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### XXX.—New species of Heterocera from Costa Rica.—VI

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which had been placed in its neighbourhood and whose relations he thought had been misunderstood. He wrote that an examination of the skeletons showed the family Cirrhitidæ of Günther to be a most artificial group, and that if a natural arrangement were to be attempted the only way to deal with it would be to disband it altogether. He then proposed to place *Cirrhit* in the Serranidæ; *Chilodactylus* was to join *Haplodactylus* in the Sparidæ, and a distinct family, Latrididæ, was established for *Chironemus*, *Threpterus*, and *Latris*. The presence or absence of a subocular shelf and of parapophyses on the anterior vertebræ were apparently the only characters taken into consideration in this arrangement. That *Chilodactylus* has and *Haplodactylus* has not a subocular shelf was apparently overlooked, and *Latris*, which resembles these genera and differs from *Chironemus* and *Threpterus* in having parapophyses on all the præcaudal vertebræ, was evidently associated with the latter owing to an error in the tabular statement of the structure of the vertebral column.

In the 'Cambridge Natural History' (1904) the Cirrhitinæ form a subfamily of the Serranidæ; the Latrididæ include only *Latris*, and are placed next to the Haplodactylidæ, comprising *Haplodactylus*, *Chilodactylus*, *Chironemus*, and *Threpterus*; parapophyses are said to be developed from the third or fourth vertebra and a subocular shelf to be absent; neither of these statements is true of all the genera.

The presence or absence of a subocular shelf and the development of parapophyses have some taxonomic importance; but other characters—for example, the number of anal spines and the presence or absence of a pelvic axillary process—are equally useful in classifying the Percoids. Apparently the subocular shelf has been lost twice and parapophyses have been twice independently developed on the anterior præcaudal vertebræ, within the limits of a single small and uniform group, the Cirrhitiformes.

### XXX.—*New Species of Heterocera from Costa Rica*.—VI.

By W. SCHAUS, F.Z.S.

#### *Heorta mitis*, sp. n.

♂. Head and collar lilacine buff. Thorax pale greenish and light brown, irrorated with fuscous-brown scales. Abdomen above fuscous grey; a dorsal tuft of brown scales at

base. Fore wings dull greenish grey, shaded with brown in cell and on inner margin; three fine black streaks on costa at base, and others more remote from base below cell; antemedial fuscous points on veins; a geminate fine curved medial line, the inner part punctiform on veins; an oblique pale shade across end of cell; a black point anteriorly on discocellular; a geminate postmedial line, very indistinct, forming a lunule between 6 and 4, and punctiform on veins below, followed by fuscous-brown shades between 3 and 6; a subterminal, wavy, velvety black line from costa to vein 4, thickening somewhat between the veins, followed by fuscous-grey shades on veins; marginal black lunules between the veins; terminal fuscous spots between veins extending on cilia, and interrupting a terminal black line. Hind wings fuscous; cilia whitish.

Expanse 37 mm.

*Hab.* Juan Vinas, Sixola.

*Bardaxima hippioides*, sp. n.

Palpi whitish buff in front, with a lateral dark streak, violaceous brown behind. Frons and tufts in front dark violaceous; tufts behind and vertex whitish buff. Collar mottled buff and reddish brown. Thorax dark violaceous brown. Abdomen fuscous brown; a velvety dark brown tuft dorsally at base. Fore wings dark violaceous brown; the base dull brown, with a short dark velvety streak and some white scales below cell; antemedial dull brown, edged in places with dark scales, outset on subcostal and just above median, preceded below cell by a patch of greenish scales; a dull brown shade on discocellular, crossed by a velvety dark brown lunule and followed by a wedge-shaped velvety spot, above which is a white streak along vein 5, limited by a white transverse line from 5 to 6, both edged with dark brown; from above streak a light brown shade oblique to apex, becoming creamy buff between 7 and 8; dark brown streaks between 5 and 7, outwardly limited by buff lunules; marginal velvety spots, edged with light brown; cilia fuscous, with light brown points at veins. Hind wings fuscous.

Expanse 45 mm.

*Hab.* El Sitio, Cartago.

*Antiopha excelsa*, sp. n.

♀. Palpi, head, and collar fuscous brown, the vertex mottled with lilacine and reddish brown. Thorax and patagia lilacine brown. Abdomen above fuscous. Fore wings: the

costal margin for two-thirds from base, the base, and basal half of inner margin fuscous grey, streaked with dark brown; the cell and beyond it lilacine, streaked with reddish brown; the apical third of costal margin reddish brown; outer portion of inner margin greyish brown, with oblique reddish-brown streaks between submedian and vein 2; along median and vein 3 to outer margin a broad fuscous-brown shade; the outer margin tinged with fuscous grey; the reddish-brown streaks between veins geminate and subterminal lines between them bifurcating towards termen and enclosing marginal white points; some postmedial white points from vein 6 to costa. Hind wings fuscous, somewhat whitish at base; cilia fuscous brown at base, greyish terminally.

Expanse 53 mm.

*Hab.* Avangarez.

*Poresta punctulum*, sp. n.

♂. Palpi grey in front, brown behind, and with a lateral black streak. Head: frons light brown; vertex ochreous buff; tufts dark brown and grey. Collar and thorax ochreous buff, partly shaded with dark brown; patagia dark grey. Abdomen fuscous grey, terminally shaded with reddish brown. Fore wings reddish brown; a white line from near base of costa oblique to near submedian and parallel with it to termen, below the line the base and inner margin is greenish grey irrorated with fuscous; a black point on discocellular; the costal margin finely paler; a black line outwardly shaded with dark violaceous from apex to white line medially; the outer margin shaded with violaceous; marginal black points between the veins slightly shaded with grey, a curved terminal line between veins 2 and 3, outwardly filled in with white and grey. Hind wings fuscous; a whitish-buff streak along inner margin.

Expanse, ♂ 41, ♀ 54 mm.

*Hab.* Juan Vinas, Tuis.

Allied to *P. thermesia*, Felder.

*Dasylophia nigrescens*, sp. n.

♀. Palpi, head, and tufts dark brown, the latter shaded with whitish. Collar and thorax black. Abdomen light brown; a greyish dorsal line. Fore wings greyish brown; the basal third black, with a black-brown streak in cell and above submedian, and followed by a lighter brown shade, and black medial line in cell, and below cell by the dark medial line and a white shade; the postmedial fuscous,

geminate, wavy, incurved to submedian fold, then outcurved, with a velvety dark spot just below vein 2, and a similar line between 2 and 3; a subterminal black shade very broad on costa, narrowing to a point at vein 2, with velvety streaks between the veins, which are followed by angled brown lines inwardly shaded with buff; a dark point at lower angle of cell; a terminal black line preceded by grey irrorations. Hind wings whitish; the veins on outer half dark brown; the margins fuscous shaded.

Expanse 45 mm.

*Hab.* Avangarez.

A male similar to this female is in the National Museum, Washington, from Cuernavaca, Mexico.

*Dasylophia placida*, sp. n.

♂. Palpi and head brown; tufts on head, thorax, and patagia lilacine brown. Collar dark violaceous brown. Abdomen light brown. Fore wings light brown, faintly tinged with lilacine, and with grey on outer half of inner margin; black irrorations on veins; some faint darker streaks at base; a faint dentate antemedial shade; a medial shade, inwardly very oblique from submedian fold to submedian vein, and there preceded by a fine reddish-brown shade; a velvety black spot at lower angle of cell; a geminate post-medial wavy fuscous shade, incurved below vein 4, the two lines well apart, the outer one followed by a pale shade, and some reddish brown above and below vein 2; a subterminal fuscous shade with dark streaks between veins 4 to 8, and fuscous spots between 2 and 4, the dark streaks followed by buff streaks; a terminal dark lunular line, the points extending on cilia. Hind wings whitish; the veins on outer half and margins fuscous.

Expanse 40 mm.

*Hab.* San José, Avangarez.

Allied to *D. guarana*, Schs., but the antennæ in the female of *placida* are simple, whereas in *guarana* they are pectinated.

*Dasylophia indecoris*, sp. n.

♂. Antennæ pectinated to near tips. Palpi, head, and patagia dark lilacine grey; a dark brown lateral line on palpi; collar dark brown. Abdomen grey-brown. Fore wings grey-brown; the cell and costal margin broadly shaded with fuscous brown; an oblique fuscous shade from costa antemedially to end of cell, angled and inwardly oblique to inner margin; a pale postmedial shade on costa; median vein

greyish buff edged with reddish brown; veins 2-4 and 5-7 terminally with fine fuscous streaks, edged with greyish buff; geminate brown streaks coalescing partly between veins 4-8; subterminal and terminal fuscous spots between veins 2-4. Hind wings fuscous brown, tinged with white at base, in and just beyond cell.

Expanse 38 mm.

*Hab.* Cachi.

Allied to *D. seriata*, Druce.

*Dasylophia angustipennis*, sp. n.

♂. Frons and collar buff-brown; vertex and thorax reddish brown; patagia violaceous brown; tufts at base of antennæ greyish brown. Abdomen above greyish brown, with dark irrorations terminally. Fore wings brown; base of costa and inner margin buff; a very oblique reddish-brown shade from costa across middle of cell, incurved and finely dentate to inner margin, followed by a fine geminate fuscous line from vein 2, sharply oblique towards base from submedian fold, punctiform at fold and vein 2; postmedial space below 4 to tornus shaded with grey; veins 4-7 dark brown; geminate fuscous and brown streaks from cell to termen and subterminal buff streaks between veins 4-8; traces of a curved postmedial line, followed by a white and black spot between 2 and 3; a subterminal lunular buff line edged with reddish brown between 2 and 4. Hind wings white; veins terminally, inner margin broadly, and apex slightly irrorated with fuscous.

Expanse 46 mm.

*Hab.* El Sitio, Juan Vinas.

Wings longer and narrower than usual.

*Arhacia corina*, sp. n.

♂. Palpi, head, collar, and thorax violaceous brown; palpi tipped with buff; a geminate dorsal whitish streak from antennæ to tips of patagia. Abdomen fuscous brown; a dorsal tuft at base mottled brown and white. Fore wings: a broad brownish-black shade from base of costa through cell and just below it to near termen between 4 and 6, on which the veins are still darker streaked; a buff shade above this along costa and below vein 7 to near termen with some brown streaks; the apical third of costa above vein 7 shaded with lighter brown; below dark shade the wing is lilacine brown; an outcurved dark geminate antemedial line; a faint postmedial line also geminate; a subterminal fuscous-brown

shade darkest from below vein 2 to vein 4; an olive-brown terminal line cut by veins and preceded by a buff line; cilia buff, with darker spots at veins. Hind wings whitish; the margins and veins terminally fuscous brown.

Expanse 35 mm.

The female has the hind wings entirely fuscous brown, the cilia whitish buff.

Expanse 42 mm.

*Hab.* Juan Vinas, Tuis.

*Cerura laqueata*, sp. n.

♂. Head white, edged with black laterally; a black spot on vertex. Collar white, edged with black in front and behind. Thorax white, streaked with black. Abdomen white at base and terminally, otherwise fuscous grey with whitish transverse lines; a postmedial black line on last segment. Fore wings silvery white, the markings black; basal and subbasal lines to submedian; antemedial and medial lines parallel, wavy, indentate on submedian, outbent to inner margin; the cell-spot large, formed by a heavy incurved line on medial side, outwardly straight between 2 and 3, obtusely projecting between 3 and 4, incurved between 4 and subcostal; a geminate lunular postmedial line, followed on costa by a thicker line; marginal oblique black lines from 6 to termen of 4, 4 to 3, 3 to 2, and 2 to tornus terminating in spots on cilia; from apex to vein 6 a straight line. Hind wings white; a fuscous patch at apex; some fuscous hairs on inner margin; a few fuscous irrorations on outer margin; dark points on cilia.

Expanse 34 mm.

*Hab.* Sixola.

*Lirimiris imitans*, sp. n.

♂. Palpi and frons reddish brown, irrorated with white; vertex whitish buff, shaded with light brown; collar brown; patagia brown, edged with buff. Abdomen grey-brown above; a dark reddish-brown dorsal tuft at base; terminal segment and anal hairs buff, streaked with pale reddish brown. Fore wings buff tinged with pale brown, and longitudinal brownish streaks from base; a geminate dark reddish-brown streak from base below cell to middle, followed by a broad olive-brown shade, terminating at a small cluster of black scales between veins 3 and 4; an olive-grey streak near base above submedian; the costal and inner margins reddish brown, with darker streaks, from a little beyond base;



the outer margin narrowly dark olive-green, preceded by a light buff shade, followed by a fine whitish and a fine black line, and terminally as well as cilia reddish brown crossed by a darker brown line; transverse whitish and pale reddish-brown lines at end of cell. Hind wings brown, the costal margin and anterior portion of cell yellowish white; a marginal darker brown shade, divided by a wavy buff line on inner half; a terminal pale shade, divided by a darker brown line, becoming black near anal angle.

Expanse 57 mm.

*Hab.* Sixola.

Fore wings similar to *Arhacia combusta*, H.-S.; hind wings differ in colour and in having veins 3 and 4 well apart.

*Dicentria patula*, sp. n.

♂. Palpi, head, collar, and patagia brown; a fuscous spot on vertex; thorax fuscous and dark brown. Abdomen above fuscous; the terminal segment and anal hairs fuscous and buff. Fore wings: basal half of costa, cell, and a shade along submedian to termen dull violaceous grey; a velvety dark brown streak at base below cell, and a similar streak on discocellular, followed by a brown shade; an olive-brown shade below cell; a broad curved postmedial buff shade from costa to vein 2, divided by an interrupted fine brownish line; vein 5 edged with dark brown to termen; a subterminal dark brown space above vein 2, extending to termen on vein 3, with a buff spot below 3; vein 4, 6 to costa, and apex pale olive-brown, with some terminal buff streaks. Hind wings whitish; fuscous hairs along inner margin; the veins light brown, becoming darker terminally.

Expanse 41 mm.

*Hab.* Cartago, Juan Vinas; Volcano Turrialba, 5800 feet.

*Dicentria missilis*, sp. n.

♂. Head, collar, and thorax fuscous, mottled with grey and light brown. Abdomen above fuscous brown, darkest dorsally at base. Fore wings light brown, tinged with buff in and below cell and on outer margin between 3 and 6; a velvety black-brown streak on discocellular, followed by a long similar streak between veins 4 and 5; vein 5 terminally broadly olive-brown; veins 3, 4, and 6 finely dark brown; a subterminal dark brown shade between veins 2 and 3; a dark shade at base of veins 2-4; a dark streak from base below cell to antemedial line, which is fine olive-brown, forming three outward curves; a whitish marginal spot

between veins 2 and 3; an indistinct subterminal line, punctiform on veins; cilia whitish buff and brown. Hind wings white, the veins and margin irrorated with fuscous hairs; a fuscous streak near inner margin.

Expanse 31 mm.

*Hab.* Sixola, Juan Vinas.

Allied to *D. stridula*, Schs., and *D. disparilis*, Schs.

*Dicentria rivalis*, sp. n.

♂. Palpi buff, a fuscous-brown patch laterally. Head and thorax mottled brown and fuscous. Abdomen above fuscous, the terminal segments buff and brown. Fore wings buff-brown, shaded with pale reddish brown on inner margin; a dark brown space at base of costa and cell; a pale line on either side of discocellular, preceded in cell by a dark shade and followed by a dark brown streak from between 4 and 5 obliquely across vein 5; antemedial line faintly indicated; small postmedial geminate streaks on veins; subterminal fuscous spots above vein 6; a dark brown space on outer margin from vein 2 to above vein 3; veins terminally fuscous; terminal brown spots between veins; fuscous spots on cilia at veins. Hind wings white, some terminal brown scales; a fuscous shade at anal angle.

Expanse 35 mm.

♀. Fore wings greyer; the lines and spots more distinct; the spot on discocellular oval, whitish grey, with dark centre; a geminate dark wavy line before cell-spot; a curved dentate fuscous line just beyond cell; the postmedial very oblique on costa and finely dentate, geminate; the subterminal spots larger. Hind wings: the veins terminally and outer margin fuscous.

Expanse 44 mm.

*Hab.* Juan Vinas, Guapiles.

Allied to *D. palmita*, Schs.

*Dicentria rustica*, sp. n.

♂. Head and thorax mottled grey-brown and fuscous; frons shaded with buff. Abdomen above black; a buff space dorsally on last two segments; underneath whitish buff; a black ventral space at base; the legs fringed with long black hairs. Fore wings dull brown, irrorated with fuscous brown, especially at base, on inner margin, and above tornus; a fuscous shade at end of cell; antemedial very indistinct, fuscous; fine fuscous streaks between veins beyond cell; postmedial black points on veins; veins dark brown;

subterminal fuscous spots between veins shaded with buff near tornus. Hind wings white; fine terminal fuscous irrorations; a fuscous-brown streak near inner margin from base, ending in a fuscous shade at anal angle. Underneath white. Fore wings: the veins on terminal half fuscous; the postmedial area shaded with fuscous above vein 4; a subterminal dentate fuscous shade; sagittate fuscous spots on veins terminally. Hind wings: a small fuscous shade at anal angle.

♀. Fore wings rather darker, the markings very confused. Hind wings fuscous; the basal area in and below cell shaded with white; a curved whitish line above anal angle.

Expanse 45 mm.

*Hab.* Sixola, Juan Vinas.

*Dicentria tacita*, sp. n.

Palpi, head, and collar medially brownish buff; collar otherwise, and thorax mottled brown and fuscous. Abdomen above fuscous brown, the terminal segments whitish buff. Fore wings brown, irrorated with fuscous at base, below cell and vein 2, and on outer margin between veins 2 and 4; traces of dark brown lines between the veins beyond cell; marginal white spots at tornus and between veins 2 and 4; black marginal spots between veins 6 and 8. Hind wings white; some brownish scales terminally; a fuscous-brown shade along inner margin.

Expanse 34 mm.

*Hab.* Sixola.

*Dicentria limosoides*, sp. n.

♂. Head, collar, and thorax mottled light brown and fuscous; some silvery white scales on patagia. Fore wings brown; the costal margin, apex, and cell paler, shaded with olive-green and pale buff; an olive-green spot at end of cell, edged with whitish; postmedial line geminate, dentate, lunular and punctiform on veins, rather indistinct; no streaks between the veins; elongated subterminal fuscous spots, outwardly shaded with white on costa and at tornus; veins broadly tipped with black. Hind wings white; a terminal brown line; veins terminally shaded with brown; a fuscous shade at apex; a fuscous line near inner margin; anal angle fuscous.

Expanse 32 mm.

♀. The markings more distinct; a geminate antemedial line; the subterminal spots all shaded outwardly with buff. Hind wings whitish; the margins broadly fuscous.

Expanse 42 mm.

*Hab.* Juan Vinas, Sixola.

Very closely allied to *Dicentria* (*Meragisa*) *limosa*, Schs.

*Psilacron arthuri*, sp. n.

♂. Head, collar, and thorax mottled greenish buff and brown; a black-brown transverse line on collar. Abdomen fuscous above; basal tufts greenish buff; terminal segment and anal hairs buff. Fore wings: some greenish buff at base, and a black point below cell followed by a fuscous-grey shade limited by the antemedial line, which is fine, black-brown, geminate, somewhat oblique from costa to submedian, then incurved; medially and below vein 4 grey, with darker irrorations; a greenish-buff shade between 3 and 4 near cell, above submedian medially, and about tornus; a small brown spot on discocellular, followed by a curved brownish shade consisting of short streaks; postmedial geminate, interrupted, forming short velvety streaks on veins, followed between veins 4-7 by a large fuscous-grey shade; a marginal dark grey shade from costa to vein 4; a terminal olive-brown line; terminal black streaks on veins; cilia whitish, with fuscous spots. Hind wings fuscous grey, the veins and inner margin darker; a geminate postmedial line on costa filled in with greenish buff.

Expanse 37 mm.

♀. Fore wings olive-brown, shaded with fuscous and dark grey, the lines as in the male; a large whitish patch on outer margin from vein 2 to just above vein 4. Hind wings with indistinct medial and geminate postmedial fuscous lines.

Expanse 41 mm.

*Hab.* Juan Vinas.

*Psilacron discolor*, sp. n.

♂. Head, collar, and thorax mottled brown and greenish. Abdomen above greyish brown; dorsal greenish tufts at base. Fore wings yellowish green, probably faded, shaded with fuscous grey in and below cell medially; a subterminal dull fuscous-grey shade from vein 4-7; a large antemedial black space from below cell to inner margin; a velvety black semilunar spot at end of cell, and an inward fuscous shade below it; a fine incurved dark line from costa before subterminal shade to vein 3, geminate from vein 7-3; a subterminal fuscous shade between veins 2 and 3; a paler marginal line, lunular below vein 4. Hind wings brownish, tinged with fuscous grey.

Expanse 41 mm.

The female has the outer margin broadly shaded with white between veins 2 and 4.

Expanse 47 mm

*Hab.* Juan Vinas, Tuis

This species may prove to be a variety of *P. roberti*, Schs. it is readily distinguished by the discal spot and black antemedial spaces.

*Heterocampa altilis*, sp. n.

♀. Head, collar, and thorax mottled green and fuscous brown. Abdomen fuscous grey, with dark velvety scales at base. Fore wings: from base to tornus, end of cell, and slightly beyond on costa dull green and brown, with some fuscous shadings antemedially; inner margin finely brown-black; a fine black medial line forming three outward curves and inwardly shaded with dull green; a buff streak on discocellular, outbent anteriorly and divided by a fine black line; a geminate white postmedial line on costa; from beyond cell and from vein 2 to costa a large greyish-black space almost reaching termen, on which veins 2-6 are brown-black, and there are intervenal dark brown streaks except between veins 3 and 4, and also a postmedial and subterminal dark brown shade, the latter limiting the dark streaks; between veins 3 and 4 an ovate space containing a whitish streak along vein 3 and some green shadings; a marginal green shade outwardly edged by a fine black line; termen brownish, with a terminal dark line. Hind wings fuscous brown; a faint postmedial pale line.

Expanse 44 mm.

*Hab.* El Sitio.

*Heterocampa apparata*, sp. n.

♂. Palpi fuscous brown, fringed in front with light brown. Head greenish brown; a darker shade on vertex. Collar and thorax violaceous brown, the former tipped with dark green; patagia and dorsal tuft at base of abdomen dark green. Abdomen fuscous brown; the anal hairs yellowish green. Fore wings apple-green; a geminate black basal line on costa; a black streak below cell at base; antemedial line fine, black, geminate, lunular, preceded by a brown spot on costa, and a similar space below cell to inner margin; bluish-white irrorations on costa medially, and an oblique patch of similar scales between veins 2 and 3 from discocellular, preceded below end of cell by some dark green

scales; discocellular light brown, edged with velvety fuscous brown; a fuscous geminate medial line on costa and a single black medial line from vein 2 to inner margin; postmedial fine, black, indistinct, lunular and oblique to vein 3, then incurved and lunular, followed between 4 and 7 by some scattered black irrorations; a subterminal wavy black shade; base of cilia yellowish. Hind wings fuscous grey, tinged with lilacine; a dark postmedial line on costa, followed by a whitish spot; cilia green.

Expanse 39 mm.

Hab. Tuis.

*Heterocampa delecta*, sp. n.

♂. Head, collar, and thorax olive-green. Abdomen above fuscous grey. Fore wings olive-green, strongly shaded with white on outer half of costal margin and beyond cell; an oblique geminate basal fuscous line, filled in with brown above cell; a wavy geminate antemedial fuscous line, rather indistinct; a fuscous medial line, outwardly edged with white on costa, interrupted by a brown line on discocellular; the postmedial from vein 7, lunular fuscous and brown, spotted with white on veins 2-7; a faint dentate brownish subterminal shade. Hind wings fuscous grey; a geminate dark postmedial line on costal margin, followed by a large white space at apex.

Expanse, ♂ 35, ♀ 45 mm.

Hab. Juan Vinas, El Sitio.

*Heterocampa dolorosa*, sp. n.

Palpi brown, tipped with grey. Frons light brown. Thorax black-brown, mottled with grey; a white patch on patagia. Abdomen dorsally brown, a darker patch at base; terminal segments shaded with white. Legs and body below greyish brown. Fore wings fuscous brown; a large whitish space from base of costa to medial, extending to submedian on inner margin, inwardly limited by an oblique basal brown shade and outwardly by the medial, which is outcurved around end of cell and dentate below submedian fold; the antemedial geminate, black, inbent on subcostal and submedian, only faintly marked above median; a black point in cell; a brown lunule on discocellular; postmedial black, geminate, lunular, divided by greyish lunules; a subterminal fuscous dentate line, outwardly partly shaded with whitish, suffusing with marginal whitish spots between veins 2 and 4; cilia whitish, spotted with fuscous. Hind wings white;

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geminate fuscous postmedial lines on costa and a spot at apex ; inner margin broadly fuscous.

Expanse, ♂ 52, ♀ 61 mm.

*Hab.* Tuis, Juan Vinas.

Closely allied to *H. atra*, Schs.

*Heterocampa livida*, sp. n.

♂. Head and thorax olive-brown. Tegulæ and patagia steel-blue, edged with green. Abdomen fuscous grey ; base and terminal segment buff. Fore wings green ; steel-blue spots on basal half of costa and one on inner margin antemedially ; some darker green at base below cell ; antemedial line indistinct, geminate ; an oblique dark green shade from cell to middle of inner margin, followed by a bluish-grey shade in and below cell ; a paler green space at end of cell extending on to costa, containing a small brown spot at end of cell, and followed above vein 4 by a dark greenish shade to subterminal, this shade being crossed by the fine lunular, geminate, postmedial line ; the subterminal broad, steel-blue, edged with fuscous, inset below vein 3 ; a pale green space at apex ; a submarginal fuscous lunular shade from veins 3-7 ; a terminal fuscous shade from vein 3 to apex, irrorated with white on veins ; cilia spotted with brown. Hind wings fuscous ; the base whitish buff ; a black postmedial line, followed by a pale shade.

Expanse 41 mm.

♀. Head and thorax steel-blue, the collar edged with fuscous. Fore wings steel-blue, the lines lunular, black, geminate ; the basal line filled in with green in and below cell ; the antemedial shaded with green towards inner margin ; a curved black line at end of cell, followed by a brown-tinged space, extending below cell to antemedial ; the postmedial shaded with brown from veins 3-7 ; the subterminal single, lunular, heavily marked, black, shaded with white and olive-brown outwardly ; terminal black streaks on veins, expanding into spots on cilia. Hind wings fuscous brown, darkest on outer margin ; a paler postmedial shade ; cilia terminally whitish and with fuscous spots.

Expanse 51 mm.

*Hab.* Juan Vinas, Tuis.

*Heterocampa lucoides*, sp. n.

♂. Head, collar, and thorax olive-green, with darker patches on patagia. Abdomen above fuscous grey. Fore wings yellowish green, mottled with olive-green, forming a

dark patch around end of cell ; a subbasal line ; a basal spot on costa and below cell ; an antemedial spot on costa, followed from subcostal to inner margin by a deeply lunular geminate line, outwardly heavily shaded with dark green between cell and submedian fold ; a pale line on discocellular outwardly darkly shaded ; the postmedial geminate, lunular from vein 6 to inner margin, followed by a dark shade between veins 2 and 3 ; subterminal dark green lunular shades, heaviest between veins 3-6 ; a submarginal olive-green shade ; terminal dark spots between the veins ; dark green spots on cilia at end of veins. Hind wings somewhat smoky, tinged with roseate buff ; a paler postmedial shade.

Expanse 40 mm.

*Hab.* Juan Vinas.

Allied to *Heterocampa* (*Luca*) *herbida*, Wlk.

*Heterocampa meretricia*, sp. n.

Palpi black behind, greenish buff in front. Frons light brown. Vertex, collar, and thorax olive-green. Abdomen green above, paler on two terminal segments ; underneath luteous. Fore wings light green ; the base to antemedial, which is nearly straight, dark olive-green ; a faint irregular medial line ; a large buff spot at end of cell, containing two brown spots on discocellular ; a postmedial fuscous line, lunular and faintly geminate, starting from a fuscous shade on costa ; subterminal black spots, inset between veins 4 and 6 ; quadrate black spots on cilia at ends of veins. Hind wings roseate ; the outer margin broadly fuscous, preceded by a fuscous postmedial line ; cilia pale green spotted with black.

Expanse 40 mm.

*Hab.* Tuis.

*Heterocampa novella*, sp. n.

Head, collar, and thorax brown tinged with violaceous, the vertex mottled with dull green. Abdomen brown tinged with grey. Fore wings brown ; the costal margin from base to postmedial mottled with dull green ; the inner and outer margins dull green ; the lines indistinct, consisting of vague fuscous shades ; the antemedial geminate on costa ; the discocellular lighter brown with a fuscous shade beyond and below it ; a small whitish postmedial spot on costa ; a broad subterminal fuscous shade from vein 3 to near apex, preceded by a faint pale brown shade ; a fine black interrupted marginal line ; cilia roseate brown with fuscous spots at veins.



Hind wings thinly scaled, the inner and outer margins more distinctly fuscous brown; a dark postmedial line followed by a paler shade; cilia roseate brown tipped with white.

Expanse 39 mm.

*Hab.* Sixola, Avangarez.

Allied to *H. sylla*, Druce.

*Heterocampa peralta*, sp. n.

♂. Head and collar violaceous brown. Patagia pale green with a white spot on dorsal edge; pale green tufts on thorax behind with long spatulate scales. Abdomen rich brown. Fore wings dull fuscous brown; a green basal line; antemedial and medial green spots on costa; an oblique fuscous shade across end of cell to near tornus; area beyond cell and above vein 3 lighter brown; outer half of inner margin white, coalescing with two small white spots on submedian, and marked by a greenish spot between them; outer margin shaded with fuscous to near apex; a terminal whitish-grey line; cilia light brown spotted with fuscous at veins. Hind wings dark brown; traces of a pale postmedial line; cilia whitish streaked with brown at veins.

Expanse 33 mm.

*Hab.* Peralta.

*Heterocampa perplexa*, sp. n.

♂. Head and thorax mottled green and brown; the tegulae dark violaceous brown. Abdomen brown dorsally, becoming paler terminally; laterally fuscous. Fore wings: the base narrowly green, crossed and limited by a dark brown line; a black point below cell; antemedial space dark violaceous brown, limited by the geminate dark antemedial line which forms three outward curves below subcostal; medial space dark reddish brown from subcostal to submedian fold, below which it is green, and there are some green spots on costa; a light brown shade on discocellular closely followed by a black medial line; beyond medial the wing is green; the postmedial lunular, geminate, black, partly indistinct; subterminal brownish spots between veins 4-7, crossed by a pale line; an inwardly lunular marginal black line; the veins terminally streaked with black. Hind wings white; the inner margin and a terminal line fuscous; the veins terminally fuscous; a buff spot at anal angle. Two specimens from Sixola have a dark grey streak from

medial to subterminal between veins 4 and 5, and the reddish-brown medial shade extends between veins 2 and 3 to near tornus; the veins on hind wings are black except at base.

Expanse 39 mm.

♀. Head, collar, and thorax moss-green. Fore wings paler in tint; three dark spots on subterminal shade between 4 and 7, and three spots between vein 3 and inner margin, the spot between 2 and 3 largest. Hind wings fuscous grey; a buff spot at anal angle; the cilia light brown and white with dark spots at veins.

Expanse 43 mm.

*Hab.* Juan Vinas, Sixola, Avangarez.

*Heterocampa plebeia*, sp. n.

Palpi dark brown fringed with buff-brown. Thorax dark brown; head, collar, and patagia light brown. Abdomen fuscous brown. Fore wings brown, the lines darker; the basal geminate; the antemedial geminate, finely dentate on costa and in cell, wavy below cell, dentate on submedian; antemedial space dark brown from costa across cell; a whitish-buff space below cell and on base of inner margin; a dark brown spot at end of cell, followed by a dull shade oblique from costa, angled at vein 4; the post-medial indistinct, geminate, followed by greyish scales on submedian and veins 2-4, and by dark brown shades on costa, and from vein 2 to inner margin, also by a quadrate dark brown shade between veins 4 and 5; a subterminal whitish-buff line, obsolescent towards apex; the veins beyond post-medial streaked with black; a faint terminal buff line above tornus. Hind wings brown; an indistinct postmedial buff shade; cilia whitish buff.

Expanse 38 mm.

*Hab.* Juan Vinas, El Sitio, Tuis.

*Heterocampa princeps*, sp. n.

♀. Head, thorax, and fore wings pale yellowish green. Abdomen light buff; some reddish brown at base dorsally; two transverse patches on last segment dorsally. Fore wings: a dark oblique shade from base of cell to inner margin suffusing above submedian with a fine curved antemedial line; an oblique darker green shade medially from costa to vein 2 subterminally, on which is a still darker lunate spot on discocellular; postmedial greenish-white spots on veins preceded and followed by small dark spots most noticeable on veins 2-4; dark streaks close to cell on

veins 3 and 4; an indistinct subterminal shade with darker shadings on veins; dark green points on cilia at veins. Hind wings white faintly tinged with yellow, more distinctly on inner margin.

Expanse 45 mm.

*Hab.* Juan Vinas, El Sitio.

*Heterocampa proba*, sp. n.

♂. Head and thorax dark moss-green; some white scales on tegulae behind. Abdomen above brown, paler dorsally; anal hairs tinged with rufous. Fore wings dark moss-green; a curved geminate dark brown basal line, filled in with lighter brown; the antemedial, geminate, finely wavy, lunular; an indistinct brownish mark on discocellular; the postmedial lunular between veins, faintly geminate, with white points on veins and a white line on inner margin; subterminal brown and fuscous spots between the veins, inset between 4 and 6; the veins on terminal third of wing tinged with fuscous and irrorated with grey scales; white points terminally on veins. Hind wings brown; the cell and beyond more thinly scaled showing a whitish ground; the costal margin dark moss-green, with a geminate post-medial line, continuing as a pale shade to inner margin.

Expanse 40 mm.

♀. The abdomen with dark brown dorsal tufts. Fore wings brighter green; the subterminal spots sagittate. Hind wings greyer, the outer margin tinged with green.

Expanse 49 mm.

*Hab.* Juan Vinas.

Allied to *H. delira*, Schs.

*Heterocampa spectra*, sp. n.

♀. Head, collar, and thorax white mottled with brownish-grey hairs. Abdomen ochreous buff, the terminal segment dorsally whitish. Fore wings white, thinly irrorated with ochreous brown and dark brown; a wavy, curved, basal ochreous-brown line; the antemedial faint, geminate, fuscous, oblique from cell, terminating in a fuscous patch on middle of inner margin; a small dark brown spot at end of cell, and two oblique brown lines above it on costa; postmedial geminate, lunular, fuscous, indistinct, followed by a brownish shade on costa; subterminal sagittate black spots between the veins; cilia white spotted with brown at veins. Hind wings light greyish brown; a dark terminal line; a post-medial whitish shade.

Expanse 47 mm.

Hab. Poas.

Allied to *H. isidra*, Schs.

*Rhoda tuisa*, sp. n.

Palpi and frons mottled grey and brown, the latter crossed by a brown line. Vertex, collar, and thorax olive-brown; whitish lines on collar in front; patagia crossed by a white transverse line, and posteriorly with a large lilacine-grey patch. Abdomen brownish above, ochreous tufts laterally; underneath yellowish. Fore wings: a silvery-white stripe from base of cell to submedian at inner line, below which the basal area is white irrorated with fuscous brown; a brown shade from base of costa to tornus and along inner margin beyond the inner line, with a fuscous streak at base of subcostal and median, and submedian medially; above the brown shade the wing is roseate across cell and between veins 2 and 4 to near termen, and is crossed by three fine outer lines, very oblique inwardly from vein 4, the outer of the three lines much thickened between 2 and 3; above the roseate shade a narrow silvery-white shade surrounding an elongated silky olive-brown space along costa which is posteriorly edged by a fuscous-brown line, oblique from costa to lower angle of cell, straight along vein 4 to within 4 mm. of termen and then finely crenulate to costa; a wavy marginal brown line, beyond which the termen is thickly irrorated with brown. Hind wings yellow; the apex and outer margin broadly black.

Expanse, ♂ 50 mm.

Expanse, ♀ 59 mm.

Hab. Sixola, Tuis.

*Chadisra hybrida*, sp. n.

♂. Palpi, head, collar, and thorax light brown shaded with reddish brown; a black spot on vertex behind; patagia grey mottled with brown. Abdomen above fuscous brown; greyish tuft at base, and grey dorsal line expanding terminally. Fore wings grey: an interrupted basal black line beyond which to antemedial the space is tinged with fuscous brown; the antemedial geminate, the first line indistinct fuscous, the second line velvety fuscous brown, sinuous, the narrow shade between them lighter brown; an inbent whitish line on discocellular followed by a vague medial fuscous shade; the postmedial velvety fuscous brown, slightly incurved from subcostal to vein 4 then wavy and somewhat

oblique to inner margin, followed by a brownish shade limited by the subterminal, which consists of coalescing clusters of velvety scales between 5 and 8, followed by a whitish line somewhat outcurved on vein 4, and parallel with termen to inner margin; the outer margin whitish irrorated with brown, very densely so above vein 4; some marginal dark brown lunules between 4 and 7; terminal dark spots at veins extending on cilia. Hind wings white, the vein on outer half dark brown; the outer margin fuscous brown; cilia white.

Expanse 38 mm.

♀. Collar fuscous brown. Fore wings very similar to male, the subterminal velvety black continuous, almost straight from costa to below vein 4, where it is angled outwardly, then inbent, and finely dentate, outwardly edged with white; a fine marginal brown line, angled below vein 4. Hind wings fuscous, tinged with white at base; cilia brownish tipped with white.

Expanse 38 mm.

*Hab.* Tuis.

*Chadisra luculenta*, sp. n.

Palpi dark brown, greyish in front. Frons dark grey. Vertex, collar, and thorax buff shaded with brown; patagia grey irrorated with fuscous, and dorsally edged with brown. Abdomen dorsally and terminally grey, laterally broadly fuscous brown; underneath white. Fore wings light brown irrorated with fuscous below cell on basal third; the costal margin crossed by black lines medially, spotted with black and white on apical third; an antemedial geminate black line filled in with white from subcostal to submedian, followed by a broad white space crossed by dentate black lines, limited by a geminate lunular black line inset on vein 3, so the white space becomes much narrower and terminates in a point on inner margin; the apex shaded with white; subterminal triangular black spots between veins 5 and 8, and small dark brown intervenal spots below vein 4; an irregular marginal black line; an interrupted dark brown line at base of cilia, which is white with geminate brownish streaks. Hind wings white; the outer margin black, widest at apex; some fuscous hairs on inner margin above angle.

Expanse, ♂ 37 mm.

Expanse, ♀ 41 mm.

*Hab.* Juan Vinas, Tuis.

*Chadisra praelauta*, sp. n.

♀. Palpi in front white irrorated with brown, dark brown behind. Head, collar, and thorax brown; patagia grey. Abdomen brown above, the basal segment whitish grey. Fore wings: basal third of costal margin and cell whitish irrorated with brown; below cell more narrowly similar, limited by an inwardly oblique fuscous shade from cell, and with a brown streak below median; a wavy black medial line divided in cell by a light brown shade and followed by a dark grey shade at end of cell; the medial space brown; a postmedial lunular black line inset on vein 3, irregularly edged with white and followed by a brown space, leaving the terminal area above vein 3 white thinly irrorated with brown; subterminal black spots between veins 6 and 8, and smaller spots between 2 and 4; a marginal irregular brown line, beyond which the irrorations are thicker. Hind wings: basal half whitish irrorated with brown; outer half fuscous, narrowing at anal angle; cilia white.

Expanse 35 mm.

*Hab.* Tuis.

*Rifargia dissepta*, sp. n.

♂. Head brownish mottled with grey. Tegulae brown, tipped with grey behind, and with two lines of grey scales in front. Thorax and abdomen grey irrorated with brown except on four basal segments of abdomen. Fore wings and cilia whitish thickly irrorated with light brown; a brownish basal shade on costa, preceded by an oblique white spot and some darker brown scales in and below cell; two fine black lines on either side of discocellular, the inner one angled anteriorly, the branch extending towards base, the outer one angled at middle of discocellular, the branches extending outwardly; a fine brownish medial shade and fine postmedial lunular line around end of cell; a subterminal whitish dentate shade with fuscous streaks between veins 4-8 and a small fuscous spot above and below vein 2; a marginal dark line straight from costa to vein 4, then lunular. Hind wings white at base, the veins and some hairs brownish; the outer margin broadly black; cilia white.

Expanse 45 mm.

♀. Fore wings: no basal dark markings; traces of an antemedial lunular line; no black lines at discocellular, the medial area from cell to inner margin tinged with fuscous brown, and a similar shade at end of cell.

Expanse 47 mm.

*Hab.* Avangarez.

Possibly only an extreme form of *R. distinguenda*, Wlk.

*Lobeza irrorata*, sp. n.

♂. Head, collar, and thorax whitish grey mottled with dark brown hairs; on thorax posteriorly a curved dark brown line, the scales partly tipped with ochreous. Abdomen: dorsally fuscous brown, with light brown shades anteriorly on segments; a small white tuft at base and a white dorsal line; last segment grey. Body below white. Fore wings white thinly irrorated with dark brown and ochreous, the latter chiefly along the lines and on antemedial portion of inner margin; an indistinct geminate antemedial line, deeply dentate and suffusing with medial shade above submedian; the medial crossing end of cell, nearly straight and outwardly toothed on veins, followed by a broad whitish space; the postmedial, geminate, lunular, more wavy in the female, and thickly irrorated with dark brown and ochreous; the termen clearer white; an irregular brown marginal line. Hind wings white; some fuscous scales at base; a medial fuscous line not reaching costa.

Expanse 69 mm.

♀. Fore wings more evenly and thickly irrorated with brown scales.

Expanse 90 mm.

*Hab.* Juan Vinas, Tuis, Sixola.

Allied to *L. schausi*, Dogn.

*Anita costalis*, sp. n.

Palpi whitish buff in front, dark brown behind. Head, collar, and thorax dark brown; a streak in front of antennae and patagia whitish buff. Abdomen above fuscous brown. Fore wings: the cell anteriorly and costal margin whitish buff; the extreme costa finely black-brown, somewhat broader towards apex; the wing otherwise olive-brown, paler between veins 4 and 6; veins 5 and 6 and 7 terminally dark brown; a transverse fuscous-brown shade at base; traces of a darker geminate antemedial line below cell; a curved dark shade on discocellular, edged with whitish buff; traces of a postmedial line from below vein 5, outwardly shaded with whitish buff between 3 and 4. Hind wings irrorated with fuscous brown.

Expanse 42 mm.

*Hab.* Sixola.

Allied to *A. basipuncta*, Schaus.

*Hemiceras amanda*, sp. n.

♂. Head and thorax lilacine brown; some white irrorations on vertex. Abdomen brown above, buff underneath.

Fore wings brown tinged with lilacine; the lines consisting of white points on veins; a white point at base below median; the antemedial nearly straight; the outer line from costa at 2 mm. from apex to middle of inner margin; an oblique fuscous spot at end of cell, from which an oblique slightly darker brown shade extends to outer margin; faint subterminal dark streaks on veins 6-8; a few whitish scales at apex; cilia brown; the inner margin lobed and excised. Hind wings brown, the veins darker; cilia tipped with white; no opaque spot.

Expanse 38 mm.

*Hab.* Juan Vinas.

Allied to *H. muscosa*, Schs.

*Hemiceras ceiba*, sp. n.

♂. Head and collar fawn-colour, the vertex white. Thorax lilacine brown. Abdomen light brown above tinged with fuscous. Body underneath buff-brown. Fore wings bright reddish brown tinged with lilacine; a fine grey streak along costa; three antemedial black points, the one on median more remote from base; apex fuscous with white irrorations; a fine straight dark brown line from apex to middle of inner margin, faintly punctiform on veins, and outwardly edged by a lighter brown line; inner margin lobed and excised. Hind wings whitish tinged with brown; the veins, inner and outer margins light brown; the stigma darker brown.

Expanse 48 mm.

*Hab.* Tuis.

*Hemiceras celia*, sp. n.

♂. Head and collar reddish brown; vertex and base of antennæ white; collar posteriorly, patagia, and abdomen dorsally violaceous brown. Body below brownish buff. Fore wings silky reddish brown tinged with violaceous except on outer margin which is dull reddish brown, branching to postmedial between veins 3 and 4; extreme costa irrorated with fuscous and white, but very indistinct; antemedial fine, nearly straight, dull reddish brown, indistinctly punctiform on veins; a fine black streak on discocellular; postmedial similar, linear from vein 2 to inner margin, consisting of black points on veins from 2 to costa; inner margin lobed and excised. Hind wings silky brown without a stigma; cilia tipped with white.

Expanse 45 mm.

*Hab.* Tuis.



*Hemiceras clarki*, sp. n.

♂. Head, collar, thorax, and fore wings brownish buff faintly tinged with roseate; collar edged posteriorly with fuscous grey. Abdomen above fuscous brown. Body below whitish. Fore wings: lines fine, yellowish buff, edged on medial side with olive-brown; the antemedial slightly out-curved; the postmedial from costa at 2 mm. from apex to middle of inner margin; the inner margin straight; a large black spot at end of cell, preceded by another spot below subcostal; veins finely irrorated with greyish; a faint darker subterminal shade inset at vein 4. Hind wings light silky brown; the opaque spot concolorous.

Expanse 46 mm.

The female has the discal spots faintly indicated.

*Hab.* Juan Vinas, Alajuela.

Named after Mr. J. B. Clark of Alajuela, at whose house I first discovered this species.

*Hemiceras corema*, sp. n.

♂. Head, collar, and thorax lilacine brown; a white line across top of frons. Abdomen slightly darker above. Body below whitish. Fore wings lilacine brown; the costa finely whitish; the lines light buff, shaded with darker brown on medial side; the antemedial straight; the postmedial oblique from costa at 3 mm. from apex to inner margin just beyond middle; a black spot on discocellular preceded by a black spot close to subcostal; the veins partly irrorated with grey and fuscous; faint traces of a pale subterminal shade; cilia dark brown, finely tipped with white; inner margin sinuous. Hind wings whitish shaded with brown, darkest on outer margin; an opaque brown spot at vein 2; cilia brown basally, outer half white.

Expanse 42 mm.

*Hab.* Sixola, Avangarez.

Allied to *H. pulverula*, Gn., and *H. indigna*, Schs.

*Hemiceras lepida*, sp. n.

♂. Head, collar, and thorax lilacine brown; a white band across top of frons. Abdomen greyish brown above, whitish underneath. Fore wings light lilacine brown irrorated with pale reddish brown; antemedial line from subcostal, fine, wavy, indistinct, brown, followed by a darker brown shade outwardly curved to inner margin near tornus; a faint oblique fuscous streak at end of cell, from which a brown shade extends to outer margin, where it expands towards apex and

tornus; an outer row of black points on veins from costa at 3 mm. from apex to vein 2; an indistinct subterminal dentate brown shade; cilia brown. Hind wings whitish; the veins and margins tinged with brown; a large opaque brown spot at vein 2; cilia tipped with white. Inner margin of fore wings slightly lobed and excised.

Expanse 45 mm.

*Hab.* Juan Vinas, Tuis, Limon.

*Hemiceras rava*, sp. n.

♂. Head, collar, and thorax lilacine brown. Abdomen above greyish brown. Body below pale buff. Fore wings brown; the antemedial fine, black, nearly straight, with a black point on median and submedian; an oblique darker brown spot at end of cell; postmedial consisting of black points on veins partly irrorated with grey scales, inwardly oblique from costa at 2 mm. from apex to middle of inner margin and followed by a dark shade below vein 2; a deeply dentate subterminal darker brown shade from costa to vein 2; inner margin nearly straight. Hind wings light brown; the veins and outer margin darker brown; a whitish shade at base due to thin scaling.

Expanse 37 mm.

*Hab.* Sixola, Guapiles, Tuis, Juan Vinas.

Very closely allied to *H. lotula*, Gn., and *H. tulola*, Schs.

*Hemiceras siderea*, sp. n.

♀. Palpi and frons ochreous buff. Vertex fuscous brown and white. Collar dark reddish brown and white. Thorax fuscous brown irrorated with white; patagia ochreous brown. Abdomen above fuscous grey. Body below and anal hairs yellowish. Fore wings reddish brown tinged with grey, except on costal and outer margins; the extreme costa white; two oblique black points at end of cell; antemedial outlined by whitish irrorations on either side below cell to inner margin, and a white point on subcostal; postmedial similarly formed, being preceded by white points on veins which are irrorated with black and white from cell, and followed by broad whitish streaks irrorated with reddish brown along veins to near termen, these streaks being also spotted with fuscous brown subterminally; outer margin otherwise broadly deep yellow; inner margin slightly lobed and excised. Hind wings fuscous brown; cilia yellowish white.

Expanse 45 mm.

*Hab.* Guapiles, El Sitio.

*Hemiceras torva*, sp. n.

Palpi buff in front, brown behind. Head: frons lilacine brown; a white band behind; vertex white irrorated with brown. Collar buff shaded with brown and violaceous behind. Thorax violaceous; patagia ochreous buff. Abdomen light brown above. Body yellowish white underneath. Fore wings ochreous buff; a fine wavy antemedial line, faintly punctiform on veins; a small brownish spot at end of cell, preceded by a point below subcostal; a row of fuscous points on veins from costa at 2 mm. from apex to a large spot on inner margin at excision, this spot somewhat reniform, brown broadly edged with dark violaceous; the lobe and excision on inner margin finely edged with dark violaceous; a subterminal dentate pale brownish shade from vein 4 to apex. Hind wings brownish white; the veins terminally, inner and outer margins more distinctly brown; the stigma still darker.

Expanse 41 mm.

*Hab.* Sixola, Guapiles.

Close to *H. valkeri*, Schs.

*Hemiceras zula*, sp. n.

Head: frons reddish brown; vertex grey mottled with white. Collar and thorax greyish, irrorated with reddish brown. Abdomen above fuscous grey. Body below whitish. Fore wings silky grey, palest on costal margin; antemedial line fine, dark brown, outwardly oblique across cell, indented below cell, then outwardly oblique but slightly indented on submedian, with black points at subcostal and at angles; postmedial very fine, brown, lunular, dentate with black points on veins; a faint silky brown shade from vein 2 to inner margin crossed by postmedial; some faint silky brown shades on outer margin; inner margin lobed and excised. Hind wings greyish brown; a whitish shade in and beyond cell; cilia white, opaque spot concolorous.

Expanse 42 mm.

The female has pectinated antennæ.

Expanse 46 mm.

*Hab.* Tuis.

Distinguished from *H. deornata*, Wlk., by the pectinated antennæ in the female and the more angular antemedial line.