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NEW SPECIES OF HETEROCEROUS MOTHS IN THE
UNITED STATES NATIONAL MUSEUM

By WILLIAM SCHAUS

IN working over the lepidopteran collections in the United States National Museum I have found a number of species of heterocerous moths that appear to be new to science and heretofore unnamed. Most of the specimens from southern Brazil, as well as the Sphingidae, were generously donated by Frank Johnson. Part of the Colombian material is from the Dognin collection, which is now a part of the national collection.

Family SPHINGIDAE

Genus *PROTOPARCE* Burmeister*PROTOPARCE MARICINA*, new species

Male.—Palpus and thorax above pale drab; palpus underneath white divided by a black line; thorax and abdomen below white, the thorax with faint dark lines, the abdomen with medial black points on segments; abdomen above pale smoke gray; subdorsal triangular spots, the three terminal segments with fine black lines. Fore wing pale drab-gray, with some darker suffusions and some fine darker lines; a small white spot edged with fine black lines; antemedial line fine, double, dark wavy and inbent to inner margin; medial line double, outbent, with dark lines and filled in with dark scaling, not extending below vein 3 and with a short black streak on veins 3 and 4; a postmedial curved series of white points, sinuous below vein 3, each point edged with dark gray; apical space broadly pale smoke

gray; the tornal space with some white points; a subterminal black line from costa curved to termen below apex; cilia white with black points. Hind wing fuscous with subterminal black streaks; inner margin narrowly white. Fore wing below ceru-olive with darker medial and postmedial bands cut by veins, the termen also darker; inner margin broadly white; the costa narrowly white at base; cilia white with black points as above. Hind wing below paler; a medial and postmedial series of small darker points, the termen broadly darker.

Expanse: 100 mm.

Habitat.—Valera, Venezuela.

Type.—U.S.N.M. No. 34754.

PROTOPARCE HUASCARA, new species

Male.—Palpus and front of head fuscous with lighter shading; head posteriorly with short white streaks. Palpus below with grayish and fuscous streaks, collar chaetura drab tipped posteriorly with whitish, patagia covering thorax pale purplish gray, with some white mottling and dark lines; base of abdomen deep purplish gray, somewhat paler on medial segments, the three terminal segments pale purplish gray, some dark segmental lines on medial segments, a black subdorsal irregular line, somewhat dentate on basal segments enclosing large white spots followed by a lateral wavy white line; abdomen below white with grayish mottling terminally. Fore wing: Base of costa with black spots; two small white spots at base in and below cell, followed by black scaling; an antemedial grayish space, incurved from costa, outwardly edged by a double sinuous black line, partly filled in with wood brown, well inbent and ending in a dark shade on inner margin; a medial dark olive-buff shade partly black-edged and parallel with the antemedial double line, this fascia followed by a broad whitish space crossed by two narrow lunular lines, well incurved and reduced to one below vein 4; the subterminal line black, very fine on costa followed by a triangular dark patch; large oblique light gray spots from apex below vein 5 a terminal irregular dark space abruptly downbent and expanding as a broad black line to inner margin at tornus and outwardly broadly edged with white. Hind wing black, the costal margin white not reaching termen; a white streak along inner margin; a short white streak above anal angle, above it a faint grayish spot. Fore wing below: Costal margin grayish on basal half; inner margin white; termen broadly benzo brown; medial space benzo brown crossed by a fuscous line; a broad postmedial brownish gray shade crossed by an indistinct subterminal line. Hind wing below yellowish white; termen broadly benzo brown and a similar narrower fascia; a macular narrow dark line, the markings at anal angle as above.

Expanse: 110 mm.

Habitat.—Colombia.

Type.—U.S.N.M. No. 34755.

Genus **XYLOPHANES** Hübner

XYLOPHANES CANTEL, new species

Male.—Palpus vinaceous; collar and thorax medially verona brown; a white line from head becoming pinkish gray, with a black line laterally on thorax; metathorax laterally with pinkish suffusions; abdomen dorsally at base seal brown, the following segments dull smoky gray, with broken black lines and isolated points, laterally roseate; underneath pale congo pink. Fore wing with the lines more intensely marked than in *katharinae* Clark; the subterminal fascia on hind wing is reduced to a few spots near anal angle. The underside is similar to other species, and they all belong to one group.

Expanse: 95 mm.

Habitat.—Mexico.

Type.—U.S.N.M. No. 34756.

Family SATURNIIDAE

Genus **ROTHSCHILDIA** Grote

ROTHSCHILDIA MUSSEHL, new species

Male.—Antennae yellowish; vertex fuscous; collar anteriorly white, posteriorly and thorax blackish red-purple; a white band across base of abdomen; abdomen otherwise mahogany red above; a fine white dorsal line; a sublateral broader white line with black points on segments, between the lines transverse black lines on segments; abdomen below with a medial double roseate line not reaching base or anal segment. Fore wing: A large grayish purple patch at base edged by a fine and irregular antemedial white line from costa to inner margin; medial space blackish red-purple to a postmedial incurved white line from costa interrupted by the point of a large hyaline spot, which is excurved on basal side below the interrupted point of the postmedial line; it continues wavyly inbent to inner margin where it contacts with the postmedial line of the hind wing; the apex of fore wing is broadly extended and somewhat paler than the medial space; from the apex a white and pinkish line is wavyly inbent toward the incurve of the postmedial line and is edged below by an irregular black line which becomes double, edging a series of buffy-citrine spots including the termen; at apex the termen is paler. Hind wing: The base of inner margin somewhat paler with the edge pinkish white; medial space as on fore wing, the postmedial very wavy and dentate, medially touched by the point of a large hyaline spot, less excurved than the spot on the fore wing; subterminal space broadly aegus brown, paler toward inner

margin, outwardly edged by some black spots and a few white scales before the inner margin; termen dark citrine with a series of smoke black spots and a fine black line; the costal margin of hind wing is broadly grayish but is concealed by the fore wing. Fore wing below as above without the basal patch. Hind wing below as above, the costal margin narrowly white and connected with the postmedial line; the terminal broad space brighter in color, but the termen as above.

Named for a very fine coworker, Chester Mussehl.

Expanse: 110 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34752.

ROTHSCHILDIA BUCAYA, new species

Female.—Antenna antimony yellow. Head vinaceous-brown; vertex and collar partly white, the latter posteriorly and thorax brown; metathorax acajou red; two dorsal white spots at base of abdomen, the following segments purple-drab with dark segmental lines, somewhat rubbed, the last two segments ecru-drab; a broad white line sublaterally, with a dark reddish point on each segment; legs largely lilacine. Fore wing: Costal margin pale mouse gray, with fine darker irrorations; wing otherwise to the postmedial white line raw umber; an antemedial outwardly white line, inwardly edged by a large hyaline spot, its lower edge curved; vein 3 with a whitish line. The postmedial white line vertical and wavy followed by a slight reddish line and a broader pale brownish-drab shade with whitish irrorations; this is followed from vein 7 to inner margin by a lunular black line on its outer edge, enclosing a dark lavender spot on each interspace; from vein 7 to inner margin a subterminal pale brownish drab irregular fascia edged by a fine, irregular, black line; terminal space on apex brownish drab, with some fuscous streaks beyond the postmedial white line, a fine white line from apex inbent to vein 7, beyond on vein 7 a cluster of black spots; termen whitish tipped with avellaneous. Hind wing: Medial space as on fore wing; an excurved oblique line, partly white from costa to inner margin at one third from base enclosing a black streak and reddish scaling; inner margin to postmedial line roseate; an ovate hyaline spot, its point touching the postmedial line as on fore wing but downbent from inner margin above anal angle. The lunular black line beyond the postmedial is much wider than on fore wing and downbent on veins; termen whitish, below costa fine, obliquely lunular, toward anal angle slightly linear with narrow black spots, above vein 4 with red points and gray scaling; marginal fine black wavy line; termen dark olive buff. Fore wing below very similar to upperside, the fore wing without the antemedial curved line; the costal margin as above; inner margin suffused with pale mouse gray. Hind wing as above, the costal margin white divided by a fine roseate line.

A large square-winged species. Expanse: 112 mm.

Habitat.—Bucay, Ecuador.

Type.—U.S.N.M. No. 34753.

Genus AUTOMERIS Hübner

AUTOMERIS HOSMERA, new species

Male.—Antennae cinnamon-rufous; palpi and head dark olive-buff; collar and thorax buffy brown, somewhat paler on metathorax; abdomen dorsally with segmental black tufts edged with dull bluish hairs and with a paler lateral line; underneath as above. Fore wing falcate, buffy brown, the lines fine, pale purple-drab; an antemedial vertical line; a large postmedial irregular line forming a somewhat quadrate spot; a line from middle of inner margin to apex edged below by a dark line; some pale shading on termen medially. Hind wing with darker shading on inner margin; a very large round spot above inner margin, black outwardly edged by a fine pinkish line, inwardly edged with reddish scales and a few white scales, in the center with a broad black streak; termen with a fine black subterminal line, below it a narrow purplish shade, the terminal edge and cilia dull grayish. Fore wing below dark olive-buff with vinaceous-buff suffusions; a medial large black spot containing a small white spot; a sinuous black line from middle of inner margin to apex where it is edged on costa with a dark shade; the termen with some darker shading. Hind wing below light brownish drab; a faint dark postmedial line, above it a white point; some faint dark streaks subterminally on interspaces.

Expanse: 102 mm.

Habitat.—Juan Vinas, Costa Rica.

Type.—U.S.N.M. No. 34751.

Larger than *Automeris leucane* Hübner; and the spot on hind wing different.

Family ARCTIIDAE

Genus HALISIDOTA Hübner

HALISIDOTA ZACUALPANA, new species

Male.—Antenna with long pectinations, the stalk white; palpi short, black; head and collar olive-yellow; thorax with darker hairs; patagia reed yellow; abdomen above olive-yellow, with broken dark segmental lines, underneath with darker suffusions. Wings marguerite yellow, the fore wing with ecru-olive streaks along cell, broken and narrower toward apex; a short streak above inner margin; veins darker, the outer space with deeply curved lines on interspaces and a terminal line between the veins. Hind wing with faint darker shading

along inner margin and few faint darker spots at costal edge. Wings below with faint traces of the markings on the upper side.

Expanse: 55 mm.

Habitat.—Zacualpan, Mexico.

Type.—U.S.N.M. No. 34757.

From the Dognin collection.

HALISIDOTA BIEDALA, new species

Male.—Head and collar lemon-chrome; thorax with ill-defined black and brown hairs; patagia deep colonial buff; abdomen naples yellow, the underside and anal hair white. Fore wing narrow, the termen oblique, stronthian yellow, with sulphine-yellow irrorations forming small antemedial spots; a medial outcurved shade with a branch from it to termen below apex; a wavy postmedial line and subterminal small spots on interspaces; the cilia mottled with dark lines. Hind wing amber-yellow, the cilia white. Fore wing below amber-yellow, with traces of the markings on upperside. Hind wing below as above.

Expanse: 46 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34758.

HALISIDOTA TEROLA, new species

Male.—Head and collar cream-buff; thorax with a medial and lateral black lines; patagia and abdomen above deep colonial buff, the latter with short, darker, segmental lines, underneath cream-buff. Fore wing long and narrow, deep colonial buff, with dull grayish suffusions forming a broad fascia from cell to apex and numerous dark brown points and irregular lines, those on subterminal space deeply angled, others on termen small. Hind wing marguerite yellow. Fore wing below marguerite yellow, with a brownish-gray fascia from cell to apex, the terminal half with numerous dark points and spots. Hind wing below as above, the medial space faintly darker.

Expanse: 50 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34759.

HALISIDOTA LOUELLA, new species

Female.—Head and collar chamois; patagia cream-buff, the thorax apparently black; abdomen above honey yellow, with brown and greenish segmental lines, underneath white. Fore wing chamois, the veins finely paler; a fine sulphine-yellow streak from within cell not reaching termen and a similar streak along vein 2; from apex to vein 2, a series of subterminal large linear round spots on interspaces. Hind wing white, somewhat hyaline. Fore wing below with faint indications of terminal markings.

Expanse: 40 mm.

Habitat.—Esperito Santo, Brazil.

Type.—U.S.N.M. No. 34760.

No paratypes.

HALISIDOTA LOISONA, new species

Female.—Palpi dark brown with black tip; head and collar light brownish vinaceous; thorax black, the patagia mostly white, showing on outer edge a black line. Abdomen above with alternate black and greenish segmental lines, underneath whitish gray with a fine black subdorsal broken line. Fore wing pale vinaceous-brown, with darker veins and small black irrorations; a black spot with pale center at end of cell; subterminal black lunular spots on interspaces, mostly double, black, preceded by postmedial fine angled lines, also terminal black spots at cilia; a faint dark line from spot at end of cell to apex. Hind wing somewhat hyaline, greenish with slightly darker suffusion on inner half of wing with terminal black spots on interspaces; a larger black spot at vein 6. Wings below with markings on wings less distinctly indicated.

Expanse: 55 mm.

Habitat.—Espirito Santo, Brazil.

Type.—U.S.N.M. No. 34761.

No paratypes.

HALISIDOTA DALTONA, new species

Male.—Palpi black; head and collar light purplish vinaceous; thorax fuscous almost completely covered by the white patagia; metathorax dull green; abdomen above dull roseate with black spots on segments, the anal hairs dull green; a subdorsal punctiform black line and black lines on central segments. Fore wing pale vinaceous-fawn, with irregular black points antemedially and on subterminal interspaces; a postmedial slightly darker shade angled with a branch extending toward apex. Hind wing semihyaline, with a faint greenish shade more prominent on interspaces; terminal black points on veins. Wings below faintly greenish, with traces of markings on upper side.

Expanse: 42 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34762.

HALISIDOTA ISHIMA, new species

Male.—Head and collar olive-ocher, the latter with two large black spots; thorax apparently with black hairs almost entirely covered by the marguerite-yellow patagia; abdomen dorsally the same, with transverse dark lines, underneath reed yellow. Fore wing marguerite yellow, with two black spots on costa near base and an irregular series of dark spots postmedially and subterminally on interspaces,

also small spots on cilia; a white spot edged with black at end of cell and a narrow streak of dark spots from cell to apex, underneath pale dull yellow-green, the small black spots on costa and terminal interspaces black and distinct, the veins tipped with black scales. Hind wing above and below pale dull green-yellow, with superposed black spots on interspaces. Fore wing and hind wing broad.

Expanse: 45 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34763.

HALISIDOTA AUSTINA, new species

Male.—Palpi amber-yellow, with a lateral black line; head and collar light vinaceous-fawn; thorax slightly paler; patagia whitish dorsally edged with fuscous hairs. Abdomen primuline yellow, with darker segmental lines. Fore wing straw yellow sparsely irrorated with pale brownish scales; subterminal small darker crescents on interspaces; a black point at veins 4 and 5. Hind wing semihyaline straw yellow, the cilia white. Wings below straw yellow, the markings of fore wing less distinct.

Expanse: 50 mm.

Female.—Similar to the male. Expanse: 55 mm.

Habitat.—Santa Catharina and Hansa Humboldt, Brazil.

Type.—U.S.N.M. No. 34764.

One paratype.

HALISIDOTA SOLDINA, new species

Female.—Head and collar light vinaceous-lilac, a black line on head and collar, the latter with dark-brown hair posteriorly; thorax with black hairs, patagia white, edged by black lines; abdomen reddish at base becoming darker with dark segmental lines, the anal hairs whitish, underside with dark shading on terminal half. Fore wing reed yellow, the costa with black spots; a small black spot at end of cell; postmedial and subterminal small dark spots on interspace; some dark mottling on cilia. Hind wing mostly reed yellow, the inner margin with darker suffusions along inner margin. Fore wing below reed yellow, the costa with dark streaks, the spots on terminal half black. Hind wing below with darker suffusions only the costa and termen whitish green.

Expanse: 54 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34766.

HALISIDOTA JOASA, new species

Male.—Head and collar pinkish buff with black spots on collar; patagia warm buff dorsally edged with black, covering the thorax; abdomen alternately orange-vinaceous and warm buff, the two anal

segments white. Fore wing mustard yellow; the costa with cinnamon-drab streaks except at base, otherwise with fine transverse dark lines, a small black spot at end of cell and a narrow brownish streak from base to termen at apex; cilia greenish white. Hind wing primrose yellow, the termen broadly white, faint darker suffusions on inner margin. Wings underneath primrose yellow, with the line to apex and the subterminal lines faintly indicated. The fore wing rather narrow, the termen oblique, the hind wing broad.

Expanse: 45 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34767.

HALISIDOTA AZADINA, new species

Female.—Head and collar deep colonial buff; thorax and patagia ivory yellow; abdomen above colonial buff, with short dark streaks dorsally, the anal hairs white; subdorsal black points. Wings marguerite yellow. Fore wing with veins finely darker and some very faint irrorations on terminal half. Hind wing with faintly darker patches on interspaces subterminally. Wings below as above.

Expanse: 64 mm.

Habitat.—São Paulo, Brazil.

Type.—U.S.N.M. No. 34768.

HALISIDOTA GUASCANA, new species

Male.—Antenna with long pectinations, black, head pallid brownish drab broken by a black spot; patagia colonial buff, thorax evidently with dark hairs; abdomen black, the anal segment with white hairs, underneath buffed with dark segmental lines. Fore wing olive-yellow, with a few minute black points, two larger subterminal points toward apex and a small spot at end of cell; traces of streaks above inner margin and from end of cell all very vague. Hind wing with costal half olive-yellow, with dark terminal streaks on and between vein, the inner margin broadly deep olive-brown. Fore wing below paler with similar but fainter markings. Hind wing below with two thick streaks from base of inner margin, the terminal markings on outer margin as above.

Expanse: 60 mm.

Habitat.—Pueblo Guasca, Colombia.

Type.—U.S.N.M. No. 34765.

HALISIDOTA CLOISA, new series

Female.—Palpi black; head and patagia cream-buff, the collar brownish; a dark line on thorax; abdomen above purplish black with paler segmental lines, the anal tufts white. Fore wing pale purplish yellow (not in Ridgway); a faint darker streak medially below vein

3, with shorter streaks on interspaces postmedially; a minute black point at end of cell with small cluster of black scales subterminal and along termen; the cilia white. Hind wing dark olive lake, with pale subfuscous below at costa on terminal half; cilia white. Fore wing below dull purplish green, paler on terminal space, with a series of dark streaks, and numerous scattered black scales. Hind wing below with the purplish-green color almost obliterated by long dark streaks on interspaces terminally and on costa; a central pale streak is irradiated with dark scales.

Expanse: 60 mm.

Habitat.—Espírito Santo, Brazil.

Type.—U.S.N.M. No. 34769.

One paratype.

HALISIDOTA GROTA, new species

Male.—The palpi with a lateral black line; head and thorax pallid purple-drab, with two black points behind head; patagia white. Abdomen above black, underneath white; also the anal hairs white. Fore wing pale vinaceous-fawn with minute black points, slightly larger at end of cell and subterminally on interspaces. Hind wing semihyaline, being paler than fore wing; a smoky dark spot on termen before tornus; also two small black spots at end of costa and faint irrorations at tips of other veins. Wings below similar but less distinct.

Expanse: 51 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34770.

One paratype.

HALISIDOTA NAYAPANA, new species

Female.—Palpi short, black; head and collar isabella color, with darker streaks; thorax pale purplish gray; patagia primuline yellow, with medial, fuscous, vertical line. Abdomen above fuscous-green, with black segmental lines; underneath greenish white, with darker mottling and a lateral fine, partly broken, undulating black line. Fore wing antimony yellow as base color; the veins mostly finely streaked with light cinnamon-drab; the costal edge with numerous black points; a dark streak along vein 5 from base of cell, then broken into spots to termen; terminal half of wing with large greenish-white spots, oval shaped and finely edged with dark lines, all on interspaces, which include small triangular black spots, both postmedially and subterminally; on the underside the base is thickly suffused with brownish drab, the outer half the same as above. Hind wing above black, underneath black, the costa broadly pale yellowish with a medial black spot and dark streaks at apex.

Expanse: 60 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34771.

One paratype.

HALISIDOTA TOLEDANA, new species

Male.—Head, thorax, and patagia pinkish white, the patagia dorsally edged with black; abdomen above with dark-shaded segmental lines, the anal segment white. Fore wing maize yellow, the cilia white; a dark olive-brown streak from base straight to apex touched above by a similar spot at end of cell; fine dark transverse lines antemedially; small subterminal black spots on interspaces, some of the spots semilunular; veins dark, also a fine postmedial line. Hind wing light chalcedony yellow, with slightly darker suffusions; veins slightly darker; a small subterminal dark spot below vein 3. Fore wing below chalcedony yellow, the marking of upper side all faint. Hind wing below, the darker suffusions below costa more intense, otherwise the same.

Expanse: 50 mm.

Habitat.—Rio Sargo, Bolivia.

Type.—U.S.N.M. No. 34772. Dognin collection.

HALISIDOTA ALARICA, new species

Male.—Head, collar, thorax, and patagia pinard yellow, with fine dark vertical lines, more heavily marked on metathorax; abdomen above maize yellow, with faint darker segmental lines. Fore wing with apex rounded baryta yellow, with brownish transverse lines on costa from base to within cell; from above inner margin at base an olive-brown streak expands and extends to termen near apex, postmedially between veins 3 and 5 dentate lines, somewhat lunular subterminal, the veins terminally dark, the cilia whitish. Hind wing naphthaline yellow, with faintly darker suffusions. Fore wing below with faint traces of the postmedial markings. Hind wing below as above.

Expanse: 50 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34773.

HALISIDOTA MARTONA, new series

Male.—This species is closely allied to *H. matona*. The abdomen is grayish avellaneous, with a broken, black, wavy, lateral line. Fore wing with the black point and faint markings very similar to the other species. Hind wing with the inner half suffused with dark ocher-yellow and two short fuscous streaks below end of costa, the underside with two narrow ovate spots on costa terminally.

Expanse: 56 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34774.

Male and two female paratypes.

HALISIDOTA CALVONA, new species

Male.—Head and collar light brown mixed with darker hairs; patagia dull white concealing the dark hairs on thorax; abdomen above isabella color with dark segmental lines, anal hairs and underside white. Fore wing above greenish white, with light yellowish-olive broad streaks along costa and from cell to apex; a shorter streak above termen; some scattered black scales and some black points post-medially and subterminally and also at tips of veins. Hind wing above dull greenish white with a broad serpentine green fascia along termen varying in length and intensity. Wings below whitish green, with some black points on fore wing, the fascia on hind wing reduced to short streak or broad and darker along the outer margin.

Expanse: 45–50 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34775.

Four paratypes.

HALISIDOTA LOMARA, new species

Male.—Palpi black; head and collar pinkish gray; thorax with black hairs; patagia grayish white; abdomen above black with paler segmental lines; a white spot on anal segment, underneath grayish white. Fore wing pale greenish gray, with scattered black points, the postmedial spots on interspaces, distinct, black; some black scales on termen. Hind wing more distinctly greenish, with darker suffusions on inner margin, the costa narrowly white; some dark green terminal spots toward costa. Wings below pale greenish, with scattered black scales, the postmedial and terminal black spots of fore wing prominent. The species is allied to *H. nella* in shape, but the spots on the underside are quite different, consisting of small clusters of black spots, instead of the distinct black spots of *H. lomara*.

Expanse: 48 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34776.

HALISIDOTA MISONA, new species

Male.—Head and patagia Naples yellow; collar dark olive-brown; thorax apparently black concealed by patagia; abdomen above dark olive-brown, the terminal segments with paler segmental lines and a few hairs at tip of anal segment, a lateral broken black line, ventrally with pale segmental lines. Fore wing mostly sulphine yellow, the base, costa, and small spots toward apex amber-yellow; black points along

costa, on basal third, postmedial and subterminal interspaces, a black streak within the cell, and a black point at end of cell. Hind wing partly sulphine yellow, the interspaces with darker suffusions and short dark streaks terminally at apex, the inner margin and cilia white. Wings below light buff, the fore wing with traces of spots on apical third, the cilia white, the hind wing with a medial dark point below costa and the terminal streaks conspicuous.

Expanse: 45 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34777.

HALISIDOTA MANADA, new species

Female.—Head and collar deep olive-buff; thorax and patagia pale pinkish buff; abdomen dorsally olive-ocher with fine whitish segmental lines, underneath white. Fore wing reed yellow with minute dark points; a black point at end of cell, faintly continued to apex; small dark spots on interspaces postmedially and subterminal, toward apex forming dark streaks. Hind wing reed yellow. Fore wing below as above, the marking more faintly indicated; hind wing below as above.

Expanse: 55 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34778.

HALISIDOTA SIEGRUNA, new species

Female.—Head and collar deep olive-buff; patagia white; abdomen above honey yellow becoming paler on terminal half with fine pale segmental lines. Fore wing reed yellow, with dark irrorations along veins forming a dark streak below cell and postmedially above inner margin; a black point at end of cell and a dark streak at apex, black points subterminally on interspaces and dark tips to veins. Hind wing reed yellow with dull shading except on termen; a dark spot terminally near inner margin. Fore wing below with the markings more pronounced, the subterminal spots like broken ovals. Hind wing below as above.

Expanse: 60 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34779.

Possibly a variation of *H. manada*.

HALISIDOTA DOMARA, new species

Female.—Head and collar chamois; thorax covered by colonial-buff patagia; abdomen olive-yellow with darker transverse lines underneath. Wings marguerite yellow; fore wing with a line of black spots antemedially on costa; some minute dark irrorations; a black

spot at end of cell; minute black spots subterminally on interspaces and black points at tips of veins. Hind wing with some black spots on termen subterminally and on tips of veins. Fore wing below with the markings faintly shown. Hind wing below faintly suffused with a slightly smoky shade, the costa broadly white.

Expanse: 55 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34780.

HALISIDOTA SUAVINA, new species

Female.—Head and collar warm buff crossed by a vertical black line; thorax with grayish and black hairs; patagia pale grayish vinaceous; abdomen light grayish vinaceous with dark segmental lines. Fore wing pale grayish vinaceous, the veins finely chamois; a darker shade at end of cell; small dark points on all interspaces. Hind wing white with very faint darker suffusions except on termen. Wings below as on upper side except the veins, which are of the ground color.

Expanse: 45 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34781.

HALISIDOTA POTAMIA, new species

Male.—Head and collar pale lobelia; thorax with a vertical black line; patagia white with dorsal black hairs; abdomen above dorsally with pinkish hairs at base, otherwise light purple-drab with darker segmental lines, underneath pinkish white with dorsal black spots on a black segmental line. Fore wing pinkish; a black streak along inner margin; the cell black antemedially, diverging at middle of cell with a small black spot at vein 5; the veins on outer half pinkish, the interspaces irrorated with black scales and small black spots subterminally, the cellular black line more definite on the right wing. Hind wing benzo brown. Fore wing below paler than above with black line on inner margin, and a few black irrorations on outer half. Hind wing below dark lavender, the costal margin pinkish white.

Expanse: 63 mm.

Habitat.—Mesopotania, Dept. Antioquia, Colombia, 5,000 feet.

Type.—U.S.N.M. No. 34782.

HALISIDOTA SPORINA, new species

Male.—Head pinkish gray, a similar color edging a black spot on collar; thorax with long black hairs; patagia pale grayish vinaceous with a few dark scales. Abdomen above mottled brown and vinaceous, underneath dull vinaceous with a wavy black lateral line. Fore wing grayish vinaceous, black points along costa antemedially and medially also a few in cell; a wavy dark brown shade from cell to

apex; the veins on terminal half pale brown, subterminal semicircular spots on interspaces; black points terminally. Hind wing the inner margin broadly pyrite yellow, the costa and termen white. Wings below pinard yellow, the fore wing markings indistinctly apparent on terminal third, the hind wing with a dark subterminal spot near anal angle.

Expanse: 44 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34783.

HALISIDOTA CHESTERIA, new species

Male.—Head and collar vinaceous-buff; thorax purplish brown, the patagia pinkish white; abdomen above with clay color and dark transverse lines, the anal hairs white underneath with narrow dark and broad whitish transverse lines. Fore wing pale congo pink, the veins finely darker; small dark spots on basal half of costa and a few dark irrorations, subterminal semicircular dark reddish spots on interspaces; terminal black spots at tips of veins, at end of cell a very conspicuous round black spot; between veins 6 and 7 the subterminal spots form streaks. Hind wing light buff, with slightly darker suffusions except on margins; a short dark streak on termen below costa. Wings underneath naphthaline yellow, the fore wing with markings reduced and fainter, the hind wing with a few dark scales at end of costa.

Expanse: 42 mm.

Habitat.—Santa Catharina, Brazil.

Type.—U.S.N.M. No. 34784.