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NEW SPECIES OF MOTHS OF THE FAMILIES NOTODONTIDAE AND BOMBYCIDAE IN THE UNITED STATES NATIONAL MUSEUM

By WILLIAM SCHAUS

THIS paper contains the descriptions of 34 new species of moths, some of the specimens being received from friends for identification and some gained by purchase. Twenty-four of the species are from various parts of Brazil, the remaining ten from scattered localities in Central and South America. Twenty-six are assigned to the family Notodontidae; eight belong to the Bombycidae, one in the subfamily Epiinae and seven in Zanolinae. The material is all in the United States National Museum.

Family NOTODONTIDAE

Genus PRONERICE Schaus

PRONERICE LUDECTIA, new species

Female.—Head and collar mottled fuscous, buffy olive and white, the patagia with numerous white-tipped scales; abdomen above buffy olive with faint pale transverse lines, underneath shell pink with dark olive-buff transverse lines. Fore wing dark citrine with a brownish tinge; costal margin with transverse black lines and white points before apex; veins from cell finely darker; an antemedial irregular black line; a white line on discocellular; a postmedial black line, partly punctiform, lunular from vein 3 to inner margin; a subterminal

sinuous fine white line expanding at apex; terminal small white streaks on interspaces. Hind wing dull buffy brown; a small white line above anal angle; cilia white. Wings below brownish drab; fore wing with the costa finely, the termen narrowly pale vinaceous-pink; hind wing deep olive-buff, the outer margin broadly brownish drab; the termen vinaceous-pink.

Expanse, 60 mm.

Habitat.—Hansa Humboldt, Brazil.

Type.—U.S.N.M. no. 34725.

Genus NYSTALEA Guénée

NYSTALEA DAHNI, new species

Male.—Head and collar saccardo's umber, with a posterior lateral black spot; thorax concealed by the patagia, which are hair brown streaked with fuscous; metathorax black with lateral tufts of long white hairs; abdomen dorsally with black tufts at base, the following segments grayish olive with transverse black lines, underneath white, at base faintly vinaceous. Fore wing mostly light cinnamon-drab mottled with light yellowish olive; base narrowly white outwardly edged by a black line from costa to median vein; short antemedial paired lines on costa; a fine medial, sinuous, black line, inbent on inner margin toward base; a subterminal black line forming three lunules from costa to inner margin, the two upper lunules proximally edged with white, the upper lunule joined by a dark outbent shade from costa, the middle lunule preceded by a fuscous vertical streak; the small lunule on inner margin with only a little white proximally; the lunules outwardly edged with white on costa and from vein 4 to inner margin; an irregular terminal black line, somewhat dentate before tornus; cilia mostly white with black spots. Hind wing white at base, the termen broadly hair brown, the veins postmedially with fine dark lines. Fore wing below yellowish white, the veins from cell finely black; a smoky medial streaky shade; white points on costa before apex; a subterminal black line parallel with termen, which is white with black lines on veins. Hind wing below white with faint yellowish suffusions on costa; subterminal small black spots on veins, a larger spot at veins 3 and 4.

Expanse, 51 mm.

Habitat.—Espírito Santo, Brazil.

Type.—U.S.N.M. no. 34711.

Two paratypes from the same locality.

Allied to *N. multiplex* Dognin.

Genus PROELYMIOTIS Schaus

PROELYMIOTIS SUTILANS, new species

Male.—Palpi buff above, fuscous underneath. Head and collar mottled gray and brown, the patagia warm buff, dorsally fringed with dark brown. Abdomen dorsally drab, with pale transverse lines, the last segment and claspers ecru-drab, underneath brownish drab at base becoming whitish with dark transverse lines. Fore wing warm buff with deep olive-buff suffusions and irrorations, the veins with fine dark streaks; a subbasal fine dark angled line; antemedial line, almost medial, double, irregularly outcurved, above inner margin inbent toward base; a black point at each end of discocellular; the veins on outer half with fine dark streaks, interrupted by the pale postmedial line, which is outcurved on costa, somewhat sinuous, and incurved to inner margin; termen with a faint darker angled line from apex to vein 3, below the vein to vein 4 with an inbent fuscous line, and below vein 4 a small fuscous lunule, the tips of veins mostly with white and black scales. Hind wing pale olive-buff with terminal irregular deep olive-buff suffusions, and a similar median broken fascia. Wings below colonial buff, a faint dark streak below costa of fore wing.

The female has the hind wing entirely hair brown, with the cilia white; the wings below almost entirely suffused with citrine-drab.

Expanse, male 36 mm., female 45 mm.

Habitat.—Hansa Humboldt, Santa Catharina, Brazil.

Type.—U.S.N.M. no. 34735.

The species is somewhat variable.

Genus TACHUDA Schaus

TACHUDA ERNEA, new species

Male.—Head and thorax hair brown, metathorax white with irregular black lines; abdomen above light drab, the basal segment partly vinaceous, underneath whitish. Fore wing base broadly hair brown expanding on costa with grayish scaling at base, and with faint paler spots on costa, and an irregular subbasal black line; antemedial line double, black, very irregular, filled in with some white scales from cell to inner margin; an irregular black medial line with a distinct white-edged line on discocellular; a double postmedial black lunular line filled in with white scaling, inbent from costa to vein 3 and excurved to inner margin closely followed by a series of dark lunules, these lines preceded and followed by vinaceous-buff shading; subterminal black lunules basally white edged, the tips extending on either side of veins to termen; an interrupted terminal black line; cilia mottled white and brown. Hind wing above pale wood brown slightly whitish at base.

Fore wing below vinaceous-drab, the costal edge finely pale vinaceous, also the termen below apex, the inner margin whitish. Hind wing below partly white, the costal margin and termen slightly vinaceous.

The female differs only in the white shading at costa before the post-medial line, and a short white streak at apex, this variability existing no doubt in both sexes.

Expanse, male 33 mm., female 34 mm.

Habitat.—Itatiaya Est do Rio, Brazil.

Type.—U.S.N.M. no. 34704.

Genus SALLUCA Schaus

SALLUCA DURANI, new species

Male.—Head and collar mottled vinaceous-fawn and wood brown; thorax fuscous concealed by the white patagia; abdomen above fawn color with paler transverse lines; anal hairs seashell pink; thorax below and abdomen white, the latter with dark, fine, transverse lines. Fore wing light buff, the markings cinnamon-buff; an antemedial out-curved series of small spots; a less intensive series of medial spots, the space between these two lines buff pink; a small white crescent, darkly edged, at end of cell; an irregular series of small, subterminal, triangular points; cilia with white spots on interspaces. Hind wing light buff, the margins broadly vinaceous-fawn. Wings below whitish buff, the apex of fore wing suffused with vinaceous-fawn.

Expanse, 40 mm.

Habitat.—Hansa Humboldt, Santa Catharina, Brazil.

Type.—U.S.N.M. no. 34705; also a paratype in the collection.

Closely allied to *S. schausi* Dognin.

SALLUCA DEFLECTANS, new species

Male.—Palpi black, fringed with roseate and clay color, the vertex partly fuscous; collar anteriorly pinkish buff, posteriorly deep greenish olive; thorax white thickly irrorated with sorghum brown. Abdomen above dorsally army brown, paler laterally, the middle segments with paler transverse lines, the last segments and underneath pinkish buff. Fore wing with a fuscous line at base of costa, below it a whitish line upbent to costa, along which it extends to near apex, medially expanding to a triangular space edged below with buffy olive, the inner margin and termen paler; subterminal dark points on interspaces; a dark-angled terminal line mostly finely edged by pale lines proximally; cilia with olive-brown spots. Hind wing with inner margin tawny-olive; costa and a postmedial line from costa to anal angle avellaneous cut by the veins; termen broadly buffy brown; cilia whitish. Fore wing below dark olive-buff suffused with light cinnamon-drab, the

costal edge, termen narrowly, and inner margin broadly white. Hind wing below white, the costa suffused with light cinnamon-drab.

Expanse, 60 mm.

Habitat.—Espírito Santo, Brazil.

Type.—U.S.N.M. no. 34736.

Quite different from any species described.

Genus DISPHRAGIS Hübner

DISPHRAGIS COREMISTA, new species

Male.—Head and thorax dull green, the tegula crossed and edged by black. Abdomen above dull reddish at base, then somewhat fuscous with faint greenish dorsal scales, the next to last segment testaceous, posteriorly with biscay-green scaling and two small fuscous spots. Fore wing dull citrine with darker suffusions; subbasal and antemedial fine, double, black lines faintly lunular; a similar post-medial line sinuous, incurved below vein 2; subterminal paired black points on interspaces; small black spots on cilia at veins. Hind wing flesh ocher, the inner margin dull red, the termen with darker, duller suffusions; cilia on termen and inner margin white. Fore wing below light ochraceous-salmon with a darker streak below costa not reaching termen, the base, tornus, and termen white; cilia with fine dark streaks at veins. Hind wing below white, with faint roseate suffusions below costa.

Expanse, 36 mm.

Habitat.—Hansa Humboldt, Brazil.

Type.—U.S.N.M. no. 34720.

DISPHRAGIS BACTRINA, new species

Male.—Head dark green; collar fuscous anteriorly then dull cinnamon tipped with white; thorax and patagia light green, the patagia with black lines laterally; abdomen at base cinnamon-drab, the following segments fuscous with slight cinnamon-drab segmental lines. Fore wing above: Some pale green at base and a wavy black basal line, followed by a broad saccardo's olive space with a small green space below cell, this space outwardly edged by a sinuous black line, which is followed from cell to inner margin by a pale-green space limited by a series of small black spots from cell medially to tornus; a faint cinnamon-buff shade above the oblique series of spots; apical space roman green preceded by dark reddish suffusions and a greenish oblique line inbent from apex with fuscous green spots below it; termen from vein 4 to tornus yellowish green with subterminal paired dark spots. Hind wing olive-drab, with a fuscous streak along the

inner margin; cilia vinaceous. Wings below white, the fore wing with faint subterminal dark spots on interspaces.

Expanse, 35 mm.

Habitat.—Espírito Santo and São Paulo, Brazil, the specimen from the latter place from the Dognin collection.

Type.—U.S.N.M. no. 34713.

The species is closely allied to *D. bactrea* Schaus (= *D. crocea* Dognin) from the Amazons and Guianas.

DISPHRAGIS HANDLEYI, new species

Female.—Head and collar mottled light buffy brown and fuscous; thorax medially black, the patagia mottled with dull green, dorsally edged with black; abdomen dorsally dull buffy citrine, underneath ecru-drab. Fore wing olive-citrine, somewhat darker antemedially; fine darker lines on costa; traces of postmedial and subterminal lines outcurved on costa, the former line continues as short dark streaks on veins, the latter line with dark streaks on veins, below vein 3 with broader spots at inner margin proximally edged by a fine white line. Hind wing white, the costa broadly olive-citrine, the termen very narrowly so; some fuscous scaling along inner margin. Wings underneath white; costa of fore wing suffused with grayish olive not reaching apex; terminal small dark spots on cilia at tips of vein; on hind wing the cilia with very fine dark streaks at veins.

Expanse, 51 mm.

Habitat.—Pueblo Guasca, Colombia.

Type.—U.S.N.M. no. 34722.

Genus MALOCAMPA Schaus

MALOCAMPA MONITA, new species

Male.—Head, thorax, and abdomen above dark greenish olive, some white hairs on vertex, the patagia and anal hairs white; body below and legs white. Fore wing yellowish olive; base white with olivaceous mottling; medial space on costa and in cell with grayish-olive mottling; termen from below apex to tornus white, the proximal edge expanding irregularly and crossed by some wavy dark scaling. Hind wing white, the costa and inner margin narrowly dark olive-gray. Fore wing below silvery white with light olive-gray shading toward base; a greenish-olive streak below costa to near apex. Hind wing below light pinkish lilac, the termen white.

Expanse, 38 mm.

Habitat.—Espírito Santo, Brazil.

Type.—U.S.N.M. no. 34708; also a paratype in collection.

MALOCAMPA EDNANA, new species

Male.—Head, thorax, and abdomen above blackish brown, the abdomen with slightly paler transverse lines; the metathorax with two white spots; abdomen below light buff with darker transverse lines. Fore wing dark buffy brown, the inner margin white with some faint darker irrorations, narrow at base, then upturned to near cell, then slightly downbent toward tornus and upturned to termen to vein 4 enclosing a small buffy brown spot; a short whitish streak to apex. Hind wing buffy brown the cilia faintly pale drab-gray. Fore wing below light purple-drab; inner margin and termen to vein 4 above tornus whitish; a fine darker postmedial line and similar subterminal shading. Hind wing below lilacine white; a fine dark postmedial line and still fainter subterminal shading.

Expanse, 37 mm.

Habitat.—Espírito Santo, Brazil.

Type.—U.S.N.M. no. 34707.

Allied to *M. sida* Schaus.

MALOCAMPA GRIFFINI, new species

Male.—Palpi fuscous fringed with vinaceous-fawn; head vinaceous-fawn with a small fuscous spot; collar russet in front, posteriorly fuscous; thorax fuscous with a dorsal white line, the patagia light grayish olive; abdomen dorsally fuscous, narrowly at base, then expanding laterally, underneath and laterally at base light ochraceous-salmon. Fore wing largely olive-gray, a chamois spot at base of inner margin limited by a curved fuscous line; followed by very fine darker lines; an almost medial black point on costa, and one below it in cell, also a dark inbent streak from vein 2 to submedian; fine darker lines on postmedial space, which extends to termen from vein 5 to vein 7 with black subcostal spots at and before apex; a broad terminal fuscous space from vein 4 to tornus; termen partly crenulate with black points at tips of veins. Hind wing partly hyaline with fine dark lines on veins expanding at the narrow dark termen; inner margin broadly light ochraceous-salmon, preceded by a dark streak and white point above anal angle. Fore wing below dark grayish brown; the base pale ochraceous-buff; costal edge before apex white with four black points. Hind wing below whitish suffused with light ochraceous-salmon at base and along inner margin; termen faintly light drab.

Expanse, 58 mm.

Habitat.—Espírito Santo, Brazil.

Type.—U.S.N.M. no. 34706.

Three paratypes in collection.

MALOCAMPA OCCAMA, new species

Male.—Head and front of collar grayish white, with a few dark hairs predominating on the collar posteriorly; thorax gray with transverse dark scaling; abdomen above drab, the base and terminal segments mottled with white hairs; abdomen below mostly white. Fore wing glossy gray; a little white at base crossed by a sinuous dark line, followed on costa to antemedial line by a hair-brown patch not extending below median vein, the antemedial dark line double, lunular dentate to inner margin; an irregular medial line with two black points on it in cell and followed by an irregular narrow fuscous fascia; postmedial line double, irregular, with double black points on veins, ending at a hair-brown patch at tornus; a terminal hair brown patch from apex to vein 4 its proximal edge curved; a lunular terminal black line, and black spots on the white cilia, at tips of veins. Hind wing whitish on inner margin, the medial space with pale vinaceous-drab suffusions; termen broadly citrine-drab; cilia white. Fore wing below citrine-drab with some white at base and whitish spots postmedially; cilia white on interspaces. Hind wing below white with a narrow terminal citrine-drab shade at apex reduced to short lines on veins toward anal angle.

Expanse, 37 mm.

Habitat.—Hansa Humboldt, Santa Catharina, Brazil.

Type.—U.S.N.M. no. 34717.

Five paratypes in collection.

MALOCAMPA DELOSIA, new species

Male.—Head and thorax grayish white mottled with fuscous hairs on collar forming transverse lines; abdomen with base and terminal segments similar to thorax, the intermediate segments hair brown with drab-gray segmental lines, underside pale vinaceous-pink. Fore wing pale brownish vinaceous with darker irrorations; a subbasal lunular black line, partly double; a double antemedial line, broken by veins, outbent to postmedial line above submedian; a large triangular postmedial spot resting on costa, its apex at vein 4 continued as a narrow line to inner margin; a postmedial double series of small black spots on interspaces from vein 5 to inner margin; terminal black spots on interspaces and similar spots at tips of veins. Hind wing ecru-drab, the veins finely dark; termen narrowly drab, the cilia white. Fore wing below drab with white suffusions at base and postmedially on interspaces; cilia white with dark points at tips of veins. Hind wing below and cilia white; some ecru-drab scaling on costa.

Expanse, 39 mm.

Habitat.—Hansa Humboldt, Santa Catharina, Brazil.

Type.—U.S.N.M. no. 34718.

Three paratypes in collection.

Genus CHADISRA Walker

CHADISRA MARCIDANA, new species

Male.—Head buffy brown; collar black with some gray hairs posteriorly; thorax buffy brown, the patagia white dorsally edged by a black line. Abdomen dorsally light drab at base, the segments following darker drab with transverse white lines, the two last segments white, underneath as above. Fore wing above: Base with a narrow black wavy line followed by white with dark irrorations from below cell to inner margin; an antemedial broad hair brown triangular space from costa to apex below cell, where it becomes linear to inner margin, edged outwardly by a somewhat lunular medial line, this line adjacent to a white spot in cell; postmedial space whitish with dark streaks on costa and irregular dark spots to submedian; a postmedial black line outangled on costa from a small costal spot vertical from vein 7 to vein 6, incurved from vein 6 to vein 4, then inbent somewhat lunular, closely followed by light drab to vein 4 and divided by a narrow white line; termen rather broadly white extending basad between veins 4 and 3; a terminal lunular black line; cilia white with deep grayish-olive spots at veins. Hind wing above white on inner margin preceded by a light grayish-olive space to below cell; the medial space on costa whitish; termen citrine-drab, also the veins; termen from vein 5 to tornus with pale spots on interspaces. Fore wing below dark vinaceous-drab with terminal white spots on costa and larger spots on termen. Hind wing below silvery white, the costa and termen dark vinaceous-drab, on termen diminishing toward anal angle.

Expanse, 50 mm.

Habitat.—Espirito Santo, Brazil.

Type.—U.S.N.M. no. 34712.

Also a paratype in National Collection. Closely allied to *C. hymen* Dyar.

CHADISRA ALSOPIA, new species

Male.—Head and thorax white, mottled with light-gray hairs; abdomen above to beyond middle dusky brown, the last segments and the underside white. Fore wing white with faint grayish irrorations; a fine black basal line inangled on median closely followed by a fainter very irregular line; antemedial line well marked on costa, very fine, outcurved to median and outbent to inner margin; traces of a faint postmedial line; subterminal line from costa before apex, wavyly inbent to vein 4 then fainter and sinuous to tornus; a fine

wavy terminal line. Hind wing whitish, the margins suffused with smoky gray, broader from apex to vein 3; cilia white. Fore wing below silvery white, with postmedial dark suffusions at costa. Hind wing below silvery white.

Expanse, 42 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. no. 34709.

Ten paratypes in collection.

Genus MERAGISA Schaus

MERAGISA GLACIDIA, new species

Male.—Head and collar white with some grayish hairs. Abdomen black, overlapped at base with drab hairs; terminal segment white with fine grayish irrorations; a fine dark and irregular subbasal line; antemedial line black, double on costa, then outbent, below costa wavily downbent, fine, partly indicated by black scales; medial line very faint with a dark point in cell; postmedial line double on costa, preceded on costa by a short fuscous streak, outbent and fine, joining the subterminal irregular lunular line; terminal line deeply lunular from apex, below vein 3 with the lunules wider apart; cilia white. Hind wing hair brown on termen, the disk with pale greenish suffusions, the cilia white. Fore wing below yellowish white on base and inner margin, the outer space broadly hair brown, the costal edge and cilia white. Hind wing below yellowish white, the costal margin and termen suffused with dark olive-buff.

Expanse, 48 mm.

Habitat.—Espirito Santo, Brazil.

Type.—U.S.N.M. no. 34728.

MERAGISA NICOLASI, new species

Male.—Head, collar, and thorax white mottled with light mouse-gray hairs. Abdomen above at base avallaneous, the following three segments fuscous with paler transverse lines, the terminal segments white, underneath white. Fore wing, white with some fine black and brownish irrorations; a fine dark angled line on costa subbasally; a small black lunule on costa antemedially, a point medially, paired black spots postmedially, and three points subterminally on costa; a slight black streak on discocellular; small postmedial lunules between veins 2 and 3 and veins 4 and 6; a deep black lunular line on termen; cilia white. Hind wing grayish olive, the inner margin broadly mustard yellow, the cilia white, wings below light grayish olive, the fore wing with the base and inner margin, the costa narrowly

white, the hind wing with the inner margin broadly white, the cilia on both wings white.

Expanse, 45 mm.

Habitat.—Jepelacio, north Peru.

Type.—U.S.N.M. no. 34734.

Allied to *M. dasra* Dognin, but very different underneath.

Genus RIFARGIA Walker

RIFARGIA MOLLERI, new species

Female.—Head deep olive-buff; collar in front fuscous, posteriorly also thorax whitish with gray vertical lines. Abdomen above vinaceous-gray, underneath white. Fore wing grayish white with dark irrorations and fine dark lines; the subbasal line wavy, partly double; antemedial line double, faintly lunular, vertical to median, then more wavy, filled in and edged with fuscous scales, expanding on inner margin; medial line double approximated across discocellular; postmedial line double, vertical from costa to vein 4, then wavyly incurved followed below vein 3 by four small black spots forming part of similar spots upbent to costa before apex; a fine terminal black line; cilia whitish with black spots at veins. Hind wing white, the termen broadly deep grayish olive, the cilia white. Fore wing below deep grayish olive, faintly whitish on discocellular, the cilia white with black points at veins, and on costa near apex. Hind wing below as above.

Expanse, 40 mm.

Habitat.—Hansa Humboldt, Brazil.

Type.—U.S.N.M. no. 34730.

Described from a unique specimen.

RIFARGIA EDVINA, new species

Male.—Head dark grayish drab; collar partly clay color; thorax and patagia drab-gray; abdomen dorsally light drab, laterally drab, underneath white. Fore wing above whitish, the markings dark olive-buff; a basal patch on costa; a broad antemedial fascia below cell to inner margin where it expands toward base and is joined at cell by a narrow medial spot from costa; a postmedial black line wavyly inbent to vein 3, preceded by a similar line from vein 5 forming large lunules to inner margin, these lines followed by a narrow shade from costa to vein 3, where it expands to termen filling the tornal space; a fine subterminal black line with projecting streaks on veins. Hind wing above white, the termen narrowly dark drab. Fore wing below white on inner margin and termen; below costa a blackish-brown shade from base expanding toward termen, projecting dark lines on

the veins. Hind wing below white; a short dark line below base of costa and similar terminal spots at apex.

Expanse, 42 mm.

Habitat.—Espirito Santo, Brazil.

Type.—U.S.N.M. no. 34716.

RIFARGIA VALTERIA, new species

Male.—Head heliotrope-slate with some lateral white hairs; collar pale smoke gray edged posteriorly by a fuscous line; thorax and patagia grayish white, the patagia with a lateral black line; abdomen with the base and three terminal segments grayish white, the intermediate segments deep mouse gray, underneath white. Fore wing with the basal half white with grayish irrorations limited by a deep mouse-gray thick line, outcurved on costa; a subbasal black line; an antemedial double outcurved line, dentate from costa to median then lunular; outer half of wing pale purplish gray, with the veins and a double postmedial lunular line light purplish gray; a subterminal lunular black line from costa to vein 4, then fainter and straight to inner margin; a terminal deeply lunular black line. Hind wing with basal half and inner margin whitish, the veins finely dark; termen broadly deep mouse gray. Fore wing below dark violet-gray, the base whitish, also postmedially on interspaces; costa terminally finely white also the cilia. Hind wing below white, the termen broadly dark violet gray, the cilia white.

Expanse, 48 mm.

Habitat.—Hansa Humboldt, Santa Catharina, Brazil.

Type.—U.S.N.M. no. 34715.

Two paratypes in collection.

RIFARGIA OGDENI, new species

Male.—Head and collar mottled gray and brown; thorax mottled with brown and gray hairs; abdomen above dark purple-drab with dull grayish hairs at base and on terminal segments. Fore wing grayish white at base on inner margin and at tornus; basal and subbasal irregular black lines and spots; antemedial line black, double, lunular partly filled in with buff; medial space white with fine dark irrorations; a conspicuous velvety-black spot at end of cell followed by a fine outcurved dark line and a fine double lunular postmedial line followed on costa by short black streaks; a whitish subterminal line preceded and followed by black streaks on veins; subterminal fuscous spots on interspaces and similar spots on tips of veins; some fuscous scaling at tornus. Hind wing hair brown, slightly paler at base; cilia white also a small spot above anal angle. Fore wing below hair brown with slight paler suffusions on basal half; cilia white on

interspaces. Hind wing below whitish below costa and on inner margin, the costa and termen broadly hair brown; cilia white.

Expanse, 35 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. no. 34714.

Also two paratypes in collection.

Genus NAVARCOSTES Schaus

NAVARCOSTES OAKLEYI, new species

Male.—Head and collar cinnamon-buff, the latter tipped with black scales; thorax vinaceous-brown, the metathorax cinnamon-buff; patagia white at shoulder; abdomen above dull taupe brown, with a quadrate tuft of fuscous scales at base, and a faint brownish-drab dorsal line, the anal hairs white; thorax below light grayish olive, the venter white on terminal half. Fore wing above with the base from costa to submedian vein crossed by a double fine black line forming two lunules; space beyond to subterminal pallid quaker drab crossed by numerous fine dark olive-buff striae; an antemedial darker antemedial shade, broad on costa, expanding on inner margin, preceded and followed on costa by short black lines and forming in cell a small spot; subterminal line slightly outcurved on costa and inbent to inner margin, parallel with termen, consisting of double black lunules on interspaces, also with a few black points, expanding distally beyond cell; termen white from vein 5 to tornus; apex suffused irregularly with light brown and gray, the costa with small black spots and striae; subterminal black lunules, merely punctiform at tornus; terminal dark shading from apex to vein 4. Hind wing hair brown, the base with pale suffusions, the cilia white. Fore wing below mostly grayish olive, the costa, termen and inner margin white, a terminal black line, also the veins terminally black; cilia cinnamon at apex. Hind wing below white, the costa and termen grayish olive, more diffused than on fore wing.

Expanse, 44 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. no. 34710.

Two paratypes in collection.

Genus KURTIA Schaus

KURTIA DELOSIA, new species

Male.—Head fuscous with a white patch in front of antenna; palpus black above, underneath white; front of collar fuscous; thorax and patagia mottled avellaneous and fuscous; abdomen above dark drab, underneath light grayish vinaceous with transverse drab bands. Fore

wing buffy olive, somewhat glossy, the costa broadly pale ochraceous-salmon; a dark spot at base of costa. Hind wing dark olive-buff, somewhat metallic, with faint whitish suffusions at base. Fore wing below paler than above, strongly metallic, the costa slightly vinaceous. Hind wing below glossy white with faint darker suffusions.

Expanse, 48 mm.

Habitat.—Hansa Humboldt, Brazil.

Type.—U.S.N.M. no. 34721.

Genus HEMICERAS Guénéé

HEMICERAS TRISTANA, new species

Male.—Palpi chamois, the upper edge tawny; vertex gray with a few dark scales; collar in front and patagia light grayish vinaceous, the latter dorsally edged with fuscous, also the thorax; abdomen dorsally drab, sublaterally and underneath cameo pink. Fore wing honey yellow, silky and with a faint roseate tinge with dark irrorations forming lines; at base a costal spot to median vein; an antemedial shade slightly outcurved from subcostal to inner margin followed by black points on subcostal, median and below median; some dark shading medially above inner margin; a small black spot in cell at subcostal; an oval narrow black spot on discocellular; a black point at base of vein 5 closely followed by a larger black spot; a pale postmedial line from costa to vein 2, then slightly incurved, its proximal edge with black points on veins and with darker shading distally at inner margin; termen with irregular dark shading. Hind wing whitish with honey-yellow suffusions, dark at anal angle. Fore wing below light pinkish cinnamon, the hind wing white.

Female.—The wings distinctly darker, the suffusions broader, almost dark vinaceous-drab; a fine pale outcurved antemedial line.

Expanse.—Male 44 mm.; female 47 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. no. 34726.

Allied to *Hemiceras latior* Draudt and *H. punctata* Dognin, differing in the three discal spots on fore wing. Five males and two females in collection.

HEMICERAS ROSTERIA, new species

Male.—Head and body above cinnamon-buff, abdomen laterally and underneath pinkish buff. Fore wing antimony yellow, somewhat darker on inner margin; the lines fine, darker, the antemedial, vertical, pale edged proximally, the postmedial from costa at two-thirds from base, inbent to inner margin near antemedial, pale edge distally; a subterminal line more indistinct; a faint streak on discocellular, the inner margin lobed at middle. Hind wing white suffused with pale

yellow-orange; stigma small, the color of fore wing. Wings below pale ochraceous-salmon, the fore wing with traces of antemedial and post-medial lines, the cilia finely dark red.

Female.—Fore wing somewhat darker than in the male, the subterminal line better defined and distally pale edged.

Expanse.—Male 32 mm.; female 44 mm.

Type.—U.S.N.M. no. 34727.

Habitat.—Aroa, Venezuela.

Allied to *Hemiceras ruizi* Dognin. Three males and four females in collection.

Family BOMBYCIDAE

Subfamily EPIINAE

Genus QUENTALIA Schaus

QUENTALIA CAMELOI, new species

Female.—Head, collar, and thorax aniline black; abdomen vinaceous slate. Fore wing deep heliotrope-gray, the markings aniline black; a streak on base of costa; a basal patch below cell; an angled faint medial line; the end of cell and slightly beyond connecting with a postmedial angled line; the termen narrowly, and a subterminal line from apex pale vinaceous-drab. Hind wing vinaceous-slate; a faint paler subterminal line; on inner margin three small black spots separated by pale grayish vinaceous scaling. Wings below dark heliotrope-gray. Fore wing with termen below apex narrowly dark slate-violet not reaching torus, proximally edged by a pale ecru-drab line; dark suffusions at base; inner margin ochraceous-buff. Hind wing below with a thick darker medial line and a fine streak on discocellular; a subterminal dark lunular line distally edged with some paler scales.

Expanse, 34 mm.

Habitat.—Tuxtepec, Oaxaca, Mexico.

Type.—U.S.N.M. no. 34701.

Collected by Joaquin Camelo.

Subfamily ZANOLINAE

Genus APATELODES Packard

APATELODES MERLONA, new species

Male.—Head, collar, and patagia light russet-vinaceous; a small dorsal black spot on collar, thorax posteriorly black, probably the same under patagia; abdomen somewhat darker with fine dark transverse lines, the anal segment above fuscous. Fore wing light russet-vinaceous, the termen partly and tornal space with dark vinaceous-drab suffusions forming broad upright lines; subbasal, antemedial, medial, and postmedial black points on costa with faint, darker,

sinuous lines, the medial line double, the postmedial line outcurved, then punctiform; a velvety-black outcurved spot on inner margin beyond base followed by a fine upright black line. Hind wing above mostly light cinnamon-drab, the costa whitish, the veins finely dark; a somewhat paler medial shade; a postmedial black spot on inner margin, edged below with white. Fore wing below vinaceous-fawn, the costal margin white to near apex, the postmedial line broad, darker, faintly curved at costa then vertical; a fine dark angled line on costa before apex; termen dark vinaceous-purple narrowing to tornus. Hind wing below with basal half of costa broadly light grayish vinaceous, a pale vinaceous large triangular spot on inner margin broadly edged above and below with dark vinaceous-drab; a short dark medial line from costa; an outcurved postmedial white line with some pale vinaceous scaling above it at inner margin; termen mostly vinaceous-drab.

Expanse, 52 mm.

Habitat.—Cheyel, Guatemala.

Type.—U.S.N.M. no. 34698.

APATELODES FLORISA, new species

Female.—Head, collar, and thorax light vinaceous-gray with a medial fuscous line; abdomen light vinaceous-drab, with fuscous dorsal tufts and lateral fuscous segmental lines, underneath purplish vinaceous. Fore wing largely light grayish vinaceous; some light brownish vinaceous scaling followed on inner margin by a dark vinaceous upright oblique spot on one wing, on the other formed by a series of short upright lines; a double outcurved dark line from costa, united below cell, downbent double, lunular on inner margin; a faint whitish line at end of cell; a dark postmedial line outbent from costa, then lunular dentate, indistinct, followed by a parallel line with black points on veins; a broken black triangular line on costa before apex distally edged with white; termen partly shaded with fuscous from vein 5 to near tornus on one wing, on the other the shading is absent. Hind wing cinnamon-buff, darker on termen; faint medial and postmedial lines; inner margin with dark scaling, an angled white line above anal angle. Fore wing below cinnamon-pink, the inner margin whitish; a triangular white spot on costa before apex; termen from apex to vein 2 hessian brown. Hind wing below cinnamon-buff; inner margin white from base to medial line which is slightly excurved below vein 3; postmedial line fine, white, proximally edged by a black line. The apex of fore wing acute, the termen rounded.

Expanse, 35 mm.

Habitat.—Tucuman, Argentina.

Type.—U.S.N.M. no. 34696.

APATELODES VISTANA, new species

Female.—Vertex light grayish vinaceous; collar and thorax cinnamon-buff, the former with a small dorsal black spot, the latter posteriorly black connected with a basal black band on abdomen, which is slightly darker than the thorax. Fore wing with the base and anteriorly light pinkish cinnamon; an antemedial fine dark line, basally pale edged outwardly curved from costa, preceded on inner margin by a large, almost quadrate velvety-black spot nearly reaching cell; medial, postmedial, and subterminal fine outcurved lines; the tornal area to vein 3 from medial line to termen suffused with mikado brown, also along termen to apex inwardly limited by a pale roseate line from costa. Apex of wing produced, the termen excurved below it. Hind wing pecan brown, the costal margin more roseate; a dark antemedial curved line and a pale postmedial line; a livid pink streak on inner margin cut by a small black spot. Fore wing below vinaceous-fawn the costal margin white to near apex; the lines faint except the distinct postmedial line; a subterminal fine white line from costa, faintly indicated from vein 4 to inner margin; termen dark vinaceous-purple except at tornus. Hind wing below somewhat darker except the broad roseate costal region; a short dark line at cell, a distinct dark medial line, and a fine whitish subterminal line more deeply curved; termen at anal angle dark vinaceous-purple; the pale line on inner margin as above.

Expanse, 73 mm.

Habitat.—Buena Vista, Colombia.

Type.—U.S.N.M. no. 34697.

APATELODES DAMORA, new species

Male.—Head and collar pale congo pink; patagia white, irrorated with grayish-vinaceous hairs; thorax concealed by patagia. Abdomen above with white hairs at base, then roseate followed by white segments all crossed by black segmental lines; anal hairs partly cinnamon-drab; underneath roseate. Fore wing base with costa white, followed by gray and black scaling in base of cell, a light russet-vinaceous antemedial space from below costa to inner margin followed by white scaling in cell; a medial cinnamon-drab fascia, broad on costa, constricted to a line from cell to below vein 2, expanding on inner margin, the whole limited by a sinuous drab line; terminal third lilacine white; a postmedial fine dark lunular line; traces of a subterminal from costa to vein 3; a small russet-vinaceous spot on costa before apex with a small white spot. Hind wing cinnamon-buff without lines; costa whitish; inner margin whitish with two small dark spots. Fore wing below whitish faintly suffused with pinkish buff; a faint postmedial line; a triangular terminal russet-vinaceous patch from apex to vein 3;

a small hyaline spot above vein 6. Hind wing below with basal half as on fore wing, the termen broadly brownish vinaceous; medial dark points on costa and discocellular; two similar points before the white inner margin; a fine dark curved postmedial line.

Expanse, 40 mm.

Habitat.—Hansa Humboldt, Brazil.

Type.—U.S.N.M. no. 34700.

APATELODES EROTINA, new species

Male.—Head avellaneous with a small black spot; collar and patagia drab-gray, the collar anteriorly dark brown, the patagia dorsally with some black hairs and medially crossed by a black line; thorax posteriorly fuscous. Abdomen dorsally hair brown, laterally with pale segmental lines. Fore wing drab-gray mottled with ecru-drab, the lines very fine, dark; the antemedial outbent to vein 2 then sinuous and downbent, the medial line slightly outcurved and downbent, touching the antemedial at vein 2, both lines then diverging to inner margin; the cell crossed at discocellular by a whitish line, followed by an outcurved line from costa; postmedial line more prominent and darker, more sinuous from vein 4 to inner margin; subterminal line white from costa expanding into a small white spot at vein 5, then faintly indicated; a dark curved shade from below angle of cell to tornus; a curved fuscous spot on inner margin antemedially; apex acute, termen rounded. Hind wing avellaneous, paler on costa; faint darker medial and postmedial lines; anal angle fuscous, and a small black spot above it on inner margin. Fore wing below from base for two-thirds pale salmon color; costa finely whitish; terminal third avellaneous, the apex narrowly fuscous; a subterminal dark straight line from costa to tornus. Hind wing below with the large pale grayish-vinaceous spot on inner margin acute toward base touching a similar broad shade on basal half of costal margin, the spot outwardly edged with mikado brown; a postmedial curved line from costa to inner margin just above the anal angle, this line fine, dark, distally edged with white, proximally broadly army brown from costa to vein 5; termen broadly light russet-vinaceous and cinnamon-drab; anal angle edged with dark purple-drab.

Expanse, 42 mm.

Habitat.—Erotina, Costa Rica.

Type.—U.S.N.M. no. 34699.

Genus THELOSIA Schaus

THELOSIA MAYACA, new species

Male.—Head, collar, and thorax drab; abdomen light pinkish cinnamon. Fore wing ochraceous-buff, the termen broadly suffused

with roseate, the costa sorghum brown, the inner margin whitish not reaching tornus; faint subbasal, antemedial, and medial darker lines, all irregular; a fuscous point in cell; postmedial almost vertical, broad, buckthorn brown; an irregular subterminal line, punctiform, at inner margin lunular; a submarginal deeply lunular line, hair brown; cilia dark tipped with white. Hind wing tawny-olive, darker on termen; a faint darker medial line. Fore wing below purplish drab, the costa and termen warm buff; a postmedial dark line, almost vertical; the submarginal line of upper side indicated; a dark terminal line. Hind wing below warm buff with some dark irrorations, a black point on cell; medial line downbent from costa, at cell inbent to middle of inner margin; traces of a subterminal line; cilia white with dark points at tips of veins.

Expanse, 37 mm.

Habitat.—Pumayaca, Peru.

Type.—U.S.N.M. no. 34694.

THELOSIA HERTA, new species

Male.—Closely allied to *Thelosia mayaca* Schaus, differing in the following respect: Abdomen below white. Fore wing more of a salmon-buff; the medial line more distinct; postmedial line finer, nearer termen; subterminal line distinct, lunular; marginal line also lunular; hind wing darker, no medial line. Wings below light ochraceous-buff, the fore wing with a point in cell, the postmedial line very fine, faintly sinuous approximated by the distinct subterminal line; submarginal line sinuous. Hind wing below with the medial line faint, lunular dentate, as also the subterminal line.

Expanse, 23 mm.

Habitat.—Villa Rica, Paraguay.

Type.—U.S.N.M. no. 34695.