

Tortricidae (Lepidoptera) from Ecuador

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Abstract. 59 species are listed. Two genera (*Markia*, *Azuayacana*) and 20 species (*Phalonia* *bassii*, *Saphenista* *tufinoa*, *Aethes* *nuda*, *Exoletuncus* *nivesanus*, *Proathorybia* *chlidonias*, *Markia* *trifascia*, *Netechna* *cerusata*, *Seticosta* *cerussograpt*, *Hynhamia* *microsocia*, *Inape* *bicornis*, *I.* *papaliactana*, *Oregocerata* *cladognathos*, *Terinebrica* *polycornuta*, *Argyrotaenia* *chillana*, *Polyortha* *maculata*, *Orthocomotis* *grandisocia*, *O. expansa*, *Omiostola* *youngi*, *Azuayacana* *cidnochroa*, *Epinotia* *lanceata*, *E. zamorata*, *Cryptophlebia* *azuaya*) are described as new, *Tortrix minima* WLSM. is transferred to *Proathorybia*, and *Tortrix spoliata* Z. is synonymized with *Argyrotaenia dispositana* Z.

Key words: Tortricidae, Lepidoptera, new taxa, Ecuador.

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I. GENERAL

The tortricine faunas of the particular countries of the Neotropical Region are rather little known and the data are dispersed in various publications. In many cases they are not verified. The groups of Tortricidae, usually its tribes, have been studied only recently (e.g. Euliini of Peru RAZOWSKI, 1997, Euliini of Chile, in press). These studies allow us to suppose that the examined faunas are rich and diverse and that only innumerable species are recorded from other, even neighbouring countries. For instance there are four species known both from Ecuador and Colombia and only single species recorded from Ecuador and Costa Rica or Argentina. The publication of their faunas seems thus justifiable. The only conclusion we may draw at present is that our knowledge on the Neotropical fauna is still superficial even as concerns a few better studied groups, e.g. the cochyelines. Some other groups, as for instance, almost all tribes of Olethreutinae, are little studied.

This preliminary list of Tortricidae from Ecuador contains only the data verified by me or the species described from this country. The most abundant tribes, as almost everywhere in South America, are Cochylini and Euliini. The Archipiini are represented by only five species, among them three species of *Argyrotaenia*. This genus is certainly the most abundant in the New World. Atteriini and Sparganothini are known of two and one species, respectively, but some species found in the material examined were excluded (Dr. J. A. POWELL, Berkeley, the specialist of these groups was asked to describe them). Whilst in Polyorthini there are nine species, the Chlidanotini are represented in Ecuador by only three ones. Each tribe of Olethreutinae is represented by a few species. It is interesting that there are two species of *Epinotia*, the genus known mainly from the Nearctic. This

genus is most probably abundant in the Neotropical region, as several species are known to me from other parts of South America (a paper in preparation).

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A b b r e v i a t i o n s:

AMNH – American Museum Natural History, New York

CMNH – Carnegie Museum Natural History, Pittsburgh

CUB – California University, Berkeley

DEI – Deutsches Entomologisches Institut

MRSN – Museo Regionale di Scienze Naturali, Torino

NHML – Natural History Museum, London

NHML – Naturhistorisches Museum, Wien

NMNH – National Museum of Natural History (Smithsonian Institution), Washington, D.C.

VOB – V. O. BECKER Collection, Brasilia

GS – genitalia slide

N o t e. The figures given in the descriptions of the labial palpus indicate the proportion of its total length to the diameter of eye.

II. SYSTEMIC PART

Cochyliini

Henricus generosus RAZOWSKI, 1994

Henricus generosus RAZOWSKI, 1994, Acta zool. cracov., **37**(2): 148, figs 19, 20. Type-locality: Ecuador: Via Sta Barbara – La Bonita. Coll. CUB.

Phalonidia ecuadorensis RAZOWSKI, 1967

Phalonidia ecuadorensis RAZOWSKI, 1967, Acta zool. cracov., **12**(8): 167, figs 8 (forewing), 9, 10 (male genit.). Type-locality: Ecuador: Huigra. Coll. NHML. – RAZOWSKI, 1994: 179 (redescr.).

Phalonidia ochraceana (RAZOWSKI, 1967)

Cochylis ochraceana RAZOWSKI, 1967, Acta zool. cracov., **12**(8): 207, fig. 90 (male genit.), pl. 16 fig. 12 (forewing). Type-locality: Argentina: Tucuman: Los Vasquez. Coll. NHML. – RAZOWSKI, 1994: 226 (redescr.).

Phalonidia bassii sp.n.

Wingspan ca 12 mm. Head creamy, labial palpus 1.5, more ochreous, thorax concolorous with lateral part of this last. Forewing ground-colour glossy creamy, in distal half more yellow. Median fascia in form of brown costal triangle and paler median suffusion; subapical marking, elongate, ochreous. Fringes creamy. Hindwing pale brownish grey.

Male genitalia (Figs 3, 4): Socius fairly large; distal part of valva slender; sacculus asymmetric, left termination short, slender, the right extremely large, curved. Cornutus half the length of aedeagus, gently bent.

Holotype, male: "Ecuador – 1986. A. CASALE, P.F. Cavazzuti, M. OLMÍ, A. Vigna TAGLIANTI; (Napo) – Baeza, 1990 m, 8.IV"; GS 13555. Coll. MRSN.

C o m m e n t s. Externally similar to several Neotropical species of this genus; female unknown. It is named after Prof. Dr. Graziano BASII (MRSN).

***Phalonidia nonaxyra* RAZOWSKI, 1994**

Phalonidia nonaxyra RAZOWSKI, 1994, Acta zool. cracov., **37**(2): 180, figs 27-30, 76. Type-locality: "Ecuador: Napo: Via Santa Barbara – La Bonita. Coll. CUB.

New data: One male collected in Napo: Baeza (MRSN).

***Phalonidia mesomerista* RAZOWSKI, 1994**

Phalonidia mesomerista RAZOWSKI, 1994, Acta zool. cracov., **37**(2): 180, fig. 83. Type-locality: Ecuador: Napo: Via Sta Barbara – La Bonita. Coll. CUB.

***Lasiothyris limatula* MEYRICK, 1917**

Lasiothyris limatula MEYRICK, 1917, Trans. ent. Soc. London, **1917**: 4. Type-locality: Ecuador: Huigra. Coll. NHML. – RAZOWSKI, 1994: 187 (redescr.).

***Saphenista tufinoa* sp.n.**

Wingspan 18 mm. Head white creamy, labial palpus ca 2; thorax creamy mixed with brown proximally. Forewing broad, with costa convex, termen straight, weakly oblique. Ground-colour white creamy, suffused with creamy and ochreous creamy, in distal part refractive, white at places. Markings brownish consisting of basal suffusion along costa, rounded costal part of median fascia and subapical blotch fusing with more ochreous brown blotch distal to end of median cell followed by ochreous shade reaching tornus; subapical and subterminal markings small; dorsum brown from beyond base to before tornus. Fringes pale ochreous, basal line brownish. Hindwing white creamy; cilia white.

Male genitalia (Figs 3,4) as in *S. campalita* RAZOWSKI, 1993 and *S. amusa* RAZOWSKI, 1993 from Peru, differing in shorter median part of transtilla and straight cornutus, respectively.

Holotype, male: "Ecuador: Carchi, 35 km W Tufino, west slope, 3120 m. 20 Nov 1987, R. DAVIDSON, C. YOUNG. Cloud forest"; GS 10766. Coll. CMNH.

***Saphenista aculeata* (RAZOWSKI, 1967)**

Phalonidia aculeata RAZOWSKI, 1967, Acta zool. cracov., **12**(8): 171, figs. 18, 19 (male genit.), pl. 15 fig. 5 (forewing). Type-locality: Ecuador: Huigra. Coll. NHML. – RAZOWSKI, 1994: 205 (redescr.).

***Saphenista rawlinsiana* RAZOWSKI, 1994**

Saphenista rawlinsiana RAZOWSKI, 1994, Acta zool. cracov., **37**(2): 211, figs 37, 38 (male genit.). Type-locality: Ecuador: Azuay Pass: 8 km NE Giron. Coll. CMNH.

***Aethes nuda* RAZOWSKI & BECKER, sp.n.**

Wingspan 27 mm. Head and thorax white, labial palpus 2.5. Forewing as in *A. turialba* (BUSCK, 1920), coloration as in *A. annosa* (RAZOWSKI, 1967) from Peru, but basal area pale. Ground-colour creamy ferruginous, white in costal area postmedially, costa mixed grey to middle. Markings rust, in form of distinct submedian fascia, subapical fascia extending to end of M3, fascia from tornus reaching median cell. Hindwing brownish creamy, suffused brown-grey on periphery, diffusely strigulated with same colour. Cilia creamy; basal line concolorous with strigulae.

Male genitalia (Figs 5,6) as in *A. turialba* (BUSCK, 1920) from Costa Rica and Venezuelan *A. alphetopa* CLARKE, 1968 but is easily distinguished by simple sacculus which in the mentioned species is provided with thorns.

Holotype, male: "Ecuador: Carchi, Maldonado, 2200 m, 9-11.I.1993, V. O. BECKER col." G.S. 21930. Coll. VOB, Nr. 105223. Paratype, male: "1.IV. 1986, Ecuador, Valle Rio Santa Anna, m. 1500, CASALE." Coll. MRSN.

Aethesiodes enclitica (MEYRICK, 1917)

Phalonia enclitica MEYRICK, 1917, Trans. ent. Soc. London, **1917**: 3. Type-locality: Ecuador: Alausi. Coll. NHML. – CLARKE, 1963: 27 (holotype, phot., male genit.); RAZOWSKI, 1967: 193 (male genit.); RAZOWSKI, 1994: 271 (redescr.).

Euliini

Bonagota melanecta (MEYRICK, 1917)

Eulia melanecta MEYRICK, 1917, Trans. Ent. Soc. London, **1917**: 10. Type-locality: Ecuador: Alausi. Coll. NHML. – CLARKE, 1958: 132 (holotype, phot., male genit.).

Bonagota sololana sp.n.

Wingspan ca 14 mm. Head pale brownish grey, labial palpus ca 1.5; thorax grey. Forewing ground-colour white suffused pale grey in dorsal and basal areas, with greyish fasciae in distal half. Postbasal fascia darker, with some blackish dots; median fascia darker, tinged brown at costa, marked with some black spots medially, accompanied by two black spots at end of median cell; a row of similar dots subterminally. Cilia greyish. Hindwing pale brownish grey; cilia paler.

Male genitalia (Figs 7,8) very distinct: Socius short, with very short distal part; sacculus armed with row of spines dorsally; aedeagus with strong dorsal process extending from beyond zone, with slender termination and curved ventral process.

Holotype, male: "Ecuador – 1986, A. CASALE, P. F. CAVAZZUTI, M. OLMÍ, A. Vigna TAGLIANTI; (Napo) Baeza, m. 1900, 8.IV"; GS 13557. Coll. MRSN.

Exoletuncus musivus RAZOWSKI, 1997

Exoletuncus musivus RAZOWSKI, 1997, Misc. zool., **20**(1): 133. Type-locality: Ecuador: Aqualani, Carabaya.

Exoletuncus consertus RAZOWSKI, 1997

Exoletuncus consertus RAZOWSKI, 1997, Misc. zool., **20**(1): 133, figs 5,6. Type-locality: Ecuador: Napo-Pastaza, E of Papallacta. Coll. AMNH.

New data: Carchi, 50 km W Tufino, west slope, 2500 m, cloud forest. Coll. CMNH.

Exoletuncus nivesanus sp.n.

Wingspan ca 20 mm. Head white, lateral parts of head, labial palpus (2.5), and distal surface of antenna black; thorax white tinged yellow with collar, median part of thorax and outer edge of tegula black. Forewing distinctly expanding terminad, costa slightly convex, termen oblique, hardly sinuate. Ground-colour greenish white, glossy, in distal area more yellow, in tornal area pinkish brown; markings black consisting of oblique line at base of costa, dorsal blotch extending from beyond base of vein Sc and to 2/3 of dorsum, straight proximally, deeply concave in middle dorsally, opposite costal triangle; subapical blotch opposite the median blotch rather parallel to the former, followed by a diffuse fascia limiting brownish tornal blotch reaching apex along last radial vein; two spots at costa subapically. Fringes brownish grey. Hindwing opalescent greyish white, greyer distally, with some grey strigulae at apex; cilia whitish with grey scales on median and subterminal lines.

Male genitalia (Figs 9,10) as in Bolivian *E. cretatus* RAZOWSKI, 1997 but with distinct, however, very short uncus, slenderer socius and less differentiate, broader terminal part of valva.

C o m m e n t s. The new species characterises with pale brownish dorsal markings and shows some smaller genital differences as the broader aedeagus, the longer socius and the more angulate median part of sacculus.

Holotype, male: "Ecuador: Azuay, 13 km NE Nieves, 3220 m, 25 Oct. 1987, R. DAVIDSON, J. RAWLINS, C. YOUNG"; GS 10798. Coll. CMNH.

Proathorybia chlidonias sp.n.

Wingspan ca 10 mm. Head and proximal part of thorax pale cinnamon brown, remaining parts of thorax grey; labial palpus 1.5, creamer terminally. Forewing somewhat expanding distally, costa weakly convex, apex very short, broad, rounded; termen weakly oblique, rather straight. Ground-colour creamy, densely suffused and sprinkled violet-grey, paler before median fascia; brownish strigulae along costa, mainly in basal half, and in terminal third of wing. Dorso-basal blotch large, triangular, dark brown, with distal edge slightly convex; median fascia atrophied in dorsal half, slightly paler; subapical blotch small, terminal blotch rather median, convex proximally, the two last named elements pale edged. Fringes slightly paler than markings. Hindwing brownish with paler fringes.

Male genitalia (Figs 11,12): Uncus long, slender; socius drooping, broad; gnathos rather delicate; valva slender, with weak costa and small sacculus; transtilla membranous except for short basal part; aedeagus broad.

Holotype, male: "Ecuador: 980 m, Tinalandia, Pichincha Prov. IV-18/22-90 MV & UV lites J. BROWN"; GS 12031. Coll. CUB.

C o m m e n t s. The new species differs from the type species of this genus in lack of terminal spine of sacculus. Very close to Mexican *P. minima* (WALSINGHAM, 1914) **comb.n.** originally described in *Tortrix*.

Markia gen.n.

Type-species: *Markia trifascia* sp.n.

Venation: In forewing all veins separate, R5 to termen, distance between M2-M3 twice M3-CuA1, chorda present, M-stem well preserved; in hindwing Sc+R1 stalked to 1/3, M3-CuA2 connate.

Male genitalia: Uncus simple, slender, pedunculi slender distal part of tegumen fairly long with lateral lobes connected with bases of gnathos arms; socius drooping, sclerotized along outer edges; vinculum fully developed; valva up-curved basally, deeply incised beyond sacculus; transtilla simple, concave dorso-medially, broad laterally; aedeagus slender, without cornuti, with large apodeme of muscles of coecum penis.

C o m m e n t s. Female unknown. Genitally resembling *Gnatheulia* RAZOWSKI, 1997 (eg in the shape of aedeagus) but with simple gnathos, long uncus and well sclerotized transtilla. Its supposed autapomorphies are the strong ventral incisure of valva and the large basal up-curved part of costal portion of valva. This genus is described in honour of Mr. Marek KOPEĆ, Cracow who kindly cooperates with me in the study on *Tortricidae*.

Markia trifascia sp.n.

Wingspan 15 mm. Head brownish grey, labial palpus ca 2.5, creamer dorsally; thorax darker than head, collar brown. Forewing slightly expanding posteriorly with costa weakly oblique, termen delicately sinuate, apex rather sharp. Ground-colour greyish, in costal half whiter, tinged reddish brown, strigulated with brown, with grey towards dorsum, brown-black in apex area. Markings dark purple brown in form of three rather parallel broad fasciae, postbasal, median (atrophying to-

wards tornus) and subapical. Cilia concolorous with ground-colour, scaled brown. Hindwings brownish, with indistinct brown strigulation; cilia brown grey.

Male genitalia (Figs 13,14) as described for the genus.

Holotype, male: "Ecuador: Morona-Santiago. Rio Culebrillas, 34 km SE Gualaceo, 2200 m, 22-23 Oct. 1987; J. RAWLINS, C. YOUNG, R. DAVIDSON. Wet forest"; GS 12202. Coll. CMNH.

Netechma dentana (MEYRICK, 1917)

Eulia dentata MEYRICK, 1917, Trans. Ent. Soc. London, **1917**:11. Type-locality: Ecuador: Huigra. – CLARKE, 1958: 123 (lectotype, phot., male genit.).

Netechma cerusata sp.n.

Wingspan ca 27 mm. Head white, labial palpus 2.5, black laterally; thorax concolorous, black in middle at base of tegula and collar. Forewing weakly expanding terminally, termen hardly sinuate. Ground-colour white indistinctly shining greenish; markings black similar to that in *Exoletuncus nivesanus*, with distinct terminal blotch reaching apex. Hindwing white, with some grey strigulae along veins; cilia white.

Male genitalia (Figs 15,16): Setae in middle of disc of valva strong, sacculus asymmetrical with small free termination and spines at top of subterminal angulation. Transtilla also asymmetric, with broad, sharp right process and long, curved left process. Aedeagus large, with long, thorned ventral termination; cornuti, three long apines and several shorter capitate ones.

Holotype, male: "Ecuador: Morona Santiago/Azuay. Pass. 21 km SE Gualaceo. 3720 m. 21 Oct 1987; C. YOUNG, R. DAVIDSON, J. RAWLINS. Wet paramo"; GS 10767. Coll. CMNH.

Paraptila equadora J. W. BROWN, 1990

Paraptila equadora J. W. BROWN, 1990, J. Lepid. Soc., **44**(4): 271, figs. 7, 17. Type-locality: Ecuador: Pas-taza: Shell-Mera. Coll. NMNH.

Ernocornutia capronata RAZOWSKI, 1988

Ernocornutia capronata RAZOWSKI, 1988, Acta zool. cracov., **31**(10): 398. Type-locality: Colombia: Cauca: Paramo de Parace: Lake San Rafael. Coll. NMNH.

New to Ecuador; three unicolorous, varying in size (17 – 22 mm) females from Carchi, 35 km W Tufino, at 3120 m in cloud forest. Coll. CMNH.

Popayanita hydrochroa (MEYRICK, 1930)

Paraptila hydrochroa MEYRICK, 1930, Exot. Microlepid., **3**: 610. Type-locality: Ecuador: Prov. Rio Bamba: Hacienda Cayandeded. – *Popayanita chydrochoa* [sic!] BROWN, 1990, J. Lepid. Soc., **44**(4):257.

Seticosta homosacta (MEYRICK, 1930)

Eulia homosacta MEYRICK, 1930, Exot. Microlepid., **3**: 610. Type-locality: Ecuador: Prov. Rio Bamba: Hacienda Cayandeded. – CLARKE, 1958: 128 (holotype, phot., male genit.).

Seticosta cerussograptia sp.n.

Wingspan 18 mm. Head and tegula snow white, labial palpus (2) pale ferruginous creamy laterally concolorous with anterior part of thorax, black blotch at base of tegula. Forewing not expanding distally, costa rather straight, termen straight, weakly oblique. Ground-colour white postbasally and in terminal third, with grey-black shades postmedially and subterminally; median area pale ferruginous, suffused blackish along median cell, more brown at costa. Cilia white with some grey

shades, basal line broad, pale ferruginous except for apex and tornus portions. Hindwing transparent, whitish with some grey spots in median and terminal parts; cilia whitish.

Male genitalia (Figs 17,18) similar to those in Bolivian *S. sagmatica* (MEYRICK, 1912) but with shorter uncus and indistinctly concave dorsal portion of transtilla.

Holotype, male: "Ecuador: Morona Santiago. Rio Culebrillas, 34 km SE Gualaceo, 2200 m, 21 Oct. 1987; J. RAWLINS, C. YOUNG, R. DAVIDSON. Wet forest"; GS 12204. Coll. CMNH.

C o m m e n t s. This species is easily distinguished by snow white distal half of forewing and yellow-brown elements of median markings. From *homosacta* it differs in lack of blackish costal triangle of forewing, and, in the male genitalia, in the shapes of the uncus projections, the weaker, postmedian angulation of ventral edge of valva and the hardly constricted median part of transtilla.

***Hynhamia microsocia* sp.n.**

Wingspan 32 mm. Head and thorax greyish creamy, labial palpus ca 5. Forewing expanding terminally, costa somewhat convex, termen gently sinuate, slightly oblique. Ground-colour creamy suffused brownish, sparsely dotted brown; brownish diffuse fascia from wing base to apex and termen, with some darker shades; some concolorous spots in subterminal area. Fringes creamy (worn). Hindwing creamy, white basally, suffused brownish and sparsely dotted brown on periphery; cilia creamy.

Male genitalia (Figs 19,20) as in *H. hemileuca* (MEYRICK, 1932) from Colombia but *socius* extremely small, gnathos with well developed distal lobes and aedeagus somewhat longer.

Holotype, male: "Ecuador: Morona-Santiago/Azuay. Pass. 21 km SE Gualaceo, 3720 m. 21 Oct 1987; C. YOUNG, R. DAVIDSON, J. RAWLINS. Wet paramo"; GS 12210. Coll. CMNH.

***Inape bicornis* sp.n.**

Wingspan 21 mm. Head and proximal part of thorax ferruginous, labial palpus 2. Forewing moderately expanding terminally, termen straight, weakly oblique. Ground-colour in proximal half of wing whitish suffused grey, dotted with brown except dorsum which is more ochreous suffused rust and more rust-violet costo-basal area; basal blotch dark rust brown. Posterior half of wing ferruginous, browner proximally, where edged white; some dark brown dots in distal area; cilia concolorous with terminal part of wing. Hindwing creamy, darkening terminally; cilia somewhat yellower.

Male genitalia (Figs 21,22) similar to those in *I. auxoplaca* (MEYRICK, 1926) from Colombia and Peruvian *I. semuncus* RAZOWSKI, 1997 especially in the shape of sacculus. The new species is easily distinguished by very long processes of the dorsal part of transtilla and presence of small cornuti.

Holotype, male: "Ecuador: Azuay, 13 km NE Nieves, 3220 m, 25 Oct. 1987, R. DAVIDSON, J. RAWLINS, C. YOUNG"; GS 10759. Coll. CMNH.

***Inape papallactana* sp.n.**

Wingspan 22 mm. Head brownish creamy, labial palpus ca 3, brownish, thorax darker than head, tegula creamer distally. Forewing moderately expanding terminally, costa weakly convex, apex rounded, broad, termen oblique, straight. Ground-colour creamy, suffused with brownish towards costa, mixed with ochreous in distal half of wing, with indistinct pinkish hue dorsally; brownish strigulation to middle, brown strigulae along costa. Markings: a vivid brown triangular blotch at base beyond basal suffusion reaching anal vein; large, brownish grey costal blotch browner proximally (remnants of median fascia) connected with top of smaller triangle extending towards dorsum where much paler; subterminal fascia brownish. Cilia creamy, with brownish lines. Hindwing creamy hardly tinged grey; cilia much whiter.

Male genitalia (Figs 23,24): Uncus expanding terminally, socius much smaller than in the known species of this genus, terminal part of gnathos large, valva broader than in Bolivian *I. penai* RAZOWSKI, 1988 but with sacculus small, little expanding ventrally. Processes of transtilla small.

Holotype, male: "Ecuador: Pichincha. 12 km NW Papallacta west slope. 3840 m. 11-12 October 1987; C. YOUNG, R. DAVIDSON, J. RAWLINS. Subparamo mixed grass/woodland"; GS 12209. Coll. CMNH.

Oregocerata cladognathos sp.n.

Wingspan 20 mm. Head and upper side of labial palpus (ca 3) grey, orange brown laterally, orange basally; thorax brownish grey; brust orangeous. Forewing distinctly expanding terminally, costa rather straight to 2/3, apex short, sharp, termen long, hardly concave medially, rather not oblique. Ground-colour brownish creamy, spotted and suffused with brown; basal third of valva darker with small strigulae; dorsum tinged brown medially; a slender, straight brownish blotch from mid-dorsum to radial arm of median cell. Fringes concolorous with ground-colour with distinct, brown basal line. Reverse: Costal half of wing orangeous, dorsal part brownish grey. Hindwing whitish, tinged creamy ochreous in apex area where weak grey strigulation; costal third of reverse tinged orangeous fringes paler than wing with traces of median line.

Male genitalia (Figs 25,26): Uncus slender; socius elongate, rounded apically, with short dorsal portion; gnathos arm terminating in long, sharp process, with terminal plate small. Valva elongate, rounded apically; sacculus half length of this last; dorsal part of transtilla rounded apically; aedeagus slender, weakly bent, without cornuti; coecum penis long.

Holotype, male: "Ecuador: Prov. Pichincha, km 40 via Quito-Pto. Quito III-25-86 S. MCKAMEY collr." GS 12030. Coll. CUB.

Clarkeulia radicana (ZELLER, 1877)

Sciaphila radicana ZELLER, 1877, Horae Soc. ent. ross., **13**: 118, pl. 2, fig. 39. Type-locality: Colombia: Bogota.

New to Ecuador: four specimens from El Oro: 5 km N Chilla, 2100 m, semiarid woodland, and Loja: 5 km NE Gonzanama, 2740 m, montane woodland. Coll. CMNH. Till now known from Colombia only.

Terinebrica polycornuta sp.n.

Wingspan 14 mm. Head pale brownish cream, labial palpus 2.5; thorax rather concolorous with head. Forewing broadest postmedially with costa convex, termen straight, weakly oblique. Ground-colour creamy, suffused and dotted brownish mainly in costal and median halves of wing, distinctly strigulated along costa. Markings brownish: Median fascia slender dorsally, broad, diffuse otherwise; subapical fascia slender, weak, some strigulae before mid-termen. Cilia concolorous with ground-colour. Hindwing creamy, suffused and sparsely strigulated with brownish on periphery; cilia concolorous with wing.

Male genitalia (Figs 27,28) close to *T. tenebrica* RAZOWSKI, 1987 from Peru as having large, drooping socii, broad transtilla, dorsal thorns of base of sacculus and oblique, hairy convexity of the disc of valva. Uncus slender, median part of transtilla very broad, with three small prominences; row of thorns in dorso-basal portion of sacculus and very large, sharp process extending from its inner surface. Arms of juxta very long, aedeagus rather weakly sclerotized.

Holotype, male: "Acc.[ession] No. 5256 R.S. Parish, Ecuador; June 15, 1914"; GS 10765. Coll. CMNH.

Chinchipena gen.n.

Type-species: *Chinchipena elettaria* sp.n.

Shapes of wings, venation and coloration as in *Clarkeulia* RAZOWSKI.

Genitalia. Male with genitalia similar to those in mentioned genus but with uncus specialised and base of costal part of valva provided with very large process. Female unknown.

C o m m e n t s. The structure of aedeagus is synapomorphic with *Clarkeulia*, the above mentioned differences to that genus are the supposed autapomorphies of *Chinchipena*.

Chinchipena eletaria sp.n.

Wingspan 27 mm. Head dirty creamy, finely scaled brownish, labial palpus 1.5, rather concolorous, thorax slightly browner medially. Base of wing and dorsum concolorous, strigulated brownish grey, remaining parts of wing brown except for apical third which is paler, tinged ochreous, marked with brown lines. Median fascia and marking extending from dorso-basal area to middle of wing dark brown with violet hue. Termen concolorously edged. Cilia creamy ochreous. Hindwing brownish grey, with some creamy spots between strigulae; cilia grey creamy, basal line browner.

Male genitalia (Figs 29,30): Uncus with two lateral lobes terminally; socius slender, drooping; basal process of costal portion of valva spined; sacculus fairly broad, without free end; transtilla a simple band, sclerotized dorsally; juxta with median process, dorsally; aedeagus short, with rounded sclerite before zone dorsally, a few dents, and very long caulis.

Holotype, male: "Ecuador: Zamora-Chinchi, 27 km NW Zamora, 3°57'S, 79°03'W, 1550 m, 10 June 1983 John E. RAWLINS"; GS 12203. Coll. CMNH.

Archipini

Argyrotaenia dispositana (ZELLER, 1877)

Tortrix (*Cacoecia*?) *dispositana* ZELLER, 1877, Horae Soc. ent. ross., **13**: 94, 488 (index, as *dissioptana*) pl.2, fig. 31. Type-locality: Colombia: near Bogota. Coll. NHML.

Tortrix spoliana ZELLER, 1877, ibid.: 96, pl.2, fig. 32 – **synon.n.** Type-locality: Colombia: Bogota. Coll. NHML.

New to Ecuador: El Oro: 6 km N Chilla, 2100 m, semiarid woodland. Coll. CMNH.

Argyrotaenia chillana sp.n.

Wingspan ca 14 mm. Head and thorax brownish with darker strigulae, labial palpus 1.5. Forewing as in *A. citharexylana* (ZELLER, 1866) from Colombia. Ground-colour between median fascia and apex white, in dorsal part, from basal area to mid-termen creamy tinged ochreous. Markings typical of the genus, brownish, spotted or strigulated with brown; median fascia atrophying in dorsal half of wing. Hindwing whitish, tinged brown-grey on periphery and partially on veins; cilia white.

Male genitalia (Figs 31,32) comparable with those in *A. lautana* POWELL, 1960 described from California, USA but differing in slenderer uncus, longer aedeagus and peculiar serrate distal portion of sacculus.

Holotype, male: "Ecuador: El Oro, 6 km north Chilla. 2100 m, R. DAVIDSON, J. RAWLINS, C. YOUNG. 6 Nov 1987, Semiarid woodland"; GS 12195. Coll. CMNH. Paratypes, 4 males labelled: "Ecuador – 1986 A. CASALE – P.F. Cavazzuti, M. OLMÍ – A. Vigna TAGLIANTI; Archidona, Pangona, 5.IV, m. 1000" (3 specimens) and a similarly labelled but with " (Napo) – Baeza, m 1900, 8.IV." Coll. MRSN.

Argyrotaenia lignea (MEYRICK, 1917)

Tortrix lignea MEYRICK, 1917, Trans. Ent. Soc. London, **1917**: 17. Type-locality: Ecuador: Huigra. – CLARKE, 1958: 247 (lectotype, phot., male genit.).

Argyrotaenia artocopa (MEYRICK, 1932)

Tortrix artocopa MEYRICK, 1932, Exot. Microlepid., 4: 255. Type-locality: Costa Rica: Orosi. Coll. NHMW. – RAZOWSKI, 1964: 470 (male genit.).

New to Ecuador: One male from Napo: Baeza, 1900 m. (MRSN).

Clepsis archidona sp.n.

Wingspan 10 mm. Externally similar to Nearctic *C. peritana* (CLEMENS, 1860). Ground-colour brownish creamy, markings brownish tinged yellow; proximal edge of median fascia straight, subapical marking an oblique fascia followed by costal spots and suffusions extending to termen.

Male genitalia (Figs 33,34) characterize with very long uncus, large aedeaus, and very long cornuti.

Holotype, male: "Ecuador – 1986, A. CASALE – P. F. Cavazzuti, M. OLMÍ – A. Vigna TAGLIANTI; Archidona, Pangona, 5.IV, m. 1000"; GS 13556. Coll. MRSN.

Idolatteria mydros OBRAZTSOV, 1966

Idolatteria mydros OBRAZTSOV, 1966, Proc. U.S. natn. Mus., 119(3543): 6, pl.3, figs 1-4. Type-locality: Ecuador: Loja vicinity. Coll. NMNH.

Idolatteria maon DRUCE, 1901

Idolatteria maon DRUCE, 1901, Ann. Mag. Nat. Hist., (7)7: 440. Type-locality: Ecuador: Chiguinda. – OBRAZTSOV, 1966: 8, pl.5, figs. 1-4. Coll. NHML.

Atteriini*Anacrusis ruptimacula* (DOGNIN, 1908)

Tortrix ruptimacula DOGNIN, 1908, Ann. Soc. ent. Belg., 48: 132. Type-locality: Ecuador. Coll. NMNH.

Atteria citrochyta (MEYRICK, 1926)

Philedone citrochyta MEYRICK, 1926, Exot. Microlepid., 3:P 247. Type-locality: Ecuador: El Topo, Rio Pastaza. Coll. NHML. – CLARKE, 1958: 176 (lectotype, phot., male genit.).

Sparganothini*Sparganopseustis elimata* (MEYRICK, 1930)

Sparganothis elimata MEYRICK, 1930, Exot. Microlepid., 3: 370. Type-locality: Ecuador: Hacienda Cayandeled, Rio Bamba. Coll. NHML. – CLARKE, 1958: 219 (holotype, phot., male genit.).

Polyorthini*Polyortha maculata* sp.n.

Wingspan 29 mm. Shape of wings and coloration as in other species of this genus. Forewing ground-colour grey sprinkled white grey, with some grey oblique fasciae and several black dots in postbasal and dorsal portions. Cilia white-grey. Hindwing greyish, in distal half brownish grey; cilia concolorous with wing base; basal line grey.

Female genitalia (Fig. 46): Ovipositor fairly long; colliculum broad, tapering terminad, inequally sclerotized; sclerites of distal part of ductus bursae well developed, fusing with signum.

Holotype, female: "Ecuador: Morona Santiago. Rio Culebrillas, 34 km SE Gualaceo, 2200 m, 21 Oct. 1987; J. RAWLINS, C. YOUNG, R. DAVIDSON. Wet forest"; GS 10684. Coll. CMNH.

C o m m e n t s. Close to *P. trochillodes* (MEYRICK, 1912) from Colombia but with smaller sclerites and much longer signum.

***Polyortha niveopunctata* DOGNIN, 1905**

Polyortha niveopunctata DOGNIN, 1905, Annls Soc. ent. Belg., **49**: 85. Type-locality: Ecuador: environs of Loja. Coll. NMNH. – DIAKONOFF, 1974: 13, figs 4,5.

***Pseudatteria dognini* OBRAZTSOV, 1966**

Pseudatteria (Pseudatteria) dognini OBRAZTSOV, 1966, Proc. U.S. Natn. Mus., **118**(3535): 588, pl. 1. Type-locality: Ecuador: Loja: Loja vicinity. Coll. NMNH.

***Pseudatteria unciana* (DOGNIN, 1904)**

Atteria unciana DOGNIN, 1906, Annls Soc. ent. Belg., **48**: 133. Type-locality: Ecuador: Zamora. Coll. NMNH. – OBRAZTSOV, 1966: 596, pl. 9 (*Pseudatteria (Pseudatteria)*).

***Pseudatteria splendens* (DRUCE, 1901)**

Atteria splendens DRUCE, 1901, Ann. Mag. nat. Hist., (7)**7**: 440. Type-locality: Ecuador: Sarayacu, Napo Pastaza. Coll. NHML. – MEYRICK, 1912: 16; MEYRICK, 1913: 22. – CLARKE, 1958: 200 (*Pseudatteria*; holotype, phot., female genit.). – OBRAZTSOV, 1966: 603 (*Pseudatteria Pseudatteria*; phot., genit.).

Atteria flabellata MEYRICK, 1912, Trans. Ent. Soc. London, **1911**: 676. Type-locality: Ecuador. Coll. NHML. – MEYRICK, 1912: 16; 1913: 22.

***Pseudatteria dictyanthes* MEYRICK, 1936**

Pseudatteria dictyanthes MEYRICK, 1936, Arb. Morphol. Taxon. Ent. Berlin, **3**: 104. Type-locality: Ecuador. Coll. DEI. – OBRAZTSOV, 1966: 612 (*Pseudatteria Eurynteria*; holotype, phot., female genit.).

***Pseudatteria buckleyi* (DRUCE, 1901)**

Atteria buckleyi DRUCE, 1911, Ann. Mag. nat. Hist., (7)**7**: 439. Type-locality: Ecuador: Intag. Coll. NMNH. – MEYRICK, 1912: 16; 1913: 22. – OBRAZTSOV, 1966: 613 (types, genit.).

Pseudatteria purpurea DOGNIN, 1904, Annls Soc. ent. Belg., **48**: 132. Type-locality: Ecuador: Loja vicinity. Coll. NMNH.

***Orthocomotis grandisocia* sp.n.**

Wingspan 30 mm in male, 34 mm in female. Head and thorax brownish, lower part of front whitish. Ground-colour white, strigulate with brown. In holotype preserved in distal area and (strigulae) along costa only, in paratypes larger, also in dorsal area. Remaining area suffused brownish, with numerous brown spots. Markings diffuse, brownish with dark brown spots. Refractive green scales forming some groups on markings and, less distinct, on ground-colour at costa. Cilia whitish, divisions and basal line brownish. Hindwing brown; cilia paler.

Male genitalia (Figs 35,36) similar to those in *O. cristata* CLARKE, 1955 from Costa Rica but with socius very broad, rounded distally and somewhat longer uncus. Scent scales at base of valva short.

Holotype, male: "Ecuador: Carchi, Chical 1250 m, 0 56'N, 76 11'W, 26 Jul 1983, J. RAWLINS"; GS 12206. Coll. CMNH. Paratypes, a pair labelled "Hacienda La Mascota, Rio Topo, Ecuador, Alt. 4500 ft.; W. J. COXEY, IV 8 1931, A.N.S. Lot 315"; female with abdomen missing.

C o m m e n t s. Externally resembling Brazilian *O. leucothorax* CLARKE, 1955 or Costarican *O. cristata* CLARKE, 1955, but differing in smaller areas of the white ground colour.

Orthocomotis expansa sp.n.

Wingspan 21-23 mm. Head brownish creamy, labial palpus ca 1.5, browner to middle; thorax creamy, scaled brown, brown proximally. Forewing ground-colour white creamy sprinkled and strigulated with brown; markings brown: basal blotch consisting of several parts, median fascia atrophied medially, subapical blotch fused with median, subterminal blotch. Refractive green scales forming two small blotches, at costa and beyond end of median cell. Cilia concolorous with ground-colour, with several brown bars. Hindwing brown; cilia paler.

Male genitalia (Figs 37,38) as in preceding species but socius slender postbasally, broadest beyond middle, tapering terminad. Uncus slender, posterior to terminal part of tegumen; this last tapering apically (in Brazilian *O. twila* CLARKE, 1955 broad terminally). Scent scales at base of valva long.

Holotype, male: "Ecuador: Carchi, Chical, 1250 m, 0 56'N, 76 11'W, 26 Jul 1983, J. RAWLINS, R. DAVIDSON"; GS 12207. Paratype, an identically labelled male. Coll. CMNH.

Chlidanotini*Pseudocomotis scardiana* (DOGNIN, 1905)

Orthotaenia (?) *scardiana* DOGNIN, 1905, Annl. Soc. ent. Belg., **49**: 86. Type-locality: Ecuador: El Monje near Loja. Coll. NMNH. – MEYRICK, 1912: 38 (*Eulia*); 1913: 38 (*Eulia*). – CLARKE, 1955: 156 (*Orthocomotis*). – RAZOWSKI, 1982: 29 (*Orthocomotis*). – BROWN, 1989: 442 (*Pseudocomotis*) (phot., male genit.).

Pseudocomotis serpendipita J. W. BROWN, 1989

Pseudocomotis serpendipita J. W. BROWN, 1989, Ent. Scand., **20**(4): 444. Type-locality: Ecuador: Morona-Santiago, Rio Calebrillas, 34 km SE Gualaceo. Coll. CMNH.

Pseudocomotis albolineana J. W. BROWN, 1989

Pseudocomotis albolineana J. W. BROWN, 1989, Ent. Scand., **20**(4): 444. Type-locality: Ecuador: Carchi, 35 km W Tufino. Coll. NMNH.

Olethreutini*Lobesia arenacea* MEYRICK, 1917

Lobesia arenacea MEYRICK, 1917, Trans. Ent. Soc. London, **1917**: 23. Type-locality: Ecuador: Duran. Coll. NHML. – CLARKE, 1958: 464 (lectotype, phot., male genit.).

Systematic position doubtful, certainly belonging in *Olethreutina* and not to *Lobesiina*.

Omiostola macrotrachela MEYRICK, 1922

Omiostola macrotrachela MEYRICK, 1922, Exot. Microlepid., **2**:519. Type-locality: Colombia: San Antonio. Coll. NHML.

New to Ecuador: One male: Carchi, 50 km W. Tufino, 2510 m, cloud forest.

Omiostola youngi sp.n.

Wingspan 28 mm. Head and proximal half of thorax rust brown, distal part brownish creamy; labial palpus 1.5. Forewing broader than in *macrotrachela*. Ground-colour ochreous rust, suffused and strigulated rust brown, tinged grey, glossy in apical portion of wing where brown ferruginous lines and slightly curved subapical line, atrophying at costa present. Costa rust brown to beyond middle, base of wing concolorous. Markings in form of dark purple brown dorsobasal blotch extending obliquely to beyond middle of median cell followed by narrower fascia from beyond mid-

dorsum; the two connecting in median cell limiting dorsal, subtriangular blotch of ground-colour; this last mixed brownish, strigulated brown. Grey tinged violet suffusion distally and costally to the markings. Cilia more black than suffusions. Hindwing brownish, paler at base; cilia paler in anal area.

Male genitalia (Fig. 39) as in *macrotrachela* but uncus larger, broad in basal third, socius large and sacculus longer, slender, without distinct prominence beyond neck of valva, ventrally.

Holotype, male: "Ecuador: Morona-Santiago, Rio Calebrillas, 34 km SE Gualaceo. 2200 m. 22-23 Oct 1987; J. RAWLINS, C. YOUNG, R. DAVIDSON. Wet forest"; GS 10779. Coll. CMNH.

C o m m e n t s. Externally very similar to the above mentioned species, but with distal edge of dorso-basal blotch straight. Cucullus somewhat broader than in Brazilian *O. alphitopa* MEYRICK, 1922.

Eucosmini

Azuayacana gen.n.

Type-species: *Azuayacana cidnochroa* sp.n.

Venation: In forewing R5 to termen, chorda extending from 2/3 distance R1-R2, M-stem atrophied; in hindwing M3-CuA1 stalked to 1/5, remaining veins separate.

Male genitalia: Uncus large with two flat lateral processes terminally; socius medio-lateral, hairy. Valva long, with slender neck and long, slender terminal part of cucullus, anterior part of this last broad, subtriangular, spined, provided with small apical process. Bases of cornuti lateral.

Distribution: Ecuador.

C o m m e n t s. The probable autapomorphies of this genus are the presence of ear-shaped terminal processes of tegumen and the shape of the cucullus. The shape and position of socii are also apomorphic. The systematic position unclear; I am including *Azuayacana* in Eucosmini mainly on basis of its forewing markings. Female unknown.

Azuayacana cidnochroa sp.n.

Wingspan 20 mm. Head white, labial palpus ca 2, suffused grey-brown laterally; thorax slightly mixed with brownish, brown proximally, end of tegula white. Forewing slender, indistinctly expanding terminally, costa weakly bent beyond middle, termen almost straight, slightly oblique. Ground-colour white, sprinkled with brownish; markings brown: basal blotch ill-defined, median fascia preserved in costal third of wing, connected with large subapical blotch followed by a small apical mark. Cilia white with a few brownish or brown bars. Hindwing whitish somewhat tinged with brownish towards apex; cilia white.

Male genitalia (Figs 40,41) as described for the genus.

Holotype, male: "Ecuador: Azuay. 13 km NE Nives, 3220 m. 25 Oct 1987. R. DAVIDSON, J. RAWLINS, C. YOUNG"; GS 10764. Coll. CMNH.

Epinotia lanceata sp.n.

Wingspan 22 mm. Head grey-white, labial palpus ca 3, mixed grey-brown laterally; thorax brownish, whitish distally, end of tegula white. Forewing slender, expanding distally with costa gently bent in terminal third, termen oblique, hardly convex. Ground-colour white sprinkled with brownish mostly in distal third of wing; markings dark brown in form of indistinct basal blotch, dorso-basal blotch reaching median cell, and small tornal blotch; subapical and terminal markings weak, brownish with brown group of scales. Cilia white with groups of brown scales. Hindwing white to middle, mixed with pale brownish towards apex; cilia white.

Male genitalia (Fig. 42): Uncus broad basally with long bifurcation; socius long, well sclerotized; distal edge of sacculus perpendicular to its ventral edge, cucullus gradually expanding termi-

nad; distal edge of basal cavity convex, setose, no bristles before distal edge of sacculus; henion broad, uniform.

Holotype, male: "Ecuador: Pinchincha. 12 km NW Papallacta, west slope. 3840 m. 11-12 October 1987; C. YOUNG, R. DAVIDSON, J. RAWLINS. Subparamo mixed grass/woodland"; GS 10786. Coll. CMNH.

Epinotia zamorata sp.n.

Wingspan 26 mm. Head and thorax brownish creamy, labial palpus very broad, subtriangular, ca 2, more ochreous brownish, basal half of tegula dark brown. Forewing broad, expanding distally, costa slightly convex, termen weakly oblique, straight to middle. Ground-colour creamy ochreous suffused with brownish between veins, with some longitudinal fine strigulae and browner costal strigulation. Markings brownish, in form of indistinct basal, dorsal and subternal blotches, costal part of median fascia and a fascia from end of median cell to apex; black marks in distal half of wing. Cilia brownish grey. Hindwing pale brownish creamy, diffusely marbled with brown; cilia concolorous with wing, with brownish lines.

Male genitalia (Fig. 43): Uncus slender, rounded apically, broad at base; socius large, drooping; henion membranous. Valva very broad basally, setose beyond a rather short basal cavity; cucullus broad distally, somewhat expanding beyond neck of valva, ventrally.

Holotype, male: "Ecuador: Zamora-Chinchiipe. 36 km NW Zamora, 2730 m. 29 October 19187; R. DAVIDSON, J. RAWLINS, C. YOUNG. Scrub cloudforest subparamo habitat"; GS 12205. Coll. CMNH.

C o m m e n t s. This species shows some characters typical of *Epinotia* but its uncus is not bifurcate as in the majority of the representatives of this genus, and the henion hardly developed. This last character was already observed in some Palaearctic *Epinotia*-species. Externally this species is distinct in having broad wings.

Crociosema impendens MEYRICK, 1917

Crociosema impendens MEYRICK, 1917, Trans. ent. Soc. London, **1917**: 17. Type-locality: Ecuador: Alausi. Coll. NHML. – CLARKE, 1958: 316 (lectotype, phot., male genit.).

Gretchena garai W. MILLER, 1987

Gretchena garai W. MILLER, 1987, Journ. Lepidopterists' Soc., **41**(3): 151, figs 1-3. Coll. NMNH. Type-locality: Ecuador: 4 km S Loja.

Grapholitini

Cydia elevata (MEYRICK, 1916)

Laspeyresia elevata MEYRICK, 1916, Exot. Microlepid., **2**: 24. Type-locality: Ecuador: Huigra. Coll. NHML. – CLARKE, 1958: 436 (holotype, phot., male genit., *Laspeyresia*).

Pammene carneola (MEYRICK, 1916)

Hemimene carneola MEYRICK, 1916, Exot. Microlepid., **2**: 29. Type-locality: Ecuador: Huigra. Coll. NHML. – CLARKE, 1958: 408 (holotype, phot., female genit., *Hemimene*).

Cryptophlebia azuaya sp.n.

Wingspan 17 mm, in one female paratype 19 mm. Head and thorax greyish, labial palpus ca 2, mixed blackish, proximal part of thorax black-grey, black blotch at base of tegula, with end part brownish creamy. Forewing weakly expanding posteriorly, termen weakly oblique, indistinctly convex. Ground-colour white-grey suffused with grey, costal strigulae grey-black: Markings

black-grey: Dorso-basal blotch reaching before middle of dorsum, oblique, straight distally almost connecting costal remnant of median fascia, followed by tornal triangle; terminal markings paler except for subapical fascia. Cilia concolorous with ground-colour with darker bars. Hindwing pale brownish, creamer at base; cilia creamy with brownish lines. Female darker, with markings better developed, in basal half of wing confluent.

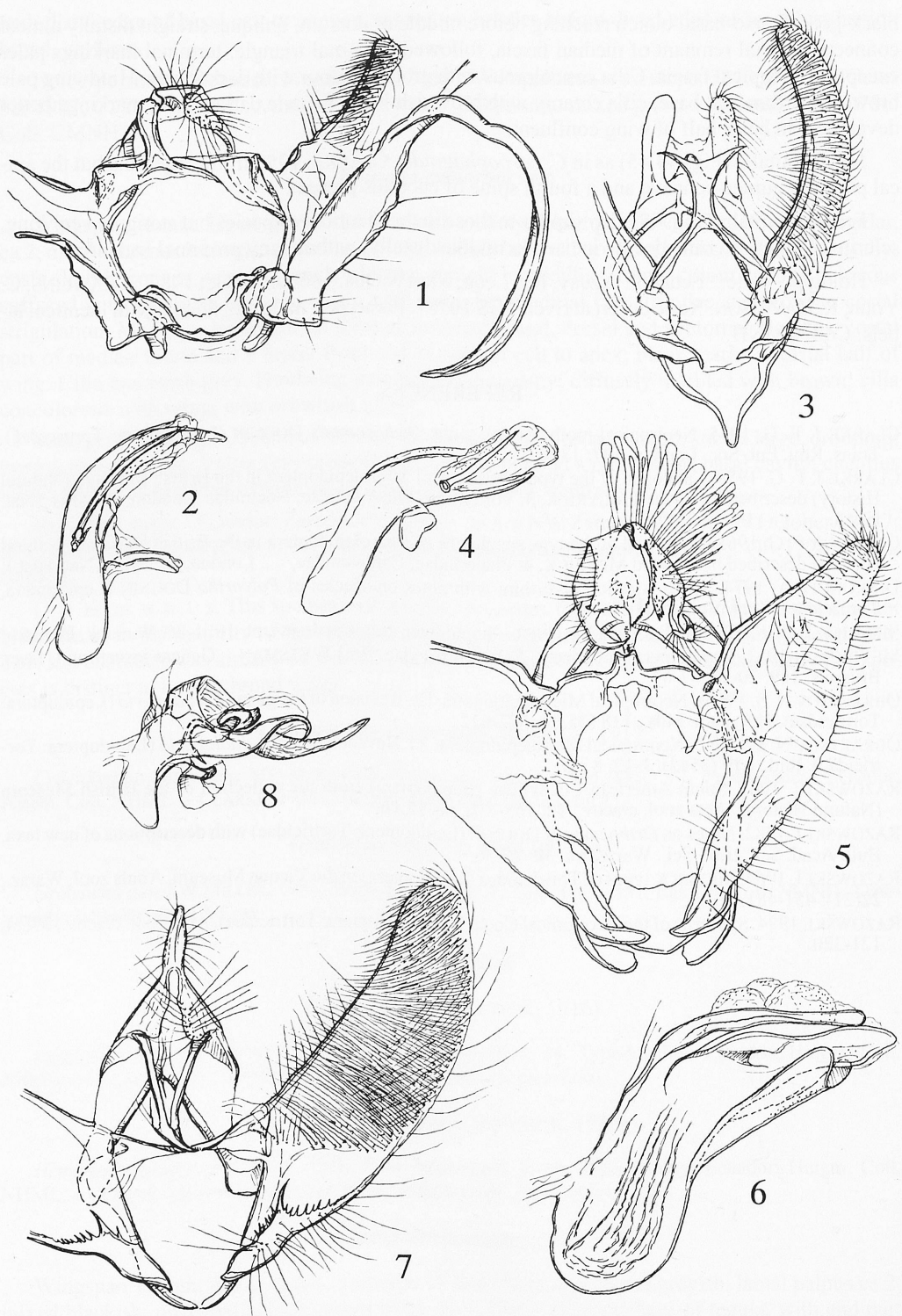
Male genitalia (Figs 44,45) as in *C. carpophagoides* CLARKE, 1951 from Argentina but the apical part of tegumen concave and a fourth spine of cucullus present.

Female genitalia (Fig. 48) also similar to those in the mentioned species but sterigma very long, sclerite of eighth sternite deeply incised in middle distally, without any proximal incisure.

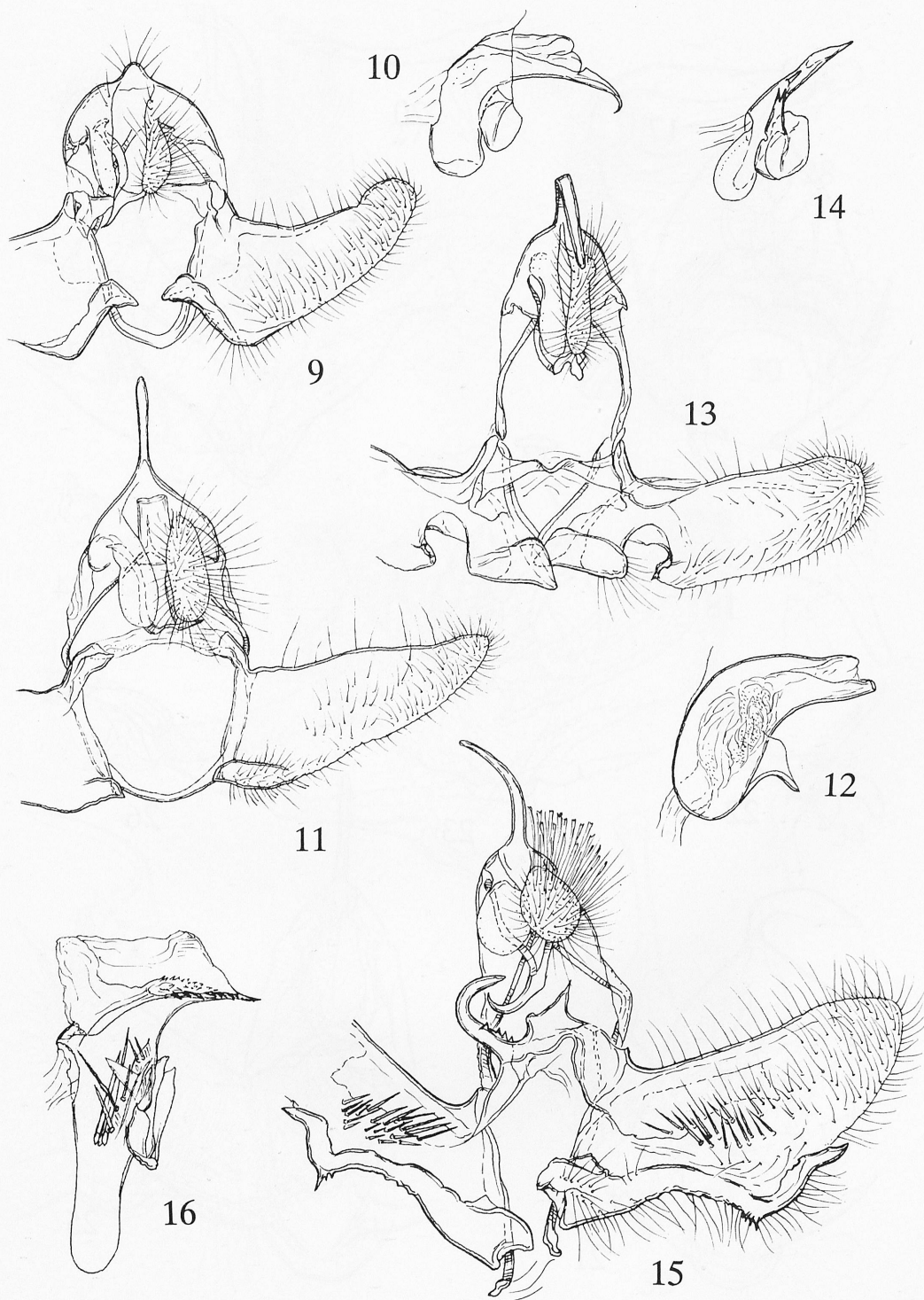
Holotype, male: "Ecuador: Azuay. Rio Leon, 6 km N Ona. 1860 m 26 Oct 1987, J. RAWLINS, C. Youn, R. DAVIDSON. Xeric desert at river"; GS 10787. Paratypes, male and female with identical labels. Coll. CMNH.

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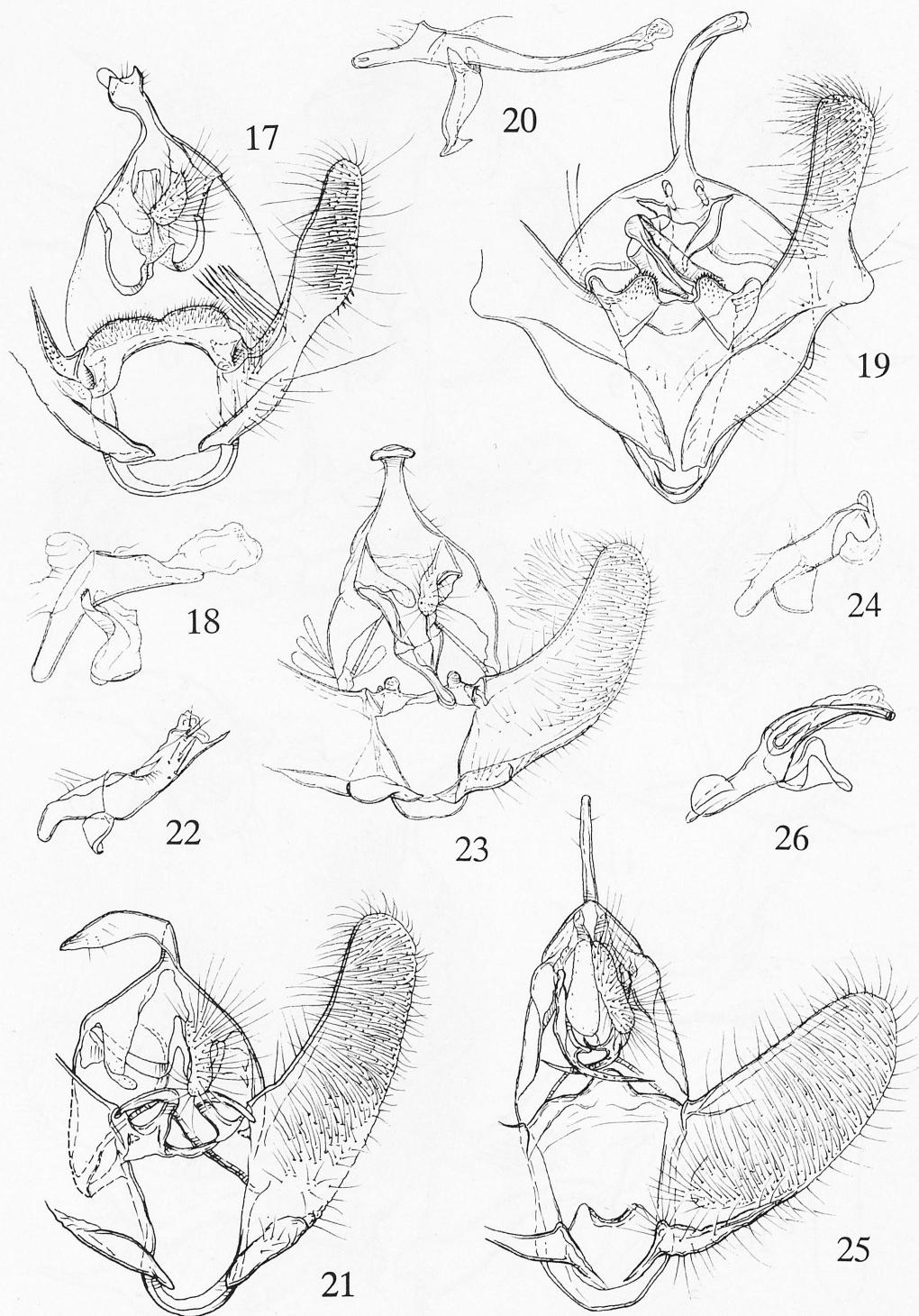
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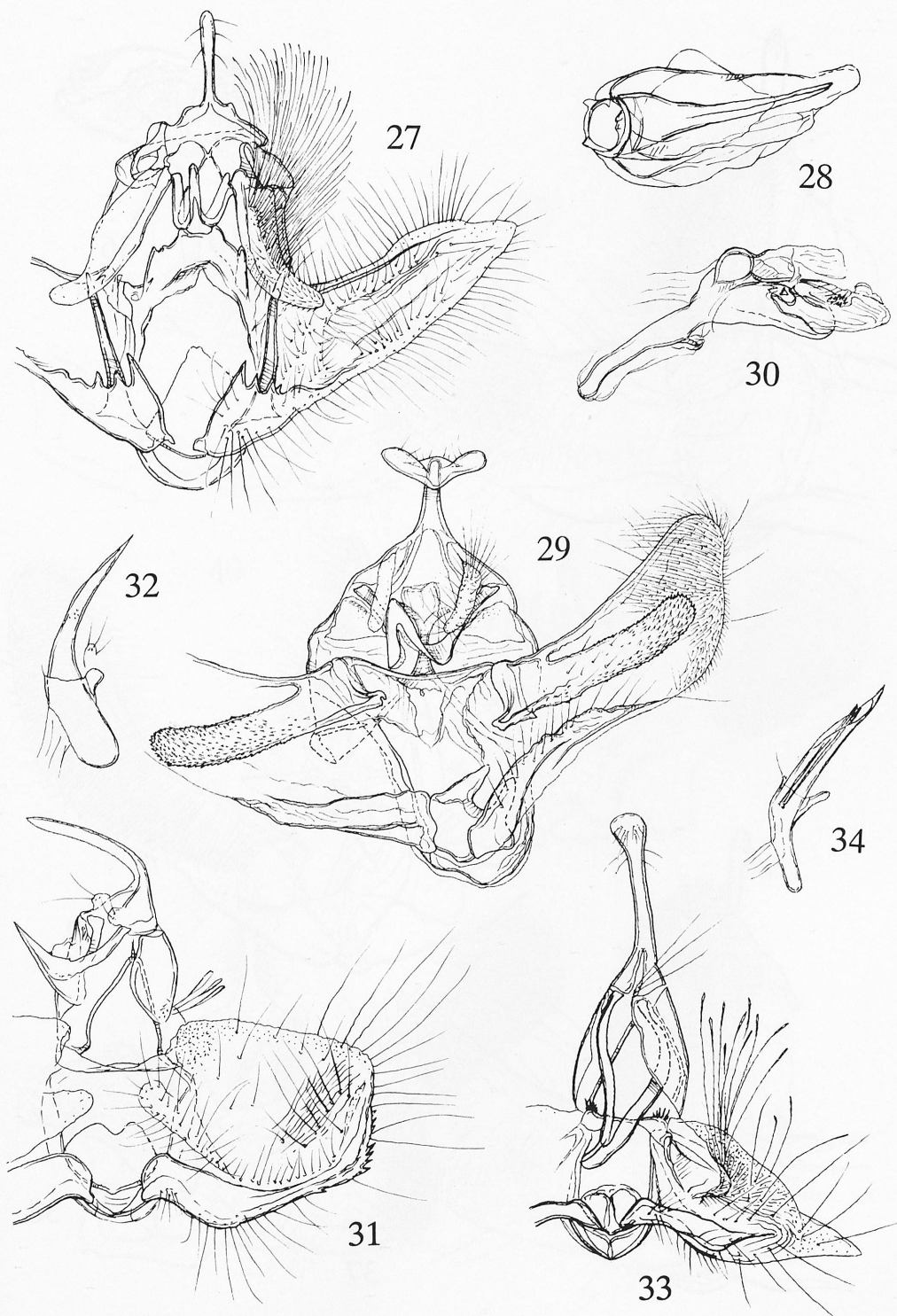
Figs 1-8. Male genitalia: 1,2 – *Phalonidia bassii* sp.n., holotype; 3,4 – *Saphenista tufinoa* sp.n., holotype; 5,6 – *Aethes nuda* sp.n., holotype, 7,8 – *Bonagota sololana* sp.n., holotype.



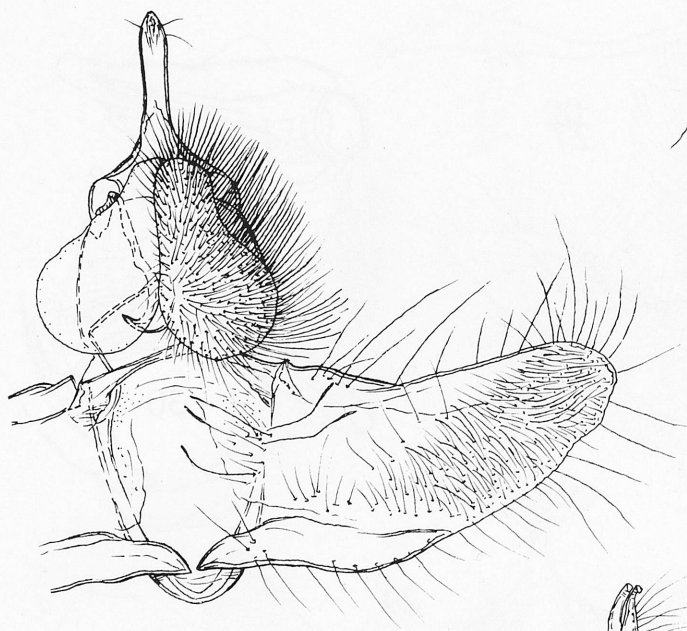
Figs 9–16. Male genitalia: 9,10 – *Exoletuncus nivesanus* sp.n., holotype; 11,12 – *Proathorybia chlidonias* sp.n., holotype; 13,14 – *Markia trifascia* sp.n., holotype; 15,16 – *Netechna cerusata* sp.n., holotype.



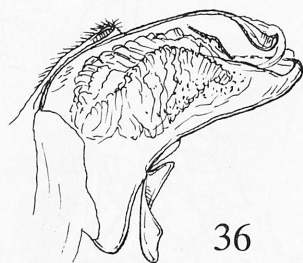
Figs 17-26. Male genitalia: 17,18 – *Seticosta cerussograptus* sp.n., holotype; 19,20 – *Hynhamia microsoccia* sp.n., holotype; 21,22 – *Inape bicornis* sp.n., holotype; 23, 24 – *Inape papaliactana* sp.n., holotype; 25,26 – *Oregocerata cladognathos* sp.n., holotype.



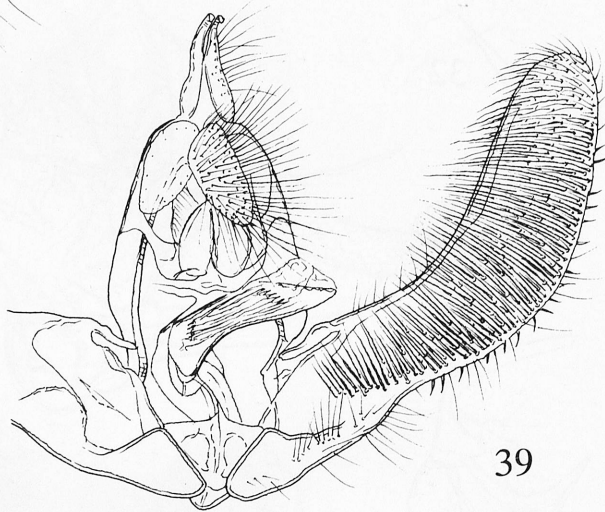
Figs 27-34. Male genitalia: 27 – *Terinebrica polycornuta* sp.n., holotype; 29,30 – *Chinchipena elettaria* sp.n., holotype; 31,32 – *Argyrotaenia chillana* sp.n., holotype; 33,34 – *Clepsis archidona* sp.n., holotype.



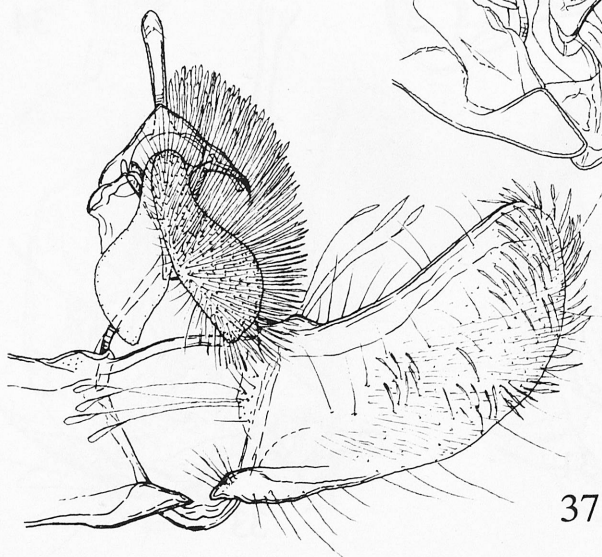
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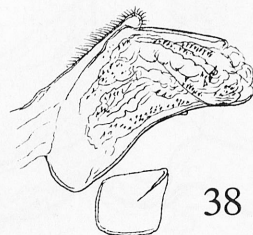
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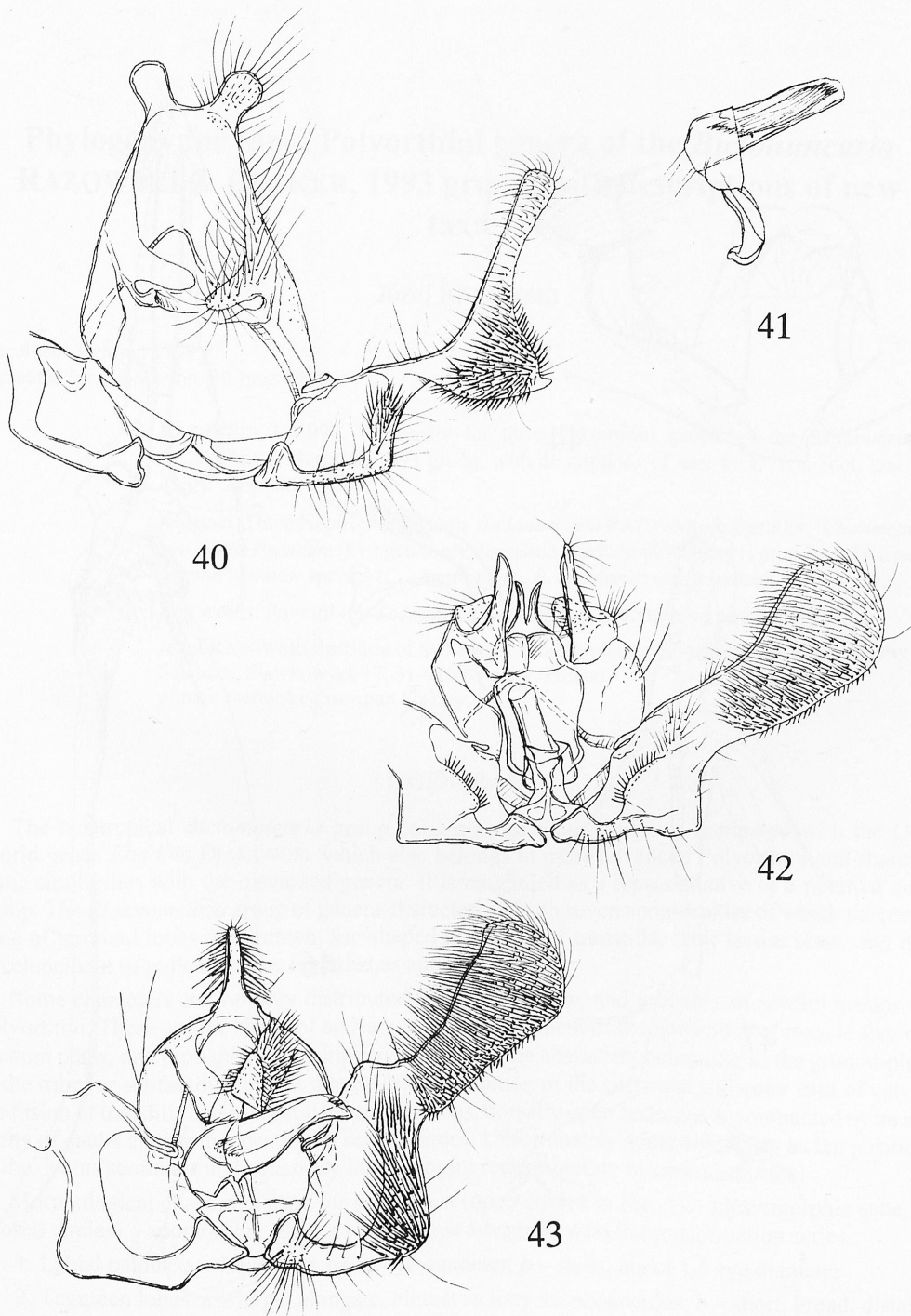


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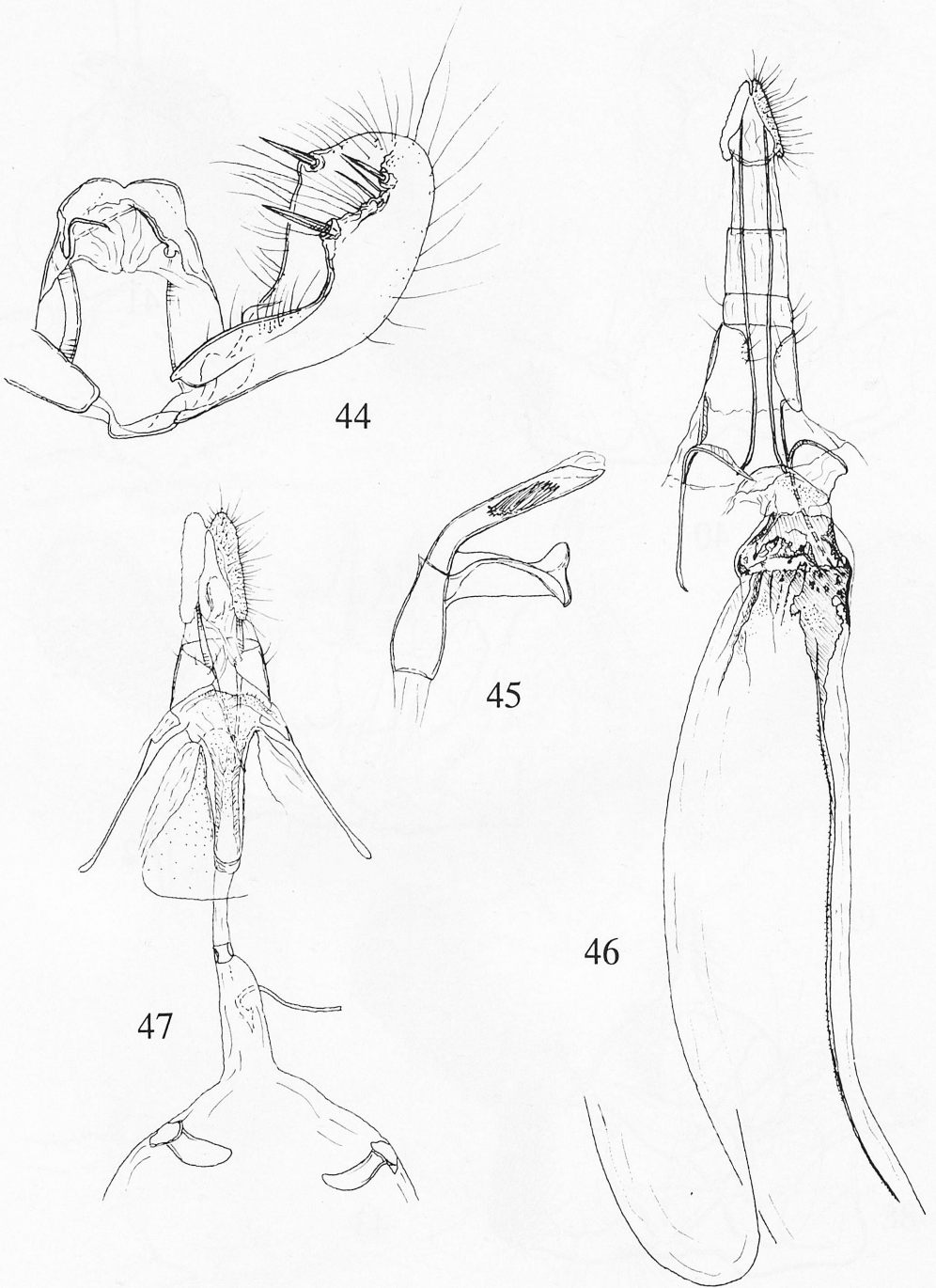


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Figs 35-39. Male genitalia: 35,36 – *Orthocomotis grandisocia* sp.n., holotype; 37,38 – *O. expansa* sp.n., holotype; 39 – *Omiostola youngi* sp.n., holotype.



Figs 40-43. Male genitalia: 40,41 – *Azuayacana cidnochroa* sp.n., holotype; 42 – *Epinotia lanceata* sp.n., holotype; 43 – *Epinotia zamorata* sp.n., holotype.



Figs 44-47. Male and female genitalia: 44,45 – *Cryptophlebia azuaya* sp.n., holotype; 46 – *Polyortha maculata* sp.n., holotype; 47 – *Cryptophlebia azuaya* sp.n., paratype.