-)2-4.5 times longer than wide, linear-elliptic, oblong-ovate, to ovate, the base generally acute to truncate [2]
1. Leaf blades 0.9-1.5(-2) times longer than wide, deltoid-ovate, broadly ovate, to ovate, the base generally cordate to truncate (sometimes narrowed at a broadly obtuse angle) [5]
2. Leaves usually whorled, 3-5 per node, the blades 3-4.5 times longer than wide, linear-elliptic to elliptic-oblanceolate; fertile part of stem (inflorescence) 6-35 cm long … C. indicum
2. Leaves usually opposite, 2 per node, the blades (1.5-)2-3.3 times longer than wide, narrowly elliptic-lanceolate, oblong-ovate, to ovate; fertile part of stem (inflorescence) 2-5 cm long [3]
3. Leaf blades 13-30 cm long, at least the larger ones, the underside usually purple; peduncles much shorter than the flowers; calyx lobes shorter to subequal to the calyx tube; corolla 8-10 cm long … C. quadriloculare
3. Leaf blades (3-)5-16 cm long, the underside usually green; peduncles longer to subequal to the flowers; calyx lobes longer than the calyx tube; corolla 1-2 cm long [4]
4. Calyx light pink to red … C. ×speciosum
4. Calyx white … C. thomsoniae
5. Leaf blade distinctly 3-5-lobed … C. paniculatum
5. Leaf blade unlobed [6]
6. Leaf blade entire to obscurely dentate, the base acute to truncate … C. trichotomum
6. Leaf blade dentate (sometimes irregularly or sparsely dentate) to crenate-dentate (rarely entire), the base usually cordate on at least some leaves (sometimes obscurely cordate, truncate, to broadly obtuse-angled) [7]
7. Inflorescence compact, umbelliform to hemispheric, the flowers densely congested, the pedicels nearly indiscernible [8]
7. Inflorescence spreading to elongate, paniculiform, the flowers relatively spread or in spaced clusters, the pedicels generally discernible [9]
8. Flowers normal; calyx 3-16 mm long, the lobes narrowly deltoid to deltoid; corolla pink, red, to purple … C. bungei
8. Flower normal, double, or irregular like a tea rose; calyx 15-25 mm long, the lobes lanceolate to linear-lanceolate; corolla usually white to pinkish white, rarely pink to red … C. chinense
9. Leaf blade glabrous or puberulent mainly along the veins; calyx 4-16 mm long, the lobes 2-14 mm long; corolla tube ca. 2 cm long, shorter to subequal to the lobes … C. japonicum
9. Leaf blade pubescent on both surfaces; calyx 5-9 mm long, the lobes 2-4 mm long; corolla tube 2.6-3 cm long, subequal to longer than the lobes … C. speciosissimum

*__Clerodendrum bungei__ Steud. {AFP} —
*__Clerodendrum chinense__ (Osbeck)Mabb. {AFP} —
*__Clerodendrum indicum__ (L.)Kuntze {AFP} —
^*Clerodendrum japonicum* (Thunb.)Sweet {AFP} —
^*Clerodendrum laevifolium* Blume —
^*Clerodendrum minahassae* Teijsm. & Binn. —
^__Clerodendrum paniculatum__ L. {AFP} —
^*Clerodendrum quadriloculare* (Blanco)Merr. {AFP} —
^*Clerodendrum schmidtii* C.B.Clarke —
^*Clerodendrum speciosissimum* Van Geert ex C.Morren {AFP} —

^*Clerodendrum* ×*speciosum* W.Bull. (*splendens* × *thomsoniae*) {AFP} —
^*Clerodendrum splendens* G.Don —
^*Clerodendrum thomsoniae* Balf.f. —
^*Clerodendrum trichotomum* Thunb. {AFP} —

Clinopodium
1. Plant sparsely pubescent to glabrate; flowers solitary in the leaf axils … C. brownei
1. Plant sparsely to densely pubescent; flowers in terminal racemes [2]
2. Plant sparsely to moderately pubescent … C. gracile
2. Plant densely villous-pubescent … C. vulgare

Clinopodium brownei (Sw.)Kuntze {AFP} —
****Clinopodium gracile*** (Benth.)Kuntze {AFP} —
****Clinopodium vulgare*** L. {AFP} —

Coleus
1. Leaf blade (3.5)5-14 cm long, glabrous to sparsely pubescent, often variegated with red, pink, purple, white, yellow, or light green, uniformly non-green, or green … C. scutellarioides
1. Leaf blade 1-9 cm long, tomentose to glabrate, generally uniformly green or greenish, not variegated [2]
2. Leaf blade 1-3.5(6) cm long … C. australis
2. Leaf blade 3-9(10) cm long [3]
3. Leaf blade obovate to rhomboid, toothed above the middle … C. neochilus
3. Leaf blade lanceolate, ovate, to suborbicular, toothed below the middle [4]
4. Leaf 1-1.5 times as long as wide; corolla light pink to purple, stamens exserted from the lower lip … C. amboinicus
4. Leaf blade 1.3-2.3 times as long as wide; corolla lavender to bluish or dark purple, stamens included in the lower lip … C. barbatus

^*Coleus australis* (R.Br.)A.J.Paton {AFP} —
^*Coleus scutellarioides* (L.)Benth. {AFP} —

Collinsonia
1. Plant with lemon-like scent; calyx 2-5 mm long, the teeth lance-subulate to narrowly lanceolate; corolla 8-13 mm long; stamens 2, staminodes 2(0) … C. canadensis
1. Plant with lemon-like or anise-like scent; calyx 4.5-7 mm long, the teeth broadly lanceolate; corolla 12-17 mm long; stamens 4 or stamens 2, staminodes 2 … C. serotina

Collinsonia canadensis L. {AFP} —
Collinsonia serotina Walter {AFP} —

Condea
1. Plant densely soft-pubescent or tomentose; leaf blades ovate lanceolate … C. floribunda
1. Plant glabrate to puberulent; leaf blades narrowly elliptic-lanceolate … C. verticillata

****Condea floribunda*** (Briq.)Harley & J.F.B.Pastore {AFP} —
****Condea verticillata*** (Jacq.)Harley & J.F.B.Pastore {AFP} —

Conradina

1. Leaf blade lower surface generally visible with 1-4 prominent secondary veins [2]
1. Leaf blade lower surface generally obscure, lacking prominent secondary veins [3]
2. Leaf blade lower surface with the unicellular trichomes thin-walled, collapsed and flattened on drying, basal and distal parts scarcely differentiated, thin-walled throughout; calyx 9-11 mm long, the apical lobe 4-5 mm long; inflorescence of 1-5 flowers … C. cygniflora
2. Leaf blade lower surface with the unicellular trichomes thick-walled, not collapsed and flattened on drying, basal and distal parts differentiated, thick-walled throughout; calyx 7-9 mm long, the apical lobe 2-4 mm long; inflorescence of (1)3-7 flowers … C. etonia
3. Leaf blade upper surface glabrous, the lower surface and midrib glabrous to glabrate; calyx tube surface glabrous to glabrate … C. glabra
3. Leaf blade upper surface puberulent to strigulose, the lower surface or midrib densely gray-pubescent to pilosulous; calyx tube surface densely pubescent or villous [4]
4. Leaf blade lower surface densely pubescent and contrasted with the glabrate midrib … C. grandiflora
4. Leaf blade lower surface densely pubescent or pilose similarly to the midrib [5]
5. Leaves 6-10(13) mm long; mature fruit mericarp 1-1.25 mm long, 0.5-0.9 mm wide … C. brevifolia
5. Leaves (5)7-20 mm long; mature fruit mericarp 0.7-1 mm long, 0.5-0.7 mm wide … C. canescens

•***Conradina brevifolia*** Shinners {AFP} — FE. SE.
Conradina canescens A.Gray {AFP} —
•***Conradina cygniflora*** C.E.Edwards et al. {AFP} —
•***Conradina etonia*** Kral & McCartney {AFP} — FE. SE.
•***Conradina glabra*** Shinners {AFP} — FE. SE.
•***Conradina grandiflora*** Small {AFP} — ST.

Cornutia

^*Cornutia grandifolia* (Schltdl. & Cham.)Schauer {AFP} —

Dicerandra

1. Annual (or persistent a 2nd year), herbaceous, branches few to none [2]
1. Perennial, woody or suffrutescent, branches many [4]
2. Peduncle 0-1 mm; pedicels 0-2 mm long; stamens subequal, the anther spur obtuse to subacute, with minute domes of digitate hairs … D. densiflora
2. Peduncle (2)3-6 mm long; pedicels 3-9 mm long; stamens unequal, the anther spur acuminate and glabrous [3]
3. Leaves 1-5 mm wide, usually revolute, surface rugose, hispid and raspy, margins denticulate; corolla white to pink, with purplish lines or dots; anthers yellow … D. fumella
3. Leaves 2-10 mm wide, not revolute, surface smooth, margins not denticulate; corolla reddish purple; anthers reddish-brown … D. linearifolia var. robustior
4. Corolla uniformly pink to purple, lacking speckles or dots or barely with spots (few being dark and pronounced in the lower lip, upper lip rarely with darkened areas in lines), the tube smoothly bent; anther spurs hairy [5]
4. Corolla white, pink, to rose-purple, with darkened or colored speckles or dots, the tube abruptly geniculate; anther spurs glabrous to glabrate [6]

5. Stems erect, not decumbent, not re-rooting; leaves narrowly lanceolate, 1-2 cm long (averaging 1.8 cm), 2-4 mm wide … D. immaculata var. immaculata
5. Stems decumbent, re-rooting; leaves rhombic, 2-4 cm long (averaging 2.5 cm), (3)4-9(12) mm wide … D. immaculata var. savannarum
6. Corolla pale pink to rose-purple (with darker dots); anther spur >1 mm long, papillose or papillose-pubescent [7]
6. Corolla white to faintly pinkish (with darker dots); anther spur <1 mm long, glabrous to glabrate [8]
7. Anthers white; style glabrous to glabrate … D. cornutissima
7. Anthers lavender; style with stiff conic hairs … D. thinicola
8. Leaves with odor of eucalyptus or wintergreen; anthers yellow, sometimes tinged with red, the glands absent, few, or inconspicuous on the connective … D. christmanii
8. Leaves with odor of mint; anthers lavender to white, the glands conspicuous on the connective [9]
9. Inflorescence of 1-2 flowers per cyme; corolla white or rarely partly pinkish, the upper lip oblong to ligulate … D. frutescens
9. Inflorescence of (1)2-3(6) flowers per cyme; corolla pale pinkish white (pink with age), the upper lip ovate to obovate … D. modesta

•***Dicerandra christmanii*** Huck & Judd {AFP} — FE. SE.
•***Dicerandra cornutissima*** Huck {AFP} — FE. SE.
•***Dicerandra densiflora*** Benth. {AFP} —
•***Dicerandra frutescens*** Shinners {AFP} — FE. SE.
Dicerandra fumella Huck {AFP} —
•***Dicerandra immaculata*** Lakela var. ***immaculata*** {AFP} — FE. SE.
•***Dicerandra immaculata*** Lakela var. ***savannarum*** Huck {AFP} — FE. SE.
Dicerandra linearifolia (Elliott)Benth. var. robustior Huck {AFP} —
•***Dicerandra modesta*** (Huck)Huck {AFP} —
•***Dicerandra thinicola*** H.A.Mill. {AFP} — SE.

Glechoma
*****Glechoma hederacea*** L. {AFP} —

Gmelina
^*Gmelina arborea* Roxb. ex Sm. {AFP} —
^*Gmelina philippensis* Cham. —

Hedeoma
Hedeoma hispida Pursh {AFP} —

Holmskioldia
^*Holmskioldia sanguinea* Retz. {AFP} — Sparingly naturalized.

Hyptis
1. Inflorescence an involucrate globose to hemispheric head (Hyptis s.str.) [2]
1. Inflorescences of terminal spikes or racemes, the cymules sometimes with a short involucre [3]

2. Peduncles usually >1 cm long; involucral bracts usually >1.5 mm wide; sepal lobe tips acute; seeds ca. 1 mm or more long, 0.5 mm wide ... H. alata
2. Peduncles usually <1 cm long; involucral bracts < 1mm wide; sepal lobe tips acute-acuminate; seeds ca. <0.8 mm long, <0.4 mm wide ... H. brevipes
3. Inflorescence of sessile axillary fascicles (flowers may be pedicellate) (Condea) [4]
3. Inflorescence of short-pedunculate cymes, sometimes densely clustered and spike-like [5]
4. Plant densely soft-pubescent or tomentose; leaf blades ovate lanceolate ... C. floribunda
4. Plant glabrate to puberulent; leaf blades narrowly elliptic-lanceolate ... C. verticillata)
5. Stem pubescent; calyx with short tufts of white hairs between the lobes (Mesosphaerum) ... M. pectinatum
5. Stem scabrid; calyx lacking tufts of white hairs between the lobes (Cantinoa) [6]
6. Leaf blades lanceolate to ovate-lanceolate; inflorescence a dense spike of cymes, internodes unapparent (Hyptis spicigera) ... C. americana
6. Leaf blades ovate; inflorescence of separated cymes, internodes long and obvious ... C. mutabilis

Hyptis alata (Raf.)Shinners {AFP} —
*****Hyptis brevipes*** Poit. {AFP} —

Lamium
1. Most or all cauline leaves and bracts sessile, the blades orbicular, reniform, to broadly ovate ... L. amplexicaule
1. Most cauline leaves and bracts petiolate, the blades ovate ... L. purpureum

*****Lamium amplexicaule*** L. {AFP} —
*****Lamium purpureum*** L. {AFP} —

Lavandula
^*Lavandula* spp. —

Leonotis
*****Leonotis nepetifolia*** (L.)R.Br. {AFP} —

Leonurus
*****Leonurus japonicus*** Houtt. {AFP} —

Lycopus: Revised by Henderson (1962).
1. Calyx subeqal to shorter than the nutlets, the lobe apices obtuse to acute ... L. virginicus
1. Calyx much longer than the nutlets, the lobe apices acuminate to subulate [2]
2. Stem sharply 4-angled ... L. americanus
2. Stem with obtuse or blunt angles, or subterete [3]
3. Leaves sessile, the expanded blade adjacent to the stem, the blade base rounded, truncate, to subclasping ... L. amplectens
3. Leaves sessile or petiolate, the expanded blade distant from the stem, the blade base strongly narrowed and attenuate [4]
4. Leaf blade base gradually narrowed; calyx 2.3-3 mm long ... L. angustifolius
4. Leaf blade base abruptly narrowed; calyx 1.8-2.2 mm long ... L. rubellus

Lycopus americanus Muhl. ex W.P.C.Barton {AFP} —
Lycopus amplectens Raf. {AFP} —
Lycopus angustifolius Elliott {AFP} — Sometimes subsumed under or treated as a variety of *L. rubellus* (Ahles 1964).
Lycopus rubellus Moench {AFP} —
Lycopus virginicus L. {AFP} —

Macbridea

•***Macbridea alba*** Chapm. {AFP} — FT. SE.

Melissa

^*Melissa officinalis* L. {AFP} —

Mentha

1. Leaves pubescent with scattered dendroid hairs; fruity or sweet odor ... M. suaveolens
1. Leaves glabrous; minty odor [2]
2. Peppermint odor (menthol and menthone predominant) ... M. ×piperita
2. Spearmint odor (carvone and limonene predominant) ... M. spicata

^*Mentha ×piperita* L. (*aquatica* × *spicata*) {AFP} —
^*Mentha spicata* L. {AFP} —
****Mentha suaveolens*** Ehrh. {AFP} —

Mesosphaerum

****Mesosphaerum pectinatum*** (L.)Kuntze {AFP} —

Monarda

1. Bracts and calyx aristate, calyx with 15 veins ... M. citriodora
1. Bracts and calyx lobes acute to acuminate, calyx with 13 veins ... M. punctata

****Monarda citriodora*** Cerv. ex Lag. {AFP} —
Monarda punctata L. {AFP} —

Nepeta

^*Nepeta cataria* L. {AFP} —

Ocimum

1. Fruiting pedicel 2-4 mm long, shorter than the corolla; calyx throat with dense ring of hairs; corolla 7-10 mm long, the tube funnel-shaped; lower pair of filaments with a small appendage at the base; nutlet black, copiously mucilaginous; disturbed sites and widely cultivated ... O. basilicum
1. Fruiting pedicel 4-7 mm long, subequal to longer than the corolla; calyx throat glabrous; corolla 3-5 mm long, the tube with parallel sides; lower pair of stamens with a tuft of cilia at base, lacking appendages; nutlet brown, not or scarcely mucilaginous; rockland sites ... O. campechianum

^*Ocimum basilicum* L. {AFP} —
Ocimum campechianum Mill. {AFP} — SE.

^*Ocimum tenuiflorum* L. —

Origanum
^*Origanum vulgare* L. {AFP} —

Orthosiphon
^*Orthosiphon aristatus* (Blume)Miq.

Perilla
*****Perilla frutescens*** (L.)Britton {AFP} —

Petitia
^*Petitia domingensis* Jacq. {AFP} —

Physostegia
1. Leaf blade sharply serrate, the apex acute or acute-acuminate … P. virginiana
1. Leaf blade entire, undulate, crenate, to subtly denticulate, the apex rounded, obtuse, to bluntly acute [2]
2. Calyx and inflorescence axis minutely stipitate-glandular and with nonglandular trichomes; nutlets 1.7-2.2 mm long, the surface usually warty … P. godfreyi
2. Calyx and inflorescence axis puberulent, eglandular; nutlets 2-3.6 mm long, surface smooth [3]
3. Leaves only gradually reduced distally, the larger leaves typically in the middle ⅓ of the stem when flowering, uppermost pair of leaves usually much larger than the floral bracts … P. leptophylla
3. Leaves strongly reduced distally, the larger leaves in the basal ⅓ of the stem, uppermost pair of leaves often subequal to the floral bracts … P. purpurea

•***Physostegia godfreyi*** Cantino {AFP} — ST.
Physostegia leptophylla Small {AFP} —
Physostegia purpurea (Walter)S.F.Blake {AFP} —
*****Physostegia virginiana*** (L.)Benth. {AFP} —

Piloblephis
Piloblephis rigida (W.Bartram ex Benth.)Raf. {AFP} —

Premna
^*Premna odorata* Blanco {AFP} —

Prunella
*****Prunella vulgaris*** L. {AFP} —

Pycnanthemum
1. Leaves linear, 1-3 mm wide … P. tenuifolium
1. Leaves ovate, elliptic, to oblong, 5-45 mm wide [2]
2. Leaves ascending to erect, the largest leaves 1-2.5 cm long … P. nudum
2. Leaves generally spreading, sometimes ascending, the largest leaves (2.5)3-10 cm long [3]

3. Bracts and calyx tips aristate or long-attenuate [4]
3. Bracts and calyx tips acute to acuminate [5]
4. Leaves 3-15 mm wide; calyx lobes 2.3-3.5 mm long ... P. flexuosum
4. Leaves 13-25 mm wide; calyx lobes 1.5-2.3 mm long ... P. setosum
5. Bracts and calyx lobe tips with 1-few spreading, jointed hairs >1 mm long; calyx lower lip with the teeth usually >1/3 of the total calyx length ... P. pycnanthemoides
5. Bracts and calyx lobe tips lacking jointed hairs >1 mm long; calyx lower lip with the teeth <1/3 of the total calyx length [6]
6. Leaf lower surface densely canescent; flower clusters pedunculate; calyx teeth usually cupped ... P. albescens
6. Leaf lower surface canescent on distal leaves, the proximal leaves glabrate ... P. floridanum

Pycnanthemum albescens Torr. & A.Gray ex A.Gray {AFP} —
Pycnanthemum flexuosum (Walter)Britton et al. {AFP} —
Pycnanthemum floridanum E.Grant & Epling {AFP} — ST.
Pycnanthemum nudum Nutt. {AFP} —
Pycnanthemum pycnanthemoides (Leavenw.)Fernald {AFP} —
Pycnanthemum setosum Nutt. {AFP} —
Pycnanthemum tenuifolium Schrad. {AFP} —

Rotheca

^*Rotheca myricoides* (Hochst.)Steane & Mabb. —

Salvia

1. Leaves mostly basal, strongly reduced upwards ... S. lyrata
1. Leaves mostly cauline, not strongly reduced upwards [2]
2. Corolla red ... S. coccinea
2. Corolla white to blue to purple [3]
3. Calyx eglandular [4]
3. Calyx glandular [6]
4. Leaf blades ovate-lanceolate ... S. hispanica
4. Leaf blades lanceolate to linear [5]
5. Leaves linear to linear-lanceolate to narrowly elliptic, the petiole indistinct; bracts generally apparent throughout the inflorescence; calyx pubescent ... S. azurea
5. Leaf blades lanceolate, the petiole more or less distinct; upper inflorescence verticils without conspicuous bracts; calyx densely white-canescent ... S. farinacea
6. Calyx tip spinulose or sharply acuminate ... S. misella
6. Calyx tips acute, obtuse, to rounded [7]
7. Leaf blade not decurrent or only slightly, the base truncate to cordate ... S. serotina
7. Leaf blade decurrent along the petiole or the blade base acute [8]
8. Plant 1.4-2.0 m tall; larger leaf blades mostly 6-12 cm long, 3-6.5 cm wide; calyx 5-10 mm long ... S. chapmanii
8. Plant <1 m tall; larger leaf blades mostly 2-5 cm long, 1-3 cm wide; calyx ca. 2 mm long ... S. occidentalis

Salvia azurea Michx. ex Lam. {AFP} —
Salvia chapmanii A. Gray {AFP} — SE.

++***Salvia coccinea*** Buc'hoz ex Etl. {AFP} — Probably introduced; widely cultivated. This name was mentioned by Bartram on St. Simons Island, GA (1792: 57), and Small (1929: 16) thought it native to the Halifax River region. Contrarily, Chapman (1897: 381) considered it escaped from cultivation, as did Mohr in Mobile, Alabama (1865, UNA). An early collection was made near Jacksonville by Keeler in 1870-1876 (NY), and by Rugel in Smyrna, TN in 1848 (FLAS).
^*Salvia elegans* Vahl —
^*Salvia farinacea* Benth. {AFP} —
^*Salvia guaranitica* A.St.-Hil. ex Benth. —
^*Salvia hispanica* L. {AFP} —
^*Salvia leucantha* Cav.
Salvia lyrata L. {AFP} —
Salvia misella Kunth {AFP} —
Salvia occidentalis Sw. {AFP} —
^*Salvia officinalis* L. —
^*Salvia rosmarinus* Spenn. —
Salvia serotina L. {AFP} — Central and south peninsula (also Neotropics). Primarily in disturbed areas. Provisionally includes *S. blodgettii* and *S. micrantha*. Chapman (1860) described *S. blodgettii*, scarcely differentiated but with smaller flowers than his *S. serotina* (putative type at US). Fernald (1900) recognized *S. micrantha* (as leaf lower surface short-pilose or glabrate) as distinct from *S. serotina* (leaves canescent on both surfaces). Epling's (1939) treatment was similar, attributing all these taxa to Florida, except *S. blodgettii* was described as having the largest flowers of all (contrary to Chapman) and it was included as a variety of *S. micrantha* (flowering calyx 5.5-7 mm long, corolla tube 5.5-7.6 mm long, lower lip 5-5.5 mm long in var. *blodgettii* vs. flowering calyx 3.5-5.5 mm long, corolla tube 4-6 mm long, lower lip 2.5-4 mm long in var. *micrantha*). Consistent with these prior works, Acevedo-Rodríguez (1996) recognized two species (plant pubescent with curved hairs; leaf blade underside glabrous, pubescent on the veins; corolla blue to violet in *S. micrantha*; vs. plant pilose; leaf blade underside densely pubescent; corolla white to lavender in *S. serotina* s.str.).
^*Salvia splendens* Ker Gawl. —

Scutellaria

1. Most leaf blades conspicuously toothed, larger ones with >5 teeth [2]
1. Most leaf blades with ≤5 teeth or the margins entire (rarely >5 teeth) [6]
2. Leaf blade cordate at the base ... S. ovata subsp. bracteata
2. Leaf blade truncate to cuneate or subcordate-cuneate at the base [3]
3. Flowers in elongate axillary racemes, distinct from the main stem or branch; corolla 5-9 mm long ... S. lateriflora
3. Flowers in terminal spikes or racemes, sometimes with axillary ones below; corolla 12-25 mm long [4]
4. Distal leaves grading into the bracts subtending the flowers ... S. arenicola
4. Distal leaves larger and fairly distinct from the bracts subtending the flowers [5]
5. Leaf blade upper surface with septate hairs ca. 1 mm long, the lower surface not much lighter than the upper surface ... S. elliptica
5. Leaf blade upper surface glabrate or the hairs minute, the lower surface lighter and strongly contrasted with the upper surface ... S. incana var. australis
6. Longer leaves 1.2-2.2 times longer than wide; corolla 3-18 mm long [7]
6. Longer leaves 3-30 times longer than wide; corolla 4-6 mm long or 18-31 mm long [9]

7. Calyx eglandular with short, uncinate hairs ... S. havanensis
7. Calyx glandular and with eglandular long, straight hairs [8]
8. Annual or short-lived tap-rooted perennial; leaf blade base cuneate ... S. drummondii
8. Perennial with rhizomes; leaf blade base mostly truncate to subcordate ... S. parvula
9. Corolla 4-6 mm long ... S. racemosa
9. Corolla 18-31 mm long [10]
10. Rhizomatous, with fusiform tubers; leaves linear, 1-2.5 mm wide ... S. floridana
10. Rhizomatous, without fusiform tubers; leaves ovate, elliptic, elliptic-oblanceolate, to obovate-lanceolate, 3-14 mm wide [11]
11. Corolla glabrous, rarely minutely villosulous; flowering Aug-Oct ... S. glabriuscula
11. Corolla pubescent; flowering mostly Mar-Jul, rarely Sep [12]
12. Stems to 70 cm tall, distal internodes longer to shorter than adjacent leaves; leaves spreading to ascending, without stipitate glands; corolla blue or pinkish ... S. integrifolia
12. Stems to 35 cm tall, distal internodes typically shorter than the adjacent leaves; leaves typically ascending, with stipitate glands; corolla white to pale blue ... S. multiglandulosa

Scutellaria arenicola Small {AFP} —
****Scutellaria drummondii*** Benth. {AFP} —
Scutellaria elliptica Muhl. {AFP} —
•***Scutellaria floridana*** Chapm. {AFP} — FT. SE.
Scutellaria glabriuscula Fernald {AFP} —
Scutellaria havanensis Jacq. {AFP} — SE.
Scutellaria incana Biehler {AFP} —
Scutellaria integrifolia L. {AFP} —
Scutellaria lateriflora L. {AFP} —
Scutellaria multiglandulosa (Kearney)Small ex R.M.Harper {AFP} —
Scutellaria ovata Hill subsp. ***bracteata*** (Benth.)Epling {AFP} —
Scutellaria parvula Michx. {AFP} —
****Scutellaria racemosa*** Pers. {AFP} —

Stachydeoma

•***Stachydeoma graveolens*** (Chapm. ex A.Gray)Small {AFP} — SE.

Stachys

1. Annual; calyx tube 2-4 mm long; corolla 4-6 mm long [2]
1. Perennial, with rhizomes or tubers; calyx tube 6-7 mm long; corolla 10-13 mm long [3]
2. Calyx (including awns) 6-8 mm long ... S. arvensis
2. Calyx (including awns) 3-5 mm long ... S. crenata
3. Most leaves sessile to subsessile, the longest petioles to 4 mm long only on the most basal leaves ... S. lythroides
3. Most or all leaves petiolate, the longest petioles to 20 mm long ... S. floridana

****Stachys arvensis*** (L.)L. {AFP} —
Stachys crenata Raf. {AFP} — SE.
Stachys floridana Shuttlew. ex Benth. {AFP} — Throughout (SE USA). Probably was once endemic to Florida (Small 1933) and it may have recently spread into adjacent states. It is known from Georgia by at least 1945 (Hardy s.n., GA), Alabama by 1950 (Wilson & Orr s.n., TROY, UWAL), and South Carolina by 1956 (Freeman 56171, CM).

Stachys lythroides Small {AFP} — SE.

Teucrium

1. Leaf blades medium to moderately dark green above, grayish green to gray beneath, midrib on lower surface with hairs pointing forward, widely spreading, or very loosely retrorse … T. canadense var. canadense
1. Leaf blades very dark green or blackish green above (rarely medium green), silvery beneath, midrib on lower surface with closely appressed retrorse hairs in basal portion (rarely loose or spreading) … T. canadense var. nashii

Teucrium canadense L. var. ***canadense*** {AFP} —
Teucrium canadense L. var. ***nashii*** (Kearney)Shinners —

Trichostema : Once comprising 3 species in Florida (Lewis 1945), it ballooned to 10 species (McClelland 2022; McClelland et al. 2023). Examination of the RADseq data of *Trichostema* (McClelland et al. 2023) with STRUCTURE, Neighbor-net, and cloud tree analyses would be useful to visualize alternate topologies and potential admixture (e.g. Du et al. 2023; Anderson et al. 2024; Vasile et al. 2024). Given the subtle to scarce morphological differences (McClelland 2022: 190-191) and geographic proximities, it would be worthwhile to explore infraspecific classifications.

1. Longest stem hairs 3-8 cells long, the stem nodes with hairs primarily spreading, rarely downwardly or upwardly curled; leaves widest towards the base or near the middle, not linear; longer style branch 1-2 times as long as the shorter one (Trichostema dichotomum s.lat.) [2]
1. Longest stem hairs usually 1-2 cells long, occasionally 3 cells long, the stem nodes with hairs primarily downwardly curved to appressed, rarely spreading or upwardly curled; leaves widest near the middle or towards the apex, or linear; longer style branch 2-6(9) times as long as the shorter [5]
2. Plant annual, branching primarily from the middle to upper part of the plant; mid-stem hairs spreading, occasionally downwardly or upwardly curled, node hairs spreading, rarely upwardly curved, longest hairs 5-8 cells long; nutlet appearing wrinkled, the ridges distinct, steep-sided; panhandle and peninsula south to Manatee and Brevard counties … T. dichotomum
2. Plant short-lived perennial, branching throughout the plant; mid-stem hairs downwardly curved, occasionally spreading, node hairs spreading, rarely downwardly curved, longest hairs 3-6 cells long; nutlet relatively smooth, the ridges low and shallow sided [3]
3. Older plants compact, to 1 m tall; largest leaves 1.5-3.5 cm long, 0.5-1.3 cm wide, 2.4-3.6 times as long as wide; coastal, calcareous substrates, Pasco and Flagler south to Monroe mainland and Miami-Dade counties … T. floridanum
3. Older plants leggy, to 1.25 m tall; largest leaves 2.7-5.5 cm long, 0.7-1.8 cm wide, 2.9-4.4 times as long as wide; panhandle and peninsula south to Collier and Martin counties, not restricted to calcareous substrates … T. fruticosum
4. Annual, branches few to none, often branching primarily in the middle and upper part of the plant; largest leaves 1.8-5 cm long, 1.5-25 times as long as wide; somewhat widespread (Trichostema setaceum s.lat.) [5]
4. Suffrutescent perennial, branching primarily near the base or throughout; largest leaves 1-2.5 cm long, 1.5-9 times as long as wide; restricted to the Florida Peninsula (Trichostema suffrutescens s.lat.) [6]
5. Largest leaves 1.8-3.5 cm long, 1.5-9 times long as wide; Franklin Co. … T. latens

5. Largest leaves 2-5 cm long, 5-25 times long as wide; panhandle and peninsula south to Pasco and Volusia Cos. ... T. setaceum
6. Largest leaves 3-9 times long as wide; nutlet strongly wrinkled or pockmarked, the ridges prominent and stocky [7]
6. Largest leaves 1.5-4.5 times long as wide; nutlet smooth to slightly wrinkled, the ridges faint to somewhat prominent [8]
7. Stem and node hairs primarily downwardly curved; largest leaves typically 1.5-2.5 cm long, 3.5-9 times long as wide; Brevard and Hillsborough south to Lee and Broward counties ... T. gracile
7. Stem and node hairs primarily spreading to upwardly curved; largest leaves typically 1.1-1.9 cm long, 3-5 times long as wide; Alachua, Citrus, Gilchrist, Hernando, Levy, Marion, and Pasco counties ... T. microphyllum
8. Plant branching throughout; flowering Oct-Jan; Martin and perhaps Palm Beach counties ... T. hobe
8. Plant branching primarily near the base; flowering Jun-Dec; central Florida counties [9]
9. Plant more robust, to 1 m tall, differently scented; fruiting calyx 5.2-6.2 mm long; Polk, Highlands, Osceola, and potentially Hardee, Lake, and Orange counties ... T. bridgesii-orzellii
9. Plant less robust, to 0.6 m tall, differently scented; fruiting calyx 4.7-6.0 mm long; Clay, Lake, Marion, Orange, Putnam, and Seminole counties ... T. suffrutescens

•***Trichostema bridgessii-orzellii*** K.S. McLell. —
Trichostema dichotomum L. {AFP} —
•***Trichostema floridanum*** K.S. McLell. & Weakley —
Trichostema fruticosum K.S. McLell. — Near endemic (SE Georgia, S Alabama, S Mississippi).
•***Trichostema gracile*** K.S. McLell. —
•***Trichostema hobe*** K.S. McLell. —
•***Trichostema latens*** K.S. McLell. —
•***Trichostema microphyllum*** K.S. McLell. —
Trichostema setaceum Houtt. {AFP} —
•***Trichostema suffrutescens*** Kearney —

Thymus
^*Thymus vulgaris* L. —

Vitex
1. Leaves mostly with 3-9 leaflets [2]
1. Leaves mostly with 1-3 leaflets [3]
2. Leaflets entire, subsessile to nearly attenuate at the base ... V. agnus-castus
2. Leaflets entire or toothed, usually with a more or less distinct petiolule, especially the terminal leaflet ... V. negundo
3. Leaflets densely gray to white tomentose on the lower surface [4]
3. Leaflets sparsely pubescent to glabrous on the lower surface [5]
4. Sprawling or spreading shrub, rooting at nodes; leaf blades mostly obovate-spatulate, ovate-elliptic, broadly oblong-elliptic, to orbicular ... V. rotundifolia
4. Erect shrub or tree, not rooting at nodes; leaf blades mostly oblong, lanceolate, or obovate ... V. trifolia
5. Inflorescence axillary ... V. glabrata
5. Inflorescence terminal ... V. parviflora

^*Vitex agnus-castus* L. {AFP} —
^*Vitex glabrata* R.Br. {AFP} —
**Vitex negundo* L. {AFP} — Previously in synonymy, the name *V. elmeri* was reinstated as a species (Gentallan, Jr. et al. 2024).
Vitex rotundifolia L.f. {AFP} —
Vitex trifolia L. {AFP} —

Volkameria
^***Volkameria glabra*** (E.Mey.)Mabberley & Y.-W.Yuan {AFP} —

MAZACEAE
Mazus pumilus (Burm.f.)Steenis {AFP} —

PHRYMACEAE
1. Leaf blade margin mostly sinuate-dentate, the sinuses U-shaped; inflorescence a solitary, axillary flower; calyx 11-18 mm long; corolla 15-28 mm long; fruit 8-12 mm long, erect or spreading … Mimulus alatus
1. Leaf blade margin mostly crenate-dentate, the sinuses V-shaped; inflorescence a terminal spike with several flowers; calyx 3-6 mm long; corolla 6-11 mm long; fruit 4-8 mm long, strongly deflexed, pointing downward … Phryma leptostachya

Mimulus
Mimulus alatus Aiton {AFP} —

Phryma
Phryma leptostachya L. {AFP} —

OROBANCHACEAE
1. Plants not photosynthetic (holoparasitic), lacking green color, drying tan or brown [2]
1. Plants photosynthetic (hemiparasitic), with green color (sometimes obscured by other pigments), often drying blackish or sometimes greenish [6]
2. Inflorescence often branched at the base, axis 1-3 mm wide, ligneous, flowers distant, few if any overlapping; flowers cleistogamous and chasmogamous; root parasite of Fagus … Epifagus virginiana
2. Inflorescence simple or few-branched, axis 2-10 mm wide, fleshy, flowers dense, overlapping at least distally, or flower appearing solitary; flowers chasmogamous; not on Fagus [3]
3. Scale-like leaves densely imbricate below the fertile part of the inflorescence; stamens exserted; root parasite of Quercus … Conopholis americana
3. Scale-like leaves distant or only partly overlapping below the fertile part of the inflorescence; stamens included; not on Quercus [4]
4. Flower on long erect pedicels (20-120 mm long) arising from the ground; primarily parasitizing Asteraceae … Aphyllon uniflorum
4. Flowers several on aerial inflorescence, the pedicel 0-15 mm long [5]
5. Flowers densely congested nearly throughout; calyx 5-lobed; parasitizing Asteraceae … Aphyllon ludovicianum
5. Flowers only partly overlapping proximally; calyx 2- or 4-lobed; stigma bilobed; parasitizing a variety of taxa, including Fabaceae … Orobanche minor

6. Leaves scale-like, appressed to erect … Striga gesnerioides
6. Leaves with blades, generally spreading [7]
7. Leaves 0.2-3(4) mm wide, mostly linear … Agalinis
7. Leaves 4-60 mm wide, not linear [8]
8. Leaves alternate (rarely opposite), sometimes nearly all basal [9]
8. Leaves opposite (rarely alternate) [11]
9. Leaf blade reguarly pinnately lobed, with more than 5 lobes per side … Pedicularis canadensis
9. Leaf blade entire or toothed, rarely lobed with 5 or fewer irregular lobes per side [10]
10. Leaves linear-lanceolate, secondary veins obscure; bracteoles absent; sepals 4; seeds unwinged … Castilleja indivisa
10. Leaves ovate-lanceolate to lanceolate, secondary veins often apparent; bracteoles present; sepals 5; seeds winged … Schwalbea americana
11. Leaf blade entire or weakly toothed [12]
11. Leaf blade strongly toothed to pinnatifid [13]
12. Plant often spreading, regularly branched; corolla yellow … Aureolaria
12. Plant usually strictly erect, unbranched or with 1-2 branches, very rarely more; corolla purple, bluish, to white … Buchnera
13. Corolla 6-14 mm long; fruit 4-7 mm long … Seymeria
13. Corolla 20-40 mm long; fruit 10-15 mm long [14]
14. Corolla yellow … Aureolaria
14. Corolla bright orange … Macranthera

Agalinis:

sect. Erectae: aphylla, flexicaulis, obtusifolia
sect. Linifoliae: linifolia
sect. Purpureae: harperi, laxa, maritima, purpurea, tenuifolia
sect. Tenuifolieae: divaricata, filicaulis

1. Subtending bracts longer than pedicels [2]
1. Subtending bracts shorter than to subequal to the pedicels [10]
2. Leaf blades fleshy, with sessile dome-shaped hairs on the upper surface [3]
2. Leaf blades not fleshy, scabridulous to scabrous on the upper surface [4]
3. Perennial, with long thick roots; stems 70-160 cm long; pedicels 5-25 mm long; corolla 25-35 mm long, the lobes 6-14 mm long; styles 15-28 mm long … A. linifolia
3. Annual, mostly with short weak roots; stems 5-75 cm long; pedicels 2.5-11 mm long; corolla 7.5-21 mm long, the lobes 2.5-6 mm long; styles 6-13 mm long … A. maritima var. grandiflora
4. Pedicels 6–25 mm; upper lobes of corolla projected over distal anthers, throats glabrous within, across bases and sinus of upper lobes … A. tenuifolia
4. Pedicels 0.5–8 mm; upper lobes of corolla spreading, erect, or reflexed-spreading, rarely projected distal to corolla mouth, throats villous within, across bases and sinus of upper lobes [5]
5. Leaf blades filiform, 0.2–0.8 mm wide; calyx lobes deltate-subulate, 0.2–1 mm long; inflorescences racemiform, with pseudoterminal flowers … A. plukenetii
5. Leaf blades mostly linear, linear-filiform, linear-lanceolate, linear-elliptic, to elliptic, 0.4–5 mm wide; calyx lobes triangular, triangular-subulate, triangular-lanceolate, to lanceolate, 0.6–5 mm long; inflorescences racemes [6]
6. Stems moderately to often copiously scabrous or scabridulous on faces and angles; axillary fascicles of leaves often well developed, shorter than or equal to subtending leaves [7]

6. Stems glabrous, glabrate, or scabridulous to sparsely scabrous; axillary fascicles of leaves absent or shorter than subtending leaves [9]
7. Stems 20–40(50) cm long; leaf blades 10–15(20) mm long; corollas 12–14 mm, the lobes 3–5 mm long; styles 4–7.7 mm long, included or slightly exserted … A. georgiana
7. Stems (10)50–200 cm long; leaf blades (10)15–40(50) mm long; corollas 22–36 mm long, the lobes 5–12 mm long; styles 14–22 mm long, strongly exserted [8]
8. Stem usually densely scabrous; axillary fascicles abundantly developed, usually subequal to the subtending leaves; pedicels 3-6 mm long; calyx lobes 0.5-2 mm long … A. fasciculata var. fasciculata
8. Stem mostly scabrellous; axillary fascicles slightly to moderately developed, shorter to subequal to the subtending leaves; pedicels 4-9 mm long; calyx lobes 1-4 mm long … A. fasciculata var. peninsularis
9. Branches ascending, slightly quadrangular-ridged distally; leaf blades linear to linear-filiform, 0.5–1.4 mm wide; calyx lobes triangular-subulate, keeled; seeds black … A. harperi
9. Branches ascending, spreading, or arching, quadrangular-ridged or winged distally; leaf blades narrowly linear, linear, to linear-lanceolate, 0.5–5 mm wide; calyx lobes triangular, lanceolate, or triangular-subulate, not keeled; seeds dark brown … A. purpurea
10. Plant not appearing leafy, leaves relatively sparse; leaves slightly divergent or appressed to strongly ascending, blades subulate to narrowly triangular, 0.5–3 mm long [11]
10. Plant leafy, leaves numerous; leaves erect, erect-ascending, ascending, spreading-ascending, recurved, spreading, arching, or reflexed, rarely appressed or ascending-appressed, blades subulate, filiform, linear, linear-filiform, linear-spatulate, linear-elliptic, linear-lanceolate, elliptic, spatulate, or lanceolate, (1)4–70 mm long [12]
11. Branches stiffly ascending, quadrangular; inflorescences racemes, sometimes with 1–3 mm, floriferous axillary branches; pedicels 1–3(4) mm; corolla throats pilose externally … A. aphylla
11. Branches widely and laxly spreading, nearly terete; inflorescences paniculate with solitary flowers; pedicels 3–10(12) mm; corolla throats glabrous externally … A. filicaulis
12. Lower corolla lobes pilose externally [13]
12. Lower corolla lobes glabrous externally (margins can be ciliolate) [16]
13. Branches and leaves opposite to alternate, alternate distally, blades fleshy, with axillary fascicles equal to or longer than subtending leaves … A. filifolia
13. Branches and leaves opposite, blades not fleshy, with axillary fascicles absent or shorter than subtending leaves [14]
14. Leaf blades narrowly linear to linear-lanceolate; upper lobes of corolla projected over distal anthers, throats glabrous within, across bases and sinus of adaxial lobes; capsules globular; seeds tan to brown … A. tenuifolia
14. Leaf blades filiform to narrowly linear; upper lobes of corolla recurved, reflexed, or reflexed-spreading, throats villous within, across bases and sinus of adaxial lobes; capsules elliptic-ovate or globular-ovoid; seeds black or yellowish tan [15]
15. Inflorescences racemiform or racemose-paniculate, flowers 1 per node; capsules globular-ovoid … A. laxa
15. Inflorescences racemes, sometimes interrupted by short floriferous branches, flowers 2 per node; capsules elliptic-ovate … A. setacea
16. Axillary fascicles usually half or more the length of subtending leaves, sometimes absent; pedicels scabrous … A. pulchella
16. Axillary fascicles absent or shorter than subtending leaves; pedicels glabrous or scabridulous [17]
17. Corolla throats glabrous externally, sometimes pilose externally proximal to sinuses … A. divaricata

17. Corolla throats pilose externally [18]
18. Proximal branches arching upward, others spreading-ascending to laxly and widely spreading, subterete to quadrangular-ridged; leaves spreading to spreading-ascending; corolla pink to rose, without 2 yellow lines and sometimes with dark-pink spots in lower throat, (8–) 10–12 mm long; capsules obovoid-oblong … A. flexicaulis
18. Branches stiffly arching-ascending to erect-ascending, quadrangular; leaves erect to erect-ascending; corolla pink, with 2 yellow lines and pink spots pale or absent in lower throat, 12–15 (17) mm long; capsules globular to oblong … A. obtusifolia

Agalinis aphylla (Nutt.) Raf. {AFP} —
Agalinis divaricata (Chapm.)Pennell {AFP} —
Agalinis fasciculata (Elliott)Raf. var. ***fasciculata*** {AFP} — Throughout.
•***Agalinis fasciculata*** (Elliott)Raf. var. ***peninsularis*** Pennell — Southern peninsula.
Agalinis filicaulis (Benth.)Pennell {AFP} —
Agalinis filifolia (Nutt.)Raf. {AFP} —
•***Agalinis flexicaulis*** Hays {AFP} —
Agalinis georgiana (C.L.Boynton)Pennell {AFP} — SE.
Agalinis harperi Pennell {AFP} —
Agalinis laxa Pennell {AFP} —
Agalinis linifolia (Nutt.)Britton {AFP} —
Agalinis maritima (Raf.)Raf. var. ***grandiflora*** (Benth.)Pennell {AFP} —
Agalinis obtusifolia Raf. {AFP} —
Agalinis plukenetii (Elliott) Raf. {AFP} —
Agalinis pulchella Pennell {AFP} —
Agalinis purpurea (L.)Pennell {AFP} —
Agalinis setacea (J.F.Gmel.)Raf. {AFP} —
Agalinis tenuifolia (Vahl)Raf. {AFP} —

Aphyllon
1. Flower on long erect pedicels (20-120 mm long) arising from the ground … A. uniflorum
1. Flowers several on aerial inflorescence, the pedicel 0-15 mm long … A. ludovicianum
… A. ludovicianum

****Aphyllon ludovicianum*** (Nutt.)A.Gray {AFP} —
Aphyllon uniflorum (L.) Torr. & A.Gray ex A.Gray {AFP} —

Aureolaria
1. Plant glabrous … A. flava subsp. reticulata
1. Plant pubescent [2]
2. Pubescence eglandular; leaf blade with few lobes basally or entire; calyx lobes entire … A. virginica
2. Pubescence, especially distally, glandular; leaf blade pinnatifid to pinnately lobed; calyx lobes toothed or pinnatifid [3]
3. Stem virgately branched; distal leaves appressed-ascending and strongly reduced; corolla 38-45 mm long … A. pectinata subsp. floridana
3. Stem stiffly branched; leaves spreading and gradually reduced distally; corolla 30-40 mm long … A. pectinata subsp. pectinata

Aureolaria flava (L.)Farw. var. ***reticulata*** (Raf.)Pennell {AFP} —
Aureolaria pectinata (Nutt.)Pennell subsp. ***floridana*** Pennell — Panhandle thru central peninsula, also Collier Co. (southern GA).
Aureolaria pectinata (Nutt.)Pennell subsp. ***pectinata*** {AFP} — Panhandle (SE US).
Aureolaria virginica (L.)Pennell {AFP} —

Buchnera

1. Larger leaf blades narrowly ovate to lanceolate, strongly 3-veined (major veins 3, minor veins (0)2), apex acute, margins irregularly dentate, teeth 2-3 mm long; calyx 6-8 mm long; corolla lobes 5-8 mm long; fruit 6-8 mm long … B. americana
1. Larger leaf blades narrowly oblanceolate, lanceolate, or broadly linear, 1-veined to obscurely 3-veined (major veins 1, minor veins (0)2), apex usually obtuse or rounded, margins entire or crenate, teeth 0.5-1.5 mm long; calyx 4.5-5.5 mm; corolla lobes 2-5 mm long; fruit ca. 4.5-6.5 mm long … B. floridana

Buchnera americana L. {AFP} — Walton Co. See Pennell (1935).
Buchnera floridana Gandoger — Throughout. This putative species subtly differs from *B. americana*, and infraspecific status may be desirable. Some have considered the two synonymous (Musselman & Mann 1977). The morphological differences were primarily developed by Pennell (1935: 476-481), who wrote "Seemingly transitional inland to [*B.*] *americana*, and in southern Florida and the West Indies to *B. elongata*." Radford et al. (1968: 954) wrote "meeting and intergrading in our area with the coastal *B. floridana*, the differences between the two appearing to be more a matter of descriptive semantics than biological fact." *Buchnera longifolia* Kunth apparently does not occur in south Florida (Philcox 1965; Sorrie in FNA, vol. 17), plants of which have been incorrectly referred to as *B. elongata* Sw., nom. illeg. (=*B. palustris* (Aubl.) Spreng.) (Pennell 1935; Long & Lakela 1972).

Castilleja

****Castilleja indivisa*** Engelm. {AFP} —

Conopholis

Conopholis americana (L.)Wallr. {AFP} —

Epifagus

Epifagus virginiana (L.)W.P.C.Barton {AFP} —

Macranthera

Macranthera flammea (W.Bartram)Pennell {AFP} — SE.

Orobanche

****Orobanche minor*** Sm. {AFP} —

Pedicularis

Pedicularis canadensis L. {AFP} —

Schwalbea

Schwalbea americana L. {AFP} — FE. SE. Very rare.

Seymeria
1. Leaf segments linear-filiform, mostly <0.5 mm wide; calyx and fruit glabrous to glabrate; parasitizing Pinus ... S. cassioides
1. Leaf segments linear-lanceolate, mostly >0.5 mm wide; parasitizing a variety of taxa, probably not Pinus [2]
2. Stems pubescent to villous; capsules densely tomentose ... S. pectinata subsp. pectinata
2. Stems pubescent to puberulous; capsules glabrescent to pubescent ... S. pectinata subsp. peninsularis

Seymeria cassioides (J.F.Gmel.)S.F.Blake {AFP} —
Seymeria pectinata Pursh {AFP} —

Striga
****Striga gesnerioides*** (Willd.)Vatke ex Engl. {AFP} — Root parasite.

PAULOWNIACEAE
Paulownia
****Paulownia tomentosa*** (Thunb.)Siebold & Zucc. ex Steud. {AFP} —

TETRACHONDRACEAE
Polypremum
Polypremum procumbens L. {AFP} —

VERBENACEAE
1. Woody vines; corolla shorter than the calyx; calyx lobes wing-like in fruit ... Petrea volubilis
1. Trees, shrubs, or herbs; corolla usually longer than the calyx; calyx lobes not wing-like in fruit [2]
2. Flowers and fruits embedded in a fleshy rachis ... Stachytarpheta
2. Flowers and fruits not embedded in a fleshy rachis [3]
3. Inflorescence an elongate raceme with visible internodes [4]
3. Inflorescence a dense spike, the internodes not apparent [6]
4. Herb ... Priva lappulacea
4. Shrub or tree [5]
5. Petioles often orangeish; leaf blade coriaceous, 5-14 cm long; corolla white, 2-3 mm wide; fruit reddish, orange, brown, to dark purple ... Citharexylum spinosum
5. Petioles greenish or indistinct; leaf blade chartaceous, 1.5-5 cm long; corolla pale to dark purple; fruit yellow to orange ... Duranta erecta
6. Corollas yellow, orange, pink, or purplish; fruit a drupe ... Lantana
6. Corollas white, pink, to purple; fruit a dry schizocarp [7]
7. Inflorescence axillary [8]
7. Inflorescence terminal [9]
8. Shrub or subshrubs, stems rather woody, sometimes trailing and re-rooting; hairs simple ... Lippia
8. Trailing or lax herbs, stems rooting; hairs T-shaped or Y-shaped ... Phyla
9. Corolla salverform; styles >6 mm long; seeds with a basal extension of the mericarp ... Glandularia

9. Corolla funnelform; styles to 3 mm long; seeds without a basal extension of the mericarp … Verbena

Aloysia
^*Aloysia virgata* (Ruiz & Pav.)Pers. —

Citharexylum
Citharexylum spinosum L. {AFP} —

Duranta
1. Leaf blades mostly ovate to elliptic, serrate from about mid-blade with 4-9 teeth per side, acute at the tip … D. erect
1. Leaf blades mostly obovate, elliptic, to ovate, entire or shallowly serrate with 1-5 shallow teeth above mid-blade, rounded to acute at the tip … D. repens

^*Duranta erecta* L. {AFP} — Widely cultivated. Sparingly naturalized.
Duranta repens L. — Miami-Dade & Monroe Co. keys; extirpated. Known only from collections by Blodgett (Key West), Rugel, Chapman, and Small (Fuchs or "Sykes" Hammock). Clearly was once native. Morphology of old, native collections match the type of *D. repens* from Jamaica. Traditionally, *D. repens* and *D. erecta* are synonymous. It is not proposed here that they are clearly distinct species, but no infraspecific taxonomy is available to acknowledge the distinctive native forms apart from the form commonly cultivated.

Glandularia: Brazilian species revised by O'Leary & Thode (2016).
1. Leaves deeply dissected, the leaf blade and segments linear and 0.5-2 mm wide; nutlet commisure subequal to the nutlet width, strongly angular at top [2]
1. Leaves toothed, lobate, to dissected, the leaf blade broad, if dissected the segments 3-12 mm wide and oblong, lanceolate, or ovate [3]
2. Calyx 9-10 mm long, teeth aristate; staminate glandular appendages shorter than corolla mouth; style 8.5-9 mm long; the 4 individual units of the fruit (cluse) each ~3 mm long, apex rounded … G. aristigera
2. Calyx 8-9 mm long, teeth acute; staminate glandular appendages longer than corolla mouth; style ~11 mm long; the 4 individual units of the fruit (cluse) each 4-6 mm long, apex rostrate … G. tenera
3. Plant densely pilose … G. ×hybrida
3. Plant glabrate, strigose, to moderately hispid [4]
4. Calyx eglandular, strigose … G. tampensis
4. Calyx glandular [5]
5. Leaves strigose, not succulent … G. canadensis
5. Leaves glabrous to glabrate, somewhat succulent … G. maritima

****Glandularia aristigera*** (S.Moore)Tronc. {AFP} —
Glandularia canadensis (L.)Small {AFP} —
^*Glandularia ×hybrida* (Grönland & Rümpler)G.L.Nesom & Pruski (*peruviana* × *phlogiflora* × *platensis* × *tweediana*) {AFP} —
•***Glandularia maritima*** (Small)Small {AFP} — SE.
•***Glandularia tampensis*** (Nash)Small {AFP} — SE.
****Glandularia tenera*** (Spreng.)Cabrera —

Lantana: A number of cultivars are on the market. Some ('Gold', 'New Gold', 'Gold Mound') may resemble the native species (*L. depressa, L. sandersii*) and could be partly derived from them. Usually these cultivars have darker, mostly plane leaf blades, while those of the native species are generally lighter green and often involute. The cultivars may also be functionally sterile or nearly so (Czarnecki II 2011).

1. Inflorescence bracts ovate to lanceolate [2]
1. Inflorescence bracts linear to narrowly lanceolate [4]
2. Leaf blade margin coarsely crenate to dentate; corolla tube 8-10 mm long … L. montevidensis
2. Leaf blade margin finely crenate, finely serrate, or subentire; corolla tube 4-6 mm long [3]
3. Leaf apex acute … L. canescens
3. Leaf apex rounded … L. involucrata
4. Stems without prickles; leaf blades generally light green (when fresh), often involute, (1.5)1.7-2.5(3) times longer than wide, corollas fairly uniformly colored within each inflorescence, yellow to yellow-orange from bud, opening, and to the older flowers, occasionally the outermost ring of flowers turning a dark orangeish [5]
4. Stems often with prickles, the prickles sometimes weak and sparse, sometimes prickles absent; leaf blades generally dark green (when fresh), mostly plane, 1–1.7(1.9) times longer than wide; corollas a mixture of contrasting colors within each inflorescence, differently colored from bud, opening, and/or to the older flowers, rarely the corollas nearly uniform in color, colors of the corolla may include various combinations and intergradations of white, yellow, orange, pink, to reddish orange [7]
5. Stems prostrate to decumbent, 0.1-0.3(0.6) m tall; leaf blades 1-3(4.5) cm long, mostly 3-10 teeth per side; fruit mostly 3-4 mm wide … L. depressa
5. Stems mostly erect to ascending, sometimes spreading or partly clambering, 0.5-2(3) m tall; leaf blades 3-6.5 cm long, mostly 8-15 teeth per side; fruit mostly 4–5 mm wide [6]
6. Young stems glabrate, pubescent to moderately antrorsely pilose, the trichomes to 1.0(1.3) mm long … L. sandersii var. sandersii
6. Young stems densely spreading to antrorsely pilose, the trichomes to 2.0 mm long … L. sandersii var. sanibelensis
7. Larger blades usually >4 cm wide, mostly 1–1.5 times longer than wide, the base usually cordate, truncate, to subacute, usually shortly and narrowly cuneate into the petiole, usually not nigrescent upon drying … L. strigocamara
7. Larger blades usually <4 cm wide, mostly 1.4–1.7 times longer than wide, the base acute to subtruncate, often gradually tapering from the outer blade base margin to the petiole, younger ones sometimes nigrescent upon drying [8]
8. Shrubs mostly >60 cm tall; stems ascending to erect; larger leaf blades (often more proximal on the stems) usually >2.9 cm long, >1.8 cm wide; peninsular Florida … L. ×floridana
8. Shrubs mostly <1 m tall; stems spreading to ascending; larger leaf blades (often more proximal on the stems) mostly <4 cm long, <2.2 cm wide; Miami-Dade County … L. ×strigodepressa

Lantana canescens Kunth {AFP} — SE.
- ***Lantana depressa*** Small {AFP} — SE. Miami-Dade Co.; pine rocklands. Previously treated as a variety (var. *depressa*), but it is much more distinct than var. *sanibelensis* (retained as a variety).
- ***Lantana ×floridana*** Raf. (*sandersii* × *strigocamara*) {AFP} —

Lantana involucrata L. {AFP} —

*__Lantana montevidensis__ (Spreng.)Briq. {AFP} —
__Lantana ×rubra__ Berland. (*strigocamara* × *urticoides*) {AFP} —
__Lantana sandersii__ A.R. Franck & Gann var. __sandersii__ {AFP} — SE. Peninsula (coastal GA, SC). Apparently extirpated from Osceola, Polk cos.
•__Lantana sandersii__ A.R. Franck & Gann var. __sanibelensis__ (R.W. Sanders)A.R. Franck & Gann {AFP} — SE. SW coast; barrier islands. Scarcely distinguishable from var. *sandersii*.
*__Lantana strigocamara__ R.W. Sanders {AFP} — Throughout; primarily disturbed areas. *Lantana camara* (native to the Neotropics, not known from Florida) has been widely, haplessly misapplied to this taxon.
•__Lantana ×strigodepressa__ A.R.Franck (*depressa* × *strigocamara*) —

Lippia

1. Erect shrub; petiole more or less distinct; leaf blades ovate-elliptic with crenate-dentate margins; peduncle 4-12 mm long … L. alba
1. Decumbent to short-erect shrub; petiole indistinct; leaf blades linear-lanceolate with sharply acute teeth, the petiole indistinct and grading into the blade; peduncle 20-70 mm long … L. stoechadifolia

^*Lippia alba* (Mill.)N.E.Br. ex Britton & P.Wilson {AFP} —
__Lippia stoechadifolia__ (L.)Kunth {AFP} — SE.

Nashia

^*Nashia inaguensis* Millsp. {AFP} —

Petrea

^*Petrea volubilis* L. {AFP} —

Phyla: Cardoso et al. (2025) treat *P. fruticosa* and *P. lanceolata* as synonyms of *P. nodiflora*, departing from an earlier revision (O'Leary & Múlgura 2012). Undoubtedly, taxonomic concepts are difficult in the pantropical group, but, in Florida at least, recognizing three taxa is worthwhile.

1. Leaf blades ovate to rhombic-ovate, the lower surface with the secondary veins prominent throughout, 6-8 per side, the basal pair of veins often branched and at a more acute angle than the upper veins, the margins sharply serrate with 8-10 teeth per side … P. fruticosa
1. Leaf blades obovate, spatulate, to elliptic, the lower surface with the secondary veins obscure or only partly prominent and usually not prominent to the margin, 3-5 veins per side, the basal pair of veins usually unbranched or sparingly branched and not much different from the other veins, the margins entire to rounded-serrate with 3-8 teeth per side [2]
2. Leaf blades elliptic-lanceolate to rhombic-elliptic, 2.5-3.5 times longer than wide, usually toothed from below the middle or at widest point to the tip … P. lanceolata
2. Leaf blades mostly obovate, rhombic-ovate, spatulate, to elliptic-obovate, 1.5-3 times longer than wide, usually toothed at the middle or at widest point to the tip … P. nodiflora

*__Phyla fruticosa__ (Mill.)K.Kenn. ex Wunderlin & B.F.Hansen {AFP} —
__Phyla lanceolata__ (Michx.)Greene {AFP} —
__Phyla nodiflora__ (L.)Greene {AFP} —

Priva
Priva lappulacea (L.)Pers. {AFP} —

Stachytarpheta: A very difficult group to circumscribe into discrete taxa (see Moldenke 1983 in Flora of Ceylon; Munir 1992; Verdcourt 1992 in Flora of Tropical East Africa; Rueda 2012 in Flora Mesoamericana).

1. Young stems, leaf blade lower surface, inflorescence rachis, and calyx sparsely pilose, strigose, to villosulous or tomentose; inflorescence ~6-10 mm wide; corolla lobes pink, red, blue, to violet [2]
1. Young stems, leaf blade lower surface, inflorescence rachis, and calyx glabrous, glabrate, sparsely puberulent, minutely pilosulous, or sparsely pubescent (stem nodes, leaf blade veins, and calyx apex often the hairiest parts); inflorescence 2-5 mm wide (to 7 mm in fruit); corolla lobes blue, violet, to white [6]
2. Plants to 1.5 m tall; young stems, leaf blade lower surface, inflorescence rachis, and calyx glabrate, finely pubescent, sparsely pilose to strigose; rarely setting viable seed [3]
2. Plants to 2 m tall; young stems, leaf blade lower surface, inflorescence rachis, and calyx villosulous or tomentose; normally setting viable seed [4]
3. Inflorescence ~10 mm wide post-anthesis, rachis 3-4.5 mm wide; floral bracts ciliate on the margins, otherwise glabrous; calyx with 4 equal teeth … S. ×adulterina
3. Inflorescence <10 mm wide post-anthesis, rachis 2.5-3(3.5) mm wide; floral bract lower surface sparsely pubescent to glabrate; calyx teeth unequal … S. ×trimenii
4. Leaf blade not strongly rugose, the tertiary and reticulate veins not impressed or only slightly so on the upper surface (only the secondary veins conspicuously impressed); corolla lobes dark purple or dark violet … S. frantzii
4. Leaf blade strongly rugose, with the tertiary and reticulate veins impressed on the upper surface; corolla lobes pink to red, or blue to violet [5]
5. Corolla lobes pink to red … S. mutabilis var. mutabilis
5. Corolla lobes blue to violet … S. mutabilis var. violacea
6. Young stems and peduncles minutely pilosulous to glabrate; inflorescence rachis 1-4 mm wide; corolla lobes dark lavender-blue, dark purple-blue, or white [7]
6. Young stems and peduncles glabrous (nodes maybe pilosulous); inflorescence rachis 1-7 mm wide; corolla lobes light blue [8]
7. Leaf blade not rugose, the tertiary and reticulate veins not impressed or only slightly so on the upper surface (only the secondary veins conspicuously impressed), the blade teeth slightly ascending; furrows from the immersed flowers conspicuously narrower than the rachis; pollen seldom fully formed … S. ×intercedens
7. Leaf blade rugose, with the tertiary and reticulate veins impressed on the upper surface, the blade teeth mostly divergent; furrows from the immersed flowers nearly as wide as the rachis; pollen normally fully formed … S. urticifolia
8. Plant erect; leaf blade strongly rugose, with the tertiary and reticulate veins impressed on the upper surface; inflorescence rachis somewhat flexuous, 1-3 mm wide; floral bracts 3-5 ×1-2 mm, ovate-lanceolate, scariously margined mostly above the middle; furrows from the immersed flowers nearly as wide as the rachis; calyx with an adaxial tooth … S. cayennensis
8. Plant decumbent to erect; leaf blade not strongly rugose, the tertiary and reticulate veins not impressed or only slightly so on the upper surface (only the secondary veins conspicuously impressed); inflorescence rachis relatively stiff, 2-7 mm wide; floral bracts 4-8 ×1.5-2.5 mm,

lanceolate-subulate, scariously margined below the middle; furrows from the immersed flowers narrower than the rachis; calyx without an adaxial tooth … S. jamaicensis

^*Stachytarpheta* ×*adulterina* Urb. & Ekm. (*jamaicensis* × *mutabilis*) —
*__*Stachytarpheta cayennensis*__ (Rich.)Vahl {AFP} —
^*Stachytarpheta frantzii* Pol. —
^*Stachytarpheta* ×*intercedens* Danser (*jamaicensis* × *urticifolia*) {AFP} — Erroneously proposed as a hybrid of *S. indica* and *S. jamaicensis* (Moldenke 1958).
__*Stachytarpheta jamaicensis*__ (L.)Vahl {AFP} —
^*Stachytarpheta mutabilis* (Jacq.)Vahl {AFP} —
^*Stachytarpheta* ×*trimenii* Rech. (*mutabilis* × *urticifolia*) —
^*Stachytarpheta urticifolia* Sims —

Tectona

^*Tectona grandis* L.f. —

Verbena

1. Spikes with flowers or fruits overlapping and mostly obscuring the rachis [2]
1. Spikes with the flowers or fruits scarcely or not overlapping, the rachis mostly plainly visible [7]
2. Plant procumbent to decumbent; leaf blades pinnately lobed or dissected; subtending floral bracts 3 times as long or longer than the calyx … V. bracteata
2. Plant erect; leaf blades coarsely serrate; subtending floral bracts subequaling the calyx [3]
3. Leaf blade base cuneate to subtly auriculate-clasping, the blade base subequal to narrower than the stem [4]
3. Leaf blade base auriculate-clasping, the blade base distinctly wider than the stem [5]
4. Central spikes sessile to subsessile, spikes rather congested in the inflorescence, 3–5 mm wide, fruits densely overlapping … V. brasiliensis
4. Central spikes pedunculate, spikes mostly spread out in the inflorescence, 2–3 mm wide, with fruits usually becoming remote at least in the proximal portion … V. montevidensis
5. Corolla tube 2.5–4 mm, subequaling the calyx; stems, peduncles, and calyces eglandular … V. incompta
5. Corolla tube 4–9 mm, 1.5–5 mm longer than the calyx; distal stems, peduncles, and calyces stipitate-glandular [6]
6. Corolla tube 4–7 mm long, 1.5–2 mm longer than the calyces … V. bonariensis
6. Corolla tube 6-9 mm long, ca. 2 times longer than the calyx … V. rigida
7. Leaf blades dissected, lobed, entire, or with less than 10 teeth along the margin of one side of most leaves [8]
7. Leaf blades regularly toothed, with more than 12 teeth along the margin of one side of most leaves [10]
8. Basal leaf blades toothed; basal flowers or fruits nearly overlapping … V. simplex
8. Basal leaf blades dissected or lobed; basal flowers widely spaced [9]
9. Basal and proximal leaves persistent at flowering time, the middle and distal ones reduced in number and size; fruit ca. 2 times as long as wide … V. halei
9. Basal and proximal leaves deciduous at flowering time, the cauline ones evenly distributed and relatively even in size; fruit slightly longer than wide … V. officinalis
10. Leaves sessile, the blade base cuneate, the petiole indistinct … V. carnea
10. Leaves petiolate, the base rounded and abruptly tapered to a winged petiole [11]

11. Sepals much exceeding the fruit, the lobes connivent (converging over the fruit and producing a beak) … V. scabra
11. Sepals subequal to the fruit, not connivent … V. urticifolia

*****Verbena bonariensis*** L. {AFP} —
Verbena bracteata Lag. & Rodr. {AFP} —
*****Verbena brasiliensis*** Vell. {AFP} —
Verbena carnea Medik. {AFP} —
Verbena halei Small {AFP} —
*****Verbena incompta*** P.W.Michael {AFP} —
*****Verbena montevidensis*** Spreng. {AFP} —
Verbena officinalis L. {AFP} —
*****Verbena rigida*** Spreng. {AFP} —
Verbena scabra Vahl {AFP} —
Verbena simplex Lehm. {AFP} —
Verbena urticifolia L. {AFP} —

LENTIBULARIACEAE
1. Plant with evident, green, expanded leaf blades in a basal rosette, without bladder-like traps; calyx 5-lobed … Pinguicula
1. Plant without evident leaf blades or the leaves filiform or linear, sometimes finely dissected, often with bladder-like traps, the leaves typically immersed in the water or soil; calyx 2-lobed … Utricularia

Pinguicula
1. Basal leaf rosette (0.8)1-4(6) cm wide; corolla (4)8-18(22) mm wide, the hairy palate 1.5-2(2.5) mm long, included or barely exserted from the tube … P. pumila
1. Basal leaf rosette 4-15 cm wide; corolla 18-35 mm wide, the hairy palate (1.5)3-10 mm long, conspicuously exserted from the tube [2]
2. Corolla yellow, rarely white (veins in tube and spur reddish to purplish), lobe … P. lutea
2. Corolla violet, pink, blue, to white, sometimes darker or yellow in the throat or tube [3]
3. Scape non-glandular short-villous proximally for 1-4(5) cm, then gradually becoming sparsely to densely glandular distally; corolla lobes with dark blue veins throughout; palate white to greenish … P. caerulea
3. Scape glabrous or sparsely to glandular-pubescent proximally, sparsely to densely glandular-pubescent distally; corolla lobes with obscure veins (sometimes dark and conspicuous only at the base of the lobe); palate yellow to brownish [4]
4. Leaves usually reddish when fresh, especially on the margins; corolla lobe ca. 2 times longer than wide, the sinus ⅓-½ the lobe length … P. planifolia
4. Leaves green when fresh; corolla lobe 0.9-1.4 times longer than wide, the sinus to ⅓ the lobe length [5]
5. Plants often singular or few overlapping together; corolla lobes longer than wide, with a ring of pink to dark purple at the base of the lobes, the tube similarly colored but sometimes paler; … P. ionantha
5. Plants often in dense overlapping patches, forming new plants from the leaf tips (gemmiparous); corolla lobes wider than or subequal to the length, with a ring of white at the base of the lobes (sometimes the lobes also white), yellow in the tube … P. primuliflora

Pinguicula caerulea Walter {AFP} — ST.
•***Pinguicula ionantha*** R.K.Godfrey {AFP} — FT. SE.
Pinguicula lutea Walter {AFP} — ST.
Pinguicula planifolia Chapm. {AFP} — ST.
Pinguicula primuliflora C.E.Wood & R.K.Godfrey {AFP} — SE.
Pinguicula pumila Michx. {AFP} —

Utricularia

1. Plant with a whorl of elongated floats at the base of the inflorescence, these usually at the water surface [2]
1. Plant without elongated floats [3]
2. Inflorescence with (4)8-14(17) flowers; bract subtending pedicel 3-5 mm long, longer than wide; pedicels recurving in fruit; corolla spur notched at tip … U. inflata
2. Inflorescence with (1)3-5(7) flowers; bract subtending pedicel 1-2 mm long, about as wide as long; pedicels ascending in fruit (rarely recurved); corolla spur lacking a notch … U. radiata
3. Corolla predominantly pink to purple or white, sometimes some lobes having yellow spots at the base [4]
3. Corolla predominantly yellow to greenish yellow, sometimes some lobes with reddish areas [6]
4. Inflorescence scape poorly developed, flowers appearing solitary emerging from the water; corolla white, 2-4 mm wide or long … U. olivacea
4. Inflorescence scape well developed and apparent; corolla pink, purple, or white, 5-20 mm wide or long [5]
5. Plant usually floating; corolla upper lip (opposite the spur) suborbicular, about as wide as the lower lip (part with yellowish spot at base) … U. purpurea
5. Plant usually terrestrial; corolla upper lip (opposite the spur) oblong-obovate, much narrower than the lower lip (part with yellowish spot at base) … U. resupinata
6. Bracts and calyx lobes margins fimbriate … U. simulans
6. Bracts and calyx lobes margins entire [7]
7. Pedicel subtended by 1 bract and 2 bracteoles; plant terrestrial [8]
7. Pedicel subtended 1 bracts, without bracteoles; plant terrestrial to aquatic [9]
8. Bladders 1-1.2 mm wide; calyx 1.5-3 mm long; fruit 1.5-2.5 mm long or wide … U. trinervia
8. Bladders 0.3-0.8 mm wide; calyx (2.5)3-5(7) mm long; fruit 2.5-4.5 mm long or wide [9]
9. Inflorescence scape 0.5-1.5 mm wide near the base; flowers congested and overlapping at apex; spur 7-14 mm long … U. cornuta
9. Inflorescence scape 0.4-1 mm wide near the base, greenish purple to purple; flowers spaced out, at least those towards the base not overlapping; spur 4-8(10) mm long … U. juncea
10. Plant floating; inflorescence of (3)5-20 flowers, the scape 7-60 cm long, 1-3 mm wide; bracts subtending pedicel 1.8-4 mm long [11]
10. Plant floating or terrestrial; inflorescence of 1-4(8) flowers, the scape 0.3-18 cm long, 0.5-1 mm wide; bracts subtending pedicel 0.5-2.5 mm long [12]
11. Stolons dimorphic, some whitish, bearing bladders (often buried in substrate), others green, bearing dissected leaves with no or 1--few bladders (fewer bladders than on non-green stolons); scape often flexuous; pedicel spreading to ascending in fruit … U. floridana
11. Stolons monomorphic, green, leaves bearing bladders; scape usually not flexuous; pedicel recurving in fruit … U. foliosa
12. Bract subtending pedicel 1.2-2.5 mm long; pedicel 1-3 cm long; corollas pale yellow to greenish yellow, with conspicuous veins, lower lip with red streaks at base, continuing into

spur, palate usually red-streaked; spur usually with shallow notch at apex, sometimes obscurely 3-fid; stolons radiating from base of inflorescence, whitish, bearing rhizoids … U. striata
12. Bract subtending pedicel 0.5-1.5 mm long; pedicel 0.2-1 cm long; corollas yellow, without conspicuous veins (palate red-streaked in U. gibba); spur not notched at apex (sometimes slightly denticulate in U. subulata); base of inflorescence not bearing radiating stolons [13]
13. Bract basifixed; calyx 2-4 mm long; upper corolla lip 3-lobed (sometimes obscurely so) and nearly subequal in size to the 3-lobed to unlobed lower lip … U. gibba
13. Bract peltate; calyx 1-2(2.5) mm long; upper corolla lip unlobed and distinctly smaller than the 3-lobed lower lip … U. subulata

Utricularia cornuta Michx. {AFP} —
Utricularia floridana Nash {AFP} —
Utricularia foliosa L. {AFP} —
Utricularia gibba L. {AFP} —
Utricularia inflata Walter {AFP} —
Utricularia juncea Vahl {AFP} —
Utricularia olivacea C.Wright ex Griseb. {AFP} —
Utricularia purpurea Walter {AFP} —
Utricularia radiata Small {AFP} —
Utricularia resupinata B.D.Greene ex Bigel. {AFP} —
Utricularia simulans Pilg. {AFP} —
Utricularia striata Leconte ex Torr. {AFP} —
Utricularia subulata L. {AFP} —
[X]***Utricularia trinervia*** Benj. {AFP} — Collier & Lee cos. (Belize, Mexico, South America). Wet pinelands. Previously known as *U. amethystina* (current concept restricted to South America), in Florida, plants were noted to have a pale yellow corolla (Brass 15873, FSU), suggestive of *U. trinervia* (Guedes et al. 2021). The bracteoles of this species are fused to the bract near the base and the capsule dehisces by dorsi-ventral slits (Costa et al. 2016).

BIGNONIACEAE

1. Leaves simple [2]
1. Leaves compound (sometimes simple or 1-foliolate on juvenile growth) [4]
2. Leaves opposite; stamens 2, staminodes 3; fruit a linear capsule … Catalpa bignonioides
2. Leaves alternate or pseudowhorled; stamens 4, staminodes 1; fruit an enlarged berry or pepo [3]
3. Leaves alternate, the blade mostly obovate-elliptic; flowers borne along leafy stems … Amphitecna latifolia
3. Leaves pseudowhorled on short shoots of mature branches, the blade mostly narrowly oblanceolate; flowers often on leafless older stems or trunks … Crescentia cujete
4. Leaves palmately compound or 2-foliolate and often with a terminal tendril (sometimes simple or 1-foliolate on juvenile growth) [5]
4. Leaves pinnately compound [10]
5. Trees; leaves palmately compound with 3-9 leaflets [6]
5. Vines; leaves 2-foliolate and often with a terminal tendril (sometimes simple or 1-foliolate on juvenile growth) [7]
6. Indumentum of simple, dendroid, or stellate hairs … Handroanthus
6. Indumentum of lepidote scales … Tabebuia
7. Plant tomentose, lepidote; fruit echinate … Amphilophium crucigerum
7. Plant glabrous, glabrate, to puberulent; fruit smooth or ridged [8]

8. Tendrils short, tri-partite, the tips thickened, curved and claw-like; corolla lobes yellow with darker lines in throat … Dolichandra unguis-cati
8. Tendrils elongate, simple or tri-partite or much-branched, the tips coiling and not claw-like and not thickened; corolla lobes orange, white, pinkish, or reddish [9]
9.Leaflets mostly elliptic-lanceolate to elliptic; corolla lobes white, pinkish, or reddish, lobes imbricate in bud; stamens included … Bignonia
9. Leaflets mostly ovate; corolla lobes pinkish orange to bright reddish orange, valvate in bud; stamens exserted … Pyrostegia venusta
10. Leaves ternately pinnate compound … Radermachera sinica
10. Leaves pinnate or bipinnately compound
11. Leaves bipinnately compound … Jacaranda mimosifolia
11. Leaves pinnately compound [12]
12. Trees; leaflets entire or toothed [13]
12. Vines or shrubs; leaflets toothed (at least some), rarely entire [14]
13. Leaflets toothed or entire; corolla white to pink or pink and white … Newbouldia laevis
13. Leaflets entire; corolla orange to reddish orange … Spathodea campanulata
14. Stems with adventitious roots; fruit fusiform, lignescent … Campsis radicans
14. Stems without adventitious roots; fruit linear, papery [15]
15. Calyx 14-22 mm long; corolla white to pink with darkened veins … Podranea ricasoliana
15. Calyx 3-8 mm long; corolla yellow or orange, sometimes with darkened veins [16]
16. Shrub; corolla yellow; stamens included, the anther thecae divaricate, attached only at tip of filament … Tecoma stans
16. Vine; corolla orange; stamens exserted, the anther thecae fused to the connective … Tecomaria capensis

Amphilophium
*****Amphilophium crucigerum*** (L.)L.G.Lohmann {AFP} —

Amphitecna
Amphitecna latifolia (Mill.)A.H.Gentry {AFP} — Miami-Dade Co. (also Neotropics). Known from the greater Brickell Hammock area; possibly transplanted (via J.K. Small?) to the hammock near the living quarters of the Deering Estate.

Bignonia
1. Leaflets often widest below the middle with a broadly rounded base; corolla lobes white to lavender or purple … B. aequinoctialis
1. Leaflets often widest near the middle with a somewhat auriculate base; corolla lobes pinkish orange, orange, to reddish orange … B. capreolata

*****Bignonia aequinoctialis*** L. {AFP} —
Bignonia capreolata L. {AFP} —

Campsis
Campsis radicans (L.)Seem. {AFP} —

Catalpa
Catalpa bignonioides Walter {AFP} —

Crescentia
^*Crescentia cujete* L. {AFP} —

Dolichandra
****Dolichandra unguis-cati*** (L.)L.G.Lohmann {AFP} — Spreads via seed and stolons.

Handroanthus : Popular in cultivation, with showy flowers, often when leafless. All can sparingly naturalize.

1. Stems and leaflet lower surface densely tomentose; corolla yellow [2]
1. Stems and leaflet lower surface often glabrate; corolla pink to purple [3]
2. Calyx, fruit, and pedicels tomentose with shorter stellate trichomes; corolla lobes usually drying with conspicuously darker venation and more or less concolorous with the tube … Handroanthus chrysanthus
2. Calyx, fruit, and pedicels villous with long trichomes; corolla lobes drying with inconspicuous venation and conspicuously lighter than tube … Handroanthus chrysotrichus
3. Leaflets of mature leaves regularly serrate; petiolules relatively long and slender, terminal petiolule subequal to leaflet width, the basal petiolules >1/2 as long as adjacent sub-basal petiolules; fruit mostly <1.5 cm wide, the valves thin, often longitudinally striate … Handroanthus heptaphyllus
3. Leaflets of mature leaves entire or slightly and irregularly serrate toward apex; terminal petiolule shorter than leaflet width, basal petiolules <1/2 as long as adjacent sub-basal petiolules; fruit mostly >1.5 cm wide, woody, usually smooth … Handroanthus impetiginosum

^*Handroanthus chrysanthus* (Jacq.)S.O.Grose—
^*Handroanthus chrysotrichus* (Mart. ex DC.)Mattos {AFP} —
^*Handroanthus heptaphyllus* (Vell.)Mattos—
^*Handroanthus impetiginosus* (Mart. ex DC.)Mattos —

Jacaranda
^*Jacaranda mimosifolia* D.Don {AFP} — Sparingly naturalized.

Newbouldia
^*Newbouldia laevis* (P.Beauv.)Seem. ex Bureau {AFP} —

Pandorea
^*Pandorea jasminoides* (Lindl.)K.Schum. —

Parmentiera
^*Parmentiera cereifera* Seem. —

Podranea
^*Podranea ricasoliana* (Tanfani)Sprague {AFP} —

Pyrostegia
****Pyrostegia venusta*** (KerGawl.)Miers {AFP} —

Radermachera
*****Radermachera sinica*** (Hance)Hemsl. {AFP} —

Spathodea
*****Spathodea campanulata*** P.Beauv. {AFP} —

Tabebuia
1. Leaflets mostly 5-7, mostly oblong-elliptic, petiolules of proximal leafets elongate and to 15 mm long … T. aurea
1. Leaflets mostly 3-5, mostly obovate-elliptic, petiolules of proximal leafets short and usually <6 mm long; corolla lavender or pink to white (yellowish in the throat) … T. heterophylla

^*Tabebuia aurea* (Silva Manso)Benth. & Hook.f. ex S.Moore {AFP} —
*****Tabebuia heterophylla*** (DC.)Britton {AFP} —

Tecoma
*****Tecoma stans*** (L.)Juss. ex Kunth {AFP} —

Tecomaria
*****Tecomaria capensis*** (Thunb.)Spach {AFP} —

MARTYNIACEAE
1. Leaf blade dentate (usually at least some), sinuate, or entire; calyx of 5 free sepals; fertile stamens 2; corolal lobes yellow, the throat with red guidelines and spots; fruit surface strongly echinate; hairs on plant mostly <0.5 mm long, some longer, rarely reaching 1 mm … Ibicella lutea
1. Leaf blade usually entire to sinuate; calyx of 5 sepal lobes, connate at the base, spathe-like; corolla lobes white, pink, to red-purple, the throat with reddish spots and yellow guidelines; fertile stamens 4; fruit surface roughly smooth, not echinate; hairs on plant commonly >0.5 mm long and some >1 mm long … Proboscidea louisianica

Ibicella
*****Ibicella lutea*** (Lindl.)Van Eselt. {AFP} —

Proboscidea
*****Proboscidea louisianica*** (Mill.)Thell. {AFP} —

CAMPANULIDS

APIALES

APIACEAE

1. Flowers in dense involucrate heads … Eryngium
1. Flowers in simple or compound umbels [2]
2. Leaves all simple … Key A
2. Leaves, at least some, compound or deeply dissected and nearly compound [3]
3. Fruit echinate, tuberculate, or hispid … Key B
3. Fruit ribbed, winged, or smooth … Key C

Key A: Leaves simple
1. Leaves septate, in shape linear, oblong, or terete [2]
1. Leaves not septate, in shape, cordate, suborbicular, to reniform [3]
2. Stoloniferous, creeping herb; leaves flattened … Lilaeopsis
2. Erect herb; leaves terete … Tiedemannia
3. Leaves sessile, distal ones perfoliate … Bupleurum
3. Leave petiolate, not perfoliate [4]
4. Decumbent, only sparingly rooting at nodes; leaf blade usually conspicuously lobed … Bowlesia
4. Stoloniferous and rooting at nearly all nodes; leaf blade not lobed … Centella

Key B: Leaves compound or dissected, fruit echinate to hispid
1. Leaves palmately compound or dissected … Sanicula
1. Leaves pinnately compound or dissected [2]
2. Ovary and fruit 5-10 times longer than wide … Scandix pectenveneris
2. Ovary and fruit 1-2 times longer than wide [3]
3. Fruit tuberculate or with hooked bristles … Spermolepis
3. Fruit hispid or bristly, not hooked, sometimes curved or barbed [4]
4. Fruit winged, hispid … Angelica
4. Fruit not winged, bristly [5]
5. Involucre of several trifid to pinnatifid bracts … Daucus
5. Involucre absent or of 1-2 linear bracts … Torilis arvensis

Key C: Leaves compound or dissected, fruit ribbed to smoooth
1. Fruit 3-5 times longer than wide [2]
1. Fruit 1-2 times longer than wide [4]
2. Leaves 3-foliolate … Cryptotaenia canadensis
2. Leaves 2- to 3-pinnately compound [3]
3. Ultimate leaf blade segments oblong-lanceolate, 1.2-4 mm wide; pedicel 1.5-8 mm long; calyx unapparent at magnification; lacking corky ribs … Chaerophyllum
3. Ultimate leaf blade segments linear-lanceolate to filiform, 0.3-0.7 mm wide; pedicel 0-1.3 mm long; calyx evident at magnification; lighter-colored secondary ribs corky … Trepocarpus aethusae
4. Involucel bracts present, conspicuous (subtending the cluster of pedicels) [5]
4. Involucel bracts absent or scale-like, occasionally with a [8]
5. Fruit with prominently winged lateral ribs, the other ribs low and blunt … Oxypolis
5. Fruit ribs unwinged or the wings subequal [6]
6. Fruit ribs winged … Sium suave
6. Fruit ribs unwinged [7]
7. Fruit ribs subequal in width … Ammi
7. Fruit lateral ribs much wider than dorsal ones … Ptilimnium capillaceum
8. Leaf blade segments entire [9]
8. Leaf blade segments toothed [11]
9. Inflorescence a sessile or subsessile fascicle of 1-3 simple umbels … Cyclospermum leptophyllum
9. Inflorescence pedunculate, usually of 5-60 simple umbels [10]
10. Fruit dorsally flattened, lateral ribs winged; dill … Anethum graveolens
10. Fruit subterete, lateral ribs not winged; fennel … Foeniculum vulgare
11. Inflorescence a sessile or subsessile fascicle of 1-3 simple umbels; celery … Apium graveolens
11. Inflorescence pedunculate, usually of 5-60 simple umbels [12]
12. Corolla yellow, greenish yellow, or purple [13]
12. Corolla white or greenish white [15]
13. Central flower or fruit of umbel sessile or subsessile … Zizia
13. Central flower or fruit of umbel pedicellate [14]
14. Sepals absent or obsolete under magnification; parsley … Petroselinum crispum
14. Sepals evident under magnification … Thaspium
15. Fruit subglobose; coriander, cilantro … Coriandrum sativum
15. Fruit compressed or flattened [16]
16. Fruit ribs winged … Ligusticum canadense

16. Fruit ribs rounded [17]
17. Plant delicate, to 1 m tall ... Angelica
17. Plant robust, >1 m tall ... Cicuta

Ammi
1. Leaf segments toothed, not linear; base of umbel rays not forming a discoid structure ... A. majus
1. Leaf segments entire, linear to filiform; base of umbel rays forming a discoid structure (plexus) ... A. visnaga

*****Ammi majus*** L. {AFP} —
*****Ammi visnaga*** (L.)Lam. {AFP} —

Anethum
*****Anethum graveolens*** L. {AFP} —

Angelica
1. Leaf segments coarsely toothed, the segments mostly with 1-5 teeth per side; inflorescence and fruit glabrous ... A. dentata
1. Leaf segments finely toothed, the segments mostly with 6-30 teeth per side; inflorescence and fruit pubescent ... A. venenosa

Angelica dentata (Chapm. ex Torr. & A.Gray)J.M.Coult. & Rose {AFP} —
Angelica venenosa (Greenway)Fernald {AFP} —

Apium
^*Apium graveolens* L. {AFP} —

Bowlesia
*****Bowlesia incana*** Ruiz & Pav. {AFP} —

Bupleurum
*****Bupleurum lancifolium*** Hornem. {AFP} —

Centella
1. Leaf blade mostly wider than long; petals and fruits pinkish red to reddish purple or brownish red ... C. asiatica
1. Leaf blade usually longer than wide or width and length subequal; petals mostly white often with pinkish or reddish tips, fruits green ... C. erecta

^*Centella asiatica* (L.)Urb. {AFP} — Schubert (2000: 36, 74, 89-103) supported treating this species as pantropical and the only member of the genus native outside of Africa (including *C. erecta* in synonymy), writing that "it is not unexpected to find variations in the morphology of different specimens of the extremely widespread *C. asiatica* [...] the previous splitting of *C. asiatica* into a number of species and varieties is not followed [...] the *C. asiatica* complex is exceptionally variable [...] the variation seems to be quantitative rather than qualitative".

Centella erecta (L.f.)Fernald {AFP} — Sometimes included as a synonym of *C. asiatica* (Schubert 2000), and otherwise poorly distinguished when treated as a distinct species. Studying Australian material, Alqahtani et al. (2017) applied the name *C. erecta* and contrasted it with other taxa in Australia (*C. erecta* putatively distinguished by underground, thicker stems, larger and more lustrous leaf blades, less dentate).

Chaerophyllum

1. Light-colored ribs of fruits narrower than the dark-colored intervals between them … C. procumbens
1. Light-colored ribs of fruit subequal to wider than the dark-colored interval between them … C. tainturieri

Chaerophyllum procumbens (L.)Crantz {AFP} —
Chaerophyllum tainturieri Hook. {AFP} —

Cicuta

Cicuta maculata L. {AFP} —

Coriandrum

^*Coriandrum sativum* L. {AFP} —

Cryptotaenia

Cryptotaenia canadensis (L.)DC. {AFP} — SE.

Cyclospermum

****Cyclospermum leptophyllum*** (Pers.)Sprague ex Britton & P.Wilson {AFP} —

Daucus

1. Involucral bracts trifid, scarcely bristly, scarious-margined, spreading or reflexed in fruit; prickles of fruit not barbed … D. carota
1. Involucral bracts pinnatifid, bristly, not scarious-margined, appressed to the umbel in fruit; prickles of fruit apically barbed … D. pusillus

^*Daucus carota* L. {AFP} —
Daucus pusillus Michx. {AFP} —

Eryngium

1. Most cauline leaves unlobed (sometimes the distalmost ones just below inflorescence lobed), toothed, the sinuses <½ the width from the midrib to the blade margin [2]
1. Cauline leaves palmately, pinnately, or apically lobed (basal ones often unlobed), the sinuses nearly reaching the midrib or petiole [6]
2. Leaf blade margin bristly or prickly, these 2-6 mm long [3]
2. Leaf blade margin entire to serrate, any bristle tips <0.6 mm long [5]
3. Plant leafy with fascicles of leaves subtending the inflorescence head; leaf margin dentate, the teeth (or lobes) spinose-tipped … E. foetidum
3. Plant subscapose, bracts subtending inflorescences highly reduced and scarcely foliaceous; leaf margin straight or nearly so with bristles at intervals [4]

4. Leaves mostly 5-10 mm wide, bristles in fascicles of 2-4; involucral bracts linear-lanceolate ... E. yuccifolium var. synchaetum
4. Leaves mostly 10-30 mm wide, bristles moslty solitary; involucral bracts ovate-lanceolate ... E. yuccifolium var. yuccifolium
5. Leaf blade linear to narrowly lanceolate, 15-50 cm long, the margin entire to obscurely denticulate ... E. aquaticum
5. Leaf blade ovate to oblong-lanceolate, 2-10 cm long, the margin regularly crenate to serrate ... E. integrifolium
6. Stems prostrate or weakly decumbent; inflorescence mostly solitary and axillary [7]
6. Stem erect to ascending, only basally decumbent; inflorescence mostly terminal and numerous [8]
7. Stem decumbent basally, and leafy nearly throughout; leaves primarily pinnately lobed ... E. aromaticum
7. Stem erect, leafy primarily at the base and strongly reduce distally; leaves primarily apically lobed ... E. cuneifolium
8. Cauline leaves pinnatifid or pinnatisect; inflorescence heads 4-8 mm wide ... E. divaricatum
8. Cauline leaves mostly ternately to palmately lobed or dissected; inflorescence head 2.5-4.5 mm wide [9]
9. Inflorescence head subhemispheric, sublglobose, to ovoid, the involucral bracts usually not or barely laterally exceeding the basal flowers, the flowers exceeded by the subtending bracteoles ... E. baldwinii
9. Inflorescence head elliptic to subcylindric, the involucral bracts usually laterally exceeding the basal flowers, the flower subequal to the subtending bracteole ... E. prostratum

Eryngium aquaticum L. {AFP} —
Eryngium aromaticum Baldwin {AFP} —
Eryngium baldwinii Spreng. {AFP} —
•***Eryngium cuneifolium*** Small {AFP} — FE. SE.
^*Eryngium divaricatum* Hook. & Arn. {AFP} —
^*Eryngium foetidum* L. {AFP} —
Eryngium integrifolium Walter {AFP} —
Eryngium prostratum Nutt. ex DC. {AFP} —
Eryngium yuccifolium Michx. {AFP} — Possibly historically used to inhibit snake venom enzymes (Price, III 2016) and maybe included in some preparations of *I. vomitoria* (Carriger, Jr. 2020).

Foeniculum
^*Foeniculum vulgare* Mill. {AFP} —

Ligusticum
Ligusticum canadense (L.)Vail {AFP} —

Lilaeopsis
1. Leaves (6)8-30(5) cm long; peduncle much shorter than adjacent leaves; spongy tissue present in all 5 ribs of the mericarp ... L. carolinensis
1. Leaves 1-4(10) cm long; peduncle subequal to longer than adjacent leaves; spongy tissue confined to 2 lateral ribs of the mericarp ... L. chinensis

Lilaeopsis carolinensis J.M.Coult. & Rose {AFP} — Native to some areas, but also naturalizing and spreading.
*****Lilaeopsis chinensis*** (L.)Kuntze {AFP} —

Oxypolis
1. Most leaves pinnately compound with 5-9 lanceolate, 1-veined leaflets ... O. rigidior
1. Most leaves trifoliolate to simple with 1-3 linear-lanceolate, 3-veined leaflets ... O. ternata

Oxypolis rigidior (L.)Raf. {AFP} —
Oxypolis ternata (Nutt.)A.Heller {AFP} —

Petroselinum
^*Petroselinum crispum* (Mill.)Fuss {AFP} —

Ptilimnium
Ptilimnium capillaceum (Michx.)Raf. {AFP} —

Sanicula
1. Staminate flowers 10-25; styles longer than the bristles on ovary or fruit [2]
1. Staminate flowers (0)3-8; styles subequal to shorter than the bristles on ovary or fruit [3]
2. Calyx lobes lanceolate, rigid, nearly free; petals greenish white; ovary or fruit bristles bulbous at base, not in rows; staminate flowers longer than fruits; fruit subsessile to sessile, not prickly basally ... S. marilandica
2. Calyx lobes ovate, subscarious, connate in basal third; petals yellowish green; ovary or fruit bristles gradually tapering to base, arranged in rows; staminate flowers shorter than fruits; fruit pedicellate, prickly basally ... S. odorata
3. Annual, roots fibrous; basal leaves to 4.5 cm wide; fruit pedicellate ... S. canadensis
3. Perennial, roots thickened and cord-like; basal leaves to 12 cm wide; fruit subsessile to sessile ... S. smallii

Sanicula canadensis L. {AFP} — Bicknell (1897) described *S. floridana* (later reduced to a variety by Wolff) as a commonly smaller plant with more numerous, closely spaced cauline leaves with fewer and larger teeth. Bicknell (1897) was also of the opinion that typical *S. canadensis* occurred in Florida. Shan & Constance (1951) stated that *S. floridana* "seems to have no distinct features deserving special status".
Sanicula marilandica L. {AFP} —
Sanicula odorata (Raf.)Pryer & Phillippe {AFP} —
Sanicula smallii E.P.Bicknell {AFP} —

Scandix
*****Scandix pecten-veneris*** L. {AFP} —

Sium
Sium suave Walter {AFP} —

Spermolepis
1. Ovary and fruit tuberculate ... S. divaricata

1. Ovary and fruit echinate with hooked bristles … S. echinata

Spermolepis divaricata (Walter)Raf. {AFP} —
Spermolepis echinata (Nutt. ex DC.)A.Heller {AFP} —

Thaspium

1. Cauline leaves 3-foliolate, blade margin glabrous with a whitish border, evenly and finely toothed … T. trifoliatum
1. Cauline leaves 2- to 3-pinnately or ternately compound, blade margin coarsely toothed [2]
2. Cauline leaves 1–2-ternate, lower side glabrous or glabrate except along primary veins; fresh corolla golden yellow; peduncles and umbel rays glabrous or papillose-roughened on upper surface; fruits glabrous between and on the wings, fruit 5–6 mm long … T. barbinode
2. Cauline leaves 2–3-ternate, lower side puberulent on surface and veins; fresh corolla pale yellow to creamy white; peduncles and umbel rays scabrellous on upper surface; fruits scabrellous between and sometimes on several wings, fruit 4–5 mm long … T. chapmanii

Thaspium chapmanii (Coult. & Rose)Small{AFP} — Sometimes included under *T. barbinode* (perhaps absent from Florida); see Floden (2019).
Thaspium trifoliatum (L.)A.Gray {AFP} —

Tiedemannia

1. Phyllodes inconspicuously septate, joints not brittle; petals white … T. filiformis subsp. filiformis
1. Phyllodes conspicuously septate, joints brittle and easily broken; petals garnet-maroon … T. filiformis subsp. greenmanii

Tiedemannia filiformis (Walter)Feist & S.R.Downie subsp. ***filiformis*** {AFP} —
• ***Tiedemannia filiformis*** (Walter)Feist & S.R.Downie subsp. ***greenmanii*** (Mathias & Constance)Feist & S.R.Downie {AFP} — SE.

Torilis

****Torilis arvensis*** (Huds.)Link {AFP} —

Trepocarpus

Trepocarpus aethusae Nutt. ex DC. {AFP} —

Zizia

1. Basal leaves simple to 3-foliolate, cauline leaves 3-foliolate … Z. aptera
1. Basal leaves 3-foliolate to pinnately or 2- to 3-ternately compound, cauline leaves 2- to 3-pinnately or -ternately compound and none or few distally 3-foliolate [2]
2. Leaf blade margins finely and evenly serrate … Z. aurea
2. Leaf blade margins coarsely and unevenly crenate to dentate … Z. trifoliata

Zizia aptera (A.Gray)Fernald {AFP} —
Zizia aurea (L.)Koch {AFP} —
Zizia trifoliata (Michx.)Fernald {AFP} —

ARALIACEAE

1. Leaves simple [2]
1. Leaves compound [4]
2. Erect shrub to 3.5 m tall; leaf blade 10-50(70) cm long and wide ... Tetrapanax papyrifer
2. Vine or herb; leaf blade 0.5-12 cm long or wide [3]
3. Vines, the stems mostly above-ground and often with copious roots, the roots thickened and arising at nodes or internodes, the inflorescence terminal; leaves with stellate or scale-like trichomes ... Hedera
3. Rhizomatous or stoloniferous herbs, the stems submersed, below-ground, or above-ground, the roots delicate and concentrated at the nodes, the inflorescence arising from the nodes of the horizontal stem; leaves glabrous or with simple hairs ... Hydrocotyle
4. Leaves palmately compound or trifoliolate [5]
4. Leaves pinnately to tripinnately compound [6]
5. Scandent or sprawling shrub; stems and petiole with prickles; leaves 3-foliolate ... Eleutherococcus trifoliatus
5. Erect tree or hemiepiphyte; stems and petioles without prickles; leaves 5- to 7-foliolate, at least on mature plants ... Heptapleurum
6. Stem armed with prickles; leaves 2- to 3-pinnately compound ... Aralia spinosa
6. Stem unarmed; leaves pinnately compound ... Polyscias guilfoylei

Aralia
Aralia spinosa L. {AFP} —

Eleutherococcus
****Eleutherococcus trifoliatus*** (L.)S.Y.Hu {AFP} —

Hedera: Accepted species are often difficult to identity and other taxa potentially encountered are keyed below.

1. Trichomes white to orangish, stellate, the arms longer than the central body [2]
1. Trichomes orangish to reddish centrally, scale-like with a dentate or lobed margin, the sinuses shorter to subequal to the central body [4]
2. Trichomes whitish to orangish, rotate-stellate, the central body (8) 17-27(44) percent of the trichome width; tetraploid ... H. hibernica
2. Trichomes white, multiangulate-stellate, the central body (3)7-13(24) percent of the trichome width; diploid [3]
3. Leaves often heart-shaped ... H. azorica
3. Leaves rarely heart-shaped ... H. helix
4. Adult leaf blades (0.8)1.5-2.6(5.3) times longer than wide, juvenile blades (0.8)1.1-1.5(2.3) times longer; central lobe of lobate leaves (1.1)1.8-3.6(6.5) cm wide, (0.3)1.1-2.5(5) times longer than wide; trichome central body (0.075)0.116-0.176(0.309) mm wide, (26)48-72(96) percent of trichome width (Asia group of ~4 species) ... H. colchica and others
4. Adult leaf blades (0.8)1.1-1.7(3.8) times longer than wide, juvenile blades (0.8)0.9-1.1(1.5) times longer; central lobe of lobate leaves (0.9)2.9-5.3(9) cm wide, (0.4)0.6-1(2.9) times longer than wide; trichome central body (0.046)0.084-0.135(0.137) mm wide, (21)34-53(71) percent ot the trichome width (western Mediterranean basin group of ~5 species) [5]
5. Adult leaves (1)1.2-2.8(3.3) times longer than wide; trichomes with 15-20(23) teeth; tetraploid ... H. algeriensis

5. Adult leaves 1-1.1(1.5) times longer than wide; trichomes (7)11-16(24) teeth; diploid … H. canariensis

*****Hedera algeriensis*** Hibberd {AFP} —
*****Hedera helix*** L. {AFP} —

Heptapleurum

1. Shrub or tree to 12 m tall; leaflets (3)7-16, the blade 10-30 cm long; inflorescence arms 30-80 cm long; ovary 10- to 12-carpellate … H. actinophyllum
1. Shrub to 4 m tall; leaflets (3)7-9(10), blade 5-12 cm long; inflorescence arms 10-22 cm long; ovary 5- to 7-carpellate … H. arboricola

*****Heptapleurum actinophyllum*** (Endl.)Lowry & G.M.Plunkett {AFP} —
^*Heptapleurum arboricola* Hayata {AFP} — Sparingly naturalized.

Hydrocotyle

1. Leaf blade peltate or not, with a distinct sinus often extending to the petiole or nearly so, most blades with at least one sinus >¼ of the blade width or length [2]
1. Leaf blade peltate, nearly rotund lacking a sinus or the sinus <¼ of the blade width or length [4]
2. Leaves hairy … H. bowlesioides
2. Leaves glabrous [3]
3. Stems and petioles mostly 2-4 mm wide; leaves to 8 cm long or wide … H. ranunculoides
3. Stems and petioles 0.5-1.5 mm wide; leaves to 1.5 cm long or wide … H. sibthorpioides
4. Inflorescence a solitary umbel (very rarely the inflorescence axis continuing beyond a basal umbel and with 2-4 total umbels, 1 umbel terminating the branch and other umbels on one side of the branch, without verticils); mericarp faces obscurely ribbed; leaf blades ≤4(6.5) cm wide … H. umbellata
4. Inflorescence with 2+ flower clusters (very rarely 1 umbel on part of the plant), the basal and intervening nodes with verticils of flowers, terminal nodes with umbels; mericarp faces prominently ribbed; leaf blades ≤5-9(9.5-11) wide [5]
5. Inflorescence with (1)2-16(20) primary branches radiating from the basal node (and those primary branches frequently also branching), the entire inflorescence with (2)5-40 umbels/verticils and 30-200 flowers; leaf blades ≤9(11) cm wide … H. bonariensis
5. Inflorescence usually unbranched, occasionally forking into 2 branches (rarely these also forking or producing lateral branches), the entire inflorescence with (1)3-6(13) verticils/umbels and 5-25(40) flowers; leaf blades ≤5(9.5) cm wide … H. verticillata

*****Hydrocotyle bonariensis*** Comm. ex Lam. {AFP} — Probably introduced via ports. Prior to the 1930s, in Florida it was known from the Pensacola (e.g. *Curtiss 5922* in 1897), St. Augustine (e.g. *Welch 1679* in 1934), and Jacksonville (e.g. *West & Small s.n.* in 1935, and probably *Farlow s.n.* in 1891 [sterile]) areas. Reported by Small (1903: 858) in "waste grounds and on ballast" and not included in Chapman's (1860, 1897) floras.
*****Hydrocotyle bowlesioides*** Mathias & Constance {AFP} —
Hydrocotyle ranunculoides L.f. {AFP} —
*****Hydrocotyle sibthorpioides*** Lam. {AFP} —
Hydrocotyle umbellata L. {AFP} —

Hydrocotyle verticillata Thunb. {AFP} — Pedicel length varies; plants with pedicels 1-7(10) mm long have been referred to var. *triradiata* (A.Rich.)Fernald, but there is no clear distinction (Nesom & Levin 2024; also see Mathias 1936; Fernald 1939).

Polyscias

^*Polyscias guilfoylei* (W.Bull)L.H.Bailey {AFP} —

Tetrapanax

****Tetrapanax papyrifer*** (Hook.)K.Koch {AFP} —

PITTOSPORACEAE

Pittosporum

1. Leaf blade 2.5-9 times longer than wide, the margins mostly plane, the apex acute; fruit dehiscent by 2 valves … P. pentandrum
1. Leaf blade 2-3 times longer than wide, the margins usually revolute, the apex rounded; fruit dehiscent by 3 valves … P. tobira

****Pittosporum pentandrum*** (Blanco)Merr. {AFP} —
^*Pittosporum tobira* (Thunb.)Aiton {AFP} —

DIPSACALES

CAPRIFOLIACEAE

subf. Caprifolioideae: Lonicera, Symphoricarpos
subf. Linnaeoideae: Abelia
subf. Valerianoideae: Valeriana, Valerianella

1. Herbs or herbaceous vines; corolla 1.5-2.5 mm long; fruit an achene [2]
1. Woody vines or shrubs; corolla 10-50 mm long; fruit an achene, berry, or drupe [3]
2. Herbaceous, perennial vines; leaf blade ovate-cordatem, ternately divided, to palmately divided; achene plumose … Valeriana scandens
2. Erect, annual herb; leaf blade oblong to lanceolate; achene not plumose … Valerianella radiata
3. Shrubs; sepal lobes generally oblong and conspicuous, 4-6 mm long; stamens 4; ovary 3-locular; fruit an achene … Abelia ×grandiflora
3. Shrubs or vines; sepal lobes reduced and inconspicuous, 0.5-2 mm long; stamens 5; ovary 2- to 4-locular; fruit a berry or achene [3]
4. Vines (native and naturalized spp.) or shrubs (cultivated); corolla 10-50 mm long; ovary 2- or 3-locular; fruit a few- to several-seeded berry … Lonicera
4. Shrubs; corolla 3-5 mm long; ovary 4-locular, 2 being sterile; fruit a 2-seeded drupe … Symphoricarpos orbiculatus

Abelia

1. Flowers paired; epicalyx bracts 6; calyx lobes 5; corolla white … A. chinensis
1. Flowers singular; epicalyx bracts 4; calyx lobes 2-5; corolla white to pink, sometimes with orange markings … A. ×grandiflora

^*Abelia chinensis* R.Br. —
^*Abelia ×grandiflora* (Rovelli ex André)Rehder (*chinensis* × *uniflora*) {AFP} —

Lonicera
1. Shrubs (cultivated or persistent) … Lonicera spp.
1. Vines (native or non-native) [2]
2. Leaves below the inflorescence separate, petiolate; corolla white, yellow, to pinkish, lobes subequal to the tube; fruit dark … L. japonica
2. Leaves below the inflorescence connate; corolla red, lobes much shorter than the tube; fruit orange-red … L. sempervirens

****Lonicera japonica*** Thunb. {AFP} —
Lonicera sempervirens L. {AFP} —

Symphoricarpos
Symphoricarpos orbiculatus Moench {AFP} — SE.

Valeriana
Valeriana scandens L. {AFP} —

Valerianella
Valerianella radiata (L.)Dufr. {AFP} —

VIBURNACEAE
1. Leaves compound … Sambucus
1. Leaves simple … Viburnum

Sambucus
Sambucus canadensis L. {AFP} — Throughout FL (widespread from Canada to Bolivia). Hydric habitats. Seeds found in archaeological sites in Florida, probably from fruits as a food resource. Fruits also used as a dye or to make wine. Raw fruits may cause adverse symptoms and cooking has been recommended. Flowers sometimes made into teas. Cyanogenic glycosides may be present in tissues (Thomas et al. 2020; Uhl & Mitchell 2024). Sometimes treated as subspecies of *S. nigra* due to the morphological similarities (Bolli 1994; Eriksson & Donoghue 1997; Applequist 2015). A few samples were compared with ITS sequence data (Waswa et al. 2022).

Viburnum
1. Leaf blade 3-lobed, sometimes shallow or obscure … V. acerifolium
1. Leaf blade unlobed [2]
2. Leaf blade finely serrate, (6)7-12(13) teeth per cm near mid-blade … V. rufidulum
2. Leaf blade dentate, crenate, undulate to entire, 0-4 teeth per cm near mid-blade [3]
3. Petiole 0-0.5(1.5) cm long; leaf blade 0.5-3 cm long, 0.4-1 cm wide … V. obovatum
3. Petiole 0.5-3 cm long; leaf blade 3-20 cm long, 1-9 cm wide [4]
4. Leaf blade coarsely, regularly dentate from the base to the apex, base mostly cordate to truncate, the lateral veins straight or nearly so (sometimes forking) (V. dentatum complex) … Key A
4. Leaf blade entire to dentate, mostly entire to subentire near the base and toothed to entire distally, the base cuneate to truncate, the lateral veins arcuate-curving upwards … [5]
5. Stems prominently verrucose; leaf blade coriaceous, margins usually toothed (at least distally), tertiary venation conspicuous and often impressed … V. suspensum

5. Stems smooth to weakly verrucose; leaf blade chartaceous to subcoriaceous, margins entire or shallowly toothed distally, tertiary venation obscure [6]
6. Shrub or tree to 10(15) m tall; leaves (4)7-20 cm long, (2.5)3-9 cm wide, margins sometimes shallowly toothed distally; inflorescence in a pyramidal paniculiform array ... V. odoratissimum
6. Shrub or tree to 5 m tall; leaves 4-13 cm long, 1.7-5.3 cm wide, margins entire; inflorescence in a terminal compound umbelliform array [7]
7. Petiole 0.8-1.3 cm long; leaf blade (3.9)4.2-8.3(8.6) cm long, 1.7-3.4(3.7) cm wide, (1.6)1.9-2.7(3) times longer than wide, ca. (5.5)6-19(23) sq. cm in area, the perimeter ca. 10-22 cm; peduncle (12)15-37 mm long, primary branches 10-22 mm long; stone ridged and grooved ... V. nitidum
7. Petiole 1-2.1 cm long; leaf blade (6.5)6.8-9.5(10.8) cm long, (3)3.1-5.3 cm wide, 1.6-2.3(2.5) times longer than wide, ca. (15.8)18-40(44) sq. cm in area, the perimeter ca. 17-29 cm; peduncle (21)24-51(58) mm long, primary branches (15)18-30 mm long; stone smooth ... V. nudum

Key to V. dentatum complex in FL
1. Stipules absent; leaf blade lower side dull green with contrasting tawny veins, often long acuminate and falcately dentate ... V. pubescens
1. Stipules present or absent; leaf blade lower side without contrasting tawny veins, mostly acute and not falcately dentate [2]
2. Stipules often present; leaf blade upper surface not scabrous (or rarely so), with mostly appressed, singular hairs, few fasciculate, the lower surface nearly glabrous except on the veins; peduncle without fasciculate hairs, or only near the base ... V. carolinianum
2. Stipules rarely present; leaf blade upper surface scabrous with somewhat ascending to erect, fasciculate hairs, the lower surface usually densely fasciculate-hispid; peduncle usually densely fasciculate-hispid ... V. scabrellum

Viburnum acerifolium L. {AFP} —
Viburnum carolinianum Ashe — Reported for Florida (McAtee 1956).
Viburnum nitidum Aiton — Apparently common but difficult to distinguish from *V. nudum* (Spriggs et al. 2019).
Viburnum nudum L. {AFP} —
Viburnum obovatum Walter {AFP} —
^*Viburnum odoratissimum* Ker Gawl. {AFP} —
Viburnum pubescens (Aiton)Pursh — Reported for Florida (McAtee 1956).
Viburnum rufidulum Raf. {AFP} —
Viburnum scabrellum (Torr. & A.Gray)Chapm. — The common form of the *V. dentatum* complex in Florida, apparently *V. dentatum* s.str. not occurring here (McAtee 1956).
^*Viburnum suspensum* Lindl.—

ASTERALES

CAMPANULACEAE

1. Flower and fruit sessile ... Triodanis
1. Flower and fruit pedicellate, the pedicel 1-11 mm long [2]
2. Filaments and anthers connate into a tube [3]
2. Filaments and anthers free [4]
3. Corolla actinomorphic or nearly so ... Hippobroma longiflora
3. Corolla zygomorphic ... Lobelia

4. Cauline leaves mostly 1.5-6 times longer than wide; corolla rotate; fruit opening by 3-5 lateral pores ... Campanula
4. Cauline leaves mostly 9-16 times longer than wide; corolla funnelform to campanulate; fruit opening by 2-3 apical pores ... Wahlenbergia

Campanula

1. Plant 35-140 cm tall; stem stout, erect, 2-12 mm wide at the base; leaves 3-16 cm long, serrate to crenate ... C. americana
1. Plant 3-35 cm tall; stem weak, erect to decumbent, ca. 1 mm wide at the base; leaves 0.2-2 cm long, entire to crenate [2]
2. Larger leaves 12-20 mm long; sepals 6-9 mm long; corolla 14-18 mm wide ... C. floridana
2. Larger leaves 3-8 mm long; sepals 1-2.5 mm long; corolla 7-8 mm wide ... C. robinsiae

Campanula americana L. {AFP} —

- ***Campanula floridana*** S.Watson ex A.Gray {AFP} — Peninsula, eastern panhandle. Collections made in 2013 from a cemetery in Mobile Co., AL are considered to be introduced there. The genus *Rotanthella* was described to include only *C. floridana* (Morin 2020). *Campanula americana* and C. *floridana* are closely related to *Triodanis*, and there was an intimation these two species could also be placed in the genus *Legousia* together with *Triodanis* (Xu & Hong 2020).
- ***Campanula robinsiae*** Small {AFP} — Hernando, Hillsborough cos. FE. SE. Marshes. A close relative of this rare endemic appears to be *C. aparinoides*, found primarily in northeastern North America (Shetler & Morin 1986; Mansion et al. 2012). The genus *Protocodon* was described to include only *C. robinsiae* (Morin 2020), while Xu & Hong (2020) suggested *C. robinsiae* could be part of a genus containing several species all from North America that "share a number of morphological characters, pollen, and chromosomal features."

Hippobroma

****Hippobroma longiflora*** (L.)G.Don {AFP} —

Lobelia

1. Leaves near the base of the plant broadly ovate to semi-orbicular, 1-2 times long as wide, the blade base abruptly tapered or truncate to a distinct petiole [2]
1. Leaves near the base of the plant linear to ovate, 2.1-50 times long as wide, the blade base acute to gradually tapered, the petiole indistinct to distinct [3]
2. Leaf blade coarsely dentate, sinuate-crenate, to incised-dentate, ovate to semi-orbicular, truncate-cuneate to cordate at the base; fruit 6-7 mm long ... L. homophylla
2. Leaf blade entire to sinuate; fruit 2-4 mm long ... L. feayana
3. Plants 0.4-2 m tall; stems 2-8 mm wide at base; cauline leaves (at least larger ones) 8-65 mm wide, 25-200 mm long [4]
3. Plants 0.3-1.2 m tall; stems 1-5 mm wide at base; cauline leaves 0.5-8 mm wide, 10-50 mm long [9]
4. Leaves to 18 cm long and 6 cm wide; corolla pink to red (rarely white), 2.5-5 cm long; filament-tube 13–33 mm long ... L. cardinalis
4. Leaves to 10 cm long and 4 cm wide; corolla white, lavender, to blue, 0.7-3 cm long; filament-tube 2-15 mm long [5]
5. Auricles very large and conspicuous, covering almost half of calyx tube; lower corolla lip often short-pubescent basally near the throat ... L. rogersii

5. Auricles smaller, less than 1/4 length of calyx tube or absent; lower lip of corolla mostly glabrous basally near the throat (exterior of tube can be pubescent) [6]
6. Stems usually densely pubescent throughout (also within inflorescence), but occasionally sparsely pubescent to almost glabrous; calyx lobes lanceolate and mostly erect, typically not flexuous or widely spreading; margins of calyx lobes often ciliate, occasionally glabrous; calyx tube densely hirsute to glabrous; auricles present or absent; corolla tube usually pubescent on the outside, rarely glabrous ... L. puberula
6. Stems sparsely (rarely moderately) pubescent to glabrous, usually hairier at base; calyx lobes linear or lanceolate and erect or spreading or flexuous (especially the tip, sometimes twisted); margins of calyx lobes glabrous; calyx tube smooth to verrucose, very rarely sparsely hirsute; auricles absent to almost obsolete; corolla tube glabrous or sparsely pubescent in lines [7]
7. Leaves thick or thin, whitish to greenish underneath; uppermost leaves entire or toothed; calyx segments entire, not toothed ... L. amoena
7. Leaves typically thick with a parchment-like texture and sometimes with a bluish to gray-green sheen when dried (typically strongly glaucous underneath); uppermost leaves distinctly toothed; some calyx segments with a few slender, flexuous teeth (at least on some flowers) [8]
8. Calyx tube long-hirsute to glabrous; corolla tube glabrous or pubescent in lines externally, lower lip of corolla distinctly pubescent with villous hairs on upper surface near throat of tube ... L. apalachicolensis
8. Calyx tube usually glabrous, rarely with a few scattered chaffy hairs; corolla tube glabrous externally, lower lip of corolla typically glabrous on upper surface near throat of tube, but occasionally papillate or minutely pubescent with very short hairs ... L. georgiana
9. Stems subscapose, principal leaves basal (or rarely in the bottom quarter of the plant height) and large and present at flowering, those along the stem usually few, bract-like, and very strongly reduced and very small relative to the basal ones [10]
9. Stems leafy, those along the stem numerous to few and only gradually reduced upwards, basal leaves present or absent at flowering (absent if stem appearing subscapose) [11]
10. Calyx lobe sinus with small auricles; corolla not fenestrate; staminal tube 6-11 mm long ... L. floridana
10. Calyx lobe sinus lacking auricles; corolla fenestrate (lateral slits near base betwixt calyx lobes); staminal tube 3-5 mm long ... L. paludosa
11. Stem leaves <1.1 mm wide ... L. boykinii
11. Stem leaves >1.3 mm wide [12]
12. Leaves 3-5 times longer than wide, <3.1 cm long ... L. brevifolia
12. Leaves 6-24 times longer than wide, usually at least some >3 cm long [13]
13. Flowers 5-10 mm long; staminal tube 2.5-3.5 mm long ... L. nuttallii
13. Flowers 12-30 mm long; staminal tube 5-8 mm long [14]
14. Annual, usually drying pale to light greenish; stem mostly straight; upper cauline leaves subentire to obscurely toothed; pedicel with two conspicuous linear, foliaceous, acute-tipped bracteoles borne above the base of pedicel; corolla tube usually not fenestrate ... L. flaccidifolia
14. Perennial, usually drying with darker green; stem often slightly zigzagged; cauline leaves prominently denticulate; pedicel with inconspicuous gland-tipped, oval to oblong bracteoles borne at base and often hidden by bract; corolla tube fenestrate ... L. glandulosa

Lobelia amoena Michx. {AFP} —
•***Lobelia apalachicolensis*** D.D.Spaulding et al. {AFP} —
Lobelia boykinii Torr. & A.Gray ex A.DC. {AFP} — SE.
Lobelia brevifolia Nutt. ex A.DC. {AFP} —
Lobelia cardinalis L. {AFP} — ST.

Lobelia feayana A.Gray {AFP} —
Lobelia flaccidifolia Small {AFP} —
Lobelia floridana Chapm. {AFP} —
Lobelia georgiana McVaugh {AFP} —
Lobelia glandulosa Walter {AFP} —
•***Lobelia homophylla*** E.Wimm. {AFP} —
Lobelia nuttallii Schult. {AFP} —
Lobelia paludosa Nutt. {AFP} —
Lobelia puberula Michx. {AFP} —
Lobelia rogersii Bowden {AFP} —

Triodanis
1. Leaves longer than wide, becoming ovate to narrowly lanceolate below the flowers; open chasmogamous flowers 1-2 at the stem apex (the closed cleistogamous flowers below these in the inflorescence); pores of the capsule near the apex ... T. biflora
1. Leaves as wide as or wider than long, generally semi-orbicular below the flowers; open chasmogamous flowers more than 2 at the stem apex (the closed cleistogamous flowers below these in the inflorescence); pores of the capsule near or below the middle ... T. perfoliata

Triodanis biflora (Ruiz & Pav.)Greene {AFP} —
Triodanis perfoliata (L.)Nieuwl. {AFP} —

Wahlenbergia
1. Flowering hypanthium 3.5-4.5 mm long, narrowly obconic to subcylindric, to 12 mm long in fruit and subcylindric; corolla white; stigma 2-lobed; fruit opening by 2 terminal pores; seeds broadly elliptic ... W. linarioides
1. Flowering hypanthium 1.5-3 mm long, ellipsoid to ovoid, to 7.5 mm long in fruit and obconic-obovoid; corolla pale blue, lavender, purple, to deep blue; stigma 3-lobed; fruit opening by 3 terminal pores; seeds oblong ... W. marginata

****Wahlenbergia linarioides*** (Lam.)A.DC. {AFP} —
****Wahlenbergia marginata*** (Thunb.)A.DC. {AFP} —

MENYANTHACEAE
Nymphoides
1. Corolla conspicuously fimbriate on the inner surface [2]
1. Corolla glabrous, without fimbriae on the inner surface (margins sometimes short-fimbriate) [4]
2. Corolla lobes yellow ... N. grayana
2. Corolla lobes white (throat may be yellowish) [3]
3. Anthers dark; seeds etuberculate ... N. humboldtiana
3. Anthers light yellowish; seeds tuberculate ... N. indica
4. Corolla lobes yellow ... N. peltata
4. Corolla lobes white (throat may be yellowish) [5]
5. Floating leaf blades ovate to reniform, the lower surface conspicuously roughened; fruit much exceeding the calyx ... N. aquatica
5. Floating leaf blades cordate-ovate, the lower surface smooth to slightly rough; fruit not or only slightly exceeding the calyx [6]

6. Corolla lobes without a median longitudinal crest; seeds eturbuculate ... N. cordata
6. Corolla lobes with a median longitudinal crest; seeds tuberculate ... N. cristata

Nymphoides aquatica (J.F.Gmel.)Kuntze {AFP} —
Nymphoides cordata (Elliott)Fernald {AFP} —
*****Nymphoides cristata*** (Roxb.)Kuntze {AFP} —
++***Nymphoides grayana*** (Griseb.)Kuntze {AFP} —
*****Nymphoides humboldtiana*** (Kunth)Kuntze {AFP} —
*****Nymphoides indica*** (L.)Kuntze {AFP} —
*****Nymphoides peltata*** (S.G.Gmel.)Kuntze {AFP} —

GOODENIACEAE

Scaevola

1. Leaves 5-10 cm long, usually held stiff and mostly straight, thick and succulent, the midvein often disappearing around mid-blade, lateral veins scarcely evident; inflorescence of 1-3(5) flowers; calyx lobes to 1 mm long; fruit black ... S. plumieri
1. Leaves 9-25 cm long, lax and recurved, rather membranaceous, the midvein extending nearly throughout blade, lateral veins often discernible; inflorescence of 1-15 flowers; calyx lobes 3-5 mm long; fruit white to yellowish white ... S. taccada

Scaevola plumieri (L.)Vahl {AFP} — ST.
*****Scaevola taccada*** (Gaertn.)Roxb. {AFP} —

CALYCERACEAE

Acicarpha

*****Acicarpha tribuloides*** Juss. {AFP} —

ASTERACEAE

subf. Carduoideae: Centaurea, Cirsium, Onopordum
subf. Mutisioideae: Chaptalia, Gerbera
subf. Vernonioideae
    Erlangeinae: Cyanthillium
    Elephantopinae: Elephantopus, Pseudelephantopus
    Stokesiinae: Stokesia
    Vernoniinae: Vernonia
    Lynchnophorinae: Centratherum
subf. Artcotideae: Haplocarpha
subf. Cichorioideae
    Cichoriinae: Cichorium
    Crepidinae: Crepis, Nabalus, Taraxacum, Youngia
    Hieraciinae: Hieracium, Pilosella
    Hyoseridinae: Launaea, Sonchus
    Hypochaeridinae: Hypochaeris
    Lactucinae: Lactuca
    Microseridinae: Krigia, Lygodesmia, Pyrrhopappus
subf. Asteroideae, Anthemideae
    Anthemidinae: Anthemis
    Arthemisiinae: Artemisia

Cotulinae: Cotula, Soliva
Glebionidinae: Glebionis
Leucantheminae: Leucanthemum
Matricariinae: Achillea
Santolininae: Cladanthus
subf. Asteroideae, Astereae
Boltoniinae: Boltonia
Baccharidinae: Baccharis
Chrysopsidinae: Bradburia, Chrysopsis, Croptilon, Heterotheca, Pityopsis
Conyzinae: Aphanostephus, Erigeron
Doellingeriinae: Doellingeria
Gutierreziinae: Bigelowia, Euthamia
Ionactinae: Ionactis
Machaerantherinae: Eurybia, Rayjacksonia
Oclemeninae: Oclemena
Solidagininae: Brintonia, Chrysoma, Sericocarpus, Solidago
Symphyotrichinae: Ampelaster, Symphyotrichum
subf. Asteroideae, Bahieae: Hymenopappus, Palafoxia
subf. Asteroideae, Coreopsidae: Bidens, Coreopsis, Cosmos
subf. Asteroideae, Eupatorieae
Ageratinae: Ageratum, Conoclinium
Alomiinae: Brickellia
Critoniinae: Koanophyllon
Eupatoriinae: Eupatorium, Eutrochium
Fleischmanniinae: Fleischmannia
Liatrinae: Carphephorus, Garberia, Hartwrightia, Liatris
Mikaniinae: Mikania
Oxylobinae: Ageratina
Praxelinae: Chromolaena, Praxelis
Trichocoroninae: Sclerolepis
subf. Asteroideae, Gnaphalieae: Antennaria, Facelis, Filago, Gamochaeta, Pseudognaphalium
subf. Asteroideae, Helenieae
Gaillardiinae: Balduina, Gaillardia, Helenium
Marshalliinae: Marshallia
subf. Asteroideae, Heliantheae
Ambrosiinae: Ambrosia, Iva, Parthenium, Xanthium
Ecliptinae: Calyptocarpus, Eclipta, Melanthera, Pascalia, Sphagneticola, Synedrella
Engelmanniinae: Berlandiera, Borrichia, Chrysogonum, Silphium
Helianthinae: Helianthus, Lagascea, Phoebanthus, Tithonia
Rudbeckiinae: Ratibida, Rudbeckia
Spilanthinae: Acmella
Verbesininae: Verbesina
Zinniinae: Echinacea, Heliopsis, Zinnia
subf. Asteroideae, Inuleae
Inulinae: Dittrichia, Pulicaria
Plucheinae: Pluchea, Pterocaulon, Sachsia
subf. Asteroideae, Madieae: Arnica
subf. Asteroideae, Millerieae
Dyscritothamninae: Tetragonotheca, Tridax

Galinsoginae: Galinsoga
Melampodiinae: Acanthospermum, Melampodium
Milleriinae: Smallanthus
subf. Asteroideae, Neurolaeneae: Enydra
subf. Asteroideae, Polymnieae: Polymnia
subf. Asteroideae, Senecioninae: Crassocephalum, Emilia, Erechtites, Gynura, Hasteola, Packera, Pseudogynoxys, Senecio
subf. Asteroideae, Tageteae: Flaveria, Pectis, Porophyllum, Tagetes, Thymophylla

Key: Eupatoriae, herbaceous, leaves opposite (at least proximally)
1. Involucres narrowly cylindric, (1)2-3 mm wide; phyllaries 5(6) in 1-2 series; florets 5(6) … Stevia
1. Involucres campanulate, cylindric, hemispheric, to obconic, (2)3-7(25) mm wide; phyllaries (5)8-45(65+) in (1)2-8+ series; florets (3)10-125(200+) [2]
2. Pappi of 5-6 aristate scales or coroniform [3]
2. Pappi of barbellate to plumose bristles [4]
3. Leaves mostly opposite (distal sometimes alternate), blades ovate, elliptic, to lanceolate; heads usually in cymiform to corymbiform arrays, rarely borne singly … Ageratum
3. Leaves whorled (4 or 6 per node), blades linear; heads borne singly … Sclerolepis
4. Leaves whorled (3-7 per node) and larger blades 2-15 cm wide … Eutrochium
4. Leaves opposite (rarely a few whorled), or whorled and <2 cm wide [5]
5. Stem pilose, with spreading hairs 0.5-1 mm long; corolla pink to purplish … Praxelis
5. Stems glabrous, puberulent, or short-pilose; corolla white, pink, bluish, to purple [6]
6. Involucres cylindric; proximal phyllaries <1/2 length of involucre, apices mostly rounded to obtuse … Chromolaena
6. Involucres obconic to hemispheric; proximal phyllaries subequal to slightly shorter than involucre, apices mostly acute [7]
7. Shrubs 0.5-3 m tall, stems woody … Koanophyllon
7. Herbs, sometimes to 3 m tall [8]
8. Stems weak, lax, decumbent; corolla usually pinkish … Fleischmannia
8. Stems generally erect, stiff [9]
9. Receptacle conic; corolla usually bluish to purple … Conoclinium
9. Receptacle flat to hemispheric; corollas white, rarely pinkish [10]
10. Phyllaries subequal; style base glabrous; cypselae eglandular, glabrous to distally puberulent (rarely also on angles) … Ageratina
10. Phyllaries usually unequal, the outer shorter; style base puberulent (glabrous in E. capillifolium); cypselae usually glandular-punctate, usually glabrous … Eupatorium

Acanthospermum

1. Fruit 7-10 mm long, with 5-7 ribs, without terminal spines … A. australe
1. Fruit 2-6 mm long, with 0-3 ribs, with 2 terminal spines [2]
2. Leaves 20-70 mm long, sessile or subsessile; fruit lacking distinct ribs, prickles scattered … A. hispidum
2. Leaves 10-35(45) mm long, the blade usually abruptly contracted to a winged petiole; fruit with 3 ribs, prickles mostly along ribs and the apex … A. humile

****Acanthospermum australe*** (Loefl. ex L.)Kuntze {AFP} —
****Acanthospermum hispidum*** DC. {AFP} —

*__Acanthospermum humile__ (Sw.)DC. {AFP} —

Achillea

__Achillea millefolium__ L. subsp. __millefolium__ {AFP} — Following the taxonomy in POWO. There have been numerous studies examining relationships within what has been called the *Achillea millefolium* aggregate. Samples in North America have been called *A. borealis*, related to *A. asiatica* (Guo et al. 2012). The name *A. lanulosa* has also been commonly used in North America (Mulligan & Bassett 1959). Distinctive morphological characters are difficult to discern, especially for determining if any specimens of the *A. millefolium* aggregate in North America represent taxa other than *A. borealis*.

Acmella

1. Ray flowers absent; disc 10-20 mm wide, usually with a distinct purplish or maroon zone at the tip; pappus of 2-3 bristles … A. oleracea
1. Ray flowers usually present on some flowers, corolla yellow; disc 4-10 mm wide, uniformly yellow; pappus absent [2]
2. Plant densely pilose; leaf blade base cordate to truncate; phyllaries 15-21, in 3 series … A. pilosa
2. Plant glabrate or sparsely puberulous; leaf blade base cuneate or attenuate; phyllaries 6-16, in 2 series [3]
3. Petioles 2-4 mm long; leaf blades linear-lanceolate, 12-40 mm long, 3-10 mm wide … A. pusilla
3. Petioles 3-40+ mm long; leaf blades ovate to lanceolate, 20-40(100) mm long, (4)10-35 mm wide … A. repens

^*Acmella oleracea* (L.)R.K.Jansen —
*__Acmella pilosa__ R.K.Jansen {AFP} —
*__Acmella pusilla__ (Hook. & Arn.)R.K.Jansen {AFP} —
__Acmella repens__ (Walter)Rich. {AFP} — Once known partly as *A. oppositifolia* (=*Heliopsis buphthalmoides* (Jacq.)Dunal) a misapplied name (Díaz-Piedrahíta 1990, Pruski 2018).

Ageratina

1. Petioles (5)10-30(50) mm long; leaf blade 2.5-8(9) cm wide, chartaceous; phyllaries 3-7 mm long; roots mostly 0.3-0.8 mm thick … A. altissima
1. Petiole 1-20(22) mm long; leaf blade 1.5-4 cm wide, relatively subcoriaceous; phyllaries 2-4.5 mm long; roots mostly 0.8-2 mm thick [2]
2. Petioles 1-12 mm long; leaf blades mostly 5-8 times longer than the subtending petiole, the blade margins usually shallowly crenate to subentire; corolla lobes usually densely long-pubescent; achenes usually glabrate … A. aromatica
2. Petioles 7-22 mm long; leaf blades mostly 1-4 times longer than the subtending petiole, the blade margins usually strongly toothed; corolla lobes usually sparsely short-pubescent to glabrate; achenes usually puberulent, at least apically … A. jucunda

__Ageratina altissima__ (L.)R.M.King & H.Rob. {AFP} —
__Ageratina aromatica__ (L.)Spach {AFP} —
__Ageratina jucunda__ (Greene)Clewell & Wooten {AFP} —

Ageratum

1. Roots woody, only slightly fibrous; plant glabrate to moderately pilose, eglandular; flowering Jul-Jan, rarely Apr … A. maritimum
1. Roots strongly fibrous, generally lacking thickened woody roots; plant glandular-punctate or stipitate-glandular [2]
2. Leaf blade underside yellow glandular-punctate (with a very short stipe <0.1 mm long; rarely eglandular); peduncles eglandular; phyllaries sparsely pilose to glabrous, eglandular, abruptly tapered at the tip, acute to short-acuminate; flowering Dec-Oct … A. conyzoides
2. Leaf blades eglandular; peduncles usually stipitate-glandular; phyllaries densely pilose (rarely glabrous), stipitate-glandular (rarely glabrous), gradually tapered in the upper half to the tip, acute; flowering Oct-Apr … A. houstonianum

****Ageratum conyzoides*** L. {AFP} —
****Ageratum houstonianum*** Mill. {AFP} —
Ageratum maritimum Kunth {AFP} — SE.

Ambrosia
1. Leaf blade with 3-5 lobes or unlobed … A. trifida
1. Leaf blade 1-3-pinnatified or 1-3-pinnately lobed [2]
2. Plant densely hispid or pilose, usually with a creeping, prostrate stem and erect offshoots; most leaves 2-3-pinnatifid or 2-3-pinnately lobed … A. hispida
2. Plant sparsely to densely strigillose or hispid, stems erect; most leaves 1-pinnatifid or 1-pinnately lobed or the pinnae with sparse, few shallow lobes or teeth [3]
3. Annual, the taproot with copious fibrous roots; petioles mostly (3)15-40(65) mm long … A. artemisiifolia
3. Perennial, mostly stout roots near the surface, often clonal from horizontal roots; petioles 0-15(25) mm long … A. psilostachya

Ambrosia artemisiifolia L. {AFP} —
Ambrosia hispida Pursh {AFP} —
Ambrosia psilostachya DC. {AFP} —
Ambrosia trifida L. {AFP} —

Anacis: Upon restructuring *Coreopsis*, the species below were originally combined in *Gyrophyllum* (Tadesse & Crawford), an illegitimate later homonym, also preceded in rank (Art. 11.2) by *Anacis* (Feng et al. 2024).

1. Petioles 0-0.5 cm long; ray corolla 11-13-striate; disc corolla yellow … A. major
1. Petioles 0.5-5 cm long; ray corolla 16-17-striate; disc corolla red to purple or brownish … A. tripteris

Anacis major (Walter)Z.H.Feng et al. {AFP} —
Anacis tripteris (L.)Schrank {AFP} —

Antennaria
Antennaria plantaginifolia (L.)Hook. {AFP} —

Anthemis

1. Plant odor weak or insignificant; receptacles paleate throughout, paleae lanceolate to oblanceolate; cypselae ribs smooth or weakly tuberculate ... A. arvensis
1. Plant strongly malodorous (glandular); receptacles paleate distally, paleae subulate to acerose; cypselae ribs tuberculate ... A. cotula

**Anthemis arvensis* L. {AFP} —
**Anthemis cotula* L. {AFP} —

Aphanostephus

**Aphanostephus skirrhobasis* (DC.)Trel. ex Branner & Coville var. *thalassius* Shinners {AFP} —

Arnica

Arnica acaulis (Walter)Britton et al. {AFP} — SE.

Arnoglossum

1. Leaf blades broadly cordate-ovate to deltate, 0.8-1.6 times longer than wide (sometimes a few elliptic and to 2.7 times longer than wide), the basal veins widely divergent (~60-90° with midrib) [2]
1. Leaf blades ovate, elliptic, to linear, 1.5-15(20) times longer than wide, the basal veins mostly ascending-divergent to ascending-arcuate (~30-45° angle with midrib) [3]
2. Stem smooth to striate; stems or leaf blade lower surfaces often glaucous; leaves membranous; phyllary midvein lacking a wing ... A. atriplicifolium
2. Stem ribbed or angular; stems and leaf blade lower surfaces not glaucous; phyllary midvein winged ... A. diversifolium
3. Basal or proximal leaf blades regularly sinuate-crenate, crenate, crenate-dentate, to shallowly dentate, with 10-30 teeth or undulations per side, the distal ones with 3-10 teeth or undulations per side (occasionally basal ones entire); involucre 12-15 mm long; phyllary midvein winged; corolla (9)11-12 mm long ... A. floridanum
3. Basal leaf blades entire, lobed, sinuate, or dentate, with 0-9 teeth or undulations per side; phyllary midvein lacking a wing; involucre, phyllary midvein, & corolla varied [4]
4. Stems terete to terete-striate; leaf blades entire to sinuate; involucre 8-10 mm long; phyllary midvein not winged; corolla 8-9(10) mm long [5]
4. Stem strongly ridged or angled; leaf blades coarsely dentate (at least some) to entire; involucre (8)8.5-13.4 mm long; phyllary midvein winged; corolla 7-10.5 mm long [6]
5. Basal and proximal leaf blades 2.7-15(20) times longer than wide ... A. ovatum var. lanceolatum
5. Basal and proximal leaf blades 1.6-2.6 times longer than wide ... A. ovatum var. ovatum
6. Basal leaf bades 15-37 cm long, the lateral veins appressed to strictly ascending-arcuate; involucre 10-13.4 mm long; phyllary midvein wing widest at base, irregularly coarsely erose-dentate to erose-sinuate; corolla 9-10.5 mm long, the tube 0.9-1 mm wide ... A. album
6. Basal leaf blades 12-15(20) cm long, the lateral veins divergent to ascending-arcuate; involucre (8)8.5-9.9(12) mm long; phyllary midvein wing widest near middle or apex, infrequently widest at base, entire or sinuate to irregularly finely dentate; corolla 7-8(9.5) mm long, the tube 0.6-0.7 mm wide ... A. sulcatum

•*Arnoglossum album* L.C.Anderson {AFP} — SE.
Arnoglossum atriplicifolium (L.)H.Rob. {AFP} —
Arnoglossum diversifolium (Torr. & A.Gray)H.Rob. {AFP} — ST.

•***Arnoglossum floridanum*** (A.Gray) H.Rob. {AFP} — N to C pen.
Arnoglossum ovatum (Walter)H.Rob. var. ***lanceolatum*** (Nutt.)D.B.Ward —
Arnoglossum ovatum (Walter)H.Rob. var. ***ovatum*** {AFP} —
Arnoglossum sulcatum (Fernald)H.Rob. {AFP} —

Artemisia

1. Leaf blades 2-3-pinnately lobed, the lobes filiform to linear; disc flowers functionally staminate (not setting fruit), corollas subglobose … A. campestris subsp. caudata
1. Leaf blades mostly unlobed to 1-pinnately lobed (basal ones sometimes more divided), the lobes lanceolate to linear-lanceolate; disc flowers bisexual and fertile, corollas funnelform [2]
2. Receptacles villous … A. absinthium
2. Receptacles glabrous [3]
3. Leaves glabrate on the upper surface … A. vulgaris
3. Leaves tomentose to floccose on the upper surface [4]
4. Leaves deeply lobed, sinuses >1/2 way to the midrib … A. ludoviciana
4. Leaves entire, toothed, or weakly lobed with sinuses <1/2 way to the midrib … A. stelleriana

****Artemisia campestris*** L. subsp. ***caudata*** (Michx.)H.M.Hall & Clements {AFP} —
^***Artemisia ludoviciana*** Nutt. {AFP} —
****Artemisia stelleriana*** Besser {AFP} —
****Artemisia vulgaris*** L. {AFP} —

Baccharis

1. Leaf blades mostly linear and mostly entire, rarely narrowly elliptic or toothed, 1–7(11) mm wide … B. angustifolia
1. Leaf blades obovate, rhombic, to elliptic, entire to toothed, (7)10–80 mm wide (some blades smaller, especially distal ones or on immature plants) [2]
2. Leaf blade entire or with sharply acute teeth, glands small and inconspicuous under magnification; synflorescence of sessile clusters subtended by normal-sized to slightly reduced leaves … B. glomeruliflora
2. Leaf blade entire or with bluntly acute to obtuse teeth, sometimes somewhat lobate, glands large and usually conspicuous under magnification (less so in older specimens); synflorescence in paniculiform or umbelliform arrays, the arrays pedunculate and not appearing sessile, the individual heads sometimes sessile along the leafless or bracteate central rachis of the paniculiform or umbelliform array [3]
3. All leaf blades entire (marginal teeth extremely rare), the apex broadly subtruncate to subacute or mucronulate, fairly uniform in size and shape, typically only a few markedly reduced immediately below the inflorescence; synflorescence umbelliform; involucre obconic; phyllaries often with a light midvein that bisects the base of the darker medial band; pappus 3–6 mm long in fruit … B. dioica
3. Usually at least some leaf blades toothed or lobed, occasionally all entire (esp. brackish areas), sometimes the distal ones especially entire, the apex narrowly acute to rounded, size and shape typically not uniform, the leaves typically gradually reduced in size towards the inflorescence; synflorescence paniculiform; involucre campanulate; phyllaries without a light midvein or rarely present at the base of the darker medial band; pappus (6.5–)7– 12 mm long in fruit … B. halimifolia

Baccharis angustifolia Michx. {AFP} — Possibly hybridizes with *B. halimifolia*.

[x]***Baccharis dioica*** Vahl {AFP} — SE. Miami-Dade Co. (also southern Mexico, Caribbean Islands). Once known from Brickell Hammock area, last specimen perhaps from early 1915 (*Small 5449*). Ledin (1951) wrote "Not common in our area. Confined to certain hammocks especially near the coast on Cutler Road below Miami." The name *B. dioica* has often been misapplied to specimens of *B. halimifolia* with mostly entire to subentire leaves.
Baccharis glomeruliflora Pers. {AFP} —
Baccharis halimifolia L. {AFP} — Throughout.

Balduina

1. Leaves 0.5-3.5(4) mm wide, to 6 cm long; flower heads 5-45 per plant; outer phyllaries 0.6-1.7 mm wide, apices acuminate; pappus scales 0.3-0.6 mm long … B. angustifolia
1. Leaves (2)3-12 mm wide, to 20(32) cm long; flower heads 1-3(5) per plant; outer phyllaries 1.7-3.1 mm wide, apices acute; pappus scales 1.3-2.2 mm long [2]
2. Basal leaves 2.8-10.4 cm long; disc corollas yellow to orange … B. uniflora
2. Basal leaves 7-32 cm long; disc corollas dark purple to orange-red … B. atropurpurea

Balduina angustifolia (Pursh)B.L.Rob. {AFP} —
Balduina atropurpurea R.M.Harper {AFP} — SE.
Balduina uniflora Nutt. {AFP} —

Berlandiera

1. Stems scabrous to subscabrous; leaf blade pinnatifid or pinnately lobed, especially in the proximal part of the leaf; disc flowers yellow … B. subacaulis
1. Stems with at least some long hairs; leaf blade toothed only, unlobed, or the petiole winged-pinnatifid; disc flowers dark red, purple, to yellow [2]
2. Stem floccose to tomentose; leaves usually toothed only … B. pumila
2. Stem with long fine hairs and short stout ones; leaves often with a winged-pinnatifid petiole … B. ×humilis

•***Berlandiera ×humilis*** Small (*pumila* × *subacaulis*) {AFP} —
Berlandiera pumila (Michx.)Nutt. {AFP} —
•***Berlandiera subacaulis*** (Nutt.)Nutt. {AFP} —

Bidens

1. Leaves simple, toothed, sessile … B. laevis
1. Leaves lobed to divided or compound, petiolate (at least some, sometimes some leaves simple, toothed but generally petiolate) [2]
2. Leaves 2-3-pinnatisect, lobes ovate, often entire or with few, coarse teeth; ray laminae 1-2(3) mm long or absent … B. bipinnata
2. Leaves 1-pinnatisect, pinnately compound, or if 2-pinnatisect then ultimate lobes narrowly oblanceolate to linear; ray laminae variable [3]
3. Ray floret laminae yellow, 10-30 mm long [4]
3. Ray floret laminae white, absent, or if yellow to 3.5 mm long [5]
4. Leaves 1-pinnatisect or pinnately compound, lobes or leaflets usually 3(-7); involucre 5-8 mm wide; disc corolla 2.5-3 mm long; cypselae broadly cuneate, 1.5-2.5 times as long as wide, margins not barbed, not ciliate … B. mitis

4. Leaves 1- to 2-pinnatisect or 1-pinnately compound, lobes or leaflets (3)5-9; involucre 6-12 mm wide; disc corolla 3-5 mm long; cypselae narrowly cuneate, 2.5-4 times as long as wide, margins barbed or ciliate ... B. trichosperma
5. Calyculus (subtending phyllaries) (3)5-20(60) mm long, at least some subequal to longer than disc florets and cypselae; ray florets absent or ray laminae yellow; cypselae laterally flattened [6]
5. Calyculus (subtending phyllaries) 3-5 mm long, subequal to shorter than disc florets and cypselae; ray florets absent or ray laminae white; cypselae quadrangular [7]
6. Calyculus bracts (3)4(5), usually eciliate; disc florets (10)15-25 ... B. discoidea
6. Calyculus bracts 5-21, usually ciliate; disc florets 20-60(120) ... B. frondosa
7. Ray florets 5-8, sterile, laminae 5-16 mm long; pappus of 2 awns... B. alba
7. Ray florets 0(3), if present then fertile and laminae 3-5 mm long; pappus of (2)3(-5) awns ... B. pilosa

++***Bidens alba*** (L.)DC. {AFP} — Throughout (also Neotropics). Disturbed sites. Probably introduced early on through Spanish ships. The most widely noticed wildflower in Florida (~1% of iNaturalist plant observations in Florida). The earliest known records in Florida are from the 1830s in Tampa Bay and Key West (Torrey & Gray 1842, as *B. leucantha*), and subsequently documented around Indian River in 1874 (Palmer, US), Cedar Key in 1876 (Garber, US), Miami in 1877 (Garber, US), Manatee in 1889 (Simpson, US), and Mobile, Alabama in 1891 (Mohr, US). Sometimes subsumed under *B. pilosa*.
Bidens bipinnata L. {AFP} —
Bidens discoidea (Torr. & A.Gray)Britton {AFP} —
Bidens frondosa L. {AFP} —
Bidens laevis (L.)Britton et al. {AFP} — Wiegand (1899) segregated *B. nashii* by its stricter branching, somewhat fleshy leaves, the margins less serrate, the base sometimes broad, and achene margins more contracted near apex.
Bidens mitis (Michx.)Sherff {AFP} —
****Bidens pilosa*** L. {AFP} — Sporadic records in disturbed sites. Rare (to absent?) in Florida, and sometimes misapplied to *B. alba*.
Bidens trichosperma (Michx.)Britton {AFP} — Duval Co. Known records from Curtiss in 1890s.

Bigelowia

1. Plants with rhizome-like caudex branches (becoming colonial or loosely matted); leaves linear, 0.3-2 mm wide, bases persistent (± sheathing branches of caudices) ... B. nuttallii
1. Plants with rhizomes or crowns, sometimes enlarging by offsets from stem or caudex bases; leaves linear-oblanceolate to oblanceolate or narrowly spatulate, 2-14 mm wide, bases not persistent [2]
2. Plants occurring singly; proximal leaves usually without a clearly distinct petiolar region, linear to linear-oblanceolate, mostly 2-4 mm wide, usually relatively few and not forming a prominent rosette (the basal and lower stem leaves strict to ascending); involucres 6-7.5 mm high; florets 3-6; corollas 4-5 mm long ... B. australis
2. Plants commonly occurring in close clusters; proximal leaves with a distinctly narrowed petiolar region, blade elliptic to oblanceolate, mostly 4-14 mm wide, crowded in a basal rosette (the leaves mostly spreading to somewhat ascending); involucres 4-6 mm high; florets 2-5; corollas 3-4 mm long ... B. nudata

•***Bigelowia australis*** (L.C.Anderson)G.L. Nesom {AFP} — Peninsula.

Bigelowia nudata (Michx.)DC. {AFP} — Panhandle to central peninsula.
Bigelowia nuttallii L.C.Anderson {AFP} — SE.

Boltonia

1. Heads in paniculiform arrays, primary branches mostly spreading; only proximal bracts leaflike, 8-55 mm long, others reduced and linear to linear-oblanceolate or subulate, 2–10(15) mm … B. diffusa
1. Heads in corymbiform arrays, branches spreading to ascending; most bracts leaflike, 10-120 mm, only peduncle bracts reduced, linear to subulate or ovate to linear-oblanceolate, 1-12(-62) mm [2]
2. Disc mostly 3-6(8) mm wide; pappus awns 0.3-0.8 mm long; outer phyllaries 1.3-2 mm long; ray laminae 5-9 mm long … B. apalachicolensis
2. Disc mostly 6-10 mm wide; pappus awns 0.4-2 mm long; outer phyllaries 1.5-3.8 mm long; ray laminae 5-13 mm long … B. asteroides

Boltonia apalachicolensis L.C.Anderson {AFP} — Subtly distinguishable from *B. asteroides*.
Boltonia asteroides (L.)L'Hér. {AFP} —
Boltonia diffusa Elliott {AFP} —

Borrichia

1. Leaves green (glabrous to sericeous), midrib light green and somewhat inconspicuous, basal lateral veins inconspicuous; head obovate-hemispheric, the ray corollas held at or just below the apex; proximal phyllaries appressed-ascending; outer disc flowers erect-ascending; paleae acute … B. arborescens
1. Leaves glaucous (villous to sericeous), midrib whitish and conspicuous, basal lateral veins distinct; head hemispheric, the ray corollas held well below the apex; proximal phyllaries spreading; outer disc flowers spreading-ascending; paleae spinose, the spine ca. 0.2-0.4 length of the body [2]
2. Phyllaries and paleae spine-tipped … B. frutescens
2. Phyllaries and paleae acute to cuspidate … B. ×cubana

Borrichia arborescens (L.)DC. {AFP} —
Borrichia ×cubana Britton & S.F.Blake (*arborescens* × *frutescens*) {AFP} —
Borrichia frutescens (L.)DC. {AFP} —

Bradburia

****Bradburia pilosa*** (Nutt.)Semple {AFP} —

Brickellia

1. Petioles to 5 cm long, to 1/2 as long as the leaf blade; leaf blades ovate, to 10 cm wide; pappi of 38-46 purple-tinged, barbellate bristles … B. cordifolia
1. Petioles to 0.5(1) cm long, <1/4 length of leaf blade; leaf blades linear to lanceolate, to 4 cm wide; pappi of 20-28 white to tawny, usually plumose or subplumose, sometimes barbellate, bristles [2]
2. Leaves (15)20-100 mm long, 4-20(40) mm wide … B. eupatorioides
2. Leaves to 20 mm long, to 3 mm wide … B. mosieri

Brickellia cordifolia Elliott {AFP} — SE.

Brickellia eupatorioides (L.)Shinners {AFP} —
•***Brickellia mosieri*** (Small)Shinners {AFP} — FE. SE.

Brintonia
Brintonia discoidea (Elliott)Greene {AFP} —

Calyptocarpus
****Calyptocarpus vialis*** Less. {AFP} —

Carphephorus: Well-resolved phylogenies are lacking to clarify relationships and generic boundaries in Liatrinae (Schilling 2011).

1. Leaves linear, 1-2(3) mm wide … C. pseudoliatris
1. Leaves mostly oblanceolate to spatulate, 3-40 mm wide [2]
2. Leaves tapering-acute at the apex, widest between the middle and apex, to 12 cm long, to 1 cm wide, secondary veins not evident, glandular-punctate; stems glandular-punctate; pappus bristles in 2 series (Litrisa) … C. carnosus
2. Leaves generally rounded at the apex, widest just below the apex, to 20 cm long, to 4 cm wide, secondary veins conspicuous or obscure, eglandular or glandular; stems eglandular (peduncles sometimes stipitate-glandular) [3]
3. Leaves glandular-punctate, secondary veins obscure; stems villous to hirsute; involucre 6-10 mm long; phyllaries 15-40 in 3-5(7) series … C. corymbosus
3. Leaves eglandular, secondary veins usually conspicuous; stems glabrous or villous to hirsute; involucre 3-6 mm long; phyllaries 5-12 in 1-2(3) series (Trilisa) [4]
4. Stems villous to hirsute; synflorescence racemiform or thyrsoid, the interspersed bracts to 2 cm long; peduncles stipitate-glandular … C. paniculatus
4. Stems glabrous; synflorescence paniculiform or corymbiform, the subtending bracts to 0.5 cm long; peduncles glabrous [5]
5. Plant odor pleasant (coumarin- or vanilla-like); basal leaves 13-34 cm long, 2.3-6 cm wide; cauline leaf margins sometimes toothed; synflorescence compact, the inflorescence branches mostly ascending to strict-ascending; florets mostly 7-10 … C. odoratissimus
5. Plant odor insignificant; basal leaves to 6-22 cm long, 2-3(4) cm wide; cauline leaf margins entire; inflorescence branches mostly widely divergent to ascending; florets mostly 10-14 … C. subtropicanus

•***Carphephorus carnosus*** (Small)C.W.James {AFP} —
Carphephorus corymbosus (Nutt.)Torr. & A.Gray {AFP} —
Carphephorus odoratissimus (J.F.Gmel.)H.Hebert {AFP} —
Carphephorus paniculatus (J.F.Gmel.)H.Hebert {AFP} —
Carphephorus pseudoliatris Cass. {AFP} —
•***Carphephorus subtropicanus*** DeLaney et al. {AFP} —

Centaurea
1. Leaf margins prickly; heads sessile, enveloped by foliaceous bracts; phyllaries spine-tipped; corolla yellow … C. benedicta
1. Leaf margins not prickly; heads pedunculate; phyllaries apically fimbriate; corolla white, pink, blue, to purple [2]
2. Annual; leaves entire, unlobed … C. cyanus

2. Perennial; cauline leaves pinnatifid or pinnately lobed … C. stoebe subsp. australis

**Centaurea benedicta* (L.)L. {AFP} —
**Centaurea cyanus* L. {AFP} —
**Centaurea stoebe* L. subsp. *micranthos* (Gugler)Hayek {AFP} —

Centipeda
**Centipeda minima* (L.)A.Braun & Asch. — Martin Co. (native to Asia, Australia).

Centratherum
**Centratherum punctatum* Cass. {AFP} —

Chaptalia
1. Peduncle dilated just below the head; heads erect; corolla laminae 0.2-0.3 mm wide; inner florets bisexual; cypselae beak filiform and 0.5-2 times as long as body … C. albicans
1. Peduncle generally of uniform width throughout; heads nodding, lateral, or erect; corolla laminae 0.9-1.5 mm wide; inner florets functionally staminate; cypselae beak stout and 0.2-0.3 times as long as body … C. tomentosa

Chaptalia albicans (Sw.)Vent. ex B.D.Jacks. {AFP} — ST.
Chaptalia tomentosa Vent. {AFP} —

Chromolaena
1. Petiole 0-2(3) mm long; inner phyllary apices petaloid, loose, hyaline, pinkish or purplish … C. ivifolia
1. Petiole 3-25 mm long; inner phyllary apices appressed, not or scarcely petaloid, whitish [2]
2. Leaf blades 1-5 cm long, to 2.5 cm wide; involucres 5.5-7.5(8) mm long … C. frustrata
2. Leaf blades (1.5)5-12 cm long, 1.5-6 cm wide; involucres (7)8-10 mm long … C. odorata

•*Chromolaena frustrata* (B.L.Rob.)R.M.King & H.Rob. {AFP} — FE. SE.
**Chromolaena ivifolia* (L.)R.M.King & H.Rob. {AFP} —
Chromolaena odorata (L.)R.M.King & H.Rob. {AFP} —

Chyrsanthemum
^*Chyrsanthemum morifolium* Ramat. — Mostly as a potted plant.

Chrysogonum
Chrysogonum virginianum L. var. *australe* (Alexander ex Small)Ahles {AFP} —

Chrysoma
Chrysoma pauciflosculosa (Michx.)Greene {AFP} —

Chrysopsis
1. Cypselae with 2-10 ridges, the ridges yellow to red-brown, translucent; phyllaries glabrous or densely pilose, sometimes stipitate-glandular … Key A
1. Cypselae without yellow to red-brown, translucent ridges; phyllaries moderately to densely stipitate-glandular … Key B

Key A: Cypselae with 2-10 translucent, yellow to red-brown ridges
1. Phyllaries 1.5-2.5 mm wide, in 2-3 series, stipitate-glandular … C. latisquamea
1. Phyllaries 0.5-1(1.3) mm wide, in 4-5 series, eglandular or stipitate-glandular [2]
2. Phyllary apices spreading to reflexed, flexuous or twisted, usually long-attenuate to acute, eglandular; cypselae with 6-10 ridges … C. subulata
2. Phyllary apices appressed to slightly recurved at the tip, acute to short-acuminate, sometimes stipitate-glandular; cypselae with 2-6 ridges [3]
3. Stem erect; leaf margin eciliate [4]
3. Stem procumbent, ascending, to erect; leaf margin eciliate or sparsely to densely woolly [5]
4. Stems 30-80 cm long, green to dark purple; leaves to 100 (esp. on tall plants), linear to linear-lanceolate or elliptic, sometimes undulate, strongly twisted; heads 4-30(50) in open corymbiform arrays … C. linearifolia subsp. dressii
4. Stems 30-200 cm long, often dark purple; leaves to 200 on tall plants, linear to narrowly linear, flat or slightly undulate or twisted; heads 20-100, in compact subumbelliform to paniculiform arrays … C. linearifolia subsp. linearifolia
5. Perennials; stems procumbent, branched proximally, with up to 80 flowering branches; mid and distal cauline leaves to 100+, crowded, linear-elliptic to oblong, margins eciliate, glabrous; heads in compact umbelliform arrays; phyllaries appressed, glabrous to glabrate, sometimes outer ones with a few stipitate glands proximally … C. gossypina subsp. cruiseana
5. Biennials or short-lived perennials; stems procumbent to erect, simple or branched; mid and distal cauline leaves 10-50+, sometimes crowded, linear, lanceolate, oblong, or ovate, sparsely to densely woolly at least along margins; heads in lax to compact corymbiform or subumbelliform arrays; phyllaries glabrate to densely woolly, sparsely to densely stipitate-glandular [6]
6. Biennials or short-lived perennials, 10-100 cm long; stems procumbent to erect, simple or branched; mid to distal cauline leaves broadly lanceolate, oblong, to ovate, margins sparsely to densely woolly or sometimes distal cauline eciliate, faces sparsely to densely woolly, distal sometimes glabrate; heads few in lax corymbiform arrays; phyllaries sparsely to densely pilose or woolly and densely stipitate-glandular, rarely glabrous or glabrate … C. gossypina subsp. gossypina
6. Usually short-lived perennials to 80 cm long; stems ascending to erect, rarely procumbent, usually simple; mid to distal cauline leaves linear, lanceolate, to linear-oblanceolate, margins coarsely long-pilose, faces sparsely pilose to glabrate; heads usually in subumbelliform arrays, sometimes in compound subumbelliform arrays; phyllaries glabrate, apices spreading … C. gossypina subsp. hyssopifolia

Key B: Cypselae without translucent, yellow to red-brown ridges
1. Cauline leaves eglandular, sericeous … C. mariana
1. Cauline leaves stipitate-glandular (glands sometimes hidden by hairs), woolly to sericeous-tomentose [2]
2. Phyllary apices spreading to reflexed, attenuate to long-attenuate [3]
2. Phyllary apices erect, acuminate, acute, to obtuse [4]
3. Stems decumbent, ascending, to erect; heads in corymbiform to paniculiform arrays … C. godfreyi
3. Stems erect; heads in paniculiform arrays … C. lanuginosa
4. Mid cauline leaf faces woolly or tomentose; involucres yellow-green in bud [5]
4. Mid cauline leaf faces usually sparsely hirsute, rarely woolly; involucres green in bud [6]

5. Mid cauline leaf blades obovate or oblanceolate, bases cuneate to slightly auriculate-clasping, marginal cilia rarely more than 1 mm, faces appressed-tomentose; distal blade faces appressed-tomentose, sparsely stipitate-glandular ... C. floridana
5. Mid cauline leaf blades oblong, oblong-elliptic, sometimes ovate to lanceolate, bases truncate to rounded, some marginal cilia 2-3 mm, faces woolly; distal blade faces glabrate to sparsely woolly-pilose, densely stipitate-glandular ... C. highlandsensis
6. Stems ascending to erect, tips usually nodding before heads form; mid leaf faces moderately hirsute, larger glandular hairs 0.3-0.9 mm long; heads in compact to moderately open, corymbiform to paniculiform arrays ... C. delaneyi
6. Stems erect, simple, tips erect to ascending before heads form; mid leaf faces glabrate to sparsely strigillose, larger glandular hairs 0.01-0.3 mm long; heads in compact to lax, corymbiform arrays ... C. scabrella

•***Chrysopsis delaneyi*** Wunderlin & Semple {AFP} —
•***Chrysopsis floridana*** Small {AFP} — FE. SE.
Chrysopsis godfreyi Semple {AFP} — SE.
Chrysopsis gossypina (Michx.)Elliott subsp. ***cruiseana*** (Dress)Semple {AFP} — SE.
Chrysopsis gossypina (Michx.)Elliott subsp. ***gossypina*** {AFP} —
Chrysopsis gossypina (Michx.)Elliott subsp. ***hyssopifolia*** (Nutt.)Semple {AFP} —
•***Chrysopsis highlandsensis*** DeLaney & Wunderlin {AFP} — SE.
•***Chrysopsis lanuginosa*** Small {AFP} —
•***Chrysopsis latisquamea*** Pollard {AFP} —
•***Chrysopsis linearifolia*** Semple subsp. ***dressii*** Semple {AFP} —
•***Chrysopsis linearifolia*** Semple subsp. ***linearifolia*** {AFP} —
Chrysopsis mariana (L.)Elliott {AFP} —
Chrysopsis scabrella Torr. & A.Gray {AFP} —
•***Chrysopsis subulata*** Small {AFP} —

Cichorium
****Cichorium intybus*** L. {AFP} —

Cirsium
1. Stem armed with prickly, decurrent leaf bases; leaf blade upper surface covered with short, appressed bristles or prickles ... C. vulgare
1. Stem lacking prickly decurrent leaf bases or these inconspicuous; leaf blade upper surface usually lacking bristles or prickles [2]
2. Heads directly subtended by a whorl of foliaceous prickly bracts enveloping the phyllaries [3]
2. Heads not directly subtended by foliaceous bracts [5]
3. Stems and involucres densely tomentose or arachnose ... C. horridulum var. horridulum
3. Stems and involucres glabrous to sparsely tomentose or arachnose [4]
4. Leaves shallowly to deeply pinnatifid, main prickles 10-30 mm long ... C. horridulum var. megacanthum
4. Leaves spinose-dentate to shallowly pinnatifid, main prickles mostly 5-10 mm long ... C. horridulum var. vittatum
5. Phyllary prickle 0-0.5 mm long ... C. muticum
5. Phyllary spines 0.5-12 mm long [6]
6. Leaf blade lower surface densely tomentose [7]
6. Leaf blade lower surface arachnoid-villous, losely tomentose, to glabrate [8]

7. Involucre (2)2.5-3.5(4) cm long; phyllaries without a glutinous ridge … C. altissimum
7. Involucre 1.5-2.5 cm long; distal phyllaries with a medial glutinous ridge … C. virginianum
8. Heads 1-5(10) per plant; involucre 2.5-4 cm long … C. lecontei
8. Heads 5-40 per plant; involucre 1.5-2.5 cm long … C. nuttallii

Cirsium altissimum (L.)Spreng. {AFP} —
Cirsium horridulum Michx. {AFP} —
Cirsium lecontei Torr. & A.Gray {AFP} —
Cirsium muticum Michx. {AFP} —
Cirsium nuttallii DC. {AFP} —
Cirsium virginianum (L.)Michx. {AFP} —
****Cirsium vulgare*** (Savi)Ten. {AFP} —

Cladanthus

****Cladanthus mixtus*** (L.)Chevall. {AFP} —

Conoclinium

1. Peduncle subtending heads 5-10 mm long; heads 4.5-6 mm wide; corolla tube 2.0-2.3 mm long … C. coelestinum
1. Peduncle subtending heads 1-5 mm long; heads 3-5 mm wide; corolla tube 1.7-2.0 mm long … C. dichotomum

Conoclinium coelestinum (L.)DC. {AFP} —
Conoclinium dichotomum Chapm. — Actual distribution unclear; subtly distinguished from *C. coelestinum*.

Coreopsis

1. Ray corollas entire to minutely 2- or 3-fid at the apex; disc corollas 5-lobed, with 5 anthers; usually at least some proximal leaves palmately lobed or compound … Anacis
1. Ray corollas distinctly 3-4-lobed at the apex, the median lobe often bilobed, sometimes with darker colored blotches at base or near middle; disc corollas 4- or 5-lobed with 4-5 anthers; leaves simple, pinnately divided, or with a few basal auricles … Coreopsis

Key for *Coreopsis*
1. Leaves opposite; disc corolla 5-lobed with 5 anthers, and yellow (if reddish, the ray corolla with reddish blotches near base) … sect. Coreopsis
1. Leaves alternate or opposite; disc corolla 4-lobed with 4 anthers, and reddish (if 5-lobed, then ray corolla without reddish blotches) [2]
2. Leaves opposite, usually some pinnately divided; paleae linear-attenuate; cypselae oblong-elliptic, outer surface rounded, inner surface flat, wings entire … sect. Calliopsis
2. Leaves alternate or opposite, simple; paleae linear, oblanceolate, to spatulate; cypselae oblong, flattish, wings deeply fimbriate-lacerate … sect. Eublepharis

Key for sect. *Coreopsis*
1. Annuals; ray corolla often with reddish or purplish blotches near the base [2]
1. Perennials; ray corolla without reddish blotches [3]
2. Stem leafy throughout; phyllaries glabrous, occasionally with marginal cilia; disc corolla dark reddish purple; cypselae with corky, inflexed wings, epappose … C. basalis

2. Stem mostly with leaves at the base; phyllaries usually somewhat hairy; disc corolla yellow; cypselae with flat wings and 2 deciduous white pappi … C. nuecensis
3. Stem with leaves crowded towards the base, the main stem usually with up to 6 nodes above the base, the flowering stems to 25 cm long and sometimes bracteate distally, the peduncles half or more of the stem height; heads 3.5-6 cm wide at anthesis [4]
3. Stem leafy throughout, with up to 12 nodes above the base, the flowering stems 8-20 cm long and leafy, the peduncles less than half the stem height; heads 2.5-4 cm wide at anthesis [5]
4. Leaves 15-30 times longer than wide, occasionally the blade with 1-2 small lateral lobes, glabrous … C. bakeri
4. Leaves 2.5-13(17) times longer than wide, sometimes some strongly lobed, glabrous to pubescent … C. lanceolata
5. Mid-cauline leaves simple or with 2-4 lobes, blade or segments ovate to elliptic-lanceolate, rarely linear-lanceolate … C. grandiflora
5. Mid-cauline leaves 1-2 pinnately divided with (3)5-9 linear-lanceolate segments … C. pubescens

Key for sect. *Calliopsis*
1. Ray corolla yellow to orange-yellow; pappus 0.5-1.5 mm long, palea-like, triquetrous, antrorsely barbed or hispid; cypselae winged … C. leavenworthii
1. Ray corolla yellow usually with a reddish-brown to purplish spot near base; pappus absent or of short awns to 0.5(1) mm long, glabrous; cypselae winged or not … C. tinctoria

Key for sect. *Eublepharis*
1. Leaves opposite, the blades ovate to elliptic, 15-35 mm wide … C. integrifolia
1. Leaves alternate, or opposite with blades linear to narrowly elliptic [2]
2. Ray corolla lavender to purple-pink; disc corolla yellow-green to brown … C. nudata
2. Ray corolla yellow to orange, sometimes with a reddish area near the base; disc corolla reddish brown [3]
3. Stem zigzag, internodes mostly shorter than the adjacent leaves, leafy to near the middle of the stem; leaves often with moniliform hairs; adaxial phyllaries oblong-linear to lanceolate; cypselae obovate … C. longifolia
3. Stem mostly straight, internodes mostly longer than the adjacent leaves, leaves primarily basal; leaves glabrous; adaxial phyllaries deltoid to triangular; cypselae oblong [4]
4. Leaves with inconspicuous (viewable at 40x) black dots; heads (30)40-75 mm wide, 5-15 mm high at anthesis; cypselae 2-4.5 mm long … C. floridana
4. Leaves often with numerous conspicuous black dots; heads 20-30(40) mm wide, 3-5 mm high at anthesis; cypselae 1.5-2 mm long … C. gladiata

•***Coreopsis bakeri*** E.E. Schill. {AFP} —
****Coreopsis basalis*** (A.Dietr.)S.F.Blake {AFP} —
•***Coreopsis floridana*** E.B.Smith {AFP} —
Coreopsis gladiata Walter {AFP} —
Coreopsis grandiflora Hogg ex Sweet {AFP} —
Coreopsis integrifolia Poir. {AFP} — SE.
Coreopsis lanceolata L. {AFP} —
Coreopsis leavenworthii Torr. & A.Gray {AFP} —
Coreopsis linifolia Nutt. {AFP} —
Coreopsis nudata Nutt. {AFP} —

*__Coreopsis nuecensis__ A.Heller {AFP} —
__Coreopsis pubescens__ Elliott {AFP} —
*__Coreopsis tinctoria__ Nutt. {AFP} —

Cosmos
1. Ray corolla yellow to red-orange ... C. sulphureus
1. Ray corolla pink, purple, violet, to white [2]
2. Ultimate leaf segments 2-10 mm wide ... C. caudatus
2. Ultimate leaf segments 0.2-1.5 mm wide [3]
3. Ray corolla 15-50 mm long S#1585](C. bipinnatus
3. Ray corolla 5-9 mm long ... C. parviflorus

^*Cosmos bipinnatus* Cav. {AFP} —
^*Cosmos caudatus* Kunth {AFP} —
^*Cosmos sulphureus* Cav. {AFP} —

Crassocephalum
*__Crassocephalum crepidioides__ (Benth.)S.Moore {AFP} —

Crepis
**Crepis capillaris* (L.)Wallr. — Reported; no specimens known.
*__Crepis pulchra__ L. {AFP} —

Croptilon
__Croptilon divaricatum__ (Nutt.)Raf. {AFP} —

Cyanthillium
*__Cyanthillium cinereum__ (L.)H.Rob. {AFP} —

Dahlia
^*Dahlia pinnata* Cav. —

Dittrichia
*__Dittrichia viscosa__ (L.)Greuter {AFP} —

Doellingeria
1. Branches of arrays and peduncles leafless or nearly so, branches flexuous; heads 3-40(67); phyllary midvein usually swollen from base to apex; cypselae glabrous ... D. infirma
1. Branches of arrays and peduncles short, leafy, not flexuous, heads (3)20-100(-300+); phyllary midvein swollen only near the apex; cypselae sparsely strigose ... D. sericocarpoides

__Doellingeria infirma__ (Michx.)Greene {AFP} —
__Doellingeria sericocarpoides__ Small {AFP} —

Dracopis
__Dracopis amplexicaulis__ (Vahl)Cass. ex Less. {AFP} —

Echinacea

Echinacea purpurea (L.)Moench {AFP} — SE.

Eclipta

Eclipta prostrata (L.)L. {AFP} —

Elephantopus : Revised by Clonts (1972).

1. Stem leafy, the cauline leaves 3-22 cm long, basal leaves usually absent at flowering … E. carolinianus
1. Stem with few, highly reduced leaves, the cauline leaves to 4.5 cm long, the basal leaves usually present at flowering [2]
2. Inner phyllaries sparsely strigose or hispidulous with hairs 0.05-0.3(0.5) mm long; cypselae 2.5-3 mm long … E. nudatus
2. Inner phyllaries densely strigose, villous, or pilosulous with hairs 0.3-1 mm long; cypselae 3-5 mm long [3]
3. Basal leaves 1.5-7.5 cm wide, lower surface densely pilose to tomentose; inflorescence bracts 0.4-1.2 cm wide; inner phyllaries 6-8(9) mm long; pappi 2-4.5 mm long; cypselae 3-4 mm long … E. elatus
3. Basal leaves 5.5-10.5 cm wide, lower surface densely tomentose; inflorescence bracts 0.7-1.8 cm wide; inner phyllaries (8)9-13 mm long; pappi 6-8 mm long; cypselae (3)4-5 mm long … E. tomentosus

Elephantopus carolinianus Raeusch. {AFP} —
Elephantopus elatus Bertol. {AFP} —
Elephantopus nudatus A.Gray {AFP} —
Elephantopus tomentosus L. {AFP} —

Emilia

1. Basal-most leaf blades lyrate-pinnatifid to lobate; involucre narrowly cylindrical, typically 2-3 times as long as wide at anthesis; corolla pink to purplish (rarely red), the tube paler, the lobes 0.5-0.7 mm long (1.1-1.5 mm long in the Asian variety *javanica*), exserted only up to 2 mm beyond the involucre; style whitish pink to pink; pollen white … E. sonchifolia
1. Basal-most leaf blades entire to dentate (rarely lobed); involucre broadly cylindrical, typically 1.5-2 times as long as wide at anthesis; corolla pink to red or lobes pinkish and tube yellowish, the lobes 0.8-1.7 mm long, exserted up to 4 mm beyond the involucre; style whitish yellow to yellow-orange; pollen yellow-orange [2]
2. Pedicel glabrate; involucre sparsely to moderately pilose at the apex, glabrate at the base; corolla pink to red, the tube paler … E. fosbergii
2. Pedicel pilose to glabrate; involucre sparsely to densely pilose at the apex, densely pilose to glabrate at the base; corolla lobes pinkish, the tube pale yellowish … E. praetermissa

****Emilia fosbergii*** Nicolson {AFP} —
****Emilia praetermissa*** Milne-Redh. {AFP} — Central peninsula (native to west Africa). Disturbed sites. Thought to be an allotetraploid derived from *E. coccinea* (Sims)G.Don and *E. sonchifolia* (Olorode & Olorunfemi 1973).
****Emilia sonchifolia*** (L.)DC. {AFP} —

Enydra

*__Enydra fluctuans__ Lour. {AFP} —

Erechtites: Genus revised by Belcher (1956).
1. Leaves sessile to subsessile and cauline leaves dentate to deeply lobed, any petiolate areas with the wing tissue or intervening wing-like tissue between lobes ≥2 mm wide on each side of midrib; phyllaries 8-11(15) mm long; corolla and stigmas whitish to pale yellow … E. hieraciifolius
1. Leaves petiolate or winged-petiolate (sometimes distal ones sessile) and cauline leaves mostly moderately to deeply pinnately lobed, with petiole wings or intervening proximal wing-like tissue between lobes usually ≤2 mm wide on each side of midrib; phyllaries 7-8 mm long; corolla and stigmas pale lavender … E. valerianifolius

__Erechtites hieraciifolius__ (L.)Raf. ex DC. {AFP} —
*__Erechtites valerianifolius__ (Link ex Spreng.)DC. —

Erigeron
1. Plant 4-15(20) cm long; heads 1-2 per stem … E. bellioides
1. Plant (10)15-150+ cm long; heads 1-200+ per stem [2]
2. Stem usually densely leafy; leaves generally linear to narrowly lanceolate or narrowly oblanceolate, 7-30 times longer than wide; ray corolla laminae 0-2 mm long; annuals [3]
2. Stem sparsely to moderately leafy; leaves generally oblanceolate, spatulate, ovate, lanceolate, to oblong, 2-15 times longer than wide; ray corolla laminae 0.5-8 mm long; annuals or perennials [5]
3. Leaf surfaces mostly densely strigose to hispidulous; phyllaries usually hispidulous to strigose; receptacles 3-5 mm wide in fruit; pistillate florets 60-150+; pappi 3-4+ mm long … E. bonariensis
3. Leaf surface mostly glabrate to sparsely strigose or sparsely hispidulous; phyllaries glabrous to sparsely strigose; receptacles 1-3 mm wide in fruit; pistillate florets 20-45+; pappi 2-3 mm long [6]
4. Phyllaries usually sparsely strigose; corollas of pistillate florets with laminae 0 or to 0.3 mm; cypselae pale tan (usually some in each head with reddish nerves) … E. floribunda
4. Phyllaries usually glabrous, sometimes sparsely strigose; corollas of pistillate florets with laminae 0.3–1+ mm; cypselae uniformly pale tan to light gray-brown
5. Stem hispidulous with spreading hairs, at least proximally; phyllaries with greenish tips … E. canadensis var. canadensis
5. Stem glabrous to sparsely pubescent distally; phyllaries with purple-reddish tips … E. canadensis var. pusillus
6. Ray laminae to 2 mm long, shorter than the phyllaries; basal leaves mostly not persistent and not rosette-forming … E. laevigatus
6. Ray laminae 3-8 mm long, subequal to longer than the phyllaries; larger leaves sometimes basal, persistent, and rosette-forming [7]
7. Pappi of rays and discs often dissimilar, the ray without bristles, the disc with 0 or 8-15 bristles [8]
7. Pappi of rays and discs similar, the ray and disc with 10-30 bristles [10]
8. Stems hairs spreading, sometimes strigose distally; basal leaves usually withering by flowering, cauline little reduced proximal to midstem, blades lanceolate to oblong or ovate, margins coarsely serrate to nearly entire … E. annuus

8. Stems hairs usually ascending, rarely spreading; basal leaves usually persistent to flowering, blades spatulate to broadly or narrowly oblanceolate to linear, cauline usually gradually reduced distally, margins entire or obscurely serrate or crenate [9]
9. Inflorescence diffuse and extensively branched, lacking leaves; involucres 2-3 mm long; pollen viability usually high (mean 84%, range 60-99%, or as low as 17% and with up to 7 B-chromosomes), size mostly 13-16 um wide (rarely with a few 18-23 um wide), uniformly and darkly staining with cotton blue in lactophenol; sexual; diploid (n=9), with 3-4(7) B-chromosomes … E. strigosus var. beyrichii
9. Inflorescence not diffuse or if diffuse then somewhat leafy; involucres mostly 2.5-4 mm long; pollen viability usually low (mean 21%, range 0-83%), size higly variable (many 18-23 um wide), with nonviable micrograins, non-staining or stained with shrunken cytoplasm within grain wall; apomictic (diplosporous, rarely with tetrasporic maternal gametophytes); triploid or tetraploid (n=9), without B-chromosomes … E. strigosus var. strigosus
10. Plant mostly glabrate; leaf margins entire to faintly toothed; cauline leaves extremely reduced, usually <3 cm long and <0.7 mm wide; cypselae 4-nerved, 1.2-1.6 mm long … E. vernus
10. Plant usually strigose, hirsute, to villous; at least some leaves with distinct teeth; cauline leaves gradually to strongly reduced, usually some >3 cm long or >0.6 mm wide; cypselae 2-nerved, 0.6-1.5 mm long [10]
10. Plants with sparsely scaly rhizomes … E. pulchellus
10. Plants without rhizomes [11]
11. Basal leaves petiolate, the blade base abruptly contracted to a distinct petiole; cauline leaves not clasping; ray corollas 3-5 mm long … E. tenuis
11. Basal leaves sessile, the blade base cuneate or attenuate; cauline leaves clasping to subclasping; ray corollas 4-10 mm long [12]
12. Stem internodes usually shorter than the subtending leaves, the leaves gradually reduced upwards; involucres 4-6 mm long, 6-15 mm wide; ray florets 150-250(400), corollas usually white or pinkish, 5-10 mm; pappus bristles 15-20(30) … E. philadelphicus
12. Stem internodes longer than the subtending leaves, the leaves strongly reduced upwards; involucres 2.5-4 mm long, 4.5-10 mm wide; ray florets 100-150, corollas white to lavender ot pale blue, sometimes pinkish, 4-6 mm; pappus bristles 10-15 … E. quercifolius

Erigeron annuus (L.)Pers. {AFP} —
****Erigeron bellioides*** DC. {AFP} —
Erigeron bonariensis L. {AFP} —
Erigeron canadensis L. var. ***canadensis*** {AFP} —
Erigeron canadensis L. var. ***pusillus*** (Nutt.)B. Boivin {AFP} —
****Erigeron floribundus*** (Kunth)Sch.Bip. —
****Erigeron laevigatus*** Rich. {AFP} —
Erigeron philadelphicus L. {AFP} —
Erigeron pulchellus Michx. {AFP} —
Erigeron quercifolius Poir. {AFP} —
Erigeron strigosus Muhl. ex Willd. var. ***beyrichii*** (Fisch. & C.A. Mey.)A. Gray {AFP} — Here recognized as a variety, like Cronquist (1947), as possibly gene flow is frequent in mixed populations of the two varieties. Was recently elevated to species (Noyes & Poindexter 2025). "However, observations by the first author indicate that mature [var. *beyrichii*] and apomictic *E. strigosus* in the field and even under greenhouse cultivation are often morphologically very similar." […] "Ongoing research on mixed populations indicates that apomictic plants can fertilize sexual plants, with diverse fitness consequences for progeny (R.D. Noyes, unpublished data). For instance, seeds collected from sexual diploid plants in

populations that also include triploid and tetraploid apomicts yield cohorts that include up to 20% polyploid apomicts. Hybrid dynamics thus likely closely parallel those recently documented for *Taraxacum*" (Noyes & Allison 2005).

Erigeron strigosus Muhl. ex Willd. var. ***strigosus*** {AFP} —
Erigeron tenuis Torr. & A.Gray {AFP} —
Erigeron vernus (L.)Torr. & A.Gray {AFP} —

Eupatorium

1. Leaves pinnatifid, or pinnately or ternately lobed, lobes linear to linear-lanceolate, margins entire (Traganthes group) … Key A
1. Leaves simple, not lobed, margins crenate, entire, laciniate, serrate, or serrulate (core Eupatorium group) … Key B

Key A: Leaves pinnatifid to lobed
1. Leaf blades or lobes linear-lanceolate, to 4 mm wide; heads in subcorymbiform to subpaniculiform arrays; florets 7-9 … E. ×pinnatifidum
1. Leaf blades or lobes usually linear and <3 mm wide; heads in paniculiform arrays; florets usually 5 [2]
2. Stems glabrous; heads secund on branches … E. leptophyllum
2. Stems puberulent; heads not secund on branches [3]
3. Leaf blades or lobes 0.2-0.5(1) mm wide (margins strongly revolute); phyllaries usually glabrate or glabrous, usually not gland-dotted … E. capillifolium
3. Leaf blades or lobes 0.5-2.5(4) mm wide; phyllaries usually puberulent (mostly on midveins), usually gland-dotted … E. compositifolium

Key B: Leaves simple, unlobed
1. Petioles of larger leaves 5-30 mm long, distinct [2]
1. Petioles 0-5(10) mm long, distinct or subtly discernible from leaf blade [3]
2. Leaf blades deltate to rhombic, to 6(8) cm long, coriaceous-subsucculent, margins generally crenate-undulate; florets 5 … E. mikanioides
2. Leaf blades lanceolate, to 15 cm long, chartaceous to membranaceous, margins mostly serrate to serrate-crenate; florets 9–15 … E. serotinum
3. Leaf bases connate-perfoliate … E. perfoliatum
3. Leaf bases not connate-perfoliate [4]
4. Phyllaries with a white filiform to acuminate apex [5]
4. Phyllaries with an acute, obtuse, to rounded, green to white apex [7]
5. Leaves 4-10(15) mm wide, secondary veins weak or obscure … E. leucolepis
5. Leaves (5)10-45 mm wide, secondary veins conspicuous throughout [6]
6. Leaves usually gland-dotted; phyllaries puberulent to villous (at least toward bases and on midveins), gland-dotted … E. album
6. Leaves eglandular or sparsely gland-dotted; phyllaries glabrous, eglandular … E. petaloideum
7. Leaf blades usually broadest below the middle, bases usually broadly cuneate, rounded, subcordate, or truncate [8]
7. Leaf blades usually broadest near or above the middle, bases cuneate to attenuate [9]
8. Leaf blades elliptic, lanceolate, or lance-ovate, mostly 1.6-2.5 times longer than wide; inflorescence branches alternate; phyllary glands nearly colorless … E. pilosum

8. Leaf blades usually ovate to deltate, mostly 1-1.6(2) times longer than wide; proximal inflorescence branches often opposite to subopposite; phyllary glands yellow to golden (E. rotundifolium group) … Key C
9. Leaves strongly 3-nerved from the base to near the apex … E. altissimum
9. Leaves 1-nerved, pinninerved, or weakly 3-nerved [10]
10. Leaves usually in whorls of 3s or 4s, sometimes opposite, blades linear, (6)8-40 times longer than wide [11]
10. Leaves usually opposite, occasionally whorled, blades elliptic, lance-elliptic, lance-oblong, oblanceolate, or oblong, 2.5-16 times longer than wide [12]
11. Leaves 2-5 mm wide, margins usually entire to obscurely serrulate … E. hyssopifolium var. hyssopifolium
11. Leaves 5-15 mm wide, margins usually laciniately toothed … E. hyssopifolium var. laciniatum
12. Leaf blade upper surface glabrous or glabrate [13]
12. Leaf blade upper surface finely puberulent or villous [14]
13. Leaves usually recurved, the blades 2-8 cm long, 0.5-1(2) cm wide … E. mohrii
13. Leaves usually spreading to ascending, the blades 15-50 cm long, (0.5)1–2 cm wide … E. anomalum
14. Plant usually with some branches near the base; leaf blades mostly 2-3.5(4.5) cm long, margins weakly serrate to subentire; phyllaries lanceolate, larger ones 3-5 mm long; corollas 3-3.5 mm long … E. linearifolium
14. Plant usually unbranched below the middle; leaf blades (3)5-7 cm long, margins usually serrate; phyllaries elliptic, larger ones 2.5-3 mm long; corollas 2.5-3 mm long … E. semiserratum

Key C: E. rotundifolium
1. Leaf blades 3-veined from base, base subtruncate to broadly cuneate, margins crenate … E. rotundifolium var. rotundifolium
1. Leaf blades 3-veined distal to base, base broadly cuneate to cuneate, margins serrate [2]
2. Leaf blades 3-7 cm long, 3-6 cm wide, widest near middle … E. rotundifolium var. ovatum
2. Leaf blades 2-5 cm long, 1.5-3 cm wide, widest proximal to middle … E. rotundifolium var. scabridum

Eupatorium album L. {AFP} —
Eupatorium altissimum L. {AFP} —
Eupatorium anomalum Nash {AFP} —
Eupatorium capillifolium (Lam.)Small ex Porter & Britton {AFP} —
Eupatorium compositifolium Walter {AFP} —
Eupatorium hyssopifolium L. var. ***hyssopifolium*** {AFP} —
Eupatorium hyssopifolium L. var. ***laciniatum*** A.Gray {AFP} — Sometimes recognized as the species *E. torreyanum*.
Eupatorium leptophyllum DC. {AFP} —
Eupatorium leucolepis (DC.)Torr. & A.Gray {AFP} —
Eupatorium linearifolium Walter {AFP} —
•***Eupatorium mikanioides*** Chapm. {AFP} —
Eupatorium mohrii Greene {AFP} — *Eupatorium recurvans* (putative diploid) is sometimes recognized as a separate species from *E. mohrii* (putative autopolyploid), but is included in synonymy here following Schilling & Grubbs (2016), who stated morphology was not reliable to distinguish two such species (except perhaps for pollen viability analyses) (see Yahara & Sullivan 1986).
Eupatorium perfoliatum L. {AFP} —

Eupatorium petaloideum Britton ex Small {AFP} —
Eupatorium pilosum Walter {AFP} —
Eupatorium pinnatifidum Elliott {AFP} —
Eupatorium rotundifolium L. {AFP} — Variety *scabridum* is thought to be a hybrid of *E. rotundifolium* and *E. semiserratum* (Sullivan 1972; Yahara & Sullivan 1986); it was alleged to differ by its alternate branching in the inflorescence (Montgomery & Fairbrothers 1970).
Eupatorium semiserratum DC. {AFP} —
Eupatorium serotinum Michx. {AFP} —

Eurybia

1. Leaf margins (at least some) strongly spinulose-dentate; phyllary apex spinose and often spreading; phyllaries 70–140; ray florets 25-60, white to pinkish; disc florets 115-260 … E. eryngiifolia
1. Leaf margins entire to weakly spinulose-dentate near the blade base; phyllary apex acute to acuminate, erect; phyllaries 20–80; ray florets 8-35, pale to dark purple; disc florets 18-60 [2]
2. Heads usually sessile or subsessile; phyllaries 20-40; ray florets 8-17 … E. spinulosa
2. Heads pedunculate; phyllaries 30–80; ray florets 15-35 [3]
3. Heads borne in spiciform arrays, sometimes corymbiform terminally; outer phyllaries sometimes coriaceous, margins scabrous or scabroso-ciliate … E. hemispherica
3. Heads borne in corymbiform arrays; outer phyllaries not coriaceous, margins densely ciliate proximally (indurate part), distally scabrous (foliaceous part) … E. paludosa

Eurybia eryngiifolia (Torr. & A.Gray)G.L.Nesom {AFP} —
Eurybia hemispherica (Alexander)G.L.Nesom {AFP} — SE.
Eurybia paludosa (Aiton)G.L.Nesom {AFP} —
•***Eurybia spinulosa*** (Chapm.)G.L.Nesom {AFP} — SE.

Euryops

^*Euryops chrysanthemoides* (DC.)B.Nord. {AFP} —

Euthamia

1. Stems glabrous to glabrate (quite sparsely hirtellous or scabridulous); leaf blades 0.5-3 mm wide, 30-100 times as long as wide, faces glabrous to glabrate (midvein maybe hirtellous) … E. caroliniana
1. Stems glabrous, scabrous, or hirtellous; leaf blades (2)3-12 mm wide, 12-35 times as long as wide, faces glabrous, scabrous, or hirtellous [2]
2. Stems, decurrent leaf bases, and leaf faces scabrous … E. scabra
2. Stems, decurrent leaf bases and leaf faces glabrous or hirtellous … E. weakleyi

Euthamia caroliniana (L.)Greene ex Porter & Britton {AFP} — Throughout.
Euthamia scabra (L.)Nutt. {AFP} — Panhandle.
Euthamia weakleyi G.L.Nesom {AFP} — Panhandle to south-central peninsula. Previously as *E. hirtipes*, misapplied (Nesom 2021).

Eutrochium

1. Stems hollow, usually purplish and glaucous throughout … E. fistulosum
1. Stems solid (rarely hollow near bases), purple at nodes … E. purpureum

Eutrochium fistulosum (Barratt)E.E.Lamont {AFP} —
Eutrochium purpureum (L.)E.E.Lamont {AFP} —

Facelis
*****Facelis retusa*** (Lam.)Sch.Bip. {AFP} —

Farfugium
^*Farfugium japonicum* (L.)Kitam. —

Filago
*****Filago germanica*** (L.)Huds. {AFP} —

Flaveria
1. Synflorescence sessile to subsessile; leaves serrate … F. trinervia
1. Synflorescence conspicuously pedunculate; leaves entire to serrate [2]
2. Annual; leaf blade serrate; synflorescence cymiform … F. bidentis
2. Usually perennial; leaf blade entire to subtly denticulate; synflorescence corymbiform [3]
3. Subtending leaf or bractlets to 6 mm long, at least some exserted beyond the synflorescence … F. floridana
3. Subtending leaf or bractlets to 2.5 mm long, not exserted beyond the synflorescence … F. linearis

*****Flaveria bidentis*** (L.)Kuntze {AFP} —
•***Flaveria floridana*** J.R.Johnst. {AFP} — Derived from within *F. linearis* lineage (Adachi et al. 2022).
Flaveria linearis Lag. {AFP} —
Flaveria trinervia (Spreng.)C.Mohr {AFP} —

Fleischmannia
Fleischmannia incarnata (Walter)R.M.King & H.Rob. {AFP} —

Gaillardia
1. Phyllaries 5-7 mm wide; receptacle setae 5-8 mm long; ray corolla 25-35 mm long; disc corolla 7-10 mm long; cypselae 3-4 mm long; tetraploid … G. grandiflora
1. Phyllaries 2-4 mm wide; receptacle setae 0-6 mm long; ray corolla 15-25 mm long; disc corolla 6-7 mm long; cypselae 1.5-2.5 mm long; usually diploid [2]
2. Stem hairs usually short, appressed; leaves unlobed; receptacle setae 0-1 mm long; lobes of disc corollas attenuate-terete (bearing jointed hairs to 0.3 mm long) … G. aestivalis
2. Stem hairs usually coarse, spreading; leaves sometimes lobed; receptacle setae 0.3-6 mm long; lobes of disc corollas ovate to deltate, sometimes attenuate (usually bearing jointed hairs 0.3+ mm long) … G. pulchella var. picta

Gaillardia aestivalis (Walter)H.Rock {AFP} —
^*Gaillardia ×grandiflora* Van Houtte (*aristata* × *pulchella*) —
*****Gaillardia pulchella*** Foug. {AFP} — Throughout; primarily spread through extensive cultivation (native to western and central USA). Undoubtedly introduced to Florida, once thought to be native.

Galinsoga

*****Galinsoga quadriradiata*** Ruiz & Pav. {AFP} —

Gamochaeta

1. Leaves concolor or weakly bicolor, the upper and lower surfaces equally greenish to gray-greenish and both loosely or sparsely tomentose or arachnose, sometimes subpannose [2]
1. Leaves bicolor, the lower surface densely closely white-pannose to pannose-tomentose, the upper surface glabrous to sparsely arachnose [3]
2. Basal and proximal leaves 2-6(10) mm wide; bracts among heads linear, oblanceolate, or oblong-oblanceolate … G. antillana
2. Basal and proximal leaves 4-16 mm wide; bracts among heads spatulate to oblanceolate … G. pensylvanica
3. Plants (30)50-85 cm tall or long; stems erect or ascending; basal and proximal cauline leaves usually withering before flowering (clusters of smaller leaves usually present in cauline axils); apices of inner phyllaries acute-acuminate; flowering mostly late Jun-Aug … G. simplicicaulis
3. Plants mostly 10–50 cm tall or long; stems erect to decumbent-ascending; basal and proximal cauline leaves present or not at flowering; apices of inner phyllaries acute, obtuse, rounded, blunt, to acute-acuminate; flowering mostly Apr-Jun [4]
4. Leaf upper surface glabrous or glabrate; involucres (± purplish) 2.5-3 mm long, bases glabrous; outer phyllaries elliptic-obovate to broadly ovate-elliptic, apices rounded to obtuse; bisexual florets 2-3 … G. impatiens
4. Leaf upper surface sparsely arachnose; involucres (sometimes purplish) 3-4.5(5) mm long, bases often sparsely arachnose proximally; outer phyllaries ovate, ovate-triangular, or ovate-lanceolate, apices acute to acuminate; bisexual florets 2-6 [5]
5. Stems not pannose (hairs usually not individually evident); involucres 3-3.5(4) mm long; apices of inner phyllaries acute to acute-acuminate; bisexual florets 2-4; cypselae purple … G. chionesthes
5. Stems usually pannose or pannose-tomentose (hairs individually evident); involucres 3-4.5 mm long; apices of inner phyllaries acute, obtuse, or truncate-rounded, sometimes apiculate; bisexual florets 3-6; cypselae tan to brownish [6]
6. Cauline leaf blades oblanceolate to oblanceolate-oblong or oblanceolate-obovate; involucres 3-3.5 mm long; laminae of inner phyllaries elliptic-oblong to oblong, apices truncate-rounded or obtuse and apiculate; bisexual florets (3)4-6; usually fibrous-rooted, rarely taprooted … G. argyrinea
6. Cauline leaf blades oblanceolate to spatulate; involucres 4-4.5 mm long; laminae of inner phyllaries triangular, apices acute (not apiculate); bisexual florets 3-4; fibrous-rooted or taprooted … G. purpurea

Gamochaeta antillana (Urb.)Anderb. {AFP} —
Gamochaeta argyrinea G.L.Nesom {AFP} —
Gamochaeta chionesthes G.L.Nesom {AFP} —
*****Gamochaeta impatiens*** G.L.Nesom {AFP} —
*****Gamochaeta pensylvanica*** (Willd.)Cabrera {AFP} —
Gamochaeta purpurea (L.)Cabrera {AFP} —
*****Gamochaeta simplicicaulis*** (Willd. ex Spreng.)Cabrera {AFP} —

Garberia

•***Garberia heterophylla*** (W.Bartram)Merr. & F.Harper {AFP} — ST.

Gerbera
^*Gerbera jamesonii* Adlam {AFP} —

Glebionis
^*Glebionis coronaria* (L.)Cass. ex Spach {AFP} —

Gynura
1. Stems and leaves densely villous to villosulous ... G. aurantiaca
1. Stems and leaves glabrous to sparsely pubescent (rarely moderately pubescent) [2]
2. Stems decumbent to erect, subsucculent (woody at the base) ... G. bicolor
2. Stems scrambling, procumbent, or climbing, fibrous or woody ... G. procumbens

^*Gynura aurantiaca* (Blume)DC. {AFP} —
^*Gynura bicolor* (Roxb. ex Willd.)DC. — Some references have alleged that *G. bicolor* can be distinguished by other characters (petiole 0-4 cm long; inflorescence terminal; calycular bracts 1-3 mm long; phyllaries 12-16) vs. *G. procumbens* (petiole 0.1-1 cm long; inflorescence axillary; calycular bracts 3-6 mm long; phyllaries 8-12), but these appear dubious.
^*Gynura procumbens* (Lour.)Merr. —

Haplocarpha
****Haplocarpha lyrata*** Harv. {AFP} —

Hartwrightia
Hartwrightia floridana A.Gray ex S.Watson {AFP} — ST.

Hasteola
•***Hasteola robertiorum*** L.C.Anderson {AFP} — SE.

Helenium
1. Leaves filiform to linear, 1-4 mm wide, 15-150 times longer than wide, the bases not decurrent along the stem ... H. amarum
1. Leaves lanceolate, (2)5-40 mm wide, 2-20 times longer than wide, the base decurrent along the stem [2]
2. Heads 5-100 per stem, the arrays with numerous branches [3]
2. Heads 1-5(10) per stem, branches none to few [4]
3. Cauline leaves usually dentate, 0.8-3 cm wide; ray flower pistillate, fertile; disc corollas yellow to yellow-brown ... H. autumnale
3. Cauline leaves entire to subtly toothed, 0.2-1.4 cm wide; ray flower neuter; disc corollas reddish or purplish ... H. flexuosum
4. Disc corolla lobes reddish, purplish, to yellow-brown ... H. brevifolium
4. Disc corolla lobes mostly yellow [5]
5. Pappus scales fimbriate-fringed or deeply lacerate 1/2 or more of their length; leaves of basal rosettes entire, undulate, to subtly toothed; peduncles glabrate to sparsely hairy; cypselae hairy ... H. drummondii

5. Pappus scales entire to slighly lacerate; leaves of basal rosettes entire, undulate, subtly to coarsely toothed, or pinnatifid; peduncles glabrate to densely hairy; cypselae glabrous or hairy [6]
6. Leaves of basal rosettes undulate, subtly to coarsely toothed, or pinnatifid; peduncles moderately to densely hairy; cypselae hairy … H. pinnatifidum
6. Leaves of basal rosettes entire, undulate, to subtly toothed; peduncles glabrous to sparsely hairy; cypselae glabrous … H. vernale

Helenium amarum (Raf.)H.Rock {AFP} —
Helenium autumnale L. {AFP} —
Helenium brevifolium (Nutt.)A.W.Wood {AFP} —
Helenium drummondii H.Rock {AFP} —
Helenium flexuosum Raf. {AFP} —
Helenium pinnatifidum (Schwein. ex Nutt.)Rydb. {AFP} —
Helenium vernale Walter {AFP} —

Helianthus

1. Plant subscapose, larger leaves primarily basal or in proximal 1/4, upper 3/4 of plant with strongly reduced leaves only, the basal/proximal leaves persistent, up to 4(6) nodes of cauline leaves; leaves mostly not glandular-punctate (except glandular-punctate in H. occidentalis); heads 1-4(12) [2]
1. Plant leafy throughout, the basal leaves often withering, leafy cauline nodes numerous; leaves sometimes glandular-punctate; heads 1-20 [5]
2. Stems (and leaves) usually glabrous; disc corolla lobes yellow … H. carnosus
2. Stems (and leaves) usually hispid or hirsute to scabrous; disc corolla lobes yellow or reddish [3]
3. Ray florets 0 or 2–8, laminae 1–2(10) mm (inconspicuous, often tinged reddish) … H. radula
3. Ray florets 8–13(25), laminae (7)10–40 mm (yellow) [4]
4. Phyllaries lanceolate to ovate (the larger 3+ mm wide); abaxial faces usually not gland-dotted (if gland-dotted, cypselae 5–6 mm); disc corolla lobes reddish or yellow … H. heterophyllus
4. Phyllaries lanceolate (the larger 1.5–2.5 mm wide); abaxial faces of leaves (and usually ray laminae) notably gland-dotted; disc corolla lobes yellow; cypselae 3–5 mm … H. occidentalis
5. Leaves 0.2-1.1(1.7) cm wide … H. angustifolius
5. Leaves 1.1-40 cm wide [6]
6. Disc corollas reddish or purplish [7]
6. Disc corollas yellow [15]
7. Stems (leaves, phyllaries) densely silvery white tomentose or floccose … H. argophyllus
7. Stems (leaves, phyllaries) hispid to glabrate [8]
8. Petioles 0-1.2 cm long; leaf blades 4-12 times longer than wide [9]
8. Petioles 1-10+ cm long (at least of larger leaves, petiole sometimes winged from decurrent leaf bases); leaf blades 1.3-3(4) times longer than wide [11]
9. Annual; leaves not glandular-punctate; phyllaries 15-25, eglandular … H. agrestis
9. Perennial, rhizomatous; leaves glandular-punctate; phyllaries 25-38, glandular-punctate [10]
10. Leaf blade margins usually undulate and revolute … H. floridanus
10. Leaf blade margins not undulate, not or only slightly revolute … H. simulans
11. Phyllaries oblong, ovate, to lance-ovate [12]
11. Phyllaries lanceolate [13]

12. Leaves primarily alternate, blade base mostly shortly cuneate to subtruncate; involucre 15-200+ mm wide ... H. annuus
12. Leaves primarily opposite, blade base decurrent along the petiole; involucre 9-16 mm wide ... H. atrorubens
13. Stem erect, hispid, usually red-brown mottled; peduncles 25-50 cm long ... H. debilis subsp. cucumerifolius
13. Stem decumbent, glabrous to hispid or hirsute; peduncles 9-20(22) cm long [14]
14. Stems glabrous to puberulent; leaf blades serrulate or shallowly, regularly serrate, lower surface sparsely, if at all, glandular-punctate ... H. debilis subsp. debilis
14. Stems hirsute; leaf blades deeply, irregularly serrate, lower surface densely glandular-punctate ... H. debilis subsp. vestitus
15. Tuber-bearing and rhizomatous; petioles 2-8 cm long ... H. tuberosus
15. Rhizomatous or not, without tubers; petioles 0-3 cm long [16]
16. Phyllaries glandular-punctate, usually squarrose to reflexed; leaf blade bases ... H. resinosus
16. Phyllaries eglandular, appressed, ascending, to loosely spreading [17]
17. Petioles 0-1.2 cm long [18]
17. Petioles (0.5)1-3 cm long [20]
18. Stem glabrous to glabrate; leaf blade base often subcordate, often partly overlapping with the stem ... H. divaricatus
18. Stem hispid; leaf blade base cuneate, not overlapping with the stem [19]
19. Leaf blade margins usually undulate and revolute ... H. floridanus
19. Leaf blade margins not undulate, not or only slightly revolute ... H. simulans
20. Stem hirsute ... H. hirsutus
20. Stem glabrous to glabrate [21]
21. Lacking rhizomes; involucre 5-7 mm wide; ray flowers 5-8; disc flowers 15-22 ... H. microcephalus
21. Rhizomatous; involucre 8-20 mm wide; ray flowers 10-20; disc flowers 30-60 ... H. strumosus

Helianthus agrestis Pollard {AFP} — Peninsula (Thomasville, GA). A collection from Thomasville, GA in Aug/Sep 1904, identified as *H. agrestis* by C.B. Heiser and residing at GH.
Helianthus angustifolius L. {AFP} —
^*Helianthus annuus* L. {AFP} —
^*Helianthus argophyllus* Torr. & A.Gray {AFP} —
Helianthus atrorubens L. {AFP} —
•***Helianthus carnosus*** Small {AFP} — SE.
•***Helianthus debilis*** Nutt. subsp. ***debilis*** {AFP} —
•***Helianthus debilis*** Nutt. subsp. ***vestitus*** (E.Watson)Heiser {AFP} —
Helianthus debilis Nutt. subsp. ***cucumerifolius*** (Torr. & A.Gray)Heiser {AFP} —
Helianthus divaricatus L. {AFP} —
Helianthus floridanus A.Gray ex Chapm. {AFP} —
Helianthus heterophyllus Nutt. {AFP} —
Helianthus hirsutus Raf. {AFP} —
Helianthus microcephalus Torr. & A.Gray {AFP} —
Helianthus occidentalis Riddell {AFP} —
Helianthus radula (Pursh)Torr. & A.Gray {AFP} —
Helianthus resinosus Small {AFP} —
****Helianthus simulans*** E.Watson {AFP} —
Helianthus strumosus L. {AFP} —

^*Helianthus tuberosus* L. {AFP} —

Heliopsis
Heliopsis helianthoides (L.)Sweet var. ***gracilis*** (Nutt.)Gandhi & R.D.Thomas {AFP} —

Heterotheca
Heterotheca subaxillaris (Lam.)Britton & Rusby {AFP} —

Hieracium
1. Heads in thyrsiform arrays (length of arrays 3-8 times as wide); phyllaries usually glabrous or stellate-pubescent, sometimes stipitate- glandular, inner ones 6-8 mm long; florets 12-25; corollas 8-10 mm long … H. gronovii
1. Heads in corymbiform arrays (length of arrays 1-3 times as wide); phyllaries stellate-pubescent and stipitate-glandular, inner ones 8-11 m long; florets 20-60; corollas 10-14 mm long … H. megacephalon

Hieracium gronovii L. {AFP} —
Hieracium megacephalon Nash {AFP} —

Hymenopappus
Hymenopappus scabiosaeus L'Hér. {AFP} —

Hypochaeris
1. Leaves basal and some smaller ones cauline; pappus bristles in 1 series, all plumose [2]
1. Leaves all basal, cauline absent or nearly so; pappus bristles in 2 series, the outer barbellate, the inner plumose and longer [3]
2. Involucres broadly campanulate; phyllaries hirsute medially; corollas yellow … H. chillensis
2. Involucres cylindric or narrowly campanulate; phyllaries glabrous to sparsely tomentulose; corollas white … H. microcephala var. albiflora
3. Annuals; leaves glabrous or sometimes hirsute on veins; florets subequal to phyllaries at flowering; cypselae dimorphic, outer truncate or with a short beak, inner with longer beaks … H. glabra
3. Perennials; leaves hirsute; florets surpassing phyllaries at flowering; cypselae monomorphic, all beaked … H. radicata

****Hypochaeris chillensis*** (Kunth)Britton {AFP} —
****Hypochaeris glabra*** L. {AFP} —
****Hypochaeris microcephala*** (Sch. Bip.)Cabrera var. ***albiflora*** (Kuntze)Cabrera {AFP} —
****Hypochaeris radicata*** L. {AFP} —

Ionactis
Ionactis repens G.L.Nesom {AFP} —

Iva
1. Leaves linear to linear-lanceolate, 0.5-5 mm wide, margins entire [2]
1. Leaves narrowly lanceolate, ovate, or spatulate, 5-40 mm wide, margins entire or toothed [3]
2. Involucres conic or turbinate, 2.5-3 mm long; outer phyllaries partly connate … I. angustifolia

2. Involucres hemispheric, 1.5-2 mm long; outer phyllaries distinct … I. microcephala
3. Petioles indistinct, 0-2 mm long; leaf blades 1-4(6) cm long, glabrous, eglandular (rarely gland-dotted), margins entire or up to 3(6) teeth … I. frutescens
3. Petioles mostly distinct, 5-30 mm long; leaf blades 3-15 cm long, scabrellous, gland-dotted, margins usually toothed [4]
4. Annuals, to 150 cm tall; leaf blades 1.5-3 times longer than wide … I. annua
4. Perennials, to 350 cm tall; leaf blades 2.2-10 times longer than wide … I. imbricata

****Iva angustifolia*** Nutt. ex DC. {AFP} — Sometimes treated as a variety of *I. apserifolia*.
Iva annua L. {AFP} — A domesticated form (var. *macrocarpa*) with large cypselae (~4-9.5 mm long) was known from the Eastern Agricultural Complex north of Florida but fell into disuse and went extinct (Yarnell 1972; Weiland & Gremillion 2018).
Iva frutescens L. {AFP} —
Iva imbricata Walter {AFP} —
Iva microcephala Nutt. {AFP} —

Jacoaea
^*Jacobaea maritima* (L.)Pelser & Meijden —

Koanophyllon
Koanophyllon villosum (Sw.)R.M.King & H.Rob. {AFP} — SE. Miami-Dade Co.

Krigia
1. Some leaves cauline in the upper ⅔ of the plant and usually entire; peduncles cauline, arising from the upper ⅔ of the plant; pappus absent … K. cespitosa
1. All or nearly all leaves in a basal rosette (occasionally cauline and toothed or lobate in the lower ⅓ of the plant in late spring or summer plants); peduncles nearly all basal (occasionally cauline in the lower ⅓ of the plant); pappus of scales and bristles present [2]
2. Perennial; involucre of phyllaries 8-15 mm long; ligulate floret 15-25 mm long; pappus of ca. 10 outer scales and 25-40 inner bristles … K. dandelion
2. Annual; involucre of phyllaries 4-8 mm long; ligulate floret 5-12 mm long; pappus of 5 outer scales and 5 inner bristles … K. virginica

Krigia cespitosa (Raf.)K.L.Chambers {AFP} —
Krigia dandelion (L.)Nutt. {AFP} —
Krigia virginica (L.)Willd. {AFP} —

Lactuca
1. Corolla blue, lavender [2]
1. Corolla yellow [3]
2. Leaves lanceolate to ovate, lobed, toothed; achene beakless or the beak stout and less than 1/3 as long as the body … L. floridana
2. Leaves linear, lobed, entire; achene beak filiform, more than 1/2 as long as the body … L. graminifolia
3. Cypselae with 1(3) nerves … L. canadensis
3. Cypselae with (3)5-9 nerves [4]
4. Cypselae purplish to blackish, elliptic … L. virosa
4. Cypselae pale brown to grayish to whitish, obovate to oblanceolate [5]

5. Cauline leaf blades ovate to orbiculate, midribs usually smooth; phyllaries usually erect in fruit ... L. sativa
5. Cauline leaf blades oblong, narrowly obovate, to lanceolate, midribs usually prickly setose; phyllaries usually reflexed in fruit ... L. serriola

Lactuca canadensis L. {AFP} —
Lactuca floridana (L.)Gaertn. {AFP} —
Lactuca graminifolia Michx. {AFP} —
^*Lactuca sativa* L. —
****Lactuca serriola*** L. {AFP} —
****Lactuca virosa*** L. {AFP} —

Lagascea
****Lagascea mollis*** Cav. {AFP} —

Launaea
****Launaea intybacea*** (Jacq.)Beauverd {AFP} —

Leucanthemum
^*Leucanthemum vulgare* Lam. {AFP} —

Liatris
1. Rootstock elongate-tuberous to taprooted; heads in corymbiform to racemiform arrays; peduncle (often scaly) 10-75 mm long; involucre 17-27 mm long, 14-26 mm wide ... L. ohlingerae
1. Rootstock usually globose (except in L. garberi); heads in racemiform to spiciform arrays; peduncle (often scaly) 0-15(25) mm long; involucre 4-25 mm wide [2]
2. Pappus bristles plumose, the segments flexible and to 1 mm long [3]
2. Pappus bristles barbellate, the segments stiff and to 0.4 mm long [4]
3. Involucre 4-8 mm wide, the outer phyllaries 1-2 mm wide; inner phyllaries petaloid, white to pink; heads with 4-6 flowers ... L. elegans
3. Involucre 10-25 mm wide, the outer phyllaries 2-3 mm wide; inner phyllaries not petaloid, similar to outer ones; heads with (10)20-45(60) flowers ... L. squarrosa
4. Stems glabrous to sparsely pilose or sparsely puberulent [5]
4. Stems moderately to densely puberulent, hispidulous, pilose, hirsute, to strigose, glandular [11]
5. Middle and inner phyllary apices truncate, obtuse, to rounded (rarely acute) [6]
5. Middle and inner phyllary apices mucronate, cuspidate, apiculate, acute, to acuminate [8]
6. Cauline leaves spreading, divergent; heads in loose to dense arrays (internodes 2–14 mm); involucres 5-7 m wide ... L. elegantula
6. Cauline leaves ascending; heads in moderately dense arrays (internodes 1-4 mm); involucre 4-12 mm wide [7]
7. Stem and leaves glandular-punctate; leaf margins with some hairs >1 mm long; corolla tube inside pilose ... L. savannensis
7. Stem and leaves eglandular to weakly glandular-punctate; leaf margins glabrous or with hairs <0.9 mm long; corolla tube inside glabrous ... L. spicata
8. Involucres 10-15 mm long; phyllary apices acute to acuminate ... L. pauciflora
8. Involucres 5-9 mm long; phyllary apices retuse, mucronate, cuspidate, or apiculate [9]

9. Basal leaves 1-2(2.5) mm wide, margins usually ciliate proximally, faces glandular-punctate; inner phyllaries usually emarginate-mucronate, lacerate-denticulate ... L. tenuifolia
9. Basal leaves (1)2-6(10) mm wide, margins not ciliate, faces (minutely white-dotted by stomates) eglandular or weakly glandular-punctate; inner phyllaries usually obtuse-mucronate [10]
10. Culms (40)50-80(120) cm tall, 4-6 mm wide, the inflorescence ca. half of the culm height; leaves in a well-defined, densely leafy basal rosette, (4)5-7(10) mm wide and 15-20 cm long, mostly lax and spreading; flowering mostly Jul-Sep ... L. laevigata
10. Culms (60)75-100(150) cm tall, 2-3 mm wide, the inflorescence ca. 1/4 of the culm height; leaves in a diffuse, few-leaved basal rosette, 2-3 mm wide and 20-30 cm long, mostly somewhat ascending; flowering Oct-Nov ... L. quadriflora
11. Involucre (6)8-20 mm wide; florets 11-30 [12]
11. Involucre 2.5-10 mm wide; florets 3-12 [13]
12. Phyllaries bullate, the hyaline margin relatively wide and erose, lacerate, or irregular ... L. aspera
12. Phyllaries not bullate, the hyaline margin narrow to absent, entire ... L. squarrulosa
13. Peduncles 0-2(3) mm long [14]
13. Peduncles (3)4-20(30) mm long (if 0-3 mm long, then heads usually secund) [15]
14. Heads rigidly ascending, appressed to rachises and each other, overlapping; phyllary margins usually not ciliolate, apices erect to ascending ... L. chapmanii
14. Heads spreading to ascending, not strongly overlapping; phyllary margins ciliolate, apices ascending to slightly spreading ... L. provincialis
15. Involucre 10-15 mm long; heads often secund ... L. secunda
15. Involucre 4-10 mm long; heads usually not secund [16]
16. Peduncles 10-25(30) mm long; involucres 5-7 mm wide; phyllary apices rounded to subtruncate; florets 7-12 ... L. patens
16. Peduncles 0-10(12) mm long; involucres 2.5-5 mm wide; phyllary apices rounded, obtuse, acute, to acuminate; florets 3-10 [17]
17. Rootstock elongate-tuberous; involucre 8-10 mm long; florets 6-10 ... L. garberi
17. Rootstock globose; involucre 4-6(7) mm long; florets 3-6(9) [18]
18. Proximal cauline leaves (8)11-22(27) mm wide; bracts of proximalmost heads (1.8)2-6(10) mm wide; phyllary apices usually acuminate to rarely obtuse ... L. gholsonii
18. Proximal cauline leaves 3-8(10) mm wide; bracts of proximalmost heads 0.8-2.2 mm wide; phyllary apices rounded to obtuse to rarely acute ... L. gracilis

Liatris aspera Michx. {AFP} —
Liatris chapmanii Torr. & A.Gray {AFP} —
Liatris elegans (Walter)Michx. {AFP} —
Liatris elegantula (Greene)K.Schum. {AFP} —
Liatris garberi A.Gray {AFP} —
•***Liatris gholsonii*** L.C.Anderson {AFP} — SE.
Liatris gracilis Pursh {AFP} —
Liatris laevigata Nutt. —
•***Liatris ohlingerae*** (S.F.Blake)B.L.Rob. {AFP} — FE. SE.
Liatris patens G.L.Nesom & Kral {AFP} —
Liatris pauciflora Pursh var. ***pauciflora*** {AFP} —
Liatris pauciflora Pursh var. ***secunda*** (Elliott)D.B.Ward {AFP} —
Liatris quadriflora (Chapm.) {AFP} —
•***Liatris provincialis*** R.K.Godfrey {AFP} — SE.

•***Liatris savannensis*** Kral & G.L.Nesom {AFP} —
Liatris spicata (L.)Willd. var. ***resinosa*** (Nutt.)Gaiser {AFP} — Treated as a variety by Gaiser (1946) while Godfrey (1948) wrote "I venture to suggest that these cited intermediates [in Gaiser 1946:224] are actually more vigorous and robust specimens of variety *resinosa*, and further that this variety may prove worthy of specific rank." Nesom (2006) wrote "Apparent intergrades between the two taxa are common, especially in Tennessee and Alabama".
Liatris squarrosa (L.)Michx. {AFP} —
Liatris squarrulosa Michx. {AFP} —
Liatris tenuifolia Nutt. {AFP} —

Potential hybrid taxa:
Liatris ×***boykinii*** Torr. & A.Gray (*elegans* × *tenuifolia*) —
Liatris ×***steelei*** Gaiser (*aspera* × *spicata*) —

Lygodesmia
Lygodesmia aphylla (Nutt.)DC. {AFP} —

Marshallia
1. Cauline leaves mostly 5–33 mm wide, 3-13 times longer than wide; corolla white … M. obovata
1. Cauline leaves mostly 1-5 mm wide, 13-30 times longer than wide; corolla white, pink, to purple [2]
2. Corollas usually white, rarely pale pink; peduncle hairs lacking purple color; phyllaries acute to obtuse; flowering May-Jun … M. ramosa
2. Corollas usually pink to purple, rarely white; peduncle hairs usually with purple color (sometimes only the septae); phyllaries acuminate to subulate-tipped; flowering Jul-Sep [3]
3. Basal and proximal leaves linear-lanceolate, ascending, relatively firm, secondary veins usually discernible on larger, basalmost leaves … M. graminifolia subsp. graminifolia
3. Basal (and sometimes proximal leaves) spatulate, elliptic, oblong, spreading, relatively membranous, secondary veins not conspicuous … M. graminifolia subsp. tenuifolia

Marshallia graminifolia (Walter)Small subsp. ***graminifolia*** {AFP} —
Marshallia graminifolia (Walter)Small subsp. ***tenuifolia*** (Raf.)L.E. Watson {AFP} —
Marshallia obovata (Walter)Beadle & F.E.Boynton {AFP} — SE.
Marshallia ramosa Beadle & F.E.Boynton {AFP} — SE.

Melampodium
^*Melampodium divaricatum* (Rich.)DC. {AFP} —

Melanthera
1. Fertile plants 0.5–2.2 m tall; main stems (2)4–15 mm wide at the base of the plant; petiole (2)5–40 mm long; larger leaf blades (2.5)4–12 cm wide; inflorescence head 0.8–3.2 cm wide with 30–100 florets; larger phyllaries (2.5)3–4 mm wide; corollas 7–9 mm long … M. nivea
1. Fertile plants 0.2–1 m tall; main stems 2–5(7) mm wide at the base of plant; petiole 0–5 mm long; larger leaf blades 0.5–4 cm wide; inflorescence head 0.6–1.8 cm wide with 18–75 florets; larger phyllaries 1.5–3 mm wide; corollas 4.5–6.5 mm long [2]
2. Leaf blades linear to elliptic (lower ones sometimes broadly elliptic or rarely all short and broadly elliptic), unlobed or scarcely lobed, usually 5–13 times long as wide; peduncles (2)5–20 cm long; phyllaries 4–5.5 mm long; paleae 4–5 mm long … M. angustifolia

2. Leaf blades ovate to 3-lobed, rarely elliptic, 1–4 times long as wide; peduncles 2.5–10 cm long; phyllaries 4.5–7 mm long; paleae 5.5–7 mm long … M. parvifolia

Melanthera angustifolia A.Rich. {AFP} —
Melanthera nivea (L.)Small {AFP} —
•***Melanthera parvifolia*** Small {AFP} — ST.

Mikania

1. Stems 6-angled, gray-tomentulose to tomentose; inflorescence heads 7–10 mm long; phyllaries 6–8 mm; corolla lobes linear to linear-deltate, subequal to longer than the upper dilated corolla throat; cypselae 3–4 mm … M. cordifolia
1. Stems terete to 6-angled, glabrate to densely pilose; inflorescence heads 4–7 mm long; phyllaries 3–6 mm; corolla lobes triangular to deltate, ca. ½ the length of the upper dilated corolla throat; cypselae 1.5–2.2 mm [2]
2. Pseudostipule of several linear to deltate lobes basally connate into a membranous flap, the basal unlobed portion somewhat subequal to the lobe length (pseudostipules withered on older nodes); inflorescence branches glabrous to glabrate; phyllaries 3-3.5 mm long, glabrous to glabrate; corolla white, 2.5-3 mm long … M. micrantha
2. Pseudostipule a low ridge with narrowly awl-shaped projections, the projections not basally connate or only scarcely so (pseudostipules withered on older nodes); inflorescence branches glabrate to pubescent; phyllaries (3-)3.5-6 mm long, glabrous to pubescent; corolla white to pinkish, 3.5-4 mm long … M. scandens

Mikania cordifolia (L.f.)Willd. {AFP} —
++***Mikania micrantha*** Kunth {AFP} —
Mikania scandens (L.)Willd. {AFP} —

Nabalus

1. Inflorescence racemiform or spiciform; phyllaries glabrous; corolla pinkish, lavender, to white … N. autumnalis
1. Inflorescence paniculiform or corymbiform; phyllaries hispid to setose; corolla pale greenish white to pale yellow … N. serpentaria

Nabalus autumnalis (Walter)Weakley {AFP} —
Nabalus serpentaria (Pursh)Hook. {AFP} —

Oclemena

Oclemena reticulata (Pursh)G.L.Nesom {AFP} —

Onopordum

*****Onopordum acanthium*** L. {AFP} —

Packera

1. Annual or biennial; basal leaves pinnately lobed … P. glabella
1. Perennial; basal leaves simple or lobed only at the base of the blade [2]
2. Basal leaves cordate … P. aurea
2. Basal leaves cuneate to subtruncate [3]

3. Plant producing filiform aerial stolons; basal leaf blades orbiculate, ovate, to obovate, mostly 1-2 times as long as wide ... P. obovata
3. Plant without stolons; basal leaf blades lanceolate, oblanceolate, to elliptic, mostly 2-3 times as long as wide [4]
4. Phyllaries 3-5 mm long; pappus 2-3 mm long; corolla tubes 1-2 mm long, lobes 1-2 mm long; cypselae 0.7-1 mm long ... P. anonyma
4. Phyllaries 5-10 mm long; pappus 3-5 mm long; corolla tubes 2-3 mm long, lobes 2-3 mm long; cypselae 1-2 mm long ... P. paupercula

Packera anonyma (A.W.Wood)W.A.Weber & Á.Löve {AFP} —
Packera aurea (L.)Á.Löve & D.Löve {AFP} —
Packera glabella (Poir.)C.Jeffrey {AFP} —
Packera obovata (Muhl. ex Willd.)W.A.Weber & Á.Löve {AFP} —
Packera paupercula (Michx.)Á.Löve & D.Löve {AFP} — Bay Co.

Palafoxia
1. Plants 1-3 m tall; leaf blades mostly 1.8-9 times longer than wide; phyllaries subequal; corolla tube longer the lobes; pappus scales 1-2 mm long ... P. feayi
1. Plants 0.3-1.5 m tall; leaf blades 6-15 times longer than wide; phyllaries unequal or subequal; corolla tube shorter than the lobes; pappus scales 2-7 mm long [2]
2. Perennial; phyllaries 8-11 mm long, unequal ... P. integrifolia
2. Perennial or annual; phyllaries 5-8 mm long, subequal ... P. texana

•***Palafoxia feayi*** A.Gray {AFP} —
Palafoxia integrifolia (Nutt.)Torr. & A.Gray {AFP} —
****Palafoxia texana*** DC. {AFP} —

Parthenium
****Parthenium hysterophorus*** L. {AFP} —

Pascalia
^*Pascalia glauca* Ortega {AFP} —

Pectis
1. Peduncles 0-2 mm long [2]
1. Peduncles 3-54 mm long (rarely 1-2 mm long) [3]
2. Plant lemon-scented; leaves 8-16 times as long as wide; leaf blade underside with 2 rows of glands 0.2-0.5 mm long; phyllaries distinct and falling individiually ... P. linearifolia
2. Plant without much scent; leaves 4-8 times as long as wide; leaf blade underside with scattered glands 0.1-0.3 mm long; phyllaries coherent at the base and falling as a unit ... P. prostrata
3. Plant without much scent; leaves narrowly obovate to spatulate ... P. humifusa
3. Plant spicy-scented; leaves linear [4]
4. Leaves congested and internodes short at the stem apex; peduncles usually <10 mm long; phyllaries coherent at the base and falling as a unit ... P. ×floridana
4. Leaves distant and internodes long at stem apex; peduncles usually >10 mm long, phyllaries distinct and falling individiually ... P. glaucescens

Pectis glaucescens (Cass.)D.J.Keil {AFP} — South Florida (northern Caribbean).
•***Pectis* ×*floridana*** D.J.Keil (*glaucescens* × *prostrata*) {AFP} —
*****Pectis humifusa*** Sw. {AFP} —
•***Pectis linearifolia*** Urb. {AFP} —
Pectis prostrata Cav. {AFP} —

Phoebanthus
1. Leaf blade linear to linear-lanceolate, 4-8 times longer than wide, the midrib below <⅓ the blade width, the larger blades 3-7 mm wide … P. grandiflorus
1. Leaf blade linear-filiform, 10-25 times longer than wide, the midrib below as much as ¼-½ the blade width, the larger blades 0.5-2 mm wide … P. tenuifolius

•***Phoebanthus grandiflorus*** (Torr. & A.Gray) S.F.Blake {AFP} —
Phoebanthus tenuifolius (Torr. & A.Gray)S.F.Blake {AFP} — ST.

Pilosella
^*Pilosella aurantiaca* (L.) F.W.Schultz & Sch.Bip. {AFP} —

Pityopsis Recent work has recognized as many as nine native species in Florida, but taxonomic clarity is lacking. The treatment below should be viewed as tentative and tenuous. "A much larger study is needed to resolve questions on whether splitting up *Pityopsis graminifolia* into more narrowly defined separate species and how many species should be recognized." (Semple & Jabbour 2019). Semple's (1985, 1987, 2006) work is essentially the only thorough treatment of the genus and its taxa, studying specimens in the herbarium and field throughout their ranges. Most of the tissues utilized in a plastome analysis were apparently not vouchered and only vague localities were revealed (Hatmaker 2016; Hatmaker et al. 2020), making it difficult to utilize the results of the study.

1. Basal leaves subequal to shorter than the cauline leaves, the cauline leaves not strongly reduced upward; middle and upper cauline leaves ascending to somewhat spreading, 3-20 mm wide [2]
1. Basal leaves much longer than the cauline leaves; cauline leaves strongly reduced upward; middle and upper cauline leaves ascending to strict or appressed to the stem, <6 mm wide [5]
2. Stems conspicuously flexuous or zigzagged, at least in parts … P. flexuosa
2. Stems generally straight or curving, not conspicuously zigazagged [3]
3. Basal leaves usually persistent when flowering; involucres 8-13 mm long; disc florets >30; stem leaves few, soft and obtuse or slightly acute at apex … P. latifolia
3. Basal leaves usually withered when flowering; Involucres 5-9 mm long; disc florets 15-29; stem leaves dense, stiff and sharply pointed at apex [4]
4. Cauline leaves ascending … P. aequilifolia
4. Cauline leaves spreading or divergent … P. falcata
5. Upper stem, peduncles, phyllaries, and sometimes distal leaves moderately to densely stipitate-glandular [6]
5. Upper stem, peduncles, leaves, and sometimes phyllaries eglandular [7]
6. Cauline leaves >10; synflorescence with (4)10-70 heads; involucres 4.5–8 mm long … P. aspera
6. Cauline leaves 2-7; synflorescence with 1-5(10) heads; involucres 9–11 mm long … P. oligantha

7. Flowering plants robust, (30)50-100 cm tall; largest basal leaves on sterile shoots 15-30 cm long, 5-10 mm wide; largest stem leaves 5-11 cm long, 3-5 mm wide; involucres 10-14 mm high; ray florets 13-25; disc florets >30 … P. tracyi
7. Flowering plants more delicate, 20-65(75) cm tall; basal leaves on sterile shoots 10-25 cm long, 1-3 mm wide; largest stem leaves 2-6 cm long, 1-3 mm wide; involucres 5-10 mm long; ray florets 5-12; disc florets 15-29 [9]
8. Inner phyllaries densely stipitate-glandular, at least distally … P. graminifolia
8. Inner phyllaries eglandular to sparsely glandular … P. microcephala

•***Pityopsis aequilifolia*** (F.D.Bowers & Semple)E.L.Bridges & Orzell —
Pityopsis aspera (A.Gray)Small {AFP} —
*****Pityopsis falcata*** (Pursh)Nutt. {AFP} — Perhaps misapplied and absent from Florida.
•***Pityopsis flexuosa*** (Nash)Small {AFP} — SE.
Pityopsis graminifolia (Michx.)Nutt. {AFP} —Semple & Jabbour (2019) determined that *P. graminifolia* sensu Nesom (2019) was misapplied, though refuted by Nesom (2019).
•***Pityopsis latifolia*** (Fernald)E.L.Bridges & Orzell —
Pityopsis microcephala Small —
Pityopsis nervosa (Willd.)Dress — Possibly deserves recognition, but variously interpreted. Nesom (2019) listed *P. nervosa* as a synonym of *P. graminifolia* but alleged the putative type of *P. nervosa* "unambiguously is" *P. microcephala*. On the contrary, Ward (2004) associates *P. nervosa* as part of the "large-headed" complex, following Dress (1975). Semple (2006) listed *P. nervosa* as a synonym of var. *latifolia*. Type in B. "If additional research determines that *P. latifolia* should be limited to plants in Florida, then *Pityopsis nervosa* […] is the oldest species epithet to apply to the much more widely distributed species level taxon occurring in much of the southeastern USA, southern Mexico, Guatemala, and Belize." (Semple & Jabbour 2019).
Pityopsis oligantha (Chapm. ex Torr. & A.Gray)Small {AFP} —
Pitopsis tracyi (Small)Small — Nesom (2019) suggests some forms may have small heads.

Pluchea

1. Stems winged from decurrent leaf bases … P. sagittalis
1. Stems unwinged [2]
2. Leaves petiolate [3]
2. Leaves sessile to subsessile [5]
3. Shrubby, 1-4 m tall; leaf blade margins entire to subtly toothed … P. carolinensis
3. Herbaceous, 0.3-1.5(2.5) m tall; leaf blade margins conspicuously toothed [4]
4. Arrays of heads paniculiform; involucre 3-4 mm wide; inner phyllaries glabrous, sometimes glandular … P. camphorata
4. Arrays of heads corymbiform; involucre 4-7 mm wide; inner phyllaries glandular and puberulent … P. odorata
5. Leaves mostly 8-20 cm long, 3-7 cm wide, those subtending or inflorescences usually much longer than synflorescence width; involucres 9-12 mm long; middle phyllaries 2-3 mm wide; phyllaries and corollas white … P. longifolia
5. Leaves mostly 3-13 cm long, 1-4 cm wide, those subtending or inflorescences usually subequal to shorter than synflorescence width; involucre 4-10 mm long; middle phyllaries 1-1.5 mm wide; phyllaries and corollas varied [6]
6. Leaves mostly 2-7 cmm long, 0.5-3 cm wide; involucre 4-6.5 mm long, appressed-villous, puberulous, to arachnose & usually viscid-hairy; phyllaries and corollas mostly pink, purple, to reddish (corolla sometimes white at first) … P. baccharis

6. Leaves mostly 3-13 cm long, 1-4 cm wide; involucres 5-10 mm long, thinly arachnoid-pubescent and glandular-puncate; phyllaries and corollas white to pale pink … P. foetida

Pluchea baccharis (Mill.)Pruski {AFP} — Throughout. Said to "intergrade in morphology" with *P. foetida* (Nesom 2006).
Pluchea camphorata (L.)DC. {AFP} —
++***Pluchea carolinensis*** (Jacq.)G.Don {AFP} — Small (1929:53, as the misapplied *P. odorata*) reported it was first known from Key West and subsequently had spread elsewhere in Florida. The epithet references the Carolinas, apparently in error, as this species is unknown from that area. Given the date of its earliest known collections and its habitat preference, this species is presently thought to be non-native to Florida (Bradley 2012).
Pluchea foetida (L.)DC. {AFP} — Nearly throughout.
•***Pluchea longifolia*** Nash {AFP} — E panhandle to C pen.
Pluchea odorata (L.)Cass. {AFP} —
****Pluchea sagittalis*** (Lam.)Cabrera {AFP} —

Polymnia
Polymnia laevigata Beadle {AFP} — SE.

Praxelis
****Praxelis clematidea*** (Kuntze)R.M.King & H.Rob. {AFP} —

Pseudelephantopus
****Pseudelephantopus spicatus*** (B.Juss. ex Aubl.)C.F.Baker {AFP} —

Pseudognaphalium
1. Leaf surfaces concolorous, persistently tomentose on both surfaces, the bases clasping to subclasping [2]
1. Leaf surfaces discolorous, the upper greenish and glabrate to minutely pubescent, the lower densely tomentose, the base not clasping [3]
2. Leaf blades narrowly oblanceolate, margins not revolute; apex of corollas yellowish; cypselae glabrous … P. domingense
2. Leaf blades linear-oblong, margins distinctly revolute; apex of corollas reddish; cypselae papillate with myxogenic hairs … P. luteoalbum
3.Stems greenish and densely stipitate-glandular; pistillate florets 83-107; bisexual florets 9-15 … P. helleri
3. Stems whitish-tomentose, usually eglandular; pistillate florets 38–96; bisexual florets 4-8(11) … P. obtusifolium

****Pseudognaphalium domingense*** (Lam.)Anderb. {AFP} —
Pseudognaphalium helleri (Britton)Anderb. {AFP} —
****Pseudognaphalium luteoalbum*** (L.)Hilliard & B.L.Burtt {AFP} —
Pseudognaphalium obtusifolium (L.)Hilliard & B.L.Burtt {AFP} —

Pseudogynoxys
****Pseudogynoxys chenopodioides*** (Kunth)Cabrera {AFP} —

Pterocaulon

Pterocaulon pycnostachyum (Michx.)Elliott {AFP} —

Pulicaria
****Pulicaria arabica*** (L.)Cass. {AFP} —

Pyrrhopappus
Pyrrhopappus carolinianus (Walter)DC. {AFP} —

Ratibida
1. Ray corolla yellow to maroon; disc cylindric or columnar, 1.8-4.3 times longer than wide … R. columnifera
1. Ray corolla yellow; disc ellipsoid to globular or ovoid, 0.8-1.7 times longer than wide … R. pinnata

****Ratibida columnifera*** (Nutt.) Wooten & Standl. {AFP} —
Ratibida pinnata (Vent.)Barnhart {AFP} —

Rayjacksonia
Rayjacksonia phyllocephala (DC.)R.L.Hartm. & M.A.Lane {AFP} —

Rudbeckia
1. Basal and proximal leaves 0.5-1 cm wide, linear to linear-lanceolate [2]
1. Basal and proximal leaves 1.3-12 cm wide, not linear [3]
2. Stems strigose; heads 1-3; ray corolla laminae orange-red to dark purplish red … R. graminifolia
2. Stems glabrate; heads 3-15; ray corolla laminae yellow … R. mohrii
3. Basal and proximal leaves lobed [4]
3. Basal and proximal leaves unlobed [5]
4. Disc corollas yellow (drying brownish); pappi coroniform or of 4 scales to 1.5 mm long; cypselae 3-5 mm long … R. laciniata var. laciniata
4. Disc corollas primarily brown-purple (drying blackish); pappi coroniform to 0.2 mm long; cypselae 2-3 mm long … R. triloba var. pinnatiloba
5. Mid-cauline leaves petiolate or the blade base cuneate to attenuate [6]
5. Mid-cauline leaves sessile, the blade base clasping to truncate [7]
6. Mid-cauline leaves petiolate, the blade base cordate to abruptly short-cuneate … R. laciniata var. heterophylla
6. Mid-cauline leaves sessile to short-petiolate, the blade base cuneate to attenuate … R. nitida
7. Stem and leaves glabrate [8]
7. Stem and leaves pubescent, strigose to hirsute [9]
8. Annual; pappus absent; disc longer than to subequal to width; cypselae 1.8-2.5 mm long … R. amplexicaulis
8. Rhizomatous; disc wider than or subequal to length; pappus of 4-6 unequal scales; cypselae 3.5-5 mm long … R. auriculata
9. Stem and leaves softly pilose to woolly … R. mollis
9. Stem and leaves glabrate, strigose to coarsely hispid or hirsute [10]
10. Stem and leaves glabrate to strigose, occasionally partly hirsute near the base; pappus coroniform to 0.2 mm long; cypselae 2.2-4 mm long … R. fulgida

10. Stem and leaves copiously hispid or hirsute; pappus absent; cypselae 1.5-2.7 mm long … R. hirta

Rudbeckia auriculata (Perdue)Kral {AFP} — SE.
Rudbeckia fulgida Aiton {AFP} —
•***Rudbeckia graminifolia*** (Torr. & A.Gray)C.L.Boynton & Beadle {AFP} —
Rudbeckia hirta L. {AFP} —
•***Rudbeckia laciniata*** L. var. ***heterophylla*** (Torr. & A.Gray)Fernald & B.G.Schub. —
Rudbeckia laciniata L. var. ***laciniata*** {AFP} —
Rudbeckia mohrii A.Gray {AFP} —
Rudbeckia mollis Elliott {AFP} —
Rudbeckia nitida Nutt. {AFP} — SE.
Rudbeckia triloba L. var. ***pinnatiloba*** Torr. & A.Gray {AFP} — SE.

Sachsia
Sachsia polycephala Griseb. {AFP} — ST.

Sclerolepis
Sclerolepis uniflora (Walter)Britton et al. {AFP} —

Senecio
****Senecio brasiliensis*** (Spreng.)Less. var. ***tripartitus*** (DC.)Baker {AFP} —
****Senecio vulgaris*** L. {AFP} —

Sericocarpus
1. Cauline (at least proximal ones) and basal leaf blades toothed, basal or proximal leaves usually persistent on flowering stems; phyllaries recurved or spreading … S. caespitosus
1. Cauline leaf blades entire, sometimes the few most basal leaves toothed but these usually withered or absent on flowering stems; phyllaries erect or appressed (basalmost ones sometimes recurved or spreading) … S. tortifolius

Sericocarpus caespitosus G.L. Nesom {AFP} —
Sericocarpus tortifolius (Michx.)Nees {AFP} —

Silphium
1. Stem glabrous; leaf blade usually at least some lobed, rarely unlobed, to 52 cm wide … S. compositum
1. Stem hispid to scabrous; leaf blade unlobed (merely dentate to entire), to 5 cm wide [2]
2. Basal leaves persistent … Silphium asteriscus var. simpsonii
2. Basal leaves usually withered or absent [3]
3. Paleae puberulent and stipitate-glandular … Silphium asteriscus var. dentatum
3. Paleae puberulent to scabrous, eglandular … Silphium asteriscus var. asteriscus

Silphium asteriscus L. {AFP} —
Silphium compositum Michx. {AFP} —

Smallanthus
Smallanthus uvedalia (L.)Mack. ex Small {AFP} —

Solidago: *Solidago flaccidifolia* Small is probably absent from Florida, but included in the key below.

subg. Solidago

sect. Erectae, subsect. Erectae, ser. Puberulae: ***S. pulverulenta***

sect. Thyrsiflorae: ***S. petiolaris***

subg. Pleiactila

sect. Glomeruliflorae: ***S. caesia***

sect. Maritimae: ***S. mexicana, S. austrina, S. gracillima, S. chrysopsis, S. virgata***

sect. Argutae, subsect. Argutae: ***S. arguta***

sect. Argutae, subsect. Patulae: ***S. salicina***

sect. Venosae, subsect. Venosae: S***. fistulosa, S. latissimifolia, S. rugosa***

sect. Venosae, subsect. Ulmifoliae, ser. Ulmifoliae: ***S. brachyphylla, S. ulmifolia***

sect. Venosae, subsect. Ulmifoliae, ser. Auriculatae: ***S. auriculata***

sect. Unilaterales, subsect. Triplinerviae, ser. Canadensae: ***S. altissima***

sect. Unilaterales, subsect. Triplinerviae, ser. Tortifoliaea: ***S. leavenworthii***, ***S. tortifolia***

sect. Unilaterales , subsect. Serotinae: ***S. gigantea***

subg. Nemorales: ***S. nemoralis***

subg. Triactis, sect. Odorae: ***S. chapmanii***, ***S. odora***

1. Leaf bases cordate- or auriculate-clasping around the whole width of the stem … S. auriculata
1. Leaf bases not clasping the stem, or subtly clasping <1/2 of the stem [2]
2. Heads axillary in small clusters subtended by leaves 2 times or more as long as the clusters (at least the proximal clusters), occasionally the clusters elongate but then subtended by leaves >6 cm long [3]
2. Heads in thyrsiform, racemiform, or paniculiform arrays, the clusters subtended by reduced leafy bracts <6 cm long and subequal to shorter than the clusters [5]
3. Stems erect, not glaucous, weakly or not anthocyanic; proximal to mid-cauline leaves broadly lanceolate to elliptic, 3.6–18 cm long, 1–6 cm wide … S. flaccidifolia
3. Stems arching, glaucous, strongly anthocyanic; proximal to mid-cauline leaves lanceolate, 5–15 cm long, 0.8–3 cm wide [4]
4. Stems strongly arching; proximal midcauline leaves narrowly lanceolate, 5–15 cm long, 0.8–3 cm wide … S. caesia var. caesia
4. Stems weakly arching; proximal midcauline leaves shorter and broadly lanceolate to rhombic, 5–9 cm long, 1.3–2.4 cm wide … S. caesia var. zedia
5. Leaves strongly rugose-veined, the lateral and some additional veins prominent and strongly discolorous from the lower surface, impressed on the upper surface [6]
5. Leaves not strongly rugose-veined, the lateral veins scarcely prominent and concolorous to slightly discolour with the lower surface, not or only scarcely impressed on the upper surface [7]
6. Distal cauline leaves ovate-lanceolate to elliptic, the apex acute and often somewhat acuminate; inflorescence usually more pyramidal with well-developed basal, lateral branches … S. rugosa var. aspera
6. Distal cauline leaves ovate, the apex mostly obtuse; inflorescence sometimes narrowly elongate with short basal, lateral branches … S. rugosa var. celtidifolia
7. Stems below inflorescence arrays glabrous to glabrate or sparsely strigose [8]
7. Stems below inflorescence arrays distinctly pubescent [13]

8. Basal and proximalmost cauline leaves relatively large, distal cauline leaves strict to ascending-appressed, and much reduced; leaves glabrous (sect. Maritimae) … Key A
8. Basal and proximalmost cauline leaves absent or relatively small, distal cauline leaves spreading to ascending or appressed; leaves sometimes pubescent or scabrous [9]
9. Leaves scabrous or hirsute on the upper surface [10]
9. Leaves glabrous to glabrate on the upper surface [11]
10. Basal and proximal leaves larger than distal ones, with long, winged petioles; disc florets 5-15 … S. salicina
10. Basal and proximal leaves subequal to slightly smaller than distal ones, with short, winged petioles; disc florets 4-7 … S. ulmifolia
11. Leaves linear-lanceolate to lanceolate … S. gigantea
11. Leaves ovate, elliptic, to elliptic-lanceolate [12]
12. Basal leaves usually present at flowering, long-petiolate; cauline leaf blades abruptly contracted to the petiole … S. arguta var. caroliniana
12. Basal leaves usually absent at flowering, short-petiolate; cauline leaf blades cuneate at the base … S. latissimifolia
13. Main panicle branches not recurved, usually not secund [14]
13. Main panicle branches mostly secund and recurved [15]
14. Phyllaries stipitate-glandular; ray florets (5)7-9; cypselae 3-4 mm long … S. petiolaris
14. Phyllaries not stipitate-glandular; ray florets 9-16; cypselae 0.8-1.5 mm long … S. pulverulenta
15. Leaves entire, with anise-like odor when crushed [16]
15. Leaves (at least some) toothed, without anise-like odor [17]
16. Stems uniformly puberulent, sometimes with a short glabrous to glabrate strip below the leaf; mid-cauline leaves mostly (15)30–70 mm long, 8–20 mm wide (2–6 times as long as wide) … S. chapmanii
16. Stems puberulent in lines decurrent from distal leaf bases; mid-cauline leaves mostly 40–110 mm long, 5–15(20) mm wide (4–15 times as long as wide) … S. odora
17. Proximal leaf blades mostly <6 cm long, 2-4 times longer than wide; ray florest 0-2 … S. brachyphylla
17. Proximal leaf blades mostly >6 cm long, 4-15 times longer than wide; ray florets 2-18 [18]
18. Cauline leaves long-tapering or long-cuneate at the base [19]
18. Cauline leaves truncate to scarcely tapering at the base [20]
19. Leaves spatulate to oblanceolate, 1-veined, the apex short-acute to rounded, often reduced and subentire distally … S. nemoralis
19. Leaves lanceolate, often 3-veined, the apex long-acute to acuminate, mostly rather large distally … S. altissima var. pluricephala
20. Stem with mostly spreading hairs, the hairs 0.3-1 mm long (pilose, villosulous, or hirsute); leaves generally elliptic, lance-elliptic, to oblanceolate, larger ones 2.8-5 times as long as wide and with several spreading-ascending secondary veins … S. fistulosa
20. Stem with incurved, strigillose hairs, 0.1-0.3(0.5) mm long (scabrid, strigillose, to strigillose-villosulous); leaves generally linear-lanceolate to lance-oblong, 4-25 times as long as wide and with few, appressed to strict-ascending secondary veins or without distinct secondary veins [21]
21. Leaves 4-10(15) cm long, the margin plane with the rest of the blade, the apex acute to acuminate, the underside with light secondary veins slightly upraised or prominulous, distinct from the darker reticulate veins; inflorescence rachis mostly stiffly scabrellous to strigillose; ray florest 8-15; disc florets 6-10 … S. leavenworthii

21. Leaves 2-6(7) cm long, the margin slightly to moderately revolute, the apex obtuse to acute, the underside without distinct secondary veins or the secondary veins dark, flat, and anastamosing with the similar reticulate veins; inflorescence rachis often softly scabrellous or strigillose-villosulous; ray florets 2-8; disc florets 2-6 … S. tortifolia

Key A: sect. *Maritimae*
1. Distal cauline leaves numerous, large, thick to somewhat fleshy; heads in narrowly to broadly cone-shaped secund arrays, branches secund, proximal arching … S. mexicana
1. Distal cauline leaves fewer or leaves much reduced, not fleshy to somewhat fleshy; heads in thyrsiform or wand-shaped, sometimes secund arrays, proximal branches usually short, ascending, rarely some much elongated [2]
2. Basal leaves sparsely to obviously serrate; arrays sometimes with much elongate proximal arching branches [3]
2. Basal leaves entire, sometimes crenate; arrays narrow, without elongate proximal branches [4]
3. Basal leaves larger, oblanceolate; inflorescence arrays of many branches that grade from short to distally short to proximately mid length with the longest spreading and arching … S. austrina
3. Basal leaves smaller, not oblanceolate; inflorescence arrays of few long to very long lower inflorescence branches … S. gracillima
4. Basal leaves 2-5(10) mm wide; disc florets 2-5(8) … S. chrysopsis
4. Basal leaves (5)10-40 mm wide; disc florets (6)8-12 … S. virgata

Solidago altissima L. var. ***pluricephala*** M.C.Johnst. {AFP} —
Solidago arguta Aiton var. ***caroliniana*** A.Gray {AFP} —
Solidago auriculata Shuttlew. ex S.F.Blake {AFP} —
Solidago austrina Small — Eastern panhandle (Piedmont). Like *S. chyrsopsis*, segregated from *S. virgata*; "Confusion in separating *Solidago austrina, S. stricta*, and *S. virgata* is understandable and complicated by multiple ploidy levels known in *S. austrina* (2x, 4x) and *S. virgata* (2x, 4x, 6x)." (Semple et al. 2016). Whether there is admixture and the potential to treat some segregates as infraspecific taxa remains nebulous.
Solidago brachyphylla Chapm. ex Torr. & A.Gray {AFP} —
Solidago caesia L. var. ***caesia*** {AFP} —
Solidago caesia L. var. ***zedia*** R.E.Cook & Semple{AFP} —
Solidago chapmanii A. Gray{AFP} —
•***Solidago chrysopsis*** Small —South Florida.
Solidago fistulosa Mill. {AFP} —
Solidago gigantea Aiton {AFP} —
Solidago gracillima Torr. & A.Gray {AFP} —
Solidago latissimifolia Mill. {AFP} —
Solidago leavenworthii Torr. & A.Gray {AFP} —
Solidago mexicana L. {AFP} — Once treated as *S. sempervirens*, now called *S. mexicana* in Florida. "Confusion in separating *Solidago mexicana, S. sempervirens*, and *S. virgata* is understandable and complicated by multiple ploidy levels known in *S. mexicana* (2x, 4x) and *S. virgata* (2x, 4x, 6x)." and "Some collections of diploid *S. mexicana* from Florida can be difficult to separate from some *S. maya* and *S. virgata* collections; this is true in the field and with herbarium specimens." (Semple 2016).
Solidago nemoralis Aiton {AFP} —
Solidago odora Aiton {AFP} —

Solidago petiolaris Aiton {AFP} —
Solidago pulverulenta Nutt. {AFP} —
Solidago rugosa Mill. var. ***aspera*** (Aiton)Fernald {AFP} —
Solidago rugosa Mill. var. ***celtidifolia*** (Small)Fernald {AFP} —
Solidago salicina Elliott {AFP} —
Solidago tortifolia Elliott {AFP} — Frequently confused with *S. leavenworthii* (which sometimes may show twisting at the leaf bases), but the lack of distinct secondary veins are diagnostic for *S. tortifolia*.
Solidago ulmifolia Muhl. ex Willd. {AFP} —
Solidago virgata Michx. {AFP} — Throughout (SE Coastal Plain). Once treated as *S. stricta*, now determined to be *S. virgata* in Florida (Semple 2013).

Soliva

1. Leaves 1-pinnately lobed, rarely 2-pinnately lobed, blades 1-2(3) cm long; cypselar wings rugulose or ribbed nearly throughout, shoulders spinose laterally … S. stolonifera)
1. Leaves mostly 2- or 3-pinnately lobed, blades 2-8(15) cm long; cypselar wings not rugulose nor ribbed, or rugulose or ribbed only 2/3 of length, shoulders spinose or not laterally [2]
2. Heads mostly in the proximal leafless half of the plant; cypselar bodies oblanceolate to oblong-cuneate, marginal wings transversely rugulose or ribbed, shoulders not spinose laterally, faces distally villous to pilose or glabrescent … S. anthemifolia
2. Heads mostly in the distal, leafy part of the plant; cypselar bodies obovate to oblanceolate, marginal wings not transversely rugulose or ribbed, shoulder usually spinose laterally, faces glabrous or scabrellous to hirtellous … S. sessilis

****Soliva anthemifolia*** (Juss.)Sweet {AFP} —
****Soliva sessilis*** Ruiz & Pav. {AFP} —
****Soliva stolonifera*** (Brot.)Sweet {AFP} —

Sonchus

1. Leaf margin densely, copiously prickly throughout, the basal auricles often recurved or curled, rounded; peduncle and phyllaries usually glabrous, infrequently stipitate-glandular; corolla ligule mostly shorter than the tube; cypselae longitudinally ribbed, otherwise smooth … S. asper
1. Leaf margin weakly prickly, the basal auricles usually mostly straight; peduncle and phyllaries usually stipitate-glandular; corolla ligule subequal to the tube; cypselae longitiduinally ribbed, faces transversely rugulose or tuberculate … S. oleraceus

****Sonchus asper*** (L.)Hill {AFP} —
****Sonchus oleraceus*** L. {AFP} —

Sphagneticola

****Sphagneticola trilobata*** (L.)Pruski {AFP} —

Stevia

^*Stevia rebaudiana* (Bertoni)Bertoni —

Stokesia

Stokesia laevis (Hill)Greene {AFP} —

Symphyotrichum

1. Annuals with a fibrous-rooted taproot; ray or pistillate florest in 1-5 series … Key A
1. Perennials, with rhizomes or hardened rootstock; ray florets in 1 series [2]
2. Stems densely covered in scabrous, stiff scale-like leaves, these <1 cm long (basal-most leaves larger) … Key B
2. Stems not densely covered in scale-like leaves, most cauline leaves >1 cm long, not scale-like or not scabrous or not stiffened [3]
3. Basal leaves linear, entire, to 15-30 cm long, 25-70 times longer than wide, cauline leaves highly reduced … S. chapmanii
3. Basal leaves not linear, entire or toothed, cauline leaves usually well-developed [4]
4. Rootstock corm-like, globose to elongate; leaves and phyllaries silvery, silky-pilose or usually at least some hispid-pilose … Key C
4. Rootstock not corm-like; leaves and phyllaries green, glabrous to pubescent [5]
5. Stem base 5-15 mm wide; cauline leaves 2-5 cm wide, the base often sheath-like and persistent on older parts; involucre 8-15 mm wide … S. elliottii
5. Stem base 1-3 mm wide; cauline leaves 0.1-2.5 cm wide, the base not sheath-like, sometimes clasping; involucre 4-10 mm wide [6]
6. Leaf bases cordate- or auriculate-clasping … Key D
6. Leaf bases truncate to cuneate, sometimes partly sheathing, not clasping at the base [7]
7. Stems densely pilose or hirsute, rarely glabrate … S. pilosum
7. Stems glabrous to scabrous or sparsely pubescent [8]
8. Plant not succulent, of freshwater areas; stems generally straight, leafy … Key E
8. Plant subsucculent, of brackish areas; stems often zig-zag, with few leaves [9]
9. Rhizomes short; stems 1–many; mid-cauline leaves (1)1.5-2.7 mm wide; involucres 4.1-5.3 mm long; ray florets 10-16; disc florets (10)13-23, corollas 3.4-4.6 mm long; cypselae 1.5-2(2.5) mm long; pappi 3-4.4 mm long … S. bracei
9. Rhizomes long; stems 1; mid-cauline leaves (1.5)3-6 mm wide; involucres 6-9.5(11) mm long; ray florets (12)17-25; disc florets 25-45(54), corollas (4)4.7-6(6.5) mm long; cypselae 2.8-4(4.5) mm long; pappi 5-6.1 mm long … S. tenuifolium

Key A

1. Ray laminae pink to lavender, drying in 2-3(4) coils; disc florets 11-23; pappus (3.2)3.6-5 mm long … S. bahamense
1. Ray laminae usually white (rarely pink or lavender), curling or drying in 1 coil; disc florets (3)4-15; pappus 3.5-5.5 mm long [2]
2. Phyllaries 30-42; ray laminae longer than pappi; pappus 3.5-3.8(4.2) mm long … S. expansum
2. Phyllaries 18-30; ray laminae shorter than to subequal to pappi; pappus 3.5-5.5 mm long [4]
3. Green zones of phyllaries nearly absent from proximal portion; ray florets in (2)3 series; diploid … S. squamatum
3. Green zones of phyllaries extending throughout the phyllary length; ray florets in 2 series; tetraploid … S. subulatum

Key B

1. Plant scabridulous; cauline leaves appressed, distal ones adnate to stem for 1/2 or more of their length … S. adnatum
1. Plant glabrate; cauline leaves spreading, clasping … S. walteri

Key C
1. Stems ± branched; distal leaves 10–30 × 4–8 mm; arrays open, paniculiform; outer phyllaries ± foliaceous (at least distally); ray florets 13–36; disc florets 15–48; cypselae glabrous … S. plumosum
1. Stems simple; distal leaves 8–15 × 1.8–5 mm; arrays narrow (wand-shaped), paniculiform, sometimes racemiform; outer phyllaries not foliaceous; ray florets 7–12; disc florets 9–21; cypselae densely strigose [2]
2. Leaf faces sparsely to moderately finely woolly-pilose, denser distally; involucres 7–9 mm; phyllaries spreading to reflexed … S. pratense
2. Leaf faces glabrous or densely canescent distally; involucres 5–7 mm; phyllaries appressed [3]
3. Distal cauline leaves and phyllaries moderately to densely silky; e United States … S. concolor var. concolor
3. Distal cauline leaves and phyllaries glabrous or sparsely hispido-pilose; panhandle Florida … S. concolor var. devestitum

Key D
1. Proximal leaves sessile to subsessile, the blade base clasping; stems pubescent [2]
1. Proximal leaves winged-petiolate, the petiole base clasping (middle and distal sometimes sessile); stems glabrous to pubescent [4]
2. Phyllaries (stems, leaves) stipitate-glandular; leaf margins revolute, sometimes undulate; ray laminae 14–24 mm long, 1.5–3.5 mm wide … S. georgianum
2. Phyllaries eglandular (if stipitate-glandular, then leaf margins flat, not undulate, ray laminae 10–18(20) mm long, 1–3 mm wide) [3]
3. Proximal cauline leaf bases not constricted proximally; distal leaf blades lanceolate or oblanceolate to oblong-lanceolate, bases cuneate to rounded, subclasping, apices acute or acuminate, subspinulose; involucres 6–7.6 mm; cypselae sparsely strigillose to glabrate … S. fontinale
3. Proximal cauline leaf bases broadened proximal to constriction; distal leaf blades narrowly to broadly ovate, bases strongly cordate-clasping to auriculate-amplexicaul, apices usually acute, sometimes obtuse, mucronate to white-spinulose; involucres 5.5–12 mm; cypselae sericeous or strigillose … S. patens
4. Ray florets white to pale pink … S. urophyllum
4. Ray florets usually pale to dark blue or purple, rarely white [5]
5. Proximal cauline leaves winged-petiolate, wings wider distally and leaves sessile, the wings abruptly widening at the strongly auriculate-clasping petiolar bases … S. undulatum
5. Cauline leaves narrowly winged-petiolate, the wings not widening at the clasping petiolar bases [6]
6. Basal leaf bases usually deeply cordate, sometimes rounded or abruptly attenuate, proximal cauline bases cordate, rounded, or truncate, sometimes cuneate … S. shortii
6. Basal leaf bases shallowly cordate or rounded to attenuate, proximal cauline bases rounded to attenuate [7]
7. Leaf faces scabrous, adaxially strongly strigose, abaxially strigose topiloso-strigose or hirsute … S. oolentangiense
7. Leaf faces glabrous … S. laeve var. concinnum

Key E
1. Leaves subtending peduncles 2-7 mm long, 1-2 mm wide, peduncles often copiously bracteate, with 5-15 bracts; heads rather small [2]

1. Leaves subtending peduncles 10-80 mm long, 1-30 mm wide, peduncles usually with few bracts; heads rather larger [4]
2. Ray corollas white, rarely pinkish, the laminae 0.5-1.2 mm wide; pappus 2.5-3.5 mm long; cypselae 1-1.8 mm long, faintly 4-5-nerved … S. racemosum
2. Ray corollas pinkish, bluish, to white, the laminae 1-1.7 mm wide; pappus 3-4.5 mm long; cypselae 1.5-2.5 mm long, prominently 3-4-nerved [3]
3. Middle and distal leaves mostly spreading to descending … S. dumosum var. coridifolium
3. Middle to distal leaves strongly ascending … S. dumosum var. subulifolium
4. Stems usually ascending to erect, sometimes arching; disc corollas whitish to cream, lobes strongly reflexed, lanceolate, 0.9–1.7 mm long (lengths 1/2–3/4 of corollas) … S. lateriflorum
4. Stems erect; disc florets white to yellow, lobes sometimes spreading, triangular, 0.4–1.3 mm long (lengths to 1/2 of corollas) [5]
5. Leaves thin, margins flat; peduncle bracts 5–13; phyllaries linear-lanceolate, subequal to unequal, outer often foliaceous … S. lanceolatum var. latifolium
5. Leaves firm, margins often recurved; peduncle bracts 1–3(5); phyllaries oblong-lanceolate, unequal, outer sometimes foliaceous [6]
6. Cauline leaves sharply reduced on array branches, adaxial faces not waxy, abaxial with indistinct, elongate areoles (axillary clusters absent); peduncle bracts reduced, grading into phyllaries; disc corollas yellow turning reddish; cypselae 2–2.6 mm … S. simmondsii
6. Cauline leaves progressively reduced distally, adaxial faces waxy, abaxial with well-marked, isodiametric areoles (axillary clusters often present); peduncle bracts foliaceous, distal closely subtending heads, not grading into phyllaries; disc corollas cream to pale yellow turning pinkish; cypselae 1.5–2 mm … S. praealtum

Symphyotrichum adnatum (Nutt.)G.L.Nesom {AFP} —
Symphyotrichum bahamense (Britton)G.L.Nesom {AFP} —
Symphyotrichum bracei (Britton ex Small)G.L. Nesom — Peninsula (also Bahamas, Cuba). Coastal marshes. Sundberg (2004) found intermediate morphologies with *S. tenuifolium* along the upper-west peninsular gulf coast. As a variety, the name is *S. tenuifolium* var. *aphyllum*.
Symphyotrichum carolinianum (Walter)Wunderlin & B.F.Hansen {AFP} —
Symphyotrichum chapmanii (Torr. & A.Gray)Semple & Brouillet {AFP} —
Symphyotrichum concolor (L.)G.L.Nesom var. ***concolor*** {AFP} —
Symphyotrichum concolor (L.)G.L.Nesom var ***devestitum*** (S.F.Blake)Semple {AFP} —
Symphyotrichum dumosum (L.)G.L.Nesom {AFP} —
Symphyotrichum elliottii (Torr. & A.Gray)G.L.Nesom {AFP} —
Symphyotrichum expansum (Poeppig ex Spreng.)G.L.Nesom {AFP} —
•***Symphyotrichum fontinale*** (Alexander)G.L.Nesom {AFP} —
Symphyotrichum georgianum (Alexander)G.L.Nesom {AFP} —
Symphyotrichum laeve (L.)Á.Löve & D.Löve var. ***concinnum*** (Willd.)G.L.Nesom {AFP} —
Symphyotrichum lanceolatum (Willd.)G.L.Nesom var. ***latifolium*** (Semple & Chmiel.) G.L.Nesom {AFP} —
Symphyotrichum lateriflorum (L.)Á.Löve & D.Löve {AFP} —
*****Symphyotrichum oolentangiense*** (Riddell)G.L.Nesom {AFP} —
Symphyotrichum patens (Aiton)G.L.Nesom {AFP} —
Symphyotrichum pilosum (Willd.)G.L.Nesom {AFP} —
•***Symphyotrichum plumosum*** (Small)Semple {AFP} —
Symphyotrichum praealtum (Poir.)G.L.Nesom {AFP} —
Symphyotrichum racemosum (Elliott) G.L.Nesom {AFP} —

Symphyotrichum sericeum (Vent.)G.L.Nesom var. ***microphyllum*** (DC.)Wunderlin & B.F.Hansen {AFP} —
Symphyotrichum shortii (Lindl.)G.L.Nesom {AFP} —
Symphyotrichum simmondsii (Small)G.L.Nesom {AFP} —
****Symphyotrichum squamatum*** (Spreng.)G.L.Nesom {AFP} —
Symphyotrichum subulatum (Michx.)G.L.Nesom {AFP} — The plants of the *S. subulatum* group (incl. *S. bahamense, S. expansum, S. squamatum*) have generally straight stems, leaves sometimes ciliate, and ray florets in 1-3 series with the laminae 0.2-1.3 mm long, which helps to separate them from similar-looking taxa.
Symphyotrichum tenuifolium (L.)G.L.Nesom {AFP} — Northern peninsula, panhandle (also southern and eastern USA). Coastal marshes. The plants of the *S. tenuifolium* group (incl. *S. bracei*) have generally zig-zag stems, leaves glabrous, and ray florets in 1 series with the laminae 1.2-2 mm wide, which helps to separate them from similar-looking taxa.
Symphyotrichum undulatum (L.)G.L.Nesom {AFP} —
Symphyotrichum urophyllum (Lindl. ex DC.)G.L.Nesom {AFP} —
Symphyotrichum walteri (Alexander)G.L.Nesom {AFP} —

Synedrella
****Synedrella nodiflora*** (L.)Gaertn. {AFP} —

Tagetes
1. Perennial; leaves simple, toothed … T. lucida
1. Annual or perennial; leaves pinnately lobed or compound, and toothed [2]
2. Perennial; leaf rachis often winged and toothed … T. lemmonii
2. Annual; leaf rachis sometimes winged, but rarely with 1-2 teeth [3]
3. Leaflets or lobes mostly with 0-8 teeth per side; heads generally solitary; peduncles 30-100(150) mm; involucres 10-22 mm long, (3)5-13 mm wide; ray laminae (2)12-18(27) mm long … T. erecta
3. Leaflets or lobes mostly with 6-20 teeth per side; heads several together in a corymbiform cluster; peduncles 1-5(10) mm; involucres 7-11 mm long, 1.5-3 mm wide; ray laminae 1-2 mm long … T. minuta

^*Tagetes erecta* L. {AFP} —
^*Tagetes lemmonii* A.Gray —
^*Tagetes lucida* Cav. {AFP} —
^*Tagetes minuta* L. {AFP} —

Taraxacum The taxonomy of *Taraxacum* is extremely convoluted with 1000s of microspecies (Moonlight et al. 2024). See here for a recent discussion. Lucky for us, diversity is quite low in Florida and for convenience the most widely used name is applied, *T. officinale*.

****Taraxacum officinale*** Weber ex F.H.Wigg. {AFP} —

Tetragonotheca
Tetragonotheca helianthoides L. {AFP} —

Thymophylla
****Thymophylla tenuiloba*** (DC.)Small {AFP} —

Tithonia

1. Perennial, subshrub to shrubs; phyllaries 16-28, the outer shorter than the inner; ray laminae 48-69 mm long; disc florets 80-130; cypselae 4-6 mm long ... T. diversifolia
1. Annual; phyllaries 12-16, the outer longer to subequal to the inner; ray laimnae 20-33 mm long; disc florets 60-90; cypselae 5-9 mm long ... T. rotundifolia

*****Tithonia diversifolia*** (Hemsl.)A.Gray {AFP} — Peninsula (native to Mexico, Central America). Disturbed areas (also commonly cultivated).
^*Tithonia rotundifolia* (Mill.)S.F.Blake {AFP} —

Tridax

*****Tridax procumbens*** L. {AFP} —

Verbesina

1. Leaves alternate [2]
1. Leaves all opposite or nearly so, at least in the basal half, upper reduced ones sometimes alternate below the inflorescence [4]
2. Annual; leaf lower surface white strigose-canescent, especially when young; heads 10-20 mm wide, phyllaries 8-24 mm long ... V. encelioides
2. Perennial; leaf lower surface scabrous, strigellous, to glabrate; heads 4-13 mm wide, phyllaries 2-8 mm long [3]
3. Heads globose; phyllaries reflexed to spreading; corolla yellow; disc florets 40-60 ... V. alternifolia
3. Heads hemispheric to obconic; phyllaries erect to ascending, the tips sometimes reflexed; corolla white or whitish; disc florets 8-15 ... V. virginica
4. Stem unwinged, leaves not decurrent [5]
4. Stem winged from decurrent leaves [6]
5. Leaf blade sharply serrate nearly to the base; heads 3-15(20), 0.7-1.2 cm wide, radiate ... V. aristata
5. Leaf blade bluntly or coarsely toothed mostly above the middle; heads 1-3(5), 1-2 cm wide, discoide ... V. chapmanii
6. Cauline leaves sessile, the distal ones sharply reduced below the inflorescence; heads usually 1-15 ... V. heterophylla
6. Cauline leaf blade abruptly reduced and decurrent along a petiole, the distal ones gradually reduced; heads usually 20 or more ... V. occidentalis

Verbesina alternifolia (L.)Britton ex Kearney {AFP} —
Verbesina aristata (Elliott)A.Heller {AFP} —
•***Verbesina chapmanii*** J.R.Coleman {AFP} — ST.
*****Verbesina encelioides*** (Cav.)Benth. & Hook.f. ex A.Gray {AFP} —
Verbesina heterophylla (Chapm.)A.Gray {AFP} — SE.
Verbesina occidentalis (L.)Walter {AFP} —
Verbesina virginica L. {AFP} —

Vernonia

1. Leaves entire or toothed, lateral veins obscure to evident, at mid-stem the leaves 2-15 mm wide [2]

1. Leaves toothed, lateral veins distinct, at mid-stem the leaves 13-40 mm wide [4]
2. Leaves toothed, lateral veins slightly distinct, at mid-stem the leaves 9-15 mm wide … V. ×concinna
2. Leaves entire or very faintly toothed, lateral veins obscure, at mid-stem the leaves 2-9 mm wide [3]
3. Leaves narrowly lanceolate to linear, mostly 10-50 times longer than wide, upper surface typically scabrellous … V. angustifolia
3. Leaves narrowly elliptic to linear-elliptic, mostly 8-18 times longer than wide, the upper surface smooth or nearly so … V. blodgettii
4. Middle and inner phyllaries filiform to linear-lanceolate … V. noveboracensis
4. Middle and inner phyllaries ovate to oblong-lanceolate [5]
5. Leaf lower surface usually scabrellous (with appressed, awl-shaped hairs), sometimes glabrescent, not or sparsely resin-gland-dotted; heads with 9-25(30) flowers … V. gigantea
5. Leaf lower surface usually puberulous to tomentose or pannose (with erect or curled hairs), seldom glabrescent, conspicuously resin-gland-dotted; heads with 30-60 flowers … V. missurica

Vernonia angustifolia Michx. {AFP} —
Vernonia blodgettii Small {AFP} —
•***Vernonia ×concinna*** Gleason (*angustifolia* × *gigantea*) {AFP} —
Vernonia gigantea (Walter)Trel. ex Branner & Coville {AFP} —
Vernonia missurica Raf. {AFP} —
Vernonia noveboracensis (L.)Michx. {AFP} —

Xanthium
****Xanthium strumarium*** L. {AFP} —

Youngia
****Youngia japonica*** (L.)DC. {AFP} —

Zinnia
1. Involucre hemispheric; paleae with a strongly differentiated, fimbriate apex; pappus awnless; cypselae cartilaginous-winged … Z. elegans
1. Involucre subcylindric to campanulate; paleae with a weakly differentiated, erose to subentire apex; pappus of disk flowers with a prominent awn; cypselae wingless … Z. peruviana

^*Zinnia elegans* Jacq. {AFP} —
^*Zinnia peruviana* (L.)L. {AFP} —

Appendix A. Taxonomic Perspectives.

Rafinesque 1836: “Many botanists mistake real botanical species for varieties or viceversa. In fact all species might have been varieties once, and many varieties are gradually becoming species by assuming constant and peculiar characters.” […] “The process is by the seedlings being somewhat different from the parents, and thus evincing a deviation of typical mould, that may be, or may not be, propagated again. If it is, this soon assumes a permanence, becoming a permanent variety if the deviation is slight, such as mere color of flowers, size of stem, leaves, &c.; but becoming a New Species! if at last several deviations are permanently combined.” […] “4. Floridian Region. This begins in the North by a narrow belt in the marshy and sandy Islands or

Shores, pine woods and swamps of Long Island and New Jersey, widening gradually in the plains of Virginia, Carolina, Georgia, ascending the hills and south Apalachian mountains which run west into Alabama, occupying the whole of Florida, Alabama, &c. It blends in South Florida with the Antillian flora of Bahama and Cuba, in the mountains with the Alleghanian flora, and west with the Louisianian." [...] "5. The Limestone Region of Florida, with a profusion of fine plants, Ludwigias, Rhexias, &c. and many peculiar shrubs." [...] the Floridian contains 6000 species at least".

Rafinesque 1837: "Our Species, Genera, Families, and Orders are well known to be mere abstract terms of successive groups, formed by a Synthetic operation of our mind, in order to study more conveniently such collective groups of Individuals. Their permanence in continual succession of forms can only be temporary".

Candolle 1867 (1868 translation, Nicolson 1991): "There will come a time when all the plant forms in existence will have been described; when herbaria will contain indubitable material of them; when botanists will have made, unmade, often remade, raised or lowered, and above all, modified several hundred thousand taxa ranging from classes to simple varieties, and when synonyms will have become much more numerous than accepted taxa. Then science will have need of some great renovation of its formulae. This nomenclature which we now strive to improve will then appear like an old scaffolding, laboriously patched together and surrounded and encumbered by the debris of rejected parts. The edifice of science will have been built, but the rubbish incident to its construction not cleared away. Then perhaps there will arise something wholly different from Linnaean nomenclature, something so designed as to give certain and definite names to certain and definite taxa.

"That is the secret of the future, a future still very far off.

"In the meantime, let us perfect the binomial system introduced by Linnaeus. Let us try to adapt it better to the continual, necessary changes in science . . . drive out small abuses, the little negligences and, if possible, come to agreement on controversial points. Thus we shall prepare the way for the better progress of taxonomy."

Engelmann 1870 (in Bartlett 1916): "As the modern views make species a less definite entity the importance of what is a species and what are varieties lessens wonderfully."

Brandegee 1893: "It is a well-known fact that genera and species can be launched with great ease, and that the process of disproving them is onerous and thankless".

Lloyd 1907: "new species-making. There is no one but that has more or less of a touch of the fever. We are all more or less affected with the disease, not excepting the writer."

Payson 1920: "The practice of grouping a mass of distinguishable and distinct things under a single name deserves no sympathy; but, on the other hand, the habit of giving a specific name to every slight variation is equally bad."

Raven 1975: "taxonomic decisions are essentially arbitrary, and if the resulting taxonomy is to be generally useful, it must incorporate our collective wisdom from the start."

Gentry 1989: "Are species real objective evolutionary entities? (Our job being to find out what they are.) Or are they essentially artificial constructs whose delimitation more or less depends on taxonomic convenience and preference? In the latter case, there is no 'solution' to the taxonomists' dilemma. Certainly, many people working in the temperate zone, where rampant autogamy means that every clone of *Taraxacum* is essentially a different microspecies, tend to feel that this is the case. However, many of us working in the Neotropics feel that species are mostly far better defined and are, for the most part, quite objective entities. Indeed, as I see it, if species are not in some sense real units whose nature and limits we are trying to discover via scientific thought processes, taxonomy would hardly be worth doing, and we should turn our efforts to some other field of endeavor, say, population genetics, where the scientific method does provide insight into the real world."

Ertter (in Kaye 1997): "taxonomists themselves, who, being human, are prone to present their interpretations as clear-cut, objective Truths, glossing over any unpleasant inconsistencies or ambiguities" [...] "the taxonomy of any group is an artifact of its research history." [...] "A genus that has been a popular subject for systematists [...] is more likely to have had its diversity finely analyzed, parsed, and named than is one that hasn't'" [...] "grays exist, not as aberrations to be ignored but as expected and significant parts of natural diversity."

Wheeler 2004: "Revisionary taxonomy is frequently dismissed as merely descriptive, which belies its strong intellectual content and hypothesis-driven nature."

Wheeler 2013: "The need for serious descriptive taxonomy is undiminished. It is through careful, thorough, competent descriptive taxonomy that the most fascinating details of evolutionary history are revealed and the billions of ways in which organisms are adapted for survival are opened to exploitation in our quest for sustainable ways to meet human needs. That the backlog of undescribed species, perhaps numbering 10 million for eukaryotes alone, is confronted, homologies interpreted, classifications made predictive, and names kept informative matters a great deal in the face of a biodiversity crisis."

Ertter 2025: "taxonomic species are best understood as scientific hypotheses, basic components in the goal of presenting the oft-times bewildering complexity resulting from evolution-in-action in a simplified conceptual model suitable for a variety of human purposes. The resultant species hypotheses are not arbitrary, but instead based on current understanding of a set of debated criteria, primarily involving a balance of observable characters, hypothesized phylogeny, reproductive isolation, biogeography, and ecology of the proposed species, subject to differing philosophies as to the relative importance of these criteria and the purpose of taxonomy in general.

"A key implication of this viewpoint is that species hypotheses, like all scientific hypotheses, are subject to change in the face of new data, which can be as basic as the collection of additional specimens or as sophisticated as the latest molecular analytical technique."

Taxa are real things that we observe and attempt to categorize (Sharp 1871; Wilkins in Joyce 2017), as a means of communication. The current approach seeks moderation and practicality, to avoid heterogeneously lumping and avoid infinitesimally split microspecies. Perhaps, the most notorious example of lumping in vascular plants is that of the pantropical *Allophylus*, where Leenhouts (1967) cogitating over 200 binomials wrote "the only species accepted by me: *Allophylus cobbe* [...] This implies that I consider all [other] names [...] as synonyms." Extreme examples of splitting include *Crataegus*, *Ophyrs*, *Rubus*, and *Taraxacum*, where species become 'microspecies'. Basic taxonomic concepts strived for here in this flora are given below.

<u>Species</u>: almost always readily morphologically diagnosable in plants (morphologically cryptic species being extremely rare), rare to no admixture (at least in recent history, preceding the Anthropocene), hybrids with other species none or extremely rarely forming self-perpetuating and spreading populations, deeper genomic analyses (e.g. RADseq, probe sets, genome skimming, whole genome) revealing strongly supported clades of sister species or monophyletic species derived within another paraphyletic species and lack of admixture, morphological variation may exhibit localized patterns that can be recognized as infraspecic taxa.

<u>Subspecies</u>: weakly morphologically distinct (morphologically cryptic or subcryptic subspecies relatively frequent), usually in close geographic proximity, intermediate populations often present but infrequent, admixture frequent to rare, deeper genomic analyses may reveal strongly to weakly supported bifurcating clades along with signals of admixture (e.g. STRUCTURE, Neighbor-net, DensiTree). In many instances, it is reasonable to use subspecies or varieties, but occasionally the category is neglected since trinomials are mnemonically complex

and the species rank can be more appealing. Putative microspecies are probably best placed here or below.

Variety: very weakly morphologically distinct, in close geographic proximity with regular admixture such that intermediate populations are widely persistent or were persistent in recent history.

Form: an oft ignored category that generally names phenotypes that may indepedently arise in multiple populations.

Appendix B. FAQs (frequently asked questions) or trivia.

What is the difference between a prickle, spine, and thorn (see Crozier 1922)?

prickle: sharp, stiff point formed from the surfaces or margins of the stem or trunk (e.g. *Rosa, Rubus, Smilax*, Bombacoideae), petiole (e.g. *Serenoa*), leaves (e.g. *Agave, Aloe, Argemone, Bactris, Ilex, Pandanus*), leaf veins (e.g. *Lasia spinosa*, *Solanum candidum*), leaf rachis (e.g. *Guilandina*), calyx tube, petal veins (e.g. *Solanum sisymbriifolium*), fruit (e.g. *Castanea*), or cone scales (e.g. *Pinus*).

spine: sharp, stiff point formed from modified leaves (e.g. cacti), monocot leaf apex (e.g. *Agave*, *Yucca*), leaflets (e.g. *Phoenix*), or stipules (e.g. *Vachellia*). Sometimes leaf teeth are considered spines (e.g. *Ilex*) or prickles.

thorn: sharp, stiff point formed from stems or branches (e.g. *Crataegus*, *Gleditsia*, *Xylosma congesta*).

How do rhizomes and stolons differ? They are not necessarily sharply distinct (see Holm 1929; Stevens 1966; Bell & Tomlinson 1980) but general definitions are:

rhizome: mostly underground, rooting stem, usually quite different from the morphology of aerial/submersed leafy stems.

stolon: mostly aboveground, rooting stem, often quite similar to the morphology of aerial/submersed leafy stems.

What is a tree?

A plant that has a woody (highly lignified) trunk, a trunk >2 m tall and $\geq$5 cm at its narrowest diameter 0–1.3 m aboveground (1.3 m being the diameter at breast height or dbh), and an apical crown of foliage. Monocots can be trees (e.g. palms or Arecaceae, *Dracaena*). Some definitions (not followed here) restrict trees to those having stems with a vascular cambium, which would exclude monocots, although some monocots have a different form of secondary thickening in stems (Tomlinson & Zimmerman 1969; Rudall 1995; Spicer & Groover 2010).

How much oxygen is produced globally by oxygenic photosynthesis?

Annually, oxygenic photosynthesis produces ~26 x 10^{15} moles of O_2 (Petsch 2003: 521). Atmospheric O_2 contains ~3.6 x 10^{19} moles of oxygen (Duursma & Boisson 1994). Thus, annual photosynthesis is ~0.07% of total atmospheric O_2. Overall, atmospheric O_2 is slightly declining (Huang et al. 2018). It has been estimated the oceans account for ~46% of carbon fixation through oxygenic photosynthesis and terrestrial systems 54% (Field et al. 1998).

Appendix C. Statistics on the Florida flora. Data on Florida embryophyte herbarium specimens were compiled between 27 Feb–Mar 3 2020 or 15–19 Aug 2025, primarily from the Southeast Regional Network of Expertise and Collections (SERNEC), Consortium of North American Bryophyte Herbaria (CNABH), iDigBio, and Global Biodiversity Information Facility (GBIF). Figures created with assistance from A. Farid.

Table. Total number of vascular plant and bryophyte specimens collected in each county, for vascular plants and bryophytes, and ranked by vascular plant specimens collected per km^2 (2025 data). County area includes land area (excluding perennial open water). Monroe Co. Keys are split from Monroe Co. mainland and collections are estimated for these regions (~15% Monroe Co. collections are from mainland, ~85% are from the Keys). Dade Co. was changed to Miami-Dade Co. in 1997.

	Vasc. Pl.	Per km^2	Bryophytes	Per km^2	Area (km^2)
Alachua	40956	14.32	2373	1.05	2264
Baker	2930	1.53	78	0.06	1406
Bay	9195	4.07	176	0.09	1978
Bradford	2134	2.42	84	0.11	759
Brevard	15639	3.48	156	0.06	2637
Broward	6796	1.85	49	0.02	3122
Calhoun	6619	4.51	235	0.16	1469
Charlotte	5103	2.49	13	0.01	1796
Citrus	9202	5.36	873	0.58	1512
Clay	6922	3.98	513	0.33	1557
Collier	19580	3.26	2429	0.46	5246
Columbia	6312	2.73	672	0.45	1502
DeSoto	3194	1.78	108	0.07	1651
Dixie	3540	1.86	166	0.09	1823
Duval	14925	6.15	493	0.25	2004
Escambia	15361	4.24	261	0.15	1715
Flagler	3619	2.59	82	0.07	1256
Franklin	15560	11.04	520	0.37	1410
Gadsden	13522	9.3	1433	1.07	1337
Gilchrist	2579	2.37	85	0.09	904
Glades	2779	1.26	124	0.06	2004
Gulf	5863	3.44	88	0.06	1436
Hamilton	3458	2.27	107	0.08	1333
Hardee	2938	1.56	131	0.08	1651
Hendry	2539	0.74	50	0.02	2985
Hernando	9776	7.03	425	0.34	1239
Highlands	19474	6.53	1887	0.71	2663
Hillsborough	23048	7.49	1707	0.63	2722
Holmes	2556	1.9	199	0.16	1250
Indian River	4285	2.81	80	0.06	1303
Jackson	12113	4.94	938	0.40	2372
Jefferson	5753	3.72	665	0.43	1548
Lafayette	2223	1.53	185	0.12	1516
Lake	12884	4.13	1377	0.56	2469
Lee	20831	8.35	603	0.29	2081
Leon	24376	14.11	4092	2.37	1727
Levy	15660	4.81	1293	0.45	2897
Liberty	16742	7.41	2178	1.47	1480
Madison	2935	1.62	148	0.08	1792
Manatee	9865	4.44	1203	0.63	1919
Marion	13277	2.85	1890	0.46	4089
Martin	8748	4.83	90	0.06	1439
Miami-Dade	58777	9.56	5044	1.00	5040
Monroe Keys	25674	58.9	450	1.26	356
Monroe Mainland	4531	1.66	79	0.04	2226

Nassau	7542	4.29	206	0.12	1688
Okaloosa	11312	3.91	428	0.18	2423
Okeechobee	2820	1.16	31	0.02	2005
Orange	14510	3.53	2282	0.97	2350
Osceola	6852	1.65	299	0.09	3424
Palm Beach	9920	1.66	180	0.04	5113
Pasco	6782	3.25	159	0.08	1929
Pinellas	11170	13.88	111	0.15	725
Polk	20220	3.61	2281	0.47	4855
Putnam	8719	3.69	269	0.14	1870
Santa Rosa	9624	2.6	302	0.11	2634
Sarasota	12046	7.41	122	0.06	2165
Seminole	8314	7.23	5718	7.17	798
St. Johns	6247	3.64	394	0.25	1577
St. Lucie	4088	2.29	30	0.02	1483
Sumter	4981	3.26	128	0.09	1413
Suwannee	3342	1.87	249	0.14	1781
Taylor	5979	2.22	368	0.14	2699
Union	1253	1.95	44	0.07	622
Volusia	16995	4.83	851	0.30	2857
Wakulla	14158	9.01	1184	0.75	1571
Walton	12159	3.89	497	0.18	2739
Washington	4104	2.73	433	0.21	2064

Figure. Number of digitized vascular plant specimens from Florida from the top 23 herbaria (2020 data). Harvard includes the herbaria A, AMES, ECON, and GH. A specimen here typically corresponds to one mounted sheet. The ILLS-SWF herbarium contains ~25,000 Florida specimens.

Figure. Number of digitized vascular plant herbarium specimens per Florida county, per area (2025 data). Numbers for Broward and Collier were increased from significant, holdings at FTG (~2,000) and ILLS-SWF (~9,000), respectively, not found online, to make a more accurate map.

Figure. Collection year of digitized vascular plant herbarium specimens from Florida (~240,000 records did not have data for the year of collection at the time of analysis) (2020 data).

Figure. Collection month of digitized vascular plant herbarium specimens from Florida (~260,000 records did not have data for the month of collection at the time of analysis) (2020 data).

Figure. Number of digitized vascular plant herbarium specimens from Florida for the top 11 families (2020 data).

Figure. Number of digitized vascular plant herbarium specimens from Florida for the top 13 genera (2020 data). *Cyperus* includes *Kyllinga*, *Lipocarpha*, and *Oxycaryum*; *Hypericum* includes *Triadenum*; *Polygala* (now *Senega*) excludes *Asemiea*.

Figure. Number of digitized vascular plant herbarium specimens from Florida for the top 22 species (s.lat.) (2020 data). Other names here were probably construed as s.lat. in the database that may have specific or infraspecific segregates recognized (*C. rotundifolia*, *P. setaceum*, *C. polystachyos*, *V. rotundifolia*, *D. commutatum*, *R. mariana*). *Ilex myrtifolia* was excluded from *I. cassine*.

Table. County records (number of native/naturalized taxa recorded for each county) from the Atlas of Florida Plants over time. Gilchrist was mistakenly reported as 914 in 2011 (Franck 2011).

County	2001	2007	2011	2025
Alachua	1506	1539	1566	1686
Baker	527	544	585	675
Bay	866	917	1078	1262
Bradford	510	525	529	609
Brevard	1043	1172	1180	1314
Broward	832	1033	1065	1213
Calhoun	857	1039	1155	1416
Charlotte	629	721	840	908
Citrus	1091	1117	1133	1205
Clay	918	973	996	1073
Collier	1154	1245	1273	1329
Columbia	919	947	947	1006
DeSoto	551	664	834	849
Dixie	721	735	753	813
Duval	1156	1173	1244	1341
Escambia	1418	1584	1599	1694
Flagler	659	739	804	984
Franklin	1520	1530	1545	1626
Gadsden	1239	1277	1314	1606
Gilchrist	585	609	614	727

Glades	461	485	582	671
Gulf	741	761	766	1135
Hamilton	542	564	636	812
Hardee	579	633	635	754
Hendry	463	525	564	646
Hernando	1190	1209	1222	1324
Highlands	1041	1094	1116	1143
Hillsborough	1503	1597	1644	1838
Holmes	562	602	608	1012
Indian River	659	740	746	862
Jackson	1392	1455	1468	1785
Jefferson	900	933	986	1270
Lafayette	399	425	481	790
Lake	1221	1231	1238	1325
Lee	1129	1260	1280	1355
Leon	1616	1683	1706	1896
Levy	1210	1235	1242	1309
Liberty	1323	1344	1358	1610
Madison	609	639	645	1137
Manatee	1076	1113	1136	1251
Marion	1207	1237	1251	1350
Martin	913	993	1007	1116
Miami-Dade	1605	1679	1696	1772
Monroe Keys	752	806	813	838
Monroe Mainland	574	576	581	677
Nassau	755	926	934	1108
Okaloosa	1130	1202	1210	1278
Okeechobee	544	556	578	633
Orange	1042	1102	1104	1282
Osceola	797	824	930	1014
Palm Beach	999	1040	1055	1217
Pasco	1015	1108	1146	1249
Pinellas	1145	1169	1196	1259
Polk	1242	1280	1370	1463
Putnam	967	1013	1046	1178
Santa Rosa	1134	1269	1282	1383
Sarasota	814	913	1084	1188
Seminole	842	887	901	1041
St. Johns	803	841	871	1008
St. Lucie	611	681	688	783
Sumter	879	920	945	1025
Suwannee	589	604	614	773
Taylor	782	805	851	1088
Union	436	457	459	512
Volusia	1101	1271	1336	1450
Wakulla	1235	1261	1434	1674
Walton	1287	1314	1317	1361

Washington	815	836	841	1319

Figure. Number of digitized bryophyte specimens from Florida in top 18 herbaria (2020 data). Harvard includes the herbaria A and GH. A specimen here typically corresponds to one packet.

Figure. Number of digitized bryophyte specimens per Florida county (Monroe Co. keys as separate entity), expressed as the total number from each county divided by its area (km^2) (2020 data).

Figure. Collection year of digitized bryophyte specimens from Florida (~10,000 records did not have data for the year at the time of analysis) (2020 data).

Figure. Collection month of digitized bryophyte specimens from Florida (~12,000 records did not have data for the month at the time of analysis) (2020 data).

Figure. Number of digitized bryophyte specimens from Florida for the top 11 families (2020 data).

Figure. Number of digitized bryophyte specimens from Florida for the top 13 genera (2020 data).

Figure. Number of digitized bryophyte specimens from Florida for the top 16 species (s.lat.) (2020 data).