

spots extends from the anal angle almost to the apex, the spots becoming smaller near the apex; the outer margin edged with blackish-brown, more broadly so near the anal angle; the fringe yellow; the underside of the primaries orange, that of the secondaries pale whitish-yellow, with the markings as above, but quite indistinct: head, antennæ, and thorax reddish-brown; abdomen blackish-brown at the base, then to the anus thickly irrorated with yellow scales, the anus orange; the underside of the thorax and abdomen yellowish-white; the legs dark reddish-brown above, whitish beneath. Expanse 4 inches.

*Hab.* PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).

### SPHECIA (I. p. 29).

#### **Sphecia championi** (I. p. 29).

To the locality given, add:—MEXICO, Coatepec (*Schaus*).

Mr. Schaus's specimen is considerably larger than the types.

### ÆGERIA (I. p. 29).

#### **Ægeria tryphoniformis** (I. p. 29).

To the localities given, add:—MEXICO, Tierra Colorada in Guerrero 2000 feet, Teapa in Tabasco (*H. H. Smith*).

#### 1 (A). **Ægeria mardia**. (Tab. LXIX. fig. 7.)

*Ægeria mardia*, Druce, Ann. & Mag. Nat. Hist. (6) ix. p. 275 (1892) <sup>1</sup>.

Allied to *Æ. tryphoniformis*, Walk., but differing as follows:—The primaries and secondaries are quite hyaline, with the streak at the end of the cell and the spot at the apex bright orange-red, instead of pale yellowish-brown: the head, thorax, and abdomen black, instead of yellow, as in *Æ. tryphoniformis*; the anal tuft large and bright orange-red; antennæ black; palpi orange. Expanse  $\frac{3}{4}$  inch.

*Hab.* MEXICO, near Durango city (*Becker* <sup>1</sup>).

#### 2 (A). **Ægeria pallene**. (Tab. LXIX. fig. 8.)

*Ægeria pallene*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 80 (1889) <sup>1</sup>.

Primaries and secondaries hyaline, with all the veins black; the apex and outer margin of the former broadly bordered with golden-brown: head, thorax, and abdomen black above, yellowish-brown beneath; the collar, the base of the thorax, and the last segment of the abdomen banded with orange-yellow; the legs and antennæ black, the latter banded with white near the tips. Expanse  $\frac{1}{2}$  inch.

*Hab.* MEXICO, Teapa in Tabasco (*H. H. Smith* <sup>1</sup>).

Mr. Smith met with this insect in March and April 1888; it is allied to *Æ. tryphoniformis*, Walk.

#### **Ægeria sellustiformis** (I. p. 30).

To the locality given, add:—MEXICO, Coatepec (*Brooks*); PANAMA, Volcan de Chiriqui (*Trötsch, in mus. Staudinger*).

The abdomen is banded with yellow and the anal tuft is brownish at the tip.

4 (A). *Ægeria hippolyte*. (Tab. LXIX. fig. 9.)*Ægeria hippolyte*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 80 (1889) <sup>1</sup>.

Primaries yellowish-hyaline, the veins black, the apex and outer margin edged with golden-brown; secondaries hyaline; the fringe of both wings black: head, thorax, and abdomen black, the base of the thorax and the anus yellow; legs black, banded with yellow; antennæ black. Expanse 1 inch.

*Hab.* MEXICO, Cuernavaca in Morelos (*H. H. Smith* <sup>1</sup>).

One specimen, taken in June 1888.

*Ægeria deipyla* (I. p. 30).To the locality given, add:—MEXICO, Atoyac in Vera Cruz (*H. H. Smith*).*Ægeria producta* (I. p. 30).To the localities given, add:—MEXICO, Rincon in Guerrero 2800 feet (*H. H. Smith*).6 (A). *Ægeria halmyris*. (Tab. LXIX. fig. 13.)*Ægeria halmyris*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 79 (1889) <sup>1</sup>.

Primaries black, with the end of the cell and a round spot beyond it hyaline; secondaries whitish-hyaline, with the fringe black: head, thorax, and abdomen black, the base of the abdomen slightly yellowish; antennæ black, with a wide white ring near the tip; legs greyish-black. Expanse 1 inch.

*Hab.* MEXICO, Rincon in Guerrero 2800 feet (*H. H. Smith* <sup>1</sup>).

One specimen, captured in September 1888. It is most nearly allied to *Æ. producta*, Walk., but very distinct.

6 (B). *Ægeria hipsides*. (Tab. LXIX. fig. 14.)*Ægeria hipsides*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 80 (1889) <sup>1</sup>.

Primaries dusky-black, with the cell and a round spot at the end of it semihyaline; secondaries hyaline, with the veins and fringe black: head, thorax, and abdomen glossy black, the underside of the thorax white; antennæ and legs black. Expanse  $\frac{3}{4}$  inch.

*Hab.* MEXICO, Amula in Guerrero 6000 feet (*H. H. Smith* <sup>1</sup>).

A very distinct species, of which one specimen was captured in August 1888.

6 (C). *Ægeria hela*. (Tab. LXIX. fig. 15.)*Ægeria hela*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 79 (1889) <sup>1</sup>.

Primaries uniformly black, with a minute hyaline dot at the end of the cell; secondaries hyaline, with the outer margin broadly bordered with black; the fringe black: head and antennæ black, the latter with a narrow white ring near the tip; the front of the thorax and the tegulæ yellowish-brown; the rest of the thorax, the abdomen, and legs dull black, the underside of the thorax yellowish. Expanse  $\frac{6}{10}$  inch.

*Hab.* MEXICO, Atoyac in Vera Cruz, Teapa in Tabasco (*H. H. Smith* <sup>1</sup>).

This species is allied to *Æ. senta*, Druce, but it is a much smaller and darker insect. We figure the specimen from Atoyac.

7 (A). *Ægeria helena*. (Tab. LXIX. fig. 10.)*Ægeria helena*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 80 (1889) <sup>1</sup>.

Primaries and secondaries clear hyaline, with their costal and outer margins brownish-black: head, thorax, and abdomen purplish-black above, orange-yellow beneath, the anus bright orange; the antennæ black from the base to the middle, then orange, excepting the point, which is black; legs orange-yellow. Expanse  $1\frac{1}{4}$  inch.

*Hab.* MEXICO, Amula in Guerrero 6000 feet (*H. H. Smith* <sup>1</sup>).

One specimen captured in August 1888; it is allied to *Æ. guatemalena*, Druce.

7 (B). *Ægeria armasata*. (Tab. LXIX. fig. 11.)*Ægeria armasata*, Druce, Ann. & Mag. Nat. Hist. (6) ix. p. 275 (1892) <sup>1</sup>.

Primaries and secondaries hyaline, with a slightly yellowish tinge, the costal, outer, and inner margins of the primaries edged with yellowish-brown, the veins of both wings yellowish-brown, those of the secondaries being the darkest; the fringe of the secondaries dark brown; the underside of both wings light yellow: palpi and front of the head yellow; antennæ dark brown, yellowish at the base; thorax and abdomen blackish-brown, the latter with a yellow line at the base, the anal tuft yellowish-brown; legs orange, banded with black. Expanse  $1\frac{1}{4}$  inch.

*Hab.* MEXICO, near Durango city (*Becker* <sup>1</sup>).7 (C). *Ægeria hermione*. (Tab. LXIX. fig. 12.)*Ægeria hermione*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 79 (1889) <sup>1</sup>.

Primaries hyaline, slightly shaded with yellow on the inner margin, the costal and outer margins edged with yellowish-brown; secondaries hyaline; the fringe of both wings brown: thorax and abdomen black, the latter banded with yellow, the collar and tegulæ also yellow; antennæ black, with a wide yellowish-brown ring near the tip; legs yellow, with black bands. Expanse 1 inch.

*Hab.* MEXICO, Atoyac in Vera Cruz, Teapa in Tabasco (*H. H. Smith* <sup>1</sup>).

Mr. Smith captured specimens of this insect in February and May 1888.

*Ægeria guatemalena* (I. p. 31).

To the locality given, add:—MEXICO, Jalapa (*coll. Schaus*).

*Ægeria proserpina* (I. p. 31).

To the locality given, add:—MEXICO, Teapa in Tabasco (*H. H. Smith*); PANAMA, Taboga I. (*J. J. Walker*).

13 (A). *Ægeria* (?) *hades*. (Tab. LXIX. fig. 16.)*Ægeria hades*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 78 (1889) <sup>1</sup>.

Primaries and secondaries uniformly glossy bluish-black, with the veins and outer margins dull black; the underside as above: head, thorax, and abdomen bluish-black; the underside of the head and front part of the thorax white, the legs black. Expanse  $\frac{3}{4}$  inch.

*Hab.* MEXICO, Teapa in Tabasco (*H. H. Smith* <sup>1</sup>).

One specimen, captured in February 1888.

15. *Ægeria animosa*.

*Pyrrhotænia animosa*, H. Edwards, Papilio, iii. p. 156 (1883)<sup>1</sup>.

*Hab.* NORTH AMERICA, Arizona<sup>1</sup>.—MEXICO, Northern Sonora (*Morrison*).

16. *Ægeria ovinia*, sp. n. (Tab. LXVIII. fig. 9.)

Primaries glossy blue-black, with a hyaline streak along the inner margin extending from the base to the anal angle; secondaries hyaline-white, the veins black; the fringe of both wings blackish-brown: head, palpi, and antennæ black, the thorax and abdomen glossy blue-black, the fourth abdominal segment broadly bordered with pale yellow; the anal tuft large, black, with a few greyish hairs at the sides; the underside of the abdomen white; legs black, banded with grey. Expanse  $1\frac{4}{10}$  inch.

*Hab.* MEXICO, Coatepec (*coll. Schaus*).

One specimen.

BEMBECIA (to follow the genus *Ægeria*, I. p. 32).

*Bembecia*, Hübner, Verz. bek. Schmett. p. 128 (1816).

1. *Bembecia* (?) *eucheripennis*.

*Bembecia eucheripennis*, Boisd. Sp. gén. des Lép. i. p. 384 (1874)<sup>1</sup>.

*Hab.* MEXICO<sup>1</sup>.

Described from an imperfect example. Its location in this genus is doubtful.

MELITTIA (I. p. 32).

*Melittia satyriniformis* (I. p. 32).

*Melittia ceto*, Westw., antea, i. p. 32.

To the localities given, add:—MEXICO, near Durango city (*Becker*), Atoyac in Vera Cruz, Jalisco (*Schumann*), Coatepec (*Brooks*), Acapulco, Amula and Chilpancingo in Guerrero (*H. H. Smith*).

*M. ceto*, Westw., is not separable from this species.

*Melittia butleri* (I. p. 32).

To the Mexican locality given, add:—Omiteme in Guerrero 8000 feet (*H. H. Smith*).

4. *Melittia smithi*. (Tab. LXIX. fig. 17.)

*Melittia smithi*, Ann. & Mag. Nat. Hist. (6) iv. p. 81 (1889)<sup>1</sup>.

Primaries black, with a narrow hyaline streak extending from the base to the end of the cell, beyond which is an oval hyaline spot, the fringe greyish; secondaries hyaline, with the veins and fringe black; the base of both wings clothed with long yellowish hairs: head, thorax, and abdomen brownish-black, each segment of the latter edged with yellow; the underside of the thorax and abdomen yellowish-brown; antennæ black; legs yellow, excepting the hind ones, which are thickly clothed with black hairs, with a few yellow hairs near the body. Expanse  $1\frac{3}{10}$  inch.

*Hab.* MEXICO, Rio Papagaio 1200 feet, and Dos Arroyos 1000 feet, both in Guerrero (*H. H. Smith*<sup>1</sup>).

Specimens of this insect were taken by Mr. Smith in September and October 1888; it is allied to *M. butleri*, Druce, but it is a smaller and darker insect.

5. *Melittia beckeri*. (Tab. LXIX. fig. 18.)

*Melittia beckeri*, Druce, Ann. & Mag. Nat. Hist. (6) ix. p. 276 (1892)<sup>1</sup>.

Primaries greenish-brown, very thickly irrorated with pale green scales, the fringe greenish-brown; secondaries hyaline, with the veins bright orange-red, the marginal line black, the fringe dark brown; the underside of the primaries pale yellow, greenish-brown at the apex: head and thorax greenish-brown; the palpi yellow; the antennæ black; the abdomen blackish-brown above, banded with yellow beneath, the anal tuft yellow; the hind legs long and very thickly clothed with hair, that nearest the base on the outer side being pale yellow, that on the tibia and tarsus black on the inner side, bright orange on the outer side, almost white close to the ungues. Expanse  $1\frac{1}{2}$  inch.

*Hab.* MEXICO, near Durango city (*Becker*<sup>1</sup>).

This fine species is allied to *M. satyriniformis*, Hübn., from which it may be at once distinguished by the orange-red veins of the secondaries and the much paler green primaries.

TIRISTA (I. p. 32).

2. *Tirista praxila*, sp. n. (Tab. LXVIII. fig. 7.)

Primaries and secondaries semihyaline yellowish-brown; the primaries with the costal margin and the middle of the wing darker brown; the secondaries with the costal margin, apex, and outer margin bordered with yellowish-brown; the fringes of both wings pale yellowish-brown: antennæ, palpi, and legs yellowish-brown, the head, thorax, and abdomen darker brown, the anal tuft yellow. Expanse  $1\frac{3}{4}$  inch.

*Hab.* MEXICO, Jalapa (*coll. Schaus*).

One specimen.

SINCARA (I. p. 33).

*Sincara lytæa* (I. p. 33).

To the locality given, add:—MEXICO, Atoyac in Vera Cruz, Teapa in Tabasco (*H. H. Smith*).

4. *Sincara manilia*. (Tab. LXIX. fig. 19.)

*Sincara manilia*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 82 (1889)<sup>1</sup>.

Primaries and secondaries yellowish-hyaline, the costal margin of the primaries and the fringe of both wings black: head, thorax, and abdomen black, the last four segments of the latter edged with bright yellow, the anus yellow; antennæ and legs black, the palpi yellowish in front. Expanse 1 inch.

*Hab.* MEXICO, Sierra de las Aguas Escondidas 7000 feet and Omilteme 8000 feet, both in Guerrero (*H. H. Smith*<sup>1</sup>).

Found in July 1888.

5. *Sincara mæonia*. (Tab. LXIX. fig. 20.)

*Sincara mæonia*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 81 (1889)<sup>1</sup>.

Primaries and secondaries hyaline, the costal and outer margins of the primaries narrowly edged with black, the fringe of both wings black, the inner margin of the primaries with a yellowish tinge extending from the base to near the anal angle: head, thorax, and abdomen black; the front of the palpi bright yellow; the tegulæ edged with yellow; the antennæ and legs black. Expanse 1 inch.

*Hab.* MEXICO, Omilteme in Guerrero 8000 feet (*H. H. Smith*<sup>1</sup>).

Allied to *S. lytæa*, Druce.

6. **Sincara manoba.** (Tab. LXIX. fig. 21.)

*Sincara manoba*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 82 (1889)<sup>1</sup>.

Primaries brownish-black, darker along the costal margin; secondaries yellowish-hyaline, with the fringe black: head, thorax, and abdomen dull black; antennæ black. Expanse 1 inch.

*Hab.* MEXICO, Teapa in Tabasco (*H. H. Smith*<sup>1</sup>).

One specimen.

7. **Sincara** —?

*Hab.* MEXICO, Teapa in Tabasco (*H. H. Smith*).

One worn specimen.

TARSOPODA (to follow the genus *Sincara*, I. p. 33).

*Tarsopoda*, Butler, Ann. & Mag. Nat. Hist. (4) xiv. p. 410 (1874).

1. **Tarsopoda marcia.** (Tab. LXIX. fig. 22.)

*Tarsopoda marcia*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 81 (1889)<sup>1</sup>.

Primaries black; a spot at the end of the cell and a central streak reaching the base hyaline; secondaries hyaline, with the outer margin and the veins black: head, thorax, and abdomen black, the anus yellow, the abdomen banded with metallic gold, the collar yellow; antennæ black; the legs black, banded with yellow. Expanse  $\frac{6}{10}$  inch.

*Hab.* MEXICO, Dos Arroyos in Guerrero 1000 feet (*H. H. Smith*<sup>1</sup>).

Two specimens, found in September 1888.

ALYPIOIDES.

*Alypioides*, Grote, Trans. Kansas Acad. Sci. viii. p. 46 (1883).

*Pseudalypia*, antea, i. p. 34 (nec H. Edwards).

1. **Alypioides crescens.**

*Pseudalypia crescens*, antea, i. p. 34<sup>1</sup>.

*Alypioides flavilinguis*, Grote, Trans. Kansas Acad. Sci. viii. p. 46<sup>2</sup>.

*Alypioides bimaculata*, var. *dugesii*, Cocker. Ent. News, vi. p. 201 (1895)<sup>3</sup>.

To the localities given, add:—NORTH AMERICA, New Mexico<sup>2</sup>.—MEXICO, Durango city (*Becker*), Guanajuato (*Dugès*<sup>3</sup>), Oaxaca (*coll. Schaus*).

The var. *dugesii*, Cocker., from Guanajuato, is without doubt a form of *A. crescens*.

2. **Alypioides bimaculata.**

*Pseudalypia bimaculata*, antea, i. p. 35.

3. **Alypioides walkeri.** (Tab. LXX. fig. 1.)

*Pseudalypia walkeri*, Druce, Ann. & Mag. Nat. Hist. (6) ii. p. 239 (1888)<sup>1</sup>.

*Pseudalypia stuartii*, Schaus, Ent. Amer. v. p. 87 (1889)<sup>2</sup>.

Primaries and secondaries on the upper and under sides uniformly dull black; the primaries crossed just beyond the cell on the costal margin by a narrow white band that extends to the anal angle, where it is



slightly hooked; a narrow metallic line extends from the base along the costal margin, but not beyond the white band, one at the end of the cell, and several between it and the inner margin: head, thorax, and abdomen glossy black, as also the legs and antennæ; the tegulæ orange-red. Expanse 2 inches.

*Hab.* MEXICO, Acapulco (*J. J. Walker*<sup>1</sup>), Paso de San Juan in Vera Cruz (*coll. Schaus*<sup>2</sup>); GUATEMALA, Volcan de Santa Maria, Pacific Slope (*Richardson*).

This species is allied to *A. (Agarista) radians*, Feld., from which it may be at once distinguished by the white band on the primaries.

#### 4. *Alypioides radians*.

*Agarista radians*, Feld. Reise der Novara, Lep. t. 107. fig. 9<sup>1</sup>.

*Eusemia radians*, Boisd. Rev. et Mag. Zool. 1874, p. 105<sup>2</sup>.

*Hab.* MEXICO<sup>1</sup>, Cuernavaca in Morelos (*H. H. Smith*).

The locality "Moluques" mentioned by Boisduval<sup>2</sup> is clearly an error.

### ALYPIA (I. p. 35).

#### 1. *Alypia disparata*. (Tab. LXX. fig. 2, ♂.)

*Alypia octomaculata*, antea, i. p. 35 (nec Fabr.)<sup>1</sup>.

*Alypia disparata*, H. Edwards, Papilio, iv. p. 13<sup>2</sup>.

To the Mexican localities given, add:—Atoyac in Vera Cruz (*H. H. Smith, Schumann*), State of Vera Cruz (*Schaus*<sup>2</sup>).

The additional specimens received show that the Mexican insect is distinct from the North-American *A. octomaculata* (Fabr.). The females of the two species are very similar; but, as pointed out by Edwards<sup>2</sup>, the males are very different. It is probable that *A. disparata* will have to be separated eventually from the genus *Alypia*.

### PHASIS (I. p. 36).

#### *Phasis tribuna* (I. p. 36).

*Eusemia schausii*, H. Edwards, Ent. Amer. iii. p. 90 (1887)<sup>1</sup>.

To the localities given, add:—MEXICO, State of Vera Cruz (*Schaus*<sup>1</sup>).

The late Henry Edwards, upon seeing my specimens of *P. tribuna*, informed me that his *Eusemia schausii* belonged to the same species.

### DARCETA (to follow the genus *Phasis*, I. p. 36).

*Darceta*, Herrich-Schäffer, Samml. aussereur. Schmett. pp. 13, 71, 84 (1850–1858); Walker, Cat. xxxi. p. 139 (1864).

This genus is allied to *Diamuna*\*, but differs from it in having the wings considerably shorter and the apex more pointed.

\* The genera *Diamuna* and *Clitis*, Walk. (antea, i. pp. 333–335), were incorrectly included by me in the family Noctuidæ: they really belong to the Agaristidæ, and should follow the genus *Hecatesia* in Vol. I. p. 36.

### 1. *Darceta hesperina*.

*Darceta hesperina*, Herr.-Schäff. Samml. aussereur. Schmett. pp. 13, 71, 84, figg. 524-526<sup>1</sup>.

*Hab.* PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—BRAZIL<sup>1</sup>.

LEONIDES (to follow the genus *Darceta*, in the family Agaristidæ).

*Leiosoma*, Felder, Reise der Novara, Lep. t. 99, fig. 23, Erkl. der Taf. 75-107, p. 6 (nomen præocc.).

The name *Leiosoma* had been used five times in zoology before Felder adopted it: a new name is therefore substituted.

### 1. *Leonides serpentinus*.

*Leiosoma serpentinum*, Feld. loc. cit. (♂)<sup>1</sup>.

*Leisoma juanita*, Schaus, Ent. Amer. v. p. 87 (♀) (1889)<sup>2</sup>.

*Hab.* MEXICO, Paso de San Juan in Vera Cruz (*Schaus*<sup>2</sup>).—COLOMBIA, Bogota<sup>1</sup>.

I have seen three males of this insect: two in my own collection and Felder's type. I have not the slightest doubt that the insect described by Mr. Schaus is the female of the same species.

EUTHISANOTIA (to follow the genus *Leonides*, in the family Agaristidæ).

*Euthisanotia*, Hübner, Zutr. Samml. exot. Schmett. iii. p. 12 (1825).

*Eudryas*, Boisduval, Sp. Gén. des Lépi. i. t. 14. fig. 9 (1836); Rev. et Mag. Zool. 1874, p. 57;

Walker, Cat. ix. p. 143 (1856); Packard, Proc. Ess. Inst. iv. p. 24 (1864); Stretch, Zyg. & Bomb. N. Amer. p. 145 (1872).

### 1. *Euthisanotia sanctæ-johannis*. (Tab. LXX. fig. 8.)

*Eudryas stæ-johannis*, Walk. Cat. ix. p. 144 (1856)<sup>1</sup>.

*Hab.* ? NORTH AMERICA<sup>1</sup>.—MEXICO, Jalapa (*M. Trujillo*), Orizaba (*Boucard, in mus. D.*).

The specimen described by Walker was found on the door of a church at "Horsleydown."

### 2. *Euthisanotia cosyra*, sp. n. (Tab. LXX. fig. 4, ♀.)

*Female*. Primaries dull greyish-brown, paler at the base and on the outer margin, with a wide snow-white band extending from the base down the middle of the wing to the end of the cell and then curving upwards to the costal margin close to the anal angle, where it becomes very much narrower, the marginal line edged with black, the fringe brown; secondaries deep chrome-yellow, broadly bordered from the apex to the anal angle with black, a fine submarginal line chrome-yellow, the marginal line black, the fringe greyish-white; the underside of both wings chrome-yellow, broadly bordered with black, the primaries with a round black spot in the cell and an elongated black mark at the end of the cell, the outer margins of both wings yellowish-white: head, palpi, thorax, and legs greyish-brown, the antennæ black, the abdomen chrome-yellow. Expanse  $1\frac{3}{4}$  inch.

*Hab.* WESTERN MEXICO (*M. Trujillo, in coll. Schaus*).

One specimen, very distinct from any insect known to me.



LAQUEA (to follow the genus *Euthisanotia*, in the family Agaristidæ).

*Laquea*, Jordan, Novit. Zool. iii. p. 41 (March 1896).

Dr. Jordan's description of this genus was made from Jamaican examples, which, in my opinion, are specifically distinct from the Mexican *Euthisanotia argentata*, Druce.

1. ***Laquea argentata***. (Tab. LXX. fig. 5.)

*Euthisanotia argentata*, Druce, Ann. & Mag. Nat. Hist. (6) xiii. p. 352 (1894)<sup>1</sup>.

*Laquea argentata*, Jord. Novit. Zool. iii. p. 41 (part.)<sup>2</sup>.

Primaries pale fawn-colour, greyish on the outer margin; a wide silvery-white band extends from the base to the apex, crossed by a fawn-coloured line at the end of the cell; the fringe greyish-brown; secondaries yellow, broadly bordered from the apex to the anal angle with reddish-fawn-colour, the marginal line black, the fringe white: head and thorax greyish-fawn-colour; abdomen pale yellow; antennæ and legs grey. Expanse 2 inches.

*Hab.* MEXICO<sup>2</sup>, Orizaba (*Boucard, in mus. D.*<sup>1</sup>), Jalapa (*coll. Schaus*); GUATEMALA, in the city (*Rodriguez*<sup>1</sup>).—ANTILLES, San Domingo.

There is a worn example of this species from San Domingo in the National Museum, with a label in Walker's handwriting "*Copusa argentata*," but I cannot find that it has been described. The Orizaba specimen is figured.

COPIDRYAS (to follow the genus *Laquea*, in the family Agaristidæ).

*Copidryas*, Grote, Canad. Ent. viii. pp. 99, 100 (1876).

1. ***Copidryas sabulosa***.

*Agarista sabulosa*, Feld. Reise der Novara, Lep. t. 107. fig. 11 (1874)<sup>1</sup>.

*Eusemia* (?) *sabulosa*, Boisd. Rev. et Mag. de Zool. 1874, p. 106<sup>2</sup>.

*Hab.* NORTH AMERICA, San Francisco, California<sup>1</sup>.—MEXICO, Jalapa (*M. Trujillo*), Orizaba (*Boucard, in mus. D.*); GUATEMALA, in the city (*Rodriguez*).

This species varies considerably in the colour of the primaries; it is common at Jalapa.

PROCRIS (I. p. 37).

5. ***Procris landia***, sp. n. (Tab. LXX. fig. 6.)

Primaries and secondaries semihyaline brownish-black, the veins and the fringe slightly darker: head and antennæ black, the collar, thorax, and abdomen brownish-yellow, the legs black. Expanse  $1\frac{1}{10}$  inch.

*Hab.* MEXICO, Northern Sonora (*Morrison*).

One specimen. Allied to *P. thyesta*, Druce.

6. ***Procris barnea***, sp. n. (Tab. LXX. fig. 3.)

Primaries and secondaries semihyaline smoky-black, the veins, costal margin, and fringe slightly darker: head, antennæ, thorax, abdomen, and legs deep black. Expanse  $1\frac{1}{4}$  inch.

*Hab.* MEXICO, Northern Sonora (*Morrison*), Durango city (*Becker*).

Very similar to *P. thyesta*, from which it may be at once distinguished by the thorax being black instead of yellow.

BIOL. CENTR.-AMER., Heter., Vol. II., December 1896.

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## TRIPROCRIS (I. p. 37).

2. **Tripocris basalis.**

*Tripocris basalis*, H. Edwards, Ent. Amer. iii. p. 91 (1887) <sup>1</sup>.

*Hab.* MEXICO, State of Vera Cruz (*Schaus* <sup>1</sup>).

## SERYDA (I. p. 38).

**Seryda megalops** (I. p. 38).

To the localities given, add:—MEXICO, in the city (*coll. Schaus*).

## URODUS (I. p. 39).

2 (A). **Urodus dyraspes**, sp. n. (Tab. LXX. fig. 7.)

Primaries semihyaline sooty-black, the veins slightly darker; secondaries whitish-hyaline, the veins and fringe black: head, antennæ, thorax, abdomen, and legs black. Expanse  $\frac{7}{10}$  inch.

*Hab.* MEXICO, Amula in Guerrero 6000 feet (*H. H. Smith*).

One specimen.

## HARRISINA (I. p. 40).

1. **Harrisina cirama**, sp. n. (Tab. LXX. fig. 12.)

*Harrisina americana*, antea, i. p. 40 (nec Boisd.).

Primaries and secondaries brownish-black, the veins on the former deep black: head, antennæ, thorax, abdomen, and legs deep black. Expanse 1 inch.

*Hab.* GUATEMALA, San Gerónimo and San Juan in Vera Paz (*Champion*); PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).

This insect proves, upon receipt of more specimens, to be distinct from the North American *H. americana* (Boisd.).

1 (A). **Harrisina coracina.**

*Aglaope coracina*, Clem. Proc. Acad. Phil. 1860, p. 539 <sup>1</sup>.

*Hab.* NORTH AMERICA, Texas <sup>1</sup>.—MEXICO, Coatepec (*coll. Schaus*).

**Harrisina rümelii** (I. p. 40).

To the Mexican locality given, add:—State of Durango (*Forrer*).

4. **Harrisina charax**, sp. n. (Tab. LXX. fig. 9.)

Primaries deep black, appearing in some lights shot with very dark blue near the base; secondaries brownish-black: head and antennæ black, the collar bright carmine, the thorax and abdomen greenish-black, the tegulæ glossy blue-black, the legs black. Expanse 1 inch.

*Hab.* MEXICO, Dos Arroyos and Tierra Colorada in Guerrero (*H. H. Smith*).

Two specimens.

5. **Harrisina elongata**, sp. n. (Tab. LXX. fig. 10.)

Primaries and secondaries smoky-brown, on the underside shaded with blue: head and antennæ blue-black, the collar chrome-yellow, the thorax, abdomen, and legs black. Expanse  $1\frac{4}{10}$  inch.

*Hab.* MEXICO, Amula in Guerrero 6000 feet (*H. H. Smith*).

In this species the primaries are very long and narrow.

6. **Harrisina mexicana.** (Tab. LXX. fig. 11.)

*Harrisina mexicana*, Schaus, Ent. Amer. v. p. 87 (1889)<sup>1</sup>.

*Hab.* MEXICO, Paso de San Juan in Vera Cruz (*Schaus*<sup>1</sup>).

A small species allied to *H. cirama* and *H. guatemalena*, Druce. We figure the type from Mr. Schaus's collection.

ANATOLMIS (to follow the genus *Pyromorpha*, I. p. 41).

*Anatolmis*, Packard, Proc. Essex Inst. iv. p. 46 (1864); Stretch, Zygæn. & Bomb. N. Amer. p. 43 (1872).

1. **Anatolmis contermina.**

*Lycomorpha contermina*, H. Edwards, Papilio, iv. p. 13 (1884)<sup>1</sup>.

*Hab.* MEXICO, Coatepec, State of Vera Cruz (*Schaus*<sup>1</sup>).

## LYCOMORPHA (I. p. 41).

1 (A). **Lycomorpha rata.** (Tab. LXX. fig. 13.)

*Lycomorpha rata*, H. Edwards, Papilio, ii. p. 124 (1882)<sup>1</sup>.

*Hab.* NORTH AMERICA, Arizona<sup>1</sup>.—MEXICO, Northern Sonora (*Morrison*).

The specimens from Sonora are identical with those from Arizona in my own collection.

**Lycomorpha marginata** (I. p. 41). (Tab. LXX. fig. 14.)

To the Mexican locality given, add:—Jalapa (*F. D. G.*, *M. Trujillo*), Orizaba (*H. J. Elwes*).

The specimen from Jalapa is figured.

5. **Lycomorpha teos.** (Tab. LXX. fig. 15.)

*Lycomorpha teos*, Schaus, Ent. Amer. v. p. 88 (1889)<sup>1</sup>.

*Hab.* MEXICO, Barranca of Simalohuacan, State of Vera Cruz, 7000 feet<sup>1</sup>, and Jalapa (*coll. Schaus*).

We figure a specimen from Jalapa. This species is closely allied to *L. marginata*, Edwards.

6. **Lycomorpha notha.** (Tab. LXX. fig. 16.)

*Lycomorpha notha*, H. Edwards, Ent. Amer. i. p. 128 (1885)<sup>1</sup>.

*Hab.* MEXICO, Jalapa (*Schaus*<sup>1</sup>, *Höge*), Omilteme in Guerrero 8000 feet (*H. H. Smith*).

The specimen from Omilteme is blacker than those from Jalapa, and has less yellow at the base of the wings. An example from Jalapa is figured.

7. **Lycomorpha basirei**, sp. n. (Tab. LXX. fig. 18.)

Primaries and secondaries deep black, the primaries with the costal margin from the base nearly to the apex

edged with deep yellow, the secondaries with the costal margin also edged with yellow; the underside of both wings very much as above, but glossy blue-black: head, antennæ, thorax, and legs deep black, the abdomen glossy bluish-black. Expanse 1 inch.

*Hab.* MEXICO, Orizaba (*Basire, in coll. Schaus*).

One specimen.

8. **Lycomorpha semifulva**, sp. n. (Tab. LXX. fig. 19.)

Primaries deep black, broadly bordered with yellow along the costal margin from the base to the end of the cell; secondaries chrome-yellow, bordered with black from the apex to the anal angle; the fringe of both wings black; the underside very much as above: head, antennæ, thorax, abdomen, and legs deep black. Expanse 1 inch.

*Hab.* MEXICO, Orizaba (*coll. Schaus*).

Allied to *L. basirei*, from which it may be at once distinguished by the yellow secondaries.

9. **Lycomorpha augusta**. (Tab. LXX. fig. 17, ♂.)

*Lycomorpha augusta*, H. Edwards, Ent. Amer. iii. p. 91 (1887)<sup>1</sup>.

*Hab.* MEXICO, State of Vera Cruz (*Schaus*<sup>1</sup>), Omilteme in Guerrero 8000 feet (*H. H. Smith*).

We figure a male from Vera Cruz.

10. **Lycomorpha regia**. (Tab. LXX. fig. 20.)

*Lycomorpha regia*, Schaus, Ent. Amer. v. p. 88 (1889)<sup>1</sup>.

*Hab.* MEXICO, Jalapa (*coll. Schaus*<sup>1</sup>).

We figure a specimen from Mr. Schaus's collection.

AGYRTA (to follow the genus *Lycomorpha*, I. p. 41).

*Agyrta*, Hübner, Verz. bek. Schmett. p. 177 (1816).

*Dioptes*, group *Agyrta*, Walker, Cat. ii. p. 326 (1854).

1. **Agyrta micilia**.

*Phalæna micilia*, Cram. Pap. Exot. iii. p. 62, t. 228. fig. G<sup>1</sup>.

*Limacodes micilia*, Duncan, Nat. Libr. xxxvii., Exot. Moths, p. 179, t. 22. figg. 1, 2<sup>2</sup>; Butl. Cist.

Ent. ii. p. 113<sup>3</sup>.

*Hab.* PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—SOUTH AMERICA<sup>3</sup>, Surinam<sup>1</sup>, Ecuador.

2. **Agyrta æstiva**.

*Agyrta æstiva*, Butl. Cist. Ent. ii. p. 113<sup>1</sup>.

*Hab.* HONDURAS (*Dyson*<sup>1</sup>).

SYNTOMEDIA (I. p. 42).

**Syntomedia melanthus** (I. p. 42).

To the localities given, add :—MEXICO, Durango city (*Becker*), Guadalajara in Jalisco (*Goldsmith, in mus. D.*), Acapulco and Hacienda de la Imagen in Guerrero (*H. H. Smith*); GUATEMALA, in the city (*Rodriguez*); COSTA RICA, Punta Arenas (*J. J. Walker*).

**Syntomedia epilais** (I. p. 43).

To the localities given, add :—MEXICO, Jalapa (*M. Trujillo*), Orizaba (*Boucard, in mus. D.*); BRITISH HONDURAS, Belize (*Sir Alfred Moloney, in mus. D.*), Corosal (*Roe, in mus. D.*).

**5. Syntomedia vulcana.** (Tab. LXX. fig. 25.)

*Syntomedia vulcana*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 83 (1889) <sup>1</sup>.

Primaries uniformly deep glossy black, with a rich purplish tinge in some lights; a small streak in the cell and a round spot near the base on the inner margin very pale primrose-colour; a white dot close to the base on the costal margin; secondaries deep glossy black, the basal part hyaline, as in *S. melanthus* (Cram.): head, thorax, and abdomen glossy bluish-black, the abdomen with a row of white spots on each side; the legs and antennæ black, the antennæ with the tips white on the underside. Expanse  $2\frac{2}{10}$  inches.

*Hab.* MEXICO, Tierra Colorada in Guerrero 2000 feet (*H. H. Smith*).

One specimen, captured in October 1888. Allied to *S. melanthus* (Cram.), and also to *S. sauleyi*, Guen., but very distinct from either.

**6. Syntomedia joda**, sp. n. (Tab. LXXI. fig. 15.)

Primaries and secondaries deep black; the primaries with a round spot about the middle and a wide band partly crossing the wing beyond it chrome-yellow; the secondaries with the base and a round spot about the middle chrome-yellow; the fringe black; the underside of both wings as above: head, thorax, legs, and antennæ black, the antennæ tipped with white, the collar, tegulæ, and base of the thorax chrome-yellow; abdomen above glossy blue-black, with two of the segments banded with chrome-yellow, beneath dull black, with one segment only banded with yellow. Expanse  $1\frac{1}{2}$  inch.

*Hab.* MEXICO, Guadalajara (*coll. Schaus*).

A very distinct species, resembling in some respects the African *Euchromiæ*.

## ENDERA (I. p. 43).

**Endera vulcanus** (I. p. 43).

To the locality Mexico, add :—Cuesta de Misantla (*M. Trujillo*), Amula in Guerrero 6000 feet (*H. H. Smith*).

A rare species, of which we have received very few specimens.

## EUPYRA (I. p. 43).

**Eupyra principalis** (I. p. 43). (Tab. LXX. fig. 27, ♂.)

To the locality given, add :—MEXICO, Sierra Nevada de Colima 12,000 feet, Lake Chapala in Jalisco (*Richardson*), Jalisco (*Schumann*), Amecameca in Morelos (*F. D. G.*), Amula in Guerrero 6000 feet (*H. H. Smith*); GUATEMALA, in the city (*Rodriguez*).

Varies considerably in colour, some specimens being much brighter than others. We figure a male from Jalisco.

**Eupyra corydon** (I. p. 44).

To the locality given, add :—MEXICO, Jalapa (*M. Trujillo*), Orizaba (*Flohr; Boucard, in mus. D.*).

### 3. *Eupyra dama*. (Tab. LXX. fig. 24.)

*Eupyra dama*, Druce, Ann. & Mag. Nat. Hist. (6) xiii. p. 170 (1894) <sup>1</sup>.

Primaries greenish-bronze colour, pinkish along the inner margin from the base almost to the anal angle; the cell, three oval spots below, and a large spot beyond it crossed by the black veins, all hyaline; secondaries hyaline, the inner and outer margins broadly bordered with greenish-bronze; the veins and fringes of both wings black; the underside similar to the upperside, but much blacker in colour: head, thorax, abdomen, antennæ, and legs black, the collar spotted with white. Expanse  $1\frac{3}{4}$  inch.

*Hab.* MEXICO, Orizaba (*Boucard, in mus. D.*<sup>1</sup>), Jalapa (*coll. Schaus*).

A very distinct species, not closely allied to any other known to me. I believe Mr. Schaus's specimen is a male; it differs from mine in having fewer hyaline spaces on the primaries, and, instead of being entirely hyaline, the spaces are broken up into spots. The type from Orizaba is figured.

### 4. *Eupyra schausi*, sp. n. (Tab. LXX. fig. 21.)

Primaries black, shot with green near the base and at the anal angle, with an elongate spot near the base, one beyond on the costal margin, and a wide band crossing the wing near the apex, all hyaline, and two dots at the base white, the veins black; secondaries hyaline, the apex, outer margin, and a line crossing the wing at the end of the cell black: head, antennæ, thorax, tegulæ, and legs black, four spots on the collar, two on the front of the thorax, and one on each of the tegulæ bluish-white; abdomen metallic-green, each segment edged with black, a row of bluish-white spots on either side extending from the base to the anus. Expanse  $1\frac{7}{10}$  inch.

*Hab.* MEXICO, Orizaba (*coll. Schaus*).

This species is most nearly allied to *E. corydon*, Druce, but it is very distinct.

SCENA (to follow the genus *Eupyra*, I. p. 44).

*Scena*, Walker, Cat. i. p. 263 (1854).

### 1. *Scena propylea*. (Tab. LXX. fig. 26.)

*Euchromia styx*?, var. ?, Walk. Cat. i. p. 264 <sup>1</sup>.

*Scena propylea*, Druce, Ann. & Mag. Nat. Hist. (6) xiii. p. 170 (1894) <sup>2</sup>.

*Hab.* MEXICO, Orizaba (*Boucard, in mus. D.*), Jalapa (*coll. Schaus*).

The type of *Zygæna styx*, Fabr., with which Walker placed this species, is in the Banksian collection in the British Museum. I believe it to be an African insect; it is very distinct from the specimen Walker described as a variety, to which I have recently given a name.

One specimen from Orizaba. The example described by Walker <sup>1</sup> was from an unknown locality.

EMPYREUMA (to precede the genus *Calonotos*, I. p. 44).

*Empyreuma*, Hübner, Verz. bek. Schmett. p. 120 (1816); Butler, Journ. Linn. Soc., Zool. xii. p. 361, t. 28. fig. 19 (neurulation) (1876).

### 1. *Empyreuma sanguinosa*.

*Zygæna lichas*, Fabr. Spec. Ins. ii., App. p. 505 (1781) <sup>1</sup> (nec Cram.).

*Empyreuma lichas*, Butl. Journ. Linn. Soc., Zool. xii. p. 361 <sup>2</sup>.



*Sphinx sanguinosa*, Martyn, Psyche, t. 26. figg. 68, 69 (1797) <sup>3</sup>.

*Empyreuma sanguinosa*, Kirby, Cat. Lep. Het. i. p. 121 <sup>4</sup>.

*Hab.* HONDURAS <sup>2</sup> <sup>4</sup>.—ANTILLES <sup>4</sup>, Cuba <sup>2</sup>, Haiti <sup>2</sup>.

This species is included in our list on the authority of a specimen labelled "Honduras" in the British Museum. Fabricius's example is stated <sup>1</sup> to be from "Arabia," and that of Martyn <sup>3</sup> from "Tranquebar."

#### CALONOTOS (I. p. 44).

##### **Calonotos nexa** (I. p. 44).

To the localities given, add:—GUATEMALA, in the city (*Rodriguez*); HONDURAS (*Wittkugel, in mus. Staudinger*); COSTA RICA, Candelaria Mts. (*Underwood*).

##### 1 (A). **Calonotos sericea**.

*Glaucopis sericea*, Herr.-Schäff. Samml. aussereur. Schmett. p. 73, fig. 253 <sup>1</sup>.

*Læmocharis sericea*, Herr.-Schäff. loc. cit. p. 80 <sup>2</sup>.

*Hab.* PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—SOUTH AMERICA <sup>1</sup>.

One specimen from Chiriqui, agreeing with Herrich-Schäffer's figure.

##### 6. **Calonotos cucadma**. (Tab. LXX. fig. 22.)

*Cosmosoma* (?) *cucadma*, Druce, Ann. & Mag. Nat. Hist. (6) xiii. p. 171 (1894) <sup>1</sup>.

Primaries and secondaries black, streaked with greenish-blue at the base; the primaries with a small streak near the base, and a rather wide band partly crossing the wing nearest the apex, both hyaline; the secondaries with a hyaline line down the middle: head, thorax, and abdomen black, the abdomen with a greyish line on each side. Expanse  $1\frac{1}{4}$  inch.

*Hab.* PANAMA, Bugaba (*Champion* <sup>1</sup>), Chiriqui (*Trötsch, in mus. Staudinger*).

#### AMYCLES (I. p. 45).

##### **Amycles strigosa** (I. p. 46).

To the locality given, add:—MEXICO, Navarrete in Tepic, Santiago Iscuintla in Jalisco (*Schumann*), Teapa in Tabasco (*H. H. Smith*), North Yucatan (*Gaumer*).

##### **Amycles flavicollis** (I. p. 46).

To the localities given, add:—MEXICO, Rincon in Guerrero 2800 feet (*H. H. Smith*); HONDURAS (*coll. Candèze*).

#### SAURITA (I. p. 46).

##### **Saurita cassandra** (I. p. 46).

To the localities given, add:—MEXICO, Orizaba, Misantla (*F. D. G.*), Atoyac in Vera Cruz (*H. H. Smith*); HONDURAS (*Wittkugel, in mus. Staudinger*).

#### ICHORIA (I. p. 47).

##### **Ichoria lycone** (I. p. 47).

To the localities given, add:—MEXICO, Jalapa (*coll. Schaus*).

### 3. *Ichoria* (?) *parthia*. (Tab. LXX. fig. 23.)

*Ichoria* (?) *parthia*, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 83 (1889)<sup>1</sup>.

Primaries and secondaries glossy bluish-green, the secondaries slightly hyaline near the base and inner margin; the underside of both wings bluer than above: head, thorax, abdomen, legs, and antennæ bluish-green. Expanse  $1\frac{3}{10}$  inch.

*Hab.* NICARAGUA, Chontales (*Belt*<sup>1</sup>); PANAMA, Bugaba 800 to 1500 feet (*Champion*<sup>1</sup>).

A pretty little species, not very nearly allied to any known to me. The Bugaba specimen is figured.

### PSEUDOSPHEOPTERA (to follow the genus *Ichoria*, I. p. 47).

*Pseudosphenoptera*, Butler, Journ. Linn. Soc., Zool. xii. p. 370, t. 28. fig. 4 (neuration) (1876).

The type of this genus is *Euchromia basalis*, Walk., from the Amazons. A second species occurs in our region.

#### 1. *Pseudosphenoptera demoanassa*. (Tab. LXXI. fig. 1.)

*Pseudosphenoptera demoanassa*, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 29 (July 1896).

♂. Primaries and secondaries dull black; a small hyaline streak on the costal margin of the primaries close to the base, below which is a rather wide short metallic-green streak; the fringe of both wings black; underside very similar to the upperside, the secondaries with a short green streak on the costal margin: head, antennæ, thorax, and abdomen black, the collar spotted with green, the abdomen striped with green from the base to the anus; legs black. Expanse  $1\frac{1}{2}$  inch.

*Hab.* PANAMA, Chiriqui (*in mus. Staudinger*<sup>1</sup>).

A second specimen in Dr. Staudinger's collection has more metallic green on the primaries.

### MACROCNEME (I. p. 47).

#### *Macrocneme leucostigma* (I. p. 47).

To the localities given, add:—MEXICO, Jalapa (*coll. Schaus*), Vera Cruz (*F. D. G.*), Atoyac in Vera Cruz, Teapa in Tabasco (*H. H. Smith*); HONDURAS (*Dyson*); COSTA RICA, Candelaria Mts. (*Underwood*); PANAMA, Emperador (*J. J. Walker*), Taboga I. (*J. J. Walker*; *Mathew, in mus. D.*).

In the specimen from Emperador the metallic-green band that crosses the primaries is reduced to a few streaks; it is possible that upon receipt of more examples it may prove to belong to a distinct species.

#### *Macrocneme vittata* (I. p. 48).

To the localities given, add:—MEXICO, Teapa in Tabasco (*H. H. Smith*); BRITISH HONDURAS, Belize (*Sir Alfred Moloney, in mus. D.*); HONDURAS (*Wittkugel, in mus. Staudinger*).

#### 3 (A). *Macrocneme cyllarus*. (Tab. LXXI. fig. 2.)

*Macrocneme cyllarus*, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 29 (July 1896)<sup>1</sup>.

Primaries and secondaries deep black; the primaries shot with green about the middle, this colour extending from the costal margin across the wing, but not reaching the inner margin; the fringes of both wings



Druce, Herbert. 1896. "Insecta Lepidoptera Rhopalocera Supplement." *Biologia Centrali-Americana :zoology, botany and archaeology* 2, 321–336.

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