

black: head, palpi, and thorax black; the abdomen bright metallic-green, with two white lines on the underside extending from the base to the anus; antennæ black, the tips white; legs black, spotted with white. Expanse $1\frac{1}{4}$ inch.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*), Taboga I. (*J. J. Walker*).

The Chiriqui specimen is figured.

3 (B). *Macrocneme chrysitis*.

Glaucopis chrysitis, Guér. Icon. Règne Anim., Ins. p. 502 (1829–1838) ¹.

Macrocneme chrysitis, Kirby, Cat. Lep. Het. i. p. 129 ².

Hab. MEXICO, Bay of Campeche (*Perbosc* ¹).

Macrocneme iole (I. p. 48).

To the localities given, add:—MEXICO, Jalapa (*M. Trujillo*), Coatepec (*Brooks*), Misantla (*F. D. G.*).

Mr. Kirby, in his catalogue, sinks the name *M. iole* under *M. chrysitis* (Guér.); but, without seeing the type, I consider it very doubtful if this is correct, so many of the species being very closely allied.

Macrocneme adonis (I. p. 48).

To the localities given, add:—MEXICO, Jalapa (*M. Trujillo*), Orizaba (*Boucard, in mus. D.*), Valladolid in Yucatan (*Gaumer*); GUATEMALA, in the city (*Rodriguez*).

5 (A). *Macrocneme cinyras*. (Tab. LXXI. fig. 4.)

Macrocneme cinyras, Schaus, Ent. Amer. v. p. 88 (1889) ¹.

Hab. MEXICO, Jalapa, Coatepec (*Schaus* ¹).

This species is allied to *M. iole*, Druce.

5 (B). *Macrocneme ferrea*.

Macrocneme ferra, Butl. Journ. Linn. Soc., Zool. xii. p. 371 ¹.

Hab. HONDURAS (*coll. Schaus*).—COLOMBIA ¹; BRAZIL, Espiritu Santo ¹.

5 (C). *Macrocneme hesione*. (Tab. LXXI. fig. 3.)

Macrocneme hesione, Druce, Ann. & Mag. Nat. Hist. (6) ii. p. 239 (1888) ¹.

Primaries black, shot with purple, the apical half of the wing greyish, the veins black, a minute white dot close to the base; secondaries deep black; the underside of the primaries purplish-black, broadly white from the apex to the anal angle, the fringe black, that of the secondaries black, shot with purple along the costal margin: head, antennæ, thorax, legs, and abdomen black, the underside of the latter and the anus metallic-green. Expanse $1\frac{3}{10}$ inch.

Hab. PANAMA, Volcan de Chiriqui (*Trötsch, in mus. Staudinger* ¹).

A pretty little species, quite distinct from any other known to me.

Macrocneme evelina (I. p. 48).

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

CALLICARUS (I. p. 48).

Callicarus plumipes (I. p. 49).

To the localities given, add :—MEXICO, Jalapa (*M. Trujillo*), Coatepec (*coll. Schaus*); GUATEMALA, in the city (*Rodriguez*).

Varies considerably in size, the specimens from Yucatan being very small.

Callicarus laconia (I. p. 49).

To the locality given, add :—MEXICO, Dos Arroyos, Rincon, and Acapulco in Guerrero (*H. H. Smith*), Jalapa (*coll. Schaus*); GUATEMALA, in the city (*Rodriguez*).

2 (A). **Callicarus laciades**.

Callicarus laciades, Schaus, Ent. Amer. v. p. 88 (1889)¹.

Hab. MEXICO, Paso de San Juan¹, Coatepec¹, and Jalapa in Vera Cruz (*coll. Schaus*).

Very closely allied to *C. laconia*, Druce.

2 (B). **Callicarus misitra**. (Tab. LXXI. fig. 6, ♂.)

Callicarus misitra, Schaus, Ent. Amer. v. p. 88 (1889)¹.

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

A very distinct species, at once distinguished from all the others of the genus by the two bright yellow spots at the back of the head. The type, a male, is figured.

2 (C). **Callicarus jalapensis**. (Tab. LXXI. fig. 7, ♀.)

Callicarus jalapensis, Schaus, Ent. Amer. v. p. 89 (1889)¹.

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

Allied to *C. laconia*, Druce. The type, a female, is figured.

Callicarus texanus (I. p. 49).

To the Mexican localities given, add :—Guadalajara in Jalisco (*Goldsmith, in mus. D.*), Orizaba (*Boucard, in mus. D.*).

4. **Callicarus punctatus**.

Phyllæcia punctata, Guér. Icon. Règne Anim., Ins. p. 504 (1829–1838)¹; Kirby, Cat. Lep. Het. i. p. 129².

Euchromia punctata, Walk. Cat. i. p. 249³.

Hab. MEXICO, Bay of Campeche^{1 2 3}.

This species is unknown to me.

HORAMA (to follow the genus *Callicarus*, I. p. 49).

Horama, Hübner, Verz. bek. Schmett. p. 124 (1816); Walker, Cat. i. p. 251.

1. ***Horama jalapensis*.**

Horama jalapensis, Neum. Ent. Amer. vi. p. 63 (1890)¹.

Hab. MEXICO, Jalapa (*Schaus*¹).

MASTIGOCERA (I. p. 49).

Mastigocera calvipes (I. p. 49).

To the localities given, add:—ACAPULCO (*H. H. Smith*); MEXICO, Jalapa and Paso de San Juan in Vera Cruz (*coll. Schaus*); GUATEMALA, in the city (*Rodriguez*).

Of this species we have received very few specimens. The one from Costa Rica is much yellower in colour than either of the others.

Mastigocera œdipus (I. p. 49).

To the localities given, add:—MEXICO, Rincon in Guerrero (*H. H. Smith*), Jalapa (*coll. Schaus*).

Mr. Herbert Smith informs us that this moth closely resembles a species of Hemiptera found with it flying about flowers.

ISANTHRENE (I. p. 50).

Isanthrene pompiloides (I. p. 50).

To the localities given, add:—MEXICO, Puebla 7000 to 8000 feet (*F. D. G.*), Jalapa (*M. Trujillo*), Atoyac in Vera Cruz (*H. H. Smith*).

Isanthrene championi (I. p. 50).

To the Panama locality given, add:—Chiriqui (*Trötsch, in mus. Staudinger & mus. D.*).

Of this species I have now seen seven specimens, which do not show the slightest variation.

6. ***Isanthrene perbosci*.**

Glaucopis perboscii, Guér. Icon. Règne Anim., Ins. p. 501 (1829–1838)¹; Walk. Cat. i. p. 155².

Isanthrene perboscii, Kirby, Cat. Lep. Het. i. p. 132³.

Hab. MEXICO, Bay of Campeche^{1 2 3}.

Unknown to me.

HOMŒOCERA (I. p. 51).

1 (A). ***Homœocera crassa*.**

Homœocera crassa, Feld. Reise der Novara, Lep. t. 102. fig. 26 (1874)¹.

Hab. COSTA RICA, Candelaria Mts. (*Underwood*).—COLOMBIA, Bogota¹.

Three specimens from Costa Rica, almost identical with Felder's figure.

1 (B). **Homœocera rodriguezi.** (Tab. LXXI. fig. 5.)*Homœocera rodriguezi*, Druce, P. Z. S. 1890, p. 494¹.

Primaries clear hyaline, the base broadly deep black, the costal, outer, and inner margins narrowly edged with black, the veins all black; secondaries similar to the primaries, very broadly bordered with black on the inner margin: head, thorax, base of the abdomen, antennæ, and legs black; the upperside of the abdomen banded with yellow, with very minute white spots on each side, the antennæ white at the tip. Expanse $1\frac{3}{4}$ inch.

Hab. MEXICO, Jalapa (*M. Trujillo*), Orizaba (*Boucard, in mus. D.*); GUATEMALA, in the city (*Rodriguez*¹).

A very distinct species, allied to *H. crassa*, Feld., and *H. salvini*, Butl.

Homœocera beatrix (I. p. 51).*Homœocera scintillans*, anteà, i. p. 51 (nec Herr.-Schäff.).

The Costa Rican specimen referred by me to *A. scintillans* proves to be a worn individual of *A. beatrix*. I am indebted to Dr. Staudinger for sending me Herrich-Schäffer's type of *Læmocharis scintillans* for comparison.

6. **Homœocera sahacon.** (Tab. LXXI. fig. 8.)*Homœocera sahacon*, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 29 (July 1896)¹.

Primaries and secondaries yellowish hyaline; the primaries with the costal and inner margins near the base pale yellow, a bright blue spot at the base of the wing, the veins, apex, and outer and inner margins black; the secondaries with a black spot at the anal angle: head, antennæ, thorax, and legs black; abdomen deep blue-black, the segments edged with yellow. Expanse $1\frac{8}{10}$ inch.

Hab. PANAMA, Volcan de Chiriqui (*Trötsch, in mus. Staudinger*¹).

This fine species is allied to *H. (Lagaria) acuminata*, Walk. (= *Gartha dalsa*, Schaus), from Brazil.

7. **Homœocera samina.** (Tab. LXXI. fig. 9.)*Homœocera samina*, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 30 (July 1896)¹.

Female. Primaries and secondaries hyaline, the veins, apex, and outer and inner margins of both wings black: antennæ and thorax black; head, tegulæ, and abdomen bright orange, the abdomen with each segment edged with black, and a central row of metallic-blue spots extending from the base to the anus; legs orange-yellow. Expanse $1\frac{1}{2}$ inch.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*¹).

Very distinct from any described species.

ERRUCA (I. p. 52).

Erruca azia (I. p. 53).

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

MYRMECOPSIS (I. p. 53).

Myrmecopsis semihyalina (I. p. 53).

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

Myrmecopsis polistes (I. p. 53).

To the localities given, add:—MEXICO, Venta de Zopilote in Guerrero 2800 feet (*H. H. Smith*).

SPHECOSOMA (I. p. 54).

Sphecosoma fasciolatum (I. p. 54).

To the localities given, add:—MEXICO, Jalapa (*M. Trujillo*).

GYMNELIA (I. p. 54).

Gymnelia gigantea (I. p. 54).

To the locality given, add:—GUATEMALA (*Conradt, in mus. Staudinger*), Guatemala city (*Rodriguez*).

Gymnelia xenodorus (I. p. 55).

To the locality given, add:—MEXICO, Paso de San Juan in Vera Cruz (*coll. Schaus*), Teapa in Tabasco (*H. H. Smith*).

LÆMOCHARIS (I. p. 55).

Læmocharis trigutta (I. p. 55).

To the localities given, add:—COSTA RICA (*mus. Staudinger*).

Læmocharis stryma (I. p. 55).

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

2 (A). **Læmocharis masa.** (Tab. LXXI. fig. 10.)

Læmocharis masa, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 83 (1889)¹.

Primaries and secondaries hyaline, the primaries broadly tipped with black at the apex and along the outer margin; the secondaries edged with black from the apex to near the anal angle: head with a small spot on each side, and the thorax with a spot at the base, bright carmine; the abdomen, legs, and antennæ dull black; the front of the head and collar greyish-white. Expanse $\frac{3}{4}$ inch.

Hab. MEXICO, Teapa in Tabasco (*H. H. Smith*¹); HONDURAS (*Wittkugel, in mus. Staudinger*).

A small species allied to *L. stryma*, Druce, from which it may be distinguished by the wide black apex of the primaries.

4. **Læmocharis (?) nox.** (Tab. LXXI. fig. 11.)

Læmocharis nox, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 30 (July 1896)¹.

Primaries and secondaries smoky hyaline, with the veins black: head, thorax, abdomen, antennæ, and legs black, the tegulæ and a spot at the base of the abdomen bright carmine. Expanse $1\frac{1}{4}$ inch.

Hab. HONDURAS (*Wittkugel, in mus. Staudinger*¹).

GYMNOPODA (I. p. 55).

2. **Gymnopoda mecrida.** (Tab. LXXI. fig. 12.)

Gymnopoda mecrida, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 84 (1889)¹.

Primaries and secondaries uniform sooty-black, slightly hyaline at the base: head, tegulæ, and base of the thorax black, the rest of the thorax and the abdomen bright scarlet, the antennæ and legs black. Expanse $1\frac{1}{4}$ inch.

Hab. MEXICO, Durango city (*Becker*), Mexico city (*F. D. G.*).

This beautiful little species is allied to *G. subflamma*, Druce, from Chiriqui, from which it may be known by the entirely different colour of the thorax and abdomen.

THRINACIA (I. p. 56).

2 (A). **Thrinacia ochracea.**

Gymnopoda ochracea, Feld. Reise der Novara, Lep. t. 102. fig. 22¹.

Pseudomya musca, Schaus, P. Z. S. 1892, p. 275².

Thrinacia pontia, Druce, Ann. & Mag. Nat. Hist. (6) xiii. p. 172 (1894)³.

Hab. MEXICO, Jalapa (*Schaus*², *M. Trujillo*³).—COLOMBIA, Bogota¹.

2 (B). **Thrinacia prometina.** (Tab. LXXI. fig. 13.)

Thrinacia prometina, Druce, Ann. & Mag. Nat. Hist. (6) xiii. p. 172 (1894)¹.

Primaries and secondaries semihyaline black, the veins and costal margin of the secondaries darkest: head, antennæ, thorax, and legs black, the sides of the head and thorax pale yellow; the abdomen yellow, with a rather wide black band extending from the base to the anus. Expanse 1 inch.

Hab. MEXICO, Atoyac in Vera Cruz (*Schumann*¹).

One specimen, in rather poor condition.

Thrinacia intermedia (I. p. 56). (Tab. LXXI. fig. 14.)

To the Panama locality given, add:—Volcan de Chiriqui (*Trötsch, in mus. Staudinger*).

4. **Thrinacia ruatana**, sp. n. (Tab. LXXI. fig. 17.)

Primaries and secondaries smoky-black, the secondaries semihyaline near the base: head, antennæ, thorax, abdomen, and legs black, the collar and tegulæ dull red. Expanse $\frac{3}{4}$ inch.

Hab. HONDURAS, Ruatan I. (*Gaumer*).

PSEUDOCHARIS (I. p. 56).

Pseudocharis sithon (I. p. 57).

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

PSEUDOMYA (I. p. 57).

Pseudomya tipulina (I. p. 57).

To the localities given, add:—MEXICO, Jalapa (*coll. Schaus*), Teapa in Tabasco (*H. H. Smith*); GUATEMALA, Tamahu and Cahabon in Vera Paz (*Champion*); PANAMA, Bugaba, Tolé (*Champion*).

PHEIA (I. p. 57).

2. *Pheia gemmata*.

Pheia gemmata, Butl. Journ. Linn. Soc., Zool. xii. p. 385 (1876)¹; Illustr. Lep. Het. i. p. 30, t. 17. fig. 5².

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—COLOMBIA, Santa Marta^{1 2}.

Dr. Staudinger's specimen is almost identical with Butler's figure, excepting that it has an orange-yellow spot on each side of the abdomen.

3. *Pheia albisigna*.

Glaucopis albisigna, Walk. Cat. i. p. 146¹.

Pheia albisigna, Butl. Journ. Linn. Soc., Zool. xii. p. 385²; Illustr. Lep. Het. i. p. 30, t. 17. fig. 14³.

Hab. HONDURAS¹⁻³ (*Mus. Brit.*).—AMAZONS, Ega^{2 3}.

MOCHLOPTERA (I. p. 58).

Mochloptera xanthocera (I. p. 58).

To the localities given, add:—MEXICO, Orizaba (*Boucard, in mus. D.*), Jalapa (*M. Trujillo*), Coatepec (*Brooks*), Atoyac in Vera Cruz, Teapa in Tabasco (*H. H. Smith*); GUATEMALA, in the city (*Rodriguez*); COSTA RICA, Candelaria Mts. (*Underwood*).

COSMOSOMA (I. p. 58).

Cosmosoma metallescens (I. p. 58).

Cosmosoma metallescens, anteà, i. p. 58 (part.).

To the localities given, add:—MEXICO, Jalapa (*coll. Schaus*), Teapa in Tabasco (*H. H. Smith*).

I find on receipt of more specimens that *C. chalcosticta*, Butl., is distinct from *C. metallescens*.

2 (A). *Cosmosoma ada*.

Glaucopis ada, Herr.-Schäff. Samml. aussereur. Schmett. p. 73, fig. 297¹.

Læmocharis ada, Herr.-Schäff. loc. cit. p. 81².

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—BRAZIL, Rio Janeiro¹.

2 (B). *Cosmosoma bura*.

Glaucopis bura, Herr.-Schäff. Samml. aussereur. Schmett. p. 73, fig. 239¹.

Læmocharis bura, Herr.-Schäff. loc. cit. p. 80².

Cosmosoma bura, Walk. Cat. vii. p. 1612³.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—BRAZIL, Rio Janeiro¹.

This insect is allied to *Dycladia discifera* (Walk.), with which Mr. Kirby places it, but it is quite a distinct species.

2 (c). **Cosmosoma aleus.** (Tab. LXXI. fig. 16.)

Cosmosoma aleus, Schaus, Ent. Amer. v. p. 89 (1889)¹.

Hab. MEXICO, Paso de San Juan¹ and Jalapa in Vera Cruz (*Schaus*), Temax in North Yucatan (*Gaumer*); GUATEMALA, Coban in Vera Paz (*Conradt*); COSTA RICA, Candelaria Mts. (*Underwood*).

This species is very closely allied to *C. confine*, Herr.-Schäff. Mr. Schaus states¹ that it is very abundant amongst low shrubs on the outskirts of the forest, and was found in large numbers flying with *C. auge*, *C. cingulatum*, and *C. impar*.

2 (D). **Cosmosoma protus.** (Tab. LXXI. fig. 19.)

Cosmosoma protus, Druce, Ann. & Mag. Nat. Hist. (6) xiii. p. 171 (1894)¹.

Primaries and secondaries hyaline; the primaries with the costal and inner margins, the base, and a short band extending from the apex to the end of the cell, bright orange-yellow, the apex and outer margin black; the secondaries broadly bordered with black: head, thorax, and abdomen bright blue-black, with blue spots; tegulae bright orange; legs and antennae black, the antennae with the tips white. Expanse $1\frac{3}{4}$ inch.

Hab. MEXICO, Jalapa (*M. Trujillo*¹).

Allied to *C. aleus* and *C. drucei*.

3. **Cosmosoma drucei.**

Cosmosoma elegans, Druce, anteà, i. p. 59 (nec Butl.).

Cosmosoma drucei, Kirby, Cat. Lep. Het. i. p. 140.

To the localities given, add:—MEXICO, Jalapa (*M. Trujillo*), Atoyac (*H. H. Smith*); GUATEMALA, in the city (*Rodriguez*); COSTA RICA, Candelaria Mts. (*Underwood*).

3 (A). **Cosmosoma ethodæa.** (Tab. LXXI. fig. 20.)

Cosmosoma ethodæa, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 84 (1889)¹.

Primaries and secondaries yellowish hyaline; the primaries with the costal margin from the base to near the apex edged with bright yellow, the inner margin from the base to beyond the middle edged with bright orange-yellow, and the apex and outer margin broadly black, and with a black spot at the end of the cell; the secondaries with the apex and outer margin as far as the anal angle black, a black line crossing the middle of the wing from the costal margin to the anal angle; the underside as above: head and the underside of the thorax and abdomen black; the antennae black, whitish at the tip; the collar dark blue; the upperside of the thorax and abdomen bright orange, banded with dark blue, the two anal segments dark blue; the tegulae orange, edged with black; the legs black. Expanse $1\frac{3}{10}$ inch.

Hab. MEXICO, Atoyac in Vera Cruz (*H. H. Smith*¹).

A beautiful species, allied to *C. drucei*.

Cosmosoma advena (I. p. 59).

To the localities given, add:—MEXICO, Jalapa (*M. Trujillo*).

7 (A). **Cosmosoma zurcheri.** (Tab. LXXI. fig. 18.)

Cosmosoma zurcheri, Druce, Ann. & Mag. Nat. Hist. (6) xiii. p. 353 (1894) ¹.

Male. Similar to *C. hector*, Staud., but with the apical black border of the wings slightly wider, the first segment of the abdomen black, and the two anal segments black, spotted with bright dark blue on each side; tibiæ and tarsi yellow, instead of black.—*Female*. Similar to the male. Expanse $1\frac{1}{2}$ inch.

Hab. COSTA RICA, Santa Clara Valley 1200 feet (*Zurcher* ¹).

Closely allied to *C. hector*, but differing from it in the black anal segments of the abdomen.

7 (B). **Cosmosoma pudica.** (Tab. LXXI. fig. 21, ♀.)

Cosmosoma pudica, Druce, Ann. & Mag. Nat. Hist. (6) xiii. p. 353 (1894) ¹.

Female. Primaries and secondaries hyaline, with the veins, apex, and outer and inner margins black, the base of the primaries clothed with pale yellow hairs: head, antennæ, and legs black, the collar, tegulæ, thorax, and abdomen pale yellow, the thorax with a small white spot on each side, the anal segment and the anus black. Expanse $1\frac{3}{4}$ inch.

Hab. MEXICO, Orizaba (*coll. Schaus*); COSTA RICA, Santa Clara Valley 1200 feet (*Zurcher* ¹); PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).

A male from Orizaba in Mr. Schaus's collection has the abdomen entirely yellow, but it agrees in other respects with the female type figured, excepting that it is brighter in colour, being a fresh specimen.

Cosmosoma cingulatum (I. p. 60).

To the localities given, add:—MEXICO, Guadalajara in Jalisco (*Goldsmith, in mus. D.*), Dos Arroyos, R. Papagaio, and Hacienda de la Imagen in Guerrero, Teapa in Tabasco (*H. H. Smith*), Jalapa, Omealca near San Lorenzo (*M. Trujillo*), Orizaba (*Boucard, in mus. D.*), Atoyac in Vera Cruz (*Schumann*); GUATEMALA, in the city (*Rodriguez*); COSTA RICA, Candelaria Mts. (*Underwood*).

10 (A). **Cosmosoma festivum.**

Glaucopis festiva, Walk. Cat. i. p. 171 (1854) ¹.

Cosmosoma festivum, Kirby, Cat. Lep. Het. i. p. 141 ².

Hab. MEXICO, Jalapa (*coll. Schaus*); HONDURAS ² (*Dyson* ¹).

Cosmosoma impar (I. p. 60). (Tab. LXXI. fig. 22.)

Cosmosoma impar, Walk. anteà, i. p. 60 (part.).

To the localities given, add:—MEXICO, Jalapa (*M. Trujillo*); GUATEMALA, in the city (*Rodriguez*); COSTA RICA, Candelaria Mts. (*Underwood*).

We figure a Mexican specimen. The Panama locality must be erased, the specimens from thence belonging to the following species.

12. **Cosmosoma vernana**, sp. n.

Cosmosoma impar, anteà, i. p. 60, t. 7. fig. 20 (part.) (nec Walk.).

Closely allied to *C. impar*, Walk., but larger and more robust, with all the veins and the inner margin of the primaries black, instead of reddish; the male with a wide white band on the underside of the abdomen. Expanse 2 inches.

Hab. MEXICO, Jalapa (*M. Trujillo*); GUATEMALA, Coban in Vera Paz (*Conradt*); PANAMA, Volcan de Chiriqui (*Champion*).

13. **Cosmosoma meres**. (Tab. LXXI. fig. 23.)

Cosmosoma meres, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 30 (July 1896)¹.

Primaries yellowish hyaline, the costal margin and the base deep yellow, the apex, the outer and inner margins, and the veins black; secondaries hyaline, the costal margin yellow, the outer and inner margins black: head, antennæ, thorax, and abdomen black, the abdomen spotted with blue, and with two spots at the base and two about the middle dark chrome-yellow; legs black. Expanse $1\frac{1}{4}$ inch.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*¹).

ILIPA (I. p. 61).

2. **Ilipa unxa**. (Tab. LXXI. fig. 24.)

Ilipa unxa, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 31 (July 1896)¹.

Primaries yellowish hyaline, with the costal margin from the end of the cell to the apex, the veins, and base black, the apex broadly black; secondaries hyaline, edged with black at the apex and anal angle: head metallic-green, the antennæ, tegulæ, thorax, abdomen, and legs black; the abdomen with a small red spot on each side at the base, the anal segment metallic-green. Expanse $1\frac{3}{10}$ inch.

Hab. PANAMA, Volcan de Chiriqui (*Trötsch, in mus. Staudinger*¹).

3. **Ilipa braconoides**.

Glaucopsis (Ilipa) braconoides, Walk. Cat. i. p. 166¹.

Ilipa braconoides, Butl. Illustr. Lep. Het. i. p. 32, t. 11. fig. 15 (1877)².

Hab. MEXICO, Paso de San Juan, Coatepec (*coll. Schaus*); HONDURAS (*Dyson*^{1 2}).

DYCLADIA (I. p. 61).

Dycladia mexicana (I. p. 61).

To the Mexican locality given, add:—Orizaba (*Flohr*; *F. D. G.*; *Boucard, in mus. D.*).

The colour of the abdomen of this species varies from red to yellow.

1 (A). **Dycladia lydia**. (Tab. LXXI. fig. 25.)

Dycladia lydia, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 84 (1889)¹.

Primaries black, with the hyaline spaces as in *D. mexicana*, but slightly larger; secondaries hyaline, bordered with black at the apex and outer margin, but not so deeply as in *D. mexicana*: head bright dark blue in front; the thorax and basal half of the abdomen chrome-yellow; the tegulæ chrome-yellow, edged with black on the lower side; antennæ black, with white tips; the sides of the abdomen near the base and two or three small dots in a line down the middle bright greenish-blue, the lower half, anus, and underside bright red, the anal segment banded with blue; legs black. Expanse $1\frac{1}{4}$ inch.

Hab. MEXICO, Teapa in Tabasco (*H. H. Smith* ¹).

Allied to *D. mexicana*, but differing from it in the coloration of the thorax and abdomen.

1 (B). ***Dycladia thera***. (Tab. LXXI. fig. 26.)

Dycladia thera, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 85 (1889) ¹.

Primaries black, with the hyaline markings almost identical with those of *D. mexicana*, but with the apical spot smaller and narrower; the secondaries with the black margin considerably narrower than in that species; the underside of both wings as above: head and collar bright blue, the thorax and upperside of the abdomen dull black; the tegulæ black, with a yellow dot at the base; the abdomen with a yellow spot on each side close to the base, the sides and the anal segment bright blue, the underside and the anal tuft bright scarlet; antennæ and legs black. Expanse $1\frac{1}{2}$ inch.

Hab. MEXICO, Teapa in Tabasco (*H. H. Smith* ¹).

Allied to *D. mexicana*, but larger, and differing in the coloration of the head, thorax, and abdomen.

1 (C). ***Dycladia demonia***, sp. n. (Tab. LXXI. fig. 29.)

Primaries deep black, darkest close to the base, the fringe black; secondaries hyaline, with the veins, apex, and outer margin black: head bright metallic-blue; antennæ black, banded with white near the tip; collar, tegulæ, thorax, and base of the abdomen chrome-yellow, the rest of the upperside of the abdomen metallic blue-black, with a row of orange spots on each side of the three middle segments; underside of the thorax, and the coxæ and femora of the fore legs, bright carmine; underside of the abdomen black. Expanse $1\frac{4}{10}$ inch.

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

Allied to *D. lydia*, Druce, but very distinct therefrom.

Dycladia vittata (I. p. 61).

To the localities given, add:—MEXICO, Rinconada and Orizaba in Vera Cruz (*coll. Schaus*), Temax in North Yucatan (*Gawmer*).

Dycladia correbioides (I. p. 61).

To the localities given, add:—MEXICO, Jalapa (*M. Trujillo*), Orizaba (*Boucard*, in *mus. D.*), Misantla (*F. D. G.*), Coatepec (*Brooks*), Atoyac in Vera Cruz, Teapa in Tabasco (*H. H. Smith*); GUATEMALA, in the city (*Rodriguez*); HONDURAS (*Candèze*, in *mus. D.*); COSTA RICA, Santa Clara Valley 1200 feet (*Zurcher*), Candelaria Mts. (*Underwood*).

The specimen from Honduras is much more hyaline than any of the others I have seen, and it may prove to belong to a distinct species.

Dycladia imitata (I. p. 62).

To the locality given, add:—HONDURAS (*coll. Candèze*).

Dycladia augusta (I. p. 62).

To the locality given, add:—MEXICO, Jalapa (*M. Trujillo*).

Dycladia semifulva (I. p. 62).

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

8 (A). **Dycladia utica**. (Tab. LXXI. fig. 28.)

Dycladia utica, Druce, Ann. & Mag. Nat. Hist. (6) iv. p. 85 (1889)¹.

Primaries hyaline, broadly bordered at the apex and along the outer margin with black, the base red; secondaries hyaline, with the apex and outer margin edged with black: head, thorax, and abdomen black; the collar and the tegulae red; a streak down the centre of the thorax and two spots at the base white; the underside of the thorax and the base of the abdomen beneath white; the legs black and white; the antennae black, becoming white near the tip. Expanse $1\frac{1}{10}$ inch.

Hab. MEXICO, La Venta in Guerrero 300 feet (*H. H. Smith*¹).

This species is most nearly allied to an unnamed one from the Bahamas in my own collection, and comes into the group with *D. columbina* (Hübner.).

8 (B). **Dycladia pyrrha**. (Tab. LXXI. fig. 27.)

Dycladia pyrrha, Schaus, Ent. Amer. v. p. 89 (1889)¹.

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

8 (C). **Dycladia mora**, sp. n. (Tab. LXXII. fig. 8.)

Primaries and secondaries black; the primaries with the base and a wide band crossing the middle of the wing from the costal margin nearly to the angle clear hyaline; the secondaries with a small hyaline streak on the costal margin; the fringes of both wings black; underside as above, but slightly bluer in colour: head, antennae, thorax, abdomen, and legs black, two spots at the base of the thorax, a narrow line on each side of the abdomen, and the underside of both bluish-white. Expanse 1 inch.

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

I have seen several specimens of this species, which show considerable variation in the size of the hyaline markings on the primaries.

Dycladia felderi (I. p. 63).

To the localities given, add :—MEXICO, Jalapa (*M. Trujillo*), Orizaba (*Flohr*; *Boucard*, in *mus. D.*), Atoyac (*Schumann*, *H. H. Smith*), Paso de San Juan in Vera Cruz (*coll. Schaus*); GUATEMALA, in the city (*Rodriguez*); COSTA RICA, Candelaria Mts. (*Underwood*).

10. **Dycladia ladan**. (Tab. LXXII. fig. 2.)

Dycladia ladan, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 31 (July 1896)¹.

Primaries and secondaries clear hyaline, the veins, the costal, outer, and inner margins, and a rather wide band crossing the primaries from the costal margin to the anal angle, black: head, antennae, thorax, abdomen, and legs black, the abdomen spotted with red at the base. Expanse $1\frac{1}{10}$ inch.

Hab. PANAMA, Chiriqui (*Trötsch*, in *mus. Staudinger*¹).

PHÆNARETE (to follow the genus *Dycladia*, I. p. 63).

Phænarete, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 31 (July 1896).

Type *P. diana*, Druce.

Antennae minutely ciliated, rather short; palpi upturned, the third joint very short; legs slender, without any tufts: head small, thorax stout, abdomen short and thick: wings very long and narrow, costal margin straight; secondaries wider than the primaries.

1. **Phænarete diana.** (Tab. LXXII. fig. 1.)

Phænarete diana, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 31 (July 1896)¹.

Primaries hyaline, the base, veins, a narrow band crossing the wing at the end of the cell, and the apex and inner margin black, a small white dot on the costal margin close to the base; secondaries hyaline, the veins and outer margin black: head, antennæ, thorax, abdomen, and legs black; a small white spot on each side of the head and a row of white spots on each side of the abdomen; the abdomen white at the base on the underside. Expanse $1\frac{1}{2}$ inch.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*¹).

A very distinct species, not nearly allied to any known to me.

ARGYROEIDES (I. p. 64).

Argyroeides eurypon (I. p. 64).

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

4. **Argyroeides minuta.** (Tab. LXXII. fig. 3.)

Argyroeides minuta, Druce, Ann. & Mag. Nat. Hist. (6) ii. p. 240 (1888)¹.

Primaries and secondaries hyaline, shaded from the base to beyond the middle with pale yellow, all the veins deep black: head, antennæ, thorax, and legs black; abdomen black, broadly banded at the base with yellowish-white. Expanse $\frac{3}{4}$ inch.

Hab. HONDURAS (*Wittkugel, in mus. Staudinger*¹).

This small species is allied to *A. menephron*, Druce, from which it may be separated by its smaller size and entirely different coloration.

5. **Argyroeides moza.** (Tab. LXXII. fig. 4.)

Argyroeides moza, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 32 (July 1896)¹.

Primaries and secondaries yellowish hyaline, the veins all dark brownish-black; the primaries with the costal margin from the base to the apex bright carmine, and the outer and inner margins bordered with black, more broadly so near the apex; the secondaries edged with black from the apex to the anal angle: antennæ, head, thorax, and abdomen black, the base of the latter and the tip of the antennæ white; legs black; anus carmine. Expanse $1\frac{1}{4}$ inch.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*¹).

6. **Argyroeides (?) faveria.** (Tab. LXXII. fig. 5.)

Argyroeides (?) faveria, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 32 (July 1896)¹.

Female. Primaries and secondaries hyaline; the primaries with the base, costal and inner margins, and veins chrome-yellow to the middle of the wing, beyond which the veins are black, the apex broadly black, the outer margin edged with black, and with an elongated black spot at the anal angle; the secondaries with the apex edged with black: head, antennæ, and palpi deep black; the collar, tegulæ, thorax, and basal half of the abdomen deep chrome-yellow, the anal segments of the abdomen black. Expanse $1\frac{1}{10}$ inch.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*¹).

TRICHURA (I. p. 65).

Trichura druryi (I. p. 65).

To the localities given, add:—MEXICO, Cuesta de Misantla (*M. Trujillo*); BRITISH HONDURAS, Belize (*Sir Alfred Moloney, in mus. D.*).

NEOTRICHURA (to follow the genus *Trichura*, I. p. 65).

Neotrichura, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 33 (July 1896).

Type *N. penates*, Druce.

Allied to *Trichura*, but differs in having two brands on the upperside of the inner margin of the primaries and the costal margin of the secondaries being turned over on the underside, forming a kind of sac, containing a tuft of silky-white hair. The wings are also more pointed than they are in *Trichura*; in other respects it is very similar to that genus.

1. *Neotrichura penates*. (Tab. LXXII. fig. 10.)

Neotrichura penates, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 33 (July 1896).

Primaries and secondaries clear hyaline, with the veins black; the primaries with the apex and the outer and inner margins broadly bordered with black and with two pale brown brands on the inner margin about the middle; the secondaries with the apex, costal and inner margins broadly bordered with black: head, thorax, abdomen, and legs black; antennæ black, tipped with white; the front of the thorax, a spot on each side of the head, and the base and sides of the abdomen metallic-blue. Expanse $1\frac{3}{4}$ inch.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*¹).

SYNTRICHURA (I. p. 65).

2. *Syntrichura reba*. (Tab. LXXII. fig. 7.)

Syntrichura reba, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 33 (July 1896)¹.

Primaries and secondaries hyaline, the veins, costal, outer, and inner margins of both wings black: head, base of the thorax, and last two segments of the abdomen bright metallic-blue, the rest of the thorax and abdomen, and the tegulæ, black, the abdomen banded with white at the base; collar greyish-white; antennæ and legs black. Expanse 1 inch.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*¹).

3. *Syntrichura philocles*. (Tab. LXXII. fig. 9.)

Syntrichura philocles, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 34 (July 1896)¹.

Primaries and secondaries hyaline; the veins, apex, and outer and inner margins of the primaries black; the secondaries with the costal margin white, and the apex and outer margin edged with black: head, antennæ, thorax, and abdomen black; a carmine spot on each side of the head; underside of the abdomen banded with white, and a row of white spots on each side; the legs black. Expanse $1\frac{1}{10}$ inch.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*¹).

NAPATA (I. p. 66).

Napata leucotelus (I. p. 66).

To the localities given, add:—MEXICO, Paso de San Juan in Vera Cruz (*coll. Schaus*), Atoyac in Vera Cruz, Teapa in Tabasco (*H. H. Smith*), San Lorenzo (*M. Trujillo*); BRITISH HONDURAS, Belize (*Sir Alfred Moloney, in mus. D.*); HONDURAS, Ruatan I. (*Gaumer*).

Napata guatemalena (I. p. 66). (Tab. LXXII. fig. 6.)

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

We now figure the type from Tamahu: two specimens only were captured by Mr. Champion.

CHLOROPSINUS (to follow the genus *Napata*, I. p. 66.)

Chloropsinus, Butler, Journ. Linn. Soc., Zool. xii. p. 409, t. 29. fig. 1 (1876).

1. Chloropsinus potentia. (Tab. LXXII. fig. 12.)

Chloropsinus potentia, Druce, Ann. & Mag. Nat. Hist. (6) xiii. p. 171 (1894)¹.

Primaries and secondaries brownish-black, with all the veins darker: head, antennæ, abdomen, and legs brownish-black, the thorax and tegulæ bright orange. Expanse $1\frac{1}{2}$ inch.

Hab. MEXICO, Orizaba (*Boucard, in mus. D.*¹), Jalapa (*M. Trujillo*); COSTA RICA, Candelaria Mts. (*Underwood*).

We figure the type from Orizaba.

PROCALYPTA (I. p. 66).**Procalypta subcyanea** (I. p. 67).

To the locality Mexico, add :—Jalapa, Cuesta de Misantla (*M. Trujillo*).

PTERYGOPTERUS (I. p. 67).**1. Pterygopterus leucomela.**

Automolis leucomela, Walk. Cat. vii. p. 1636 (1856)¹; Schaus, P. Z. S. 1896, p. 636².

Pterygopterus superbus, Druce, anteà, i. p. 67, t. 8. fig. 7³.

To the locality given, add :—AMAZONS, Pará¹.

2. Pterygopterus clavipennis. (Tab. LXXII. fig. 11.)

Pterygopterus clavipennis, Butl. Journ. Linn. Soc., Zool. xii. p. 411, t. 29. fig. 10¹.

Hab. MEXICO, Orizaba (*coll. Schaus*).—BRAZIL, Espiritu Santo¹.

The example from Orizaba, from which our figure is taken, is, I believe, a female of *P. clavipennis*, the secondaries of which are not nearly so much elongated as shown in Butler's figure. Mr. Schaus's specimen differs from the type in being shot with blue instead of green.

ANTICHLORIS (I. p. 68).**5. Antichloris ruatana.** (Tab. LXXII. fig. 14.)

Antichloris ruatana, Druce, Ann. & Mag. Nat. Hist. (6) ii. p. 241 (1888)¹.

Primaries and secondaries smoky-black, the primaries slightly paler near the apex: head, thorax, abdomen, legs, and antennæ black. Expanse 1 inch.

Hab. HONDURAS, Ruatan I. (*Gaumer*¹).

Allied to *A. anthracina* (Walk.).

ACLYTIA (I. p. 69).

Aclytia heber (I. p. 69).

To the localities given, add:—MEXICO, Jalapa (*M. Trujillo*), Orizaba (*Flohr*); GUATEMALA, in the city (*Rodriguez*); COSTA RICA, Candelaria Mts. (*Underwood*).

Aclytia punctata (I. p. 70).

To the localities given, add:—BRITISH HONDURAS, Belize (*Blancaneaux*); COSTA RICA, Santa Clara Valley 1200 feet (*Zurcher*).

Aclytia conspicua (I. p. 70).

Aclytia lucania, Schaus, Ent. Amer. v. p. 89 (1889)¹.

To the localities given, add:—MEXICO, Jalapa, Cuesta de Misantla (*M. Trujillo*), Coatepec (*Schaus*¹); COSTA RICA, Candelaria Mts. (*Underwood*).

This insect is possibly the *A. (Glaucopis) ventralis*, Guér., the type of which I have not seen.

5. **Aclytia rufiventris**. (Tab. LXXII. fig. 13.)

Aclytia rufiventris, Schaus, P. Z. S. 1894, p. 228¹.

Hab. MEXICO, Jalapa (*Schaus*¹).

There are two males and one female of this species in Mr. Schaus's collection. *A. rufiventris* closely resembles *Heliura atava*, Druce.

6. **Aclytia moloneyi**, sp. n. (Tab. LXXII. fig. 16.)

Primaries brownish-black, without marking of any kind; secondaries brownish-black, with the base whitish hyaline, crossed by the black veins; the fringes of both wings black; the underside as above: head and the front and base of the thorax bright metallic blue-green; tegulae black, with a bright scarlet spot at the base; abdomen black, except the last four segments, which are metallic green in the middle; antennae, palpi, and legs black; the underside of the thorax and that of the two basal segments of the abdomen white, the head with two red spots beneath. Expanse 1½ inch.

Hab. BRITISH HONDURAS, Belize (*Sir Alfred Moloney, in mus. D.*).

I have much pleasure in naming this species after Sir Alfred Moloney, who has sent me many interesting insects from Belize.

CHARIDEA (I. p. 70).

Charidea submacula (I. p. 70).

To the localities given, add:—MEXICO, Teapa in Tabasco (*H. H. Smith*); GUATEMALA, Coban in Vera Paz (*Conradt*).

Charidea bella (I. p. 72).

Cyanopepla cruenta, Clem. Proc. Acad. Phil. 1860, p. 545¹.

To the localities given, add:—MEXICO, Coatepec (*Brooks*), Cuesta de Misantla (*M. Trujillo*); GUATEMALA, in the city (*Rodriguez*).

The type of *Cyanopepla cruenta* was found at Jalapa¹, whence I have already recorded the insect.

9. *Charidea ira*. (Tab. LXXII. fig. 15.)

Charidea ira, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 34 (July 1896)¹.

Male. Primaries deep black, edged at the base on the inner margin with a metallic blue streak; a wide bright carmine band extends from the base to the end of the cell and then to the anal angle; the inner margin of the wing black; secondaries black, with the apex bright carmine; the fringes of both wings black; the underside very much as above: head, thorax, and abdomen bright metallic-blue, the thorax clothed with black hairs and the abdomen banded with black; antennæ and palpi black. Expanse $1\frac{4}{10}$ inch.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*¹).

A very distinct species, not closely allied to any other known to me. It differs from all the allied forms in its very much narrower primaries.

PSEUDOCHARIDEA (to follow the genus *Charidea*, I. p. 72).

Pseudocharidea, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 35 (July 1896).

Allied to *Charidea*, from which it differs in the primaries being broader, the costal margin considerably arched about the middle, and the apex more rounded, and by having two bands on the underside close to the costal margin nearest the apex. The secondaries are very similar to those of *Charidea*, but are more rounded at the apex. The antennæ are rather long and slightly pectinated. In all other respects it is very similar to *Charidea*.

1. *Pseudocharidea eion*. (Tab. LXXII. fig. 26, ♂.)

Pseudocharidea eion, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 36 (July 1896)¹.

Male. Primaries deep black, streaked with metallic blue at the base and on the costal margin; a wide orange-yellow band crosses the wing about the middle, extending from the costal margin almost to the anal angle; the fringe black; secondaries black, shot with bright metallic blue from the base; the outer margin from the apex to the anal angle broadly bordered with orange-yellow; the fringe yellow; the underside very similar to the upperside, but with rather more blue on the wings: head black, with a white dot on each side, the collar streaked with blue; tegulæ black, edged with metallic blue; thorax and abdomen bright metallic blue, the abdomen with a black line on each side, the underside of the thorax white; antennæ black; legs slightly metallic blue-black. Expanse $1\frac{3}{4}$ inch.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*¹).

METRIOPHYLA (I. p. 73).

Metriophyla apicalis (I. p. 73).

To the localities given, add:—MEXICO, Atoyac in Vera Cruz (*H. H. Smith*); COSTA RICA, Santa Clara Valley 1200 feet (*Zurcher*).

The specimens from San Gerónimo, Guatemala, prove to be females of *M. alpha*, Druce; this locality must therefore be transferred to that species, which follows *M. apicalis* in the earlier part of this work.

3. *Metriophyla lelex*.

Heliura lelex, Druce, P. Z. S. 1890, p. 495 (♂ ♀)¹.

Hab. MEXICO, Morelos (*coll. Schaus*).—ECUADOR¹.

BIOL. CENTR.-AMER., Heter., Vol. II., February 1897.

This insect is allied to *M. apicalis* (Herr.-Schäff.), and *M. alpha*, Druce, the female being quite distinct from the females of either of those species.

HELIURA (I. p. 74).

Heliura leneus (I. p. 74).

To the localities given, add:—MEXICO, Paso de San Juan in Vera Cruz (*coll. Schaus*), Jalapa (*M. Trujillo*); COSTA RICA, Santa Clara Valley 1200 feet (*Zurcher*), Candelaria Mts. (*Underwood*).

Heliura lamia (I. p. 74).

To the localities given, add:—MEXICO, Coatepec (*coll. Schaus*); COSTA RICA, Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).

6. **Heliura pyrrhosoma.** (Tab. LXXII. fig. 19.)

Heliura pyrrhosoma, Butl. Journ. Linn. Soc., Zool. xii. p. 418 (1876)¹.

Hab. COSTA RICA, Candelaria Mts. (*Underwood*).—AMAZONS, Pará¹.

Two specimens from Costa Rica, almost identical with Butler's type in the National collection.

AUTOMOLIS (I. p. 75).

Ormetica, Clemens, Proc. Acad. Phil. 1860, p. 545.

3. **Automolis tæniata.**

Chelonia tæniata, Guér. Icon. Règne Anim., Ins. p. 514 (1829–38)¹.

Ormetica sphingiformis, Clem. Proc. Acad. Phil. 1860, p. 545².

Automolis imitata, Druce, anteà, i. p. 75, t. 8. fig. 27³.

To the localities given, add:—MEXICO, Coatepec (*Brooks*), Orizaba¹ (*Boucard, in mus. D.*); GUATEMALA, in the city (*Rodriguez*); COSTA RICA, Candelaria Mts. (*Underwood*).

The type of *Ormetica sphingiformis*, Clem., was from Jalapa, from whence I have already recorded this species.

5. **Automolis subulifera.**

Eucyrta (Automolis) subulifera, Feld. Reise der Novara, Lep. t. 102. fig. 3, Index, p. 4¹.

Hab. PANAMA¹.

I have not seen a specimen of this species.

6. **Automolis fulgurata.**

Automolis fulgurata, Butl. Journ. Linn. Soc., Zool. xii. p. 420¹; Illustr. Lep. Het. i. p. 46, t. 18. fig. 5².

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—BRAZIL, Espiritu Santo^{1 2}.

Dr. Butler's figure is a poor one; it does not show the neuration of the primaries.

7. Automolis chrysomelas.

Automolis chrysomelas, Walk. Cat. vii. p. 1636 (1856)¹; Schaus, P. Z. S. 1896, p. 636².

Eucyrtia (*Automolis*) *geometrica*, Feld. Reise der Novara, Lep. t. 102. fig. 6, Index, p. 4³.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—GUIANA³; BRAZIL¹.

8. Automolis nabdalsa. (Tab. LXXII. fig. 21, ♀.)

Automolis nabdalsa, Schaus, Ent. Amer. v. p. 90 (1889)¹.

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

Mr. Schaus states that this species bears a certain resemblance to *Eucyrtia prætexta*, Feld. The type, a female, is figured.

9. Automolis orbona. (Tab. LXXII. fig. 20, ♂.)

Automolis orbona, Schaus, Ent. Amer. v. p. 90 (1889)¹.

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

Described from two males, from one of which our figure is taken.

10. Automolis parma. (Tab. LXXII. fig. 17, ♂.)

Automolis parma, Schaus, Ent. Amer. v. p. 90 (1889)¹.

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

Mr. Schaus states that this species is very similar to *A. contraria*, Walk., and differs chiefly in the narrower outer margin of the primaries and in the position of the white apical spot. We figure the type, a male.

11. Automolis tegyra. (Tab. LXXII. fig. 24.)

Automolis tegyra, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 36 (1896)¹.

Primaries deep black, crossed from the costal to the inner margin by two wide primrose-yellow bands, the first near the base, the second nearest the apex; secondaries yellow, broadly bordered with black; the underside as above: head, antennæ, palpi, and thorax black, the collar, front of thorax, and tegulæ primrose-yellow; abdomen dark chrome-yellow, the two anal segments black, edged with metallic-blue; the legs black. Expanse $1\frac{1}{2}$ inch.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*¹).

12. Automolis salma. (Tab. LXXII. fig. 23, ♂.)

Automolis salma, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 36 (1896)¹.

Male. Primaries and secondaries pale primrose-yellow, the secondaries slightly darker along the inner margin; a small black spot on the inner margin of the primaries close to the anal angle: head, collar, thorax, and tegulæ primrose-yellow; abdomen chrome-yellow, with a large metallic blue spot on the last two segments; antennæ, palpi, and legs black. Expanse $1\frac{4}{10}$ inch.

Hab. PANAMA, Chiriqui (*in mus. Staudinger*¹).

ISCHNOGNATHA (I. p. 76).

3. Ischnognatha rutila.

Sphinx adscita rutilus, Cram. Pap. Exot. iv. p. 183, t. 382. fig. B¹.

Caryatis rutila, Hübn. Verz. bek. Schmett. p. 171².

Automolis rutilus, Walk. Cat. vii. p. 1637³.

Ischnognatha striata, Druce, Ann. & Mag. Nat. Hist. (6) xv. p. 45 (1895)⁴.

Hab. COSTA RICA⁴, Candelaria Mts. (*Underwood*).—GUIANA, Surinam^{1 3}.

CRATOPLASTIS (I. p. 76).

Cratoplastis diluta (I. p. 76).

To the localities given, add:—MEXICO, Paso de San Juan in Vera Cruz (*coll. Schaus*).

2. **Cratoplastis romula**. (Tab. LXXII. fig. 22, ♂.)

Cratoplastis romula, Druce, Ann. & Mag. Nat. Hist. (6) xv. p. 45 (1895)¹.

Male. Primaries greyish-black, the veins slightly paler near the base, a large oval semihyaline white spot at the end of the cell, the fringe dark grey; secondaries semihyaline white, broadly bordered with bluish-black at the apex and on the costal, outer, and inner margins: head and anus bright orange; antennæ, thorax, and abdomen greyish-black, the abdomen with a greyish-white line extending from the base almost to the anus; legs greyish-black. Expanse 1½ inch.

Hab. COSTA RICA¹, Candelaria Mts. (*Underwood*).

PIONIA (I. p. 76).

Pionia lycoides (I. p. 76).

To the localities given, add:—MEXICO, Cuesta de Misantla, Jalapa (*M. Trujillo*), Orizaba (*Boucard, in mus. D.*).

Pionia undulata (I. p. 77).

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

Pionia affinis (I. p. 77).

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

Pionia calopteridia (I. p. 77).

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

Pionia elegans (I. p. 78).

To the localities given, add:—MEXICO, Orizaba (*Flohr*), Atoyac in Vera Cruz (*H. H. Smith*); COSTA RICA (*mus. Staudinger*).

The specimen from Orizaba is very much larger than any of the others, and is also slightly brighter in colour.

9. **Pionia raca**. (Tab. LXXII. fig. 18.)

Pionia raca, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 37 (July 1896)¹.

Primaries pale yellowish-brown, without any marking; secondaries hyaline, the costal margin yellowish, the

apex and outer margin slightly edged with black: head, thorax, and tegulæ yellowish-brown; antennæ, palpi, abdomen, and legs black; underside of the thorax and the three basal segments of the abdomen beneath yellowish-brown. Expanse $1\frac{6}{10}$ inch.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*¹).

BELEMNIA (I. p. 78).

Belemnina jovis (I. p. 78).

To the localities given, add:—MEXICO, Cuesta de Misantla (*M. Trujillo*); BRITISH HONDURAS, Belize (*Sir Alfred Moloney, in mus. D.*).

We have received only one specimen from Mexico.

2. *Belemnina trötschi*. (Tab. LXXII. figg. 25, ♂; 27, ♀.)

Belemnina trötschi, Druce, Ann. & Mag. Nat. Hist. (6) xviii. p. 37 (July 1896)¹.

Male. Primaries deep black, bronze-green at the base, this colour extending outwards to about the middle of the cell, beyond which the wing is crossed from the costal almost to the outer margin above the apex by a wide deep orange-yellow band; secondaries deep black, the base shot with bright metallic blue; the fringes of both wings black; underside as above, but with both wings shot with bright metallic blue, the secondaries with two blue dots beyond the middle: head, antennæ, thorax, collar, and tegulæ deep black, the collar and tegulæ spotted with metallic blue, the thorax with two rather large metallic blue spots at the base; the abdomen dark bronze-green, on the underside bright carmine, the segments on each side edged with metallic blue; legs black.—*Female.* Very similar to the male, but with much more blue on the secondaries. Expanse, ♂ $2\frac{1}{10}$, ♀ $2\frac{1}{2}$ inches.

Hab. COSTA RICA¹; PANAMA, Volcan de Chiriqui (*Trötsch, in mus. Staudinger*¹).

I have named this very fine *Belemnina* after Herr E. Trötsch, who has sent specimens of so many new species to Dr. Staudinger from Chiriqui. The male is from the Volcan de Chiriqui and the female from Costa Rica.

SUTONOCREA (I. p. 79).

2. *Sutonocrea incerta*.

Malabus incertus, Walk. Cat. iii. p. 716 (1855)¹.

Cretonotus incertus, Herr.-Schäff. Samml. aussereur. Schmett. p. 72, fig. 503 (1856)².

Cretonotus lobifer, Herr.-Schäff. loc. cit. p. 84³.

Automolis reducta, Walk. Cat. vii. p. 1638 (1856)⁴.

Hab. PANAMA, Chiriqui (*ex Staudinger*).—AMAZONS⁴, Pará^{1 3}.

Our specimen from Chiriqui is not so highly coloured as Herrich-Schäffer's figure.

EMPUSA (I. p. 79).

Empusa vitrea (I. p. 79).

To the localities given, add:—MEXICO, Jalapa (*M. Trujillo*), Orizaba (*coll. Schaus*); GUATEMALA, in the city (*Rodriguez*).

GALETHALEA (I. p. 80).

Galethalea confinis (I. p. 80).

To the localities given, add:—MEXICO, Orizaba (*Flohr*; *Boucard, in mus. D.*); GUATEMALA, in the city (*Rodriguez*); COSTA RICA, Candelaria Mts. (*Underwood*); PANAMA, Volcan de Chiriqui 3000 to 4000 feet (*Champion*).

2. Galethalea pica.

Halesidota pica, Walk. Cat. iii. p. 743 (1855)¹.

Galethalea pica, Butl. Journ. Linn. Soc., Zool. xii. p. 424 (1876)².

Hab. COSTA RICA, Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—BRAZIL, Rio Janeiro^{1 2}.

EPANYCLES (I. p. 80).

Epanycles obscura (I. p. 80).

To the localities given, add:—MEXICO, Orizaba, Jalapa (*coll. Schaus*), Teapa in Tabasco (*H. H. Smith*); COSTA RICA, Santa Clara Valley 1200 feet (*Zurcher*).

Epanycles gigantea (I. p. 80).

To the localities given, add:—MEXICO, Jalapa (*M. Trujillo*), Atoyac in Vera Cruz (*Schumann*), Orizaba (*coll. Schaus*).

EPISCEPSIS (to follow the genus *Epanycles*, I. p. 80).

Episcepsis, Butler, Illustr. Lep. Het. i. p. 49 (1877).

1. Episcepsis venata.

Episcepsis venata, Butler, Illustr. Lep. Het. i. p. 49, t. 16. fig. 7 (♀) (1877)¹.

Heliura venata, Schaus, Amer. Lep. part 1, p. 7, t. 1. fig. 20 (♂) (1892)².

Heliura alia, Schaus, Ent. Amer. v. p. 90 (1889)³.

Hab. MEXICO, Jalapa (*M. Trujillo*), Paso de San Juan and Orizaba in Vera Cruz (*Schaus*^{2 3}), Teapa in Tabasco (*H. H. Smith*).—AMAZONS, Rio Jutahi¹.

Our Mexican specimens are almost identical with the type in the National collection.

EUAGRA (I. p. 81).

2. Euagra intercisa.

Euagra intercisa, Butl. Cist. Ent. ii. p. 111 (1876)¹.

Hab. PANAMA, Chiriqui (*mus. Staudinger*).—VENEZUELA¹; BOLIVIA.

Dr. Staudinger's specimen from Chiriqui does not differ from others from Bolivia in my own collection.

MYDROMERA (I. p. 81).

Mydromera isthmia (I. p. 81).

Evagra notochloris, Boisd. Lép. Guat. p. 87 (1870) ¹.

Boisduval's specimens were from Honduras, whence I have already recorded the species.

METASTATIA (I. p. 81).

Metastatia saphira (I. p. 81).

To the localities given, add:—MEXICO, Coatepec (*coll. Schaus*), Cuesta de Misantla (*M. Trujillo*), Teapa in Tabasco (*H. H. Smith*).

The Mexican specimens are the largest I have seen.

2. Metastatia ossa. (Tab. LXXIII. fig. 1.)

Metastatia ossa, Druce, P. Z. S. 1893, p. 285 ¹.

Hab. PANAMA, Volcan de Chiriqui (*Trötsch, in mus. Staudinger*).—COLOMBIA ¹; GUIANA.

A beautiful species, allied to *M. pampa*, Druce. We figure Dr. Staudinger's specimen from our region.

PHILOROS (I. p. 81).

Philoros rubriceps (I. p. 82).

To the localities given, add:—MEXICO, Jalapa (*M. Trujillo*), Orizaba (*H. J. Elwes*), Atoyac in Vera Cruz (*H. H. Smith*), Coatepec (*Brooks*); COSTA RICA, Candelaria Mts. (*Underwood*).

This species is common in Mexico. The spot on the head varies from red to yellow.

CTENUCHA (I. p. 82).

Ctenucha affinis (I. p. 83). (Tab. LXXIII. fig. 3, ♂.)

We now figure the male of this species.

7. Ctenucha unicolor.

Scepsis (?) *unicolor*, Feld. & Rogenh. Reise der Novara, Lep. t. 139. fig. 11 ¹.

Hab. MEXICO (*Bilimek* ¹).

8. Ctenucha imitata.

Ctenucha imitata, H. Edwards, Ent. Amer. iii. p. 91 (1887) ¹.

Hab. MEXICO, State of Vera Cruz (*Schaus* ¹).

9. Ctenucha scepsiformis.

Ctenucha scepsiformis, H. Edwards, Ent. Amer. iii. p. 91 (1887) ¹.

Hab. MEXICO, State of Vera Cruz (*Schaus* ¹).

10. **Ctenucha azteca.** (Tab. LXXIII. fig. 2.)

Ctenucha azteca, Schaus, P. Z. S. 1892, p. 278¹.

Hab. MEXICO, Durango city (*Becker*), Mexico city (*Schaus*¹).

We figure the type.

11. **Ctenucha (?) dolens**, sp. n. (Tab. LXXIII. fig. 4.)

Primaries uniformly dull brownish-black; secondaries rather darker, with a greenish shade; the fringe of both wings black; the underside as above: head, antennæ, thorax, and legs black, the tegulæ and the front of the thorax greenish-black. Expanse $1\frac{1}{4}$ inch.

Hab. MEXICO (*mus. Staudinger*).

One specimen, not labelled with any exact locality in Mexico.

12. **Ctenucha sanguinaria.**

Ctenucha sanguinaria, Streck. Rep. Chief of Engineers, 1878, App. SS. p. 1858, t. 2. fig. 2¹.

Hab. NORTH AMERICA, Rio Blanco¹.—MEXICO, Las Vigas (*coll. Schaus*).

SCEPSIS (to follow the genus *Ctenucha*, I. p. 83).

Ctenucha, group 3, *Scepsis*, Walker, Cat. ii. p. 285 (1854).

Scepsis, Packard, Proc. Essex Inst. iv. p. 40 (1864); Stretch, Zygæn. & Bomb. N. Amer. p. 19 (1872).

1. **Scepsis salatis.** (Tab. LXXIII. fig. 5.)

Ctenucha salatis, Boisd. Lép. Guat. p. 83 (1870)¹.

Hab. MEXICO, Coatepec (*Brooks*); HONDURAS¹.

We are indebted to Mons. C. Oberthür for kindly lending us Boisduval's type of this and of the following species. Our figure of *S. salatis* is taken from a Mexican example.

2. **Scepsis pollinia.** (Tab. LXXIII. fig. 8.)

Ctenucha pollinia, Boisd. Lép. Guat. p. 83 (1870)¹.

Hab. MEXICO, Durango city (*Becker*); HONDURAS¹.

One specimen from Durango city, not differing from the type.

EPIDESMA (to follow the genus *Leucopsumis*, I. p. 83).

Epidesma, Hübner, Verz. bek. Schmett. p. 176 (1816).

1. **Epidesma ursula.**

Phalæna Noctua ursula, Cram. Pap. Exot. iv. p. 107, t. 345. fig. E (1781)¹.

Hab. COSTA RICA (*Gabb, in mus. D.*).—GUIANA, Surinam¹.

One specimen from Costa Rica, not labelled with any exact locality.



Druce, Herbert. 1897. "Insecta Lepidoptera Rhopalocera Supplement."
Biologia Centrali-Americana :zoology, botany and archaeology 2, 337–360.

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