BULLETIN OF THE ALLYN MUSEUM

Published by THE ALLYN MUSEUM OF ENTOMOLOGY Sarasota, Florida

Number 52

20 July 1979

NINE NEW SPECIES AND SEVEN NEW RECORDS OF MEXICAN HESPERIIDAE

Hugh Avery Freeman

1605 Lewis Drive, Garland, Texas 75041

Research on the Hesperiidae during the past three years has resulted in the discovery of nine more undescribed species of that family from Mexico. These new species were found among material obtained from E. C. Welling, Mérida, Yucatán, Mexico and among specimens contained in my collection. Seven new records were also located from Mexico making the present total count of known Hesperiidae from that country to be 693 species.

Acknowledgments: The author wishes to thank the National Geographic Society for furnishing research grants which made it possible for this research to be conducted. I would also like to thank Dr. Frederick H. Rindge, curator Department of Entomology, American Museum of Natural History, E. C. Welling, Merida, Yucatan, Mexico, and Dr. W. W. McGuire, San Diego, California for the loan of Mexican specimens for determination. The photographs of the adults used in this article were made by Melvin Cannon, former ICT Coordinator, Hillcrest High School, Dallas, Texas.

C. C. Hoffmann recorded *Ridens mephitis* (Hew.) from "Tierras caliente y templado-calida de Chiapas, Oaxaca (region del Istmo), Tabasco and Veracruz". In all of the specimens that I have examined from Mexico I have found one male of that species from Sta. Rosa, Comitán, Chiapas, August 1965, obtained from Dr. T. Escalante, which is now in my collection. All of the specimens obtained from E. C. Weling, M., from Candelaria Loxicha, Oaxaca, are examples of an undescribed species of *Ridens* the description of which follows:

Ridens allyni, new species

Figures 1, 2 (δ), 3, 4 (\circ), 5 (δ genitalia)

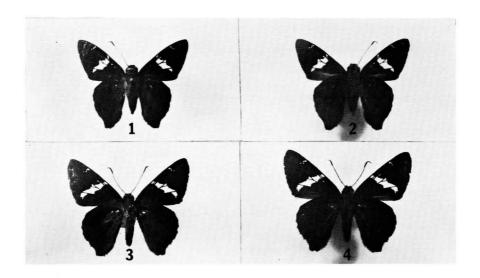
MALE (Upper side). Primaries black. The discal band of white, hyaline, spots is compact. There is an oval spot in space 1b situated just under the outer edge of the large spot in space 2. The cell spot is large and in line with the inner edge of the spot in space 2. The triangular spot in space 3 is overlapped on the lower surface by the spot in space 2 and on the upper side by the cell spot which usually extends from the center of that spot to completely overlapping it on the top side. The double costal spots are well defined and located over the outer edge of the cell spot. There are four minute apical spots in spaces 6-9, directed to the center of the outer margin of the wing. The spot in space 6 is slightly out of line with the others being somewhat nearer the apex and this spot is not present in all members of the type series. Costal fold is well developed. The fringes are black throughout corresponding with the ground color of the wings.

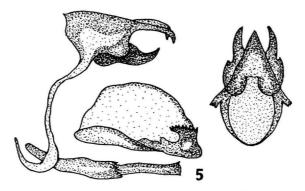
Secondaries black, with some blue scales present over the basal area of the wing.

Fringes white, uncheckered.

MALE (Under side). Primaries brownish-black, with the discal and apical spots being well defined. Space 1 is considerable lighter especially midway between the spot in space 1b and the base where it is yellowish.

Secondaries brownish-black, with a somewhat darker discal and cellular area. There is a small yellowish discal spot in space 1c which is variable being fairly distinct in some specimens to absent in others.





Figures 1-5: *Ridens allyni*, new species. 1-2, Paratype \circlearrowleft upper (1) and under (2) surfaces; Candelaria Loxicha, Oaxaca, Mexico, 25 October 1968 (E. C. Welling; H. A. F.). 3-4, Allotype \circlearrowleft upper (3) and under (4) surfaces; same locality and collector as above, 6 August 1969 (H. A. F.). 5 \circlearrowleft genitalia of Paratype; same locality and collector as above, 24 August 1968 (H. A. F.).

Thorax black above heavily oversacled with blue scales, below brownish-black. Abdomen black above overscaled with blue scales, below brownish-black. Head dark brownish-black. Palpi grayish-brown, slightly lighter below the eyes. Legs dark brown. Antennae, shaft dark brown above, slightly checkered with yellow beneath, club dark brown above, below yellowish at the base.

Wing measurements. Primaries: base to apex, 26 mm; apex to outer angel, 18.5 mm; outer angle to base, 16 mm. Secondaries: base to end of vein 3, 15 mm; center of costa to anal angle, 23 mm. Total expanse, 48 mm.

FEMALE (Upper side). Primaries black with some blue scales present over the basal area. Discal and apical spots similar to those present in the male except there is a minute spot in space 1a just under the inner edge of the spot in space 1b and the double costal spots are larger and located over the center of the cell spot. The fringes are black throughout.

Secondaries similar to the males except the blue overscaling is more extensive extending from the anal angle to the costa over the basal and central areas of the wing. The fringes have the same black scales as the wing ground color intermixed with the white scales making them appear to be somewhat dusky.

FEMALE (Under side). Primaries and secondaries very similar to the male.

Thorax, abdomen, head, palpi, legs, and antennae, similar to the male.

Wing measurements. Primaries: base to apex, 28 mm; apex to outer angle, 19 mm; outer angle to base, 19 mm. Secondaries: base to end of vein 3, 18.5 mm; center of costa to anal angle, 21.5 mm. Total expanse, 49 mm.

Type material. Holotype, male, Candelaria Loxicha, Oaxaca, Mexico, 30 September 1968 (E. C. Welling collector), will be placed in the Allyn Museum of Entomology. Allotype, female, same location and collector, 6 August 1969, will remain for the present in my collection. In my collection there are 25 male Paratypes from the same location and collector, July - October 1968 to 1971. The Allyn Museum collection contains 22 male and nine female Paratypes from the following locations and on various dates: same locality and collector as Holotype, 12 males and 3 feamales; Totontepec, Oaxaca, one female; Presidio, Veracruz, one male; Dos Amates, Veracruz, one male; Catemaco, Veracruz, five males and one female; Santa Rosa Comitan, Chiapas, two males and four females; San Quintin, Chiapas, one male. Male Paratypes will be distributed to the American Museum of Natural History, the British Museum (Natural History), Carnegie Museum and the National Museum of Natural History.

This new species is named for A. C. Allyn, Jr. who has done so much to increase our knowledge of the Lepidoptera.

Ridens allyni is more closely related to R. mephitis (Hew.) than to other members of this genus. There are three basic superficial differences between the two species. R. mephitis has the spot in space 3 small, overlapped by the spot in space 2, but widely separated from the cell spot, whereas in R. allyni the spot in space 3 is well developed and comes in contact with the cell spot and is usually overlapped by that spot. Another difference that is readily discernable in R. mephitis the fringe of the primaries is white at the tornus, while in R. allyni it is black like the rest of the fringe of the primaries. A third difference is in the discal spot in space 1c on the lower surface of the secondaries., R. mephitis usually has a double white discal spot in that space which is usually conspicuous, whereas R. allyni has but a single spot in that area which is usually inconspicuous or may be completely absent. There are basic differences in the genitalia, even though both species lack a beak on the cuiller.

Myrinia raymundo, new species

Figures 6,7 (3), 22 (3 genitalia)

MALE (Upper side). Primaries brown, with the discal dark band indistinct and dislocated at the end of vein 4. There is one lower pupil in the cellular ocellus. There are

no apical spots and no costal fold present. The fringes are concolorous with the brown wings.

Secondaries brown with an indistinct discal band and elongated cellular spot. There is an indistinct marginal band of spots extending from the anal angel to the apex. Fringes concolorous with the wings.

MALE (Under side). Primaries very similar to above except lighter in coloration. Secondaries similar to above except lighter in coloration. There is a dark spot midway between the cellular spot and the base of the wing.

Thorax above brown, slightly lighter beneath. Abdomen brown above, lighter beneath. Head brown. Palpi light tan. Legs tan. Antennae, both shaft and club, dark brown above, tan beneath.

Wing measurements: Primaries: base to apex, 17 mm; apex to outer angle, 13 mm; outer angle to base, 13 mm. Secondaries: base to end of vein 3, 13 mm; center of costa to anal angle, 13 mm. Total expanse, 36 mm.

FEMALE. Unknown.

Type material. Holotype, male, Tenosique, Tabasco, Mexico, 4 September 1962 (E. C. Welling collector), will be placed in the Allyn Museum of Entomology. There is one male paratype, same location and collector, 30 August 1962 in the H. A. Freeman collection.

This new species is named for my good friend Raymundo Velazquez of Ciudad Valles, S. L. P., Mexico.

Myrinia raymundo is perhaps more closely related to M. santa Evans from Espiritu Santo than any other member of this genus, however it can readily be separated from that species by the genitalia, and general lighter coloration. This is the first member of this genus to be recorded from Mexico.

Pythonides mundo, new species

Figures 8, 9 (\eth), 23 (\eth genitalia)

MALE (Upper side). Primaries dark brown with a broad black central area from the dorsum to near the costal area. Submarginal band of brownish-black spots from the tornal area to the apex. Central dark area balck divided at vein 4 forming a black apical area and a discal area extending to the costa. There are blue-gray scales in the area between the submarginal and central dark areas, the outer cellular area and the basal area. No costal fold present. Hind tibia without upper spurs. There is no male tuft. Fringes concolorous with the dark brown wing coloration.

Secondaries brown with indistinct violet-blue scales between the submarginal area and the dark discal area. Fringes concolorous with the dark brown wing color.

MALE (Under side). Primaries similar to above except lighter in coloration.

Secondaries similar to above except lighter in coloration. Discal band present but indistinct as compared to above.

Thorax above dark brown, slightly lighter beneath. Abdomen dark brown above, slightly lighter beneath. Head dark brown. Palpi dark brownish-gray. Legs brown. Antennae, both shaft and club, dark brown.

Wing measurements. Primaries: base to apex, 16.5 mm; apex to outer angle, 12 mm; outer angle to base, 13.5 mm. Secondaries: base to end of vein 3, 18 mm; center of costa to anal angle, 18 mm. Total expanse, 33.5 mm.

FEMALE. Unknown.

Type material. Holotype, male, Candelaria Loxicha, Oaxaca, Mexico, 14 March 1969 (E. C. Welling collector), will be presented to the Allyn Museum of Entomology. There are three male paratypes in the collection of the author from the same locality and collector, 14 August 1969, 7 August 1971, and 31 August 1971.

This new species is named for my good friend Mundo Sanchez of Ciudad Valles, S. L. P., Mexico.

Pythoniades mundo belongs in the P. neivai Hayward complex that slightly resemble Pellicia costimacula in general maculation, with its nearest relative being P. eminus

Bell from Peru, however the genitalia will readily separate the two species as well as the general maculation.

Zobera marginata, new species

Figures 10, 11 (3), 24 (3 genitalia)

MALE (Upper side). Primaries grayish-brown, slightly lighter through the discal area. There are slight rectangular spots in spaces 1a and 1b, with the one in space 1a twice the size of the one in space 1b, both spots situated at the outer edge of the elongated cell spot. There are small spots in spaces 4 and 5. There are four apical spots in spaces 6, 7, 8, and 9, with the ones in spaces 6 and 8 in line, and the ones in 7 and 9 in line. There are two linear cell spots, with two minute spots in spaces 10 and 11 directly above the inner edge of the upper cell spot. There is a white centered spot in the basal area of space 1a. All spots are white hyaline. There is a well developed costal fold which terminates at the small spot in space 11. Fringes concolorous with the rest of the wing coloration, except in space 1a where there is a whitish spot.

Secondaries grayish-white, especially in the discal area. The marginal area is dark grayish-brown made up of closely related spots. The discal dark line is narrow, the basal area is grayish-brown. The outer margin is slightly crenulate between veins 2 and 3. Fringes very slightly checkered, being near the same color as the outer margin of the wing.

MALE (Under side). Primaries light grayish-white, being much lighter over the discal area, and in space 1. All white hyaline spots are present and well developed.

Secondaries grayish-white, with all spots reappearing and the submarginal lunules are larger and more distinct. The dark marginal border is very distinct contrasting with the whitish discal and basal areas of the wing. The veins are lighter than the ground color.

Thorax above grayish-brown, much lighter beneath. Abdomen grayish-brown above, light grayish beneath. Head dark grayish-brown. Palpi sordid white except at upper extremities where they are nearly black. Legs grayish-white. Antennae, both shaft and club, dark brown above, lighter beneath.

Wing measurements. Primaries: base to apex, 18 mm; apex to outer angle, 10.5 mm; outer angle to base, 12 mm. Secondaries: base to end of vein 3, 12.5 mm; center of costa to anal angle, 12.5 mm. Total expanse, 33 mm.

FEMALE. Unknown.

Type material. Holotype, male, Candelaria Loxicha, Oaxaca, Mexico, 12 August 1971 (E. C. Welling collector), will be placed in the Allyn Museum of Entomology. There are 16 male paratypes from the same location and collector, August and September 1971. There is one male paratype from 18 miles north of Tepic, Nayarit, Mexico, 16 August 1960, P. H. Arnaud collector, in the authors collection.

This new species is lighter in coloration than Z. albopunctata Freeman. There are differences in the maculation especially in the upper surface of the secondaries as Z. marginata has a much clearer whitish discal area than Z. albopunctata and the marginal border is more pronounced. This species lacks the small hyaline spot just basad to the cellular spot which is present in albopunctata. Z. marginata is slightly smaller than albopunctata. There are also differences in the genitalia.

Piruna mexicana, new species

Figures 12, 13 (3), 25 (3 genitalia)

MALE (Upper side). Primaries dark brown. There are five minute white spots present, one in space 2, one in space 3, one in the cell, and two apical spota, one in space 6 and one in space 8. Fringes sordid yellow, lighter than the ground color of the rest of

the wing.

Secondaries dark brown. There is a small cell spot and two minute connected spots just outside and below the cell spot. There is a linear spot in space 2. All spots white, hyaline. Fringes sordid yellow.

MALE (Under side). Primaries brown, lighter than above. All spots reappear and are well defined. There is an extra spot in space 1a which does not appear on the upper side. Veins at the ends yellowish, contrasting with the general ground coloration.

Secondaries chocolate brown. There are seven well developed marginal spots. A well developed cell spot and four well developed discal spots as well as a distinct spot in space 7 midway between the cell spot and the submarginal spot in space 6.

FEMALE. Similar to the male except slightly larger and lighter in coloration.

Type material. Holotype, male, 9 miles east of Queretaro, Queretaro, Mexico, 25 August 1967 (James A. Scott collector), will be placed in the Allyn Museum of Entomology. The allotype female is from 18 miles west of Cananea, Sonora, Mexico, 19 August 1960, R. Zweifel collector, is in my collection. There are three male paratypes from Queretaro collected at the same time and collector as the holotype which are in my collection.

This new species is a member of the cingo Evans complex, based on the location of the spot in space 7 on the lower surface of the secondaries. It differs from other members of this complex in the well defined spots on the lower surface of the wings as well as in the genitalia. This is the species of Piruna which has been misidentified as P. microsticta Godman from southern Arizona. Other members of this complex in Mexico are P. cingo Evans from Guerrero and Colima, in which the spots are well defined but much smaller than in mexicana; P. ajijiiciensis Freeman, from Ajijic, Jalisco, which has rounded wings and reduced maculation; P. milpa Freeman, which is darker with better defined spots both above and below, and; P. sombra Evans, from Chiapas, Mexico and Guatemala, in which the wing shape is normal but with all maculation greatly reduced.

Piruna sombra Evans 1955

Type locality. — Guatemala.

Distribution. — Apparently the type in the British Museum is the previously only known specimen. I have two males in my collection, one collected at Ochuc, Chiapas, Mexico, 20 May 1975, by Peter Hubbell, and the other from Tuxtla Gutierrez, Chiapas, Mexico, 20 August 1966, collected by W. & J. Ivie. This is a new Mexican record.

Dalla lathaea (Schaus) 1913

Type locality. — Costa Rica.

Distribution. — There are two males in the British Museum from Costa Rica. I have a male from Ochus, Chiapas, Mexico, 20 May 1975, collected by Peter Hubbell, in my collection. This is a new record for Mexico.

Turesis tabascoensis, new species

Figures 14, 15 (δ), 26 (δ genitalia)

MALE (Upper side). Primaries warm chocolate brown. There is an elongated hyaline spot in space 2 which completely overlaps the double cell spots. The spot in space 3 is situated midway over the outer edge of the spot in space 2. There is a well developed apical spot in space 6 and a minute spot in space 7. All spots are yellow hyaline. In space 1b midway between the inner edge of the spot in space 2 and the base there is a linear yellowish spot. The fringes are yellow.

Secondaries warm chocolate brown. There are three faint yellowish discal spots present. Fringes yellow.

MALE (Under side). Primaries ferruginous. All yellow spots reappear and are well

defined. The linear spot in space 1b midway between the spot in space 2 and the base is lighter in coloration being sordid white. The costal area is yellow.

Secondaries ferruginous. There is a small yellow discal spot in space 2 situated nearer the margin than the base.

Thorax chocolate brown intermixed with yellow scales above, below light brown. Abdomen chocolate brown above, lighter beneath. Head chocolate brown intermixed with yellow scales. Palpi yellow. Legs yellowish brown. Antennae, both shaft and club dark brown both above and below with some yellow at the base of the club.

Wing measurements. Primaries: base to apex, 12.5 mm; apex to outer angle, 8 mm; outer angle to base, 10 mm. Secondaries: base to end of vein 3, 8 mm; center of costa to anal angle, 10 mm. Total expanse, 28 mm.

FEMALE. Unknown.

Type material. Holotype, male, Tenosique, Tabasco, Mexico, 28 August 1962 (E. C. Welling collecotor), will be placed in the Allyn Museum of Entomology.

Turesis tabascoensis differs from T. lucas (Fabr.) in not having the conspicuous opaque yellow spot in space 1b and by also being much smaller in size 28 mm compared to 40 mm. It differs from T. theste Godman by the presence of the linear spot in 1b between the spot in space 2 and the base which is not present in theste and by the size as theste total expanse is 38 mm. It differs from T. basta Evans by having the spot in space 2 completely overlapping the double cell spots which does not occur in basta and by size as the total expanse of basta is 40 mm. The genitalia differs from the three described species as can be compared with my drawing and the figures in Evans American Hesperiidae, part 1V.

Vertica ibis Evans 1955

Type locality. — Bolivia.

Distribution. — The British Museum contains the unique type of this species. I have a female in my collection from Tenosique, Tabasco, Mexico, 25 September 1962, collected by E. C. Welling. This is a new mexican record.

Decinea mustea, new species

Figures 16, 17 (3), 28 (3 genitalia)

MALE (Upper side). Primaries brown with a narrow linear, yellowish, spot in space 2 and a small yellowish spot in space 3, otherwise immaculate. Fringes slightly lighter than wing ground color.

Secondaries brown with a minute yellowish dot in space 3, otherwise immaculate.

Fringes slightly lighter than wing ground color.

MALE (Under side). Primaries light brown with the spots reappearing and distinct. There is a rather prominent yellowish area in space 1b. The ground color is slightly lighter at the end of the cell.

Secondaries light brown with a minute yellowish spot in space 3, otherwise immaculate.

Thorax brown above, slightly lighter beneath. Abdomen brown above, lighter beneath. Head brown. Palpi brown intermixed with yellow scales. Legs brown. Antennae, both shaft and club brown, except on the basal area of the club where there are some yellowish scales especially on the lower surface.

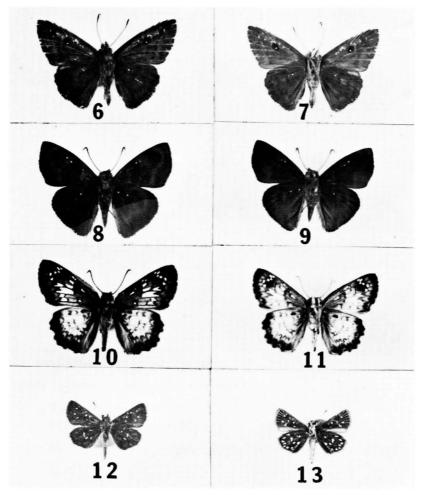
Wing measurements. Primaries: base to apex, 17 mm; apex to outer angle, 11 mm; outer angle to base, 12 mm. Secondaries: base to end of vein 3, 12.5 mm; center of costa to anal angle, 13 mm. Total expanse, 35 mm.

FEMALE. Similar to the male except there is a minute upper cell spot and a very inconspicuous apical spot in space 6 on the primaries.

Wing measurements. Primaries: base to apex, 19 mm; apex to outer angle, 12.5 mm; outer angle to base, 14 mm. Secondaries: base to end of vein 3, 14 mm; center of costa to anal angle, 14 mm. Total expanse, 36 mm.

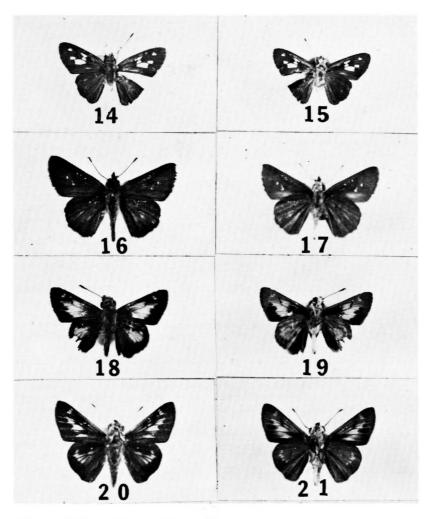
Type material. Holotype, male, Muste, Chiapas, Mexico, 19 July 1968 (E. C. Welling collector), will be placed in the Allyn Museum of Entomology. Allotype, female, Muste, Chipas, Mexico, 22 July 1968, same collector, will remain for the present in my collection. There is one male paratype, same location and collector, 18 July 1968, will remain in my collection.

Decinea mustea is perhaps more closely related to D. neroides (H.-S) in that it lacks



Figures 6-13: new Mexican Hesperiidae. 6-7, *Myrinia raymundo*, new species, Paratype ♂ upper (6) and under (7) surfaces; Tenosique, Tabasco, Mexico, 30 August 1962 (E. C. Welling; H. A. F.). 8-9, *Pythonides mundo*, new species, Holotype ♂ upper (8) and under (9) surfaces; Candelaria Loxicha, Oaxaca, Mexico, 14 March 1971 (E. C. Welling; Allyn Museum). 10-11, *Zobera marginata*, new species, Holotype ♂ upper (10) and under (11) surfaces; Candelaria Loxicha, Oaxaca, Mexico, 12 August 1971 (E. C. Welling; Allyn Museum). 12-13, *Piruna mexicana*, new species, Holotype ♂ upper (12) and under (13) surfaces; nine miles east of Queretaro, Queretaro, Mexico, 25 August 1967 (James A. Scott; Allyn Museum).

apical spotss in the males and the only spots prominent on the primaries are the ones in spaces 2 and 3, however it differs from that species in the fact that the antennal club is not white and there is but a minute spot in space 3 on the lower surface of the secondaries. The genitalia do not match any of the known species of *Decinea*.



Figures 14-21: new Mexican Hesperiidae. 14-15, *Turesis tabascoensis*, new species, Holotype & upper (14) and under (15) surfaces; Tenosique, Tabasco, Mexico, 26 August 1962 (E. C. Welling; Allyn Museum). 16-17, *Decinea mustea*, new species, Paratype & upper (16) and under (17) surfaces; Muste, Chiapas, Mexico, 18 July 1968 (E. C. Welling; H. A. F.). 18-19, *Poanes benito*, new species, Paratype & upper (18) and under (19) surfaces; El Portillo del Rayo, near Candelaria Loxicha, Oaxaca, Mexico, 29 October 1967 (E. C. Welling; H. A. F.). 20-21, *Mellana oaxaca*, new species, Holotype & upper (20) and under (21) surfaces; Candelaria Loxicha, Oaxaca, Mexico, 14 September 1971 (E. C. Welling; Allyn Museum).

Poanes benito, new species

Figures 18, 19 (3), 28 (3 genitalia)

MALE (Upper side). Primaries yellow with a broad black marginal border resembling *P. zabulon* (Bdv. & LeC.). There are three yellow apical spots in spaces 8, 9, and 10. There is an indistinct bar at the end of the cell. Basal area of wing darkened by the presence of some black scales. No yellow spots in spaces 4 and 5. Fringes dark being slightly lighter at the outer angle.

Secondaries black with a yellow central area extending from vein 2 to the cell.

Fringes yellow.

MALE (Under side). Primaries yellow except at the base and a black marginal border extending from space 1b to space 3. There is a dark bar at the end of the cell.

Secondaries yellow with a faint cell spot and the slightest indication of a marginal border. Anal angle darkened by the presence of some black scales.

Thorax dark brown heavily overscaled with green and yellow scales on the upper side, below lighter with the yellow scales predominating. Abdomen dark brown above with a heavy overscaling of yellowish scales, below yellowish. Head yellow with some green scales intermixed. Palpi bright yellow. Legs yellow.

Wing measurements. Primaries: base to apex, 14 mm; apex to outer angle, 9 mm; outer angle to base, 11 mm. Secondaries: base to end of vein 3, 10 mm; center of costa to anal angle, 11 mm. Total expanse, 31 mm.

FEMALE. Unknown.

Type material. Holotype, male, La Calera, 10 miles south of Cumbre de Autian, Jalisco, Mexico, July-Aug., 1967 (Peter Hubbell collector), will be placed in the Allyn Museum of Entomology. There is one male paratype, El Portillo del Rayo, near Candelaria, Oaxaca, Mexico, 19 October 1967 (E. C. Welling collector), will remain for the present in my collection.

This new species is named for my good frined Benito Reycendes of Ciudad Valles, S. L. P., Mexico.

Poanes benito resembles P. zabulon on the upper surface, except in the absence of yellow spots in spaces 4 and 5 which are prominent in zabulon, and the more restricted central yellow area on the secondaries. On the lower surface there is considerable difference. In zabulon the marginal border of the primaries extends to the apex, while in benito it terminates at space 3. The most prominent difference between the two species is indicated by the secondaries as benito is yellow over the entire area, while zabulon has a dark marginal border, dark basal area and several dark discal spots being present. The genitalia are distinct as can be determined by my drawing and Evans figures of the members of the genus Poanes.

Mellana oaxaca, new species

Figures 20, 21 (3), 29 (3 genitalia)

MALE (Upper side). Primaries dark brown. There is a fulvous streak in space 1b. There are well developed fulvous spots in spaces 2 and 3 as well as a short linear spot in space 4. The apical spots are well developed. There are two indistinct fulvous streaks in the cell and only the slightest indication of a minute cell spot above the spot in space 2. The costa is dull fulvous from near the base to midway to the apex. Fringes only slightly lighter than the ground color.

Secondaries dark brown. The fulvous markings consist of a linear cell spot and five discal spots, with the one in space 1 being linear as is also the very short spot in space 2, the one in space 3 almost touches the cell spot, while the ones in spaces 4 and 5 are small and somewhat rounded. Fringes sordid white with a very slight yellowish shade near the anal angle.

MALE (Under side). Primaries ochreous brown at the apex, the remainder of the wing from the costa to vein 2 pale yellow with the spots being well indicated. The area

below vein 2 has the gound color ochreous brown with a well developed yellowish white area just below the spot in space 2. There s a brownish shaded area just outside of the spot in space 2 and a much smaller area of the same color by the spot in space 3. There is a well developed black bar at the end of the cell which is not discernable on the upper side.

Secondaries brownish ochraceous with the discal and cell spots represented by slightly lighter coloration. Below vein 1 there are a few scattered black scales making that area slightly darker.

Thorax dark brown above covered sparcely with fulvous scales, and below it is lighter yellowish brown. Abdomen same general coloration as the thorax above, below much lighter. Head brown heavily overscaled with green and fulvous scales. Palpi bright yellow. Legs yellowish-gray. Antennae, shaft above light brown, yellowish beneath, club dark brown above, yellowish beneath.

Wing measurements. Primaries: base to apex, 16 mm; apex to outer angle, 11 mm; outer angle to base, 13 mm. Secondaries: base to end of vein 3, 10.5 mm; center of costa to anal angle, 13 mm. Total expanse, 34 mm.

FEMALE. Unknown.

Type material. Holotype, male, Candelaria Loxicha, Oaxaca, Mexico, 14 September 1971 (E. C. Welling collector), will be placed in the Allyn Museum of Entomology. There are two male paratypes in my collection from the same location and collector, one 27 August 1969, and the other 22 September 1971.

Mellana oaxaca resembles M. helva (Moschler) somewhat on the upper side but lacks the well developed cell spots which are present in helva. On the lower surface the differences can readily be detected due to the ground color of the secondaries, in helva it is greenish-ochreous, while in oaxaca it is dark brownish-ochreous. The genitalia are distinctive.

Euphyes ampa Evans 1955

Type locality.-Honduras.

Distribution. The British Museum contains the male type and a female from Honduras. I have a female in my collection from Candelaria Loxicha, Oaxaca, Mexico, 15 September 1971, obtained from E. C. Welling. This is a new Mexican record.

Amblyscirtes simius Edwards 1881

Type locality.-Arizona.

Distribution. Arizona and various localities in western and southwestern Texas. Recently Dr. W. W. McGuire collected several specimens in Coahuila, Highway 57, 18 miles southeast of Saltillo, during September 1977 and he sent me two females for my collection. These specimens are unusually dark but otherwise well represent the species. This is a new record for Mexico.

Saliana severus (Mab.) 1895

Type locality.-French Guiana.

Distribution. The British Museum contains specimens from Nicaragua, Costa Rica, Panama, Colombia and Ecuador (La Chima. Paramba). In my collection I have a male obtained from T. Escalante, from Chimalapa, Oaxaca, Mexico, August 1965, which is a new record for Mexico.

Neoxeniades posta Evans 1955

Type locality.-Moyabamba, Peru.

Distribution.-Peru (Moyabamba. La Merced). I have in my collection a male from Candelaria Loxicha, Oaxaca, Mexico, 2 September 1968, collected by E. C. Welling and a female from Tehuantepec, Oaxaca, August 1949, obtained from T. Escalante. This is a

new record for Mexico.

LITERATURE CITED

Bell, E. L. 1941. New species of Neotropical Hesperiidae. American Mus. Novitates, (1125): 10 pp.

------ 1942. New Genera and New Species of Neotropical Hesperiidae. American Mus. Novitates, (1205): 9 pp.

Draudt, M. 1921-24. Hesperiidae (sic). In A. Seitz. The Macrolepidoptera of the World. 5: 836-1011; 1046-1055. Pl. 168.

Evans, W. H. 1952. A Catalogue of the American Hesperiidae. part II, Pyrginae, Section 1. British Museum (Natural History), London. 170 p., pl. 10-25.

------ 1955. A Catalogue of the American Hesperiidae. Part IV, Hesperiinae and Megathyminae. British Museum (Natural History), London. 449 p., pl. 54-88.

Freeman, H. A. 1969. Records, New Species, and a New Genus of Hesperiidae from Mexico. J. Lepid. Soc. 23 (suppl. 2) 62 pp., pl. 15.

Godman, F. D., and Osbert Salvin. 1887-1901. Biologia Centrali-Americana. Insects. Lepidoptera-Rhopalocera II: 244-637; LII: pls. 112.

Hoffmann, Carlos C., 1941. Catalogo sistematico-zoogeographico de los Lepidopteros Mexicanos. Segunde parte- Hesperioidea. An. Inst. Biol. Mexico. 12: 237-294.

Steinhauser, S. R. 1974. Notes on Neotropical Nymphalidae and Hesperiidae with Descriptions of New Species and Subspecies and a New Genus. Bull. of the Allyn Mus. No. 22. pp. 1-38.

