

DESCRIPTIONS OF SOME NEOTROPICAL EULIINI AND ARCHIPINI (LEPIDOPTERA, TORTRICIDAE)

J. RAZOWSKI

Razowski, J., 1990. Descriptions of some Neotropical Euliini and Archipini (Lepidoptera, Tortricidae). *Misc. Zool.*, 14: 105-114.

Descriptions of some Neotropical Euliini and Archipini (Lepidoptera, Tortricidae).— Four new genera (*Hyptiharpa* n. gen., *Hyphenobosa* n. gen., *Netechma* n. gen., *Icteralaria* n. gen.) and seven new species (*Hyptiharpa hypostas* n. sp., *Hyphenobosa glechoma* n. sp., *Atepa colaptes* n. sp., *Icteralaria idiochroma* n. sp., *I. ichnobursa* n. sp., *Clepsis naucinum* n. sp. and *C. misgurna* n. sp.) are described.

Key words: Euliini, Archipini, Tortricidae, Lepidoptera, Neotropical.

(*Rebut: 4 VI 90; Aceptació condicional: 11 II 91; Acc. definitiva: 21 V 91*)

Józef Razowski, Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Sławkowska 17, 31-016 Kraków, Polska (Poland).

INTRODUCTION

The present paper contains the descriptions of new taxa of Euliini and Archipini. The listing of their genera and species is given in the checklist of Neotropical Lepidoptera (POWELL et al., in press). Whilst to Euliini belong 59 described Neotropical genera and several further genera are expected (four new genera are described below), only six genera of Archipini are recorded of that region. Four of them (*Argyrotaenia* Stephens, 1852, *Choristoneura* Lederer, 1859, *Archips* Hübner, 1822 and *Clepsis* Guenée, 1845) are widely distributed in the Holarctic and Oriental regions and only *Durangarchips* Powell, 1988 and *Idolatteria* Walsingham, 1913 are exclusively Neotropical in distribution.

MATERIAL AND METHODS

The studied material was collected by the staff of the Division of Entomology and Parasitology, University of California, Berkeley

(USA). The holotypes and the majority of the paratypes are deposited in the collection of that institution and some paratypes are in the collection of the Institute of Systematics and Evolution of Animals, PAS, Kraków (Poland).

The number given in the descriptions for the labial palpus indicates the proportion of its total length to the diameter of the eye.

RESULTS

Tribe Euliini

The genera described in this paper belong to two groups: one (*Netechma*, *Icteralaria*) is rather close to other Neotropical Euliini as mentioned in their descriptions, and the other (*Hyptiharpa*, *Hyphenobosa*) has a separate position within the tribe. They show some characters similar to those of Cochylini, such as the shape of the valva and its strength, or in *Hyptiharpa* the complete reduction of the gnathos. However, the juncture among

the tegumen, valva and vinculum is different from that in the cochyline moths. The shape of the aedeagus recalls that there are some Chlidanotini in which the opening for the ductus ejaculatorius is ventral. These two genera are included in Euliini on the basis of the forewing pattern which is close to that of the majority of the species of this tribe. Their dorsal blotch is a part of the usual tortricine basal blotch, the other remainder of which is at costa and wing base. Another, more posterior dorsal blotch is probably derived of the median pattern and is connected with the median fascia. The males have no scale pencil on the foreleg, but that is often reduced in the representatives of the tribe.

Hyptiharpa n. gen.

Type-species: *Hyptiharpa hypostas* n. sp.

Labial palpus 2. Venation: in forewing all veins separate, R_5 to termen below apex; trace of chorda at 1/3 distance $R_1 - R_2$; Cu_2 originating opposite mid-length of $R_1 - R_2$; in hindwing $M_3 - Cu_1$ very close to one another at discal cell. No sexual dimorphism.

Male genitalia.—Pedunculi rather short, top of tegumen slightly elongate; uncus well sclerotized, without terminal brush; gnathos absent; socius with base situated beyond middle of its length, rounded dorsally, fusing with lateral folds of tegumen; vinculum fully developed. Costa of valva well sclerotized except terminal portion; sacculus large, well sclerotized, with free, directed backwards terminal portion; ventral portion of disc of valva membranous, weakly plicate, connected to juxta, provided with some small setae. Median part of transtilla strongly sclerotized, long, lateral parts small; juxta simple, concave posteriorly. Membrane of anellus with numerous microtrichia. Aedeagus simple, membranous ventrally; coecum penis rounded; caulis bilobe distally; opening for ductus ejaculatorius ventro-proximal; cornuti absent.

Female genitalia.—Ovipositor short, of ty-

pical tortricine shape; genital segment almost uniform, in large part membranous, with dense groups of scent scales on ventral and lateral surfaces. Sterigma, a sclerotized median plate distinctly concave medially, with long lateral ribs not connecting with apophyses anteriores; ostium in anterior part of segment; distal portion of ductus bursae slightly broadening, not sclerotized; ductus seminalis postmedian; accessory bursa and signa absent.

Biology.—Moths collected in July at altitude of 800'.

Distribution.—Sinaloa and Chihuahua (Mexico).

Comments.—The probable autapomorphies of this genus are the shape of the sacculus, the presence of the membranous, plicate and setose ventral portion of the disc of valva, the form of the proximal part of aedeagus, the form of the subgenital segment of the female and the shape of the sterigma. The genitalia of the two sexes show some distinct reductions, the most important of which is a complete atrophy of the gnathos.

Hyptiharpa hypostas n. sp.

Alar expanse 9-10 mm. Head ochreous, labial palpus more orange basally; thorax brownish ochreous, with collar and distal part of tegula paler, ochreous. Costa of forewing convex, less so in male than in female; apex rather rounded; termen convex, slightly oblique. Ground colour pale ochreous cream suffused and sprinkled with brown especially along discal cell and posteriorly to it. Pattern brown, pale edged, consisting of basal blotch represented by triangular part situated at dorsum and small remainder at costa and base, another triangular blotch in middle of dorsum with proximal edge convex and distal edge slightly concave connected to mid-part of proximal edge of slender median fascia, and subapical fascia reaching mid-termen. Proximal edge of the latter abruptly concave beyond costa, distal edge slightly convex. Dorsal strigulae and some dots at costa concolor-

ous with pattern. Fringes concolorous with ground colour, in female tinged orange. Hindwing brown with rounded apex; fringes paler.

Male genitalia (figs. 1, 2).—Uncus strongly sclerotized, slender, bent, slightly tapering subterminally, not setose; socius in dorsal part ovate, slender in ventral portion. Valva broad to beyond middle, then tapering terminally; sacculus strongly sclerotized, setose, broad except for thin, strongly curved free termination provided with a minute subterminal thorn; ventro-caudal portion of valva well sclerotized. Median part of transtilla large, tapering terminally. Aedeagus small, tapering distally, with sharp apex.

Female genitalia (fig. 20).—Papilla analis rather small; apophyses posteriores slightly longer than apophyses anteriores; anterior edge of ventral part of genital segment strongly sclerotized laterally; medial part of sterigma broad extending posteriorly and somewhat so anteriorly, provided with a median pit deepened distally; small, spined membranous fold beyond sterigma. Corpus bursae elongate.

Holotype.—Male, “27 mi E Villa Union, 800', Sin. aloa, Mex. ico, VII-26-64, J. Powell, Black & White lights”; genitalia slide 6034. Paratype.—Female, “21 mi E Villa Union, 300', Sin. aloa, Mex. ico, VII-25-64, J.A. Chemsak & J. Powell, Black & White lights”; genitalia slide 11824.

Hypenolobosa n. gen.

Type-species: *Hypenolobosa glechoma* n. sp.

Wing venation and pattern as in *Hyptiharpa*.

Male genitalia.—Similar to those in that genus (cf notes below “Eulliini”, but socius drooping, gnathos present, however, illdefined, transtilla without median part but with convex ventral portion. Very large, well sclerotized lobe dorsally to sacculus connecting ventral portion of transtilla is the autapomorphy of this genus.

Female genitalia.—Unknown.

Biology.—No data except for date of collection of holotype.

Distribution.—Chihuahua (Mexico).

Hypenolobosa glechoma n. sp.

Alar expanse 2 mm; labial palpus brownish cream, remaining parts of head darker. Forewing slender, with costa slightly convex and termen somewhat oblique. Ground colour cream with indistinct brown admixture; pattern brownish, darker on edges; a few costal spots concolorous with pattern; basal blotch atrophied in basal and costal areas of wing, remaining part larger, triangular, with oblique distal edge; median fascia reaching tornus, with distal edge concave at cubital arm of discal cell; proximal edge of dorsal blotch straight; subapical fascia reaching tornus. Remainder of fringes concolorous with ground colour. Hindwing brown-grey; fringes probably cream (damaged), with basal line brownish grey.

Male genitalia (figs. 3-5).—Uncus strongly curved, uniformly broad throughout, distinctly flattened laterally; socius slender, hairy; lateral lobe of tegumen extending medially, fused with arm of gnathos; median part of gnathos plate-shaped; vinculum well developed, sclerotized along proximal edge, with minute median prominence at its middle. Valva broad with terminal portion slender, tapering apicad; disc sparsely hairy; sacculus broad, with ventral edge convex, provided with post-basal and subterminal thorns; termination of sacculus slender, sharp, minutely spined; distinct thorn on ventral margin of left sacculus (asymmetry), medially; large, flat, sclerotized lobe with somewhat plicate surface and minutely dentate outer edge dorsally to sacculus. Transtilla broad, convex dorsomedially with several parallel, dorsal folds. Aedeagus flat, broad to middle, wedge-shaped in distal half.

Holotype.—Male, “Santa Clara Canyon, 5 mi W. Parrita, Chih. uahua, Mex. ico, VIII-13-56, D.D. Linsdale collector”; genitalia slide 11850.

Netechma n. gen.

Type-species: *Tortrix technema* Walsingham, 1914

Labial palpus ca 1.5, with subtriangular median joint; forewing slender; male without costal fold. Venation: all veins separate; in forewing $M_3 - Cu_1$ to 1/4 so, with base of stalk far of base of M_2 . Scale pencil of foreleg absent.

Male genitalia (figs. 6, 7).— Uncus slender, distinctly curved well sclerotized, without terminal brush; gnathos fully developed; socius drooping, hairy and scaled; pedunculus of tegumen long. Arms of vinculum well sclerotized, membranously connected ventrally. Valva elongate-ovate, with costa well developed and disc simple, scarcely hairy; pulvinus absent; sacculus strongly sclerotized, provided with long, upcurved free termination and several thorns in its distal half. Transtilla weakly sclerotized medially, provided with two submedian processes directed distad; juxta simple. Aedeagus large, in distal half asymmetrically sclerotized.

Female unknown.

Biology.— Type-species found at an altitude of 6000-7000', collection date of another example: early May.

Distribution.— Costa Rica.

Comments.— This genus is related to *Terinebrica* Razowski as one can judge from the shape of the tegumen, socius and uncus. The valva is in the two genera similarly shaped but in *Terinebrica* it is characterised by a submedian convexity of the disc. There are further differences in the shapes of the juxta which in *Terinebrica* is armed with a pair of dorsal processes and in the new genus is simple. The supposed autapomorphies of *Netechma* are the presence of distal processes of the transtilla and its membranous median part, the shape of the aedeagus and vinculum (described above). The name of this genus is an anagram of the name of its type-species.

Netechma technema (Walsingham, 1914) - n. comb.

Tortrix technema Walsingham, 1914, *Biologia cent.-am. Zool. Lepid. Heterocera*, 4: 284, pl. 8, fig. 25.

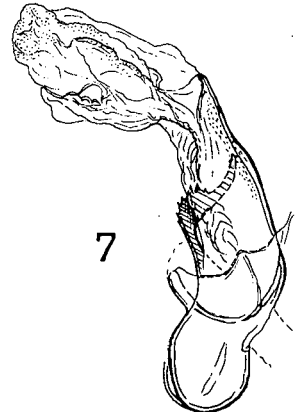
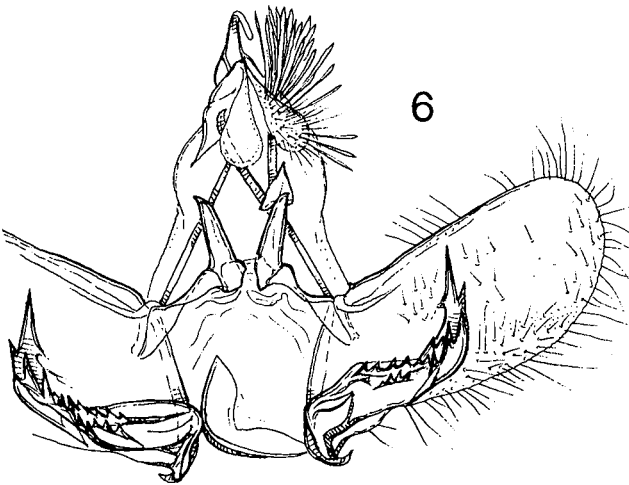
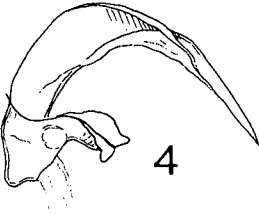
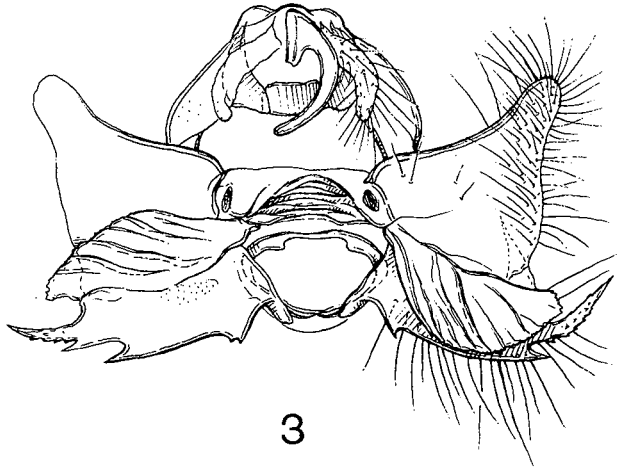
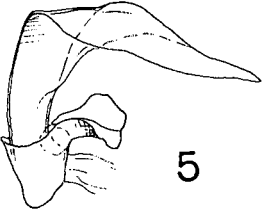
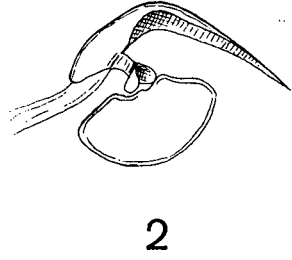
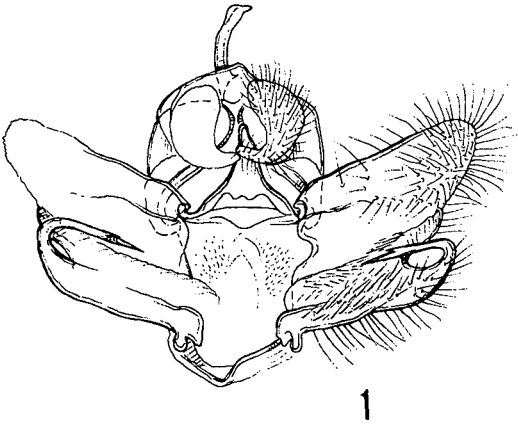
Holotype.— Labelled "V. de Irazu, 6000-7000', Costa Rica, Rogers, 18; Gdm. Slvn. Coll. 66595"; abdomen missing; specimen deposited in the British Museum of Natural History, London. The examined specimen was taken in Costa Rica, Province Puntarenas, 6 km S. San Vito, on 2 & 5 May, 1967, by D.F. Veirs; genitalia slide JAP owell 3239.

Apeta colaptes n. sp.

Alar expanse 9-10 mm. Head yellowish cream, yellow laterally; flagellum of antenna yellow, ringed brown; thorax yellow cream, with collar and base of tegula rust. Forewing typical of the genus, with ground colour glossy, pale yellow. Base of costa rust brown, paler, weaker suffusion at dorsum; dorsal blotch rust brown, median fascia rather concolorous with former marking, subapical fascia similarly coloured at costa, otherwise ferruginous yellow. Fringes darker than ground colour. Hindwing yellow cream tinged brown distally; fringes concolorous with median part of wing.

Male genitalia (figs. 8, 9).— As in *A. cordobana* Razowski but smaller, with slenderer and shorter uncus, much slender valva and sacculus and larger aedeagus provided with much shorter ventroterminal portion and single group of curved cornuti in vesica.

Holotype.— Male; C. osta Rica, 19 air km NW Liberia, vic. Sta Rosa, Guanst. Prov., 21 V 85, Blacklight, J. Powell Collector"; genitalia slide 11848. Paratypes.— Two males with identical data, one with abdomen missing.



Icteralaria n. gen.

Type-species: *Icteralaria diochroma* n. sp.

Labial palpus ca 1.5; forewing slender, with apex rounded and termen oblique. Venation: in forewing all veins separate; R_5 to termen below apex; in hindwing $Rr - M_1$ stalked to $2/3$, $M_2 - M_3$ to about $1/3$ so, and their stem almost connate with Cu_1 . Male without costal fold. Pattern, a dark blotch broader at costa than at dorsum, formed by a fusion of median fascia and subapical blotch. Scale tuft of foreleg missing.

Male genitalia.—Uncus slender, strongly sclerotized, curved, without ventroapical brush; gnathos fully developed, with arms slender; socius broad, drooping, provided with hairs and scales. Vinculum arms slender, connected membranously with one another ventrally. Valva rather broad; disc slightly plicate posteriorly, pulvinus atrophied; costa well developed, distinctly sclerotized; sacculus short, with terminal process. Median part of transtilla well developed; yuxta, a small concave plate armed with group of thin spines situated beyond zone; coecum penis short, broad; caulis very short; cornuti numerous capitate spines.

Female genitalia.—Ovipositor short; apophyses slender; sterigma a concave plate with distinct antevaginal part and hairy lateral lobes followed by scobinate area in middle of ventral membrane of VIII segment. Colliculum ill-defined; ductus bursae short; corpus bursae provided with ventral sclerite surrounding a depression in middle of which originates slender ductus seminalis; accessory bursa ventrolateral, extending from distal third of corpus.

Biology.—Moths collected in May and September at altitude above 1500 m.

Distribution.—Colombia and Costa Rica.

Comments.—The species of this genus are easily distinguished by the shape and coloration of the forewing. The supposed autapomorphies of *Icteralaria* are the shape of the transtilla, sacculus and aedeagus (described above). The presence of a bunch of

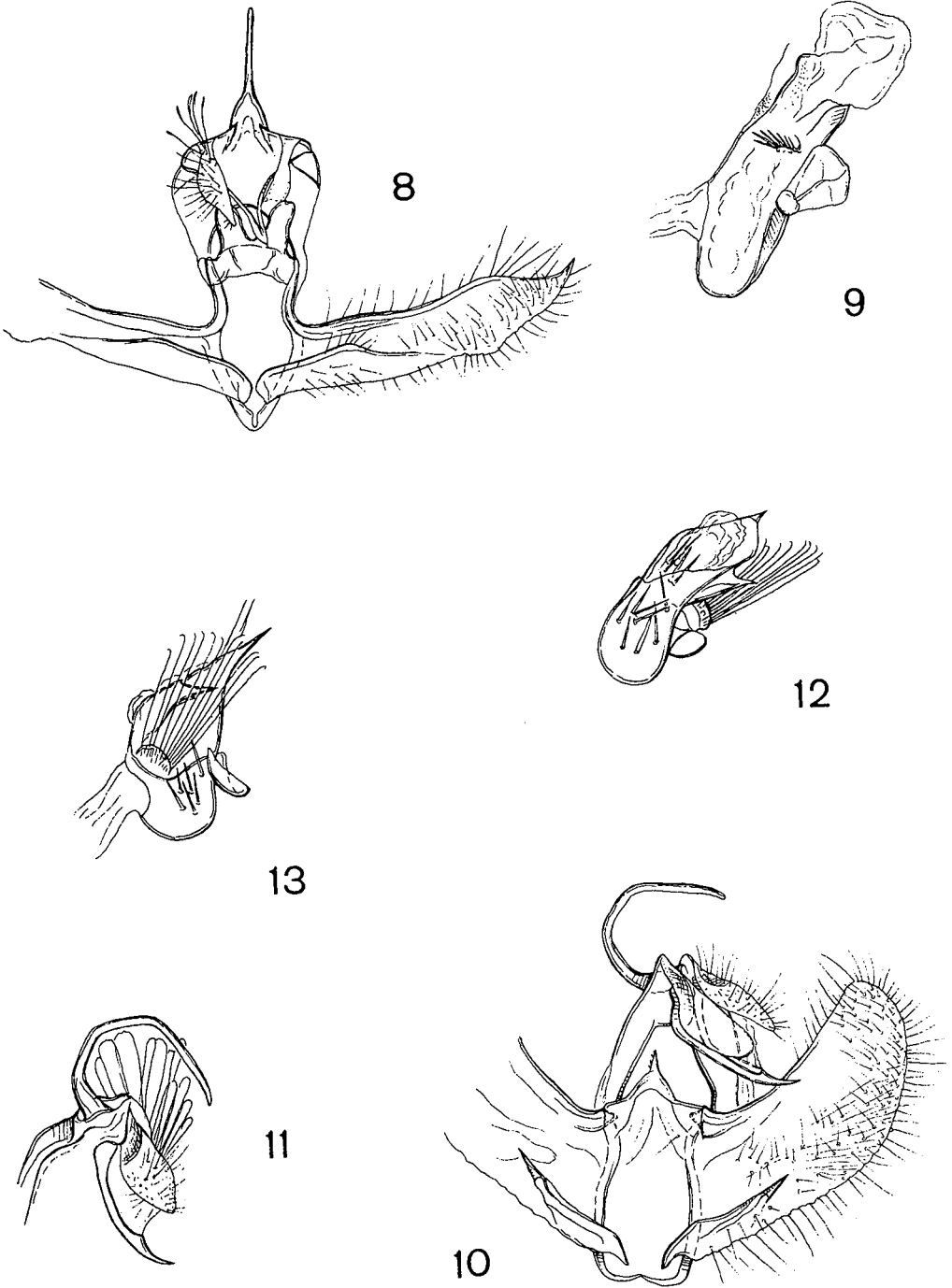
thin spines on a lobe of the left side of the aedeagus was already observed in another Neotropical genus, viz., *Transtillaspis* Razowski. The shape of the uncus and the valva are similar to those in several other genera of Neotropical Euliini (e.g. in the two preceding genera). Two species are known until now.

Icteralaria idiochroma n. sp.

Alar expanse 10 mm. Labial palpus dark brown-grey, with scattered blackish scales and cream grey terminal portion; front and anterior surface of scape of antenna cream grey, remaining parts of head brownish grey; thorax pale yellowish cream with collar slightly tinged ferruginous at base. Forewing very slender; costa tolerably straight; termen distinctly oblique. Ground colour yellowish white; costa weakly suffused ochreous, spotted brown-grey to median pattern; the latter extending from $1/3$ of costa to before apex, with anterior edge concave, reaching mid-dorsum and distal edge slightly so, almost parallel to termen. Pattern dark grey, slightly tinged ochreous at distal edge, paler along costa where blackish spots present; some three black spots in discal cell. Fringes somewhat darker than ground colour. Hindwing slender, with elongate apical portion, greyish, transparent white-grey basally, with some grey spots in distal portion. Fringes greyish white.

Male genitalia (figs. 10-13).—Uncus strongly curved, slightly expanding basally; sacculus well sclerotized dorsally, with moderate terminal thorn. Lateral parts of transtilla short, broad, median portion broad basally, with slender apical process provided with minute spines anteriorly. Lateral process of aedeagus broad basally, ventroapical portion acute; coecum penis broad, short; numerous very thin, hooked spines on lateral lobe; cornuti, two groups (8 and 6) of moderate spines provided with small heads in vesica.

Holotype.—Male; "Costa Rica, 8 rd km, N. Vara Blanca, Volcan Poas, 1500 m, Alajuela Prov. ince, V-26-85, J. Powell collector"; genitalia slide 11839.



Figs. 8-13. Male genitalia: 8, 9. *Atepa colaptes* n. sp., holotype; 10-13. *Icteralaria idiochroma* n. sp., holotype.

Icteralaria ichnobursa n. sp.

Alar expanse ca 14 mm. Labial palpus grey, paler basally and terminally; remaining parts of head brownish grey, front paler, flagellum brown, vertex ferruginous; thorax yellowish cream. Forewing as in preceding species but with termen less oblique. Ground colour yellowish cream; median marking grey-brown, paler along costa where spots grey-brown. Hindwing dirty cream, suffused grey postmedially, tinged ochreous in apical area, strigulated grey-brown; fringes concolorous with wing middle.

Female genitalia (fig. 21).— Sterigma rounded proximally, with lateral parts convex; anterior edge rounded, emarginate, scobinate area concave along middle; distal portion of ductus bursae membranous, with curved, oblique fold ventrally; sclerite of bursa copulatrix C-shaped, ventral, accompanied by minute spines near proximal and left edges.

Holotype.— Female; “Colombia: Villa de Cauca, 4 km NW San Antonio, 6500’, A. H. Miller Collr., IX-19-58”; genitalia slide 11819.

Comments.— The male of this species remains unknown. The external differences between this species and *I. idiochroma* are rather slight (see description).

Tribe Archipini

In this paper two species of *Clepsis* Guenée are described. Until now 29 Neotropical species of this genus are known (RAZOWSKI, 1979).

Clepsis naucinum n. sp.

Alar expanse 11 mm; labial palpus over 1.5, brownish cream, paler distally; remaining parts of head brownish; thorax brownish, darker anteriorly. Forewing slender, not expanding post-

eriorly, with costa convex to 1/3, then straight; termen rather straight, somewhat oblique. Ground colour pale brownish cream, slightly suffused and dotted brown; brown strigulation at base of costa and brownish suffusion at base of dorsum. Pattern brownish, brown at costa, consisting of pale edged median fascia the proximal edge of which convex medially, and subapical much darker blotch; apex area suffused brown; some brown dots from middle of that blotch towards tornus. Fringes concolorous with ground colour, darker at apex. Hindwing pale brownish with paler fringes. Variation rather distinct, some specimens are darker, with more yellow-brown shade of ground colour and distinct strigulation; median fascia darkest costally, occasionally indistinct in remaining parts, with posterior edge often diffuse.

Male genitalia (figs. 14-16).— Uncus long, slender, with short, rounded apical part; aedeagus fairly broad.

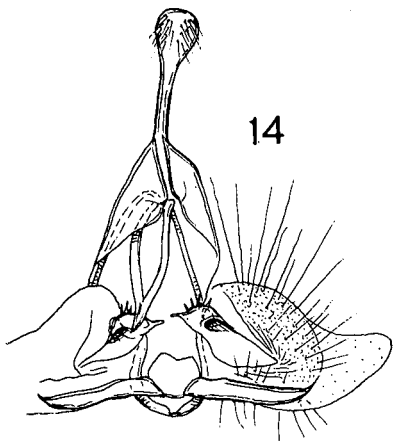
Holotype.— Male; “Costa Rica: 6 km S. San Vito, Puntarenas Prov., VI-20 & 27-67, D.F. Veirs Collector”; genitalia slide 11827. Paratypes.— Ten males, four of which with the same data, three similarly labelled but dated 13 and 18 III and two dated 20 and 27 IV, same year.

Comments.— This species is close to *Clepsis inconclusana* (Walker) from Veracruz, Mexico but differs in having much longer uncus and broader aedeagus.

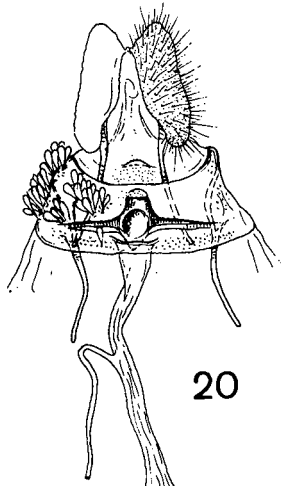
Clepsis misgurna n. sp.

Alar expanse 12 mm (paratypes 11-12.5 mm). Labial palpus ca 1.5, pale brownish ochreous, more cream terminally; remaining parts of head brown-ochreous, thorax browner. Forewing slender, not expanding terminally; costa distinctly convex in basal third, slightly concave before apex; apex part very short; termen rather straight, slightly oblique. Ground colour

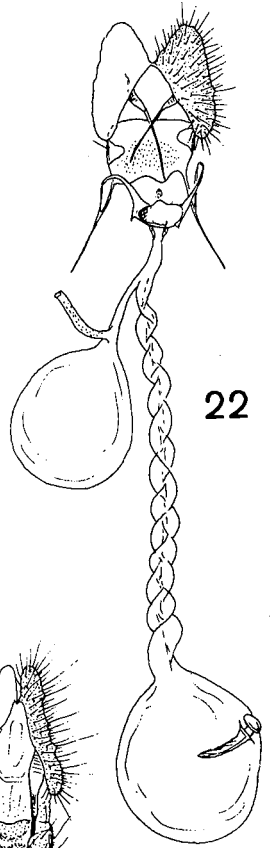
Figs. 14-22. Male and female genitalia: 14-16. *Clepsis naucinum* n. sp., holotype; 17-19. *Clepsis misgurna* n. sp., holotype; 20. *Hyptiharpa hypostas* n. sp., paratype; 21. *Icteralaria ichnobursa* n. sp., holotype; 22. *Clepsis misgurna* n. sp., holotype.



14



20



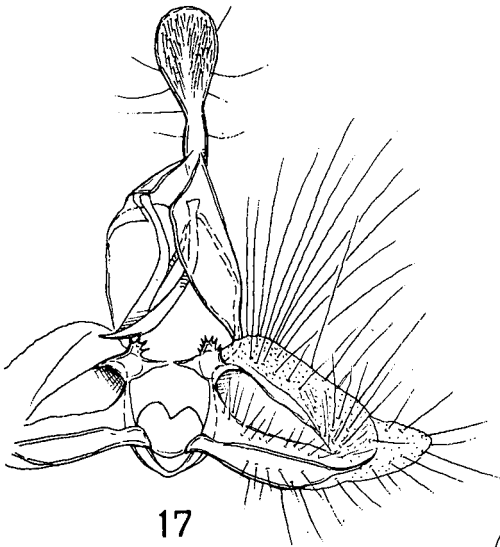
22



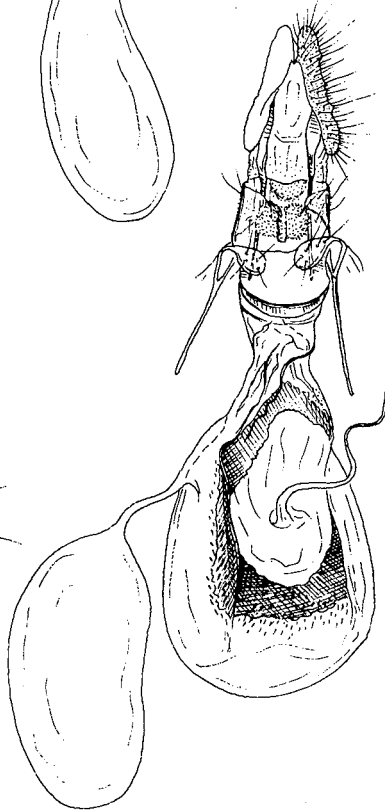
15



16



17



21



18



19

cream-brown, suffused and sprinkled brown; pattern brown, consisting of median fascia with straight proximal edge, extending from beyond 1/3 of costa to mid-termin, pale edged in dorsal area, slender in costal third, broad otherwise, with distal edge indistinct at least partially; subapical blotch well developed, partially fused with subterminal marking or accompanied by irregular suffusions and spots. Costal spots rather distinct; basal blotch reduced to slight dorsal suffusion. Fringes almost concolorous with ground colour. Hindwing pale brownish cream, slightly darkening on periphery, with fringes similar. Variation: Ground colour more or less dark; costal parts of pattern often darker than its remaining portions; subapical blotch in some specimens fused with subterminal pattern forming a fascia with proximal edge concave near costa.

Male genitalia (figs. 17-19).— Terminal half of uncus broad, apex rounded; sclerite of disc of valva large; sacculus broad. Aedeagus small, with long, slender coecum penis, completely sclerotized in zona area, with sclerite of left side broad, distinctly tapering apically.

Female genitalia (fig. 22).— As in *C. spirana* Razowski but with longer sterigma and less numerous and larger coils of ductus bursae.

Holotype.— Male; "Costa Rica: 6 km S. San Vito, Puntarenas Prov., IV-20 & 27-67, D.F. Veirs Collector"; genitalia slide 11825. Paratypes.— Nine males and four females with same data or dated 13 & 18 III (one specimen) and 2 & 5 V (four specimens).

Comments.— This species is similar to *C. spirana* Razowski but differs in having a longer

and more elliptic distal part of the uncus, more elongate aedeagus in the male and larger signum in the female. From *C. miserulana* (Zeller) it differs by the smaller number of coils of the ductus bursae and the shape of the sterigma.

CONCLUSIONS

The knowledge of these two Neotropical tribes is still rather poor. Based on the present data Archipini is represented by innumerable genera, but the number of its species will certainly increase during the course of further studies. Euliini are very abundant both in species and genera and many new taxa are thus expected. Several unplaced species belong certainly to that tribe.

ACKNOWLEDGMENTS

My gratitude is due to Prof. Dr. Jerry A. Powell, University of California, Berkeley for providing this valuable study material and for the exchange of some paratypes.

REFERENCES

- POWELL, J. A., RAZOWSKY, J., BROWN, J. W. (in press). Tortricinae excl. Cochylini. In *Atlas of Neotropical Lepidoptera. Checklist* (J. B. Heppner, Ed.).
RAZOWSKI, J., 1979. Revision of the genus *Clepsis* Guenée (Lepidoptera: Tortricidae). Part. II. *Acta zool. cracov.*, 24(2): 113-152.