

The most reliable character in distinguishing the instars is the size of the head. Other characters, such as color and the presence of certain lines aid in their determination but are not so reliable. With some practice the instar can be told by the naked eye. There is no constant ratio between the sizes of the heads during the different instars, as stated by Dyar for other moths.

The growth in length or width during a caterpillar's life, is not constant and when plotted forms an oscillating line. In general, the growth is negative during the last few days of each instar.

The larvae first feed gregariously upon the surface of the oak leaves and later separate to feed upon the full thickness of the leaves. Newly hatched and older caterpillars will migrate considerable distances in search of food. Due to climate and natural enemies their number fluctuates in each locality from one extreme to the other.

NEW SPECIES OF NEOTROPICAL PYRAUSTINAE (LEPID.).

By W. SCHÄUS.

(Continued from page 190.)

Bocchoris cubanalis, new species.

Female.—Palpi ochreous fringed with white. Head ochreous with a white spot on frons and one on vertex behind. Collar brown in front, white behind. Thorax brown with lateral white lines. Abdomen above brown, the basal segment suffused with white; a broad lateral white band on basal half. Wings white, the markings mostly ochreous brown; a terminal fuscous line inwardly edged with white, interrupted on fore wings by veins; basal half of cilia ochreous, terminal half grayish white. Fore wings: eostal margin gray; some ochreous shading at base; a subbasal outbent streak below cell; antemedial line almost vertical mottled with black striae; a medial spot across cell edged with black striae; a similar broad bar on disco-cellular; postmedial from edge of costa, almost vertical to vein 2, upangled and curved where suffusing with disco-cellular bar, then vertical and slightly sinuous to inner margin; a broad subterminal shade expanding at vein 2 and suffusing with postmedial; a streak along vein 7 expanding to subterminal shade, leaving small white spots on either side of postmedial line below eostal margin. Hind wings: postmedial line heavily striated with black, downbent to near anal angle, upbent and narrower to lower angle of cell, then curved to inner margin below middle; the subterminal shade broadly edged inwardly with black striae and suffusing with postmedial at anal angle. Wings below white with all the markings as above fuscous gray.

Expanse, 15 mm.

Habita.—Santiago, Cuba.

Type.—Cat. No. 23781, U. S. N. M.

Allied to *B. minima* von Hedemann.

Bocchoris incoalis, new species.

Male.—Palpi white with a lateral reddish brown line. Head, collar and thorax white. Abdomen white-brown, faintly at base, more heavily on last segments. Wings white, the lines mostly light brown striated with fuscous brown; cilia whitish with a dark brown line close to base, and some grayish shading at middle of outer margins. Fore wings: a basal streak along costal edge; a fine antemedial outcurved line from a small spot on costa, closely followed by a fine line suffusing with a short medial streak on submedian; a broad bar on discocellular suffusing with a broader clear brown spot on costal margin, inwardly edged by a slightly curved dark line which also reaches the medial streak on submedian, and is followed above submedian by a fine dark line to postmedial; the discocellular bar and costal spot is outwardly edged by a fine dark line somewhat incurved and extending to near submedian joined there and on costa joined by the fine postmedial line which is outcurved, but indentate between veins 5 and 6, with a streak extending to discocellular bar; the postmedial is closely followed by another line which is connected between veins 5 and 6 by a thick line with the subterminal line, the latter being somewhat interrupted towards inner margin; a broad terminal dark line preceded by brown suffusions chiefly at apex. Hind wings: a broad medial line, bifurcating at cell, but not reaching costal margin, again bifurcating on inner margin above anal angle; a sinuous, narrower, postmedial line crossed between veins 2 and 3 by a fine line from medial line to termen; a still finer subterminal line marked by a small triangular spot between veins 5 and 6, not extending beyond vein 2; marginal clusters of scales on veins 2-5, and brown suffusions at apex; a terminal thick line diminishing towards anal angle. Underneath with the markings very similar but duller.

Expanse, 15 mm.

Habitat.—Peru.

Type.—Cat. No. 23782, U. S. N. M.

Closely allied to *B. darsanalis* Druce.

Pilocrocis pargialis, new species.

Male.—Palpi brown, fringed below at base with white. Frons brown. Vertex bluish gray. Collar and patagia dark bluish gray. Abdomen above grayish brown shaded with reddish brown on second and terminal segments. Body below whitish. Legs and tarsi mostly white; fore femora and tibiae cinnamon brown, the tarsi with broad brown rings. Wings gray brown rather thinly scaled, the lines fuscous brown, fine. Fore wings: an indistinct subbasal line; antemedial line slightly outcurved, deeply wavy; a faint whitish discocellular line, with dark edging; postmedial line wavy, slightly incurved to vein 6, then outcurved, deeply dentate, upbent above vein 2 to discocellular, then wavily downbent to inner margin. Hind wings: a dark line on discocellular; postmedial line dentate, upbent along vein 2 to cell, then downbent towards inner margin; a dark terminal line. Wings

below grayish white; the postmedial line more punctiform; discocellular markings as above, an interrupted terminal dark line on both wings.

Expanse, 30 mm.

Habitat.—Castro, Parana.

Type.—Cat. No. 23783, U. S. N. M.

Pilocrocis guianalis, new species.

Male.—Antennae with short cilia. Hind tibiae with long curved hairs, ochreous, inwardly brown shaded. Palpi uniform brownish gray, also head, collar, thorax, and abdomen above; the patagia rather long. Body below and legs pale ochreous, the fore femora brownish gray. Wings dull gray brown; a fine darker antemedial line from subcostal, slightly outcurved; a medial darker spot in cell followed by an ochreous spot; a double incurved fuscous line on discocellular divided by a fine ochreous line; postmedial faint, fuscous from costal edge, vertical and dentate to vein 3, inbent below vein 3 to discocellular, then vertical to near submedian and inbent to inner margin, preceded by small pale ochreous spots above and below being 4; cilia tipped with whitish gray and with a fine pale line at base. Hind wings: a fuscous shade on discocellular, followed by a pale ochreous spot which is outwardly edged by the faintly darker postmedial; this line is upbent to the lower angle of cell, then downbent to inner margin below middle. Wings below whitish ochreous, the postmedial line finer, faintly marked, with traces of the ochreous spots.

Expanse, 30 mm.

Habitat.—Cayenne, French Guiana.

Type.—Cat. No. 23784, U. S. N. M.

Very much like *P. alvinalis* Guenée, which has the hind tibiae smooth.

Pilocrocis dentilinealis, new species.

Male.—Palpi brown with white spots below at base of first and second joints. Head and abdomen above ochreous. Collar and thorax lilacine brown. Abdomen below whitish ochre, laterally silvery white. Legs white; fore femora and tibiae light brown. Wings thinly scaled, ochreous brown; an interrupted dark terminal line. Fore wings: a dark basal line across costa and cell; a fine antemedial line across cell to submedian; a small dark medial spot in cell; a fuscous brown spot on discocellular; postmedial fine, dark brown vertical and deeply dentate from costa to vein 5, then lunular to vein 3, upcurved below 3 to near discocellular and downbent to inner margin, somewhat thicker below vein 2 to near submedian. Hind wings: a dark line on discocellular; postmedial fine, outcurved and minutely dentate between veins 5 and 2, inset to cell at vein 2, then broader and minutely dentate to inner margin. Wings below pale ochreous, the spots smaller; the postmedial lines almost punctiform; an interrupted brown terminal line; costa of hind wings whitish.

Expanse, 28 mm.

Habitat.—Rio de Janeiro, Brazil.

Type.—Cat. No. 23785, U. S. N. M.

Pilocrocis estebanalis, new species.

Female.—Palpi cinnamon brown fringed below with white. Frons brown. Vertex white mottled with pale ochreous. Collar yellow, thorax whitish yellow; a cinnamon brown line on shoulders. Abdomen above pale yellow, underneath silvery white. Thorax below silvery white, the legs white; the fore legs outwardly ochreous. Wings semihyaline pale yellow. Fore wings: costal edge very finely brown; an antemedial brown point in cell; a round medial spot below subcostal, a brown bar on discocellular. Hind wings without markings. Wings below white; a dark line on discocellular of fore wing.

Expanse, 26 mm.

Habitat.—San Esteban Valley, Venezuela.

Type.—Cat. No. 23786, U. S. N. M.

Near *P. citrina* Druce.

Pilocrocis sororalis, new species.

Male.—Palpi ochreous white, the first and second joints with terminal gray rings. Head white with a large gray spot on frons and on vertex. Collar white with a central and outer fuscous gray lines; thorax fuscous edged with white behind, the patagia white with large dark spots. Abdomen above white with broad black segmental lines somewhat narrower subdorsally; underneath silvery white. Legs white, the fore femora and tibiae with gray spots. Fore wings opalescent, semihyaline, white, the markings dark cupreous brown; costal edge pale ochreous, the markings not crossing it (except the postmedial line; a thick broken basal line; a broad subbasal line, expanding into a spot in cell; antemedial line fine, almost vertical expanding slightly just below cell; a medial spot from above cell to a black line along median; a medial spot above submedian connected on inner margin with the antemedial by an inbent line; a broad fascia across discocellular space; postmedial narrow, vertical to vein 5, then slightly outbent to vein 2, upbent along it to discocellular fascia with which it suffuses, then downbent to inner margin, being followed there by a narrow white line, the rest of inner margin to tornus being broadly dark shaded; a large terminal dark space, its proximal edge rounded, almost touching the postmedial line and stopping at vein 3; only a terminal dark line between veins 2 and 3; cilia mottled white and fuscous. Hind wings semihyaline opalescent white; a black spot at vein 6 and cell; a postmedial fuscous shade, expanding into a spot on inner margin above anal angle; a fuscous shade from postmedial from vein 3 to termen below vein 2; a curved line from postmedial above vein 5 to vein 2 near termen; a dark apical quadrate spot not reaching vein 5. Fore wings below without the dark space at inner angle, only a short line; the postmedial line free throughout. Hind wings with the markings much fainter.

Expanse, 34 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23787, U. S. N. M.

Near *P. pellucidalis* Dogn.

Pilocrocis cyranonalis, new species.

Male.—Palpi grayish brown fringed below at base with white. Body above grayish brown, underneath white, the legs mostly white; fore femora and tibiae grayish brown, the fore tibiae and base of tarsi thickly scaled. Wings brown with a faint purplish tinge; the cilia grayish brown. Fore wings: spots opalescent white finely edged with fuscous brown; an ante-medial point below cell; a small medial spot in cell below subcostal, and a slightly larger spot below cell; a quadrate postmedial spot from vein 5 to vein 7 its outer edge dentate; a white point beyond it above vein 4, and an inset point below vein 4. Hind wings: a darker line on discocellular followed by a faintly hyaline spot; a darker postmedial line, dentate opposite cell, inset at vein 2 and downbent dentate towards inner margin. Fore wings below paler brown; costal margin whitish ochre; the spots as above dull but white. Hind wings below whitish, the termen shaded with pale brown; a whitish spot on discocellular defined by black spots on either side; post-medial line fine but thicker between veins 5 and 6 and just below vein 2.

Expanse, 34 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23788, U. S. N. M.

Near *P. cyrisalis* Druce.

Pilocrocis bastalis, new species.

Male.—Mid tibiae with tufts of long black hairs; hind tibiae missing. Palpi brown, the first joint and part of second fringed with white. Head, collar and thorax grayish brown. Abdomen above grayer, underneath whitish ochre. Wings brown with a cupreous tinge. Fore wings: a narrow medial hyaline spot across cell, and a narrower outbent streak below cell; a narrower fuscous brown streak on discocellular; three postmedial small hyaline spots forming a slightly incurved line cut by veins 6 and 5, and a smaller spot below vein 4 slightly inset. Hind wings more thinly scaled at base and along inner margin; the postmedial hyaline spots placed as on fore wing and the same size. Wings underneath duller.

Expanse, 30 mm.

Habitat.—Peru.

Type.—Cat. No. 23789, U. S. N. M.

Pilocrocis evanidalis, new species.

Male.—Palpi: first joint pale ochreous, second and third joints light brown. Body above brown, underneath whitish. Wings silky brown, faintly cupreous; cilia tipped with white. Fore wings: a faint, darker, ante-medial line, somewhat macular; a small dark and narrow linear spot on discocellular; postmedial line fine, slightly darker, almost vertical from costa to below vein 3, in and upbent to near discocellular, angled and downbent to inner margin. Hind wing with very faint traces of a postmedial line. Wings

below paler with a purple tinge; a whitish line on discocellular of fore wing; a faint postmedial line on hind wing.

Expanse, 30 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23790, U. S. N. M.

***Tyspanodes santiagalisis*, new species.**

Female.—Palpi and head pale ochreous brown; frons with silvery scales laterally and behind. Collar opalescent gray shaded with ochreous brown in front. Thorax opalescent gray. Abdomen above ochreous brown, dorsally shaded with gray except at base and terminally, the last segment dark gray with a transverse ochreous yellow band. Body below and legs silvery white; the legs faintly streaked with ochreous. Fore wings gray with a faintly darker vertical postmedial shade. Hind wings whitish ochre thinly scaled. Wings below pale ochreous; a broad dark grayish shade below costa.

Expanse, 20 mm.

Habitat.—Santiago, Cuba.

Type.—Cat. No. 23791, U. S. N. M.

***Tyspanodes piuralis*, new species.**

Male.—Head and body above pale ochreous, the palpi white in front. Body below white, the tibiae streaked with ochreous. Fore wings pale ochreous, thinly scaled, somewhat opalescent; small darker subbasal points on median and vein 1; a faint, fine, antemedial dark line outangled in cell, deeply incurved below cell, and outangled on vein 1; two dark points at ends of discocellular; postmedial line fine, dentate, well outcurved beyond cell, preceded by a similar less distinct line; termen faintly tinged with brown; terminal dark points on interspaces. Hind wings hyaline opalescent white; terminal black points on interspaces. Wings below white with terminal black points; costa of fore wings pale ochreous.

Expanse, 21 mm.

Habitat.—Piura, Peru.

Type.—Cat. No. 23792, U. S. N. M.

***Tyspanodes albomarginalis*, new species.**

Female.—Palpi, head, collar and thorax white. Abdomen above gray brown, the basal segment white; underneath white. Legs white. Fore wings suffused with brown, costa and inner margin narrowly white; termen more broadly white, cilia white; some white hairs at base; a short, white streak below cell at base; the white on inner margin expanding slightly antemedially; a postmedial punctiform white line, well outcurved from costa to vein 2, then inbent. Hind wings semihyaline white; faint traces of a postmedial and subterminal pale ochreous shade thinly irrorated with brown.

Wings below white.

Expanse, 22 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23793, U. S. N. M.

***Phostria cleodalis*, new species.**

Male.—Antennae with a short tuft of hairs before middle. Palpi dark gray. Head and collar brown. Thorax and abdomen above grayish brown; underneath white. Legs streaked with light brown; tarsi white; a broad fuscous ring at base of fore tarsi. Wings brown with a faint purplish tinge. Fore wings: costal margin tinged with gray to postmedial line; a faint brownish white spot in end of cell, and one below cell, before vein 2, faintly darker edged; an outbent pale line on discocellular, edged with darker brown lines, followed by a semihyaline white spot from veins 5-6, and a smaller spot above vein 6, their outer edge incurved; three similar spots from vein 5 to vein 2, with their outer edge lunular; the spot below vein 5 is outset beyond the spot above it, and they are all darker edged by what is presumably the postmedial line; cilia dark gray. Hind wings with faint hyaline spots in and beyond cell, also streaks on interspaces below cell to inner margin on either side of the faint postmedial line; a dark streak on discocellular; cilia gray tipped with white towards anal angle. Wings below gray, with only the postmedial spots of fore wing well defined.

Expanse, 29 mm.

Habitat.—Bolivia.

Type.—Cat. No. 23794, U. S. N. M.

Near *P. tridentalis* Hampson. This species is described on page 328, Ann. Mag. Nat. Hist., vol. 14, 1912; on page 333 Hampson describes under the same name a species from Africa, for which I suggest the name of *hampsonialis*.

***Phostria indignalis*, new species.**

Female.—Palpi gray brown. Head and abdomen dull dark grayish brown. Collar and thorax tinged with dull dark steel gray. Abdomen below dark silky gray. Legs dark gray, the tarsi ochreous; some blue scaling at base of fore femora. Wings dark brown; the discal area of fore wings faintly tinged with blue. Wings below paler, the cells tinged, the veins streaked with blue; the terminal third tinged with purple.

Expanse, 32 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23795, U. S. N. M.

***Phostria cayennalis*, new species.**

Male.—Palpi and head orange. Collar opalescent gray shaded with orange

in front. Thorax and abdomen above lavender-gray; the latter with the last segment and anal hairs orange, the genitalia tuft white; venter yellow. Legs orange. Fore wings: base of costa and inner margin lavender-gray; costa otherwise shaded with ochreous, the inner margin otherwise and termen broadly dark grayish brown; disc of wing more thinly scaled, iridescent blue, irrorated with dark gray below cell, with dark brown postmedially, and crossed by dark veins. Hind wings gray broadly shaded with fuscous terminally, the disc thinly scaled. Wings below graycr, the disc of fore wing only faintly tinged with blue.

Expanse, 32 mm.

Habitat.—Cayenne, French Guiana.

Type.—Cat. No. 23796, U. S. N. M.

Near *P. disciiridescens* Hampson.

Phostria carusalis, new species.

Male.—Palpi black, at base white. Frons fuscous with a pale yellow line in front. Collar dark brown with a yellow spot laterally. Thorax and abdomen above fuscous brown, the patagia and base of abdomen laterally bright yellow. Body below whitish; mid and hind tibiae outwardly light brown; fore tibiae and base of tarsi outwardly dark brown; tarsi ochreous. Fore wings deep purple irrorated with black; costal margin dull fuscous brown; a bright yellow spot from base of inner margin, its anterior edge straight below base of cell, then downcurved to middle of inner margin; a broad, oblique, bright yellow fascia from end and beyond cell from subcostal to below vein 2. Hind wings bright yellow, rather thinly scaled; termen dark purple from inner margin, expanding above vein 3, then narrowing to a point at middle of costal margin; cilia dark silky brown with some fuscous shadings. Wings below somewhat duller.

Expanse, 26 mm.

Habitat.—Bolivia.

Type.—Cat. No. 23797, U. S. N. M.

Near *P. delilalis* Walker.

Dichoerocis gyacalis, new species.

Female.—Palpi ochreous, laterally dark brown on terminal half. Head, collar, thorax, and abdomen above grayish brown, the patagia mostly pale yellow. Fore wings pale yellow; costal margin broadly dark silky gray to below cell at base, leaving only the terminal lower half of cell yellow, beyond cell extending to middle of discocellular then slightly narrower; a fuscous gray spot on discocellular; termen dark silky gray, the inner margin more narrowly so, and not reaching base; the marginal shade is inwardly finely edged with dark brown. Hind wings pale, the termen dark silky gray; a faint spot on discocellular. Wings below paler; the inner margin of fore wing whitish yellow; hind wings with only a fine brown terminal line.

Expanse, 26 mm.

Habitat.—Sao Pau'lo, Brazil.

Type.—Cat. No. 23798, U. S. N. M.

Near *D. eubeusalis* Walker, which has no dark inner margin on fore wing.

Dichocrocis tlapalis, new species.

Male.—Palpi whitish ochre with a lateral brown spot on second joint. Frons whitish ochre with a large fuscous spot. Vertex mottled white and brown. Collar gray-brown tipped with white. Thorax fuscous, the patagia inwardly edged with white on anterior half, and with a short white line on outer edge. Abdomen above fuscous with whitish segmental lines at base, the anal hairs ochreous. Wings fuscous brown. Fore wings: basal half of costa ochreous yellow; a black point at base; a subbasal wavy white line, preceded on costa by a black spot extending into cell, and followed by a larger black spot on costa; a wavy antemedial white line slightly outcurved, followed by a small black spot on costa and a small white spot in cell; a large white spot at end of cell, narrowing behind; a yellowish white sinuous line on discocellular inwardly broadly edged with fuscous brown; postmedial line remote, white, outcurved below costa, incurved from veins 6-4, again outcurved to below vein 2, and upbent to below discocellular, but very faint, and outangled from vein 2 near cell to inner margin; this line is inwardly edged with fuscous brown preceded by whitish shades on interspaces from veins 8-2; a whitish yellow shade from costa to vein 7 before apex; an irregular black terminal shade; cilia dark brown, with a pale line at base, also tipped with white towards apex. Hind wings: a subbasal and an antemedial white line; a small whitish spot on discocellular circled with fuscous; postmedial very faint from costa, upbent along vein 2 to lower angle of cell, then more distinct, downbent and excurved to inner margin near anal angle; termen and cilia as on fore wing. Fore wings below paler, the inner margin whitish. Hind wings below pale; a space below cell to inner margin whitish; the postmedial line more distinct.

Expanse, 22 mm.

Habitat.—Orizaba, Mexico.

Type.—Cat. No. 23799, U. S. N. M.

Near *D. penniger* Dyar.

Dichocrocis clystalis, new species.

Male.—Palpi lilacine gray, the base whitish. Frons whitish. Vertex ochreous. Collar light silky brown. Thorax silvery gray. Abdomen above brown, the base and anal segment whitish gray; some fuscous shading on segments behind. Body below whitish, the legs silvery white. Fore wings lilacine brown; a fuscous brown spot as base of cell, and one on inner margin; a similar subbasal spot on costa, also an antemedial spot from which a fine

black line is outbent to inner margin; the basal half of costa is somewhat paler shaded; a small black spot at middle of cell; a thick black discocellular line, outbent from subcostal, suffusing at vein 4 with a similar postmedial line inbent from costal edge, the space between forming a triangular whitish yellow spot; below vein 4 the two lines suffuse into a thicker vertical line to inner margin, terminal fuscous brown spots on interspaces. Hind wings lilacine brown irrorated with fuscous gray; a dark line on discocellular, faint traces of a fuscous postmedial line, more distinct at costa and inner margin. Fore wings below much paler, the cell and inner margin whitish; a black oblique line on discocellular; the postmedial line from costa to vein 4. Hind wings below almost white; a black discal point and faint postmedial line.

Expanse, 17 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23800, U. S. N. M.

Lamprosema diaphanalis, new species.

Male.—Palpi with first and base of second joint white, otherwise dark brown. Head, collar, and thorax whitish yellow; a dark brown streak on shoulders. Abdomen whitish with a dorsal line, deep yellow at base, then brown; anal hairs yellowish. Body below and legs silvery white; fore tibiae and base of tarsi streaked with brown. Wings thinly scaled whitish yellow; cilia white; lines fine, pale brown. Fore wings: basal half of costa shaded with purplish; antemedial line outbent from median to inner margin; lines on either side of the more densely scaled discocellular; a small yellow spot at middle of cell adjoining subcostal; postmedial from subcostal, outcurved, lunular to below vein 4, and inbent to cell at vein 3, then vertical and sinuous to inner margin. Hind wings with a dark point on discocellular; postmedial line outcurved, lunular to vein 2, not reaching cell, and almost straight to middle of inner margin. Fore wings below: costal edge dark brown, the cellular spot and discocellular line dark edged, postmedial hardly lunular. Hind wings below white; postmedial line indistinct.

Expanse, 28 mm.

Habitat.—Volcan de Santa Maria, Guatemala.

Type.—Cat. No. 23801, U. S. N. M.

Sylepta anchuralis, new species.

Male.—Fore tibiae and tarsi, except terminal joints with thick short fringe. Palpi with first and base of second joints white, otherwise brown. Head, body and wings bistre brown; some pale hairs at base of abdomen. Body below and legs whitish; fringe on fore tibiae brown, on tarsi brown circled by two white lines. Fore wings: a small antemedial hyaline spot below cell, with darker brown shading on either side; a short semihyaline streak from subcostal near end of cell, and a similar streak below it from vein 2 to submedian fold, both darker edged on either side; two semihyaline

points beyond cell between veins 5 and 7 more heavily edged with dark brown, and two larger spots slightly outset between veins 3 and 5, their outer edge indented on vein 4, and only dark edged outwardly; faint terminal spots on interspaces. Hind wings more thinly scaled, whitish at base and on inner margin; a semihyaline small spot with dark edge beyond discocellular; a faint postmedial line dentate between 5 and 2, upbent to cell and downbent to below middle of inner margin; an interrupted dark terminal line; a dark line at base of cilia. Wings below paler tinged with gray.

Expanse, 29 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23802, U. S. N. M.

Sylepta albicostalis, new species.

Male.—Palpi: first joint white, second and third dark brown. Head, collar and thorax bright orange. Abdomen above gray. Body below and legs white; fore and hind tibiae and tarsi streaked with gray. Fore wings gray shot with blue, the apex narrowly white; cilia gray, at apex dark brown. Hind wings gray; the costal margin for two thirds from base broadly white, extending beyond anterior half of cell. Wings below pale gray without any white at apex of fore wing; the costal margin of hind wing as above.

Expanse, 46 mm.

Habitat.—Volcan de Santa Maria, Guatemala.

Type.—Cat. No. 23803, U. S. N. M.

Near *S. laticalis* Lederer.

Sylepta viridivertex, new species.

Male.—Palpi brown, the first joint white. Frons pale brownish ochre. Vertex and collar pale green. Thorax grayish shaded with pale green behind; patagia mostly pale green shaded. Abdomen dull brownish gray with faint greenish shading dorsally. Abdomen below ochreous white. Legs white; fore tarsi with three fuscous bands. Wings thinly scaled brownish gray, the lines dull dark brown; a pale line at base of cilia which is partly darker shaded. Fore wings: antemedial line slightly outcurved; a dark line on discocellular not reaching lower angle of cell; a dentate postmedial line from subcostal, outbent and curved from below vein 6 to below vein 3, then upbent, curved at lower angle of cell and slightly outbent to inner margin. Hind wings more thinly scaled at base; a dark line on discocellular; postmedial line faintly dentate, vertical to below vein 6 slightly outcurved and upbent between veins 3 and 2, then downbent to inner margin before reaching cell. Wings below paler, the hind wings almost white with the postmedial line better defined.

Expanse, 30 mm.

Habitat.—Aroa, Venezuela.

Type.—Cat. No. 23804, U. S. N. M.

Near *S. silicalis* Guenée.

Sylepta mysticalis, new species.

Female.—Palpi grayish brown, whitish on first and base of second joints. Body above and wings ochreous brown. Body below and legs ochreous white. Fore wings: a fine outbent dark antemedial line; a dark point on discocellular; postmedial line fine, dark, very slightly outcurved to vein 2, upbent to near cell, angled and downbent to inner margin. Hind wings: postmedial line faint, very slightly outcurved and only a little upbent on vein 2, then angled and downbent to inner margin. Wings below somewhat paler, the postmedial line almost punctiform.

Expanse, 27 mm.

Habitat.—Rio de Janeiro, Brazil.

Type.—Cat. No. 23805, U. S. N. M.

Near *S. brunnescens* Hampson.

Sylepta nebulalis, new species.

Male.—Palpi brownish gray, the second joint crossed by darker shades at base and tip. Head dark brown. Collar and thorax dark gray shaded with fuscous. Abdomen above brown with fine white segmental lines and some fuscous irrorations towards base. Abdomen below and legs ochreous white, the fore femora shaded with brown. Wings thinly sealed whitish irrorated with brown forming lines and blotches; cilia white partly tipped with fuscous. Fore wings: a dark spot at base; subbasal space mottled; two antemedial pale lines defined by fine dark edging outbent to median, incurved on inner margin; a dark medial point in cell; a large dark spot on discocellular; postmedial line whitish defined by a dark line on inner edge, and outwardly brown shaded to termen, slightly inbent from costa to discocellular fold, outcurved lunular, upbent above vein 2 to cell, then incurved to vein 1, angled and slightly inbent on inner margin; terminal space more darkly shaded along veins. Hind wings: irrorations forming numerous fine lines; postmedial line dark, thick, better defined, outcurved between veins 5 and 2, inset and almost straight to inner margin; terminal space as on fore wing. Wings below duller white with finer irrorations; fore wings with the spot in cell and discocellular spot well marked; hind wings with a dark lunule on discocellular, the postmedial line finer and dentate.

Expanse, 27 mm.

Habitat.—Peru.

Type.—Cat. No. 23806, U. S. N. M.

Lygropia maritzalis, new species.

Male.—Palpi yellow streaked behind with black; first and second joints terminally fuscous brown. Body above orange; a black dorsal patch at base of abdomen, and a transverse fine black line anteriorly on third segment; anal hairs ochreous with lateral black tufts. Abdomen below yellowish

white. Legs white shaded with ochreous; fore tarsi white with three black rings. Wings bright orange; cilia black at base tipped with gray; markings black. Fore wings: a subbasal spot on costa; a more remote spot on inner margin; an antemedial spot on costa entering cell as a line, an outset vertical line below cell, and a similar line from vein 1 to inner margin; a thick line on discocellular; an outbent postmedial line across costal margin; spots from veins 7-2, the spot above vein 5 slightly inset, a larger inset spot below vein 2, and a small spot below it on inner margin. Hind wings: a post medial series of spots outcurved and smaller from veins 5-2, a line inset at vein 2 and downbent towards inner margin also interrupted. Fore wings below: costa finely fuscous; postmedial spots reduced to points. Hind wings below with a dark point on discocellular; postmedial spots faintly indicated.

Expanse, 29 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23807, U. S. N. M.

In appearance like *Sylepta stictigramma* Hampson from the Bahamas and Cuba.

***Lygropia domingalis*, new species.**

Female.—Palpi yellow. Head, body above and wings orange yellow. Body below yellowish white. Legs yellow; fore tarsi white with three fuscous rings. Fore wings: a black line across costa and cell near base; a subbasal black point on inner margin; antemedial black line on costa, and a medial point below cell; a thick black line on discocellular; fine and faint postmedial streaks on costa; a point below vein 6; a short fine streak post-medially below vein 2; cilia whitish gray. Hind wings: a small fuscous spot medially below vein 2; cilia fuscous tipped with gray. Wings below without markings.

Expanse, 24 mm.

Habitat.—San Francisco Mountains, San Domingo.

Type.—Cat. No. 23808, U. S. N. M.

Collected by Mr. A. Busck.

Near *Lygropia chromalis* Guenée.

***Lygropia venadialis*, new species.**

Female.—Palpi white streaked behind with black. Head and body above yellow; some black scaling at base of abdomen and on second segment. Body below and legs white. Wings yellow, lines black; a terminal line; cilia gray. Fore wings: base of costa and cell fuscous; a fine short basal streak below cell; antemedial line outbent in cell, vertical below it to inner margin followed in cell by a white spot edged with black; discocellular spot extending above subcostal, outlined in black, medially constricted like a figure 8 with a round white spot in front and one behind; postmedial line slightly outbent from costa below vein 3, obsolescent to discocellular spot where it is vertical to

inner margin. Hind wings: a postmedial line downbent to below vein 3, obsolescent and well inset, downbent from vein 2 to inner margin below middle. Fore wings below duller, the markings as above; the termen with light brown shading. Hind wings below as above but with a dark spot on upper discocellular.

Expanse, 15 mm.

Habitat.—Venadio, Sinaloa, Mexico.

Type.—Cat. No. 23809, U. S. N. M.

Received from Mr. B. Preston Clark.

Lygropia naranjalis, new species.

Female.—Palpi yellow narrowly fringed and tipped with black. Head, body, and wings deep orange; a black dorsal stripe on abdomen from second segment to anal segment; anal hairs black. Body below black; throat deep yellow; fore femora yellow, the tibiae and tarsi black; hind legs silvery gray, the tibiae orange. Fore wings: costa and termen narrowly black; cilia black. Hind wings: termen narrowly black expanding at apex and anal angle. Wings below the same.

Expanse, 17 mm.

Habitat.—Sao Paulo, S. E. Brazil.

Type.—Cat. No. 23810, U. S. N. M.

Near *L. armeniacalis* Walker.

Lygropia fuscivenalis, new species.

Male.—Palpi orange, the third joint black. Head, throat, collar and front of patagia bright orange; patagia otherwise, thorax and abdomen brownish black; anal hairs white. Fore wings dull grayish brown, the veins fuscous brown, except the discocellular which has no marking. Hind wings brown black, the veins black.

Expanse, 23 mm.

Habitat.—Peru.

Type.—Cat. No. 23811, U. S. N. M.

Margaronia morosalis, new species.

Male.—Palpi fuscous brown fringed with white on basal half. Head collar and thorax dark brown tinged with lilacine. Abdomen above fuscous; anal hairs yellow brown mottled with darker brown tipped hairs. Body below ochre white. Legs white; fore tibiae and tarsi shaded with brown. Fore wings silky brown; traces of faintly semi-hyaline spots beyond cell and between veins 3 and 2, better defined on underside. Hind wings silky brown thinly sealed appearing semihyaline; termen broadly silky brown.

Expanse, 30 mm.

Habitat.—Callao, Peru.

Type.—Cat. No. 23812, U. S. N. M.
 Received from Mrs. J. Pusey.
 Near *M. holophoenica* Hampson.

***Margaronia brevilinealis*, new species.**

Male.—Palpi fuscous brown, white at base. Head, collar and thorax dark brown. Abdomen above fuscous brown; anal hairs whitish broadly tipped with black, the lateral tufts opalescent. Abdomen below whitish gray with dark transverse shades. Thorax below and throat silvery white. Legs ochre white, the fore tibiae and tarsi shaded with brown. Wings dark brown faintly tinged with purple; a fine pale line at base of cilia. Fore wings: basal half faintly tinged with lilacine; a semihyaline yellowish fascia adjoining discocellular, incurved below vein 3, and with only a small spot below vein 2, darker edged, outwardly lunular dentate. Hind wings: costa to beyond middle narrowly white; a broad medial semihyaline line terminating below vein 2, its proximal edge somewhat indentate at lower angle of cell.

Expanse, 30 mm.

Habitat.—Volcan de Santa Maria, Guatemala.

Type.—Cat. No. 23813, U. S. N. M.

***Margaronia guatemalalis*, new species.**

Male.—Palpi fuscous brown fringed below with white. Head and thorax dark grayish brown. Abdomen above fuscous, a white transverse line near base; terminal segment white in front yellowish behind; anal hairs black; lateral tufts opalescent. Wings dark brown faintly tinged with purple; cilia dark silvery gray with a fine pale line at base. Fore wings: a semihyaline broad white line beyond cell from vein 8 terminating in a small spot below vein 2. Hind wings: basal half of costa narrowly white; a broad medial semihyaline whitish line, vertical, narrowing to a point, but not reaching anal angle; a fuscous line on discocellular. Wings below paler.

Expanse, 22 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23814, U. S. N. M.

Near *M. albicincta* Hampson.

***Margaronia marginepuncta*, new species.**

Male.—Palpi dark brown, the base white. Head brown. Collar gray brown tipped with white. Thorax gray brown. Abdomen above darker gray-brown; a white transverse line near base; anal segments and hairs yellow-white, the latter tipped with black, the lateral tufts opalescent. Abdomen below yellowish white. Legs white, the fore tibiae shaded with light brown. Wings brown tinged with purple. Fore wings: a whitish dark edged line on discocellular followed by a broad semihyaline whitish fascia from vein 7, incurved at vein 3 to below end of cell, terminating in a small spot

below vein 2; a small yellow spot medially on inner margin. Hind wings, a broad medial semihyaline white fascia from costa to near inner margin, where it is somewhat narrower; cilia on both wings gray, crossed by a brown line near base. Hind wings below with the basal half of costa whitish.

Expanse, 20 mm.

Habitat.—Jamaica, West Indies.

Type.—Cat. No. 23815, U. S. N. M.

Near *M. lualis* Herrich-Schaeffer.

***Margaronia brunneacollis*, new species.**

Male.—Palpi fuscous brown, fringed with white below on basal half. Head, collar and thorax dark brown, the patagia shaded with bronze. Abdomen above fuscous, underneath white; anal tufts yellowish at base broadly tipped with silvery steel gray. Throat and legs white. Fore wings dark brown, showing indistinctly, the postmedial white spot of underside. Hind wings white, the termen broadly black at apex, extending narrowly to beyond middle of costa, narrowing to a point at anal angle. Fore wings below dark brown; base of inner margin to cell white; an oblique large oval white spot beyond cell from vein 7 to below vein 2. Hind wings below as above.

Expanse, 36 mm.

Habitat.—Bolivia.

Type.—Cat. No. 23816, U. S. N. M.

Near *M. auricollis* Snellen.

***Margaronia aroalis*, new species.**

Female.—Palpi brown, the base and throat dull white. Head and body above dull brown, underneath and legs ochreous white. Fore wings dull brownish gray; a semihyaline yellowish white space from below middle of cell, its lower edge downbent to vein 1, its outer edge wavyly upcurved to below vein 7, its upper edge following median to vein 4 and sinuously upbent to below vein 7, terminating there in a small spot. Hind wings yellowish white, the termen rather broadly dull brownish gray. Wings below whiter, the hind wings without the terminal shade.

Expanse, 26 mm.

Habitat.—Aroa, Venezuela.

Type.—Cat. No. 23817, U. S. N. M.

***Margaronia venatalis*, new species.**

Female.—Palpi: first joint white, second pale lilacine brown fringed below with white. Head, collar and thorax white. Abdomen above gray shaded, white at base. Abdomen below white, the two last segments gray. Legs white. Fore wings brownish gray, the median veins from cell and vein 1 dark brown; a white streak above median; shorter white streaks above vein 1, and on inner margin, the latter interrupted by an oblique medial dark

shade from cell at vein 2; a white streak above vein 6 to near termen; short postmedial whitish streaks on interspaces from vein 5 to vein 2 adjoining cell, below vein 2 forming a whitish vertical shade to inner margin; a terminal dark brown line preceded by a white line cut by veins. Hind wings brownish gray, paler at base and on inner margin; a dark terminal line. Fore wings below silky gray-brown; a terminal fuscous brown line. Hind wings below white; a terminal fuscous brown line expanding slightly on interspaces.

Expanse, 26 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23818, U. S. N. M.

Margaronia rioalis, new species.

Female.—Palpi fuscous brown; a short white streak in front at base; the fringe with a few white tipped hairs. Head dark brown with lateral white lines. Collar and thorax fuscous brown; an outer white line expanding broadly on patagia. Abdomen above fuscous brown, the last three segments with fine white lines behind. Abdomen below grayish brown with three white lines as above. Legs fuscous gray. Fore wings fuscous brown; an opalescent white spot across cell obliquely towards inner margin and tornus, ending in a point; a large semioval opalescent spot postmedially from vein 8 to near tornus, its outer edge rounded, its inner edge almost straight, a fine white line on discocellular; a whitish subterminal line; the apex broadly brown as in *M. heliconalis* Guenée, but the two spots do not meet behind as in that species. Hind wings opalescent white; termen broadly fuscous brown, narrowing on inner margin to a point above middle, on costal margin narrowing to a point near base; at vein 6 the white forms a short upbent subterminal line. Wings below fuscous, the opalescent portions as above.

Expanse, 26 mm.

Habitat.—Rio de Janeiro, Brazil.

Type.—Cat. No. 23819, U. S. N. M.

Also near *M. extorris* Dognin, which is the same as *M. confinis* Druce, but the latter name, though earlier, is preoccupied by an eastern species.

Margaronia busccalis, new species.

Male.—Palpi lilacine brown, shaded with light reddish brown at base. Frons white with a transverse reddish brown line. Vertex and collar lilacine brown. Thorax fuscous, the patagia brownish gray. Abdomen reddish brown with some white segmental lines and dark irrorations dorsally near middle; lateral white tufts at base upcurved over base of abdomen. Body below white; legs mostly white; base of mid tarsi brown; fore legs lilacine brown with tufts of hair on tibiae and base of tarsi; terminal half of tarsi white. Fore wings pale olive-brown tinged with lilacine; base dark brown

limited by a thick straight white line, inbent from costa to inner margin; costal margin paler; a curved white spot below subcostal before end of cell, laterally edged with fuscous in front; an angled dark brown line on discocellular followed by an oblique white spot from vein 7 to vein 5, its outer edge indented on vein 6; postmedial line remote, faintly darker, vertical from costa to vein 4, slightly incurved and inbent below vein 2, outwardly edged with white from subcostal to vein 6. Hind wings thinly scaled whitish suffused with light ochreous brown; a postmedial minutely wavy brownish line; a dark terminal line; cilia gray tipped with white. Wings below whitish gray, the markings indistinct; postmedial line on hind wings better defined, interrupted by veins.

Expanse, 24 mm.

Habitat.—Santo Domingo, West Indies.

Type.—Cat. No. 23820, U. S. N. M.

Collected by Mr. A. Busck.

Near *M. impulsalis* Herrich-Schaeffer; the antemedial line oblique and narrower, the discocellular spot also more oblique.

***Cliniodes paranalis*, new species.**

Male.—Palpi brownish gray. Frons fuscous brown. Vertex yellow-brown. Collar and thorax gray. Abdomen above yellow-brown, underneath silvery white. Legs whitish streaked with brown, the fore tibiae and base of tarsi dark brown. Fore wings thinly scaled, the disc whitish opalescent; costal margin pale yellowish white, darker at base of costal edge; inner margin yellow-brown with a darker medial shade extending above vein 1; a fine dark postmedial line, almost obsolescent on costa, from vein 6 parallel with termen, below vein 3 slightly incurved and thicker; some yellow brown irrorations on termen; cilia silvery white. Hind wings semihyaline opalescent white. Fore wings below opalescent white, the costal margin golden yellow brown; postmedial line only distinct on costal margin.

Expanse, 32 mm.

Habitat.—Castro, Parana.

Type.—Cat. No. 23821, U. S. N. M.

***Nomophila clarissalis*, new species.**

Male.—Palpi fuscous; a broad white band on second joint. Head and body above fuscous gray; patagia streaked with orange; lateral long orange hairs on abdomen. Body below and legs dark gray; tarsi whitish with fuscous rings. Fore wings bronze-brown tinged with purple; veins except subcostal and discocellular streaked with orange, not reaching termen; cilia silky gray-black. Hind wings orange; termen narrowly and cilia black. Fore wings below duller; inner margin with a white streak. Hind wings below as above; the costal margin narrowly black.

Expanse, 24 mm.

Habitat.—Peru.

Type.—Cat. No. 23822, U. S. N. M.

***Psara extremalis*, new species.**

Female.—Palpi brown mottled with black, the base below grayish white. Frons brown with a pale line in front, vertex brownish gray. Collar gray mottled with brown. Thorax gray; patagia white with a few gray scales. Abdomen above white at base, yellowish medially, pale gray terminally with white segmental lines; some black scales on front of anal segment. Body below and legs white; fore tibiae spotted with black; tarsi with black spots. Fore wings ochreous white, the markings black; costa mostly black, also the base of cell; three subbasal inbent black spots from cell to inner margin; antemedial line interrupted by veins, outbent across cell, inbent below it; a medial annulus in cell and one below cell; a large quadrate spot on discocellular containing a small white spot; postmedial inbent from costa to vein 6, slightly outbent to vein 3, very faint and inbent to close above vein 2 and downbent to inner margin; a fuscous shade between veins 5 and 6 adjoining postmedial suffusing with a similar shade to apex; a terminal black line interrupted by veins; cilia white mottled with black. Hind wings white irrorated with pale yellow brown scales, a dark line on discocellular; postmedial inbent from costa to below vein 6, outbent and dentate to near termen; a medial wavy line from vein 5 to inner margin above anal angle; a terminal black line expanding at apex, its inner edge diffuse. Wings below white, the fore wings with the spots entirely black, the terminal space beyond postmedial suffused with gray.

Expanse, 27 mm.

Habitat.—Baracoa, Cuba.

Type.—Cat. No. 23823, U. S. N. M.

***Psara guatalis*, new species.**

Female.—Palpi fuscous brown above, white underneath. Head brown. Collar and thorax dark silky gray. Abdomen above brown shaded with dark gray. Body below and legs white; fore tibiae shaded with pale yellow-brown the basal joint of fore tarsi tinged with black. Fore wings silky brown faintly tinged with purple; an almost imperceptible dark postmedial line outcurved to vein 3, then incurved to inner margin. Hind wings more thinly scaled, silky brown. Wings below silky gray, the veins faintly streaked with purple.

Expanse, 27 mm.

Habitat.—Cayuga, Guatemala.

Type.—Cat. No. 23824, U. S. N. M.

***Psara antillalis*, new species.**

Female.—Palpi dark brown above, white below. Body above brownish

gray, the thorax glossy; body below and legs white; a brown streak on hind tibiae; a dark ring on first joint of fore tibiae. Wings gray-brown tinge with purple, the lines black; cilia dark gray tipped with white. Fore wings: antemedial line outbent to below vein 1 and then again outbent; a point in cell; a larger point on discocellular; postmedial line thick, faintly outbent to vein 5, slightly outcurved, minutely lunular to below vein 3, shortly inbent above vein 2 to well below discocellular, and slightly inbent wavy to inner margin. Hind wings: a streak on discocellular; postmedial line thick, slightly outcurved from vein 5 to below vein 3, shortly upbent between veins 3 and 2, and downbent towards inner margin; a faint terminal line. Wings below whitish gray-brown, the postmedial line well marked; dark streaks on discocellular.

Expanse, 27 mm.

Habitat.—Santo Domingo, West Indies.

Type.—Cat. No. 23825, U. S. N. M.

Collected by Mr. A. Busck.

Near *P. pachycera* Hampson.

***Psara subnitens*, new species.**

Male.—Palpi fuscous brown, underneath white, the third joint with long porrect hairs. Body above dark silky gray-brown; lateral white lines on frons; abdomen with a thick lateral tuft on next to last segment. Body below and legs white; fore tibiae streaked with dark brown. Wings dark silky gray-brown tinged with purple. Fore wings: some blue sealing on basal half especially at base, also postmedially on interspaces; cilia iridescent black or brown tipped with opalescent white; a very faint postmedial darker line from costa to vein 3 almost vertical. Hind wings: a faint fuscous line on base of cilia, the tips opalescent white. Wings below silvery gray.

Expanse, 26 mm.

Habitat.—Trinidad; also from French Guiana.

Type.—Cat. No. 23826, U. S. N. M.

***Phlyctaenodes ramsdenalis*, new species.**

Female.—Palpi yellow brown, the first joint white, the second joint partly fringed with white. Body above bone white, underneath silvery white. Legs white; fore and hind tibiae streaked with pale brown. Fore wings dull bone white, the markings brownish gray; antemedial line obliquely outcurved to below vein 1, and outbent to near middle of inner margin; a point in cell adjoining subcostal; a streak on discocellular; postmedial line faint on costa, incurved to vein 7, slightly incurved to below vein 3, dentate below 4 and 3, then forming a narrow deep incurve across vein 2 and a slight incurve from fold to inner margin; a subterminal grayish macular shade. Hind wings semihyaline white; a fine brownish postmedial line from vein 6 to below vein 2; a terminal grayish brown shade; cilia silvery white on both wings.

Fore wings below whiter, postmedial line faint towards inner margin; subterminal shade more heavily marked, dark gray. Hind wings below with markings very faint.

Expanse, 20 mm.

Habitat.—Santiago, Cuba.

Type.—Cat. No. 23827, U. S. N. M.

Near *P. helvialis* Walker.

Phlyctaenodes jaralis, new species.

Female.—Palpi yellow-brown, the first joint white. Head yellow brown, the frons with lateral white lines. Collar and thorax ochraceous yellow. Abdomen above duller and paler. Abdomen below with alternate pale gray and ochreous yellow bands. Legs white; fore femora pale grayish; fore tibiae with an ochre yellow streak. Fore wings whitish yellow, the lines pale brown starting from subcostal; antemedial outbent across cell, outcurved below cell, incurved below vein 1; a streak on discocellular; postmedial line incurved to vein 6, slightly outcurved to vein 3, inwardly downbent to vein 2, then wavy, vertical to inner margin; a subterminal, vertical, pale brownish yellow shade; cilia broadly tipped with white. Hind wings semihyaline yellowish white; a fine postmedial line straight from costa to vein 2; a subterminal dark line; the termen whitish yellow. Wings below white, the outer lines as above.

Expanse, 23 mm.

Habitat.—Guadalajara, Mexico.

Type.—Cat. No. 23828, U. S. N. M.

Near *P. autocratoralis* Dyar.

Liopasia meridionalis, new species.

Male.—Palpi lilacine brown, underneath white on basal half. Head lilacine brown, darker on vertex; white lines above eyes. Thorax lilacine brown. Abdomen above dark brown, the two basal segments lilacine brown with paired white spots. Abdomen below pale brown. Thorax below and legs white, the mid and hind legs streaked with brown at base; some brown shading at base of tarsi. Fore wings lilacine brown, lines fine, fuscous; antemedial line deeply outcurved below cell, incurved across vein 1; inner margin medially and at tornus shaded with fuscous brown; a medial round linear spot across cell; a similar spot around discocellular; postmedial outcurved, deeply lunular, inbent along vein 2, and inwardly downbent to inner margin, preceded by an oblique dark brown shade from vein 2 to inner margin, followed above and below vein 1 by orange spots; cilia dark brown with paler tips and white spots at tornus. Hind wings semihyaline white; termen gray-brown widest at apex, not reaching anal angle, preceded by a fine subterminal line punctiform on veins 6-3; the inner edge of terminal shade is dentate. Fore wings below duller and paler; costal margin white to beyond

middle; a dark spot in cell and on discocellular; faint postmedial points on interspaces. Hind wings below white; a faint line on discocellular; traces of postmedial line; termen on apical half faintly tinged with brown; cilia white with black spots at veins.

Expanse, 38 mm.

Habitat.—Castro, Paraná.

Type.—Cat. No. 23829, U. S. N. M.

Near *L. dorsalis* Hampson, but with white hind wings.

Liopasia puseyalis, new species.

Female.—Palpi dark brown, white below at base. Body above dark brown; patagia tinged with purple, a dorsal yellow spot on second segment of abdomen. Abdomen below ochreous with broad gray bands. Thorax below and legs white; a black spot on basal joint of fore tarsi. Fore wings purple, the inner margin darker shaded; a subbasal dark line; a black medial-streak in cell containing a few yellow scales; an inset streak below cell followed by a short oblique yellow line, and then a small yellow spot; terminal third of cell lilacine containing a yellow spot with black lines on either side; a black incurved lunule on discocellular followed by a black shade between veins 5 and 6; apex broadly yellow on costa, narrowing to below vein 6, which is purple, crossed by some black subterminal scaling, and a terminal black line, indented on vein 7 and not reaching apex; a subterminal yellow spot on inner margin, and a little larger triangular spot above vein 1, preceded by a fine yellow streak; a yellowish white semilunar whitish spot on termen from close to tornus to vein 3; cilia whitish yellow at tornus and apex, otherwise fuscous brown. Hind wings pale yellow; termen from costa to vein 3 purple-brown; a black terminal point before anal angle. Fore wings dull purple-brown; apex broadly yellowish white; inner margin white expanding to tornus. Hind wings below whitish yellow, termen as above.

Expanse, 40 mm.

Habitat.—Callao, Peru.

Type.—Cat. No. 23830, U. S. N. M.

Received from Mrs. M. J. Pusey.

Liopasia surinamalis, new species.

Male.—Palpi light rufous brown, shortly fringed below with whitish. Head and thorax light rufous brown; white lines laterally on frons. Abdomen above gray-brown. Body below and legs white; a brown spot on first joint of fore tarsi. Fore wings dull ochreous yellow; basal third of costa purplish, medial third with purplish shading. Antemedial line black, outbent across cell, outcurved below it, incurved below vein 1; some pale red irrorations on medial space, and subterminally; discocellular spot defined by black scaling on its inner side, and purplish shading outwardly; postmedial line fine, black and purple, outbent and straight from costa to vein 6, lunular to vein

2, slightly inbent, then upbent and interrupted, below discocellular thicker, down and inbent to inner margin, preceded from below vein 2 to inner margin by a broad purple shade; this shade suffusing with the shade beyond discocellular; a marginal reddish line, interrupted towards apex, preceded between veins 3 and 5 by a reddish spot. Hind wings semihyaline white; a terminal fuscous shade, not reaching below vein 3. Fore wings below paler, duller, showing the markings of upper side; the marginal line and spot fuscous. Hind wings below as above.

Expanse, 21 mm.

Habitat.—Paramaribo, Surinam.

Type.—Cat. No. 23831, U. S. N. M.

(*To be continued.*)

A NEW SCOLYTID BEETLE FROM TROPICAL FLORIDA.

BY E. A. SCHWARZ, *Bureau of Entomology.*

The rediscovery of the Scolytid genus *Dendrosinus* in our fauna is the more surprising to me in view of my published opinion (Proc. U. S. N. Museum, Vol. 18, p. 607, 1896) that such a remarkable genus would long ago have been found had it occurred here. But in view of the large number (more than 120 species) of tropical arborescent plants now known to be at home in southern Florida, it should now be expected that many tropical genera of Scolytids hitherto supposed not to occur within our limits, will be found. The true *Dendrosinus globosus* Eich. may yet be rediscovered in our fauna and its retention in our lists is recommended.

In a recent clearing at Marathon, Vacas Key, Florida, a small tree was encountered March 7, 1919, by H. S. Barber and myself, standing leafless in the burned area and harboring a numerous colony of these remarkable beetles, most of them just starting their galleries. Sections of the trunk and branches were shipped to Washington, and through the kindness of Prof. S. J. Record the wood has been identified as *Bourreria havanensis* Miers (described as *B. ovata* Miers in Small's Flora of the Florida Keys). The limited field examination possible in our short stop in that locality disclosed no immature stages except that two eggs were found in sawdust-filled recesses along one of the deeper galleries occupied by a pair of the beetles. A few old healed-over galleries with entrance hole covered with from one to perhaps four years' growth of wood were found but from none of these had larval galleries been excavated. The fresh galleries were short and usually contained two adults, probably a pair, which when placed in an open vial would stridulate, producing a