

Józef RAZOWSKI & Vitor O. BECKER

Cochylidii (Lepidoptera: Tortricidae) Collected in Central America and Mexico

[with 182 text-figs]

Cochylidii (Lepidoptera: Tortricidae) zebrane w Ameryce Środkowej i Meksyku

Abstract. Sixty-eight species are realised in the examined material; 48 species, 1 sub-species and 3 genera are described as new.

The present paper is based on the material collected by the second author during his trips to Mexico, Guatemala, Costa Rica and Honduras and the holotypes of the new described species are deposited in his collection.

Phtheochroa psaeoptera sp. n.

Alar expanse, 16 mm. Labial palpus over 1, forewing not expanding terminally; costa slightly convex; apex rounded; termen weakly convex, oblique. Head, thorax and ground colour of forewing clear white, abdomen whitish. Ochreous pattern in form blotches, at base, of costa its 1/3, middle and at apex, marked with groups of refractive silver and black scales, median marking followed by broad refractive fascia partially interrupted in middle extending towards tornus; small spot at middle of base of wing. Fringes pale ochreous, white at tornus. Hindwing whitish cream, mixed with dirty ochreous on peripheries. Fringes white, weakly mixed with ochreous. Variation occurring in shape and intensity of pattern, especially of median fascia, beyond which grey shade or suffusion on ground colour. Ochreous parts of pattern more or less dark, often with refractive spots.

Male genitalia (Figs 1, 2): Tegumen slender; uncus slender, broadest post-medially; socius small; terminal part of gnathos strong; transtilla slender, tapering medially, well sclerotized and minutely spined dorsally. Valva long, rounded terminally; sacculus strong, concave beyond submedian oblique rib internally and ventrally, with blunt free termination. Aedeagus very small, provided with postmedian, broad basally process of the right side; coecum penis broad; juxta broad, with large median concavity proximally.

Holotype: "Mexico: Veracruz, Huatusco, 1300 m, 19—21. VIII. 1981, V. O. BECKER col."; paratypes, 6 identically labelled males (4 ones with abdomen missing).

Comments. Genitally the new species somewhat resembles *Ph. superbissima* RAZ., but is completely different externally. Female unknown.

Phtheochroa zacualpana (BUSCK)

Five specimens collected in August in Mexico: Mexico City (2600 m) and Huatusco, Vera Cruz (1300 m).

Carolella desinens RAZOWSKI

Several specimens collected in the state Vera Cruz: Huatusco and biological station "Los Tuxtlas" near Catemaco by both authors.

Female genitalia (Figs 136, 137): Papilla analis long; apophyses delicate; antrum broad, weakly sclerotized, minutely spined ventrally; ductus bursae short; corpus bursae membranous, spined in distal half; ductus seminalis dorso-lateral; accessory bursa extending dorsally. Sterigma almost completely membranous.

Carolella emarcida sp. n.

Alar expanse, 13 mm. Labial palpus ca 1.5, cream, mixed with yellow-brown medially; remaining parts of head and thorax cream suffused with brownish grey. Forewing broad, weakly expanding posteriorly, costa curved outwards; apex very short; termen hardly convex, weakly oblique. Ground colour cream, sprinkled with brown; anterior half of costa suffused with grey-brown; costal half of median fascia and small subapical spot ochreous-brown; dorsal portion of median fascia dark grey followed by paler suffusion extending towards tornus, and brown dots; dark brown dot at disc. Fringes concolorous with ground colour. Hindwing brownish grey with paler fringes. Variation: one paratype with distinct suffusions on ground colour situated dorso-basally and in subterminal area, and with subapical spot missing.

Male genitalia (Figs 3—5): Tegumen broad, with short, broad basally socius; median part of transtilla broad, slightly concave apically; valva tapering in distal portion; sacculus well sclerotized. Aedeagus large, bent; cornutus strong, with small capitulum.

Holotype, male: "La Venta, Pco., Morazan, Honduras, 5. IX. 1973, V. O. BECKER col.", G. S. 21695; paratypes, two identically labelled males.

Carolella aguila sp. n.

Alar expanse, 10 mm. Labial palpus 1.5, pale brownish grey laterally white, otherwise; remaining parts of head white except for collar that is brownish and antenna being pale brown. Forewing almost uniformly broad throughout; costa bent medially; termen oblique, slightly convex. Ground colour yellowish cream, suffused with whitish in median and posterior portions of wing where represented by slender fascia extending from disc to termen before tornus; costa suffused with dark brown to middle, then black-brown suffusion extends all over distal half of wing as far as to whitish fascia; median fascia oblique, in form of slender dorsal marking not reaching discal dot; from the end of that marking black-brown on peripheries; fringes dark grey-brown.

Male genitalia (Figs 6, 7): Socius long; median part of transtilla slender; valva rather broad, with short sacculus. Aedeagus typical of the genus, with fairly long cornutus provided with basal plate.

Holotype, male: "Mexico: Veracruz, Est. Biol. Tuxtlas, 11—16. VI. 1981, V. O. BECKER col.", G. S. 21674.

Commenst. However, the male genitalia slightly differ from those in several species of this genus, the coloration is quite different, somewhat similar to that in *C. erigeronana* (RILEY).

Aethesoides mexicana RAZOWSKI

One specimen collected in San Cristobal de las Casas, Chiapas, Mexico on the altitude of 2300 m, at the end of August.

Aethesoides chalcospila (MEYRICK)

Several specimens collected in Turrialba, Costa Rica on the altitude of 600 m, in July.

Aethesoides timia sp. n.

Alar expanse, 12 mm; labial palpus over 1.5, dirty cream, remaining parts of head concolorous, thorax similarly coloured, sprinkled with pale brownish grey. Forewing weakly expanding terminally; costa slightly bent; termen short, somewhat oblique. Ground colour dirty cream, suffused and sprinkled with brownish; pattern brownish, scarcely spoted with dark brown at edges, represented by postbasal, median and subapical costal blotches, and trace of dorsal portion of median fascia; subterminal pattern elongate, connecting subapical blotch with termen. Fringes cream white with dark brown divisions. Hindwing greyish cream, more brownish grey on peripheries; fringes whitish with brownish median line.

Male genitalia (Figs 8, 9): Sacculi asymmetrical, free end of right sacculus short, both rounded apically, somewhat convex before middle ventrally; transtilla broad. Aedeagus large, with short distal part; cornutus very long, slender, bent.

Female genitalia (Figs 138, 139): Sterigma short, membranously fused with apophyses; antrum short, distinctly sclerotized; bursa copulatrix strengthened with several longitudinal sclerotized fold extending from before middle to before antrum; ventro-lateral sack from sclerotized portion of antemedian surface of bursa copulatrix.

Holotype and one paratype labelled "Mexico: Veracruz, Est. Biol. Tuxtlas, 11—16. VI. 1981, V. O. BECKER col.", G. S. 21668 and 21667 (female); one male from same locality, dated 4. X. 1973 and one with Nr. 38410.

Comments. This and the following species are very close to *Ae. columbiana* RAZ. as the shapes of the aedeagus and cornutus show. The differences are mainly in the shape of the sacculus.

Aethes inanita sp. n.

Alar expanse, 14 mm; labial palpus over 2. Head brownish cream, thorax similarly coloured, dotted with brownish grey. Forewing slightly expanding terminally; costa weakly convex; apex very short, rather pointed; termen weakly oblique, tolerably straight. Ground colour dirty cream, strigulated with brown; postbasal pattern preserved at costa, median fascia represented by costal and dorsal blotches, subapical pattern fused with slender subterminal marking extending to beyond middle of termen, all brownish ochreous, spotted with black-brown along edges. Brown-black suffusion in form of terminal line, concolorous dots on some strigulae; somewhat paler divisions of cream fringes. Hindwing pale brownish grey, darker at apex; fringes cream, paler and mixed with grey in anal part, with brownish grey median line and similar division beyond apex. Variation: Pattern and strigulation more or less distinct, in one paratype basal blotch almost complete.

Male genitalia (Figs 10, 11) as in preceding species but sacculi almost symmetrical, pointed apically, more strongly convex before middle ventrally.

Female genitalia (Fig. 140): Sclerotized portion of sterigma convex medially; semiovate, thick membrane from distal edge of antrum; distal half of bursa copulatrix provided with longitudinal sclerites extending beyond base of sack-shaped process on the right side. Ductus seminalis as in remaining species of this genus, dorso-laterally.

Holotype, male "Mexico: Vera Cruz, Huatusco, 1300 m. 19—23, VIII. 1981, V. O. BECKER col."; paratypes, 2 males and 1 female identically labelled.

Lorita abornana BUSCK

Several specimens collected in Mexico (Biological Station "Los Tuxtlas", Vera Cruz) and Costa Rica (Turrialba).

Henricus inanimalis sp. n.

Alar expanse 14 mm; labial palpus 2, grey, whitish above and terminally, remaining parts of head whitish; thorax whitish grey, grey medially. Forewing slender, broadest postmedially where costa bent; apex short, delicately rounded; termen rather straight, oblique. Ground colour white, dorsum delicately strigulated and sprinkled with pale grey; pattern silver-grey, black edged. Basal blotch diffuse in distal part dorsally; median fascia represented by median, black scaled, dorsal and costal portions; four small costal spot in distal third of wing extending towards dorsum and termen. Costal tufts not preserved. Fringes whitish, basal line in costal half of wing grey. Fringes white-grey, darkening on peripheries, strigulated with grey; fringes grey-white.

Female genitalia (Fig. 141): Lateral parts of sterigma rather well sclerotized posteriorly; antrum weakly sclerotized, short; ductus bursae membranous distally, with some strongly sclerotized folds in anterior half; numerous spines in membranous corpus bursae; accessory bursa from between ventral sclerites of median portion of ductus bursae; ductus seminalis ventro lateral, from before middle length of corpus bursae.

Holotype, female: "Mexico; Chiapas, Teopisca, 1900 m, 23—26. VI. 1981, V. O. BECKER col.", G. S. 21663.

Comments. The male remains unknown; judging from the external characters and female genitalia the new species is close to *H. cognatus* (WALSINGHAM).

Henricus inspergatus sp. n.

Alar expanse 15 mm. Labial palpus 1.5, white, pale brownish to middle, cream distally, remaining parts of head white, vertex scaled with grey; thorax brown. Forewing broadest postmedially; costal tufts developed; apex broad, rounded; termen weakly oblique. Ground colour whitish, mixed with cream in posterior half of wing; pattern brown, delicately strigulated with dark brown; basal blotch distinct at costa, median fascia with trace of costal part, broad medially; terminal pattern indistinct marked with numerous black-brown spots; dorsum suffused with brownish. Fringes pale ferruginous with brown basal line. Hindwing broader than in preceding species, pale brownish, brownish apically; fringes cream brown with indistinct, darker basal and median lines.

Variation: Male with paler ground colour being clear white in basal half of wing; dorsal area in one specimen as dark the pattern, terminal markings variable. Tufts of scales large, two on forewing costa, one on hindwing costa, subapically.

Male genitalia (Figs. 12—14): Socius tapering terminally, with some spines; dorsal edge of transtilla strong, median part small, with pair of spines. Valva broad anteriorly, strongly tapering terminally, with almost uniform anterior half of costa; sacculus distinctly sclerotized, with some irregular minute dents. Aedeagus with large right process and much smaller, slenderer left process;

numerous, rather short cornuti forming a compact group in vesica. Abdominal scent organs on Fig. 127.

Female genitalia (Fig. 142): Distal parts of sterigma connected anteriorly; antrum ill-defined, with well sclerotized distal edge; distal portion of ductus bursae delicately sclerotized, anterior and median areas provided with sclerotized, slender folder folds; corpus bursae minutely spind; ductus of accessory bursa from middle of ductus bursae, ductus seminalis sublateral, from post-median part of corpus bursae, both ventrally.

Holotype, female: "Mexico: Chiapas, San Christobal de las Casas, 2300 m, 23—27. VI. 1981, V. O. BECKER col."; G. S. 21717; Paratypes, 2 identically labelled males.

Comments. Close to the preceding species, differing in dark suffusion of forewing dorsum, brown colour of pattern, ferruginous shade of forewing fringes externally and shapes of the antrum, sclerites of the bursa copulatrix and the position of the ductus seminalis.

Henricus improvisus sp. n.

Alar expanse, 15 mm. Labial palpus over 1.5, whitish, pale ochreous to middle; front white; antenna and vertex brownish; thorax olive-brown. Forewing not expanding terminally, broad postbasally; costa hardly concave beyond middle; termen oblique, indistinctly convex. Ground colour cream, with weak pale ochreous suffusions; dorsum suffused with pale brown; pattern brown, in form of short, convex basal blotch, slightly mixed with ochreous posteriorly; median fascia atrophied except for dorsal portion; terminal markings weak, brown-grey. Fringes cream. Weak costal tuft near middle of forewing found. Hindwing brown-grey; fringes slightly paler.

Male genitalia (Figs. 15—18): Socius broad, somewhat tapering in distal fourth, without spines. Median part of transtilla distinct, incised medially; valva rather wedge-shaped, with simple costa; sacculus with distinctly sclerotized dorsal edge, marked with small group of minute spines medially. Aedeagus weakly sclerotized postmedially, provided with almost equally long lateral processes, left being broader than the right. Single, very strong cornutus in vesica.

Holotype, male: "Mexico: Veracruz, Huatusco, 1300 m. 19—23. VIII. 1981, V. O. BECKER col.", not dissected. Paratypes, 2 males identically labelled.

Henricus palimpsestus sp. n.

Alar expanse, 18 mm; labial palpus, head and thorax as in preceding species. Forewing broad; costa with antemedian and postmedian tufts on weakly convex costa; apex rather pointed, very short; termen fairly oblique, tolerably straight. Ground colour dark cream with pale ochreous suffusions and spots, especially in median area of wing; grey suffusion and reticulation in distal area; dorsum

spotted and suffused with grey; provided with brownish ochreous spots. Basal blotch olive-brown, ochreous along convex distal edge; median fascia atrophied, terminal pattern irregular; black dot at disc. Fringes concolorous with ground colour with brown basal line. Hindwing without costal tuft, brown, with slightly paler fringes. Variation: Dorsal and terminal suffusions often dark grey, somewhat glossy, in one specimen completely grey. Ground colour occasionally ochreous. Hindwing more or less dark. Alar expanse varying from 15 (one male) to 20 mm (females).

Male genitalia (Figs 19—21): Socius broad, rounded terminally; median part of transtilla distinct, incised in middle; valva slender, with convex basal half costa; sacculus simple, with distinctly sclerotized dorsal edge. Aedeagus characterized with slender, pointed apically right process and broad, flat left arm; cornutus very strong.

Female genitalia (Figs 143, 144): Papilla analis very large; apophyses thin, long. Sterigma distinctly sclerotized, with well developed, pocket-shaped lateral portions, connected with subgenital sclerite by means of thick membrane; antrum short, broadening proximally, rather well sclerotized; ductus bursae with longitudinal, sclerotized folds; and accessory bursa situated in middle, ventrally; corpus bursae minutely, irregularly spined, with anterior prominence hidden in large concavity on the bottom of which originates ductus seminalis.

Holotype, female (not dissected): "Mexico: Veracruz, Huatusco, 1300 m, 19—23. VIII. 1981, V. O. BECKER col." Paratypes: 8 males and females, identically labelled.

Henricus insolitus sp. n.

Alar expanse, 26 mm. Labial palpus 2, whitish, head almost concolorous, but antenna and vertex brownish. Thorax brownish, dark brown in middle posteriorly, tegula brown, cream apically. Forewing costa convex beyond $1/3$, weakly concave medially; apex rounded; termen weakly oblique, straight. Ground colour white; basal blotch and median fascia (in middle part of wing, remaining preserved parts at costa and dorsum grey and brownish, respectively) brown; brownish suffusion beyond disc; grey transverse markings in distal third of wing, two black spots at apex; dorsum suffused with ash-grey. Large, brownish cream tuft of scales at disc, numerous groups of erect scales both on pattern (brown, rust-brown, glossy) and ground colour (white). Fringes white. Hindwing pale, grey cream with paler fringes.

Female genitalia (Fig. 145): Papilla analis broad; apophyses long. Distal portion of sterigma distinctly sclerotized laterally, medio-anterior portion partially sclerotized; antrum membranous, with two lateral prominences slightly expanding dorso-anteriorly; ductus bursae with longitudinal sclerotized folds; corpus bursae densely spined except for left side which is somewhat more strongly sclerotized; ductus seminalis from anterior portion of corpus bursae; accessory bursa extending from middle of antrum membrane, ventrally.

Holotype, female: "Sto Thomas, Apipilihoasco, Mexico, 6—I—76 *Quercus*; D. CIBRIÁN", G. S. 21662

Comments. This and the preceding species belong in the group of species closely related to *H. cognatus*. The membranous sack of the species in question corresponds with that in *palimpsestus* which is much better distinguished from ductus bursae.

Henricus exploratus sp. n.

Alar expanse, 12 mm. Labial palpus 2, white, mixed with pale ochreous basally; remaining parts of head white, antenna brownish; thorax olive-brown. Forewing costa convex basally, with extending scales on top of convexity and postmedially; apex rounded; termen oblique, hardly convex. Ground colour cream, more white proximally; basal blotch convex, olive-brown, mixed with ochre terminally; median fascia represented by brown dorsal blotch marked with grey and ochreous brown costal and subcostal strigulae; terminal pattern in form of brownish oblique markings; two brown spots at apex. Fringes cream, paler at tornus. Hindwing broad, brownish grey with paler fringes. Variation: Ground colour more or less dark, in one specimen whitish; median pattern occasionally atrophying, terminal pattern in one paratype distinct, grey; termen marked with brown dashes; dorsum and median area of wing beyond disc with pale brown or grey-brown suffusions.

Male genitalia (Figs 22—24): Uncus remainder broad; socius somewhat tapering apically. Valva broad basally; costa simple, with long scales submedially; sacculus broadening basally and terminally, with delicate indentation before end. Aedeagus slender, with almost equally long, pointed lateral processes; vesica densely spined; three slender cornuti present.

Female genitalia (Fig. 148): Papilla analis slender; sterigma well sclerotized, with narrow antevaginal sclerite; antrum large, marked with median concavity of dorsal wall; ductus bursae broad, armed with some spines, corpus bursae membranous, with small antemedian prominence of ventral wall; ductus bursae thick, median; ductus of accessory bursa extending from before middle of ductus bursae, both situated ventrally.

Holotype, male: "Costa Rica, Braulio Carrillo, 1100 m, VII. 1981, V. O. BECKER col.", G. S. 21671; paratypes: one male identically labelled as above, one female labelled "S. Isidoro, 1500 m., Costa Rica, 27. XI. 1973" and one female with label "Costa Rica, 1800 m. Volcán Turrialba, 9. VII. 1972, V. O. BECKER col."

Henricus zelotes sp. n.

Alar expanse, 14 mm. Labial palpus 1.5; head and thorax similarly coloured as in preceding species; shape of forewing also similar; ground colour whitish with indistinct yellowish cream hue; dorsum and costa strigulated with brown;

basal blotch chestnut brown, hardly convex subcostally; median fascia atrophied except for brown subternal portion and weak median and costal markings; terminal part of wing marked with brown-grey oblique fascia and subapical, parallel line, both spotted with dark brown. Fringes whitish. Hindwing broad, brownish, paler basally than on peripheries; fringes pale brownish.

Male genitalia (Figs 25, 26): Socius broad, rounded apically; basal part of valva broad, terminal portion very slender; costa strongly convex postbasally; sacculus with distinctly sclerotized, simple dorsal edge. Aedeagus similar to that in *H. platina* CLARKE, but with single, strong cornutus.

Holotype, male: "Mexico: Veracruz, Huatusco, 1300 m, 19—21, VIII. 1981, V. O. BECKER col.", G. S. 21672.

Henricus comes vicecomes ssp. n.

Alar expanse, 12 mm (female 21 mm). Labial palpus ca 1.5, pale ochreous cream, remaining parts of head concolorous, thorax a little darker. Forewing as in nominate subspecies, almost unicolorous ochreous cream, with pale ferruginous suffusion and ferruginous brown traces of pattern in form of ternal remainder of median fascia and subapical blotch. Female paratypes darker, with costal portion of median fascia preserved, and with dorsal suffusion.

Male genitalia (Figs 27, 28) as in nominate subspecies, but cornutus much larger and more strongly bent and lateral processes of aedeagus shorter.

Female genitalia (Figs 146, 147): Papilla analis broad; sterigma with large proximal lobes and typically developed distal part; roof-shaped sclerite above ostium bursae; median concavity of dorsal wall anteriorly to mentioned roof; antrum ill-defined; ductus bursae weakly sclerotized, with delicate folds; accessory bursa extending from posterior part of the latter, ventrally; corpus bursae spined, with small ventral sclerite surrounding base of ductus seminalis.

Holotype, male: "Mexico: Veracruz, Huatusco, 1300 m., 19—23. VIII. 1981, V. O. BECKER col.", G. S. 21659; paratypes, two identically labelled females.

Henricus turbulus CLARKE

Four specimens from Cristobal de las Casas, Chiapas (Mexico) collected at the altitude of 2300 m, between 23 and 17 of June. The determination is based on the comparison with the original description. The female genitalia are characterized as follows: The ductus seminalis extends from dorsal portion of the corpus bursae, the ductus of the accessory bursa, ventrally.

Male genitalia (Figs 29—32), unknown to date: Socius large, with minutely dentate inner edge; uncus small; sacculus provided with postbasal, dorsal process. Aedeagus armed with pair of flattended processes, the right being longer than the left; cornutus short, with broad base, similar to that in *melanoleucus*.

Henricus ophyrodes (MEYRICK)

Several specimens collected in Costa Rica in Braulio Carrillo (1100 m), volcano Turrialba (1800) and San Isidoro (1500 m) in June, August and October. The determination is based on the comparison with the type (with abdomen missing, however).

Male genitalia (Figs 33—35): Socius large, broad to middle, very slender terminally; sacculus provided with dorsal process, situated more proximally than in the preceding species. Aedeagus longer than in *turbulus*, with broader lateral processes and weaker cornutus.

Female genitalia (Figs 149, 150): Antrum broader than in *turbulus*; ductus bursae more strongly curved proximally; elongate sclerite in ventral portion of corpus bursae, extending from base of ductus bursae.

Henricus melanoleucus CLARKE

Six specimens collected in San Rafael, Mexico (IX—II), bearing the labels "*Pinus ayacahuite*".

Henricus inchoatus sp. n.

Alar expanse, 25 mm. Labial palpus 1.5, cream white, vertex more cream; thorax brown. Forewing uniformly broad throughout; costa somewhat convex postbasally; apex rather rounded; termen oblique, tolerably straight. Ground colour white in form of postbasal blotch extending from costa to grey suffusion of dorsal edge and tornal area becoming gradually greyer towards apical and costal parts of wing, transversely marked with grey and black-grey. Basal blotch brown grey; median fascia broad, diffuse, grey at costa, marked with black medially, atrophying towards dorsum. Fringes white grey, white at tornus, basal line brownish grey, atrophying dorsad. Hindwing gradually tapering apically, brownish grey, more cream basally; fringes pale brownish grey, whitish anally, with weak brownish median line. Scale tufts absent in both pairs of wing.

Male genitalia (Figs 36—40) very similar to those in *macrocarpanus* differing in the shape of the sacculus being in the new species larger, almost straight dorsally, provided with longer tip, minutely dentate socius and different proportions of the processes of the aedeagus.

Holotype, male: "Real del Monte, Hidalgo, 6—I—76; *Cupressus beathocoi* ENGL.; D. CIBRIAN", G. S. 21660.

Saphenista teopiscana sp. n.

Alar expanse, 12 mm. Labial palpus 1.5, cream white posteriorly, remaining parts of head white, vertex creamer; thorax ochreous with paler end of tegula. Forewing almost uniformly broad throughout; costa weakly convex basally, bent and provided with extending scales at 2/3; termen somewhat oblique,

slightly convex. Ground colour pale ochreous suffused with orange; dorso-basal blotch diffuse, brownish; median fascia atrophied, subterminal fascia ferruginous, extending from costal convexity to termen, accompanied by more anterior suffusion. Fringes cream, with ferruginous in apex area. Hindwing cream, mixed with brown on peripheries; fringes whitish.

Male genitalia (Figs 41, 42): Socii slightly broadening terminally, fused basally; median part of transtilla large; valva slender, slightly broadening apically; sacculus small; vinculum elongate, simple. Aedeagus proportionally small, with short ventro-apical projection; caulis postmedian; cornutus long, capitate. Abdominal organ (Fig. 128) in form of single, median prominence of sixth sternite and slight prominence of the following, rounded posteriorly sternite.

Holotype, male: "Mexico: Chiapas, Teopisca, 1900 m, 23—26, VI. 1981, V. O. BECKER col.", G. S. 21676.

Comments. Close to *S. consona* RAZ. & BECKER, but easily distinguished by the shape of the abdominal organ.

Saphenista multistrigata (WALSINGHAM)

Several specimens collected in biological station "Los Tuxtlas", Vera Cruz, Mexico in June. Some further specimens showing, however, slight differences from Costa Rica are probably conspecific.

Saphenista orichalcana sp. n.

Alar expanse, 8 mm. Labial palpus ca 1, brownish, white distally and above; front white, remaining parts of head pale ochreous, thorax ochreous, more brown anteriorly. Forewing hardly expanding terminally with weakly and uniformly convex costa and weakly oblique, rather straight termen. Ground colour pale yellowish ochreous with indistinct pinkish shine; pattern ferruginous except for costal portion of median fascia and subapical fascia which are rust-brown. Basal blotch represented by dorsal tringle, median fascia subdivided into three (in left wing four) blotches and costal spot. Fringes paler than ground colour. Hindwing whitish, mixed with brownish on peripheries; fringes whitish.

Male genitalia (Figs 43, 44): Valva elongate, slightly convex beyond middle ventrally; sacculus small, distinctly sclerotized, rather broad. Vinculum long, slender, simple. Aedeagus slender, slightly bent post-medially; cornutus small, curved. Abdominal organ (Fig. 129) in form of pair of postero-lateral prominences on extremely short base.

Holotype, male: „Costa Rica: Braulio Carrillo, 1100 m, VII. 1981, V.O. BECKER col.", G.S. 21689, paratype, male with label Turrialba, VIII. 1972.

Probably closest to *S. multistrigata*.

Saphenista imaginaria sp. n.

Alar expanse, ca 8 mm. Labial palpus 1, dirty cream, remaining parts of head concolorous, thorax browner. Forewing slightly broadening medially; costa weakly convex; termen obliquely straight. Ground colour dirty cream; pattern yellowish brown, with brownish shades. Dorso-basal blotch elongate-subtriangular, median fascia divided into small costal and elongate subdorsal blotches accompanied by median spot or suffusion; subterminal fascia brownish, distinct. Fringes concolorous with ground colour. Hindwing pale brownish grey with paler fringes. Variation occurring in intensity and completeness of pattern; often all elements are distinct at costa, more or less atrophying towards middle of wing, in some specimens median fascia is divided in distinct costal spot, oblique marking extending from disc to tornus and two longitudinal median elements. Ground colour varies from olive cream to brownish yellow, pattern from olive-grey to brownish. Some paler shades accompany the pattern in few specimens.

Male genitalia (Figs 45, 46): as in the preceding species, but the aedeagus is thicker, almost straight, with subterminal caulis and long cornutus. Abdominal organ (Fig. 130) larger than in *orichalcana*, with distinct base and distal prominences directed posteriorly.

Female genitalia (Fig. 151) similar to those in *S. nauphraga* RAZ. & BECKER, but with distinctly incised distal edge of antrum.

Holotype, male: „Turrialba, IV. 1973". Paratypes, 16 males and females, also from Turrialba, Costa Rica.

Close to *S. nauphraga* RAZ. & BECKER and *S. lacteipalpis* (WALSINGHAM).

Saphenista onychina sp. n.

Alar expanse, 10 mm. Labial palpus 1.5, whitish, remaining parts of head rather concolorous; thorax olive cream. Forewing expanding terminally; costa rather straight; termen oblique, hardly convex. Ground colour olive cream with slightly darker and greyer suffusions near base and postmedially. Pattern dark olive grey, becoming paler and creamer towards middle of wing; median fascia consisting of distinct costal spot, elongate median blotch marked with black scales and weaker dorsal blotch; basal blotch preserved in form of slender costal marking; subapical blotch short, followed by median suffusion marked with black along last median vein. Fringes concolorous with ground colour. Hindwing brownish grey with slightly paler fringes.

Female genitalia (Figs 152, 513): Sterigma with convex submedian portions antrum broad, deeply incised in middle of posterior edge; corpus bursae with postmedian sclerotization; ductus seminalis extending dorsally from before middle of bursa; accessory bursa not found.

Holotype, female: "Costa Rica: St. Cruz, Turrialba, 1500 m., VII. 1981, V. O. BECKER col."; paratype, identically labelled female.

Saphenista gilva sp. n.

Alar expanse, ca 10 mm. Labial palpus missing; head pale ochreous with whitish front; thorax pale ochreous. Forewing slender, almost uniformly broad throughout; costa rather straight; termen distinctly oblique, straight. Ground colour ochreous cream with traces of ferruginous pattern in form of subapical fascia. Apex edged with pale ferruginous; greyish suffusion in anterior part of dorsal area sprinkled with dark grey. Fringes concolorous with ground colour. Hindwing dirty cream with paler fringes.

Male genitalia (Figs 147—49) similar to those in *imaginaria*, but valva more strongly upcurved, sacculus longer, aedeagus thicker, distinctly tapering terminally; caulis postmedian; cornutus distinct, much shorter than in *imaginaria*. Abdominal organ absent.

Holotype, male: "Turrialba, Costa Rica, II. 1972, V. O. Becker col."

Saphenista fluida RAZOWSKI

Single specimen labelled: Tenjapan, Vera Cruz, Mexico, collected at altitude of 1300 m. in October.

Saphenista praia RAZOWSKI

Several specimens collected in Costa Rica: volcano Turrialba at 1800 m and one on S. Isidoro, at 1500 m.

Female genitalia (Fig. 154) very close to those in *S. nongrata* RAZOWSKI but with much longer antrum having almost straight posterior edge.

The male characterizes with expanded distal portion of the cornutus. Abdominal organ absent.

Saphenista nongrata RAZOWSKI

Numerous specimens collected in Huatusco (Mexico: Veracruz) in August and two specimens from Zangolica, same state, in October.

Male genitalia (Figs 50, 51) as in preceding species but having smaller aedeagus and uniformly broad cornutus.

Saphenista eranna sp. n.

Alar expanse, 11 mm. Labial palpus 1.5, cream, white posteriorly and above, front white, vertex more cream; thorax ochreous brownish. Forewing slender; costa straight to 2/3 where bent; apex rather rounded; termen oblique, hardly

convex. Ground colour yellowish cream, suffused with ochreous posteriorly and costally; dorso-basal blotch brown accompanied by ochreous indistinct basal suffusion; median fascia almost completely atrophied; subterminal fascia brownish, accompanied by median brownish suffusion marked with black scales. Fringes concolorous with ground colour, ochreous at apex. Hindwing brownish ochreous with ochreous cream fringes. Variation distinct: in some specimens dorso-basal triangle concolorous and fused with dorsal part of median fascia, rust brown or ferruginous. Ground colour ochreous to ferruginous, pattern much darker, pale edged; costal portion of median fascia always absent.

Male genitalia (Figs 52, 53): Valva long, slightly broadening apically: median part of transtilla longer than in *S. praia* and *S. nongrata*; aedeagus slender, with long ventral termination and slender (much shorter than in two mentioned species) cornutus. Abdominal organ (Fig. 131) very strong, in form of single, expanding apically, convex posteriorly prominence of the seventh sternite and indistinct prominence of the eighth sternite.

Female genitalia (Fig. 155): Sterigma short, rather weakly sclerotized; antrum weakly sclerotized, sculptured; posterior part of ductus bursae broad, membranous, anterior part with better sclerotized longitudinal folds, from beyond which extends ventral, flattened process; ductus of accessory bursa from middle of folded area, dorsally; ductus seminalis dorsal, from before middle of corpus bursae.

Holotype, female: "Costa Rica: Braulio Carrillo, 1100 m, VII. 1981, V. O. BECKER col.", G. S. 21680; paratypes 8 males and females labelled "Costa Rica, 1800 m, Volcán Turrialba, 9. VII. 1972, V. O. BECKER col." or Costa Rica, Turrialba, 600 m (VII. 1981). One specimen with collection nr. 35779.

Saphenista dexia sp. n.

Alar expanse, 10. Labial palpus missing, front greyish, vertex and thorax pale olive brownish. Forewing slender with costa weakly convex and oblique termen. Ground colour olive cream, slightly suffused with pale brownish olive. Pattern brownish in form of indistinct dorso-basal blotch, diffuse median fascia marked with brown in middle of wing and subterminal fascia atrophying terminally; costal parts of basal marking and median fascia small, brownish. Fringes concolorous with ground colour. Hindwing brownish cream with paler fringes.

Female genitalia (Fig. 156): Sterigma weakly sclerotized, concave, minutely spined; antrum rather slender, membranous medially, slightly concave anteriorly and posteriorly; ductus bursae slender, sclerotized and minutely spined to large, curved ventro-lateral process, then broad, membranous. Corpus bursae minutely spined, especially in ventral concavity from the middle of which extends ductus seminalis.

Holotype, female: "1800 m, Costa Rica, Volcán Turrialba, 31. III. 1973, V. O. BECKER col.", G. S. 21697.

Saphenista juvenca sp. n.

Alar expanse, 14 mm. Labial palpus ca 1.5, brownish, white apically; head and thorax pale yellow-brown. Forewing slender; costa rather straight; termen distinctly oblique. Ground colour pale brownish cream, suffused and sprinkled with yellow-brown; pattern yellowish brown, diffuse, consisting of ill-defined basal blotch, broad median fascia interrupted subcostally and subterminal suffusion marked with dark brown group of scales beyond disc. Fringes dirty cream. Hindwing cream mixed with brownish on peripheries; fringes cream. In paratype hindwing pale brownish grey.

Male genitalia (Figs 54, 55): Median part of transtilla strong; valva broad, slightly upcurved in terminal portion; sacculus with basal process followed by small concavity. Vinculum long, rather simple. Aedeagus thick, with short coecum penis and long cornutus.

Holotype, male: "1800 m, Costa Rica, Volcán Turrialba, 9. VIII. 1972, V. O. BECKER col.", G. S. 21696.

Saphenista praefasciata (MEYRICK)

Several specimens from Costa Rica: Cerro de la Muerte, Sta Cruz (Turrialba) and Braulio Carrilio showing some genital variation, especially in the length of the cornutus. The specimens with long cornutus fit the holotype. Some examples are brownish with darker median fascia, in other ones the dorsal portion of median fascia is dark brown with indistinct violet hue.

Male genitalia (Figs 57, 58) large, median part of transtilla broad; valva slender, up-curved; sacculus strongly sclerotized, with large basal plate and small postbasal prominence. Aedeagus curved, with long cornutus, and subterminal caulis fused with aedeagus wall. In some specimens (Fig. 59) aedeagus is slightly longer and the cornutus much shorter than in specimens identical with the type.

Female genitalia (Figs 159, 160): Sterigma broad, weakly sclerotized in median portion; ductus bursae broad, provided with distinct lateral collar-shaped sclerite situated medially beyond strongly sclerotized anterior half; corpus bursae sclerotized laterally, with small anterior prominence of sclerite; ductus seminalis anterior, extending from small concavity of membrane; accessory bursa originating in sclerotized portion of base of ductus bursae, just before distinct rib, both ventrally.

Saphenista illimis RAZOWSKI

Four specimens collected in Cristobal de las Casas (Chiapas, Mexico) at the altitude of 2300 m, late June.

Saphenista incauta sp. n.

Alar expanse, 16 mm. Labial palpus 2, pale brownish cream, remaining parts of head concolorous, vertex slightly browner; thorax brownish. Forewing rather not expanding terminally; costa indistinctly convex; termen weakly oblique. Ground colour brownish grey, traces of basal blotch and median fascia yellow-brown, preserved in costal area, those in terminal third of wing brownish, diffuse; brownish suffusion in midpart of median fascia. Fringes pale brownish. Hindwing pale brown-grey with cream grey fringes.

Female genitalia (Fig. 161): Sterigma broad, deeply concave and minutely spined medially; ductus bursae sclerotized, with several folds in anterior half, half-moon shaped fold extending of the left side ventro-laterally; corpus bursae with rather weak ventro-anterior sclerite and numerous, minute spines, mainly dorsally; accessory bursa very small, similarly situated as in *praefasciata*; ductus seminalis probably dorsal.

Holotype, female: "Costa Rica, Sta Cruz, Turrialba, 1500 m., VIII. 1981, V. O. BECKER col.", G. S. 21679.

Saphenista oreada sp. n.

Alar expanse, 14 mm. Labial palpus over 1, whitish, hardly tinged with brownish to middle; head whitish with cream vertex; thorax olive cream, mixed with brownish grey anteriorly. Forewing slender; costa almost straight; termen oblique, slightly convex. Ground colour whitish, suffused and sprinkled with grey; with some brown strigulae along dorsum and minute spots along median area of wing. Yellowish brown marking at base of costa; diffuse brownish median fascia, marked with brown atrophying dorsally; small subapical spot and irregular brown suffusion provided with brown dots, in whole terminal part of wing. Fringes whitish, mixed with brownish grey in anterior half. Hindwing greyish with white-grey fringes.

Female genitalia (Fig. 158): Distal part of sterigma forming pair of large lobes; vicinity of antrum surrounded by ovate plate; ductus bursae short, distinctly sclerotized, expanding laterally towards base of long ductus of accessory bursa; corpus bursae membranous, minutely spined throughout.

Holotype, female: "Mexico: Chiapas, San Cristobal de las Casas, 2300 m, 23—27. VI. 1981, V. O. BECKER col.", G. S. 21669.

Saphenista orescia sp. n.

Alar expanse, 16 mm. Labial palpus over 2, pale brownish, remaining parts of head cream; thorax more olive-grey. Forewing expanding posteriorly; costa straight to 2/3, then bent; termen oblique, somewhat convex. Ground colour cream with olive-grey hue, costa and dorsum delicately strigulated with brown; median fascia in form of olive ochreous costal spot, indistinct brownish median

part marked with black; subapical blotch ochreous-olive, accompanied by slightly paler suffusion beyond disc and grey suffusion before termen, both marked with black; apex and spot before it black. Fringes pale ochreous olive, cream at tornus, slightly mixed with black at apex. Hindwing grey, mixed with brownish at apex; fringes grey, cream grey in anal area.

Female genitalia (Fig. 157): Sterigma very broad, rather weakly sclerotized, with lateral parts concave in middle anteriorly; ductus bursae distinctly sclerotized except for distal portion, with slender longitudinal folds in anterior half and delicate lateral half-moon-shaped fold; corpus bursae well sclerotized dorso-posteriorly, provided with ventro-lateral process, proximally; ductus seminalis ventral, extending from proximal part of bursa copulatrix; accessory bursa not found.

Holotype, female: "Mexico, D.[istrict] F.[ederal], Pq. Nal. Zoquiapan 3200 m., 26. VIII. 1981, V. O. BECKER col.", paratype, identically labelled female.

This and the preceding four species form a group characterized by the shapes of the sterigma and the ductus bursae having a collar-shaped sclerite on the left side.

Saphenista lathridia sp. n.

Alar expanse, 10 mm. Labial palpus 1.5, ochreous, whitish posteriorly; front grey, remaining parts of head and thorax pale yellowish brown. Forewing slender; costa somewhat bent postmedially; apex rounded; termen oblique, tolerably straight. Ground colour cream suffused with pale ochreous; pattern ill-defined, ochreous brownish, diffuse, in form of indistinct median fascia and terminal suffusion; dorsum and dorso-basal blotch somewhat paler. Fringes rather concolorous with pattern. Hindwing dirty cream with more white fringes.

Male genitalia (Figs 60, 61): Valva slender; sacculus short, slightly expanding terminally. Vinculum with distinct processes. Aedeagus rather small, with subterminal caulis and capitate cornutus. Abdominal organ absent.

Holotype, male: "1800 m, Costa Rica, Volcán Turrialba, 9. VIII. 1972, V. O. BECKER col.", G. S. 21703.

Externally similar to *dexia*, but paler, more ferruginous in shade. In this group of species the female never develop ventro-lateral process of the ductus bursae found in mentioned species.

Saphenista livida RAZOWSKI

Single specimen collected in Mexico City (24. VIII. 1981, at the altitude of 2600 m). To this date known from Durango, Mexico.

Saphenista neanica sp. n.

Alar expanse, 16 mm. Labial palpus 1.5, brownish cream, more ferruginous to middle, remaining parts of head dirty cream; thorax darker, ferruginous anteriorly. Forewing broad; costa delicately curved outwards; apex pointed; termen weakly oblique, hardly concave postapically. Ground colour ferruginous cream, paler beyond middle costally, spotted with brown along costa, suffused so at its base; brown suffusion beyond disc fused with indistinct, dark brown subapical blotch. Median fascia represented by dark brown, pale edged dorsal triangle and minute costal spot. Fringes damaged, probably concolorous with ground colour. Hindwing grey-brown with somewhat paler fringes.

Female genitalia (Figs 164, 165): Sterigma small, asymmetrical, in form of extending posteriorly distal portion of antrum; the latter distinctly sclerotized, deeply incised in middle of ventro-posterior edge; ductus bursae short, hardly sclerotized medially; corpus bursae large, provided with rather weak postmedian sclerite of dorsal wall and strong lateral sclerite accompanied by group of spined; another small group of spines in right portion, postmedially; ductus seminalis dorsal, extending from beyond middle of corpus bursae; base of accessory bursa from its distal part, also dorsally.

Holotype, female: "Mexico: Veracruz, Hautusco, 1300 m, 19—23. VII. 1981, V. O. BECKER col.", G. S. 21660.

The systematic position of this species is doubtful. Externally it resembles the preceding species. Unfortunately the male genitalia remain unknown.

Phalonidia synucha sp. n.

Alar expanse, 9 mm. Labial palpus 1.5, greyish, cream distally; front white cream; vertex and thorax pale brownish. Forewing costa slightly curved outwards; termen weakly oblique, indistinctly convex. Ground colour pale ochreous cream, suffused and sprinkled with pale brownish, pattern indistinct, brownish; median fascia preserved in costal area, diffuse dorsally; subapical fascia not reaching termen, accompanied by more posterior spot. Fringes darker than ground colour, especially in apical area. Hindwing pale brownish cream with creamer fringes. Female much darker than holotype with ferruginous brownish pattern and brownish ground colour becoming paler, almost whitish beyond costal half of median fascia.

Male genitalia (Figs 66, 67): Socii large; valva broad beyond middle; sacculus broad, convex; median part of transtilla broad basally, thin apically. Aedeagus slender, bent, with long cornutus.

Female genitalia (Figs 162, 163): Sterigma membranous except for the median portion beyond ostium; antrum elongate; ductus bursae very short, membranous; proximal part of corpus bursa much strongly sclerotized than the distal part, forming large dorsal prominence; large sclerite occupying almost entire left side of corpus; membranous sac just beyond ventral end of sclerites;

accessory bursa dorsal, from base of sac; ductus seminalis from distal portion of corpus, ventrally.

Holotype, male: "Turrialba, Costa Rica, 600 m, XI. 1971, V. O. BECKER col.", G. S. 21712; paratypes one male with date XI. 1942 and one female labelled: "1800 m, Costa Rica, Volcán Turrialba, 9. VIII. 1972, V. O. BECKER col."

Comments. This species is very close to *Ph. ochracea* RAZ. and *Ph. squalida* (RAZ. & BECKER) differing from the latter mainly in the shapes of the cornutus and the aedeagus. The differences in the female genitalia are mainly in the form of the corpus bursae.

Phalonidia diaphona sp. n.

Alar expanse, 10 mm. Labial palpus 1, pale ochreous cream, front and vertex creamer. Forewing rather uniformly broad throughout; costa straight to before apex; termen weakly oblique, weakly convex. Ground colour yellowish brown; brown dots along dorsum, black suffusion along costa to 2/3, followed by black dot; grey suffusion in place of costal portion of median fascia. Pattern atrophied. Fringes yellow-brown. Hindwing brownish with brownish cream fringes, median line brownish.

Male genitalia (Figs 62—65): Soci coalescent almost to their tops; transtilla broad, especially at the base of median part; vinculum delicate; valva slender; costa gently concave, provided with apical, sharp process; sacculus slender, long, hardly convex ventrally. Aedeagus curved, with short ventral termination; cornutus plate-shaped.

Holotype, male: "Mexico: Veraacruz, Est. Biol. Tuxtlas, 11—16. VI. 1981, V. O. BECKER col.", G. S. 21690.

Distinct by peculiar process of costal portion of valva.

Phalonidia hapalobursa sp. n.

Alar expanse, 13 mm. Labial palpus about 1.5, pale ochreous cream, remaining parts of head concolorous. Forewing slender; costa hardly concave near middle; termen distinctly oblique, somewhat convex. Ground colour pale ochreous cream, paler and more yellowish beyond median pattern, glossy pearl scales on ground colour, especially near pattern; costa suffused with pale ferruginous as far as to diffuse, more rust, dark costal portion of median fascia; remaining portions of the fascia atrophied; subterminal pattern paler, subapical spot followed by two diffuse markings; weak suffusion linking subapical spot and termen; black spot at disc and blackish suffusion on veins beyond it. Fringes cream, mixed with ferruginous in apex portion. Hindwing pale brownish cream with similar fringes.

Female genitalia (Fig. 166): Papilla analis with elongate warts; sterigma fairly long, expanding at the end ventrally; antrum short, rather broad, ductus

seminalis rather weakly sclerotized; corpus bursae membranous, without spines slight sclerotization before base of ductus seminalis, dorsally.

Holotype, female: Costa Rica, Turrialba, XI. 1972, V. O. BECKER col., G. S. 21716.

Comments. The female genitalia resemble those in *Ph. tornocarpa* (MEYRICK). The systematic position of this species is doubtful.

Cirrothaumatia gen. n.

Type species: *Phalonia tornosema* CLARKE, 1968

The new genus belongs in the *Saphenista*-group and characterizes with lateral position of the socii and large tuft of androconial scales situated above the base of the sacculus and directed dorsally. In the female genitalia the ductus seminalis and the ductus of the accessory bursa extend from anterior portion of the corpus bursae (Fig. 167).

Distribution: Central America. Bionomy: unknown except for dates of the collection of the moths.

To this genus belong two species, viz., the above mentioned type species and *C. vesta* (CLARKE), comb. n., known from Venezuela. It is related to *Parirazona* RAZOWSKI but differs in having saccular groups of the androconial scales and different shape of the socius.

Cirrothaumatia tornosema CLARKE

Numerous specimens from Braulio Carrillo (1100 m, VII), Turrialba (600 m VII), V. Neilly (800 m, XI) in Costa Rica and Huatusco (1300 m, VIII), Vera Cruz, Mexico. It was described from several females collected on Volcan Santa Maria in Guatemala.

Male genitalia (Figs 68, 69) as in *vesta* but with much longer and slenderer median part of transtilla and broader socius.

Thysanphalonia gen. n.

Type species: *Thysanphalonia cirrhites* sp. n.

Probable autapomorphies: Strong dorsal edge of sacculus forming terminal brush similar to that in the genus *Cnephasia* CURTIS and elongate lateral socius. Synapomorphy (with preceding genus): Presence of bunch of long scent scales situated near base of valva. Other characters: Transtilla broad, with strong median part; vinculum arm broad; aedeagus large, without cornuti.

Distribution: Northern part of Neotropical Region. Bionomy unknown. Monotypical genus probably closest to the preceding one.

Thysanphalonia cirrhites sp. n.

Alar expanse, 14 mm. Labial palpus 1, greyish, remaining parts of head grey, thorax white-grey, dark grey anteriorly and medially. Forewing fairly broad; costa distinctly curved outwards at base, then straight; apex rounded; termen strongly oblique, rather straight. Ground colour white, delicately suffused and sprinkled with grey, with some paler dots along median cell and dorsum. Basal blotch dark grey, interrupted along middle; median fascia in form of subsquare ferruginous blotch in dorsal half of wing before tornus, delicately edged with grey, accompanied by brownish grey dashes in middle of wing; distal portion of wing greyish with two oblique, diffuse fascias extending from costa to tornus and termen. Fringes damaged. Hindwing brown-grey, with darker, diffuse strigulation and paler fringes.

Male genitalia (Figs 70—74): Socius elongate, slightly extending beyond top of tegumen; top of median part of transtilla provided with some minute thorns; costa of valva well sclerotized, upcurved; ventral edge weakly sclerotized; sacculus long, curved terminally; aedeagus broad in anterior part, with small apical prominence; caulis antemedian. Otherwise as for the genus.

Holotype, male: "Mexico: V.[era] Cruz, Zangolica, 27. X. 1973, V. O. BECKER col.", G. S. 21713.

Lasiothyris cerastes sp. n.

Alar expanse, ca 10 mm. Labial palpus 1, brownish, whitish cream above, remaining parts of head white-cream; thorax cream, mixed with ochreous anteriorly. Forewing slender, slightly expanding terminally; costa straight to 2/3, then bent; termen oblique, hardly convex. Ground colour in basal half of wing cream suffused with ferruginous along edges, pinkish cream postmedially. Costa, diffuse median fascia and subapical blotch ferruginous, some dots along termen slightly paler. Fringes ferruginous cream, darker in apex area, cream in tornal part. Hindwing brownish, transparent anteriorly, with brown venation; fringes cream-brown. Variation: Three paratypes pale coloured, with pale ochreous cream ground colour and somewhat darker, diffuse pattern.

Male genitalia (Figs 75, 76): Very similar to those in *L. limatula* (MEYRICK) but with very slender median part of transtilla and much shorter and thicker aedeagus. In one specimen one weakly sclerotized cornutus developed. Abdominal organ (Fig. 132) with strong base, and slender lateral processes, slightly varying in their length.

Female genitalia (Figs 168, 169): Sterigma membranous; antrum cup-shaped, rounded anteriorly; ductus bursae slender, provided with rather well sclerotized ventral process extending postmedially, and distinct dorsal prominence in postmedian area; ductus seminalis dorsal, extending from distal portion of corpus bursae.

Holotype, male: "Costa Rica: Turrialba, 600 m, VII. 1981, V. O. BECKER col.", G. S. 21685; paratypes, identically labelled female and two further females and one male.

Lasiothyris cinigmula sp. n.

Alar expanse, 7 mm. Labial palpus over 1, cream-white, remaining parts of head concolorous; thorax more brownish, especially anteriorly. Forewing with rather straight costa and weakly oblique, hardly convex termen. Ground colour cream, with delicate pale ochreous suffusions; median fascia almost completely atrophied, slightly darker than ground colour; subapical fascia ferruginous, incomplete. Fringes cream. Hindwing pale brownish cream with long, much paler fringes.

Female genitalia (Fig. 170): Sterigma typical of the group, well sclerotized posteriorly; antrum cup-shaped, distinctly sclerotized; ductus seminalis short, rather membranous; corpus bursae minutely spined mainly on peripheries, better sclerotized anteriorly than posteriorly, with distinctly sclerotized sub-ventral lobe postmedially; ductus seminalis originating in postmedian area of corpus bursae, ductus of accessory bursa just before the latter, more medially, both in dorsal surface.

Holotype, female: "Mexico: Veracruz, Est. Biol. Tuxtla, 11—16. VI. 1981, V. O. BECKER col.", G. S. 21678.

The systematic position of this species is uncertain until the male is examined. Seemingly it is closest to *L. stricta* RAZ. & BECKER from Brazil.

Lasiothyris diclada sp. n.

Alar expanse, 8 mm. Labial palpus over 1, cream, tinged with ochre laterally; remaining parts of head cream; thorax pale ochreous cream. Forewing rather similar in shape to that in preceding species. Ground colour pale ochreous cream with rather distinct gloss; pattern yellow-brown, basal third of costa and suffusion extending from disc to tornus concolorous, dorsal portion of median fascia and posterior part of subapical fascia tinged with dark brown. Fringes darker than ground colour, slightly more yellowish. Hindwing brownish, paler and transparent anteriorly; fringes paler, more cream in distal part of wing than in the anal portion, where greyer.

Male genitalia (Figs 77, 78): Distal portion of tegumen strong, with socii large, broad basally. Vinculum arms not fused apically. Valva almost uniformly broad throughout with up-curved costa; sacculus short, broad. Median part of transtilla broad anteriorly, slender and curved in terminal third. Aedeagus slender, slightly bent terminally, with large, postmedian caulis membranously fused with pair of valvella; cornutus delicate. Abdominal organ (Fig. 133) large, with elongate base and long terminal processes.

Holotype, male: "Costa Rica: Turrialba, 600 m., VII. 1981, V. O. BECKER col.", G. S. 21684.

This species is distinct by the genitalia, showing only some similarity in the shape of the valva to the following species.

Lasiothyris cnestovalva sp. n.

Alar expanse, 9 mm. Labial palpus over 1, cream remaining parts of head concolorous, vertex mixed with pale ochreous; thorax ochreous cream. Forewing as in *dielada* but median fascia interrupted medially and black markings in middle of subterminal area larger; black spot at disc. Hindwing brownish white, brownish on peripheries, with long costal fold covering long tuft of scales brown-black in distal half. Fringes greyish, darker in apex area.

Male genitalia (Figs 79—82): Socii short on large base; basal portion of transtilla broad, terminal part slender, wedge-shaped. Valva with costa well sclerotized, expanding distally; sacculus strong, broadening and bristled terminally followed by small concavity of ventral edge of valva. Aedeagus slender, slightly bent; caulis postmedian. Abdominal organ in form of usual bifurcate process of sixth sternite and minute, simple prominence of middle of posterior edge of seventh one.

Holotype, male: "Costa Rica: Braulio Carrillo, 1100 m, VII. 1981, V. O. BECKER col.", G. S. 21693.

Comments. This species is easily distinguished by black-brown colour of scale tuft of the hindwing. The costal fold of the hindwing is similar to that in *dielada* and *micida*, but the scales in the first of them are pale (in *micida* not realized). In *cerastes* the costal fold is delicate, reaching to middle of costa (similarly as in *L. limatula* (MEYER.)) and the scale tuft has not been found either.

Lasiothyris micida sp. n.

Alar expanse, 10 mm. Labial palpus over 1, black-brown, remaining parts of head and thorax concolorous. Forewing broad, distinctly expanding terminally; costa weakly convex; termen oblique, slightly convex. Ground colour blackish with distinct bluish refraction; pattern black-brown without any gloss, consisting of irregular basal blotch, broad, interrupted median fascia, and slender subapical fascia followed by apical and postapical spots. Fringes brownish, paler at tornus. Hindwing brownish white, brown on peripheries with darker fringes. Variation: In pale specimens ground colour more grey, occasionally hardly tinged with ferruginous in tornal area; pattern weak, consisting of several spots; refractive pattern in form of numerous spots. Hindwing in female specimen brown.

Male genitalia (Figs 83, 84): Socius short, on broad base; median part of transtilla thick, incised distally; vinculum arms coalescent apically, with distinct median process directed proximally. Valva broad, rather rounded term-

inally; sacculus broad basally. Aedeagus slender, bent distally, with subterminal caulis and broad cornutus. Abdominal organ absent.

Female genitalia (Fig. 171) resembling those in some *Saphenista*-species. Papilla analis broad, with slender anterior portion; distal part of sterigma elongate; antrum broad, short, slightly concave distally; ductus bursae broad; corpus bursae small, minutely spined; ductus seminalis ventral, from distal portion of corpus; accessory bursa more posterior, extending dorsally.

Holotype, male: "Costa Rica, Turrialba, 600 m, VII. 1981, V. O. BECKER col.", G. S. 21673; paratypes, 5 males and 1 female.

Platphalonidia luxata sp. n.

Alar expanse, 16 mm. Labial palpus over 1, broad, pale brownish cream; front creamer, vertex rather concolorous; thorax dirty cream, mixed with pale brownish anteriorly. Forewing somewhat expanding terminally; costa almost straight; termen weakly oblique, straight. Ground colour brownish white, suffused with brownish especially along wing edges and beyond disc; darker strigulation along dorsum and costa; median fascia in form of dorsal blotch, brownish, brown anteriorly; subapical blotch indistinct. Fringes concolorous with suffusions on ground colour. Hindwing pale brownish with even paler fringes. Variation: Dorsal blotch in paratypes slender, base of wing in male suffused with brown; female with yellow-brown blotch and ochreous shade of ground colour and remaining parts of pattern.

Male genitalia (Figs 85, 86) as in *P. felix* (WALSINGHAM) but with slender aedeagus, proportionally longer cornutus and sacculus more extending ventrally.

Female genitalia (Fig. 172) as in *felix* but with shorter ductus bursae and concave anterior edge of antrum.

Holotype, male: "Mexico, D.[istrict] F.[ederal], Mexico, 2600 m, 24. VIII. 1981, V. O. BECKER col.", not dissected; paratypes identically labelled male and female.

Mourecochylis limenarchis RAZOWSKI

Collected in Costa Rica (Braulio Carrillo, 1100 m, VII) in four specimens. Male does not show any differences with the holotype, description of the female genitalia is as follows.

Female genitalia (Fig. 173): Sterigma with broad postvaginal part concave in middle anteriorly and asymmetrical distal edge of antevaginal plate; antrum rather membranous; anterior portion of broad ductus bursae with numerous longitudinal sclerites; corpus bursae small, with collar-shaped broadening at base of the ductus and numerous small spines; base of ductus of accessory bursa from end of sclerotized part of ductus bursae, ventrally; ductus seminalis dorsal.

Mielkeana angysocia sp. n.

Alar expanse, 12 mm. Labial palpus over 1, cream, front whitish; remaining parts of head and thorax probably concolorous (scales wanting). Forewing rather not expanding terminally; costa uniformly curved outwards throughout; apex pointed; termen oblique, hardly convex. Ground colour whitish, suffusions and indistinct strigulation brownish, basal blotch concolorous; median fascia indistinct with blackish brown markings at costa and subcostally; subapical blotch extending towards mid-termen, brownish, with groups of darker scales, similarly coloured spot at apex, paler suffusion beyond disc. Fringes missing. Hindwing pale brown with similar fringes.

Male genitalia (Figs 87—89) similar to those in *M. gelasima* RAZ. & BECKER from Brazil, but with shorter socii, smaller median part of transtilla, rounded distal part of sacculus and slightly slenderer aedeagus. Abdominal organ (Fig. 134) with longer terminal prominences.

Holotype, male: "1800 m, Costa Rica, Volcán Turrialba, 31. III. 1973, V. O. BECKER col.", G. S. 21699.

Mielkeana affecta RAZOWSKI

Nine specimens from Huatusco (Vera Cruz, Mexico) collected by the end of August at the altitude of 1300 m, and one from Braulio Carrillo (Costa Rica; altitude 1100 m, July).

Male genitalia (Figs 90—95): Socius short on very broad base; median part of transtilla broad, with pair of apical thorns; arm of vinculum broad. Valva slender, up-curved; sacculus broad basally with long, curved downwards process extending from its dorso-basal portion. Aedeagus thick, with distinct, directed ventrally termination and postmedian caulis; single slender and 4 short, broad basally cornuti in vesica.

Mimeugnosta enopla sp. n.

Alar expanse, 8 mm. Labial palpus 1, head and thorax cream, front slightly paler, anterior part of thorax mixed with ochreous. Forewing not expanding posteriorly; costa weakly convex; termen oblique, hardly convex. Ground colour cream with slight ochreous admixture; pattern diffuse, pale yellow-ferruginous in from of costal part of median fascia and subapical blotch. Fringes cream. Hindwing pale brownish with brownish cream fringes.

Male genitalia (Figs 96—99): Socii very long, well sclerotized with bases connected membranously; median part of transtilla long, slender; valva broadening in terminal portion, with large group of rigid scales medially; sacculus slender; vinculum coalescent ventrally. Aedeagus slender; cornutus long, bent. Abdominal organ (Fig. 135) long, with well developed terminal bifurcation.

Holotype, male: "Costa Rica, Turrialba, IV. 1973, V. O. BECKER col."

Three females, most probably conspecific with the male before me. Externally they differ from the male in having well developed subapical fascia and small dorsal grey spot in postbasal area. Their genitalia are (Fig. 174) characterized with distinct roof-shaped prominence beyond ostium and weakly sclerotized, minutely spined antevaginal portion of sterigma. Ductus bursae weakly sclerotized and broad distally, provided with longitudinal, sclerotized folds anteriorly; corpus bursae with numerous spines; ductus of accessory bursa extending from beyond folded sclerites, ventro-laterally; ductus seminalis dorsal.

Mimeugnosta arta sp. n.

Alar expanse, ca 10. Head cream; thorax cream-ochreous. Forewing costa almost straight to beyond middle; termen oblique, hardly convex. Ground colour pale ochreous cream, glossy; pattern yellowish ochreous in form of traces of basal blotch, diffuse median fascia and rather distinct, tinged with ferruginous subapical pattern extending towards middle of termen, marked with dark brown in middle; black dot at disc. Fringes pale ochreous cream. Hindwing brownish with similar fringes.

Female genitalia (Fig. 175): Papilla analis with distinct lateral warts; eighth tergite short; sterigma broad, with fairly large roofs-haped prominence beyond ostium; antrum fairly well sclerotized, slender. Irregular, delicate folds in median part of ductus bursae; corpus bursae minutely spined, less densely in median area than on peripheries; ductus seminalis extending from bulbous base in distal part of corpus bursae, ventrally.

Holotype, female: "Rio Dulce, Isabel, Guatemala, 13—14. IX. 1973, V. O. BECKER col.", G. S. 211707.

The systematic position of this species is uncertain as the male is not examined. Externally it is very similar to the male of the preceding species, and the females shows some similarity in the shape of the sterigma (roof like prominence beyond ostium).

Cochylis methoeca sp. n.

Alar expanse, 9 mm. Labial palpus ca 2, brownish grey; front and vertex whitish; thorax whitish, grey medially and proximally. Forewing indistinctly expanding terminally; costa almost straight except terminal portion; termen weakly oblique, convex, ground colour white, with brownish transverse strigulation and black-brown spots along costa. Median fascia diffuse, brownish grey, blackish at costa and in middle, tinged with ferruginous subdorsally; subapical pattern similarly coloured, in form of interrupted line accompanied by large greyish suffusion and apical spots. Fringes concolorous with terminal part of wing, with some darker divisions. Hindwing brownish grey with paler fringes. Variation: female darker than male, with blackish dots on median fascia and

in terminal third of wing and with grey traces of basal blotch, mainly in costal third of wing.

Male genitalia (Figs 100—102): Median part of transtilla slender, long; vinculum arm thin. Valva broad, with sculptured, concave internal surface; sacculus convex, minutely spined, with row of small dents across median area and some other dents on outer edge. Aedeagus broad, with well developed ventral termination; cornuti numerous.

Female genitalia (Figs 176): Distal portion of sterigma large, slightly concaving medially, forming slight convexity beyond ostium; antrum broad, with two elongate sclerites ventrally; minutely spined sclerite tapering proximally on right side; ductus seminalis and accessory bursa typical of the genus.

Holotype, male: "Mexico: Veracruz, Huatusco, 1300 m, 19—23. VIII. 1981, V. O. BECKER col.", G. S. 21694; paratype, identically labelled female.

Closely related to the following species.

Cochylis eutheta RAZOWSKI

About 10 specimens collected in biological station "Los Tuxtlas" near Catemaco (Vera Cruz, Mexico) in mid-June.

Female genitalia (Fig. 177): Distal portion of sterigma with differentiated lateral parts; antrum broad, with several folds; wedge-shaped sclerite described for preceding species atrophied.

Spinipogon veracruzanus sp. n.

Alar expanse 9 mm. Labial palpus over 1; head and thorax whitish, palpus slightly tinged with ochreous laterally. Forewing broadest medially; costa curved in middle; termen weakly oblique. Ground colour whitish, with weak ochreous suffusion in basal part of wing and at apex; pattern indistinct, costal portion of median fascia grey-brown, remaining part diffuse, pale ochreous; subterminal fascia concolorous with the latter, browner on edges; weak brownish suffusion in basal part of costa. Fringes cream. Hindwing greyish with paler fringes.

Male genitalia (Figs 103, 104) similar to those in *S. signiferus* RAZOWSKI, but median part of transtilla longer, broad apically, costal portion of valva much broader, rounded apically, provided with longer spines and terminal opening of aedeagus situated more posteriorly (in *spiniferus* rather dorsally).

Holotype, male: "Mexico: Veracruz, Est. Biol. Tuxtlas, 11—16. XI. 1981, V. O. BECKER col.", G. S. 21677.

In the material examined there are two groups of specimens showing some genital differences to the holotype which may represent distinct subspecies. They are described below.

Form 1. Coloration darker, more brownish; pattern almost complete; costal portion of median fascia brownish; brown-grey spot beyond base of wing at dorsum. Male genitalia (Figs 105, 106) differ from those in holotype in having thicker median part of transtilla, much slenderer costal portion of valva, almost equally broad distal part of sacculus and less curved aedeagus. Ten specimens from Turrialba, Costa Rica.

Form 2. Externally similar to form 1. Male genitalia (Figs 107, 108) with slightly broader costal portion of valva and slenderer distal portion of sacculus; further differences in median part of transtilla and aedeagus. Single male from Guacayacan, Costa Rica.

Spinipogon ialtris RAZOWSKI

Six specimens: one collected in Los Tuxtlas (Vera Cruz, Mexico), remaining ones in Turrialba, Costa Rica.

Spinipogon elaphroterus sp. n.

Alar expanse, 8 mm. Labial palpus 1.5, cream; remaining parts of head and thorax rather concolorous; forewing weakly expanding terminally, similar in shape to that in *ialtris*. Coloration also similar, but brown suffusion at least along vein m_2 present. In holotype ground colour white-cream, pattern brownish, consisting of median fascia (darkest at costa) and subapical fascia fused with broad suffusion extending from disc to termen. Variation distinct: ground colour varying from cream to pale brownish, pattern from pale ochreous marked with brownish to brown; dorsal spot situated beyond base of wing from grey to black-grey.

Male genitalia (Figs 109, 110): Socius broad; median part of transtilla broad to middle, slender terminally, bifurcate apically; valva slender, tapering terminally, rounded at apex where bristled; sacculus long, fairly broad, with strong basal broadening expanding ventrally. Aedeagus slender, tapering in distal portion; single, very slender cornutus in vesica.

Female genitalia (Figs 178, 179): Sterigma simple, tapering laterally; ostium bursae situated under sclerotized collar; antrum slender, rounded proximally; ductus bursae rather weakly sclerotized; accessory bursa extending ventrally from beyond base of the latter; corpus bursae minutely spined throughout with strong ventral socle-shaped prominence strengthened with long spines directed to middle; ductus seminalis originating on top part of the socle, post-medially. Subgenital sternite strong, with emarginate posterior edge.

Holotype, male: "Costa Rica: Turrialba, 600 m, VII. 1981, V. O. BECKER col.", G. S. 21681". Paratypes, 39 males and females from same locality and one female from Los Tuxtlas, Vera Cruz, Mexico.

Enallcochylis gen. n.

Type species: *Enallcochylis enochra* sp. n.

The genus is described on basis of the following supposed autapomorphies: Valvellae fused one with another to form flattened, pocket-shaped structure the ventral wall of which is linked with juxta; cornuti arranged in very long double row; plate-shaped sclerite at the origin of the cornuti row. Synapomorphy with *Cochylis* TREIT.: cornuti non-capitate, forming a compact group.

The two species included in this genus distinctly differ in the shape of the tegumen, in the type species being of usual form characteristic of the group whilst in *empeda* stout, concave posteriorly. The socii typically developed (longer than in *Cochylis*, and with distinct bases) in *enochra*, are strongly reduced in *empeda*, most probably represented by posterior surface of the apex of tegumen (a lobe marked with hair). The female characters are not included in this description, as the systematic position of examined specimen seems doubtful to some degree.

Enallcochylis enochra sp. n.

Alar expanse, 10 mm. Labial palpus 1, pale ochreous cream remaining parts of head paler, thorax concolorous. Forewing hardly expanding terminally; costa almost straight to beyond middle; termen weakly oblique, somewhat convex. Ground colour pale ochreous cream; pattern rudimentary, more brownish than ground colour, consisting of costal suffusion representing median fascia and slender subapical marking. Blackish spot beyond base of dorsum; some brown scales before termen medially. Fringes concolorous with darkest parts of ground colour. Hindwing brownish with similar fringes. Variation slight: paratype with brownish costal spots, in middle and subapically and brown scales before middle of termen. Female with almost complete, diffuse median fascia.

Male genitalia (Figs 111—114): Distal portions of socius slender; vinculum arm slender; median part of transtilla strong, tapering terminally, pointed apically. Valva broad, tapering towards the end; sacculus broad basally, slender beyond base, provided with thick terminal dent directed ventrally. Aedeagus very large, with fairly long ventral termination; coecum penis large; distal cornuti strong; caulis very small connected with large plate incised in middle of distal edge, ventral wall of plate twice shorter than the dorsal wall, membranously connected with broad juxta.

Female genitalia (Fig. 180): Eighth tergite fused with sterigma; the latter forming, broad, sclerotized complex similar to that in numerous species of *Cochylis*. Anterior portion of the complex convexely rounded, concave ventrally, with two pairs of bulbous convexities in middle; ostium bursae broad; antrum broad, rather membranous; ductus bursae slender; corpus without sclerites,

with apical ductus seminalis; ductus of accessory bursa from bottom of antrum, laterally.

Holotype, male: "Costa Rica, Turrialba, VIII. 1972, V. O. BECKER col.", G. S. 21709; paratype, male with label "Turrialba, Costa Rica, 600 m, VII. 1971, V. O. BECKER col." Female with identical label.

Enallcochylis empeda sp. n.

Alar expanse, 9 mm. Labial palpus 1, cream, remaining parts of head and thorax concolorous. Forewing as in preceding species; ground colour cream tinged with pale ochreous; pattern pale ochreous, consisting of diffuse costal portion of median fascia, subapical marking reaching termen and brown-grey post-basal spot at dorsum. Fringes cream. Hindwing brownish cream with paler fringes.

Male genitalia (Figs 115—117): Tegumen strong, elongate, terminating in short lateral lobes; median part of transtilla large; juxta membranous medially. Valva slender posteriorly; sacculus curved, with ventral edge deeply concave and with pointed apex, directed ventrally. Aedeagus much shorter than in preceding species, with long termination and fairly large coecum penis; caulis ill-defined; ventral plate deeply incised posteriorly; cornuti small.

Holotype, male: "Costa Rica, Turrialba, IX. 1972, V. O. BECKER col.", G. S. 21704; Paratype, male with label "Turrialba, Costa Rica, 600 m, II. 1972, V. O. BECKER col."

Ceratuncus tantulus sp. n.

Alar expanse, 9 mm. Labial palpus 1, black-grey; remaining parts of head and thorax rather concolorous. Forewing weakly expanding posteriorly; costa straight; apex rounded; termen weakly convex, somewhat oblique. Ground colour cream, preserved in basal half of wing, suffused with grey along its edges, greyish postmedially. Median fascia brown at costa, ferruginous medially and dorsally; subapical blotch large, expanding towards termen, accompanied by small apical spot and ferruginous suffusion extending from beyond disc. Fringes grey, ochreous in apex area. Hindwing dark grey with similar fringes. Female: alar expanse 12 mm; ground colour cream, less suffused with grey than in male; median fascia atrophying dorsally, ferruginous in middle, brown in costal part; subapical blotch and postdiscal suffusion dark brown; apex area ochreous yellow; fringes ochreous yellow, brownish grey towards tornus.

Male genitalia (Figs 118—121) similar to those in *C. lugens* RAZ. but differ in having smaller distal process of tegumen, large ventral portion of valva forming distinct posterior angle, slender, spined costal part of valva and broad medially, curved aedeagus.

Female genitalia (Figs 181, 182): Sterigma large, with peculiar, rounded posterior sclerite provided with median pit; lateral parts of sterigma somewhat

concave; ductus bursae short; bursa copulatrix entirely membranous; ductus seminalis from distal portion of corpus, laterally.

Holotype, male: "Mexico: Gro., Villa Ayala, 25. VI. 1971, V. O. BECKER col.", G. S. 21714; paratype, identically labelled female.

Ceratuncus cristatus sp. n.

Alar expanse, 10 mm (paratype 11 mm). Labial palpus 1.5, greyish, white apically. Head and thorax whitish. Forewing weakly expanding terminally; costa slightly curved outwards; apex rounded; termen somewhat oblique, delicately convex. Ground colour whitish; costa and dorsum delicately suffused with grey, with some black scales. Median fascia ochreous, black-grey at costa, similarly strigulated at dorsum where ochreous colour atrophied; subapical spot ochreous; pale ochreous suffusion beyond disc; black dots at disc, before middle of termen and near tornus terminally. Fringes whitish cream. Hindwing pale brownish cream, more whitish towards base; fringes paler than wing. Variation: in one paratype dorsum strigulated with black; subterminal pattern in form of slender fascia from costa to beyond middle of termen.

Male genitalia (Figs 122—126) close to those in *C. eriodens* RAZ. but with slender base of apical process of tegumen, shorter and more convexely rounded sacculus and smaller group of strong thorns of valva. Aedeagus longer and slenderer.

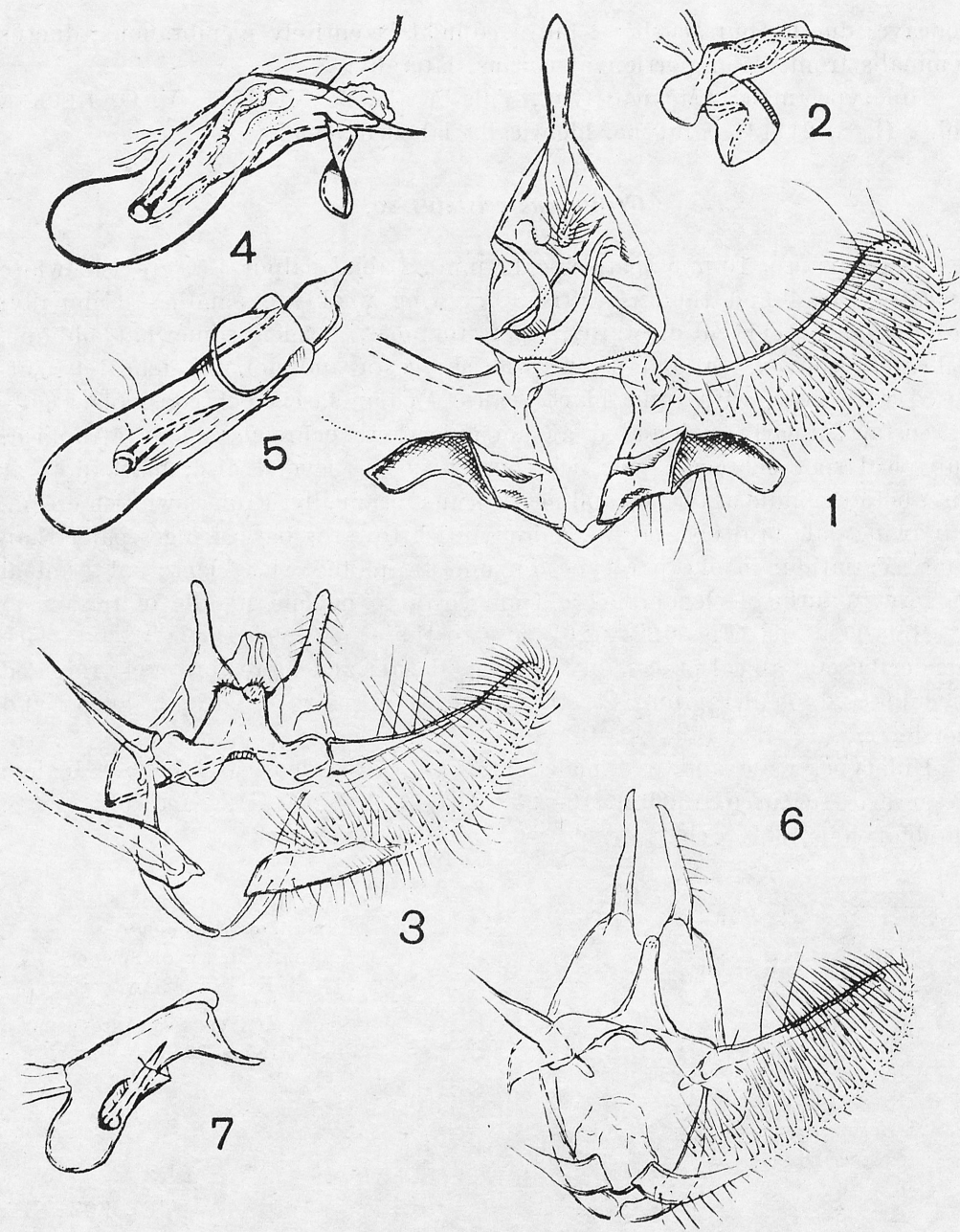
Holotype, male and two male paratypes with identical labels: "Mexico: Veracruz, Huatusco, 1300 m, 19—23. VIII. 1981, V. O. BECKER col.", G. S. of holotype 21687, one paratype with abdomen missing.

Institute of Systematic and
Experimental Zoology
Polish Academy of Sciences
31-016 Kraków, Sławkowska 17

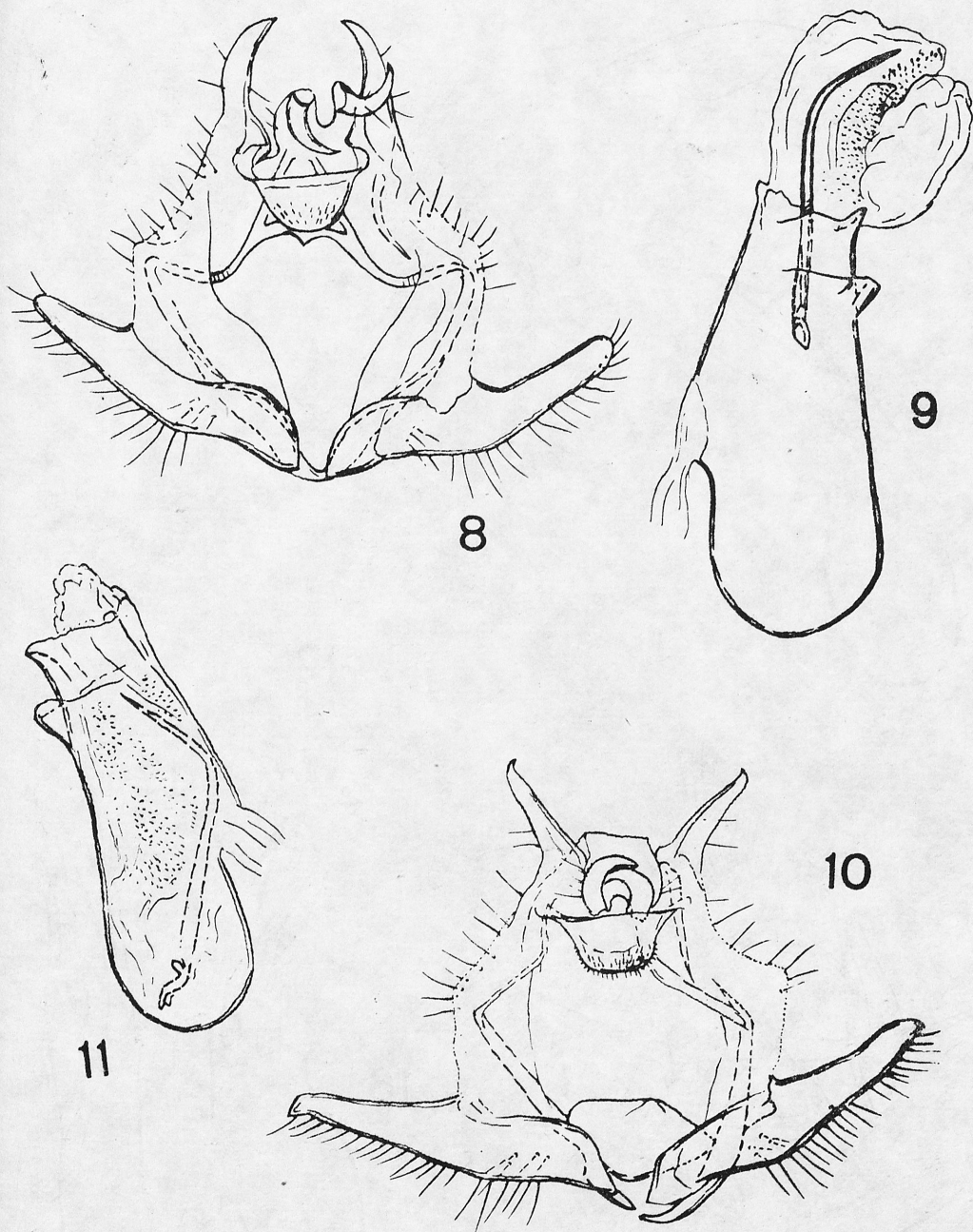
Centro de Pesquisa Agropecuaria
dos Cerrados, 73300 — Planaltina,
D. F., Brazil

STRESZCZENIE

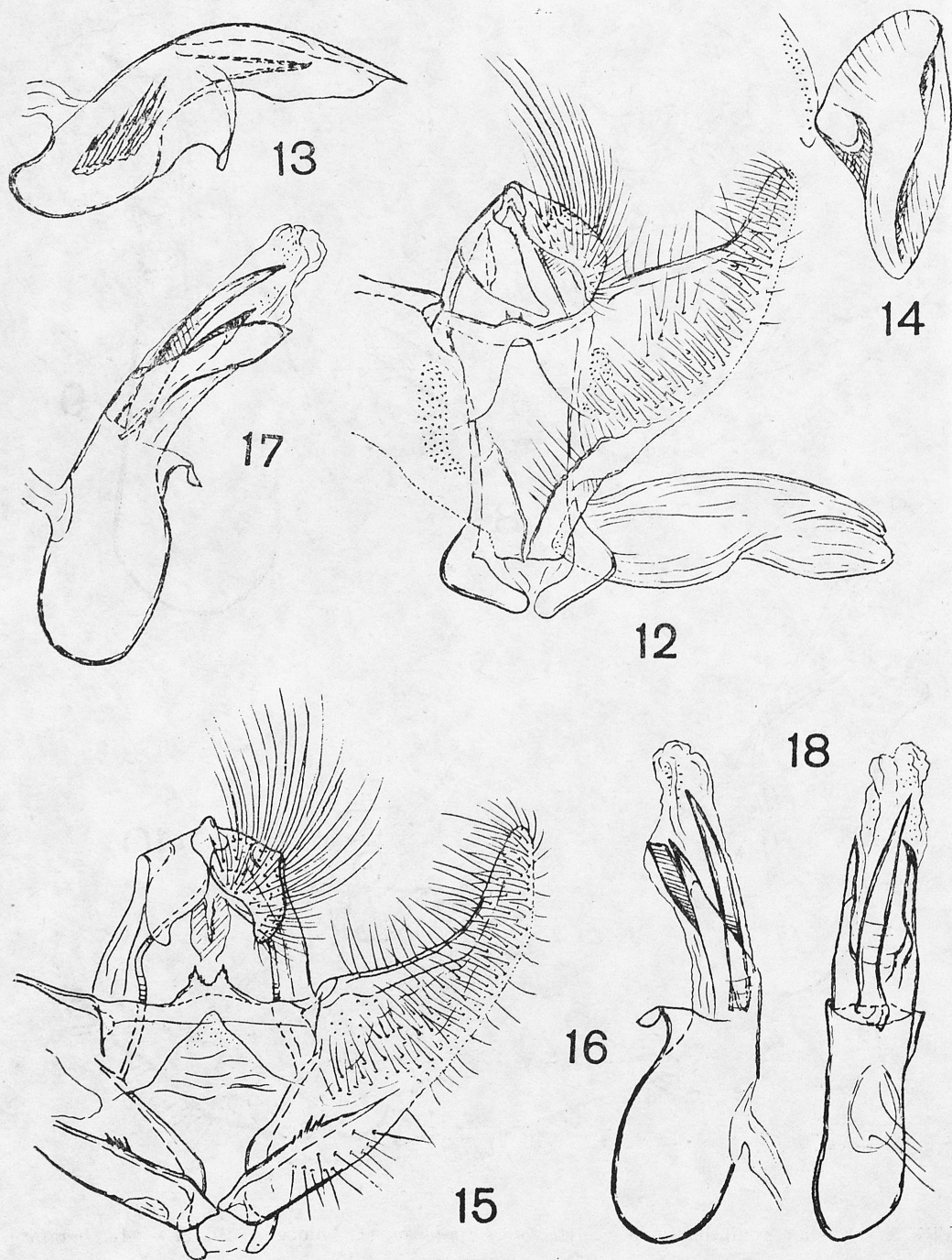
W materiałach zebranych w Meksyku, Gwatemali, Kostaryce i Hondurasie stwierdzono 68 gatunków, z czego 46 gatunków i 1 podgatunek zostały opisane jako nowe. Ponadto opisano 3 nowe rodzaje.



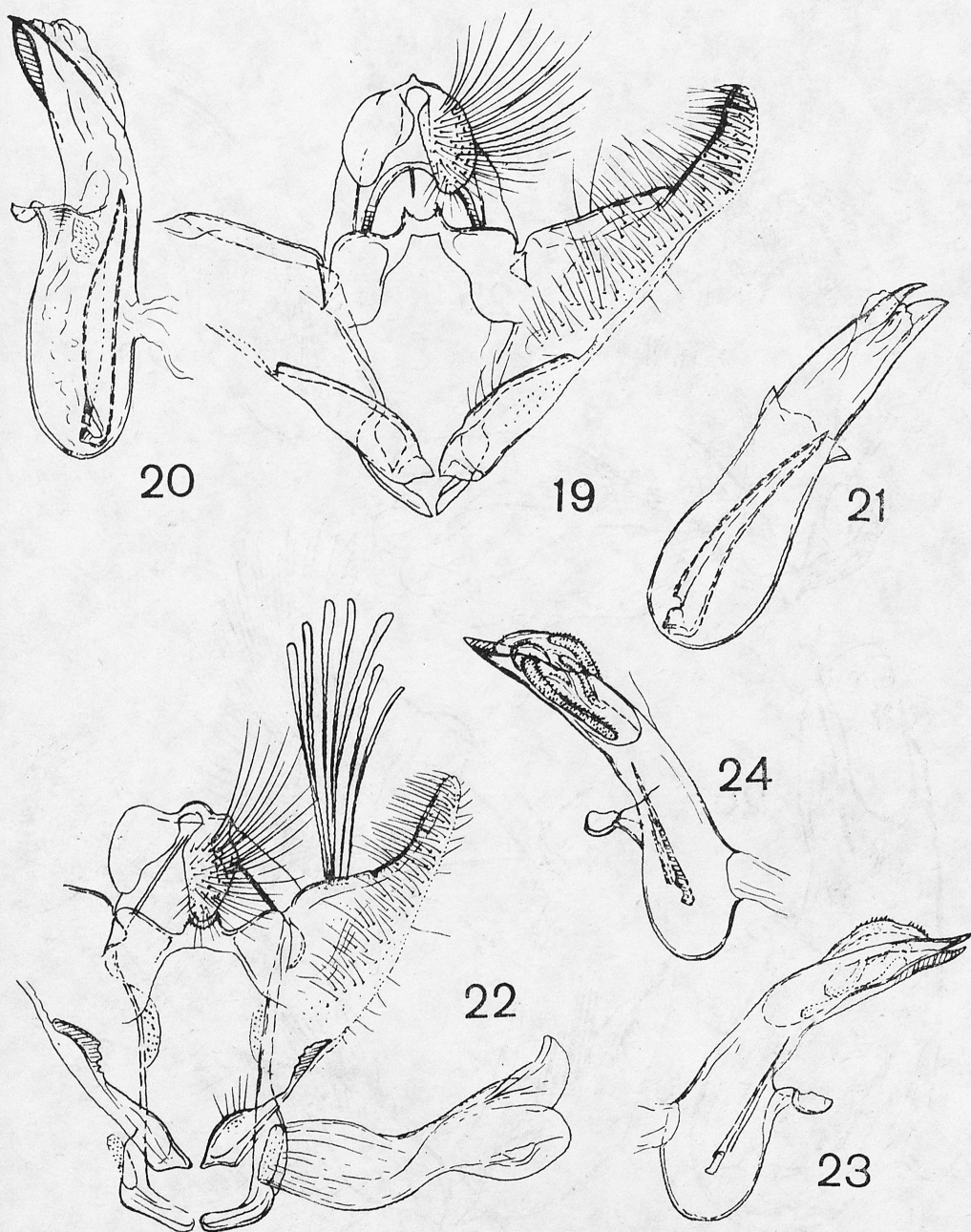
Figs 1—7. Male genitalia: 1, 2 — *Phtheochroa psaeoptera* sp. n., paratype; 3—5 — *Carolella emarcida* sp. n., holotype; 6, 7 — *C. aquila* sp. n., holotype



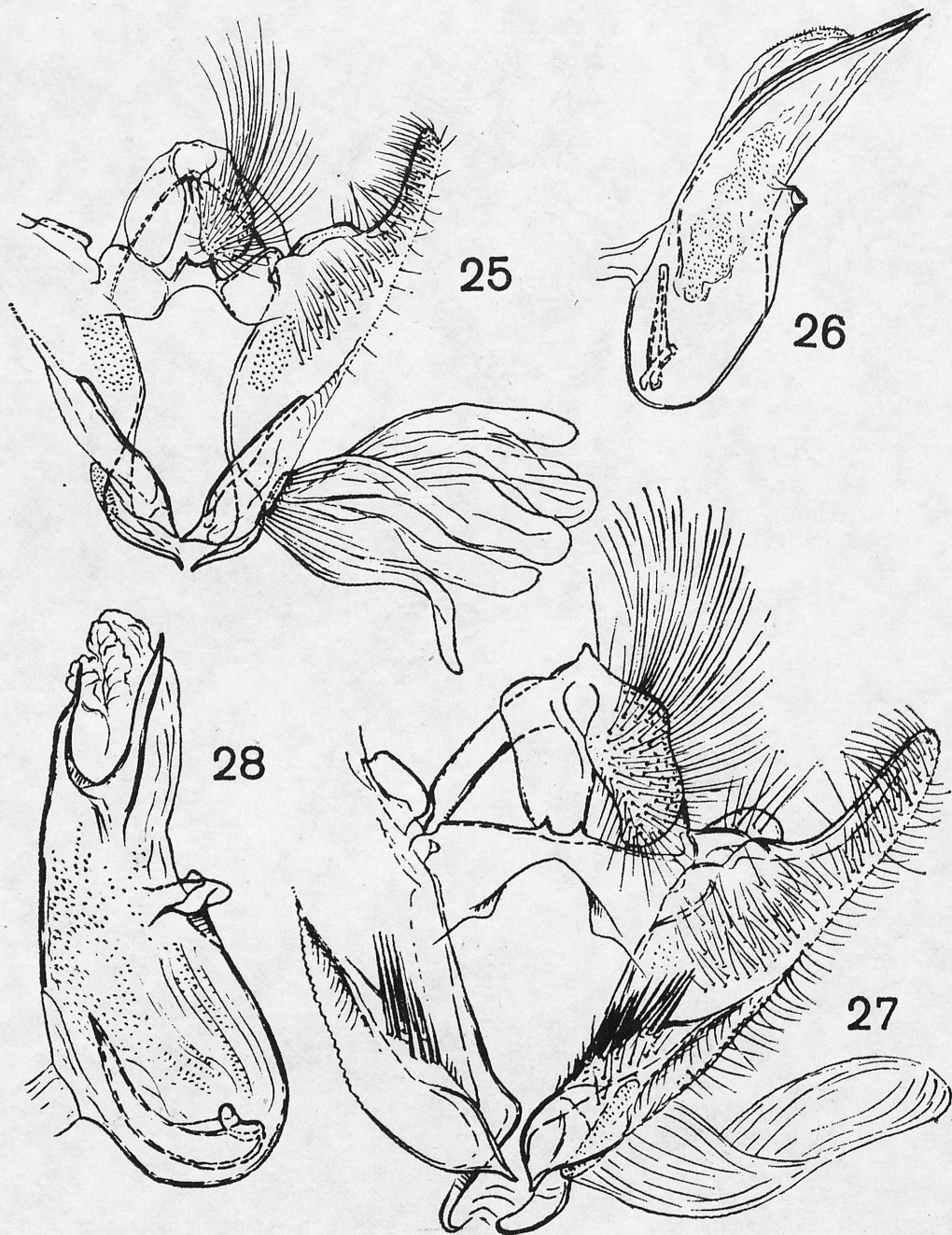
Figs 8—11. Male genitalia: 8, 9 — *Aethesoides timia* sp. n., holotype; 10, 11 — *Ae. inanita* sp. n., paratype



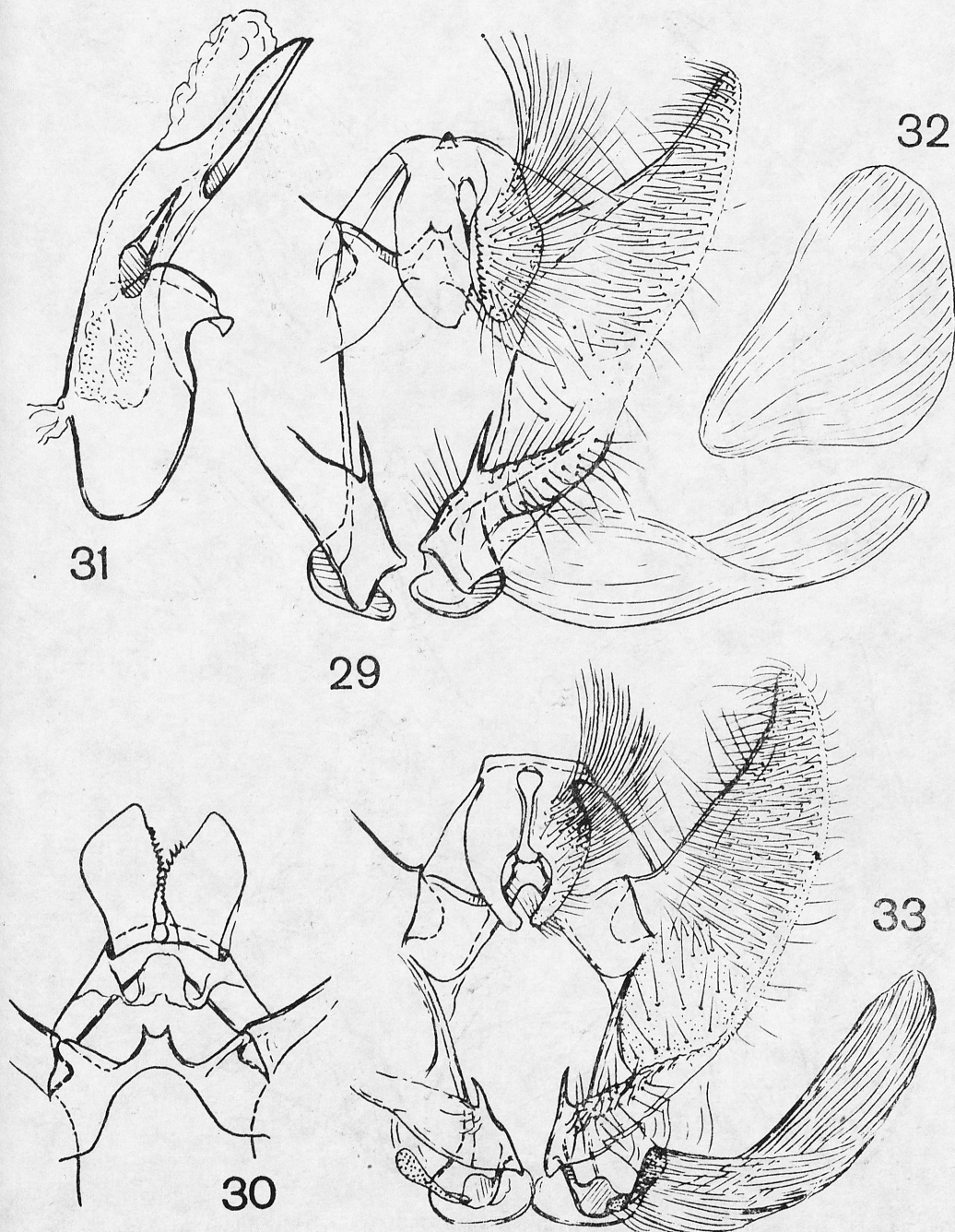
Figs 12—18. Male genitalia: 11—14 — *Henricus inspergatus* sp. n., paratype; 15—18 — *H. improvisus* sp. n., paratype



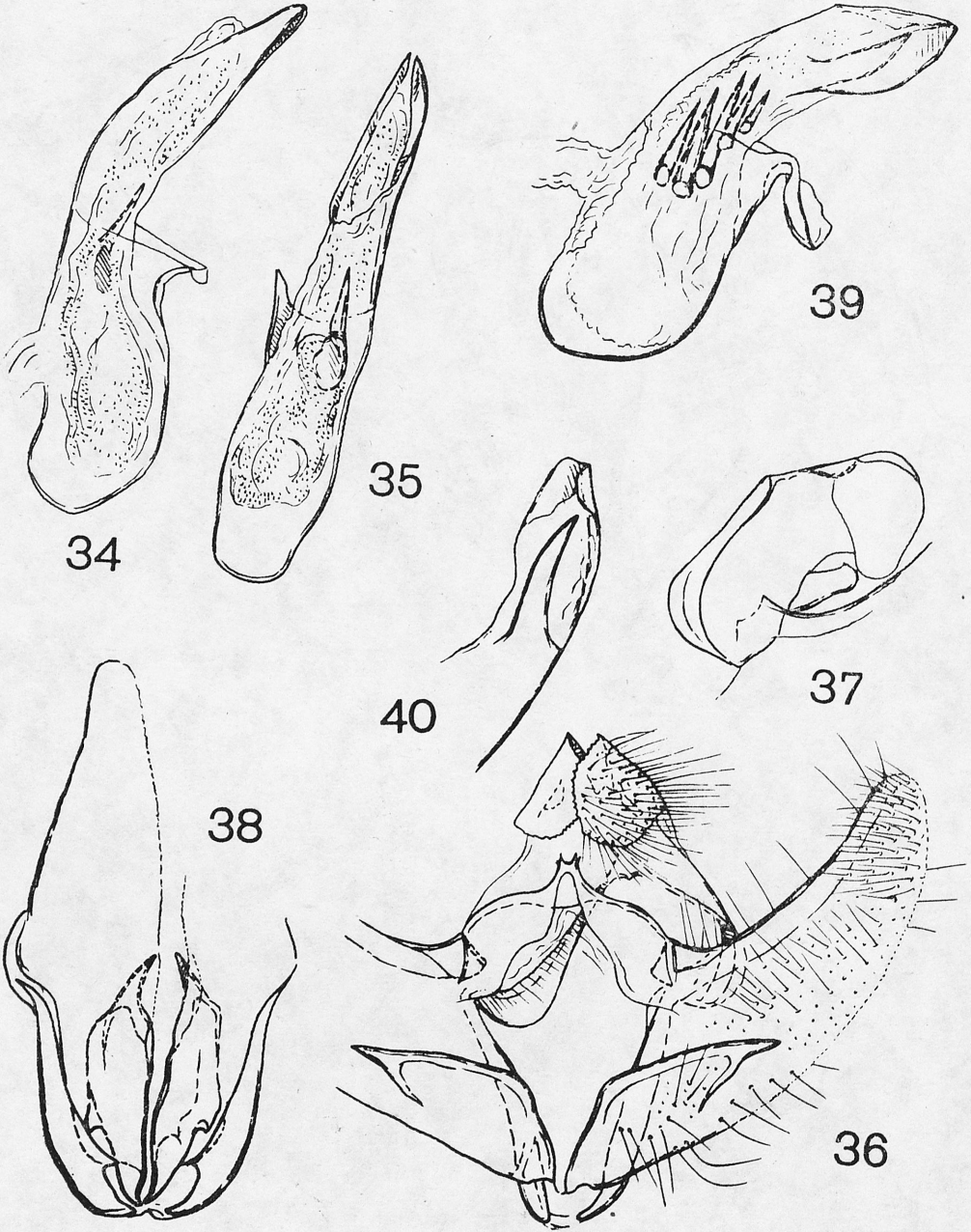
Figs 19—24. Male genitalia: 19—21 — *Henricus palimpsestus* sp. n., paratype, 22—24 — *H. exploratus* sp. n., holotype



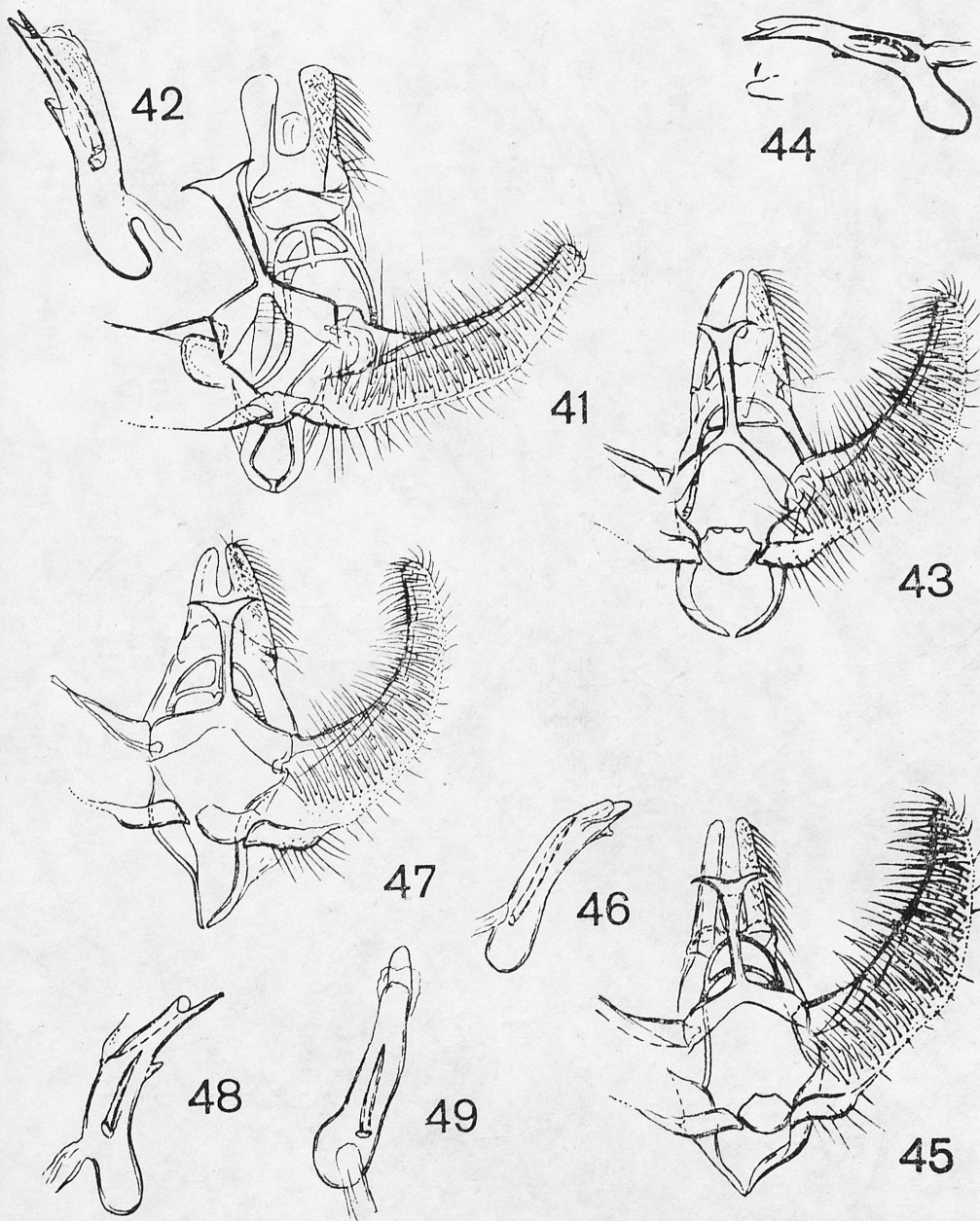
Figs 25—28. Male genitalia: 25, 26 — *Henricus zelotes* sp. n., holotype; 27, 28 — *H. comes vicecomes* ssp. n., holotype



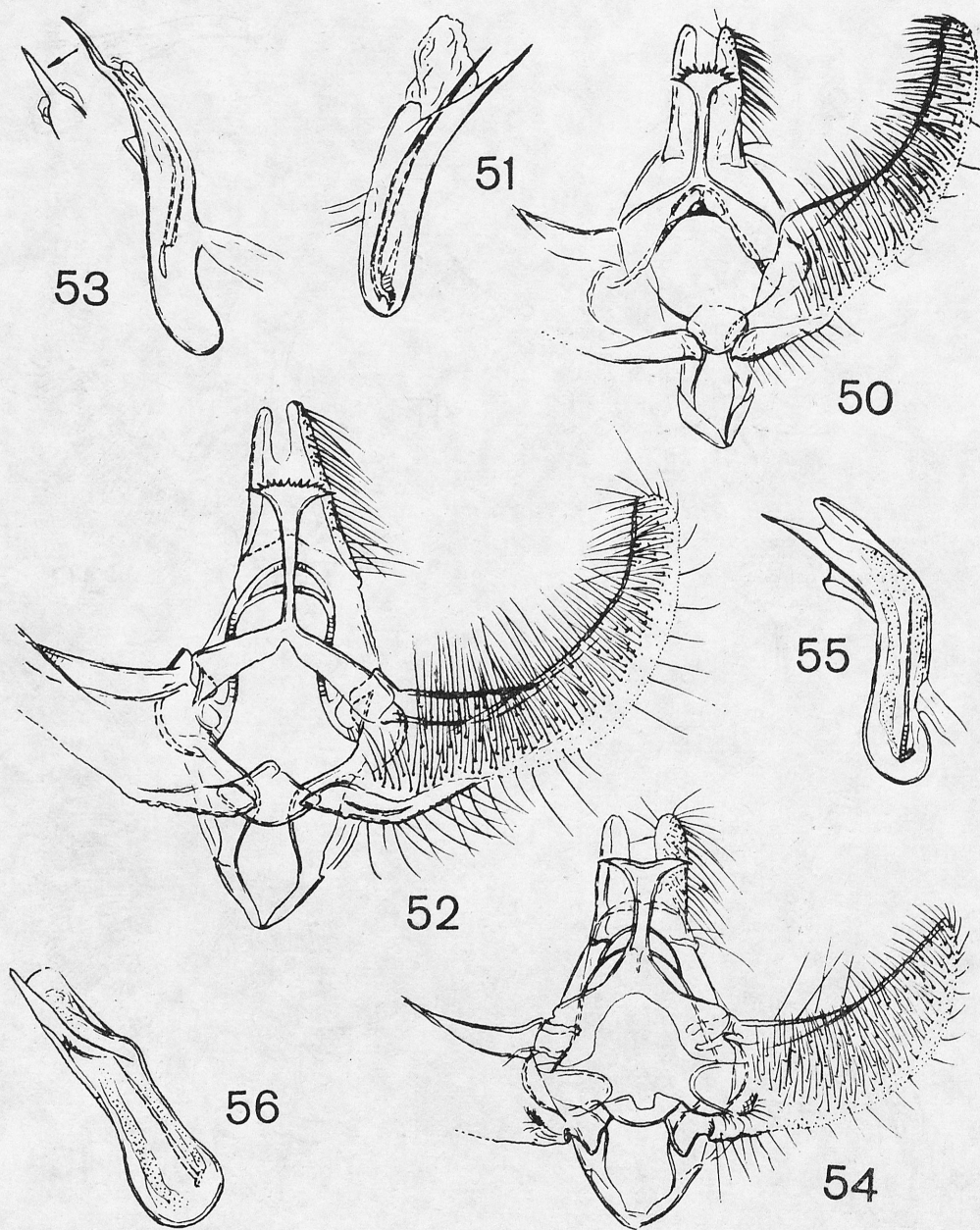
Figs 29—33. Male genitalia: 29—32 — *Henricus turbulus* CLARKE, San Cristobal de las Casas;
33 — *H. ophyrodes* (MEYR.), Braulio Carrillo



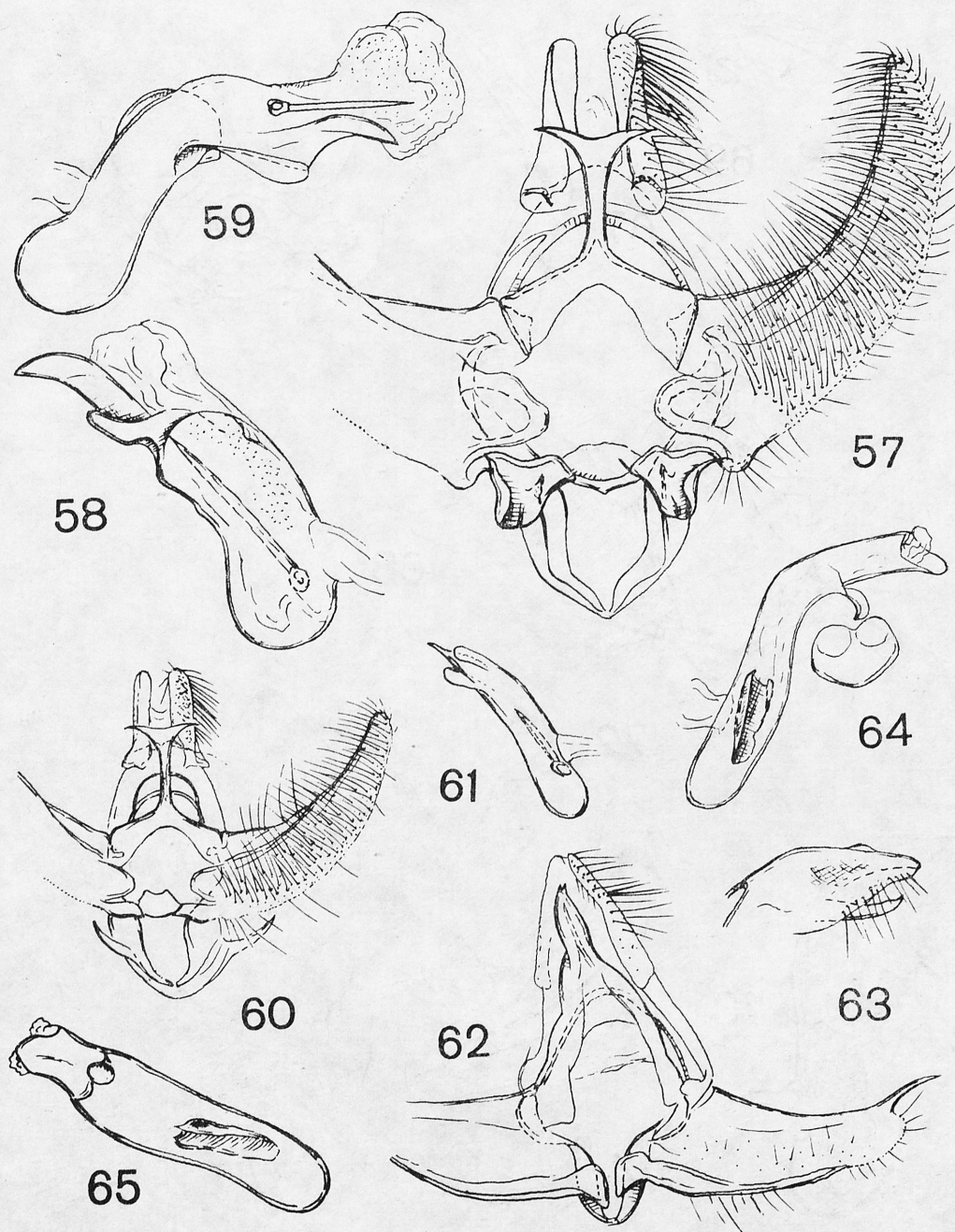
Figs 34—40. Male genitalia: 34, 35 — *Henricus ophyroides* (MEYR.), Braulio Carrillo; 36—40 — *H. inchoatus* sp. n., holotype



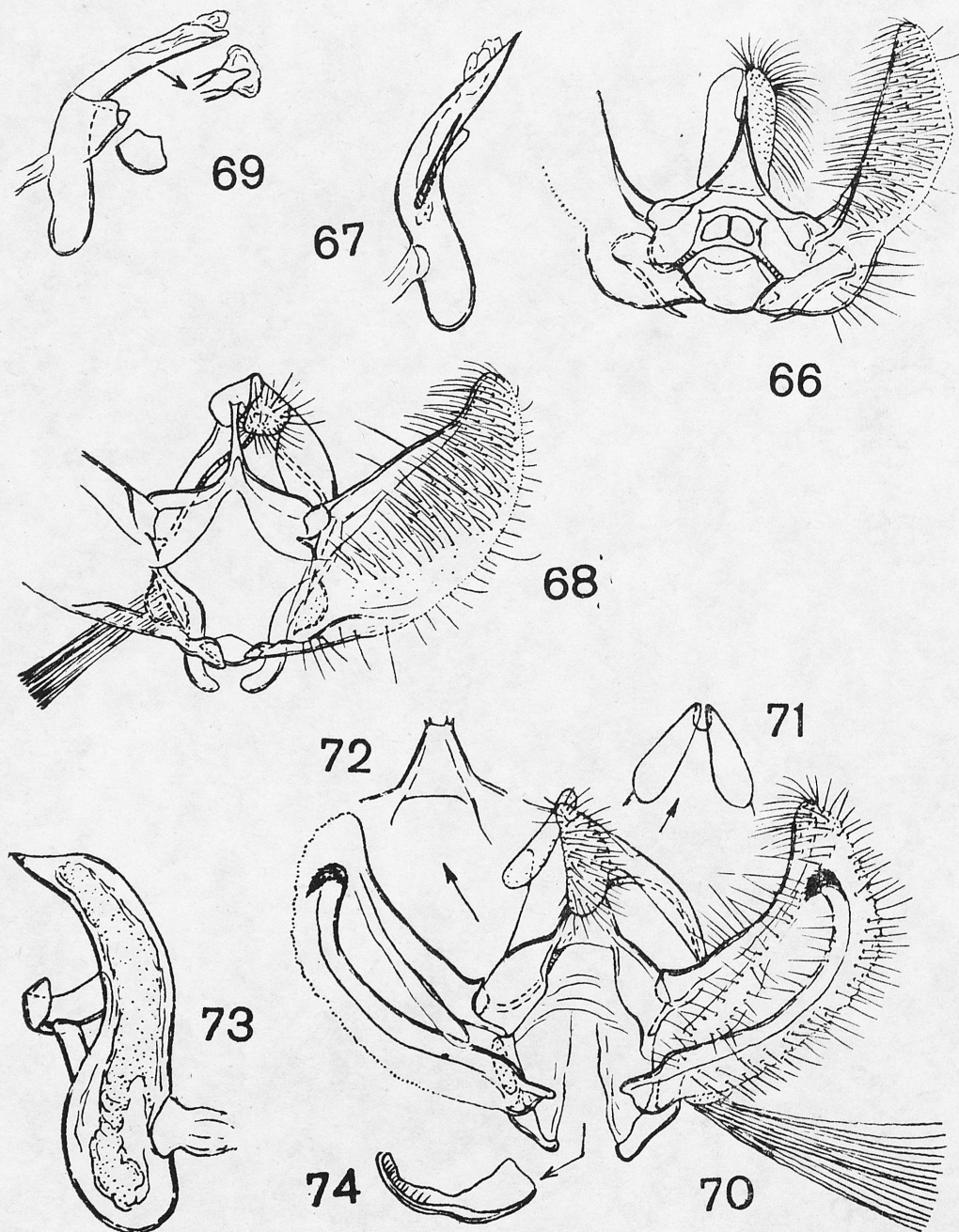
Figs 41—49. Male genitalia: 41, 42 — *Saphenista teopiscana* sp. n., holotype; 43, 44 — *S. orichalcana* sp. n., holotype; 45, 46 — *S. imaginaria* sp. n., holotype; 47—49 — *S. gilva* sp. n., holotype



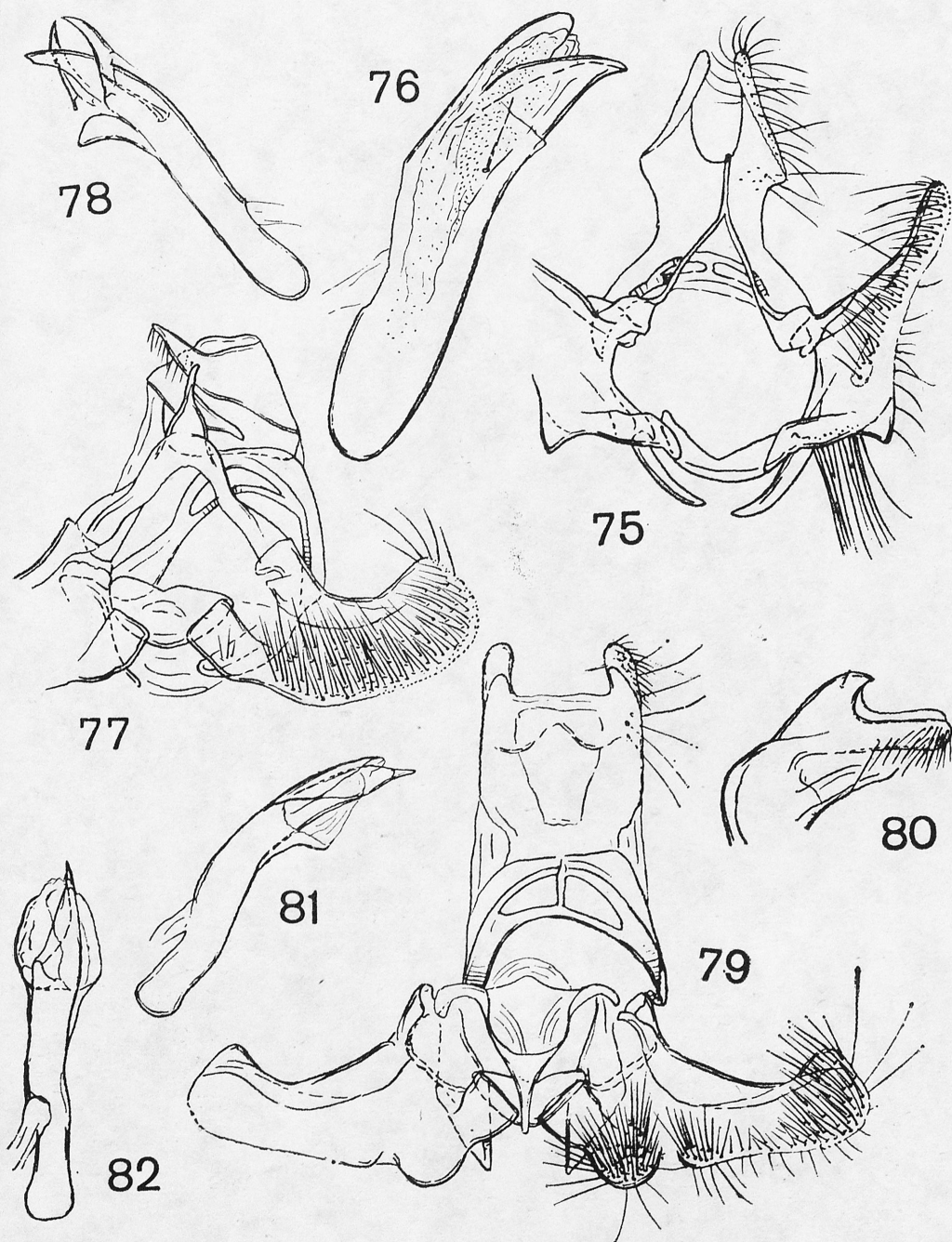
Figs 50—56. Male genitalia: 50, 51 — *Saphenista nongrata* RAZ., Huatusco; 52, 53 — *S. eranna* sp. n., paratype; 54—56 — *S. juvenca* sp. n., holotype



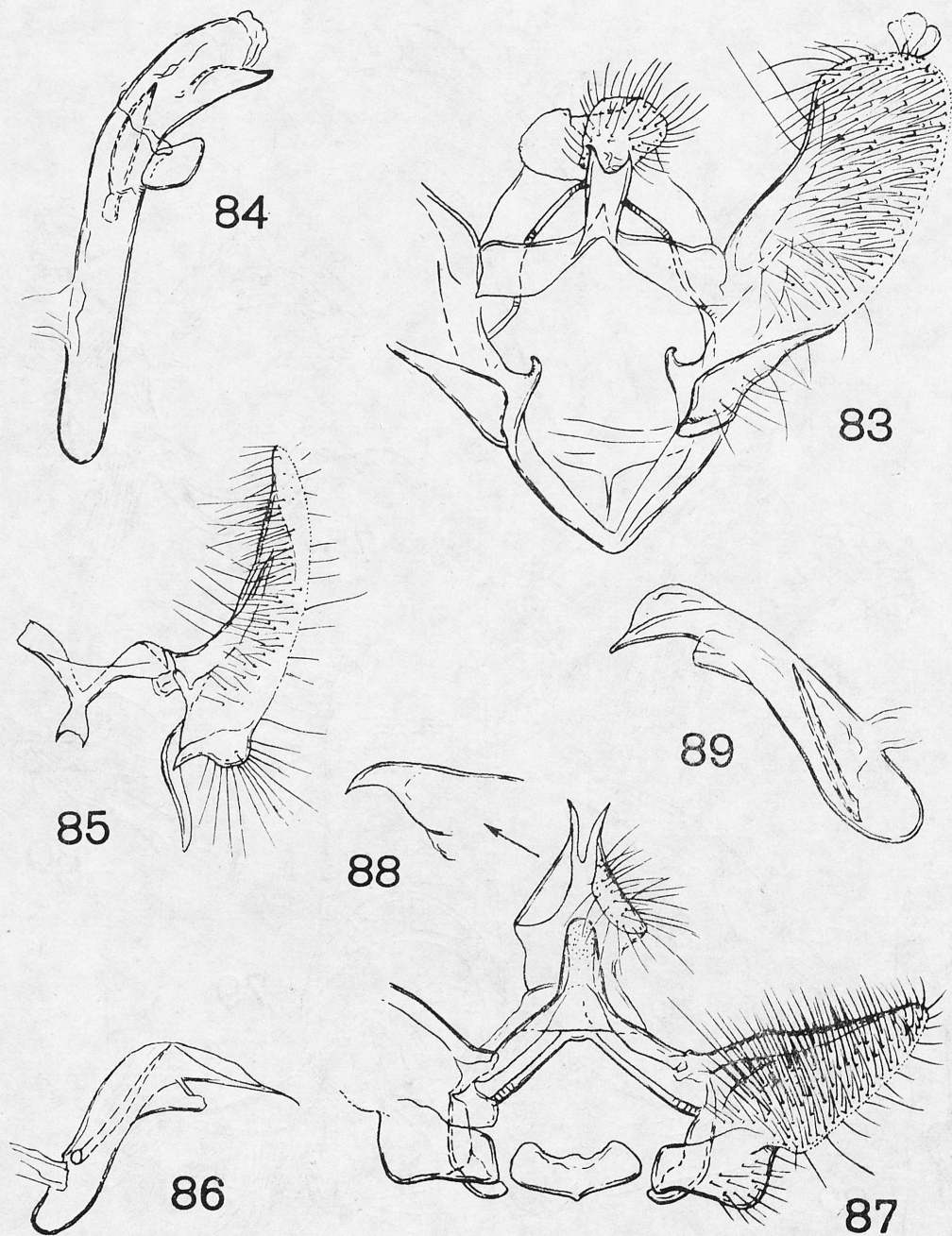
Figs 57—65. Male genitalia: 57, 58 — *Saphenista praefasciata* (MEYR.), Cerro de la Muerte (Costa Rica); 59 — same species, same locality; 60, 61 — *S. latridia* sp. n., holotype; 62—65 — *Phalonidia diaphona* sp. n., holotype



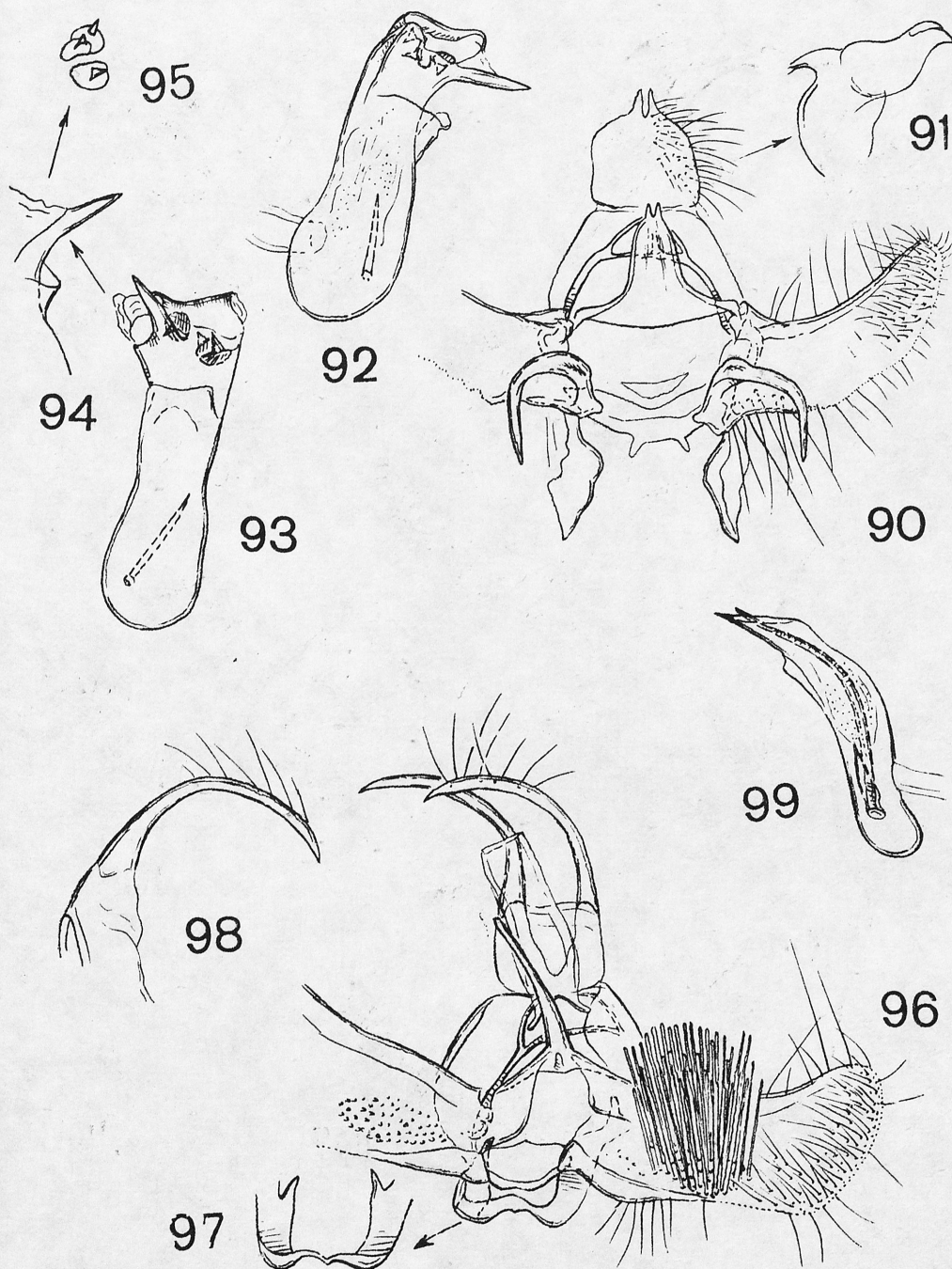
Figs 66—74. Male genitalia: 66, 67 — *Phalonidia synucha* sp. n., holotype; 68, 69 — *Cirrhothaumatia tornosema* (CLARKE), Huatusco; 70—74 — *Thysanphalonia cirrhites* sp. n., holotype



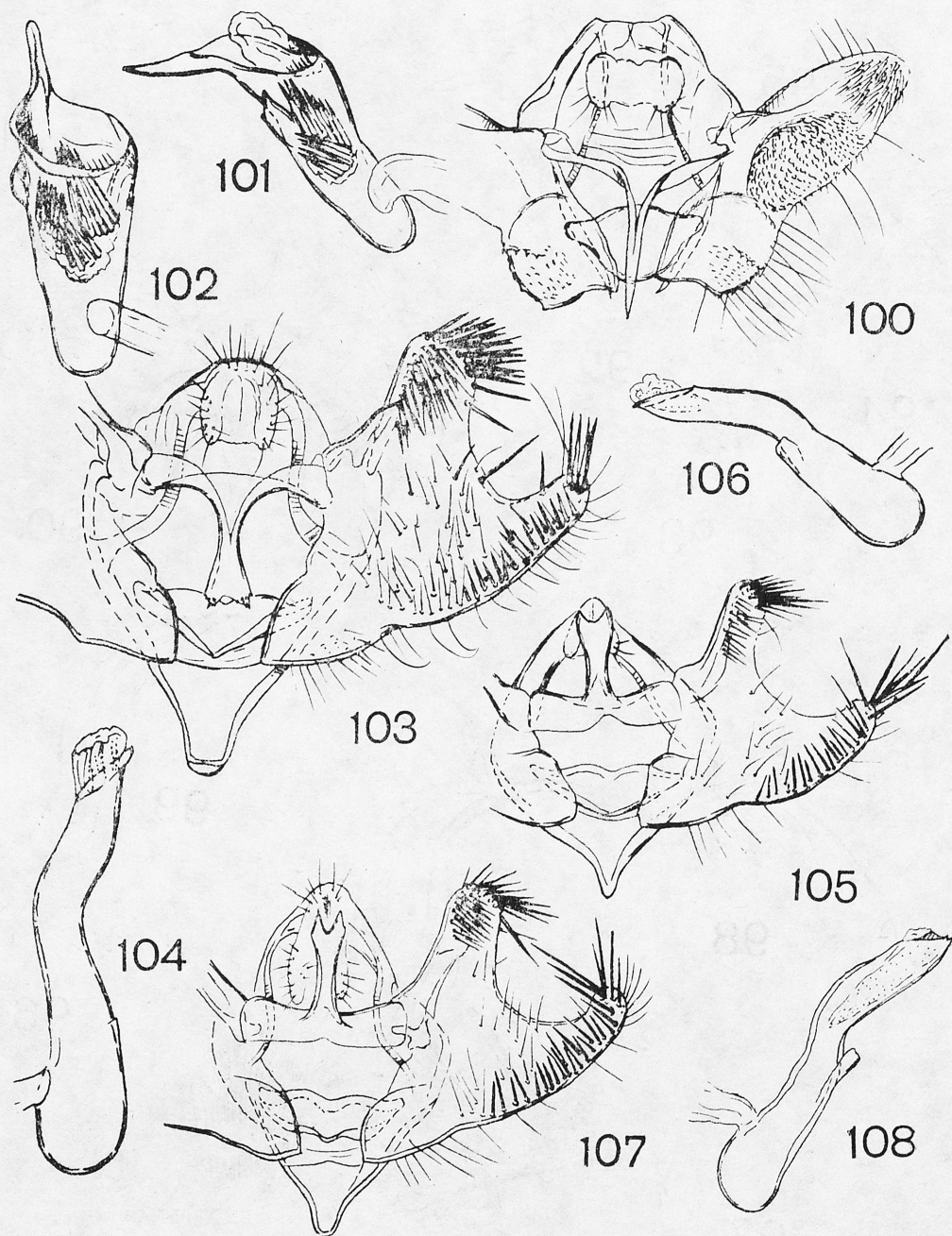
Figs 75—82. Male genitalia: 75, 76 — *Lasiothyris cerastes* sp. n., holotype; 77, 78 — *L. diclada* sp. n., holotype; 79—82 — *L. cnestovalva* sp. n., holotype



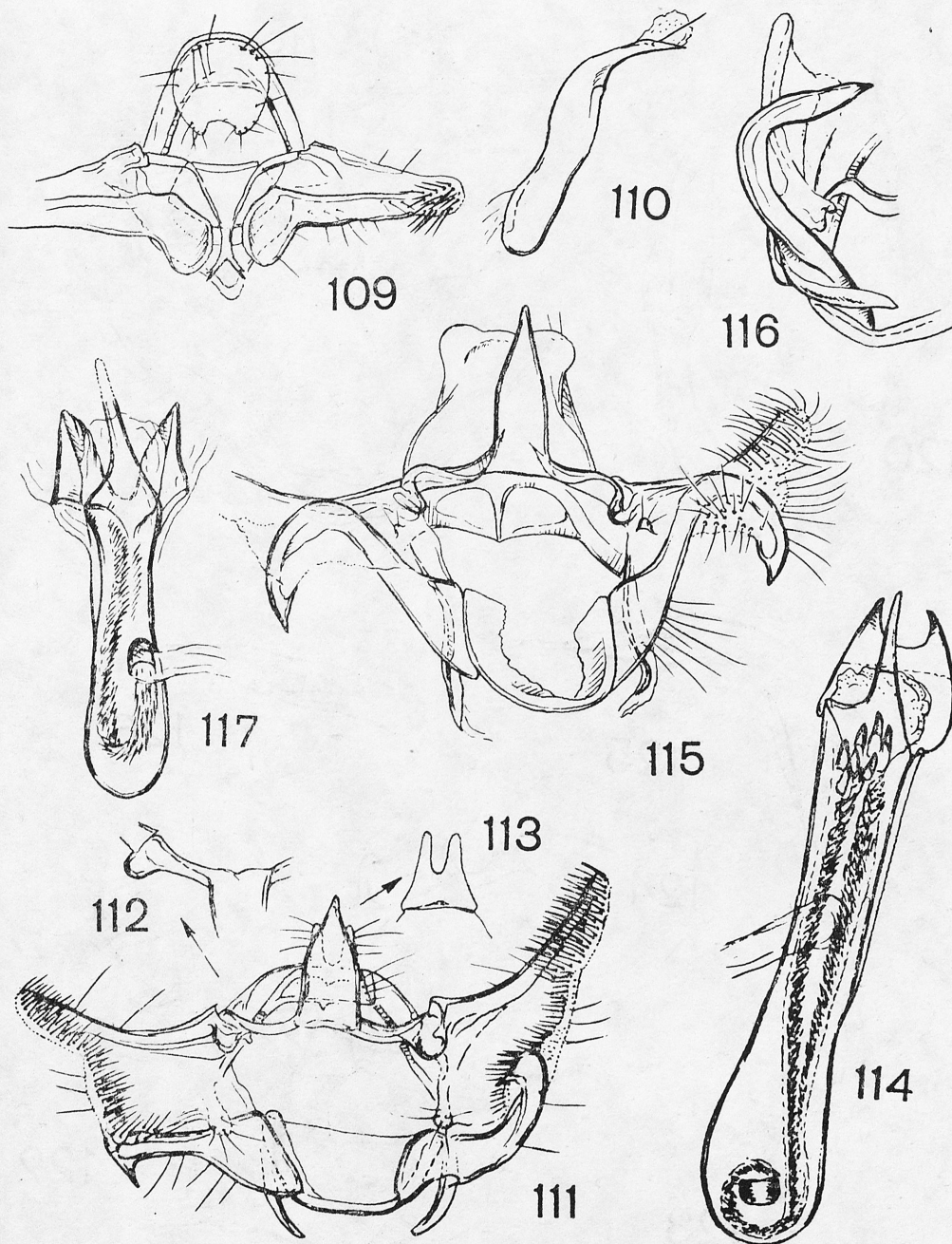
Figs 83—89. Male genitalia: 83, 84 — *Lasiothyris micida* sp. n., holotype; 85, 86 — *Platphalonia luxata* sp. n., paratype; 87—89 — *Mielkeana angysocia* sp. n., holotype



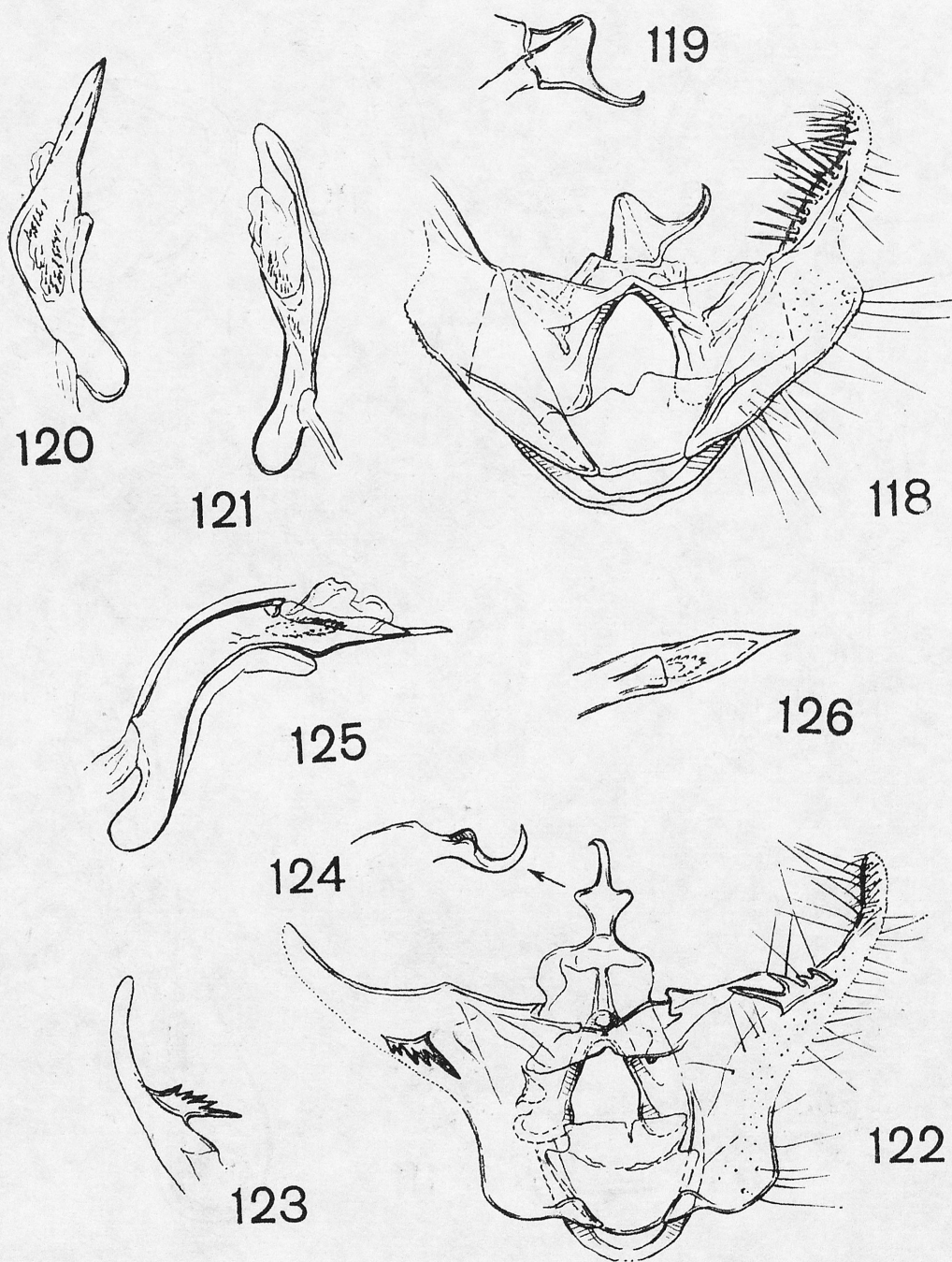
Figs 90—99. Male genitalia: 90—95 — *Mielkeana affecta* (Raz.), Huatusco; 96—99 — *Mimeugnosta enopla* sp. n., holotype



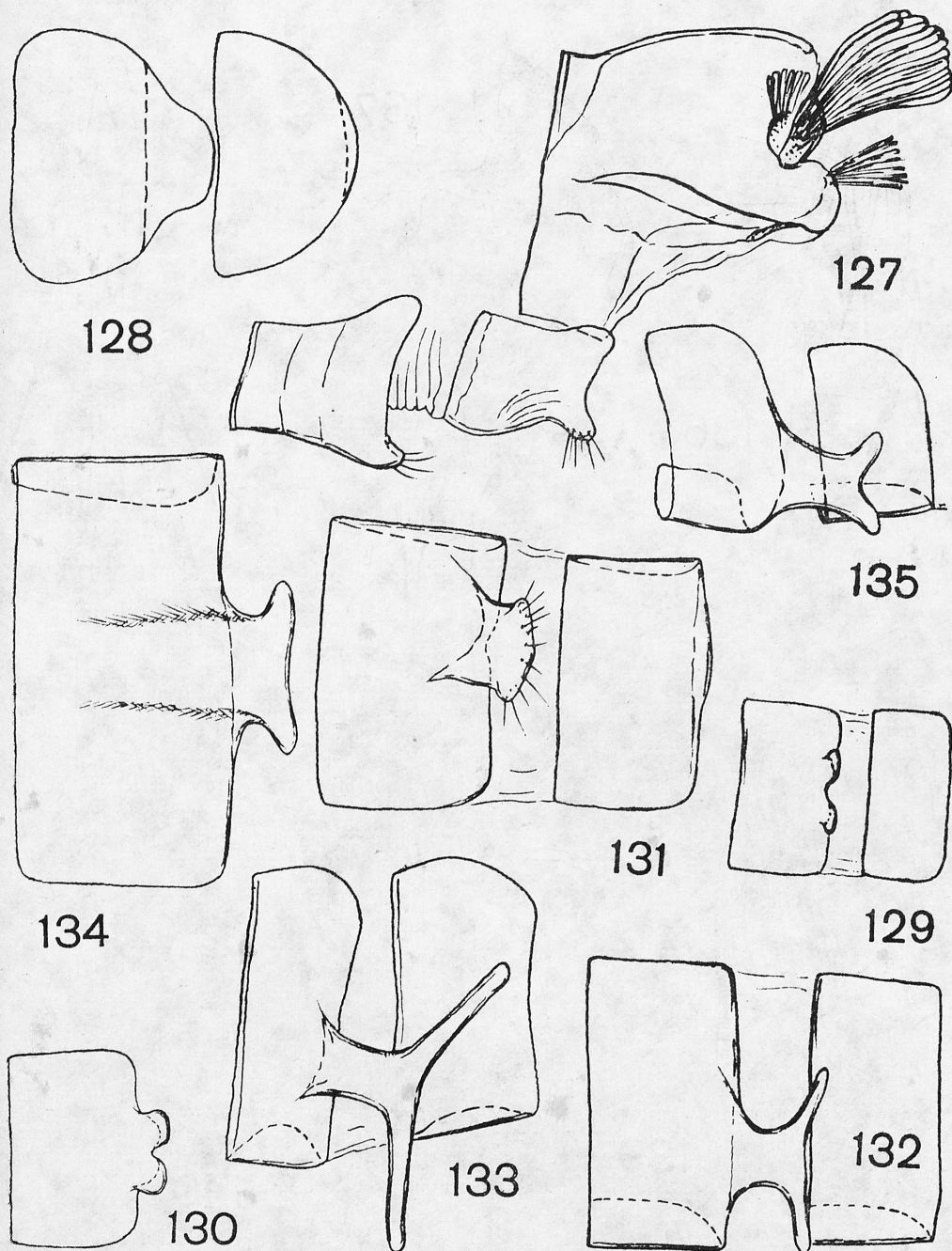
Figs 100—108. Male genitalia: 100—102 — *Cochylis methoea* sp. n., holotype; 103, 104 — *Spinipogon veracrusanus* sp. n., holotype; 105, 106 — *S. veracrusanus* f. 1; 107, 108 — *S. veracrusanus* f. 2



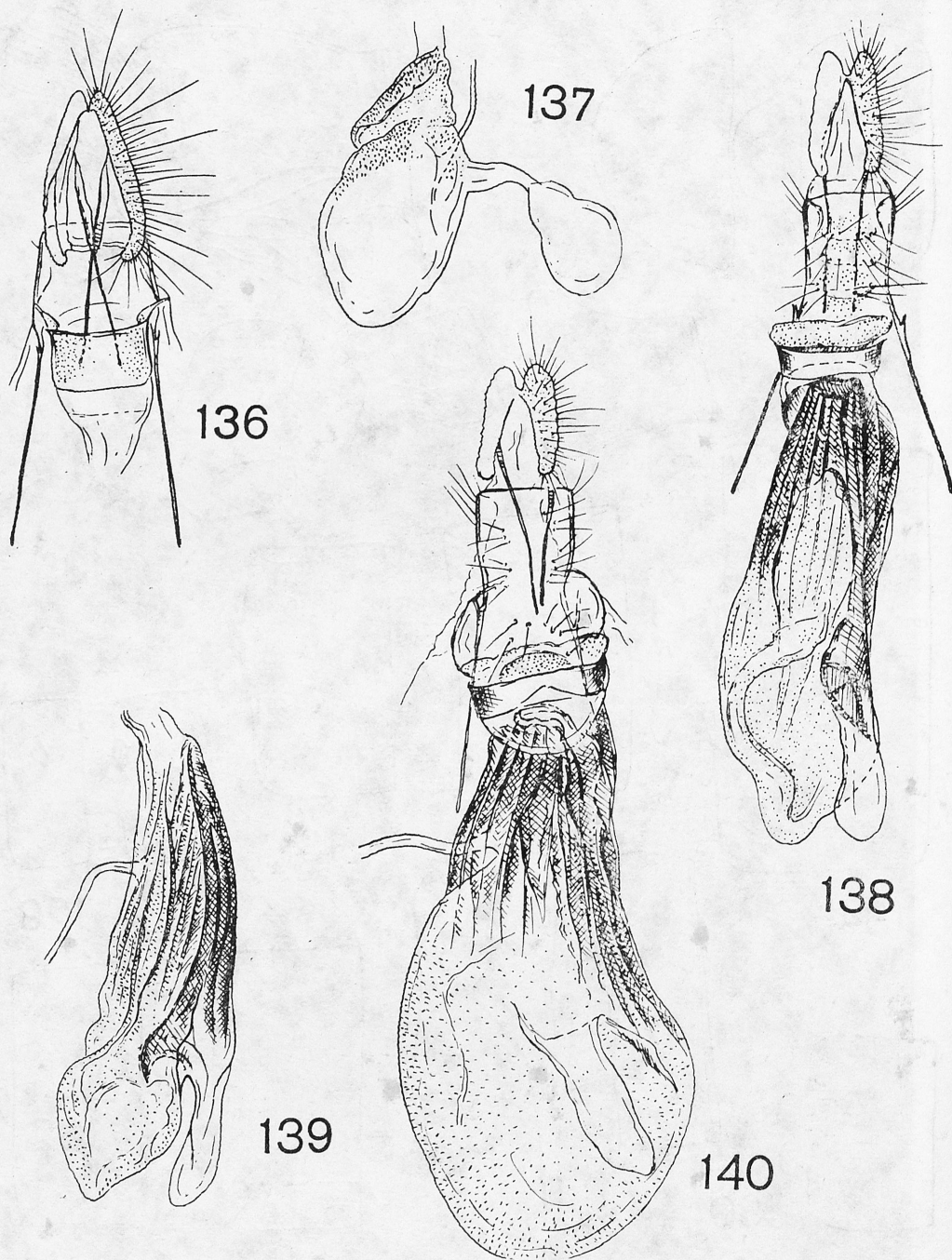
Figs 109—117. Male genitalia: 109, 110 — *Spinipogon elaphroterus* sp. n., holotype; 111—114 — *Enallcochylis enochra* sp. n., holotype; 115—117 — *E. empeda* sp. n., holotype



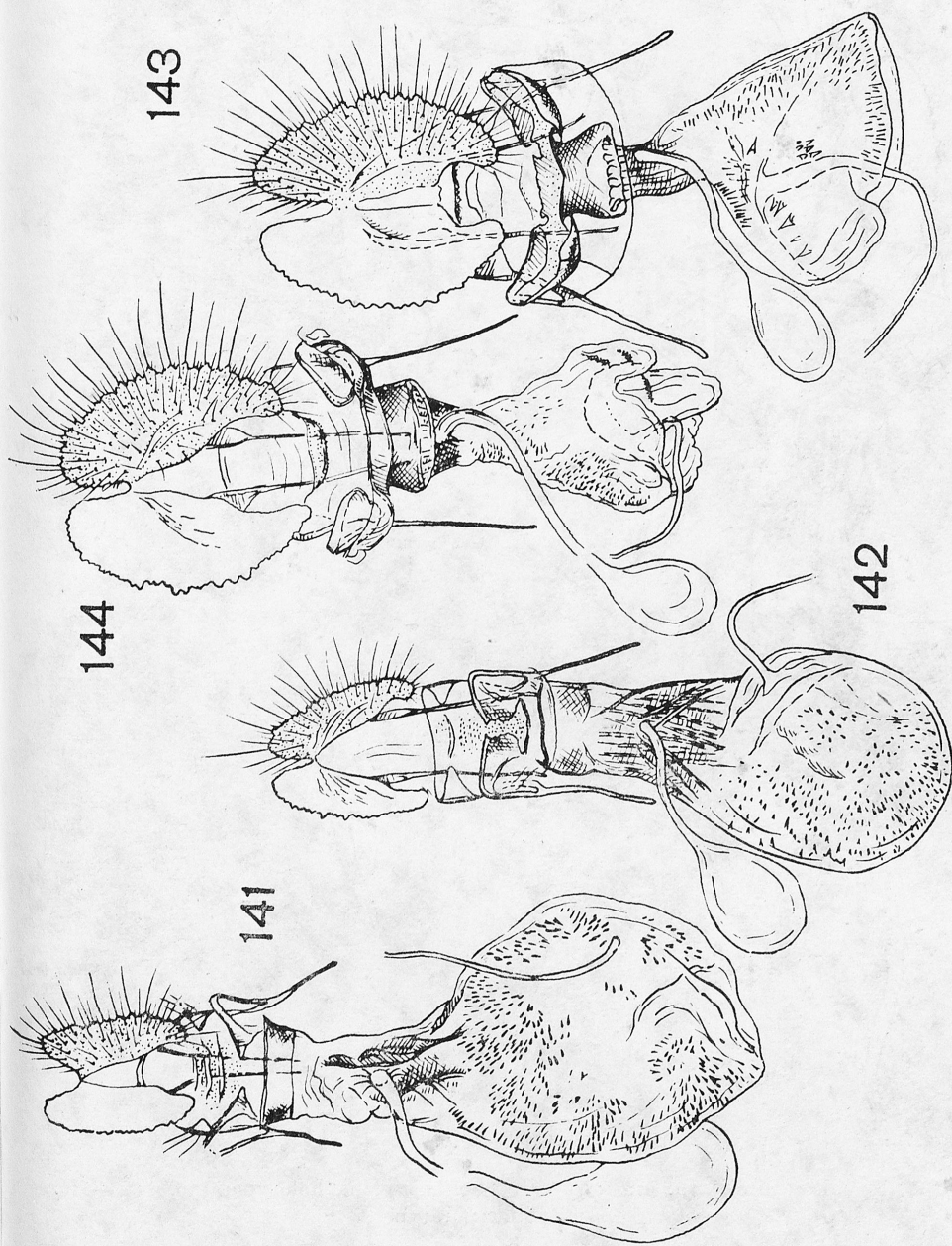
Figs 118—126. Male genitalia: 118—121 — *Ceratuncus tantulus* sp. n., holotype; 122—126 — *C. cristatus* sp. n., holotype



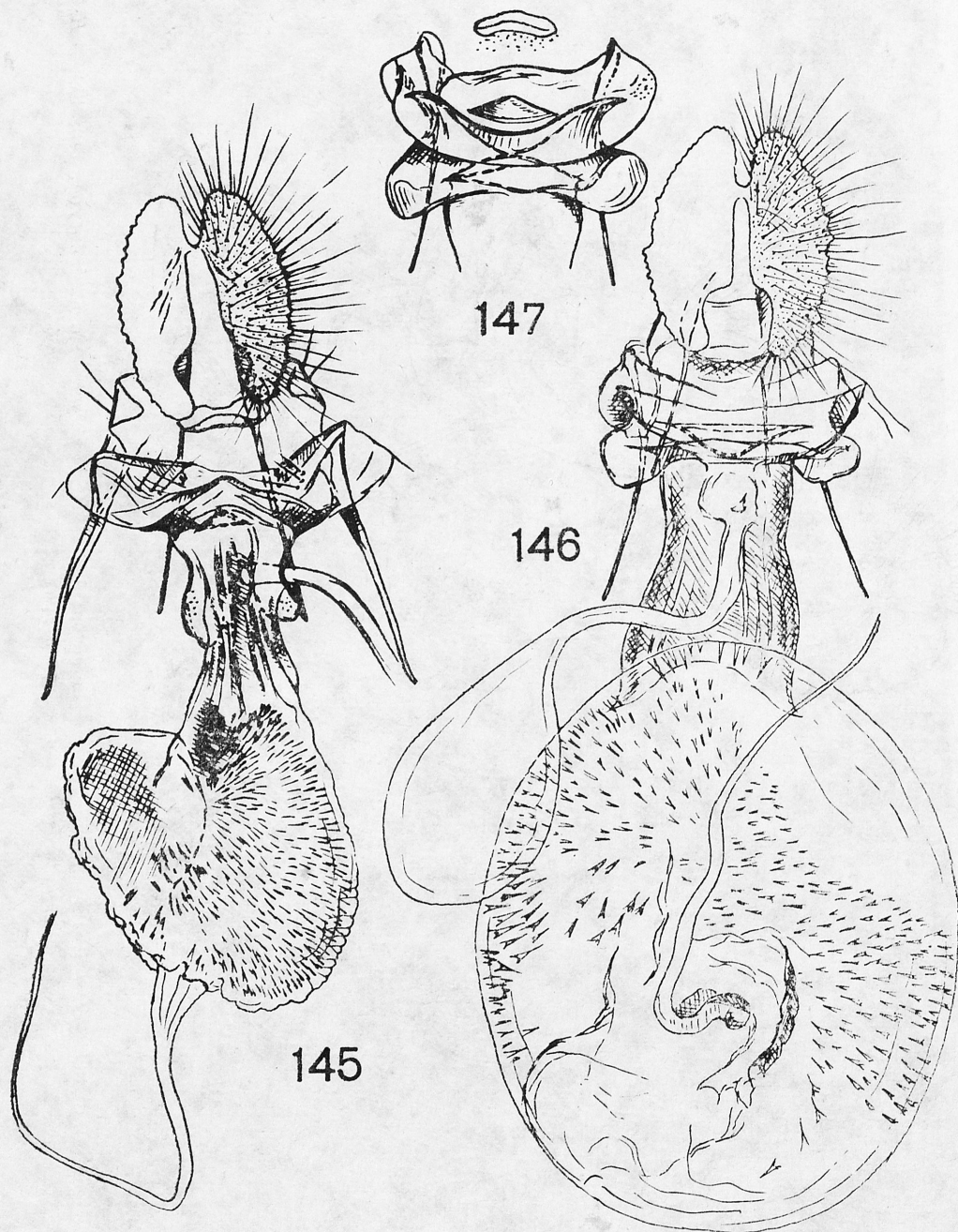
Figs 127—135. Abdominal organs: 127 — *Henricus inspergatus* sp. n., holotype; 128 — *Saphenista teopiscana* sp. n., holotype; 129 — *S. orichalcana* sp. n., holotype; 130 — *S. imaginaria* sp. n., holotype; 131 — *S. eranna* sp. n., paratype; 132 — *Lasiothyris cerastes* sp. n., holotype; 133 — *L. dielada* sp. n., holotype; 134 — *Mielkeana engysocia* sp. n., holotype; 135 — *Mim-eugnosta enopla* sp. n., holotype



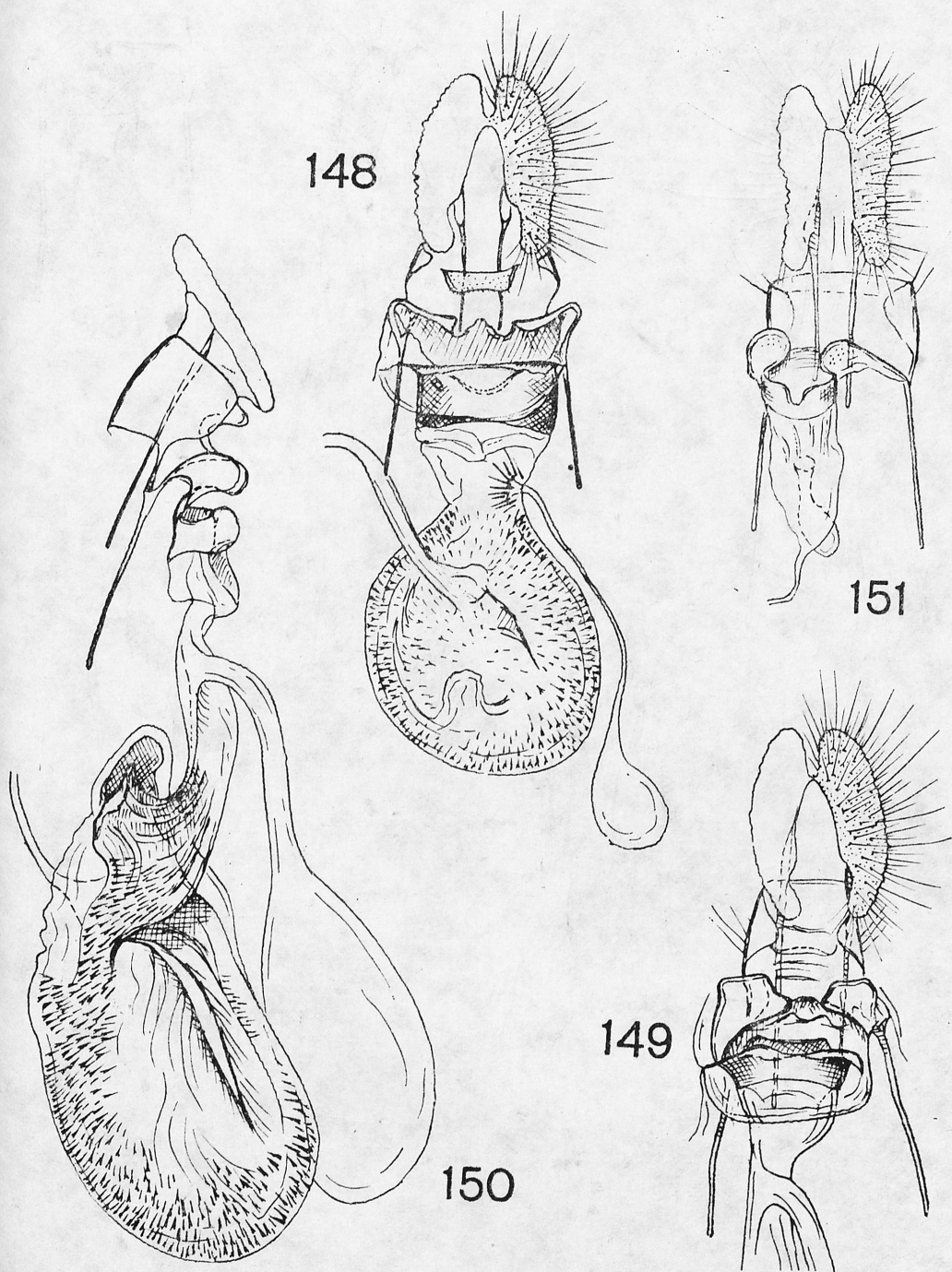
Figs 136—140. Female genitalia: 136, 137 — *Carolella desinens* sp. n., paratype; 138, 139 — *Aethesoides timia* sp. n., paratype; 140 — *Ae. inanita* sp. n., paratype



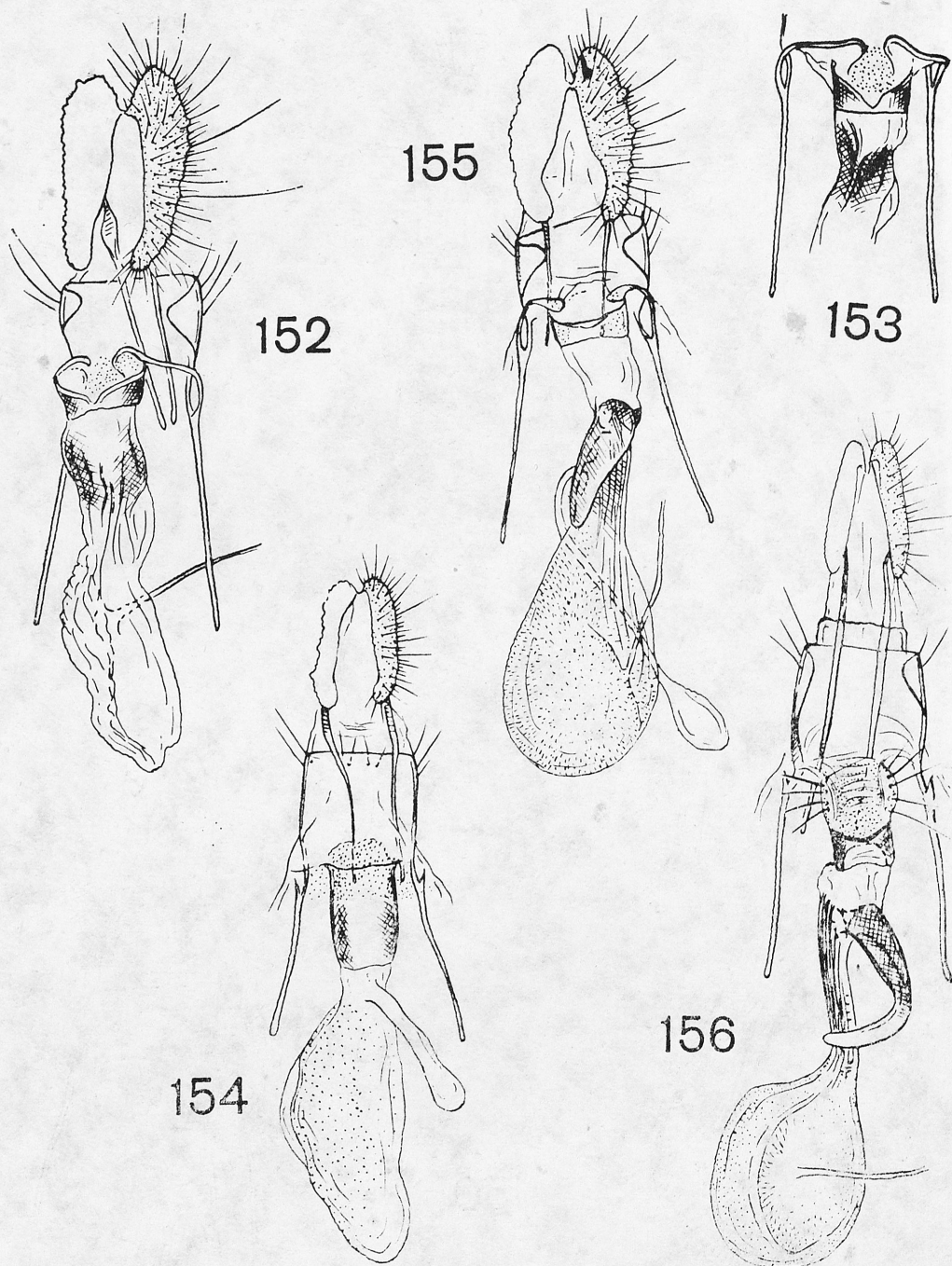
Figs 141—144. Female genitalia: 141 — *Henricus inaninalis* sp. n., holotype; 142 — *H. inspergatus* sp. n., holotype; 143, 144 — *H. patimpsestus* sp. n., paratypes



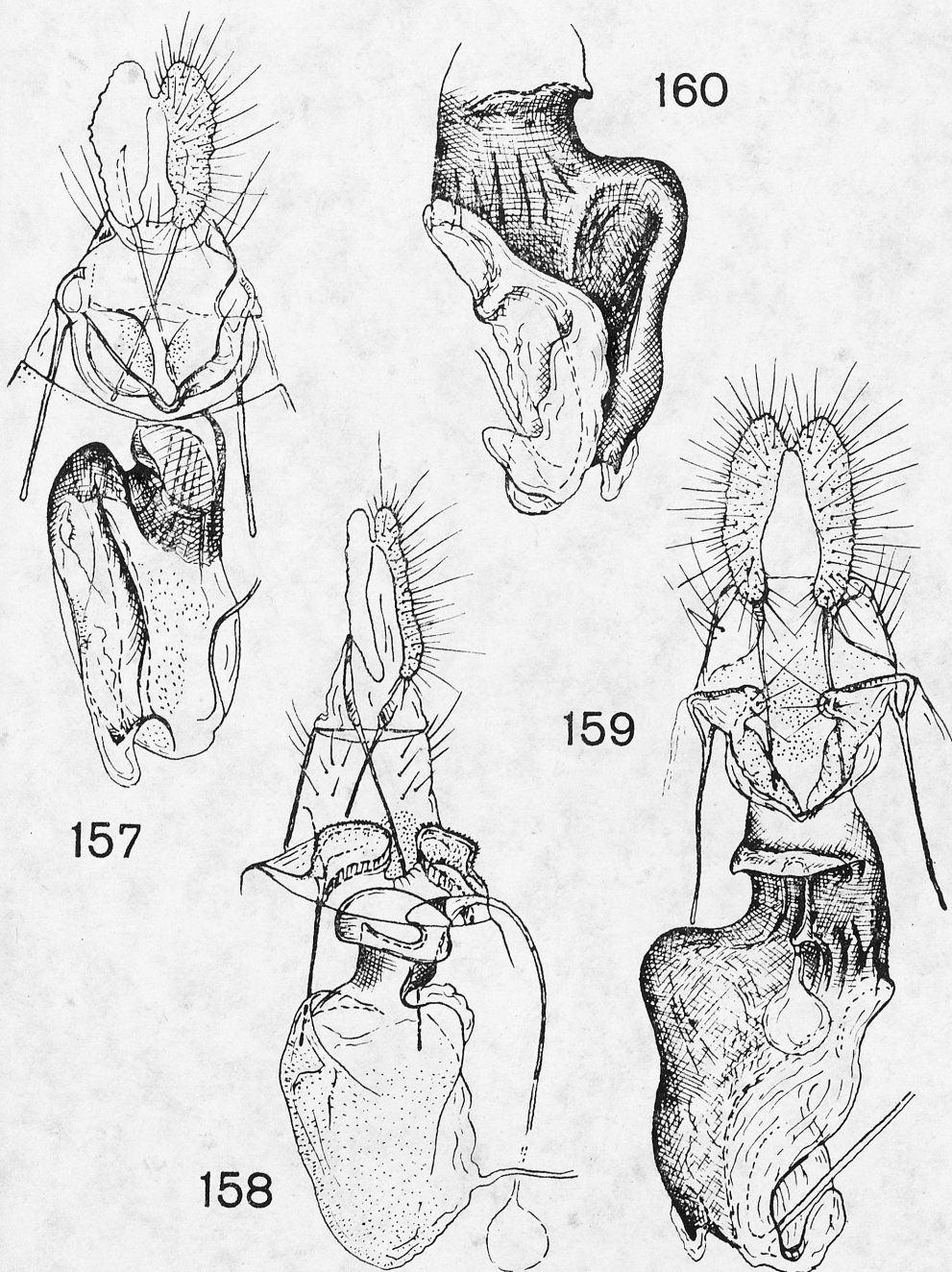
Figs 145—147. Female genitalia sp. n.: 145 — *H. insolitus* sp. n., holotype; 146, 147 — *H. comes vicecomes* sp. n., paratype



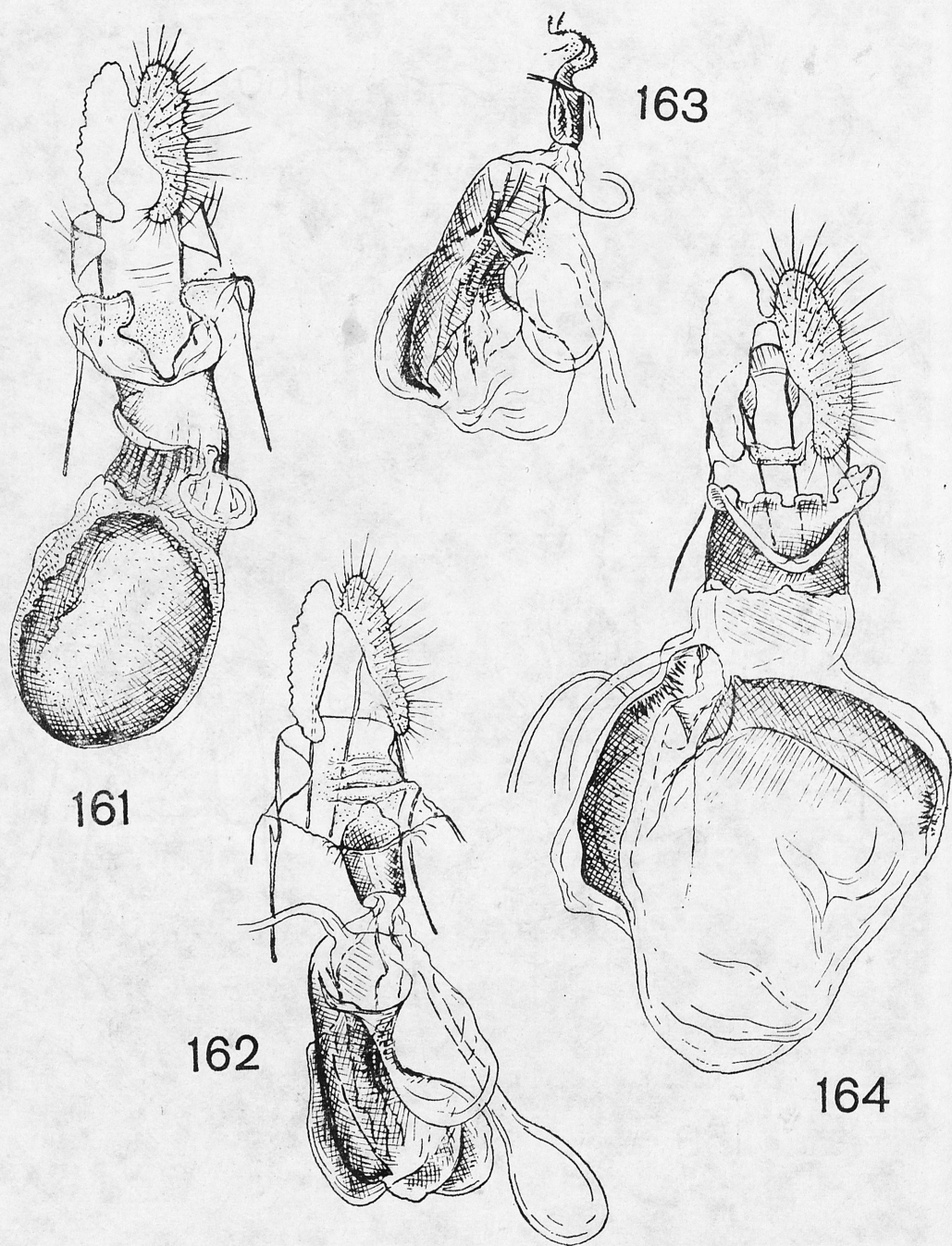
Figs 148—151. Female genitalia: 148 — *H. exploratus* sp. n., paratype; 149, 150 — *H. ophyrodes* (MEYR.), Braulio Carrillo; 151 — *Saphenista imaginaria* sp. n., paratype



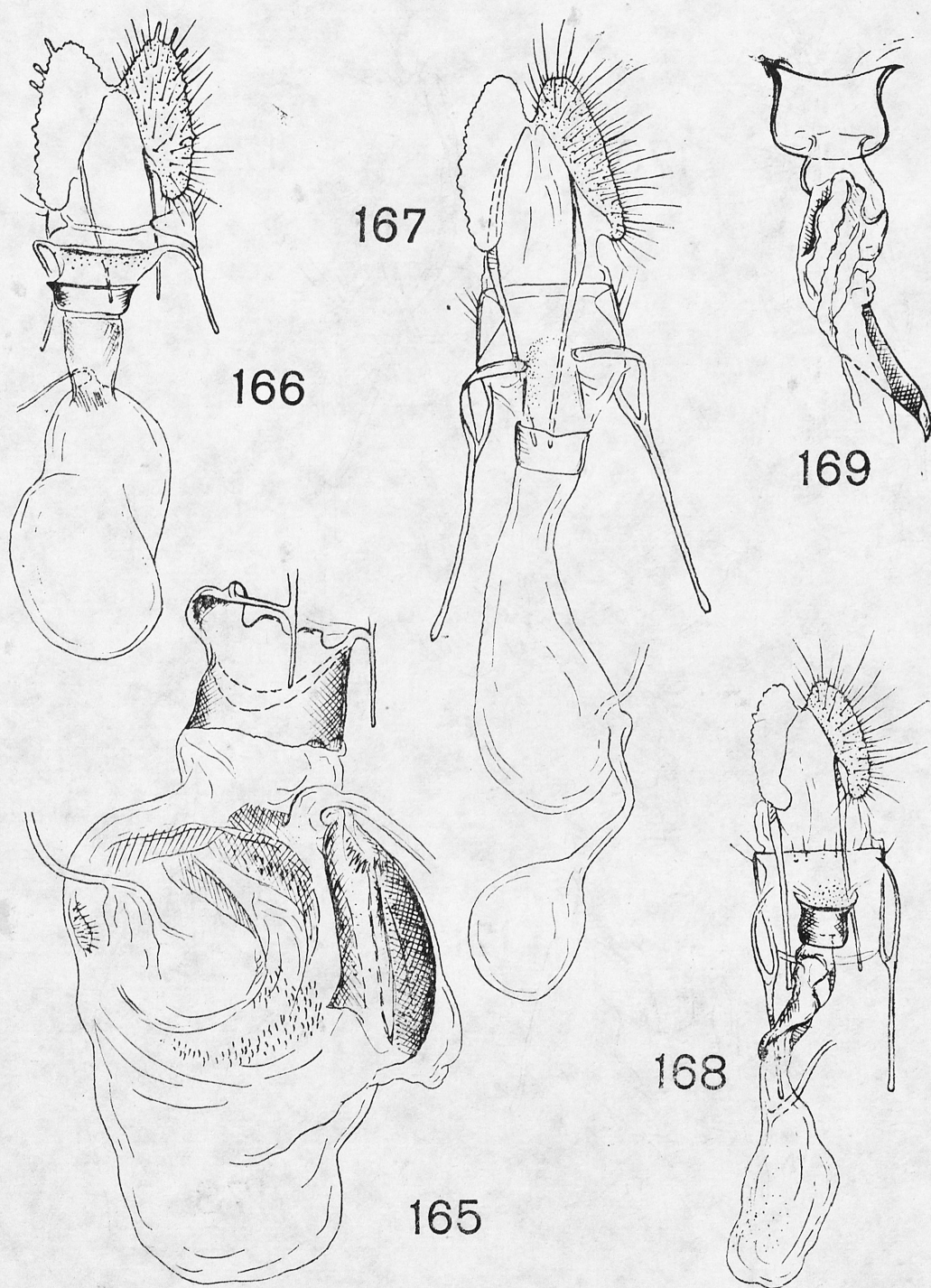
Figs 152—156. Female genitalia: 152 — *Saphenista onychina* sp. n., holotype, 153 — same species, paratype; 154 — *S. praia* Raz., Turrialba; 155 — *S. eranna* sp. n., holotype; 156 — *S. dexia* sp. n., holotype



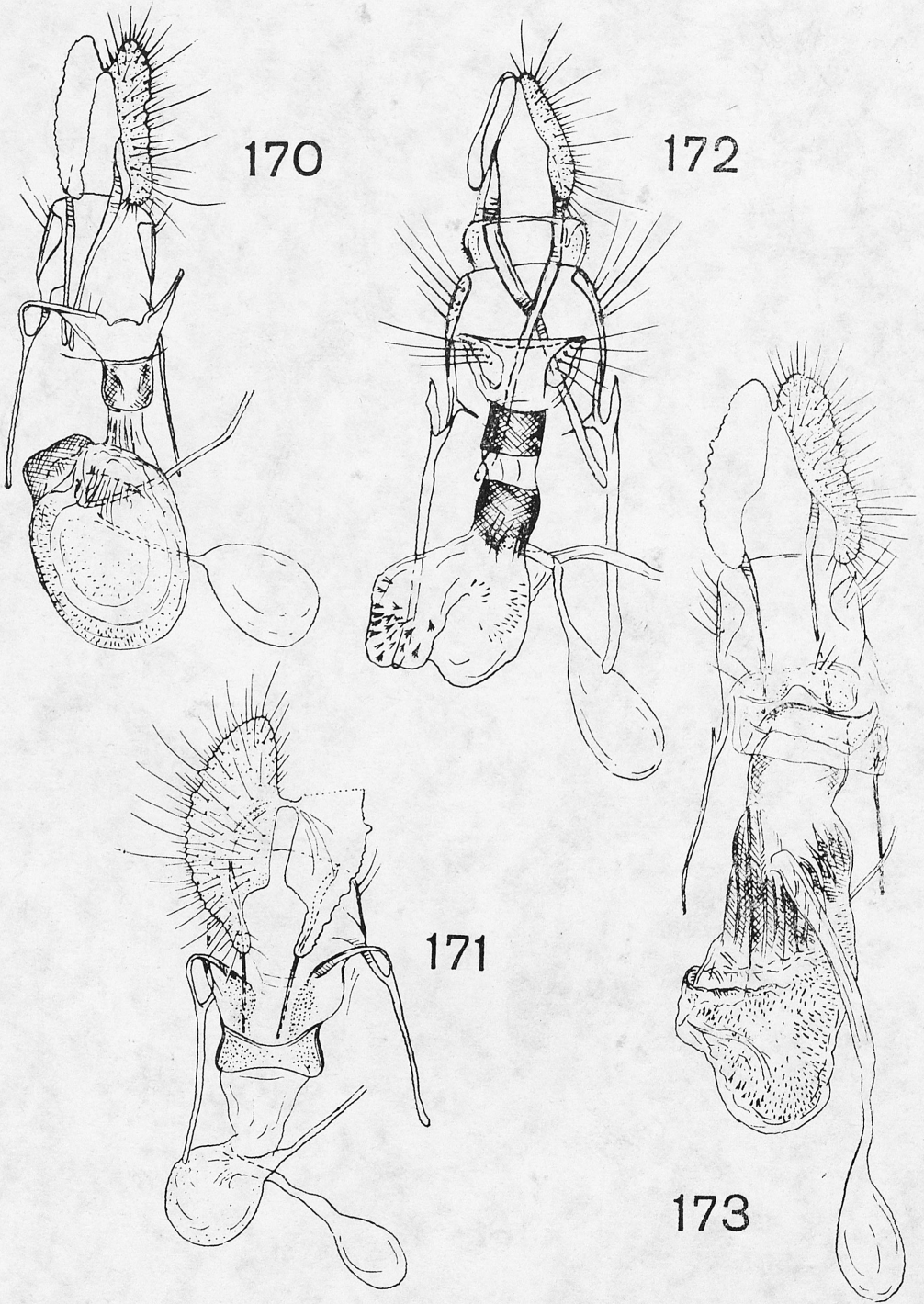
Figs 157—160. Female genitalia: 157 — *Saphenista orescia* sp. n., paratype; 158 — *S. oreada* sp. n., holotype; 159, 160 — *S. praefasciata* (MEYR.), Cerro de Muerte (Costa Rica)



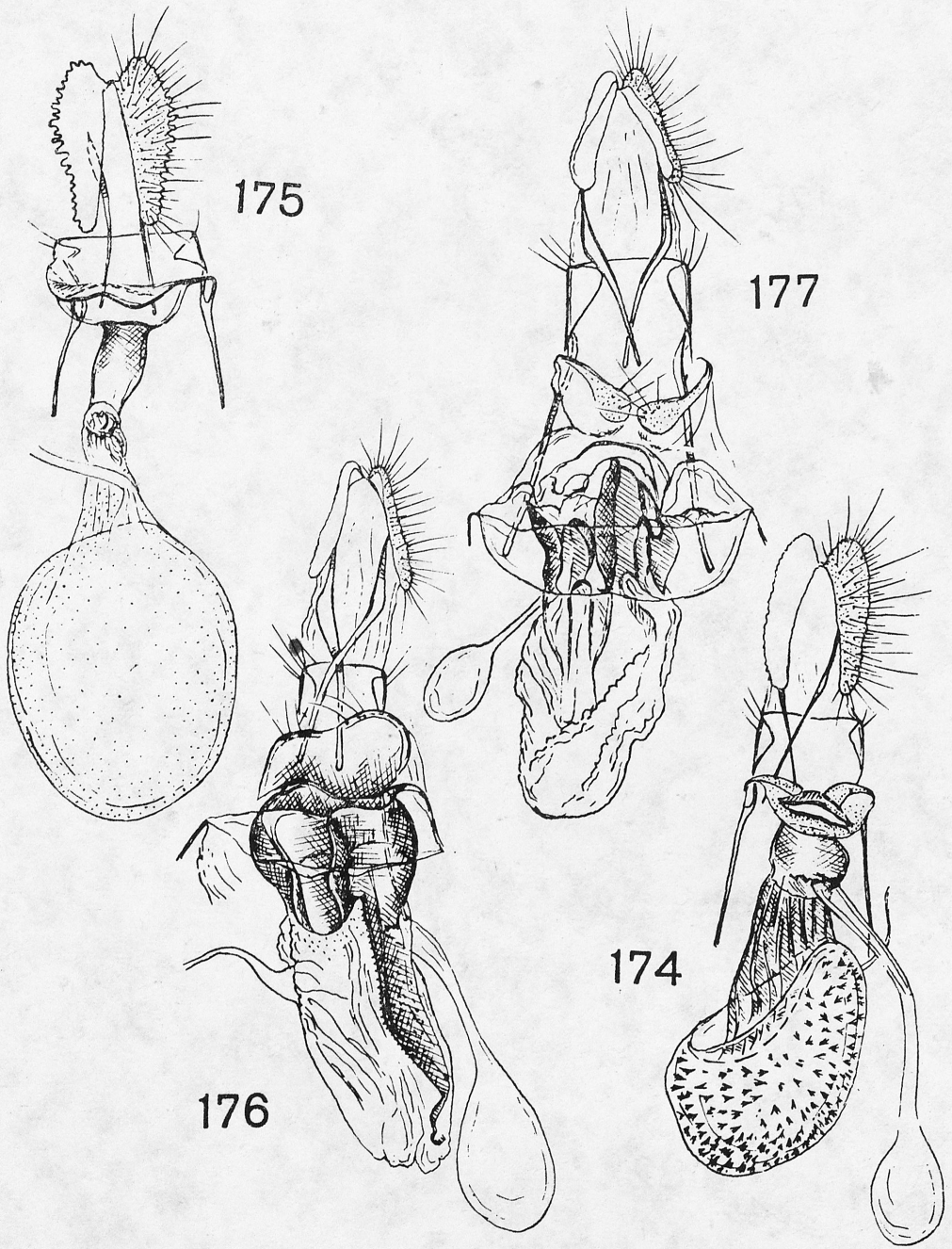
Figs 161—164. Female genitalia: 161 — *Saphenista incauta* sp. n., holotype; 162, 163 — *Pha-
lonidia synucha* sp. n., paratype; 164 — *Ph. neanica* sp. n., holotype



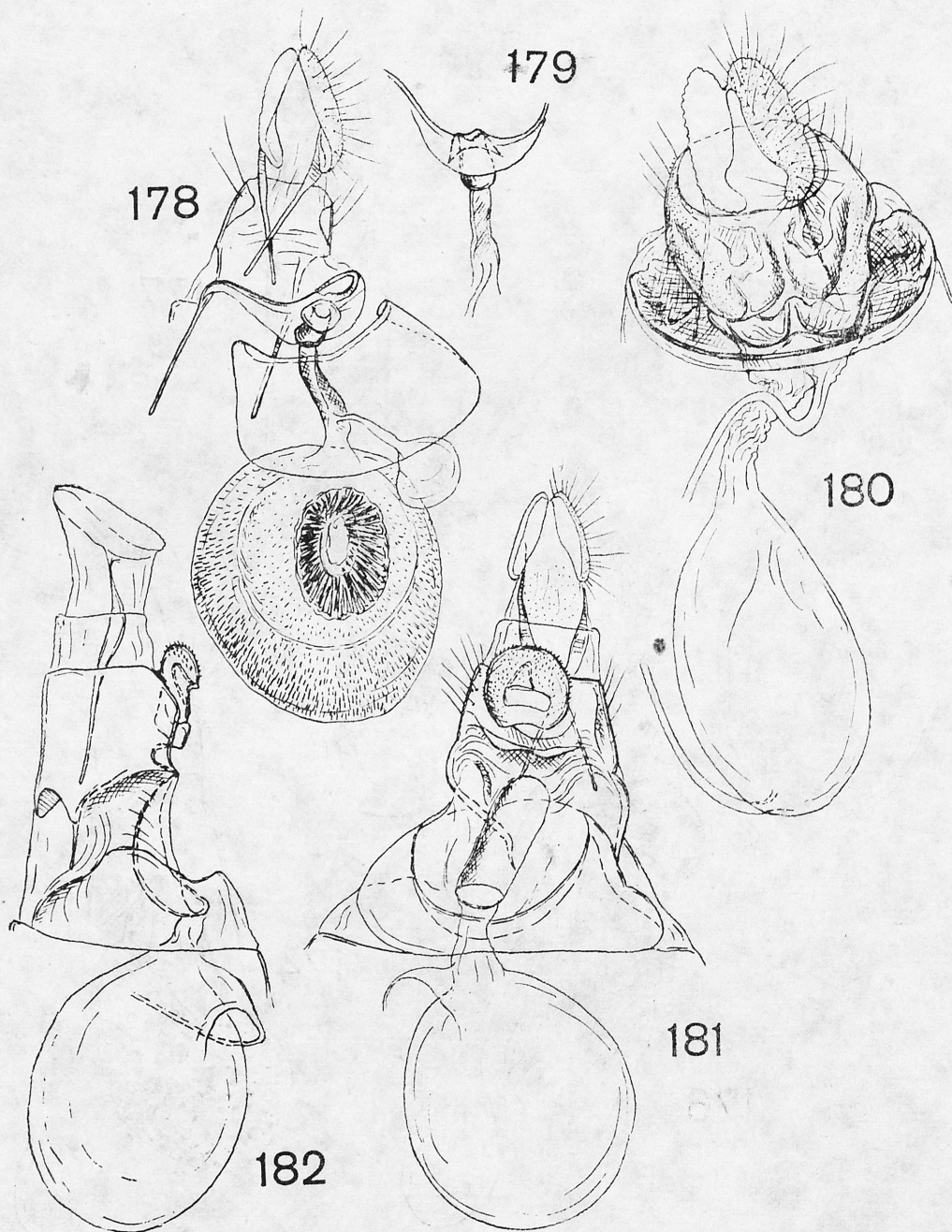
Figs 165—169. Female genitalia: 165 — *Phalonidia neanica* sp. n., holotype; 166 — *Ph. hapalobursa* sp. n., holotype; 167 — *Cirrhothaumatia tornosema* (CLARKE), Huatusco; 168, 169 — *Lasiothyris cerastes* sp. n., paratype



Figs 170—173. Female genitalia: 170 — *Lasiothyris cinigmula* sp. n., holotype; 171 — *L. micida* sp. n., paratype; 172 — *Platphalonidia luxata* sp. n., paratype; 173 — *Mourecochylis limenarchis* Raz., Braulio Carrillo



Figs 174—177. Female genitalia: 174 — *Mimeugnosta enopla* sp. n., paratype; 175 — *M. arta* sp. n., holotype; 176 — *Cochylis methoea* sp. n., paratype; 177 — *C. eutheta* RAZ., Los Tuxtlas



Figs 178—182. Female genitalia: 178, 179 — *Spinipogon elaphroterus* sp. n., paratype; 180 — *Enallcochylis enochra* sp. n., Turrialba; 181, 182 — *Ceratuncus tantulus* sp. n., paratype