

1. **Boreophila cereralis.** (Tab. LX. fig. 25.)

Eurycreon (*Spilodes*) *cereralis*, Zell. Verh. zool.-bot. Ges. Wien, xxii. p. 517¹.

Hab. NORTH AMERICA, Colorado, Texas¹.—MEXICO, near Durango city (*Becker*), Orizaba (*H. J. Elwes*).

Three specimens, agreeing with others from Colorado in my own collection.

OPSIBOTYS.

Opsibotys, Warren, Ann. & Mag. Nat. Hist. (6) vi. p. 474 (1890).

1. **Opsibotys thalesalis.**

Botys thalesalis, Walk. Cat. xviii. p. 599¹.

Hab. HONDURAS (*Dyson*¹).

The type in the National Collection is all I have seen of this species.

HYALORISTA.

Hyalorista, Warren, Ann. & Mag. Nat. Hist. (6) ix. p. 299 (1892).

This genus is very closely allied to *Syllythria*, Hübn., if, indeed, it is distinct therefrom. Mr. Warren gives *Rhodaria tæniolalis*, Guen., a Tropical-American insect, as the type.

1. **Hyalorista tæniolalis.**

Rhodaria tæniolalis, Guen. Sp. gén. des Lép. viii. p. 172¹; Walk. Cat. xvii. p. 317².

Botys tæniolalis, Leder. Wien. ent. Monats. vii. p. 367³.

Hab. MEXICO, Orizaba (*F. D. G.*), Atoyac in Vera Cruz, Teapa in Tabasco (*H. H. Smith*); HONDURAS, Ruatan I. (*Gaumer*); COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—GUIANA, Cayenne^{1 2 3}; AMAZONS; BRAZIL^{1 2 3}; ANTILLES, Dominica.

A common and very widely distributed species in Tropical America. Amongst the long series of specimens before me, those from Mexico and Rio Janeiro are more brightly coloured than any from the intermediate localities.

2. **Hyalorista syphaxalis.**

Botys syphaxalis, Walk. Cat. xviii. p. 604¹.

Botys syphacalis, Leder. Wien. ent. Monats. vii. p. 367².

Rhodaria directalis, Walk. Cat. xxxiv. p. 1283³.

Hab. MEXICO, Jalapa (*M. Trujillo*); HONDURAS (*Dyson*¹); PANAMA, Obispo (*Salvin, in mus. D.*).—VENEZUELA²; BRAZIL³, Rio Janeiro.

The few Central-American specimens received vary considerably in colour and size.

3. *Hyalorista limasalis*.

Scopula (?) *limasalis*, Walk. Cat. xxxiv. p. 1464¹.

Hab. HONDURAS, Limas¹.

The two specimens of this species in the National Museum are in very poor condition.

4. *Hyalorista deidamialis*, sp. n. (Tab. LX. fig. 27.)

Male. Primaries brownish-yellow, with the outer margin from the apex to the anal angle broadly bordered with dark brown, a fine waved brown line crossing the wing beyond the middle, and a second line close to the base, a small brown spot in the cell; secondaries semihyaline-yellowish-white, broadly bordered from the apex to the anal angle with dark brown: head, antennæ, thorax, and abdomen brown.—*Female.* Very similar to the male. Expanse $\frac{3}{4}$ inch.

Hab. MEXICO, Orizaba (*F. D. G.*), Jalapa (*M. Trujillo*); COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*); PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

Several specimens. One from the Volcan de Chiriqui is figured.

ISOCENTRIS.

Isocentris, Meyrick, Trans. Ent. Soc. Lond. 1887, p. 232; 1890, p. 448.

1. *Isocentris xanthialis*.

Botys xanthialis, Guen. Sp. gén. des Léop. viii. p. 343¹; Walk. Cat. xviii. p. 569²; Leder. Wien. ent. Monats. vii. p. 371³.

Hab. MEXICO, Paso de San Juan in Vera Cruz (*Schaus*); GUATEMALA, in the city (*Rodriguez, in mus. D.*); COSTA RICA, Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*; *Arcé, in mus. D.*).—COLOMBIA; ECUADOR; CUBA^{1 2 3}.

I have seen five specimens of this species from our region; those from Ecuador in my own collection are darker in colour. Dr. Staudinger's example is labelled with the MS. name of *Botys incalis*, Guen.

CONDYLORRHIZA.

Condylorrhiza, Lederer, Wien. ent. Monats. vii. p. 393 (1863).

The type of this genus is *Botys illutalis*, Guen. (= *Botyodes vestigialis*, Guen.), a widely distributed Tropical-American insect.

1. *Condylorrhiza vestigialis*.

Botyodes vestigialis, Guen. Sp. gén. des Léop. viii. p. 321¹; Walk. Cat. xviii. p. 551²; Leder. Wien. ent. Monats. vii. p. 394³.

Botys illutalis, Guen. Sp. gén. des Léop. viii. p. 333⁴; Walk. Cat. xviii. p. 591⁵.

Condylorrhiza illutalis, Leder. Wien. ent. Monats. vii. p. 393, t. 13. fig. 7⁶.

Botys tritealis, Walk. Cat. xviii. p. 597⁷.

Botys mestoralis, Walker, loc. cit. p. 729⁸.

Hab. MEXICO, Jalapa (*M. Trujillo*); COSTA RICA, Volcan de Irazu 6000 to 7000 feet

(*Rogers*), Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—West coast of America (*Kellett & Wood*^{5 7}); COLOMBIA^{1 2 3}; AMAZONS, Pará⁵, Villa Nova⁵; BRAZIL^{4 6}.

A common species at Jalapa. The locality for *D. mestoralis* was unknown to Walker⁸.

2. *Condylorrhiza sublutalis*, sp. n. (Tab. LX. fig. 26, ♂.)

Male. Primaries and secondaries semihyaline pale greyish-brown, both wings crossed by two indistinct zigzag darker lines—the first before the end of the cell, the second beyond it,—the marginal line also slightly darker, the fringe silvery-brown: head, antennæ, thorax, and abdomen yellowish-white, the legs white.
—*Female*. Rather darker than the male, and with the lines more distinct. Expanse, ♂ 1½, ♀ 1¼ inch.

Hab. MEXICO, Presidio (*Forrer*), Cordova (*Rümeli*), Coatepec (*Brooks*), Jalapa (*W. Schaus, M. Trujillo*), Atoyac in Vera Cruz, Teapa in Tabasco (*H. H. Smith*), Valladolid in Yucatan (*Gaumer*); GUATEMALA, Coban (*Conradt*), San Gerónimo, Cerro Zunil, San Isidro (*Champion*); COSTA RICA, Caché (*Rogers*), Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Arcé, in mus. D.*).—VENEZUELA; ECUADOR.

A common and widely distributed species in our region. Mr. Schaus informs me that he also has specimens of it from Rio Janeiro. We figure a male from Teapa.

EPICORSIA.

Epicorsia, Hübner, Verz. bek. Schmett. p. 355 (1816).

1. *Epicorsia mellinalis*.

Epicorsia mellinalis, Hübn. Zutr. Samml. exot. Schmett. i. p. 24, figg. 137, 138¹; Verz. bek. Schmett. p. 356².

Lonchodes mellinalis, Guen. Sp. gén. des Lép. viii. p. 355³; Walk. Cat. xviii. p. 739⁴.

Botys mellinalis, Leder. Wien. ent. Monats. vii. p. 371⁵.

Hab. MEXICO, Mexico city (*Höge*), Cordova (*Rümeli*), Omealca, Orizaba (*M. Trujillo; Boucard, in mus. D.*), Jalapa (*Schaus*), Atoyac in Vera Cruz (*H. H. Smith*), Temax in North Yucatan (*Gaumer*); GUATEMALA, in the city (*Rodriguez, in mus. D.*); PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—BRAZIL^{1 3 4 5}.

A common and widely distributed Tropical-American species, varying greatly in size and in the distinctness of the lines crossing the wings. The single example from Chiriqui in Dr. Staudinger's collection is about half the usual size.

2. *Epicorsia œdipodalis*.

Botys œdipodalis, Guen. Sp. gén. des Lép. viii. p. 336¹; Walk. Cat. xviii. p. 569²; Leder. Wien. ent. Monats. vii. p. 371³; Snell. Tijdschr. voor Ent. xviii. p. 198⁴.

Hab. GUATEMALA, Cubilguitz and Teleman in Vera Paz, Pantaleon (*Champion*); HONDURAS (*Dyson*²); COSTA RICA, Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*), Volcan de Chiriqui 3000 to 4000 feet (*Champion*).—

COLOMBIA, R. Magdalena⁴; VENEZUELA²; ECUADOR; BRAZIL; ANTILLES, Jamaica², Haiti^{1 2 3}, San Domingo².

This species may be at once distinguished from *E. mellinalis* by the absence of the submarginal line on the secondaries.

3. *Epicorsia butyrosa*.

Botys butyrosa, Butl. P. Z. S. 1878, p. 493¹.

Hab. MEXICO, Cuernavaca in Morelos (*H. H. Smith*); GUATEMALA, in the city (*Rodriguez*), San Gerónimo (*Champion*); COSTA RICA, Candelaria Mts. (*Underwood*), Volcan de Irazu 6000 to 7000 feet (*Rogers*); PANAMA, Volcan de Chiriqui 3000 to 4000 feet (*Champion*).—ANTILLES, Jamaica¹.

This insect is allied to *E. ædipodalis*, but it has whiter wings.

4. *Epicorsia* (?) *prumnides*, sp. n. (Tab. LX. fig. 28, ♀.)

Female. Primaries pale yellowish-brown, shaded with dark brown, and crossed from the costal to the inner margin by four narrow waved dark brown lines—the first close to the base, the second just beyond it, the third at the end of the cell, and the fourth beyond a round brown spot in the cell,—the marginal line and fringe dark brown; secondaries pale yellow, crossed by two dark brown waved lines, the outer margin and anal angle clouded with dark brown, the fringe brown; the underside paler than above: head and thorax yellowish-brown, the abdomen yellow, the legs yellowish-white. Expanse $1\frac{3}{10}$ inch.

Hab. MEXICO, Jalapa and Paso de San Juan in Vera Cruz (*Schaus*), Dos Arroyos in Guerrero (*H. H. Smith*).

SCIORISTA.

Sciorista, Warren, Ann. & Mag. Nat. Hist. (6) vi. p. 475 (1890).

1. *Sciorista finitalis*.

Botys finitalis, Guen. Sp. gén. des Léop. viii. p. 335¹; Walk. Cat. xviii. p. 592²; Leder. Wien. ent. Monats. vii. p. 370, t. 8. fig. 12³.

Hab. MEXICO, Atoyac in Vera Cruz (*H. H. Smith*), Omealca and Orizaba (*M. Trujillo*).—BRAZIL^{1 2 3}, Rio Janeiro.

Mexican specimens are slightly paler than those from Rio Janeiro in my own collection.

2. *Sciorista oriolalis*.

Samea oriolalis, Guen. Sp. gén. des Léop. viii. p. 196¹; Walk. Cat. xvii. p. 355².

Hab. MEXICO, Jalapa (*M. Trujillo*); GUATEMALA, El Tumbador (*Champion*); COSTA RICA, Caché, Rio Sucio, Volcan de Irazu 6000 to 7000 feet (*Rogers*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—GUIANA, Cayenne^{1 2}; ECUADOR.

3. *Sciorista togalis*.

Botys togalis, Leder. Wien. ent. Monats. vii. pp. 371, 463, t. 8. fig. 18¹.

Botys villicalis, Möschl. Abhandl. Senck. naturf. Ges. xiv. p. 76 (1886)².

Hab. MEXICO, Milpas in Durango 5900 feet (*Forrer*), Jalapa (*M. Trujillo*); GUATEMALA, Zapote (*Champion*); PANAMA, Chiriqui (*Trötsch*, in *mus. Staudinger*), Volcan de Chiriqui 2000 to 3000 feet (*Champion*).—AMAZONS; ANTILLES, Cuba¹, Jamaica².

This species is closely allied to *S. oriolalis*, Guen. It has the primaries rather narrower, more pointed at the apex, and paler at the base.

4. *Sciorista campalis*.

Botys campalis, Guen. Sp. gén. des Lép. viii. p. 344¹; Walk. Cat. xviii. p. 570².

Botys cubanalis, Guen. loc. cit. p. 345³.

Botys memmialis, Walk. Cat. xviii. p. 731⁴.

Hab. MEXICO, Presidio (*Forrer*), Tierra Colorada in Guerrero, Teapa in Tabasco (*H. H. Smith*), Temax in North Yucatan (*Gaumer*); GUATEMALA, Panima, San Juan and San Gerónimo in Vera Paz, San Isidro, Cerro Zunil, El Reposo (*Champion*); SALVADOR (*mus. Staudinger*); COSTA RICA, Santa Clara Valley (*Zürcher*); PANAMA, Chiriqui (*Ribbe*), Volcan de Chiriqui 2000 to 3000 feet (*Champion*), Panama city (*J. J. Walker*).—ANTILLES, Cuba³, Jamaica², Haiti¹, San Domingo², Dominica.

A common and widely distributed species in our region. It varies considerably in colour and in the extent of the dark marginal border: in some specimens the border is quite dark and distinct, in others it is very pale, and in several it is entirely wanting. As a rule, the Mexican specimens are paler than those from further south. The locality for *B. memmialis* was unknown to Walker⁴.

SAMEODES.

Sameodes, Snellen, Tijdschr. voor Ent. xxiii. p. 217 (1880).

1. *Sameodes nicæusalis*.

Lepyrodes (?) *nicæusalis*, Walk. Cat. xvii. p. 464¹.

Samea discessalis, Walk. Cat. xxxiv. p. 1302².

Hab. HONDURAS (*Dyson*¹), Limas².

The types of this species are in the National Collection. Mr. Warren has placed it in Snellen's genus, which was founded upon a species from Celebes.

APHYTOCEROS.

Aphytoceros, Meyrick, Trans. Ent. Soc. Lond. 1884, p. 320.

1. *Aphytoceros lybialis*. (Tab. LX. fig. 29.)

Botys lybialis, Walk. Cat. xviii. p. 624¹.

Botys amatalis, Walk. loc. cit. p. 625³.

Botys capitalis, Grote, Bull. U.S. Geol. & Geogr. Surv. vi. p. 272³.

Hab. NORTH AMERICA, Florida³.—MEXICO, Durango (*Forrer*), Orizaba (*Boucard*, in *mus. D.*), Jalapa (*Schaus*, *M. Trujillo*), Coatepec (*Brooks*), Cordova (*Rümeli*), Atoyac in Vera Cruz, Teapa in Tabasco (*H. H. Smith*); GUATEMALA, San Gerónimo, Panima, and Cahabon in Vera Paz, Coatepeque, Las Mercedes, San Isidro, Dueñas (*Champion*); HONDURAS (*Dyson*¹); COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*), Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Ribbe*, in *mus. Staudinger*), Volcan de Chiriqui 2000 to 3000 feet (*Champion*).—AMAZONS, Pará².

A common, widely distributed, and very variable species in our region. A specimen from Jalapa is figured.

2. *Aphytoceros senahuensis*, sp. n. (Tab. LXI. fig. 1, ♀.)

Female. Primaries and secondaries cream-colour, the veins and fine lines crossing the wings from the costal to the inner margin all reddish-brown, the marginal line dark brown, the fringe cream-colour; the underside whitish, with the markings very faint: head and thorax reddish-brown, the abdomen yellowish-white, the legs white. Expanse $1\frac{3}{4}$ inch.

Hab. GUATEMALA, Senahu in Vera Paz (*Champion*).

One specimen.

3. *Aphytoceros ostrealis*.

Botys ostrealis, Guen. Sp. gén. des Lép. viii. p. 327¹; Walk. Cat. xviii. p. 572²; Leder. Wien. ent. Monats. vii. p. 371³.

Hab. PANAMA, Chiriqui (*Trötsch*, in *mus. Staudinger*).—VENEZUELA²; BRAZIL^{1 3}, S. Paulo, Rio Janeiro; ANTILLES³, Jamaica², San Domingo².

A single specimen from Chiriqui in Dr. Staudinger's collection is no doubt referable to this somewhat variable species. It differs from South-American examples in having the reddish-brown bands narrower.

AZOCHIS.

Azochis, Walker, Cat. xviii. p. 542 (1859).

1. *Azochis gripusalis*.

Azochis gripusalis, Walk. Cat. xviii. p. 542¹.

Botys saniosalis, Leder. Wien. ent. Monats. vii. pp. 371, 466, t. 9. fig. 11².

Hab. MEXICO, Presidio (*Forrer*), Amula in Guerrero 6000 feet (*H. H. Smith*), Jalapa (*Schaus*, *M. Trujillo*); GUATEMALA, Las Mercedes 3000 feet (*Champion*); COSTA RICA, Santa Clara Valley (*Zürcher*); PANAMA, Volcan de Chiriqui 3000 to 4000 feet (*Champion*).—ECUADOR; AMAZONS, Ega¹; BRAZIL².

Varies considerably in colour, Central-American specimens being paler than those from South America.

2. *Azochis amplalis*.

Botys amplalis, Guen. Sp. gén. des Lép. viii. p. 330, Delt. et Pyral. t. 10. fig. 4¹; Walk. Cat. xviii. p. 590²; Leder. Wien. ent. Monats. vii. p. 371³.

Hab. PANAMA, Volcan de Chiriqui 3000 feet (*Champion*).—VENEZUELA²; GUIANA, Surinam^{1 2 3}, Cayenne^{1 2 3}.

One specimen from Chiriqui, a female, very similar to Guenée's figure.

TERASTIA.

Terastia, Guenée, Sp. gén. des Lép. viii. p. 211 (1854); Walker, Cat. xvii. p. 379; Lederer, Wien. ent. Monats. vii. p. 415.

The type of this genus is *T. meticulosalis*, Guen., from Haiti, an insect which is fairly common in our region.

1. *Terastia meticulosalis*. (Tab. LXI. fig. 2.)

Terastia meticulosalis, Guen. Sp. gén. des Lép. viii. p. 212¹; Walk. Cat. xvii. p. 379²; Leder. Wien. ent. Monats. vii. p. 416³.

Hab. MEXICO, Mexico city (*Höge*), Jalapa (*Schaus*, *M. Trujillo*), Atoyac in Vera Cruz (*H. H. Smith*), Coatepec, Rinconada (*Schaus*), Orizaba (*Boucard*, in *mus. D.*); GUATEMALA, in the city (*Rodriguez*); HONDURAS (*Dyson*²); COSTA RICA, Candelaria Mts. (*Underwood*).—ANTILLES, Haiti^{1 3}, San Domingo².

This species appears to be confined to Central America and the Antilles. A specimen from Mexico city is figured.

MEGASTES.

Megastes, Guenée, Sp. gén. des Lép. viii. p. 375 (1854); Walker, Cat. xviii. p. 762; Lederer, Wien. ent. Monats. vii. p. 411.

Guenée described this genus upon a single species from Brazil, which ranges northwards to Costa Rica. A very fine new form is now added from our region.

1. *Megastes grandalis*.

Megastes grandalis, Guen. Sp. gén. des Lép. viii. p. 376, Delt. et Pyral. t. 5. fig. 6¹; Walk. Cat. xviii. p. 762²; Leder. Wien. ent. Monats. vii. p. 412³.

Hab. COSTA RICA, Candelaria Mts. (*Underwood*); PANAMA, Taboga I. (*J. J. Walker*).—VENEZUELA²; BRAZIL^{1 2 3}.

Two specimens, very similar to Guenée's figure.

2. *Megastes praxiteles*, sp. n. (Tab. LXI. figg. 3, ♂; 4, ♀.)

Male. Primaries and secondaries hyaline-white; the primaries with the base dark greyish-brown, a small spot in the cell and one just below it pale yellowish, edged with dark brown, the middle part of the costal margin chalk-white, a large almost square mark at the end of the cell, from which two dark greyish-brown lines cross the wing to the inner margin, a double submarginal dark brown waved line

extending from near the apex to the anal angle, the marginal line dark brown, the fringe pure white; the secondaries crossed about the middle by a dark greyish-brown line, which is widest on the inner margin, above which a fine dark brown line extends partly across the wing to the base, two fine sub-marginal waved brown lines extending from near the apex to the anal angle, the marginal line dark brown, the fringe white; the underside of both wings white, with all the markings very faint: head, collar, front of thorax, and legs white; the antennæ dark brown; the abdomen with the base and part of the upperside dark greyish-brown, the three anal segments and the underside white.—*Female*. Very similar to the male, but considerably larger and with the abdomen more marked with white. Expanse ♂ 2, ♀ 2½ inches.

Hab. MEXICO, Jalapa (*M. Trujillo*), Coatepec (*Schaus*), Cuernavaca in Morelos, La Venta in Guerrero (*H. H. Smith*); GUATEMALA, Las Mercedes (*Champion*).

This species is apparently rare, though widely distributed in Mexico. Mr. Schaus captured only one specimen, which is very much paler than any of the others before me. *M. praxiteles* is allied to *M. grandalis*, Guen., but very different in the colour and markings. We figure a male from Cuernavaca, and a female from La Venta.

PALIGA.

Paliga, Moore, Lep. Ceylon, iii. p. 350 (1886).

1. *Paliga inclusalis*.

Scopula (?) *inclusalis*, Walk. Cat. xxxiv. p. 1464¹.

Hab. MEXICO, Teapa in Tabasco (*H. H. Smith*); HONDURAS, Limas¹.

One specimen from Teapa, very similar to Walker's type in the National Museum.

EURYCREON.

Eurycreon, Snellen, Tijdschr. voor Ent. xviii. p. 209 (1875).

1. *Eurycreon fuscocilialis*.

Eurycreon fuscocilialis, Snell. Tijdschr. voor Ent. xviii. p. 210, t. 13. fig. 1¹.

Hab. BRITISH HONDURAS, Corosal (*Roe, in mus. D.*); COSTA RICA, Candelaria Mts. (*Underwood*); PANAMA, Volcan de Chiriqui (*in mus. Staudinger*¹).

Of this species we have a fairly good series, showing a considerable amount of variation in colour and in the distinctness of the markings. One of the specimens in Dr. Staudinger's collection is very dark.

NOMOPHILA.

Nomophila, Hübner, Verz. bek. Schmett. p. 368 (1816); Lederer, Wien. ent. Monats. vii. p. 379 (1863).

Stenopteryx, Guenée, Sp. gén. des Léop. viii. p. 413 (1854); Walker, Cat. xix. p. 811.

This genus contains only one species, which is common all over the globe.

1. *Nomophila noctuella*.

Tinea noctuella, Wien. Verz. p. 136¹.

Nomophila noctuella, Grote, Check-list of N. Amer. Moths, p. 53 (1882)².

Pyrallis hybridalis, Hübn. Europ. Schmett. vi. Pyral. t. 17. fig. 114³.

Nomophila hybridalis, Hübn. Verz. bek. Schmett. p. 368⁴; Leder. Wien. ent. Monats. vii. p. 379⁵.

Botys hybridalis, Treitschke, Schmett. Europ. vii. p. 109⁶; Duponch. Hist. Nat. Lép. Fr., Noct. v. 2, p. 153, t. 220. fig. 3⁷.

Stenopteryx hybridalis, Herr.-Schäff. Europ. Schmett. iv. p. 42⁸; Guen, Sp. gén. des Lép. viii. p. 414⁹; Walk. Cat. xix. p. 812¹⁰.

Hab. NORTH AMERICA², California, Colorado, Florida, Arizona.—MEXICO, Durango city (*Becker*), Mexico city, Patzcuaro (*F. D. G.*), Jalapa (*M. Trujillo*); GUATEMALA, Santa Cruz, Cerro Zunil, Dueñas (*Champion*); COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*).—SOUTH AMERICA to Brazil⁹ and Chili¹⁰; EUROPE^{1 3-10}; ASIA⁵; AFRICA⁵; AUSTRALIA.

This cosmopolitan insect does not seem to have been previously recorded from Central America. It is not necessary to give a full list of localities here.

SPARAGMIA.

Sparagmia, Guenée, Sp. gén. des Lép. viii. p. 216 (1854); Walker, Cat. xvii. p. 384; Lederer, Wien. ent. Monats. vii. p. 414.

1. *Sparagmia gigantalis*.

Sparagmia gigantalis, Guen. Sp. gén. des Lép. viii. p. 216, Delt. et Pyral. t. 6. fig. 10¹; Walk. Cat. xvii. p. 385²; Leder. Wien. ent. Monats. vii. p. 414³.

Hab. MEXICO, Coatepec (*Schaus*); COSTA RICA, Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Arcé, in mus. D.; Ribbe, in mus. Staudinger*), Bugaba (*Champion*).—COLOMBIA; ECUADOR; AMAZONS, Villa Nova²; BRAZIL^{1 3}; PARAGUAY; ANTILLES, San Domingo².

A common insect in Tropical South America.

ATHEROPODA.

Megaphysa, Guenée, Sp. gén. des Lép. viii. p. 212 (1854) (part.).

Atheropoda, Lederer, Wien. ent. Monats. vii. p. 413 (1863).

1. *Atheropoda majoralis*.

Megaphysa majoralis, Guén. Sp. gén. des Lép. viii. p. 215¹; Walk. Cat. xvii. p. 382².

Atheropoda majoralis, Leder. Wien. ent. Monats. vii. p. 413, t. 3. fig. 9³.

Megaphysa sibilalis, Guen. Sp. gén. des Lép. viii. p. 215⁴; Walk. Cat. xvii. p. 382⁵.

Atheropoda sibilalis, Leder. Wien. ent. Monats. vii. p. 413⁶.

Hab. MEXICO, Rinconada in Vera Cruz (*Schaus*); GUATEMALA, San Gerónimo
BIOL. CENTR.-AMER., Heter., Vol. II., July 1895. 2 ff

(*Champion*), Coban (*Conradt*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger; Arcé, in mus. D.*).—ECUADOR; BRAZIL¹⁻⁶.

Five specimens, agreeing with a large series from Ecuador in my own collection.

2. *Atheropoda remusalis*. (Tab. LXI. fig. 5.)

Botys remusalis, Walk. Cat. xviii. p. 597¹.

Hab. COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*).—COLOMBIA, Bogota¹.

We have received a single specimen of this species from Costa Rica. I have examined the type in the Oxford Museum.

3. *Atheropoda corylalis*.

Megaphysa corylalis, Guen. Sp. gén. des Lép. viii. p. 214¹; Walk. Cat. p. 381².

Atheropoda corylalis, Leder. Wien. ent. Monats. vii. p. 413³.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—COLOMBIA^{1 2 3}.

One specimen. It is very like *A. majoralis*, but has the lines on the primaries in a different position, that on the secondaries extending straight across the wing but not reaching the outer margin.

4. *Atheropoda pontealis*, sp. n. (Tab. LXI. fig. 6.)

Primaries and secondaries pale yellow; the primaries crossed from the costal to the inner margin by two narrow brown lines—the first straight, near the base, the second curved, beyond the middle,—the wing on the outer side of the second line shaded with pink, a small spot in the cell and one at the end of it, the veins near the outer margin, and the fringe brown; the secondaries crossed about the middle by a dark brown line, the base semihyaline; the underside very much as above: head, thorax, abdomen, and legs dark yellow, the antennæ brown.—*Female*. Very similar to the male. Expanse 2 inches.

Hab. MEXICO, Rinconada in Vera Cruz (*Schaus*); GUATEMALA, Panajachel 5000 feet (*Champion*); COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*); PANAMA, Chiriqui (*Arcé, in mus. D.*).—ECUADOR.

Of this species I have seen four specimens only from our region, but from Ecuador I have a very large series, varying slightly in colour. *A. pontealis* bears a great resemblance to *Sparagmia gigantalis*, Guen., from which it may be at once distinguished by the very different shape of the primaries. A specimen from Panajachel is figured.

POLYGRAMMODES.

Polygrammodes, Guenée, Sp. gén. des Lép. viii. p. 318 (1854); Walker, Cat. xviii. p. 547.

1. *Polygrammodes sanguinalis*, sp. n. (Tab. LXI. fig. 7.)

Primaries and secondaries white, crossed from the costal to the inner margin by a series of reddish-brown zigzag lines, which become broader near the base, the fringe white; the underside white, with a few reddish-brown spots on both wings: head white, with a small red spot on each side; the palpi black above, white beneath; the antennæ pale brown; the collar white; the tegulæ white at the base, pale

reddish-brown at the tip; the thorax pale reddish-brown; the abdomen pale brown above, with a row of red spots on each side, white beneath; the legs white. Expanse $1\frac{6}{10}$ inch.

Hab. MEXICO, Rinconada in Vera Cruz (*Schaus*); GUATEMALA, in the city (*Rodriguez*); COSTA RICA, Caché (*Van Patten*), Volcan de Irazu 6000 to 7000 feet (*Rogers*); PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).

Six specimens, some of which are more heavily marked than others. The insect is allied to *P. runicalis*, Guen., from Brazil, the type of the genus. We figure an example from Guatemala city.

PACHYNOA.

Pachynoa, Lederer, Wien. ent. Monats. vii. p. 391 (1863).

1. *Pachynoa hercules*.

Botys hercules, Feld. & Rogenh. Reise der Novara, Lep. t. 135. fig. 49¹.

Hab. COSTA RICA, Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Arcé, in mus. D.*; *Ribbe*; *Trötsch, in mus. Staudinger*), Bugaba, Volcan de Chiriqui (*Champion*).—COLOMBIA, Bogota¹.

Varies in colour from reddish-yellow to quite pale yellow.

2. *Pachynoa ponderalis*.

Botys ponderalis, Guen. Sp. gén. des Lép. viii. p. 328, Delt. et Pyral. t. 8. fig. 10¹; Walk. Cat. xviii. p. 561²; Leder. Wien. ent. Monats. vii. p. 371³.

Hab. MEXICO, Orizaba (*Boucard, in mus. D.*), Jalapa, Cuesta de Misantla (*M. Trujillo*); GUATEMALA (*Conradt, in mus. Staudinger*), Cerro Zunil, Las Mercedes, Volcan de Atitlan, San Gerónimo (*Champion*); HONDURAS (*Wittkugel, in mus. Staudinger*).—BRAZIL^{1 3}.

Varies in size and colour—from pale yellow to chrome-yellow; most of the Guatemalan specimens are darker than those from Mexico.

In Guenée's figure the markings on the primaries are more distinct than in any of the examples before me. Walker² gives "? North America" as a locality.

3. *Pachynoa cræsus*, sp. n. (Tab. LXI. fig. 8.)

Male. Primaries and secondaries chrome-yellow, shaded with blackish-grey scales at the base and across the middle, crossed from the costal to the inner margin by two curved dark grey lines—the first near the base, the second beyond the middle; the primaries with the cell, a rather faint submarginal zigzag line extending from the costal margin near the apex to the inner margin slightly above the anal angle, a small round spot at the base of the cell, and an elongate spot at the end of it, hyaline-white; the secondaries with a hyaline-white spot at the end of the cell; the fringe greyish-yellow; the underside pale yellowish-white, with the lines less distinct: head, antennæ, thorax, and abdomen brownish-chrome-yellow, the underside of the latter and the legs yellowish-white. Expanse $1\frac{3}{4}$ inch.

Hab. GUATEMALA, Las Mercedes 3000 feet (*Champion*).

One specimen. Allied to *P. hercules* (Feld. & Rogenh.), from which it may be at once distinguished by the hyaline spots in the cell of the fore wing.

4. ***Pachynoa flavidalis*.** (Tab. LXI. figg. 9, ♂ ; 10, ♀.)

Botys flavidalis, Guen. Sp. gén. des Lép. viii. p. 329¹; Walk. Cat. xviii. p. 562²; Leder. Wien. ent. Monats. vii. p. 371³.

Botys cinctipetalis, Walk. Cat. xxxiv. p. 1391⁴; Grote, Check-list of N. Amer. Moths, p. 53⁵.

Botys lacoalis, Walk. Cat. xviii. p. 733⁶.

Hab. NORTH AMERICA^{1 2 3 4 5}.—MEXICO, Jalapa (*M. Trujillo*), Orizaba (*Boucard*, in *mus. D.*), Rinconada, Paso de San Juan (*Schaus*); GUATEMALA, Chiacam in Vera Paz, Las Mercedes 3000 feet, San Isidro 1600 feet (*Champion*); COSTA RICA, Candelaria Mts. (*Underwood*).—S.E. BRAZIL, Rio Janeiro.

A variable species, both in colour and in the distinctness of the markings; some specimens are dirty white and others dark yellow. The largest specimens I have seen are those from Guatemala. The specimens from the Candelaria Mountains are all very pale. We figure a male from Chiacam and a female from Las Mercedes. No locality is given by Walker⁶ for *Botys lacoalis*.

5. ***Pachynoa cyclades*, sp. n.** (Tab. LXI. figg. 12, ♂ ; 13, ♀.)

Male. Primaries fawn-colour, black at the base, clouded with blackish-grey from the middle almost to the outer margin, with a narrow waved black line, edged with greyish-white on the inner side, crossing the wing before the middle, a submarginal zigzag greyish-black line, edged with white on the outer side, extending from the costal margin near the apex to the inner margin near the anal angle, and a round white spot in the cell and an elongate spot at the end of it, both edged with black, the fringe fawn-colour; secondaries pearly-white, the marginal line fawn-colour, the fringe white: head in front, the antennæ, and palpi brownish-fawn-colour; the collar, thorax, and abdomen greyish-black, the underside of the latter and the legs white.—*Female*. Primaries very similar to those of the male, but rather paler; the secondaries shaded with yellow, with a black spot at the end of the cell and a waved submarginal black line extending from the costal margin almost to the anal angle, the marginal line spotted with black. Expanse, ♂ ♀, 2 inches.

Hab. MEXICO, near Durango city (*Becker*), Mexico city (*Höge*).

Three specimens. This fine species is very distinct from any other known to me. We figure a male from Mexico city and a female from Durango city.

ANOMOSTICTIS.

Diastictis, Hübner, Verz. bek. Schmett. p. 355 (nec p. 288) (1816).

Anomostictis, Warren, Ann. & Mag. Nat. Hist. (6) ix. p. 434 (1892).

1. ***Anomostictis fracturalis*.**

Botis fracturalis, Zell. Verh. zool.-bot. Ges. Wien, xxii. p. 509, t. 3. fig. 16¹; Grote, Bull. U.S. Geol. & Geogr. Surv. iv. p. 677².

Hab. NORTH AMERICA², Texas¹.—MEXICO, Northern Sonora (*Morrison*), Amula in Guerrero 6000 feet (*H. H. Smith*), Jalisco (*Schumann*).

ACHARANA.

Acharana, Moore, Lep. Ceylon, iii. p. 285 (1885).

1. *Acharana phæopteralis*.

Botys phæopteralis, Guen. Sp. gén. des Léop. viii. p. 349¹; Walk. Cat. xviii. p. 612²; Leder. Wien. ent. Monats. vii. p. 372³.

Botys vestalis, Walk. Cat. xviii. p. 579⁴.

Botys plebejalis, Leder. Wien. ent. Monats. vii. pp. 373, 469, t. 10. fig. 8⁵.

Hab. HONDURAS (*Dyson*⁴).—SOUTH AMERICA^{1 2 3}, Venezuela⁵, Rio Janeiro^{2 4}; ANTILLES, Jamaica⁴.

TRISCHISTOGNATHA.

Trischistognatha, Warren, Ann. & Mag. Nat. Hist. (6) ix. p. 429 (1892).

1. *Trischistognatha palindialis*.

Spilodes palindialis, Guen. Sp. gén. des Léop. viii. p. 380¹; Walk. Cat. xviii. p. 772².

Hab. MEXICO, Rinconada in Vera Cruz (*Schaus*).—BRAZIL^{1 2}.

One specimen, identified by Mr. Schaus.

PACHYZANCLA.

Pachyzancla, Meyrick, Trans. Ent. Soc. Lond. 1884, p. 315; 1887, p. 228.

1. *Pachyzancla detritalis*.

Botys detritalis, Guen. Sp. gén. des Léop. viii. p. 347¹; Walk. Cat. xviii. p. 572².

Botys lycialis, Walk. loc. cit. p. 572³.

Botys philealis, Walk. loc. cit. p. 596⁴.

Hab. MEXICO, Northern Sonora (*Morrison*), Cuernavaca in Morelos, Acaguizotla, Dos Arroyos, and Chilpancingo in Guerrero, Atoyac in Vera Cruz, Teapa in Tabasco (*H. H. Smith*), Jalisco (*Schumann*); GUATEMALA, San Gerónimo, Volcan de Atitlan (*Champion*); HONDURAS²; COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*); PANAMA, Volcan de Chiriqui (*Champion*).—COLOMBIA^{1 2}; VENEZUELA⁴; GUIANA^{1 2}; AMAZONS, Villa Nova²; BRAZIL^{1 2}; ANTILLES, Jamaica³, San Domingo^{2 3}.

A common and widely distributed species in Tropical America, varying greatly in size and to some extent in colour. We have received a large series of specimens from our region.

2. *Pachyzancla cynoalis*, sp. n. (Tab. LXI. fig. 11, ♂.)

Male. Primaries and secondaries pale semihyaline-yellow; the primaries crossed by two fine darker lines—the first near the base, the second beyond the cell,—and with an indistinct submarginal line, the fringe dark yellow; the secondaries crossed from the costal to the inner margin by two faint lines—the first beyond the middle, the second submarginal,—the fringe dark yellow: head, antennæ, thorax, and abdomen

pale yellow, the legs yellow.—*Female*. Very similar to the male, but rather larger and darker. Expanse, ♂ 1, ♀ 1½ inch.

Hab. MEXICO, Cuernavaca in Morelos (*H. H. Smith*); GUATEMALA, San Gerónimo (*Champion*); COSTA RICA, Caché (*Rogers*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*), Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

A widely distributed species in our region, but nowhere common. We figure a specimen from the Volcan de Chiriqui.

3. *Pachyzancla grisealis*.

? *Botys grisealis*, Snell. Tijdschr. voor Ent. xviii. p. 198, t. 11. fig. 8¹.

Hab. MEXICO, Jalapa (*M. Trujillo*), Rinconada in Vera Cruz (*Schaus*), Orizaba (*F. D. G.*); GUATEMALA, San Gerónimo (*Champion*); COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—? COLOMBIA¹.

A common species throughout our region, not varying to any extent. The exact locality is not mentioned by Snellen.

4. *Pachyzancla* (?) *silicalis*.

Botys silicalis, Guen. Sp. gén. des Léop. viii. p. 349¹; Walk. Cat. xviii. p. 612²; Leder. Wien. ent. Monats. vii. p. 375, t. 11. fig. 5³.

Hab. PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—GUIANA, Cayenne^{1 2 3}; BRAZIL^{1 2 3}.

One specimen, very similar to Lederer's figure.

ZUNACETHA.

Zunacetha, Walker, Cat. xxvii. p. 133 (1863).

Walker included a single species from Honduras in this genus, and placed it in his family Galleridæ. I now add two others from our region.

1. *Zunacetha bipartita*.

Zunacetha bipartita, Walk. Cat. xxvii. p. 134¹.

Mieza nervosa, Feld. & Rogenh. Reise der Novara, Lep. t. 139. fig. 43².

Hab. MEXICO, Atoyac in Vera Cruz (*H. H. Smith*); GUATEMALA, San Juan and San Gerónimo in Vera Paz (*Champion*); HONDURAS (*Dyson*¹), Corosal (*Roe, in mus. D.*); PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—COLOMBIA, Bogota².

I have not seen a specimen of this insect from south of Panama.

2. *Zunacetha angulifera*, sp. n. (Tab. LXI. fig. 14.)

Male. Primaries and secondaries hyaline-white; the primaries crossed near the apex by a narrow brownish line, which almost reaches the anal angle and then turns inwards along the inner margin; the secondaries

with a narrow V-shaped brownish line below the middle, which does not touch either margin; the fringe white: head, antennæ, thorax, abdomen, and legs white, the collar yellow. Expanse $1\frac{1}{4}$ inch.

Hab. GUATEMALA, Teleman in Vera Paz (*Champion*).

One specimen.

3. *Zunacetha bugabensis*, sp. n. (Tab. LXI. fig. 15.)

Primaries white, with all the veins from the middle to the outer margin black, two narrow black lines in the form of an inverted V extending across the wing from the inner margin; secondaries white, broadly bordered with black on the costal margin at the apex and on the outer and inner margins; the fringe greyish-white: head and palpi chrome-yellow, the antennæ black; the thorax and abdomen white, with a greyish-black line down the middle, the last three abdominal segments also greyish-black.—*Female*. Very similar to the male. Expanse $1\frac{4}{10}$ inch.

Hab. PANAMA, Bugaba 1000 feet (*Champion*).

We have received a few specimens only of this species. It is allied to *Z. bipartita*, Walk.

SALBIA.

Salbia, Guenée, Sp. gén. des Léop. viii. p. 198 (1854); Walker, Cat. xvii. p. 357; Lederer, Wien. ent. Monats. vii. p. 380.

1. *Salbia cassidalis*.

Salbia cassidalis, Guen. Sp. gén. des Léop. viii. p. 199¹; Walk. Cat. xvii. p. 359²; Leder. Wien. ent. Monats. vii. p. 381³.

Hab. COSTA RICA, Candelaria Mts. (*Underwood*), Volcan de Irazu 6000 to 7000 feet (*Rogers*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—ECUADOR; BRAZIL^{1 2 3}.

We have a fair series of this species from Costa Rica.

2. *Salbia cognatalis*.

Salbia cognatalis, Snell. Tijdschr. voor Ent. xviii. p. 215, t. 12. figg. 9, 10¹.

Hab. MEXICO, Teapa in Tabasco (*H. H. Smith*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—COLOMBIA¹.

Central-American specimens agree well with Snellen's figure.

3. *Salbia xiphialis*. (Tab. LXI. fig. 16.)

Botys xiphialis, Walk. Cat. xviii. p. 594¹.

Hab. COSTA RICA, Candelaria Mts. (*Underwood*).—SOUTH-EAST BRAZIL, Rio Janeiro¹.

One male, which I have compared with Walker's type in the National Museum.

4. *Salbia serratilinealis*.

Botys serratilinealis, Leder. Wien. ent. Monats. vii. pp. 375, 472, t. 11. fig. 2¹.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—VENEZUELA¹; ECUADOR.

One specimen from Chiriqui, differing from others from Ecuador in my own collection in being a little paler.

5. **Salbia lauralis.** (Tab. LXI. fig. 17, ♀.)

Salbia lauralis, Walk. Cat. xvii. p. 358¹.

Hab. COSTA RICA, Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—COLOMBIA; VENEZUELA¹; ECUADOR; AMAZONS, Ega¹; ANTILLES, San Domingo¹, Dominica.

We have received a few specimens of this widely distributed species from Costa Rica, none of which are in good condition. A female from Chiriqui in Dr. Staudinger's collection is figured.

SAROTHRONOTA.

Sarothronota, Lederer, Wien. ent. Monats. vii. p. 394 (1863).

1. **Sarothronota flegia.**

Phalæna Pyralis flegia, Cram. Pap. Exot. ii. p. 66, t. 140. fig. D¹.

Pyralis flegialis, Poey, Cent. Lép. Cuba, 1^{ère} Décade, fig. (1832)².

Margarodes flegialis, Guen. Sp. gén. des Lép. viii. p. 310³.

Margaronia flegialis, Walk. Cat. xviii. p. 520⁴.

Sarothronota flegia, Leder. Wien. ent. Monats. vii. p. 394, t. 13. fig. 9⁵.

Margaronia virginalis, Hübn. Verz. bek. Schmett. p. 358⁶.

Hab. MEXICO, Jalapa (*M. Trujillo, Höge*), Rinconada and Paso de San Juan in Vera Cruz (*Schaus*), Cuesta de Misantla, Omealca (*M. Trujillo*), Orizaba (*Boucard, in mus. D.*), Coatepec (*Brooks*), Chilpancingo in Guerrero (*H. H. Smith*), Mexico city (*Höge*), Valladolid in Yucatan (*Gaumer*); BRITISH HONDURAS, Belize (*Sir A. Moloney, in mus. D.*), Corosal (*Roe, in mus. D.*); GUATEMALA, in the city (*Rodriguez*); HONDURAS (*Dyson*⁴); PANAMA, David, Bugaba (*Champion*), Chiriqui (*Ribbe, in mus. Staudinger*).—GUIANA, Surinam¹; ANTILLES, Cuba^{2 3 5}, Jamaica⁴, San Domingo⁴, St. Thomas⁴.

This is one of the commonest species of Pyralidæ in Central America. Specimens from Cuba in my own collection are quite similar, except in size. In other respects, the insect does not show the slightest variation.

2. **Sarothronota (?) citrinalis**, sp. n. (Tab. LXI. fig. 18.)

Primaries and secondaries uniformly dark citron-yellow: head, thorax, and abdomen citron-yellow, the latter whitish beneath; the antennæ yellow, the legs black. Expanse 1 $\frac{3}{4}$ inch.

Hab. MEXICO, Presidio (*Forrer*), Dos Arroyos in Guerrero (*H. H. Smith*), Bolaños in Jalisco (*Richardson*).

A few specimens. We figure one from Dos Arroyos.

HOTERODES.

Hoterodes, Guenée, Sp. gén. des Lép. viii. p. 310 (1854); Lederer, Wien. ent. Monats. vii. p. 394.

1. *Hoterodes ausonia*.

Phalena Pyralis ausonia, Cram. Pap. Exot. ii. p. 66, t. 140. fig. C¹.

Hoterodes ausonialis, Guen. Sp. gén. des Lép. viii. p. 311, Delt. et Pyral. t. 4. fig. 9²; Walk. Cat. xviii. p. 535³; Leder. Wien. ent. Monats. vii. p. 395⁴.

Margaronia canastalis, Hübn. Verz. bek. Schmett. p. 358⁵.

Hab. MEXICO, Coatepec (*Schaus*), Atoyac in Vera Cruz, Dos Arroyos and Tierra Colorada in Guerrero, Teapa in Tabasco (*H. H. Smith*), Valladolid and Temax in Yucatan (*Gaumer*); GUATEMALA, Cahabon, San Juan, Panima, and San Gerónimo in Vera Paz, Las Mercedes, San Isidro (*Champion*); HONDURAS (*Dyson*³); COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*); PANAMA, Chiriqui (*Arcé, in mus. D.*; *Ribbe, in mus. Staudinger*), Bugaba, Volcan de Chiriqui (*Champion*).—COLOMBIA^{2 4}; VENEZUELA³; GUIANA, Surinam^{1 2 3}, Cayenne^{2 3}, Essequibo River; AMAZONS³; BRAZIL^{2 4}; ANTILLES, San Domingo³.

This species does not show much variation. Specimens from Porto Real, South-east Brazil, in my own collection, are larger and slightly paler than any of those from Central America; some others from the Essequibo River, sent by Whitely, are very small.

ERILUSA.

Erilusa, Walker, Cat. xxxiv. p. 1375 (1865).

The species of this genus bear a great resemblance to the Dioprinae. Five are known to me from Central America.

1. *Erilusa dioptrides*.

Erilusa dioptrides, Walk. Cat. xxxiv. p. 1377¹; Butl. Ill. Lep. Het. i. p. 62, t. 20. fig. 2².

Hab. MEXICO, Jalapa (*M. Trujillo*); GUATEMALA, in the city (*Rodriguez, in mus. D.*), Cerro Zunil 4000 feet (*Champion*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—VENEZUELA; ECUADOR; AMAZONS², Pará^{1 2}.

Mexican specimens are considerably darker than those from Ecuador in my own collection. *E. radialis*, Feld. & Rogenh., also from the Amazons, is a closely allied form, but may be at once distinguished from it by the yellow head and antennæ.

2. *Erilusa mimalis*.

Erilusa mimalis, Feld. & Rogenh. Reise der Novara, Lep. t. 136. fig. 33¹.

Hab. GUATEMALA (*Salvin*¹).

This species is only known to me by Felder and Rogenhofer's figure.

BIOL. CENTR.-AMER., Heter., Vol. II., July 1895.

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3. ***Erilusa cœlivitta*.** (Tab. LXI. fig. 19, ♂.)

Erilusa cœlivitta, Walk. Cat. xxxiv. p. 1377¹.

Hab. MEXICO (*Boucard, in mus. D.*); PANAMA, Chiriqui (*Ribbe; Trötsch, in mus. Staudinger*), Bugaba (*Champion*).—AMAZONS, Pará¹.

Five specimens, showing no variation. We figure an example from Bugaba. The female is rather larger than the male, and it has the hyaline markings broader.

4. ***Erilusa croceiceps*.** (Tab. LXI. fig. 20, ♂.)

Erilusa croceiceps, Walk. Cat. xxxiv. p. 1375¹; Feld. Reise der Novara, Lep. t. 136. fig. 31 (♀)²; Butl. Ill. Lep. Het. i. p. 62, t. 20. fig. 4 (♀)³.

Hab. PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*), Volcan de Chiriqui 2000 to 3000 feet, David (*Champion*).—AMAZONS², Pará¹, Ega¹³.

I have seen three specimens of this species from the southern part of our region. We figure a male from the Volcan de Chiriqui.

5. ***Erilusa purpuralis***, sp. n. (Tab. LXI. fig. 21, ♀.)

Female. Primaries and secondaries uniformly dark glossy purplish-brown, the inner margin of the secondaries and the fringe greyish-black; the underside paler than above: head and collar orange, the antennæ brown, the thorax, abdomen, and legs greyish-black. Expanse $1\frac{3}{4}$ inch.

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

One specimen. This species resembles *Hoterodes gilippusalis*, Walk., from the Amazons, from which it may be at once distinguished by the yellow head and collar.

ACRIDURA.

Acridura, Butler, Ann. & Mag. Nat. Hist. (4) xv. p. 398 (1875); Trans. Ent. Soc. Lond. 1878, p. 122.

Phryctena, Oberthür, Études d'Ent. vi. p. 114 (1881).

This genus was founded by Mr. Butler upon two species from Espiritu Santo, both of which range northwards to the Mexican State of Vera Cruz. He first referred it to the family Arctiidæ (Zygænoïd type), but subsequently to the Ægeriidæ. M. Oberthür referred his genus *Phryctena* to the Pyralidæ, to which family I have very little doubt it really belongs. *Acridura* appears to me to be nearly allied to *Erilusa*, Walk. Three additional species are here referred to the genus, one with some doubt.

1. ***Acridura gryllina*.**

Acridura gryllina, Butl. Ann. & Mag. Nat. Hist. (4) xv. p. 398¹; Trans. Ent. Soc. Lond. 1878, p. 125, t. 5. fig. 6².

Phryctena glaucopidalis, Oberth. Études d'Ent. vi. p. 114, t. 20. fig. 4 (♂)³.

Hab. MEXICO, Cordova (*Sallé*³), Atoyac in Vera Cruz (*H. H. Smith*); GUATEMALA, San Gerónimo (*Champion*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*), David, Volcan

de Chiriqui 2000 to 3000 feet (*Champion*).—COLOMBIA; ECUADOR; BRAZIL, Espiritu Santo¹; PARAGUAY.

Of this species I have seen eighteen males, which do not show any variation. The female I believe to be unknown.

2. ***Acridura metallica***. (Tab. LXI. fig. 22, ♂.)

Acridura metallica, Butl. Ann. & Mag. Nat. Hist. (4) xv. p. 399, t. 5. fig. 5 (antenna) (♀)¹.

Hab. MEXICO, Rinconada in Vera Cruz (*Schaus*); GUATEMALA, Coban in Vera Paz (*Conradt*).—BRAZIL, Espiritu Santo¹.

Mr. Butler described the female of this species. The two specimens received from our region are, I believe, males. The one from Coban is figured.

3. ***Acridura prochyta***, sp. n. (Tab. LXI. fig. 23, ♀.)

Female. Primaries black, with a small hyaline dot near the base, the base with some metallic-green scales, the fringe blackish-brown; secondaries hyaline, the veins and the outer margin black: head, thorax, and abdomen metallic-green, the collar and a spot on each side of the base of the thorax orange-yellow, the antennæ black; the legs greenish-black, the hind tarsi partly white. Expanse $1\frac{3}{10}$ inch.

Hab. MEXICO, Jalapa (*M. Trujillo*).

One specimen. Not allied to any species known to me.

4. ***Acridura dædala***, sp. n. (Tab. LXI. fig. 24, ♂.)

Male. Primaries and secondaries semihyaline-glossy-purplish-black, the primaries shot with dark metallic-blue close to the base: head, collar, tegulæ, and thorax metallic green, the latter with a dense patch of white scales on the underside in front; the antennæ, abdomen, and legs black. Expanse $1\frac{1}{10}$ inch.

Hab. PANAMA, Volcan de Chiriqui 3000 feet (*Champion*).

One specimen.

5. ***Acridura* (?) *hadriana***, sp. n. (Tab. LXI. fig. 25.)

Male. Primaries and secondaries very dark brown; the primaries with the fringe brown, white at the anal angle; the secondaries with a narrow hyaline streak on the costal margin which extends from the base almost to the anal angle, a small hyaline-white spot at the end of the cell, the fringe partly white: head and antennæ black; the thorax black above, white beneath; the abdomen black, with the anus yellow, the underside banded with white; the legs black, the hind tarsi banded with white.—*Female*. Very similar to the male. Expanse, ♂ ♀, $1\frac{1}{10}$ inch.

Hab. MEXICO, Atoyac in Vera Cruz, Teapa in Tabasco (*H. H. Smith*); PANAMA, Chiriqui (*Arcé, in mus. D.*; *Trötsch, in mus. Staudinger*).

Two males and two females. A male from Teapa is figured.

MARGARONIA.

Margaronia, Hübner, Verz. bek. Schmett. p. 358 (1816).

1. ***Margaronia quadristigmalis***.

Margarodes quadristigmalis, Guen. Sp. gén. des Lép. viii. p. 304¹ (nec Walk.).

Margaronia isoscelalis, Walk. Cat. xviii. p. 521² (nec Guen.).

Hab. NORTH AMERICA¹.—MEXICO, Jalapa (*M. Trujillo, Schaus*), Atoyac in Vera Cruz (*Schumann*), Cordova (*Rümeli*), Chilpancingo in Guerrero 4600 feet (*H. H. Smith*); GUATEMALA, San Gerónimo, Sinanja, and Cubilguitz in Vera Paz, El Tumbador (*Champion*); HONDURAS (*Mus. Brit.*); COSTA RICA, Candelaria Mts. (*Underwood*).—WEST COAST OF AMERICA (*Kellett & Wood*²); ECUADOR; AMAZONS, Villa Nova²; BRAZIL, Rio Janeiro; ANTILLES, Dominica.

A common species in Central America. It varies a good deal in size. The Cost Rican specimens are smaller than those from Mexico and Guatemala.

2. *Margaronia isoscelalis*.

Margarodes isoscelalis, Guen. Sp. gén. des Léop. viii. p. 304¹; Leder. Wien. ent. Monats. vii. p. 398².

Margaronia eribotalis, Walk. Cat. xviii. p. 524³.

Hab. HONDURAS (*Dyson*³).—BRAZIL^{1 2}; ANTILLES, St. Thomas².

There are specimens of this species in the National Museum.

3. *Margaronia innotata*, sp. n. (Tab. LXI. fig. 26.)

Primaries and secondaries silky-hyaline-white; the primaries edged with golden-yellow along the costal margin, a small black dot at the end of the cell, the marginal line with black points, the fringe white; the secondaries with a fine marginal black line: head, antennæ, thorax, abdomen, and legs white, the anal tuft brownish-black. Expanse 1 inch.

Hab. MEXICO, Presidio (*Forrer*), Jalapa (*M. Trujillo*), Temax in North Yucatan (*Gaumer*); HONDURAS, San Pedro (*Whitely, in mus. D.*); NICARAGUA, Matagalpa (*Richardson*); COSTA RICA, Candelaria Mts. (*Underwood*), Rio Sucio (*Rogers*); PANAMA, Chiriqui (*Ribbe*).

This species is allied to *M. quadrastigmatis*, Guen., from which it may be distinguished by its slightly shorter and broader wings, and by the absence of the small black dots on the costal margin of the primaries. The sexes are very similar.

PACHYARCHES.

Pachyarches, Lederer, Wien. ent. Monats. vii. p. 398 (1863).

1. *Pachyarches lustralis*.

Margarodes lustralis, Guen. Sp. gén. des Léop. viii. p. 306, Delt. et Pyral. t. 4. figg. 8, 9 (head)¹.

Margaronia lustralis, Walk. Cat. xviii. p. 520².

Pachyarches lustralis, Leder. Wien. ent. Monats. vii. p. 398³.

Hab. MEXICO, Jalapa (*Schaus, M. Trujillo*), Rinconada and Paso de San Juan in Vera Paz (*Schaus*), Coatepec (*Brooks*), Mexico city (*Höge*); GUATEMALA, in the city (*Rodriguez*); COSTA RICA, Candelaria Mts. (*Underwood*); PANAMA, Volcan de Chiriqui 2000 to 3000 feet, Taboga I. (*Champion*).—ECUADOR; BRAZIL; ANTILLES, Haiti^{1 2 3}.

This is a common insect in Tropical America. The large series of specimens before

me do not show any variation. We have received numerous examples from Mexico, but from Guatemala I have seen one only.

2. *Pachyarches imitalis*.

Margarodes imitalis, Guen. Sp. gén. des Lép. viii. p. 306¹.

Margaronia imitalis, Walk. Cat. xviii. p. 520².

Pachyarches imitalis, Leder. Wien. ent. Monats. vii. p. 398³.

Hab. MEXICO, Cordova (*Rümeli*), Jalapa (*M. Trujillo*), Paso de San Juan in Vera Cruz (*Schaus*); COSTA RICA, Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—WEST COAST OF AMERICA (*Kellett & Wood*²); COLOMBIA; VENEZUELA²; ECUADOR; BRAZIL, Rio Janeiro²; ANTILLES, Haiti^{1 3}, San Domingo².

This species is allied to the preceding, but may be distinguished from it by its smaller size and paler colour. We have a fair series of specimens, which vary slightly, those from Ecuador in my own collection being rather darker than any I have seen from our region.

EUDIOPTIS.

Eudioptis, Hübner, Verz. bek. Schmett. p. 359 (1816).

Phakellura, Westwood, Introd. Mod. Class. Ins. ii. p. 401 (1840); Guenée, Sp. gén. des Lép. viii. p. 294.

Phacellura, Lederer, Wien. ent. Monats. vii. p. 400 (1863).

This genus is of considerable extent, and the species are very widely distributed over the globe.

1. *Eudioptis hyalinata*.

Phalæna Geometra hyalinata, Linn. Syst. Nat. 12th edit. i. 2, p. 874 (1767)¹.

Pyrallis hyalinata, Poey, Cent. Lép. Cuba, 2^e Décade, fig. (1832)².

Phakellura hyalinatalis, Guen. Sp. gén. des Lép. viii. p. 296³; Walk. Cat. xviii. p. 510⁴.

Phacellura hyalinatalis, Leder. Wien. ent. Monats. vii. p. 400⁵.

Phakellura hyalinata, Snell. Tijdschr. voor Ent. xviii. p. 234⁶.

Eudioptis hyalinata, Grote, Check-list of N. Am. Moths, p. 54⁷.

Phalæna Pyralis marginalis, Cram. Pap. Exot. iv. p. 160, t. 371. fig. D⁸; Stoll, ibid., Suppl. v. p. 110, t. 22. figg. 9 (larva), 9 κ (cocoon)⁹.

Phacellura marginalis, Leder. Wien. ent. Monats. vii. p. 401¹⁰.

Pyrallis lucernalis, Hübn. Europ. Schmett. vi. Pyral. t. 17. fig. 108¹¹.

Eudioptis lucernalis, Hübn. Verz. bek. Schmett. p. 359¹².

Hab. NORTH AMERICA^{3 7}.—MEXICO (*Boucard, in mus. D.*), Presidio, Durango (*Forrer*), Paso de San Juan and Rinconada in Vera Cruz (*Schaus*), Cordova (*Rümeli*), Jalapa (*M. Trujillo*), Vera Cruz, Venta de Zopilote in Guerrero, Teapa in Tabasco (*H. H. Smith*), Temax in North Yucatan (*Gaumer*); BRITISH HONDURAS, San Pedro (*Whitely, in mus. D.*); GUATEMALA, San Gerónimo and Tamahu in Vera Paz, San Isidro, El Reposo (*Champion*); HONDURAS (*Dyson*⁴); COSTA RICA, Volcan de Irazu 6000 to

7000 feet (*Rogers*), Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—SOUTH AMERICA^{3 6 9} to the Argentine Republic; BAHAMAS; ANTILLES, Jamaica⁴, Cuba², Haiti³, San Domingo⁴, Dominica.

This common and widely distributed American species varies very little, except in size. Specimens from the Bahamas are small and have the dark margins of the wings slightly narrower than usual. From Mexico and Guatemala we have received a very large number of examples. The larva is stated to feed upon Cucurbitaceous plants; it, and the cocoon also, is figured by Stoll and Poey.

2. *Eudioptis lucidalis*.

Eudioptis lucidalis, Hübn. Zutr. Samml. exot. Schmett. ii. p. 24, figg. 331, 332¹; Verz. bek. Schmett. p. 359².

Phakellura lucidalis, Guen. Sp. gén. des Lép. viii. p. 298³; Walk. Cat. xviii. p. 512⁴.

Hab. MEXICO, Jalapa, Cuesta de Misantla (*M. Trujillo*), Paso de San Juan in Vera Cruz (*Schaus*), Teapa in Tabasco (*H. H. Smith*); GUATEMALA, Cubilguitz and San Gerónimo in Vera Paz, San Isidro (*Champion*); NICARAGUA, Matagalpa (*Richardson*); COSTA RICA (*Van Patten, in mus. D.*), Volcan de Irazu 6000 to 7000 feet (*Rogers*), Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Arcé, in mus. D.*; *Ribbe, in mus. Staudinger*), Volcan de Chiriqui 2000 to 3000 feet (*Champion*), Panama city (*J. J. Walker*).—VENEZUELA; ECUADOR; GUIANA, Surinam^{1 3 4}; AMAZONS; BRAZIL, Ceara; ANTILLES, Dominica.

Very similar to *E. hyalinata* (Linn.), but differing from it in the black abdomen, including the anal tuft, and in the slightly darker margins to the wings.

3. *Eudioptis gazorialis*.

Phakellura gazorialis, Guen. Sp. gén. des Lép. viii. p. 297¹.

Hab. COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—BRAZIL, Rio Janeiro.—? JAVA¹.

Walker in his Catalogue (xviii. p. 514) includes this species under *P. indica*, Saund., but I consider them to be distinct. The identification with *P. gazorialis* is given on Dr. Staudinger's authority. The locality quoted by Guenée¹ I believe to be incorrect.

4. *Eudioptis plumbidorsalis*.

Phakellura plumbidorsalis, Guen. Sp. gén. des Lép. viii. p. 298¹; Walk. Cat. xviii. p. 512².

Hab. PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—ECUADOR; GUIANA, Cayenne^{1 2}.

In this species the dark borders of the wing are very wide. Specimens from Ecuador in my own collection are considerably smaller than those from Chiriqui.

5. *Eudioptis gigantalis*.

Phakellura gigantalis, Snell. Tijdschr. voor Ent. xviii. p. 234, t. 13. figg. 7, 8 (hind leg) ¹.

Eudioptis hyalinata, Warr. Trans. Ent. Soc. Lond. 1889, p. 265 ² (nec Linn.).

Hab. MEXICO, Rinconada in Vera Cruz (*Schaus*); GUATEMALA, Coatepeque, El Reposo, Las Mercedes (*Champion*); COSTA RICA, Santa Clara Valley (*Zürcher*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—COLOMBIA ¹; ECUADOR; AMAZONS ².

We have received a few specimens of this species from Central America. From Ecuador I have a large series, which do not show any variation. None of the examples before me have the margins of the wings so red as shown in Snellen's figure. Central-American specimens are brighter in colour than those from South America.

6. *Eudioptis nitidalis*.

Phalæna Pyralis nitidalis, Cram. Pap. Exot. iv. p. 160, t. 371. fig. F ¹; Stoll, *ibid.*, Suppl. v. p. 110, t. 22. figg. 10, 10 m, n, o (larva and pupa) ².

Phakellura nitidalis, Guen. Sp. gén. des Lép. viii. p. 299 ³; Walk. Cat. xviii. p. 511 ⁴.

Phacellura nitidalis, Leder. Wien. ent. Monats. vii. p. 401 ⁵.

Eudioptis nitidalis, Grote, Check-list of N. Am. Moths, p. 54 ⁶.

Diaphania vitralis, Hübn. Zutr. Samml. exot. Schmett. i. p. 20, figg. 101, 102.

Hab. NORTH AMERICA ⁶, Florida ⁷.—MEXICO, Rinconada in Vera Cruz (*Schaus*), Coatepec (*Brooks*), Jalapa, Cuesta de Misantla (*M. Trujillo*), Orizaba (*Boucard, in mus. D.*); GUATEMALA, Volcan de Atitlan, San Gerónimo (*Champion*), Guatemala city (*Rodriguez*); COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*), Candelaria Mts. (*Underwood*); PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*), Chiriqui (*Ribbe, in mus. Staudinger*).—COLOMBIA ³, Bogota; ECUADOR; GUIANA, Surinam ¹, Cayenne ³; AMAZONS, Pará ⁴; BRAZIL ^{3 5}; ANTILLES, San Domingo ⁴.

This species is not uncommon throughout Tropical America, but I have not seen a specimen from north of Mexico. It varies greatly in size, also in the shape of the yellow hyaline spot on the primaries.

7. *Eudioptis praxialis*, sp. n. (Tab. LXI. fig. 28.)

Primaries dark glossy-purplish-brown, with a large square hyaline yellowish spot below the cell extending to the inner margin; secondaries pale hyaline yellow, broadly bordered with purplish-brown, the inner margin of the border straight; the fringe purplish-brown: head, thorax, and abdomen blackish-brown above, white beneath; the antennæ blackish-brown, the legs yellowish-white. Expanse $1\frac{8}{10}$ inch.

Hab. COSTA RICA, Santa Clara Valley 1200 feet (*Zürcher*); PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).

Three specimens. This species is allied to *E. nitidalis* (Cram.), but it is a much larger insect, and easily distinguishable from it by the distinct border to the secondaries. We figure a male from Costa Rica.

8. *Eudioptis olealis*.

Eudioptis olealis, Feld. & Rogenh. Reise der Novara, Lep. t. 135. fig. 35¹.

Hab. MEXICO, Jalapa (*Schaus*); COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*).—COLOMBIA, Bogota¹; ECUADOR.

Mr. Schaus's specimen from Jalapa differs slightly from the others in having the spot on the primaries rather smaller and the band on the secondaries more elongated.

9. *Eudioptis cumalis*, sp. n. (Tab. LXI. fig. 27.)

Primaries and secondaries semihyaline-purplish-brown, crossed about the middle by a semihyaline pale yellow waved line: head, thorax, and abdomen purplish-brown above, white beneath; the antennæ brown, the legs whitish. Expanse $1\frac{1}{4}$ inch.

Hab. COSTA RICA, Volcan de Irazu 6000 feet (*Rogers*).

One specimen. This insect is not closely allied to any described species.

10. *Eudioptis latilimbalis*.

Phakellura latilimbalis, Guen. Sp. gén. des Lép. viii. p. 296¹; Walk. Cat. xviii. p. 511²; Snell. Tijdschr. voor Ent. xviii. p. 232³.

Phacellura latilimbalis, Leder. Wien. ent. Monats. vii. p. 400⁴.

Hab. COSTA RICA, Candelaria Mts. (*Underwood*), Volcan de Irazu 6000 to 7000 feet (*Rogers*); PANAMA, Chiriqui (*Ribbe*, in *mus. Staudinger*; *Arcé*, in *mus. D.*).—COLOMBIA, Magdalena River³; ECUADOR; BRAZIL^{1 2}.

Varies in the size of the hyaline spot on the primaries.

11. *Eudioptis damalis*, sp. n. (Tab. LXI. fig. 29.)

Male. Primaries and secondaries semihyaline-purplish-brown; the primaries with a very indistinct yellowish spot beyond the cell, the secondaries with the basal portion slightly yellowish; the fringe brown: head, thorax, and abdomen blackish-brown, the anal tuft black, the antennæ and legs pale brown. Expanse $1\frac{1}{4}$ inch.

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

One specimen. Allied to *E. olealis*, Feld. & Rogenh., but very distinct.

12. *Eudioptis* — ?

Hab. MEXICO, Presidio (*Forrer*).

A small species, apparently distinct, but not in sufficiently good condition for determination.

13. *Eudioptis arguta*.

Phacellura arguta, Leder. Wien. ent. Monats. vii. pp. 401, 478, t. 13. fig. 15¹.

Hab. NORTH AMERICA¹.—MEXICO, Teapa in Tabasco (*H. H. Smith*); GUATEMALA, Pantaleon (*Champion*); COSTA RICA, Santa Clara Valley 1200 feet (*Zürcher*); PANAMA,



Druce, Herbert. 1895. "Insecta Lepidoptera Rhopalocera." *Biologia Centrali-Americana :zoology, botany and archaeology* 2, 209–232.

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