

Southern Magnolia

Magnolia grandiflora

Family: Magnoliaceae

Range: From East Texas to Central Florida and up to Virginia.

Habitat: Swamps, hammocks, sand hills, sometimes planted as ornamentals

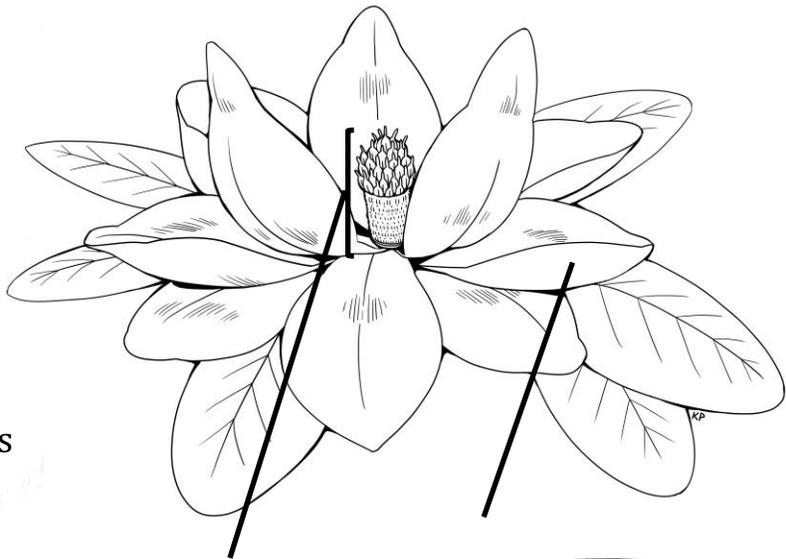
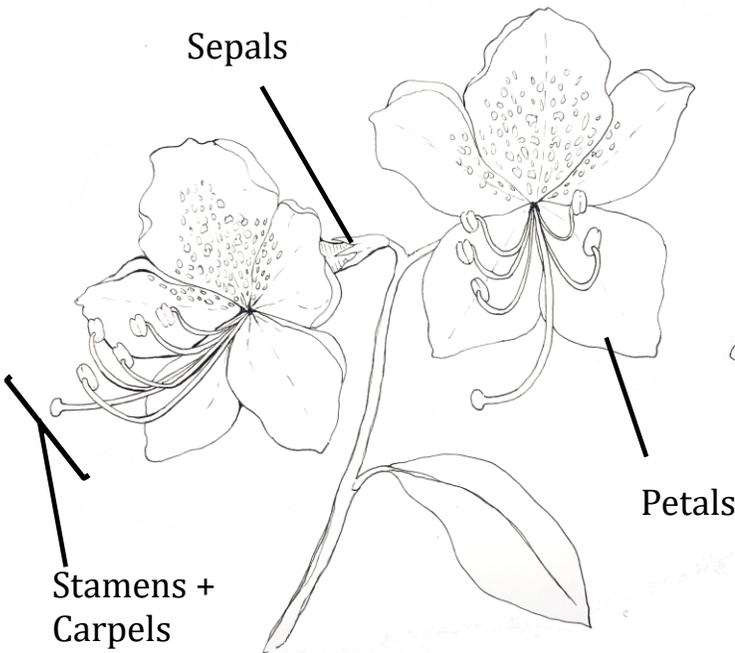
The southern magnolia's scientific name, 'grandiflora', means big flower. These large, fragrant flowers are composed of white **tepals** (when sepals, the outermost part of a flower, look just like the petals). Its leaves are a very distinct dark green on the top and brown on the bottom surface. The timber can be used to make furniture because it is very dense.

What's that plant part?

Color the Azalea and the Southern Magnolia Flowers below, and using the azalea flower as a guide, label the parts of the magnolia using the word bank. What similarities and differences do you see between the Azalea and the Magnolia?

Tepals

Stamens + Carpels

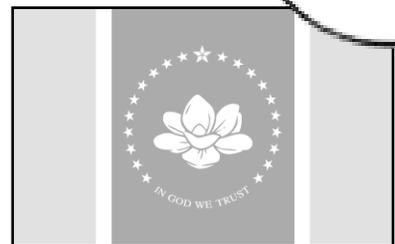


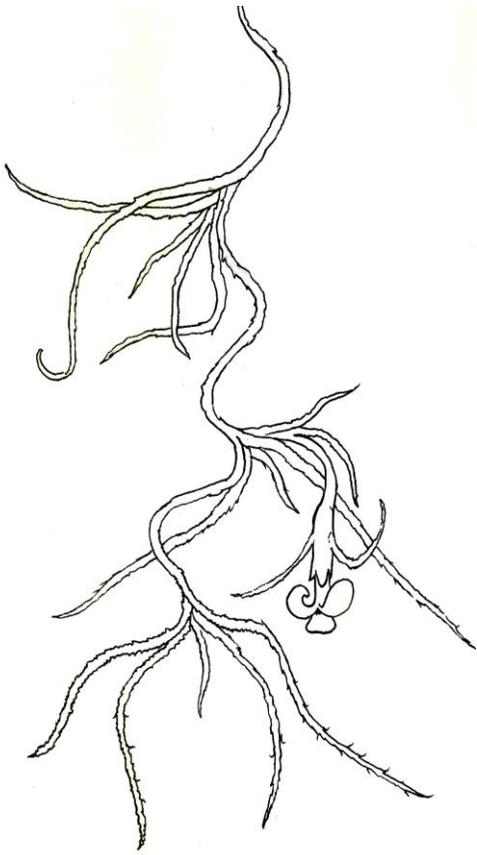
Be a Botanist!

Search your neighborhood for a Magnolia and observe it at different parts of the year!

- In late spring, you might see flowers. Using sight, smell, and touch, what do you observe?
- In late summer, you might see cone-like fruit! What does that cone kind of look like when compared to the flower?
- What do the leaves feel and look like?

Magnolia is so iconic that it is part of the new Mississippi flag! Color it here!





Spanish Moss

Tillandsia usneoides

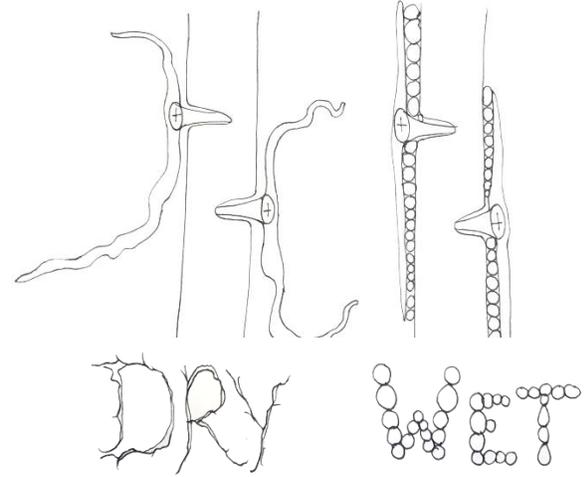
Family: Bromeliaceae

Range: The Americas (Southern US to Argentina)

Habitat: Lowlands, swamps, marshes hanging on trees

Despite its name, Spanish Moss is neither Spanish nor a moss! It is an **epiphyte**, meaning it grows on other plants, but does not take any nutrients. Spanish moss has no roots and is an air plant, getting nutrients and moisture from the air with the help of scale-like hairs called **trichomes**. In the past, Spanish moss was used for stuffing cushions and mattresses.

The diagram to the right shows how the trichomes (which are what make the plant a beautiful silvery color) stick up when the Spanish moss is dry, and then fold down to trap water against the plant when it is wet. Who needs roots?



A Spanish Moss-tery!

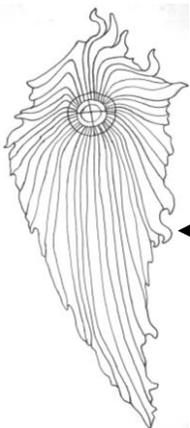
Now that you know Spanish Moss is in the family Bromeliaceae, circle the popular fruit that is also in this family!

Apple Orange Avocado Tomato Pineapple Mango Raspberry Grape Starfruit

You might not know what this fruit looks like while still growing on its full plant. Search for an image with both the fruit and the rest of the plant and sketch it below.

What is your favorite fruit from the ones in this box?

Can you find the plant family it belongs to?

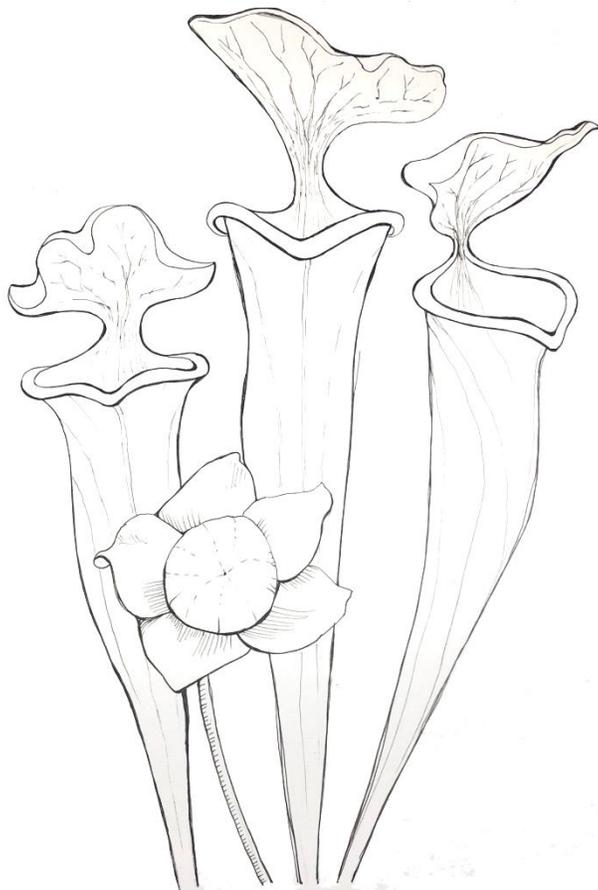


Hey look! Plant hairs (trichomes) can take all different shapes, and Spanish moss has some very strange-shaped trichomes. This is what it looks like from above under a microscope. Give it some color!

Be a Botanist!

Look up!! There are many other types of Bromeliads that grow in Florida. Some grow on the ground, and some grow on trees!

- Do you notice any in town that are planted in the ground? What observations can you make? What fills up the cracks between leaves?
- Are there any that look similar to Spanish Moss? What shape are they in?
- Some live in the trees and look different from Spanish Moss. What do they look like?



Yellow Pitcher Plant

Sarracenia flava

Family: Sarraceniaceae

Range: Southeast United States from the Florida Panhandle to southern North Carolina

Habitat: Wetlands, wet prairies, flatwoods, and swamps

In the spring, pitcher plants create **modified leaves** in the shape of tubular pitchers that can grow to be 27 inches (70 cm) long! They have yellow-to-red color with streaks that may attract insects, who then fall into the pitcher and are digested by a pool of enzymes, providing nutrients for the plant to grow. In the fall, the plant saves energy by creating flat leaves instead of pitchers because there are fewer insects to get nutrients from.

Frankenplant!: Design your OWN Carnivorous Plant!

There are a lot of ways plants can be carnivorous, from pitfall traps with our pitcher plant, to sticky hairs with sundews, tunnel traps with bladderworts, and snapping traps with Venus flytraps. All of these plants live in the Southeast United States in wet ecosystems that are low in nutrients!

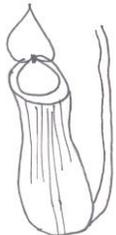
Design your own carnivorous plant in the space below! What traits are you going to give it? It can be structures, colors, smells, anything! Why did you choose those traits? What will you call your plant?



Venus Flytrap



Sundew



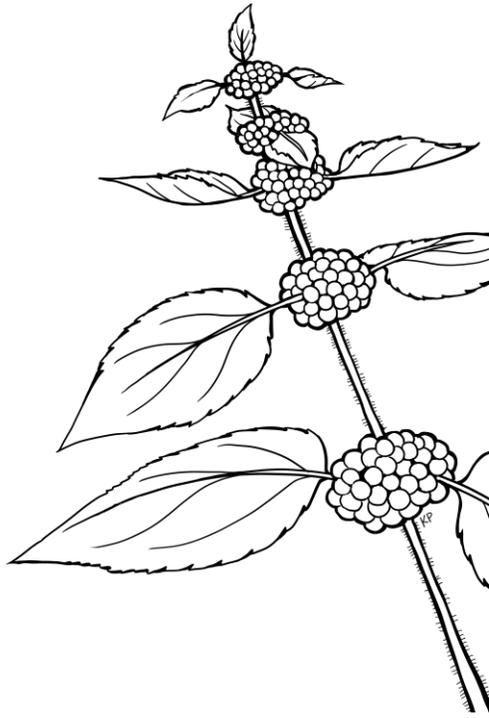
Pitcher Plant



Bladderwort

Be a Botanist!

- You may not be able to find a pitcher plant in your neighborhood.
- Research "Carnivorous Plants in Florida" and look at all the different species on the Gardening Solutions IFAS link!
- Choose your favorite. Why is it your favorite?
- Why do you think we have so many diverse carnivorous plants that digest insects? (**Hint:** think about soil nutrients)



American Beautyberry

Callicarpa americana

Family: Lamiaceae

Range: Southeast United States, from East Texas up to Maryland

Habitat: Open or moist woods, thickets, hammocks. Often planted as an ornamental.

Beautyberry is named for its purple berry clusters you may see around town in the fall! This shrub has some amazing chemical compounds that deter herbivores, like insects and mammals. For hundreds of years, many Indigenous Civilizations in the Southeast United States discovered they could use beautyberry as a medicinal plant for MANY ailments and to keep mosquitoes away!

ImPRESSive Leaves

Find a beautyberry bush in your neighborhood (they grow naturally or in gardens. They may have bright purple berries in the fall or clusters of pink flowers in the spring). Grab a few leaves, and on a sturdy surface place a piece of paper on top and rub the side of a crayon over the leaf.

What observations can you make about how the leaf looks, feels, and smells?

Optional: If you are able to find some purple berries, grab a few handfuls and place them in a pot of boiling water. What happens to the berries? What happened to the water?

Many reds, purples, and blues in plants come from a pigment called **anthocyanin** that dissolves in water! These compounds you extracted can be used for tie dyeing white fabric! With an adult's permission, dip some white fabric into a pot of these extracted pigments for some fun, botanical tie dye!

Be a Botanist!

- Many plants in the mint family create fragrant oils that we use in cooking and perfumes!
- Some of our commonly used mints include rosemary, basil, oregano, and lavender. Can you find other mints that we use?
- Find these plants at a store or in your spice's cabinet. What happens when you rub a leaf and smell it?
- What mints are sometimes used on pizza?

If you want to explore more plants in your backyard, you can start a field notebook to keep your favorite drawings or plant samples and observations! Here is a template to help you learn and discover more! You can print out as many copies as you want, or copy it by hand in your own notebook. Happy hunting!

My Field Observations!

Draw or tape your plant here!

Describe the plant:

Where is it growing:

How it makes you feel:

Date:

Time:

Location:

Weather (Circle):     

Temperature:

Any plants, animal, or fungi nearby?