

## Tortricidae collected in Ecuador in the years 1996–1999: Euliini (Lepidoptera)

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**Abstract:** This paper represents the third contribution to our knowledge of the Tortricidae of Ecuador. In this report we provide data on 23 genera and 35 species of Euliini (Tortricinae). Five genera, 26 species and 1 subspecies are described as new and data on the distribution of several other species are provided. Holotypes of new species and subspecies are in the collection of Volker PELZ, Ruppichteroth, and eventually will be deposited in the Senckenberg-Museum, Frankfurt am Main. New taxa are as follows: *Dogolion* gen. n., *Lydontopa* gen. n., *Xoser* gen. n., *Bolbia* gen. n., *Moronata* gen. n., *Gravicornutia cuspidata* sp. n. (HT: ♂), *Gravicornutia inapulana* sp. n. (HT: ♂), *Dogolion oligodon* sp. n. (HT: ♂), *Proathorybia unisignata* sp. n. (HT: ♂), *Psedaleulia dumetosa* sp. n. (HT: ♂), *Lydontopa polydonta* sp. n. (HT: ♂), *Lobogenesis riesteri* sp. n. (HT: ♂), *Netechna ochrotoma* sp. n. (HT: ♀), *Punctapinella paratheta* sp. n. (HT: ♀), *Strophotina apparatus* sp. n. (HT: ♀), *Gauruncus laudatus* sp. n. (HT: ♀), *Gauruncus simplicissimus* sp. n. (HT: ♂), *Xoser exors* sp. n. (HT: ♂), *Transtillaspis monoseta* sp. n. (HT: ♂), *Transtillaspis multisetae* sp. n. (HT: ♂), *Transtillaspis luiscarlosi* sp. n. (HT: ♂), *Transtillaspis irrorata* sp. n. (HT: ♂), *Bolbia biloba* sp. n. (HT: ♂), *Anopinella tenebricosa* sp. n. (HT: ♀), *Anopinella consecta* sp. n. (HT: ♂), *Anopinella alshiana* sp. n. (HT: ♂), *Rhytmologa yukipana* sp. n. (HT: ♂), *Chamelania auricoma* sp. n. (HT: ♂), *Moronata eriosocii* sp. n. (HT: ♂), *Orthocomotis paratonsa* sp. n. (HT: ♀), *Orthocomotis longuncus* sp. n. (HT: ♂), *Orthocomotis euchaldera domonoana* ssp. n. (HT: ♂).

**Key words:** Lepidoptera, Tortricidae, Tortricinae, Euliini, Ecuador, new taxa.

### Tortricidae gesammelt in Ecuador in den Jahren 1996–1999: Euliini (Lepidoptera)

**Zusammenfassung:** Im dritten Teil der Artikelserie „Tortricidae von Ecuador“ werden die Untersuchungsergebnisse für 23 Gattungen und 35 Arten der Tribus Euliini (Tortricinae) vorgestellt. 5 Gattungen, 26 Arten und 1 Unterart werden neu beschrieben. Die Holotypen der neuen Taxa befinden sich in der Sammlung Volker PELZ, Ruppichteroth und werden letztlich an das Forschungsinstitut und Natur-Museum Senckenberg, Frankfurt am Main, gelangen. In der Liste der neuen Taxa im englischen Abstract wird in Klammern das Geschlecht des Holotypus angegeben (siehe im Abstract).

### Tortricidae coleccionadas en Ecuador en los años 1996–1999: Euliini (Lepidoptera)

**Resumen:** En este artículo, la tercera parte de “Tortricidae de Ecuador”, se presenta datos de 23 géneros y 35 especies de Euliini. Se describen cinco nuevos géneros, 26 nuevas especies y una nueva subespecie. Los holotipos de las especies nuevas están en la colección Volker PELZ, Ruppichteroth, determinados ultimamente para el Senckenberg-Museum, Frankfurt am Main. La lista de las taxon nuevas se encuentra en el resumen inglés.

## Introduction

This is our third paper dealing with the Tortricidae of Ecuador. An introduction and background to the series

of publications can be found in RAZOWSKI & PELZ (2001), which includes a list of collecting sites, photographs of habitats and maps of the general area. The papers are based on material collected by the second author mainly in the vicinity of Macas from 1996 to 1999. Where available, other recently collected material also is included.

The first paper (RAZOWSKI & PELZ 2001) treated the tribes Tortricini and Cochylini; the second paper (RAZOWSKI & PELZ 2002) treated one species of Endotheriniina (Olethreutini); and this paper deals with the tribe Euliini.

Holotypes of the new taxa are in the collection of Volker PELZ, Ruppichteroth, Germany, and eventually will be deposited in the Senckenberg-Museum, Frankfurt am Main.

**Note.** Numbers included in descriptions of the labial palpus refer to the proportion of their total length to the horizontal diameter of the compound eye.

### Abbreviations:

- > road from > to
- CREA Centro de Reconversión Económica del Austro (Azuay, Cañar y Morona-Santiago, Ecuador)
- CVPR Collection Volker PELZ, Ruppichteroth, Germany
- Gral. General
- GS Genitalia slide
- HT Holotype
- ISEZ Institute of Systematics and Evolution of Animals PAS, Kraków, Poland
- PN National Park
- Prov. Province
- Pto Puerto
- PUCE Museo de Zoología, Centro de Biodiversidad y Ambiente, Pontificia Universidad Católica del Ecuador, Quito, Ecuador
- SMFL Lepidoptera collection of Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt am Main, Germany
- sta station

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The photographs were taken by the second author, the black and white drawings of the genitalia by the first author.

## Systematics

### Euliini

#### *Gravicornutia* RAZOWSKI & BECKER, 2001

Our knowledge of the geographic distribution of *Gravicornutia* is rather poor. The 20 previously described species are known only from six states in Brazil, ranging from Goiás and Rio de Janeiro to Paraná and Santa Catarina (RAZOWSKI & BECKER 2001). Rio de Janeiro supports the greatest number of species with six. The descriptions below of *G. cuspis* and *G. inapulana* from Ecuador bring the total number of species to 22, illustrating a considerably wider distribution in South America and demonstrating our superficial knowledge of the genus despite the relative large number of described species.

#### *Gravicornutia cuspis* sp. n.

(Figs. 1, 2, 60)

**Holotype:** ♂, "Ecuador, Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 27.–30. iv. 1998, leg. Volker PELZ"; GS 880-VP (CVPR).

**Paratype** (1 ♂): same locality as holotype, 23.–24. iv. 1998 (CVPR).

**Etymology:** The species name refers to its long cornutus (Latin: *cuspis* = pike). The name is not an adjective.

### Diagnosis

Similar to *G. umbrosa* RAZOWSKI & BECKER, 2001 from Santa Catarina, Brazil, but easily distinguished superficially. The male genitalia of *G. cuspis* have a much shorter uncus, smaller socii and a shallow median concavity of the transtilla. Other parts of genitalia (e.g. sacculus, aedeagus, cornutus, terminal part of tegumen) are also somewhat distinct from those of *G. umbrosa*.

### Description

♂ (Fig. 60): Wing span 9 mm. Head cream; labial palpus ca. 1.5, with second joint brown medially; thorax concolourous with head. Forewing slender, only slightly expanded terminally; costa weakly convex, termen oblique. Ground colour cream with slight ochreous admixture terminally. Markings reduced: Some brownish spots at costa and in terminal area of wing, one spot near middle of median cell. Cilia concolourous with wing. Hindwing pale brownish cream with browner strigulation; cilia paler than wing.

♂ genitalia (Figs. 1, 2): Uncus slender, slightly broadened subterminally; socii broad distally; gnathos slender. Valva long, sacculus slender with sharp terminal process; transtilla large, broad, with lateral sharp prominences terminally; juxta simple, small; aedeagus slender, almost as long as costa of valva; cornutus slender, long.

#### *Gravicornutia inapulana* sp. n.

(Figs. 3, 4, 46, 61, 62)

**Holotype:** ♂, "Ecuador, Morona-Santiago-Prov., Macas, Pro-

año > Inapula, CREA-Domono, 1100 m, 20.–23. iv. 1998, leg. Volker PELZ"; GS 839-V.P. (CVPR).

**Paratype** (1 ♀): same data as holotype, GS 840-V.P. (CVPR).

**Etymology:** The species name refers to Inapula, the name of the type locality. The name is defined as a noun in apposition.

### Diagnosis

Closely related to *G. goianica* RAZOWSKI & BECKER, 2001 and *G. nigrobasana* RAZOWSKI & BECKER, 2001 but easily distinguished by the slightly expanding terminal part of uncus, the shorter distal part of the median process of the transtilla and the very large cornutus.

### Description

♂ and ♀ (Fig. 61, 62): Wing span ♂ 9 mm, ♀ 10 mm. Head pale brownish yellow, vertex browner; labial palpus 1.5, cream; thorax pale cinnamon brownish. Forewing slender slightly expanded terminally, termen rather oblique, almost straight. Ground colour pale ochreous ferruginous, paler towards wing base. Markings brownish grey with a few black spots along edges; concolourous spots along costa. Dorso-basal blotch rudimentary, slender, followed by rather subtriangular blotch at mid-dorsum; median fascia brown to middle, slender in dorsal part, terminating at tornus; subapical blotch accompanied by a rounded subterminal blotch and smaller apical spot. Cilia concolourous with terminal part of wing. Hindwing pale brownish grey with darker venation; cilia slightly paler than wing, greyer.

♂ genitalia (Figs. 3, 4): Uncus fairly long, rounded apically; socii ovate; valva rounded terminally; sacculus slender followed by small caudal thorn; median part of transtilla broad, subtriangular, with pair of wing-shaped processes; aedeagus stout; cornutus very large, slightly bent.

♀ genitalia (Fig. 46): Distal lobes of sterigma rather short, with lateral projections; anteostial part large, concave along middle; corpus bursae with large postmedian projection strengthened by slender sclerites; numerous spines in corpus bursae.

### *Dogolion* gen. n.

**Type-species:** *Dogolion oligodon* sp. n.

**Etymology:** The genus name is an anagram of the name of its type-species. Its gender is masculine.

### Diagnosis

This genus is related to a few euliine genera characterized by a very slender uncus, e.g. *Proathorybia* RAZOWSKI, 1999. It differs from these in the large ventral parts of the bases of sacculi, the well-sclerotized transtilla and the presence of dorso-submedian parts of the juxta.

### Description

**Venation:** Forewing with distance between base of R1–R2 and R2–R3 nearly equal, R5 to termen below apex; CuA2 from discal cell about  $\frac{2}{3}$  distance to R1–R2. Hindwing with Rs–M1 stalked to middle, M3–CuA1 very short stalked.

♂ **genitalia**: Uncus slender, not hairy; socii submembranous, drooping, hairy and scaled; gnathos arms and terminal plate slender; vinculum complete; valva broad basally with terminal portion submembranous; costa long, attenuating before end of valva; sacculus simple, without terminal process, extending ventro-basally; small triangular process beneath mid-valva; transtilla well-sclerotized, concave medially, spiny dorso-laterally; juxta large with two dorsal processes; aedeagus simple, fairly broad, slightly expanding terminally; coecum penis large; caulis very small; cornuti a series of small spines.

♀ **genitalia**: Eighth tergite large; sterigma broad with well developed lateral parts and semiovate median portion; sterigma and almost entire bursae copulatrix densely spined; colliculum very large, sack-shaped, rounded proximally; ductus bursae short.

**Distribution**: Known only from Ecuador.

### *Dogolion oligodon* sp. n.

(Figs. 5, 6, 47, 63, 64)

**Holotype**: ♂, "Ecuador, Morona-Santiago-Prov., Macas, Proaño > Alshi, 1700 m, 27. ix.–4. x. 2000, leg. Volker PELZ"; GS 1128-V.P. (CVPR).

**Paratypes** (2 specimens): 1 ♂, 1 ♀ (GS 1390-V.P.), same data as holotype (CVPR).

**Etymology**: The species name refers to the presence of a subcostal process of the valva (Greek: oligos = small, odontos = tooth). The name is not an adjective.

### Diagnosis

*Dogolion oligodon* is the only species in the genus, and it is distinguished by the characters detailed above in the description of the genus. Externally it resembles *Transtillaspis bascanion* RAZOWSKI, 1998, *T. irrorata* sp. n. and *T. monoseta* sp. n.

### Description

♂ and ♀ (Fig. 63, 64): Wing span 14 mm. Head cream; labial palpus ca. 1.8, cream, terminal joint and outer side brownish; thorax brownish cream. Forewing somewhat expanded terminally; costa slightly convex; termen oblique, hardly convex. Ground colour brownish cream suffused and sprinkled brownish and rust brown; costal strigulation brown, dorsal strigulae concolourous but small, terminal area of wing suffused pale brownish, subterminal area brown. Markings indistinct consisting of submedian elongate blotch at  $\frac{1}{3}$  of dorsum, terminating near middle of wing followed by a pale, rather whitish area of ground colour at end of median cell and subapical blotch divided into three parts. Cilia concolourous with ground colour, with broad brownish divisions. Hindwing greyish, whiter towards base, with diffuse pale brownish-grey spots; cilia greyish with distinct, grey basal line.

**Variation**: ♀ paratype (Fig. 64) with yellowish ground colour, brownish strigulation and dark brown markings; the subterminal area strongly suffused brownish extending by means of weak suffusion to beyond mid-termen.

♂ **genitalia** (Figs. 5, 6): As described for the genus.

♀ **genitalia** (Fig. 47): As described for the genus.

### *Proathorybia unisignata* sp. n.

(Figs. 7, 8, 65)

**Holotype**: ♂, "Ecuador, Morona-Santiago-Prov., Macas, Proaño > Alshi, 1700 m, 27. ix.–4. x. 2000, leg. Volker PELZ"; GS 1393-V.P. (CVPR).

**Etymology**: The species name refers to the forewing markings (Latin: UNUS = one, SIGNATUS = signed). The name is defined as a noun in apposition.

### Diagnosis

The ♂ genitalia of *P. unisignata* are very similar to those of the Mexican *P. minima* (WALSINGHAM, 1914), especially in the shape of valva. Both have a membranous transtilla and a broad, partially membranous aedeagus. *P. unisignata* is easily distinguished by a slender termination of the gnathos and a short base of the costa of the valva. From Ecuadoran *P. chlidonias* RAZOWSKI, 1999 it differs in the yellow ground colour of the forewing and the much shorter socii.

### Description

♂ (Fig. 65): Wing span 9 mm. Head and thorax cream; labial palpus cream ca. 1.5; Forewing slender, expanding terminally; costa weakly convex; termen oblique, somewhat sinuate. Ground colour yellowish-cream with indistinct ochreous suffusions and brownish-grey spots. Markings much darker than spots, brown-grey, reduced to a spot at mid-costa accompanied by a small subapical spot. Cilia concolourous with ground colour; hindwing concolourous, transparent, with paler cilia.

♂ **genitalia** (Figs. 7, 8): Uncus very slender; socii broad, semiovate; terminal plate of gnathos very slender; basal part of costa of valva short, weakly up-curved; sacculus simple, short; aedeagus broadened medially; cornuti numerous microspinulae.

♀ unknown.

### *Psedaleulia dumetosa* sp. n.

(Figs. 9, 10, 48, 66, 67)

**Holotype**: ♂, "Ecuador, Morona-Santiago-Prov., Macas, Proaño > Alshi, 1700 m, 27. ix.–4. x. 2000, leg. Volker PELZ"; GS 1397-V.P. (CVPR).

**Paratypes** (7 ♂♂, 1 ♀): 4 ♂♂ same data as holotype (GS 1076-V.P., 1394-V.P., 1405-V.P., 1406-V.P.); 1 ♀ (GS 872-V.P.), 1 ♂ (GS 685-V.P.) Macas, Proaño > Inapula, CREA-Domono, 1100 m, 20.–23. iv. 1998; 1 ♂ (GS 1395-V.P.) same locality, 2. x. 2000 (all CVPR). 1 ♂ Macas, Proaño > Inapula, CREA-Domono, 1100 m, 20.–23. iv. 1998 (ISEZ).

**Etymology**: The name refers to the spines of valva (Latin: DUMETUM = thicket, with -os [as suffix] = rich in) and is considered a noun in apposition.

### Diagnosis

The new species is only the second known representative of *Psedaleulia*. From the Peruvian *P. qualitata* RAZOWSKI, 1997 it differs in having a slender spiny subcostal lobe of the valva and a strong postbasal lobe above the sacculus armed with long setae.

### Description

♂ and ♀ (Fig. 66, 67): Wing span 10–12 mm. Head light



yellowish cream, labial palpus 2, slightly mixed brownish to middle; thorax cream brownish, basal half of tegula browner. Forewing slender, not expanding terminally; costa almost straight, termen oblique, mostly straight. Ground colour yellowish cream with weak brownish strigulation mainly along dorsum; some blackish strigulae and dots along costa and in the apical third of wing. Markings: Trace of median fascia in form of brownish grey costal spot and blackish spot in the middle of the wing; subapical blotch with two brown strigulae; one spot subterminally and a row of dots along termen. Cilia concolourous with wing. Hindwing pale cream brownish with indistinct darker strigulation; cilia lighter.

♂ **genitalia** (Figs. 9, 10): Very similar to those in *P. qualitata* differing mainly in the disc of valva, which in *P. dumetosa* has a large proximal lobe armed with long thick setae followed by an elongate fold with less numerous shorter setae. Aedeagus broad, with weakly sclerotized spiny lobes and slender coecum penis.

♀ **genitalia** (Fig. 48): Ovipositor short; papilla analis broad; apophyses short, slender. Sterigma short, broad, densely spined, with large proximal part and anteostial portion concave medially; colliculum fused with sterigma, weakly sclerotized; bursa copulatrix small; ductus bursae short; ductus seminalis postmedian, dorsal; accessory bursae extending from terminal part of ductus bursae.

### *Lydontopa* gen. n.

Type-species: *Lydontopa polydonta* sp. n.

Etymology: The name is an anagram of the name of the type-species. Its gender is feminine.

### Diagnosis

This genus is probably related to *Proathorybia* RAZOWSKI, 1999; the two have similar shapes of tegumen, uncus, gnathos and valva. Its putative autapomorphy is the configuration of the transtilla which is armed with a pair of sharp rods.

### Description

Venation: Forewing with all veins separate, distance between bases of R4–R5 twice as that between R5 and M1; R5 to termen below apex; M3–CuA1 well separated at median cell; CuA2 arising about opposite  $\frac{1}{3}$  distance from wing base to base of R1–R2. Hindwing with Rs–M1 stalked to  $\frac{1}{3}$ , M3–CuA1 stalked about  $\frac{1}{8}$  distance.

♂ **genitalia**: Uncus slender; socius drooping, hairy; arm of gnathos simple, terminal plate large; vinculum slender, complete. Distal part of valva slender; sacculus broad with serrate caudal part and terminal process; disc of valva sparsely hairy; pulvinus absent; transtilla a slender band with two sublateral sharp processes; juxta small; aedeagus shorter than costa of valva, with long ventral termination, median zone, small caulis, and slender coecum penis; two strong capitate cornuti present.

♀ unknown.

**Distribution.** Known only from Ecuador.

### *Lydontopa polydonta* sp. n.

(Figs. 11, 12, 68, 69)

**Holotype:** ♂, "Ecuador: Azuay-Prov., Cuenca 2500 m, 23.–28. I. 1996, leg. Volker PELZ"; GS 800-V.P. (CVPR).

**Paratypes** (9 ♂♂): 5 ♂♂ (GS 1441-V.P., 1444-V.P.) Ecuador Azuay-Prov., PN Cajas, Laguna Llaviuco, 3225 m, 2°50'38"S, 79°8'35"W, 11. x. 2002, sta 25, leg. GIELIS & PELZ; 4 ♂♂ (GS 1440-V.P., 1442-V.P.) same locality, 12. x. 2002; (7 ♂♂ CVPR, 1 ♂ ISEZ, 1 ♂ PUCE).

**Etymology:** The name is composed of the Greek odontos = tooth and poly = numerous, referring to the shape of the sacculus. The name is considered a noun in apposition.

### Diagnosis

The genus is monotypic; its autapomorphies are mentioned above for the genus.

### Description

♂ (Figs. 68, 69): Wing span 12–14.5 mm. Head cream white; labial palpus ca. 4, cream white, laterally ochreous; thorax more ochreous cream. Forewing distinctly expanding posteriorly, costa weakly convex, apex fairly long, termen sinuate. Ground colour cream tinged light yellowish ochreous in distal area of wing. Numerous blackish dots especially in distal area, the largest followed with weak rust shade before end of median cell. Cilia concolourous with ground colour. Hindwing whitish, cream on periphery, with some indistinct greyish spots in apex third; cilia whitish.

**Variation:** Quantity and size of blackish dots variable; in particular, the prominent central dot is greatly reduced in some specimens. Ground colour more ochreous in some specimens.

♂ **genitalia** (Figs. 11, 12): As described for the genus.

### *Nunimeus numenius* RAZOWSKI & BECKER, 2001

(Figs. 13, 49, 70)

**Material examined** (1 ♂, 2 ♀♀): 1 ♂ (GS 968-V.P.), Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 23.–24. vi. 1999; 1 ♀ (GS 967-V.P.) same locality, 28.–30. vi. 1999; (both CVPR); 1 ♀ (GS 770-V.P.), Morona-Santiago-Prov., Macas, Gral. Proaño, Río Jurumbaino, 1100 m, 19.–23. v. 1998; (ISEZ).

This species was described from two ♂♂ from the province of Tungurahua, Ecuador. Our ♂ shows only slight differences to the type in the length of the costal process of valva (Fig. 13). The ♀ (Fig. 70) previously was unknown.

♀ **genitalia** (Fig. 49): Sterigma broad, with large, thorny lateral lobes and anteostial portion reduced to a slender, sclerotic belt; ductus bursae short, provided with spiny sclerite which extends as far as antemedian part of corpus bursae; ductus seminalis median, situated dorsally; accessory bursa small, dorsal, postmedian.

**Remarks:** Dimorphism is seen in the shade of the ground colour of the forewing which is whitish-cream, more or less densely suffused with brownish or brownish-rust; median fascia brown, complete or consisting of large dorsal triangle accompanied by small costal spot; trace of subapical and subternal spots may appear.

### *Icteralaria ecuadorica* RAZOWSKI, 1999

(Figs. 14, 15, 71)

**Material examined** (5 ♂♂, 2 ♀♀): 1 ♂ (GS 674-V.P.) Morona-Santiago-Prov., Macas, 1000 m, 11.–23. XII. 1997; 1 ♂, 2 ♀♀ same locality, 25. VI.–4. VII. 1999, 1 ♂ (GS 782-V.P.) same locality, 23.–28. I. 1998; 1 ♂ Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 27.–30. IV. 1998; 1 ♂ (GS 675-V.P.) Morona-Santiago-Prov., Macas, San Vicente, Río Yukipa, 900 m (Cabañas ecológicas), 6.–13. II. 1996 (CVPR, 1 ♀ ISEZ).

**♂ genitalia** (Figs. 14, 15): Resembling those of *I. idiochroma* RAZOWSKI, 1999 from Costa Rica but easily distinguished by the slender central part of the transtilla and the presence of long proximal (ventral) processes. In *I. ecuadorica* the aedeagus is somewhat longer, provided with a much larger ventro-terminal process; all cornuti are short, spiniform; and the sacculus is broader, with short, dull free termination.

**Remarks:** This species previously was known only from the holotype ♀. The shape of the central part of the transtilla is rather variable among the specimens examined. It can be slender, tapering terminally or provided with an additional small thorn near the apex.

### *Lobogenesis* RAZOWSKI, 1992

This genus was described as monobasic, but at present it consists of 8 species. BROWN (2000) revised *Lobogenesis* and compared it with *Odonthalitus* RAZOWSKI, 1992 (originally monobasic, now including 6 species). The two genera are very closely related, and a discussion of their phylogeny is provided by BROWN. *Lobogenesis* is widely distributed in the Neotropics from Costa Rica to Bolivia.

### *Lobogenesis riesteri* sp. n.

(Figs. 16, 17, 50, 72, 73)

**Holotype:** ♂, “Ecuador, Morona-Santiago-Prov., Macas, Proaño > Alshi, Río Abanico, 1500 m, 17. II. 1998, leg. Volker PELZ”; GS 642-V.P. (CVPR).

**Paratypes** (1 ♂, 2 ♀♀): 1 ♀ (GS 1387-V.P.), Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 23.–24. VI. 1999; 1 ♀ (GS 1388-V.P.), same locality, 28.–30. VI. 1999; (all CVPR); 1 ♂ same locality, 28.–30. VI. 1999 (ISEZ).

**Etymology:** This species is named in honour of Mr. Wolfgang RIESTER, Macas, for his interest and support of the fieldwork in the vicinity of Macas.

### Diagnosis

Externally this species resembles to *L. magdalenana* BROWN, 2000 from Colombia and *L. larana* BROWN, 2000 from Venezuela. In the ♂ genitalia it is closer to the latter, but differs in the position and shape of the spiny areas of the valva.

### Description

**♂ and ♀** (Fig. 72, 73): Wing span 10–11 mm. Head cream, labial palpus ca. 1.5, brownish-grey; thorax light brownish cream, mixed grey-brown proximally. Forewing expanding posteriorly, costa bent near apex, termen weakly oblique, slightly sinuate, apex sharp. Ground colour whitish cream, mixed with grey from beyond middle, strigulated and sprinkled dark grey. Markings in form of traces

of basal blotch (a posterior line), median fascia (a diffuse costal blotch) and a few short lines in the distal area of the wing. Cilia grey-cream tinged grey, with dark grey basal line. Hindwing grey-cream, strigulated grey, darker on periphery; cilia concolourous with wing base.

**Variation:** Paler and darker specimens, with well developed strigulation and remnants of markings which are blackish grey. In one specimen grey lines edged ochreous.

**♂ genitalia** (Figs. 16, 17): Uncus very slender bifurcate from before middle; socius elongate-ovate; arm of gnathos slender, expanding postbasally, provided with large subterminal lobe; terminal plate of gnathos very small. Valva broad basally, extending beyond middle dorsally with an oblique row of short bristles extending from beyond middle and a group of much longer setae in the middle, anteriorly; pulvinus broad, not extending beyond disc; transtilla with dorso-median rounded lobe and lateral broadenings; aedeagus slender; coecum penis very short; cornutus long, funnel-shaped in basal half.

**♀ genitalia** (Fig. 50): Sterigma broad with latero-proximal lobes, small roof-shaped sclerite beyond ostium bursae followed by minutely spined areas; broad colliculum and large proximal membranous sac; corpus bursae membranous.

### *Netechma ochrotona* sp. n.

(Figs. 51, 74)

**Holotype:** ♀, “Ecuador, Morona-Santiago-Prov., Macas, Gral. Proaño, Río Jurumbaino, 1100 m, 19.–23. V. 1998, leg. Volker PELZ”; GS 742-V.P. (CVPR).

**Paratype** (1 ♀): Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 28.–30. VI. 1999 (CVPR).

**Etymology:** The species name refers to the ochreous colouration of forewings (Greek: ochra = yellow ochre; Latin: TONUS = tension, strain). The name is defined as a noun in apposition.

### Diagnosis

Similar to *N. consequens* RAZOWSKI, 1999 from Argentina and Brazil and *N. sectionalalis* (MEYRICK, 1932) from Costa Rica, but differing in the shapes of ductus bursae, ductus seminalis, and sterigma, which characterizes with large latero-posterior lobes.

### Description

**♀** (Fig. 74): Wing span 14 mm. Head cream ochreous, labial palpus ca. 2, mixed brownish; thorax brownish cream, light cream distally. Forewing as in *N. consequens* from Brazil. Ground colour cream suffused ochreous, with more brownish diffuse shades submedially and subterminally. Markings: Submedian triangular blotch of dorsum and subternal blotch dark brown, costal blotch and subapical blotch brownish grey with brown marks, this last extending towards tornus, marked brown in middle. Cilia cream with some brown scales. Hindwing light brownish grey, cilia paler, mixed ochreous in distal third of wing.

**♀ genitalia** (Fig. 51): Sterigma with large latero-posterior lobes and small proximal corners; ductus bursae short,

in major part rather well sclerotized; corpus bursae elongate, distinctly sclerotized and spiny except for proximal portion, with large rounded posterior prominence; accessory bursa originating at base of ductus bursae.

***Punctapinella conchitis* (MEYRICK, 1912)**

(Fig. 75)

**Material examined:** 1 ♂, (GS 948-V.P.), Morona-Santiago-Prov., Macas, Proaño > Alshi, 5 km SO Alshi, 1700 m, 5. VII. 1999 (CVPR).

Previously known only from Colombia. Our specimen slightly differs from Colombian example illustrated by BROWN (1991) in having the cornutus more slender, longer and curved and a somewhat longer sacculus.

***Punctapinella paratheta* sp. n.**

(Figs. 52, 76)

**Holotype:** ♀, "Ecuador: Morona-Santiago-Prov., Macas, Proaño > Inapula CREA-Domono, 1100 m, 28.–30. VI. 1999, leg. Volker PELZ"; GS 1298-V.P. (CVPR).

**Paratype** (1 ♀): (GS 871-V.P.), Morona-Santiago-Prov., Macas, Gral. Proaño, Río Jurumbaino, 1100 m, 19.–23. V. 1998, leg. Volker PELZ (CVPR).

**Etymology:** The species name refers to the similarity to the related species *P. theta* BROWN, 1991 (Latin: PAR, PARIS = like, similar, equal). The name is not an adjective.

**Diagnosis**

Although the ♀ genitalia of *P. paratheta* are extremely similar to those of *P. chionocarpa* (MEYRICK, 1932), and *P. theta*, the species is superficially distinct. The new species differs from all known species of this genus except the Brazilian *P. niphastra* (MEYRICK, 1931) in having dark hindwings and a somewhat different arrangement of the pale spots of the forewing which are more pink than in other species. The majority of the species of *Punctapinella* are known from the eastern part of South America, two are known from Colombia. Three species are now known from Ecuador (the third one is *P. chione* RAZOWSKI & BECKER, 1999).

**Description**

♀ (Fig. 76): Wingspan 14–15 mm. Head cream grey; labial palpus > 2, brownish grey, whitish subterminally; thorax cream, tegula mixed brownish basally. Forewing as in *P. chionocarpa*. Ground colour white tinged cream pinkish in form of ovate blotches, the largest in costal half of wing basally accompanied by an elongate dorso basal blotch; two small spots beyond middle, two much larger in subterminal area; one at middle, another near tornus; row of spots from before apex to mid-termen and a strip at costa before this last row. Cilia pinkish cream (worn). Hindwing brownish paler basally; cilia pale brown.

♀ genitalia (Fig. 52): Very similar to those in *P. theta* from Venezuela but with somewhat longer ductus bursae and broader distal part of sterigma.

***Paraptila symmetricana* BROWN, 1990**

(Fig. 101)

**Material examined:** 1 ♀ (GS 904-V.P.), Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 20.–23. IV. 1998 (CVPR).

This species was described from Bolivia (BROWN 1990); another species, *P. ecuadora* BROWN, 1990 is known only from the ♂ holotype from Ecuador. Determination of our specimen is based on the comparison of photographs of the adults.

***Cuproxena elongana* BROWN, 1991**

**Material examined:** 1 ♀ (GS 816-V.P.), Morona-Santiago-Prov., Macas, 1000 m, 14. II. 1996; 1 ♀, same locality, 25. VI.–4. VII. 1999 (both CVPR).

Our specimens differ in the shape of dark grey costal blotch which in one example is more rounded. This species was described from Venezuela and its holotype is from Amazonas Territory. It also was found in Peru. BROWN (1991) suggests that if the association of Peruvian specimen with the holotype from Venezuela is correct, it is one of the most widely distributed species of this genus. Now its area is extended to Ecuador.

**Remarks:** The determination is based on the illustrations in the original description. Unfortunately the Ecuadoran ♂ is still unknown which prohibits a confirmation of our determination by comparison of the ♂ genitalia.

***Strophotina apparata* sp. n.**

(Figs. 53, 77)

**Holotype:** ♀, "Ecuador, Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 23.–26. III. 1998, leg. Volker PELZ"; GS 896-V.P. (CVPR).

**Etymology:** This name refers to the magnificent external appearance (Latin: APPARATUS = splendid). The name is here defined as a noun in apposition.

**Diagnosis**

Externally species of this genus are extremely similar. The differences in the ♀ genitalia are slight between the two described species, *S. strophota* (MEYRICK, 1926) and *S. curvidagus* BROWN, 1998. However, the genitalia of the new species are unlike either of those, in the absence of the bulbous parts of the ductus bursae, the slender sterigma, and the indistinctly sclerotized bursa copulatrix.

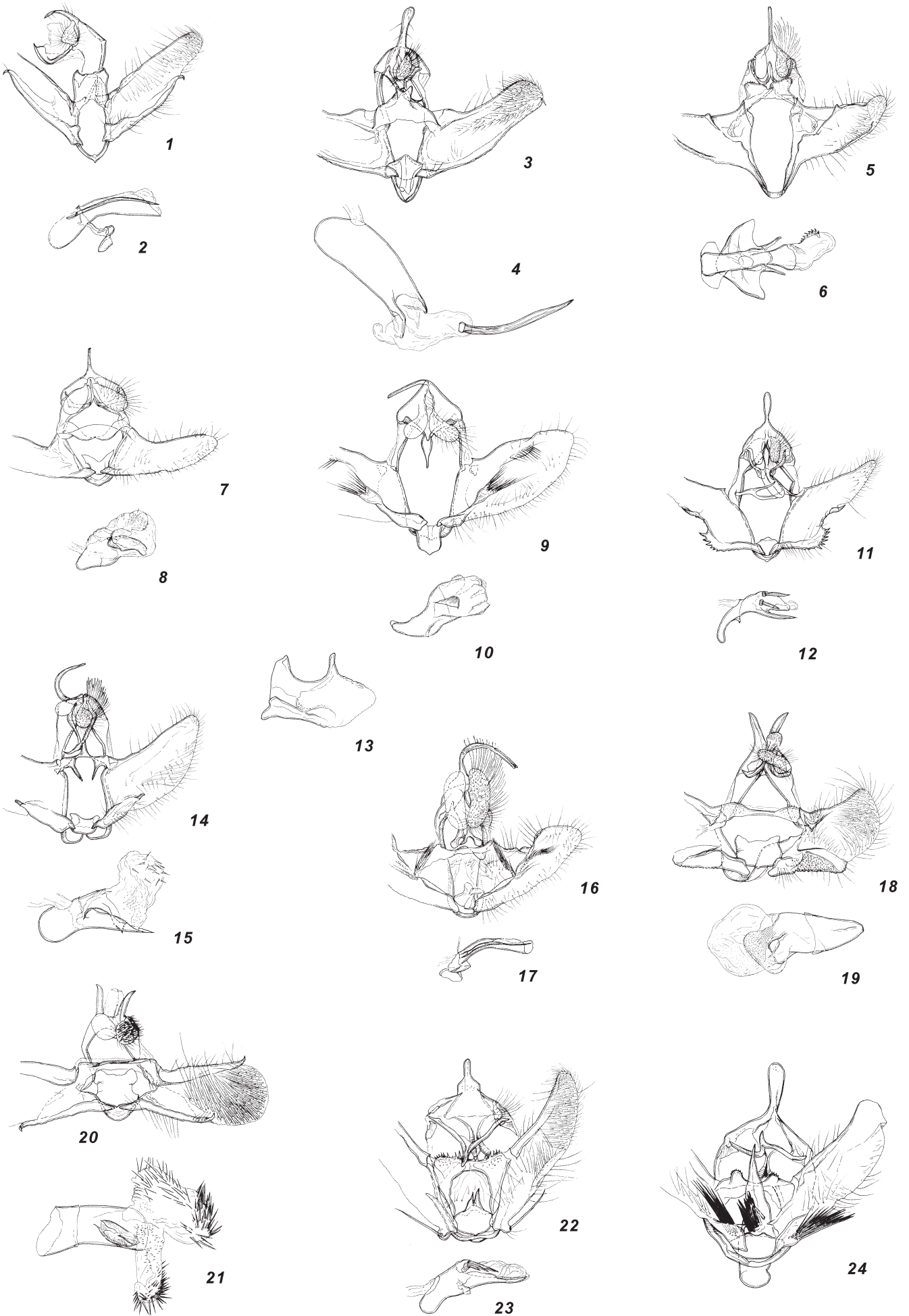
This genus previously was known from Venezuela, Colombia, Peru (*S. strophota*), and Costa Rica (*S. curvidagus*).

**Description**

♀ (Fig. 77): Wing span 25 mm. Head and thorax light brownish cream, labial palpus > 4, end of second joint and third joint dark brown, termination of this last whitish; tegula mixed brown proximally. Shape of the

**Figs. 1–24:** ♂ genitalia. **Figs. 1, 2:** *Gravitcornutia cuspis* sp. n., holotype. **Figs. 3, 4:** *Gravitcornutia inapulana* sp. n., holotype. **Figs. 5, 6:** *Dogolion oligodon* sp. n., holotype. **Figs. 7, 8:** *Proathorybia unisignata* sp. n., holotype. **Figs. 9, 10:** *Psedaleulia dumetosa* sp. n., holotype. **Figs. 11, 12:** *Lydontopa polydonta* sp. n., holotype. **Fig. 13:** *Nunimeus numenius* RAZOWSKI & BECKER, 2001, Ecuador, Macas, Proaño > Inapula, CREA-Domono, 1100 m, 23.–24. VI. 1999; GS 968-V.P., valva. **Figs. 14, 15:** *Icteralaria ecuadorica* RAZOWSKI, 1999, Ecuador, Morona-Santiago-Prov., Macas, 1000 m, 11.–23. XII. 1997; GS 674-V.P. **Figs. 16, 17:** *Lobogenesis riesteri* sp. n., holotype. **Figs. 18, 19:** *Gauruncus simplicissimus* sp. n., holotype. **Figs. 20, 21:** *Xoser exors* sp. n., holotype. **Figs. 22, 23:** *Transtillaspis monoseta* sp. n., holotype. **Fig. 24:** *Transtillaspis multisetae* sp. n., holotype.





forewing typical of the genus. Ground colour cream with slight olive hue sprinkled brown, and with dense brown strigulae of appressed pearl scales. Costal blotch large, dark brown with scattered reddish scales and large spot of ground colour at inner tip; subterminal elongate transverse marking slightly darker (sprinkled black) than ground colour. Cilia concolourous with this last. Hindwing brownish, whiter in basal area, with diffuse brown strigulation. Cilia cream.

♀ **genitalia** (Fig. 53): Proximal part of sterigma broad; ostium bursae rounded, protected by distinct, spiny sclerite proximally; distal part of sterigma in large part membranous, with well sclerotized lateral arms; ductus bursae long, in major part sclerotized, slender medially, strongly, asymmetrically expanding in distal part; corpus bursae minutely spined, with distal sclerite extending from ductus bursae.

### *Pseudomeritastis heliadelpha* (MEYRICK, 1932)

**Material examined:** 1 ♂ (GS 808-V.P.), Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 30. III.–2. IV. 1998 (CVPR).

This species previously was known only from Colombia. OBRAZTSOV (1966) included seven species in his revision of *Pseudomeritastis* OBRAZTSOV, 1966, distributed from Guatemala (1 species) and Costa Rica (2 species) south to Colombia and Bolivia (two species in each country). Hence the discovery of the genus in Ecuador is not surprising, suggesting a wide distribution in the Neotropical region.

### *Gauruncus laudatus* sp. n.

(Figs. 54, 78)

**Holotype:** ♀, “Ecuador, Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 23.–26. III. 1998, leg. Volker PELZ”; GS 913-V.P. (CVPR).

**Etymology:** The species name is due to the beautiful colouration of the forewings (Latin: LAUDARE = to praise). The name is defined as a noun in apposition.

### Diagnosis

RAZOWSKI (1988) included two species in *Gauruncus* RAZOWSKI, 1988: *G. gelastes* RAZOWSKI, 1988 from Argentina and *G. gampsognathos* RAZOWSKI, 1988 from Bolivia. The latter is known from the ♂ only, but is distinct externally. A third species, *G. intermedius* RAZOWSKI & BECKER, 2002, was described from Ecuador. The new species differs from the others in the whitish-grey ground colour and the ochreous-ferruginous posterior area of wing. The ♀♀ of *G. laudatus* and *G. gelastes* differ from congeners in the absence of the submedian processes of eighth sternit.

### Description

♀ (Fig. 78): Wing span 15 mm. Head and thorax grey, labial palpus > 2. Forewing broadest postmedially; costa convex, termen weakly oblique. Ground colour in anterior part of wing whitish grey dotted grey, with pale rust costal spots, separated from posterior part of wing by means of rust brown oblique line marked brown in costal

third. All the posterior area yellowish ochreous with light ferruginous or ochreous suffusions and brown dots along costa and dorsum; brown lines between veins; subterminal area suffused brownish medially marked with black-brown striae; termen brown edged. Cilia yellowish ochreous with brown and cream divisions. Hindwing light brownish grey, paler basally; cilia paler than wing.

♀ **genitalia** (Fig. 54): Very similar to those of *G. gelastes* but easily distinguished by the lack of ear-shaped processes of the subgenital sternite which in the mentioned species are anterior to ostium area and situated laterally.

### *Gauruncus simplicissimus* sp. n.

(Figs. 18, 19, 79)

**Holotype:** ♂, “Ecuador, Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 30. III.–2. IV. 1998, leg. Volker PELZ”; GS 765-V.P. (CVPR).

**Etymology:** The species name refers to the shape of the sacculus (Latin: SIMPLICISSIMUS = the most simple). The name is defined as a noun in apposition.

### Diagnosis

Closely related and very similar to *G. gelastes* and *G. gampsognathos*, but differing in the possession of short, slender socii and an nearly straight ventral edge of the sacculus. The distal end of the latter is rounded, not produced, and provided with some thorns.

### Description

♂ (Fig. 79): Wing span 13 mm. Head and thorax brownish; labial palpus ca. 1.5. Forewing costa somewhat convex, mostly basally; apex short, acute; termen not oblique, hardly concave beneath apex. Ground colour pale brownish densely strigulated and suffused with brown; strigulae being concentrated in basal half of wing, medially forming an ill-defined fascia; subapical marking weaker; three cream white spots along costa subapically. Cilia concolourous with ground colour (specimen worn). Hindwing brownish, cilia paler.

♂ **genitalia** (Figs. 18, 19): Uncus slightly shorter than in the above mentioned species; socii elongate, rather short; valva short with subtriangular process at base of costa subdorsally; sacculus rather straight ventrally, rounded terminally, densely thorny; median part of transtilla long, bases broad, minutely spiny; aedeagus broad.

### *Xoser* gen. n.

**Type-species:** *Xoser exors* sp. n.

**Etymology:** The genus name is an anagram of the name of the type-species. Its gender is masculine.

### Diagnosis

Externally resembling some Sparganothini or Euliini (e.g. *Gauruncus* RAZOWSKI, 1988), but distinct in the ♂ genitalia. The uncus is bifid as in *Gauruncus* with broadly separate arms and the costa of the valva terminates in a thorn as in *Chamelania jaliscana* RAZOWSKI, 1999. The socii are bristled, the transtilla is simple, and the cornuti are represented by numerous simple spines. The gnathos is absent as in Chlidanotini.



## Description

**Venation:** Forewing with all veins separate; distance between bases of R4–R5 ca.  $\frac{1}{3}$  the distance between bases of R3–R4; R5 to termen; base of CuA1 almost opposite that of R1. Hindwing with Rs–M1 approaching basally to one another; M2–M3 distinctly separate; M3–CuA1 connate.

♂ **genitalia:** Uncus bifid with distinctly separate bases of arms; socii ovate, bristled; gnathos absent; costa of valva large, broad basally, terminating in a curved thorn; sacculus with similar but longer termination; distal part of valva rounded; disc hairy and bristled, pulvinus not extending proximally; transtilla without median part, broad basally; juxta large; aedeagus stout; vesica with large plate and numerous spines, the majority of which fairly long.

♀ unknown.

**Remarks:** The ♂ genitalia of this species possess an unusual mosaic of characters: the valvae resemble those of Chlidanotini; the aedeagus and cornuti are similar to those of Euliini and some Cochylini; and the gnathos is completely atrophied. The loss of the gnathos is characteristic of Cochylini; its reduction is seen in some Cnephysiini and almost all Chlidanotini. However, this is a first example of its loss in Euliini.

## *Xoser exors* sp. n.

(Figs. 20, 21, 80)

**Holotype:** ♂, “Ecuador, Morona-Santiago-Prov., Macas, San Vicente, Río Yukipa, 900 m (Cabañas ecológicas), 6.–13. II. 1996, leg. Volker PELZ”; GS 860-V.P. (CVPR).

**Etymology:** The species name refers to the extraordinary combination of characters (Latin: EXORS, EXORTIS = without share in). The name is not considered to be an adjective.

## Diagnosis

*Xoser exors* can be distinguished from all other Euliini by the characters detailed above. It is the only known species in the genus.

## Description

♂ (Fig. 80): Wing span 12.5 mm. Head brownish, labial palpus 1.5; thorax brown. Forewing rather uniformly broad throughout; costa somewhat convex; apex short; termen indistinctly oblique, slightly concave beneath apex. Ground colour greyish brown, darkest at base and dorsum, grey-white sprinkled brown in distal half of wing; large ochreous cream blotch before tornus edged brown; brown slender fascia from it to costa; brown diffuse subapical blotch extending in form of weak fascia to end of termen; concolourous spots at apex and termen; a row of indistinct dots parallel to the mentioned fascia. Cilia brownish white, brown at apex, with weak brownish median line. Hindwing greyish brown, greyer at base; cilia paler than wing.

♂ **genitalia** (Figs. 20, 21): As described for the genus.

## *Transtillaspis* RAZOWSKI, 1987

RAZOWSKI & BECKER (2001) present a summary of our knowledge of the morphology and distribution of *Transtillaspis*. The genus occurs rather widely throughout South America, from Venezuela to Argentina and from Brazil to Peru but previously only one species was recorded from Ecuador: *T. argenteolinea* RAZOWSKI & BECKER, 2002. The four species described below fit well into the existing species-groups found in other parts of its range.

## *Transtillaspis monoseta* sp. n.

(Figs. 22, 23, 81)

**Holotype:** ♂, “Ecuador, Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 28.–30. VI. 1999, leg. Volker PELZ”; GS 993-V.P. (CVPR).

**Etymology:** The name refers to presence of a single seta on the sacculus (Latin prefix MONO- = single). The name is a noun in apposition.

## Diagnosis

This new species is probably closest to *T. bascanion* RAZOWSKI, 1987 from Peru, from which it can be distinguished by the broad base of the uncus, the lack of large submedian thorns of the transtilla, and the presence of a single spine at the sacculus (in *T. bascanion* there are three strong ones). It also is similar to *T. batoidea* RAZOWSKI, 1987 from Peru, but differs in the shape of the uncus and the number of saccular spines. The ♀ is unknown.

## Description

♂ (Fig. 81): Wing span 17.5 mm. Head brownish, labial palpus > 1.5; thorax brownish grey with refractive whitish scales. Forewing rather uniformly broad throughout; costa distinctly curved outwards, termen fairly oblique, rather straight. Ground colour whitish cream preserved in dorsal half of wing and in form of a diffuse fascia from mid-wing to apex. Remaining areas brownish with brown remnants of markings and costal spots; subterminal marking as a transverse stripe near middle; rust suffusions mainly on dark elements of markings. Cilia (worn) cream brown, black at tornus. Hindwing dark grey with some light cream spots in distal third; cilia paler than wing.

♂ **genitalia** (Figs. 22, 23): Uncus short, broad in basal half; socii and gnathos arm slender; valva with small ventral prominence postbasally armed with single long spine; transtilla strong, heavily thorny; juxta provided with pair of unequally large dorsal processes; aedeagus broad to middle, slender posteriorly; dorsal group of cornuti consisting of five cornuti (2 small and 3 larger).

## *Transtillaspis multisetae* sp. n.

(Figs. 24, 82)

**Holotype:** ♂, “Ecuador, Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 23.–24. VI. 1999, leg. Volker PELZ”; GS 982-V.P. (CVPR).

**Etymology:** The name refers to presence of several setae on the sacculus (Latin: MULTUS = numerous). The name is again a noun in apposition.

## Diagnosis

*T. multisetae* belongs to a group of species characterized by a rather delicate transtilla forming a pair of submedian thorny lobes. The setae of sacculus are little specialised, slender, and numerous. It is also comparable to *T. blechra* RAZOWSKI, 1987 or *T. baea* RAZOWSKI, 1987, both from Peru, but both of which lack spines on the sacculus.

## Description

♂ (Fig. 82): Wing span 15.5 mm. Head olive grey, thorax darker, greyer, labial palpus as in *T. monoseta*. Forewing rather slender; costa gently convex; termen weakly convex, slightly oblique. Ground colour greyish cream sprinkled grey, suffused reddish rust dorsally and post-medially. Traces of markings grey (three slender fascia at costa and subapical blotch), median fascia reaching end of median cell. A few black dots in middle near termen and a spot at tornus. Cilia greyish with brown median line and black stripe at tornus. Hindwing brownish grey, paler, translucent in basal half; cilia paler than wing.

♂ genitalia (Fig. 24): Uncus long, weakly expanding terminally; socii vestigial; gnathos arms slender; sacculus with dense postbasal spines forming a compact group; transtilla with pair of submedian prominences; juxta with weak sclerotization of the dorsal part (probably without larger prominences); aedeagus large with a large group of cornuti.

## *Transtillaspis luiscarlosi* sp. n.

(Figs. 25, 26, 83)

**Holotype:** ♂, "Ecuador, Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 23.–24. iv. 1999, leg. Volker PELZ"; GS 970-V.P. (CVPR).

**Etymology:** The species is dedicated to Luis Carlos RIVADENEIRA.

## Diagnosis

The new species is close to the Peruvian *T. cornutipaea* RAZOWSKI, 1997 and *T. atimeta* RAZOWSKI, 1997, as indicated by the shape of the valvae and transtilla. It differs from them in the large, asymmetrical processes of the juxta, the very broad aedeagus and the presence of numerous cornuti in the vesica.

## Description

♂ (Fig. 83): Wing span 14 mm. Head cream brownish; labial palpus 2.5, brownish; thorax slightly darker than vertex. Forewing broad; costa uniformly convex; termen slightly convex. Ground colour cream ochreous with slight brownish admixture, dotted and strigulated greyish brown. Markings slightly darker consisting of strigulation or reticulation; basal blotch in form of a small costal spot; median fascia indistinct with darkest spot medially, broadest at tornus; subapical blotch ill-defined connected with a fascia broadening and terminating near mid-termen; cilia concolourous with ground colour with some brownish divisions (partially worn). Hindwing greyish brown with some darkened spots; cilia cream, basal line brownish grey.

♂ genitalia (Figs. 25, 26): Uncus slender, fairly long, pointed apically; valva broadest medially, convex ventro-caudally; sacculus simple, broadest in basal third, with some terminal folds; two large, broad submedian lobes of transtilla; aedeagus broad with large ventro-terminal lobe; pair of lateral asymmetrical processes of anellus at zone; one broad, curved and one very long, slender processes of juxta developed; cornuti of various sizes: ca. 10 long and medium sized ones and numerous small spines.

## *Transtillaspis irrorata* sp. n.

(Figs. 27, 28, 84)

**Holotype:** ♂, "Ecuador, Morona-Santiago-Prov., Macas, Proaño > Alshi, 5 km SO Alshi, 1700 m, 27. ix.–4. x. 2000, leg. Volker PELZ"; GS 1391-V.P. (CVPR).

**Paratype** (1 ♂): (GS 1399-V.P.), same data as holotype, (CVPR).

**Etymology:** The name is due to maculation of the forewing (Latin: *irroratus* = sprinkled [with water]). The name is defined as a noun in apposition.

## Diagnosis

This species is closely related to the Bolivian *T. brandinojuxta* RAZOWSKI, 1987, as indicated by the presence of a bifurcate dorsal process of the juxta accompanied by a pair of lateral thorns. It differs, however, in the much broader aedeagus, a series of the larger cornuti and the broader distal process of juxta.

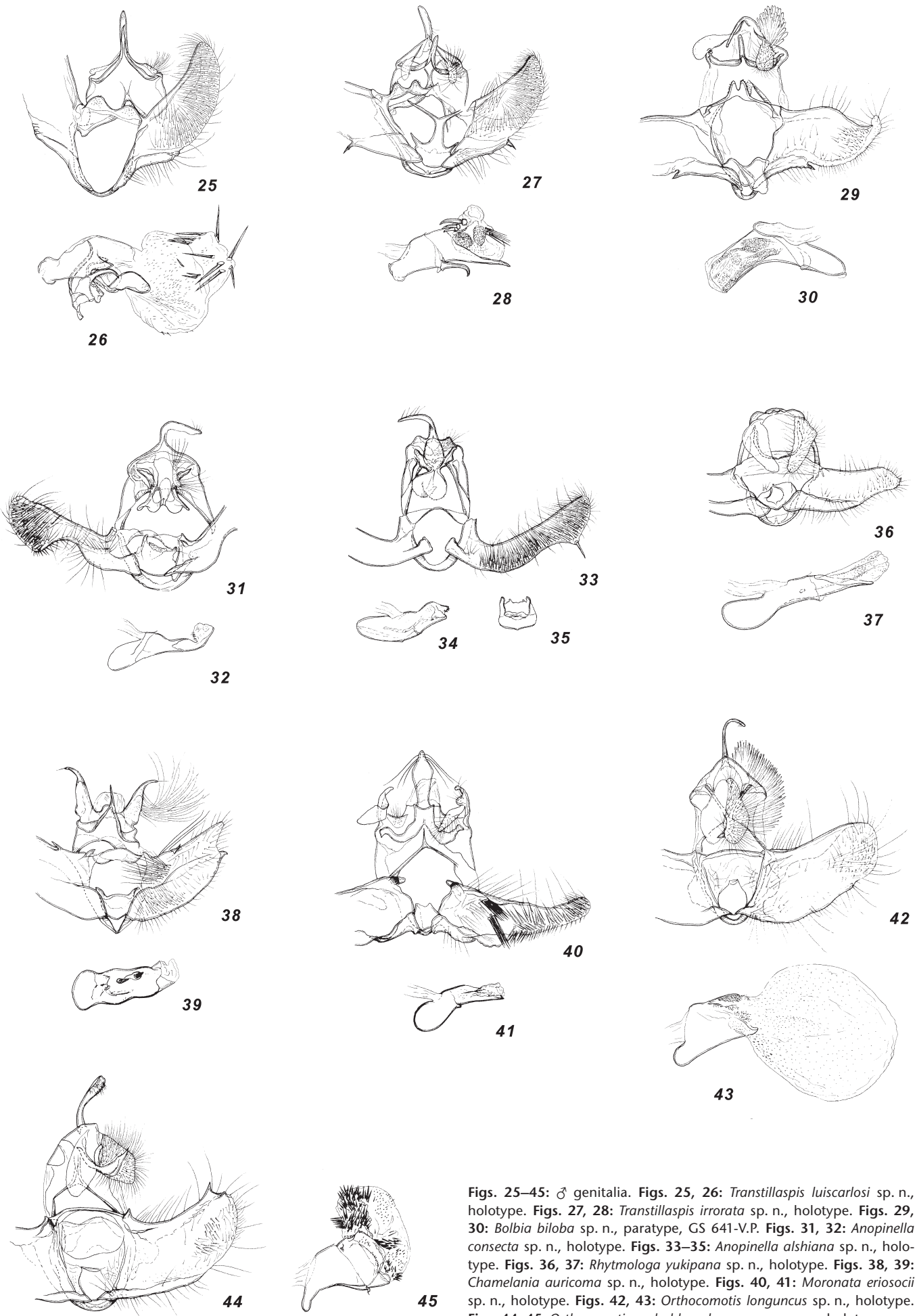
## Description

♂ (Fig. 84): Wing span 12.5 mm (paratype 13 mm). Head brownish cream, thorax much browner; labial palpus ca. 2, brown. Forewing weakly expanding terminally, costa somewhat convex, termen mostly straight, slightly oblique. Ground colour pale brownish with browner suffusions and brown spots along wing edges; remnants of markings (basal blotch, median fascia and subapical blotch connected with subterminal and terminal markings) concolourous. Cilia (worn) concolourous with ground colour. Hindwing pale brownish cream; strigulation and spots brownish; cilia pale cream.

**Variation:** Paratype with distinct brown markings; ground colour in the form of small spots in the distal third of wing.

♂ genitalia (Figs. 27, 28): Uncus slender, moderately large; arms of gnathos slender; socii slender fairly long; valva tapering terminally, somewhat upcurved; sacculus terminating in a distinct thorn; dorsal part of transtilla, two submedian thorny lobes; juxta with rod like dorso-median process bifurcate terminally and two rather slender lateral processes; aedeagus stout, with elongate ventral termination; coecum penis short; caulis provided with distal hooked process; cornuti three slightly curved thick spines.

**Remarks:** The ♀ is unknown. In the genitalia morphology, the paratype differs slightly from the holotype, primarily in the shape of the aedeagus.



Figs. 25–45: ♂ genitalia. Figs. 25, 26: *Transtillaspis luiscarloi* sp. n., holotype. Figs. 27, 28: *Transtillaspis irrorata* sp. n., holotype. Figs. 29, 30: *Bolbia biloba* sp. n., paratype, GS 641-V.P. Figs. 31, 32: *Anopinella consecta* sp. n., holotype. Figs. 33–35: *Anopinella alshiana* sp. n., holotype. Figs. 36, 37: *Rhytmologa yukipana* sp. n., holotype. Figs. 38, 39: *Chamelania auricoma* sp. n., holotype. Figs. 40, 41: *Moronata eriosocii* sp. n., holotype. Figs. 42, 43: *Orthocometis longuncus* sp. n., holotype. Figs. 44, 45: *Orthocometis euchaldera domonoana* ssp. n., holotype.



***Bolbia* gen. n.**

Type-species: *Bolbia biloba* sp. n.

Etymology: The name is an anagram of the name of the type-species. Its gender is feminine.

**Diagnosis**

*Bolbia* differs from all known genera of Euliini in the shape of the central part of the transtilla and the valva. It is also characterized by a large coecum penis and a distinct sacculus. It appears to be related to *Psedaleulia* RAZOWSKI, 1997 and other genera with a slender uncus and gnathos.

**Description**

**Venation:** In forewing all veins separate, R5 to apex, M3 approaching CuA1 basally; in hindwing all veins distinctly separate.

♂ **genitalia:** Tegumen broad, rather short, with broad shoulders; uncus very slender; gnathos simple with slender arms and long terminal plate; socii drooping, broad, hairy and scaled; vinculum fully developed, slender. Valva tapering in distal third, with well developed costa; disc scarcely hairy, without pulvinus; sacculus slender, extending terminally into a sharp process. Transtilla slender, with well developed bilobed central part marked with a few thorns; juxta broad, with elongate median part. Aedeagus broad, weakly sclerotized terminally, with zone median and rather short coecum penis; cornuti not found.

♀ unknown.

**Distribution:** Known only from Ecuador.

***Bolbia biloba* sp. n.**

(Figs. 29, 30, 85)

**Holotype:** ♂, "Ecuador: Morona-Santiago-Prov., Macas, Gral. Proaño, Río Jurumbaino, 1100 m, 11.–23. XII. 1997, leg. Volker PELZ"; GS 1352-V.P. (CVPR).

**Paratype** (1 ♂): (GS 641-V.P.), same data as holotype (CVPR).

**Etymology:** The species name refers to the presence of two lobes from the median part of the transtilla (Latin: *LOBUS* = lobe, *BI-* = double). The name is a noun in apposition.

**Diagnosis**

The ♂ genitalia are most similar to those of *Psedaleulia qualitata* RAZOWSKI, 1997 from Peru, but can be distinguished by the features discussed above in the diagnosis of the genus.

**Description**

♂ (Fig. 85): Wing span 10–11 mm. Head cream, labial palpus > 2, brownish, flagellum of antenna grey; thorax light cream ochreous, base of tegula black. Forewing not expanded terminally, costa convex, apex sharp, termen slightly convex. Ground colour whitish grey with numerous whitish dots between grey strigulae. Markings grey with blackish grey strigulae and terminal marking. It consists of dorsal blotch situated postbasally, followed by paler blotch reaching tornus; short postbasal fascia from costa being a part of atrophying basal blotch; subapical blotch fusing with subterminal rather diffuse

marking. Cilia cream with blackish divisions. Hindwing whitish suffused grey in distal half, with diffused grey strigulation; cilia whitish with weak grey basal line.

♂ **genitalia** (Figs. 29, 30): As described for the genus.

***Anopinella* POWELL, 1986**

*Anopinella* was proposed to include three species, one of which (*homosacta* (MEYRICK, 1930)) later was transferred to *Sericosta* RAZOWSKI, 1986 (RAZOWSKI 1986). The genus recently was revised by BROWN & ADAMSKI (2003), to include 35 species, 30 of which were described as new. Of the four species we have from Ecuador, only one was treated by these authors. The other three species are described below because it was too late to include them in their work, which was already in press.

***Anopinella tenebricosa* sp. n.**

(Figs. 55, 86)

**Holotype:** ♀, "Ecuador: Morona-Santiago-Prov., Macas, San Vincente, Río Yukipa, 900 m (Cabañas ecológicas), 6.–13. II. 1996, leg. Volker PELZ; GS 799-V.-P. (CVPR).

**Etymology:** This name refers to dark colouration of the species (Latin: *TENEBRICOSUS* = dark) and is considered a noun in apposition.

**Diagnosis**

This species can be distinguished by the dark colour of the wing markings. The genitalia resemble those of *Anopinella boliviana* BROWN & ADAMSKI, 2003, but in the latter the distal edge of the colliculum is broad and well sclerotized, and the proximal part of the ductus bursae is broader and shorter.

**Description**

♀ (Fig. 86): Wing span 15 mm. Head brownish, labial palpus ca. 2; thorax paler (worn). Forewing slender. Ground colour pale brownish grey with distinct reddish rust admixture, whiter before middle in costal third; subterminal blotch slender, brownish grey, broadly edged with refractive grey. Costal blotch blackish with much darker proximal and distal parts; termen similarly suffused but paler. Cilia brownish rust. Hindwing dark, blackish brown; cilia paler.

♀ **genitalia** (Fig. 55): Sterigma weakly sclerotized, spiny except for posterior, lateral arms; its anterior edge a little stronger sclerotized than lateral edges; colliculum short, broad, membranous; ductus bursae slender.

***Anopinella consecta* sp. n.**

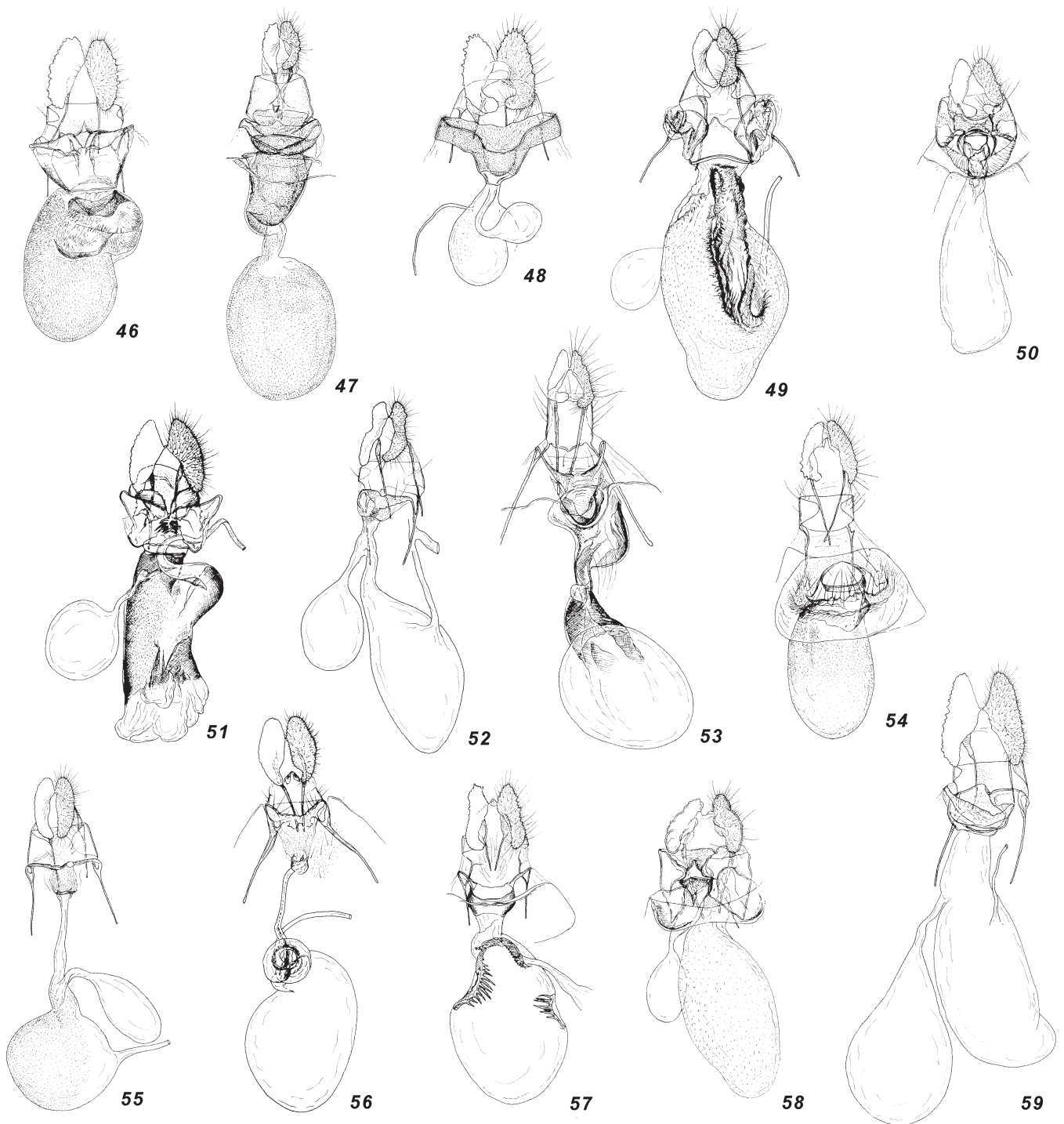
(Figs. 31, 32, 87)

**Holotype:** ♂, "Ecuador: Morona-Santiago-Prov., Macas, Gral. Proaño, Río Jurumbaino, 1100 m, 16.–21. II. 1998, leg. Volker PELZ"; GS 828-V.P. (CVPR).

**Etymology:** The species name refers to the deep ventral concavity of the valva separating the cucullus (Latin: *CONSECTUS* = separated). The name is considered a noun in apposition.

**Diagnosis**

In the ♂ genitalia *A. consecta* differs from all described species in the absence of the pollex, well developed in *A. ophiodes* (WALSINGHAM, 1914) from Guatemala and its



Figs. 46–59: ♀ genitalia. Fig. 46: *Gravicornutia inapulana* sp. n., paratype, GS 840-V.P. Fig. 47: *Dogolion oligodon* sp. n., paratype, GS 1390-V.P. Fig. 48: *Psedaleulia dumetosa* sp. n., paratype, GS 872. Fig. 49: *Nunimeus numenius* RAZOWSKI & BECKER, 2001, Ecuador, Macas, Proaño > Inapula, CREA-Domono, 1100 m, 28.–30. vi. 1999, GS 967-V.P. Fig. 50: *Lobogenesis riesteri* sp. n., paratype, GS 1387-V.P. Fig. 51: *Netechma ochrotona* sp. n., holotype. Fig. 52: *Punctapinella paratheta* sp. n., paratype, GS 871-V.P. Fig. 53: *Strophotina apparata* sp. n., holotype. Fig. 54: *Gauruncus laudatus* sp. n., holotype. Fig. 55: *Anopinella tenebricosa* sp. n., holotype. Fig. 56: *Rhytmologa yukipana* sp. n., paratype, GS 884-V.P. Fig. 57: *Chamelania auricoma* sp. n., paratype, GS 897-V.P. Fig. 58: *Moronata eriosocii* sp. n., paratype, GS 1352-V.P. Fig. 59: *Orthocomotis parattonsa* sp. n., holotype.

allies. The deep ventral concavity between sacculus and cucullus is a putative autapomorphy of this species.

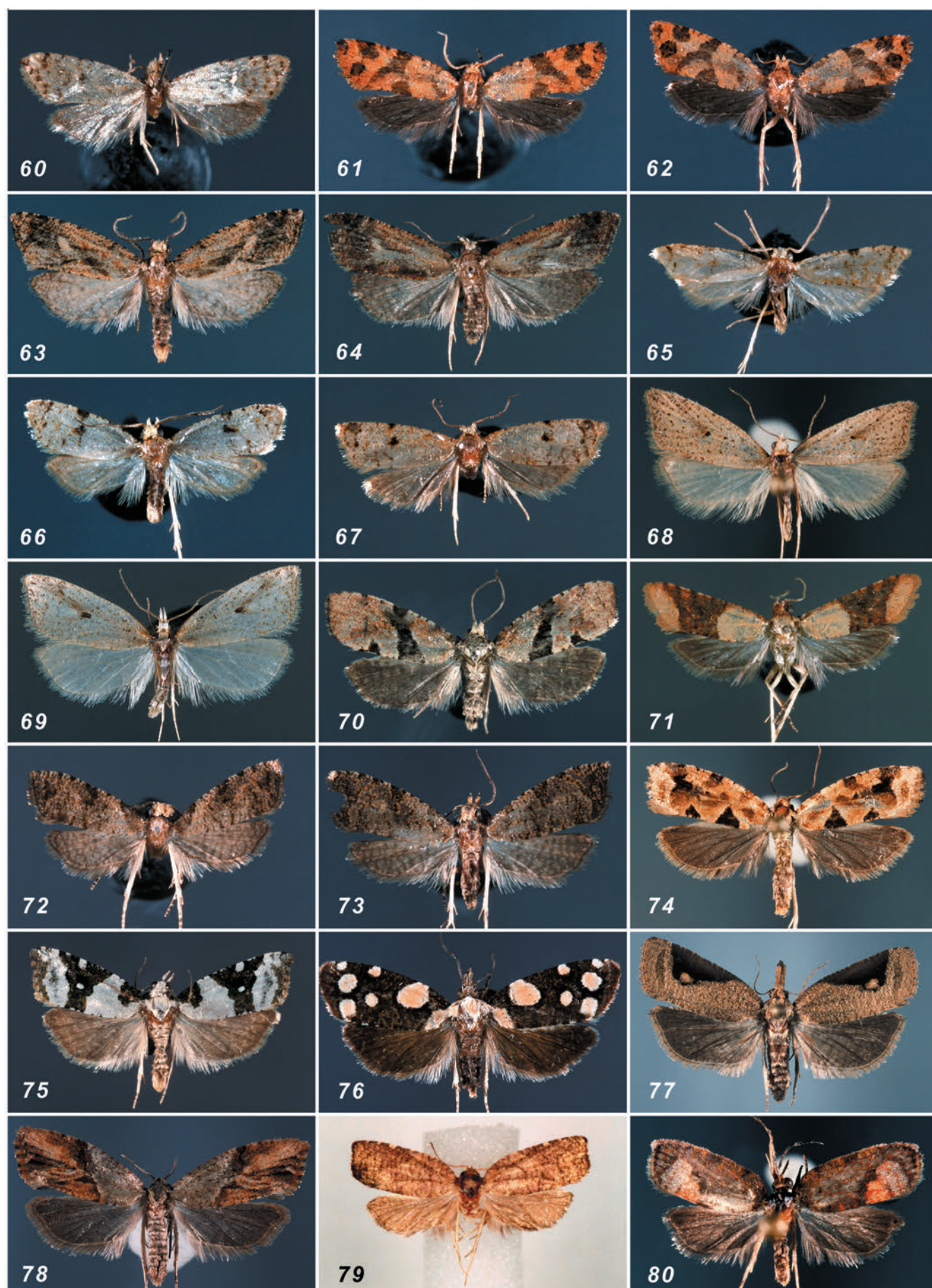
#### Description

♂ (Fig. 87): Wing span 16 mm. Head cream, labial palpus ca. 2; thorax mixed brownish. Ground colour of forewing whitish cream with brownish suffusions; brownish rust scales forming lines around subterminal marking; irregular brown suffusion in dorso-basal area intermixed with some rust scales; termen brownish marked with

some brown spots; brownish or brown-grey spots along costa. Cilia cream with rust admixture and brownish divisions. Hindwing brownish, paler, more grey anteriorly; cilia grey.

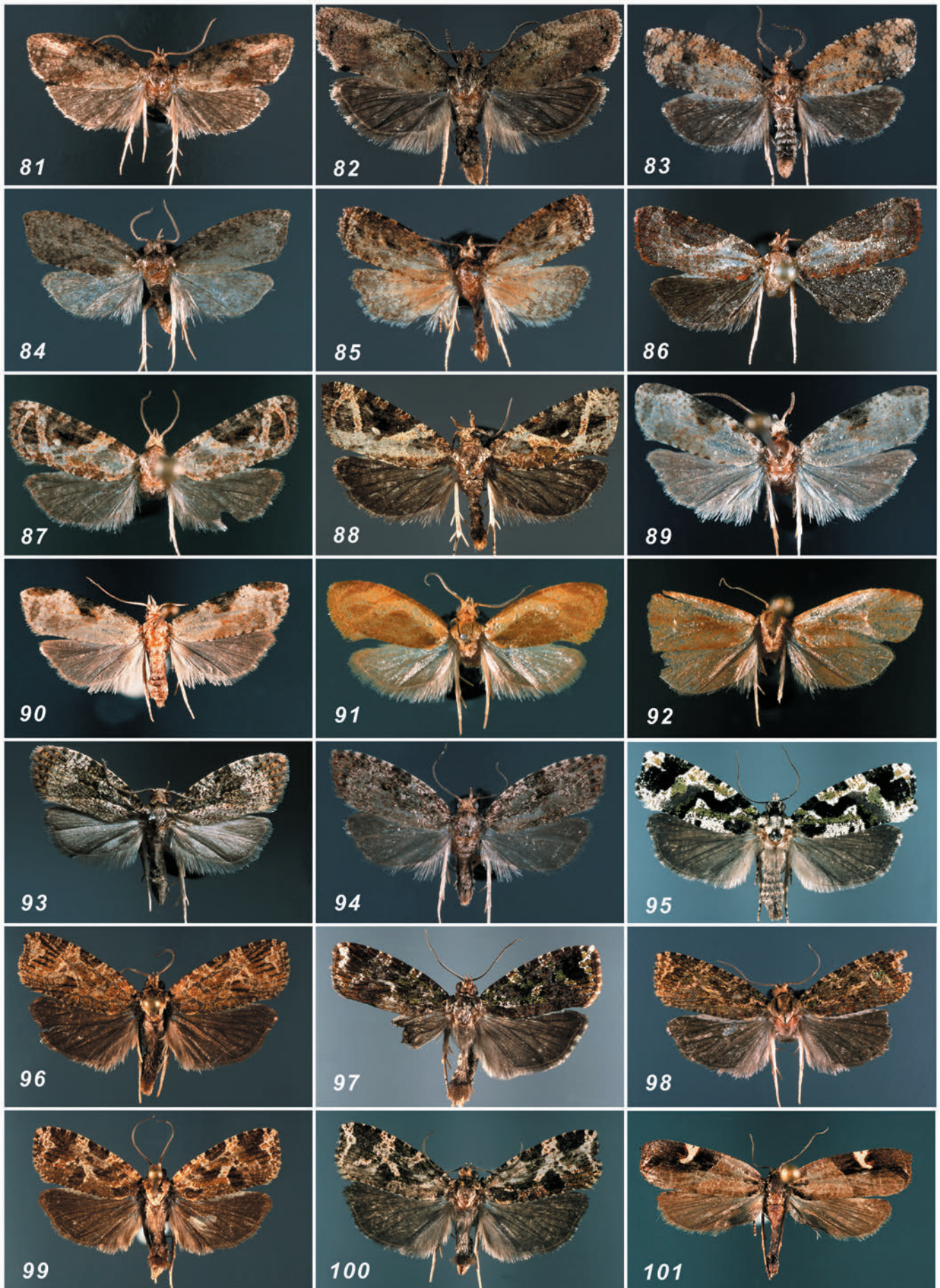
♂ genitalia (Figs. 31, 32): Uncus rather strong; socii elongate; arm of gnathos with subterminal rounded process followed by a rounded lobe; terminal plate of gnathos weakly sclerotized distally; valva deeply concave beyond angle of sacculus; cucullus like part, short; aedeagus rather short.





Colour Plate 1. Figs. 60–80: (see page 205)





Colour Plate 2. Figs. 81–101: (see page 205)

***Anopinella alshiana* sp. n.**

(Figs. 33–35, 88)

**Holotype:** ♂, “Ecuador, Morona-Santiago-Prov., Macas, Proaño > Alshi, 5 km SO Alshi, 1700 m, 5. VII. 1999, leg. Volker PELZ”; GS 984-V.P. (CVPR).

**Etymology:** The species name refers to the name of the type locality Alshi. The name is defined as a noun in apposition.

**Diagnosis**

Closely related to the Colombian *A. isodelta* (MEYRICK, 1912) but differing in the more finely spined plates of the gnathos. It differs from *A. triquetra* (WALSINGHAM, 1914) from Costa Rica and Guatemala in the shorter cucullus.

**Description**

♂ (Fig. 88): Wing span 16 mm. Head cream, labial palpus > 2, light brownish; thorax pale brownish, end of tegula cream. Forewing broad, subtriangular. Ground colour and suffusions as in *A. consecta*; dorsum strongly suffused brownish with several browner spots; costal blotch broad, brown with some darker spots and cream costal strigulae; some brown spots along costa and at apex; subterminal blotch broad, convex distally; termen cream with brownish suffusions and spots. Cilia cream with brownish divisions (worn). Hindwing brown with indistinct darker strigulae; cilia paler.

♂ **genitalia** (Figs. 33–35): Uncus delicate, slender; gnathos arm shorter, with small lateral prominence near middle and large terminal lobe with serrate edges; terminal plate of gnathos not developed; valva long; sacculus convexely rounded followed by a shallow concavity; cucullus like termination of valva short, provided with distinct pollex.

***Rhytmologa* MEYRICK, 1926**

This previously monotypic genus was known only from two ♀ ♀. CLARKE (1958) redescribed the venation and illustrated the ♀ genitalia of the type-species. We present the first description of the ♂ genitalia based on *Rhytmologa yukipana* n. spec. (Figs. 36, 37). The type-species is characterized by a slender forewing and a rather oblique termen. The new species has a different wing shape.

♂ **genitalia**: Uncus rather short, broad with latero-terminal rounded lobes and similarly shaped median lobe probably representing a strongly reduced uncus; arms of gnathos very slender, terminal plate absent; socii large, tapering terminally, drooping, rather scarcely hairy; vinculum well developed, rather weakly sclerotized. Valva proportionally small; costa well developed, however, very slender; sacculus without free termination; end of the valva provided with a few small prominences; disc scarcely hairy; pulvinus absent. Transtilla broad, comprised of thick membrane; juxta moderately large, simple. Aedeagus large; zone postmedian; caulis small; coecum penis large; cornutus absent.

♀ **genitalia**: Subgenital sternite deeply incised, weakly sclerotized; sterigma membranous, with long posterior area finely spined and with well sclerotized, bristled posterior part developed in form of lateral arms. Collicu-

lum in major part sclerotized; cestum long, consisting of weakly sclerotized folds and proximal bands.

**Distribution:** Known from Colombia, Peru, and Ecuador. Two species included.

***Rhytmologa yukipana* sp. n.**

(Figs. 36, 37, 56, 89, 90)

**Holotype:** ♂, “Ecuador: Morona-Santiago-Prov., Macas, San Vincente, Río Yukipa, 900 m (Cabañas ecológicas), 6.–13. II. 1996, leg. Volker PELZ”, GS 1386-V. P. (CVPR).

**Paratypes** (2 specimens): 1 ♂ (GS 673-V.P.), 1 ♀ (GS 884-V. P.), same data as holotype; ( ♀ CVPR, ♂ ISEZ).

**Etymology:** The name refers to the name of the Yukipa River and is defined as a noun in apposition.

**Diagnosis**

The new species differs from *R. numerata* MEYRICK, 1926 in the forewing shape and markings. In the ♀ genitalia the colliculum is much shorter and the coiled part of ductus bursae is larger than in *R. numerata*.

**Description**

♂ (Fig. 89): Wing span 16 mm. Head whitish, labial palpus 2.5, thorax (worn) cream. Forewing ground colour whitish with indistinct olive grey admixture, darker greyer strigulation and dorsal suffusion; some concolourous dots in costal area; costal spots grey. Markings dark grey with some darker strigulae: basal blotch represented by slender costal suffusion, large triangle near middle, and slender subapical blotch (paler, with whitish costal spots) reaching apex of wing; subterminal fascia indistinct. Cilia cream white (worn). Hindwing whitish grey, tinged brownish on periphery; cilia whitish.

♀ (Fig. 90): Wing span 20 mm. Labial palpus > 3. Forewing with larger, darker markings and strigulation.

♂ **genitalia** (Figs. 36, 37): As described for the genus.

♀ **genitalia** (Fig. 56): Similar to those in *R. numerata* but colliculum much shorter and coiled part of ductus bursae larger.

***Chamelania auricoma* sp. n.**

(Figs. 38, 39, 57, 91, 92)

**Holotype:** ♂, “Ecuador: Morona-Santiago-Prov., Macas, San Vincente, Río Yukipa, 900 m (Cabañas ecológicas), 6.–13. II. 1996, leg. Volker PELZ”; GS 683-V.P. ( CVPR).

**Paratypes** (5 ♂♂, 2 ♀♀): 1 ♀ same data as holotype (ISEZ); 2 ♂♂, (GS 633-V.P, 677-V.P.), Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 20.–23. IV. 1998; 1 ♂ (GS 676-V.P.); 1 ♀ (GS 897-V.P.), same locality, 23.–26. III. 1998 1 ♂ (GS 684-V.P.), same locality, 27.–30. IV. 1998 (all CVPR); 1 ♂ same locality, 28.–30. VI. 1999 (ISEZ).

**Etymology:** The species name refers to the colour of the wing markings (Latin: AUREUS = golden, COMA = hair, mane). The name is a noun in apposition.

**Diagnosis**

The new species is closest to the Mexican *C. jaliscana* RAZOWSKI, 1999. Both have similar forewing shape, markings, and venation. In the ♂ genitalia both have a costal process of the valva and a similar, broad base of arm of gnathos. Putative autapomorphies for *C. auricoma* are



the very slender terminal plate of the gnathos, the peculiar, slender socii, the small costal process of the valva, the broad sacculus, the short, thick cornuti in the ♂, and the presence of two sclerites of the corpus bursae of the ♀, armed with strong spines.

### Description

♂ and ♀ (Fig. 91, 92): Wing span 12 mm (10–14 mm in paratypes). Head yellowish cream, labial palpus ca. 1.5, whiter terminally; collar light ochreous rusty; thorax brownish cream. Ground colour glossy golden cream; markings more brownish: Dorsum brownish ochreous from base to tornus, subtriangularly rounded costad; costal half of median fascia slender fusing with subterminal fascia; subapical marking in form of a slenderly curved fascia reaching mid-termen; apex suffused. Cilia slightly paler than subterminal fascia, with more ochreous basal line. Hindwing light cream brownish, whiter towards base, browner in anal area; cilia rather concolourous with middle of wing.

**Variation:** Markings more or less distinct, often with brown admixture; in some specimens dorsal area dark, diffuse with more or less distinguished oblique dorso-basal fascia.

♂ **genitalia** (Figs. 38, 39): Tegumen moderately short; uncus in form of apical prominence; socii well sclerotized, bent, with thin hairs in basal half and one apical hair; gnathos arm broad basally, strongly tapering towards very slender terminal plate; vinculum fully developed, slender apically. Valva rather broad, with slender terminal portion; costa well sclerotized with antemedian process; sacculus broad terminating in a hook; basal part of disc with rigid hairs. Transtilla broad, convex; juxta with elongate corners. Aedeagus short; coecum penis short, broad; two cornuti in vesica.

♀ **genitalia** (Fig. 57): Ovipositor short; apophyses short, slender. Cup-shaped part of sterigma large; ductus bursae broad, rather short; pair of sclerites armed with large

thorns connected by a slender distal sclerite of corpus bursae.

### *Moronata* gen. n.

Type-species: *Moronata eriosocii* sp. n.

**Etymology:** The name refers to Morona, the first part of the name of the province of the type-locality of *M. eriosocii*. Its gender is feminine.

### Diagnosis

This genus has an isolate position within the Euliini. It is similar to *Psedaleulia* only in the position of the base of the gnathos and the bunches of spines on the disc of the valva. Putative autapomorphies are the configuration of the socii, the shape of the terminal plate of the gnathos, the lateral position of the bases of its arms, the reduction of the transtilla with well developed basal apodemes, the presence and positions of the groups of spines of the disc of the valva, and the structure of the large sterigma.

### Description

**Venation:** In forewing all veins separate, R5 to apex; CuA2 almost opposite base of R1. In hindwing Rs–M1 separate; M3–CuA1 very short stalked.

♂ **genitalia:** Tegumen very broad, not tapering terminally; uncus club-shaped with long lateral hairs terminally; socii rigid with weakly sclerotized basal inner lobe and small postmedian convexity; gnathos arm broad, terminal plate very broad, concave apically; vinculum slender, complete. Valva slender, tapering in distal part terminally; costa well sclerotized; sacculus with slender ventral lobes; disc provided with groups of spines, one dorso-postbasal accompanied by submedian small group of long spines, and numerous spines in entire distal half, especially near its ventral edge. Transtilla membranous; apodemes of muscle 4 large; juxta small, simple. Aedeagus rather small, tapering in distal part posteriorly; caulis small, median; coecum penis broad; cornuti absent.

♀ **genitalia:** Papillae anales fairly well sclerotized; ste-

**Colour Plate 1 (page 202).** Figs. 60–80: Imagines. **Fig. 60:** *Gravicornutia cuspis* sp. n., holotype ♂, wingspan 9 mm. **Figs. 61, 62:** *Gravicornutia inapulana* sp. n., Fig. 61 ♂ holotype, wingspan 9 mm, Fig. 62 ♀ paratype, wingspan 10 mm. **Figs. 63, 64:** *Dogolion oligodon* sp. n., Fig. 63 ♂ holotype, wingspan 14 mm, Fig. 64 ♀ paratype, wingspan 14 mm. **Fig. 65:** *Proathorybia unisignata* sp. n., holotype ♂, wingspan 9 mm. **Figs. 66, 67:** *Psedaleulia dumetosa* sp. n., Fig. 66 ♂ holotype, wingspan 11 mm, Fig. 67 ♀ paratype, wingspan 12 mm. **Figs. 68, 69:** *Lydontopa polydonta* sp. n., Fig. 68 ♂ holotype, wingspan 12 mm, Fig. 69 ♂ paratype, wingspan 14.5 mm, GS 1440-V.P. **Fig. 70:** *Nunimeus numenius* RAZOWSKI & BECKER, 2001, ♀ wingspan 15.5 mm, GS 967-V.P. **Fig. 71:** *Icteralaria ecuadorica* RAZOWSKI, 1999, ♂ wingspan 11 mm, GS 782-V.P. **Figs. 72, 73:** *Lobogenesis riesteri* sp. n., Fig. 72 ♂ holotype, wingspan 10 mm, Fig. 73 ♀ paratype, wingspan 11 mm, GS 1387-V.P. **Fig. 74:** *Netechma ochrotona* sp. n., holotype ♀, wingspan 14 mm. **Fig. 75:** *Punctapinella conchitis* (MEYRICK, 1912) ♂ wingspan 17.5 mm, GS 984-V.P. **Fig. 76:** *Punctapinella paratheta* sp. n., holotype ♀, wingspan 15 mm. **Fig. 77:** *Strophotina apparata* sp. n., holotype ♀, wingspan 25 mm. **Fig. 78:** *Gauruncus laudatus* sp. n., holotype ♀, wingspan 15 mm. **Fig. 79:** *Gauruncus simplicissimus* sp. n., holotype ♂, wingspan 13 mm. **Fig. 80:** *Xoser exors* sp. n., holotype ♂, wingspan 12.5 mm.

**Colour Plate 2 (page 203).** Figs. 81–101: Imagines. **Fig. 81:** *Transtillaspis monoseta* sp. n., holotype ♂, wingspan 17.5 mm. **Fig. 82:** *Transtillaspis multisetae* sp. n., holotype ♂, wingspan 15.5 mm. **Fig. 83:** *Transtillaspis luiscaulosi* sp. n., holotype ♂, wingspan 14 mm. **Fig. 84:** *Transtillaspis irrorata* sp. n., holotype ♂, wingspan 12.5 mm. **Fig. 85:** *Bolbia biloba* sp. n., holotype ♂, wingspan 11 mm. **Fig. 86:** *Anopinella tenebricosa* sp. n., holotype ♀, wingspan 15 mm. **Fig. 87:** *Anopinella consecta* sp. n., holotype ♂, wingspan 16 mm. **Fig. 88:** *Anopinella alshiana* sp. n., holotype ♂, wingspan 16 mm. **Figs. 89, 90:** *Rhytmologa yukipana* sp. n., Fig. 89 ♂ holotype, wingspan 16 mm, Fig. 90 ♀ paratype, wingspan 20 mm, GS 884-V.P. **Figs. 91, 92:** *Chamelania auricoma* sp. n., Fig. 91 ♂ holotype, wingspan 12 mm, Fig. 92 ♀ paratype, wingspan 14 mm, GS 897-V.P. **Figs. 93, 94:** *Moronata eriosocii* sp. n., Fig. 93 ♂ holotype, wingspan 12 mm, Fig. 94 ♀ paratype, wingspan 13 mm, GS 1352-V.P. **Fig. 95:** *Orthocomotis parattonsa* sp. n., holotype ♀, wingspan 27 mm. **Fig. 96:** *Orthocomotis longuncus* sp. n., holotype ♂, wingspan 23 mm. **Fig. 97:** *Orthocomotis euchaldera domonoana* ssp. n., holotype ♂, wingspan 22 mm. **Fig. 98:** *Orthocomotis* sp. near *expansa* RAZOWSKI, 1999, ♂ wingspan 23 mm, GS 1001-V.P. **Figs. 99, 100:** *Orthocomotis* sp. near *exolivata* CLARKE, 1956, Fig. 99 ♂ wingspan 20.5 mm, GS 893-V.P., Fig. 100: ♂ wingspan 25 mm, GS 940-V.P. **Fig. 101:** *Paraptilia symmetricana* BROWN, 1990, ♀ wingspan 20 mm, GS 904-V.P.



rigma large with developed proximal corners; ostium area protected by sclerotic folds; ductus bursae short; accessory bursa extending from before ostium bursae; corpus bursae membranous, minutely spined.

### ***Moronata eriosocii* sp. n.**

(Figs. 40, 41, 58, 93, 94)

**Holotype:** ♂, "Ecuador, Morona-Santiago-Prov., Macas, 1000 m, 25. VI–4. VII. 1999, leg. Volker PELZ"; GS 976-V.P. (CVPR).

**Paratypes** (2 specimens): 1 ♂ (GS 879-V.P.), Ecuador, Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 27.–30. IV. 1998; 1 ♀ (GS 1352-V.P.), same locality, 28.–30. VI. 1999 (both CVPR).

**Etymology:** This name refers to the hairy socii (Greek: erion = wool). The name is a noun in apposition.

### **Diagnosis**

Externally *Moronata eriosocii* resembles some species of *Transtillaspis*, e.g., *T. cornutipaea* RAZOWSKI, 1997. However, it can be distinguished from similar species by the characters discussed in the diagnosis of the genus above.

**♂ and ♀** (Figs. 93, 94): Wing span 12 mm (11 mm in ♂ paratype, 13 mm in ♀ paratype). Head greyish cream, frons whiter, labial palpus ca. 2, with terminal joint half the length of second joint. Forewing broad, costa distinctly convex; termen weakly oblique, almost straight. Ground colour whitish sprinkled black-grey, costal spots blackish or grey; median part of wing suffused brownish. Markings blackish: basal blotch almost completely atrophied, median fascia indistinct in dorsal half of wing, with some black spots in costal portion. Terminal part of wing light yellowish ochreous also with blackish strigulae; veins grey. Cilia concolourous with terminal area, with grey divisions beyond veins; whitish at tornus. Hindwing brownish grey; cilia much paler.

**Variation:** ♂ paratype with ground colour more brownish and markings strongly reduced; costal spots brown; terminal area of wing light ferruginous, veins and divisions of cilia grey-brown.

**♂ genitalia** (Figs. 40, 41): As described for the genus.

**♀ genitalia** (Fig. 58): As described for the genus.

### ***Orthocomotis* DOGNIN, 1905**

As there is some uncertainty regarding the systematic position of this genus we are placing it at the end of Euliini. It was placed in Tortricinae by CLARKE (1956), treated as Euliini by POWELL (1986), and transferred to Schoenotenini by BROWN (1989). However, it recently was returned to Euliini by HORAK (1998).

### ***Orthocomotis parattonsa* sp. n.**

(Figs. 59, 95)

**Holotype:** ♀, "Ecuador, Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 28.–30. VI. 1999, leg. Volker PELZ"; GS 942-V.P. (CVPR).

**Etymology:** The species name refers to the apparent close affinity with *O. attonsa* RAZOWSKI, 1982 (Latin: PAR, PARIS = like, similar, equal). The name is a noun in apposition.

### **Diagnosis**

Externally similar to Brazilian *O. attonsa* RAZOWSKI, 1982 in having white forewing ground colour. The ♀ genitalia are similar to those of *O. trissophricta* (MEYRICK, 1932) and *O. chloantha* (WALSINGHAM, 1914) from Mexico. From *O. attonsa* it differs in the much longer ductus bursae and the entirely membranous corpus bursae. From *O. trissophricta* and *O. chloantha* it differs in the more anterior origin of the accessory bursa. In *O. parattonsa* the accessory bursa arises from the corpus bursae rather than from the base of ductus bursae.

### **Description**

**♀** (Fig. 95): Wing span 27 mm. Head with frons white, vertex black, scape of antenna grey; labial palpus > 1, black with ends of joints two and three white; thorax white with collar almost completely black, tegula scaled black basally, black and grey terminally, dorsal crest black; legs white with black rings. Forewing typical of the genus with termen slightly concave medially. Ground colour white scarcely scaled black, with large refractive green fasciae and broad refractive leaden grey fascia forming distal part of median marking extending from dorsum to before costa. Markings black in form of a small, consisting of two parts basal blotch, S-shaped fascia from costa beyond base to middle of wing and subapical blotch fused with subterminal blotch. Cilia white with black divisions. Hindwing dark brownish grey, paler basally; cilia slightly paler.

**♀ genitalia** (Fig. 58): Sterigma short, rounded proximally; ductus bursae broad, more slender than corpus bursae; accessory bursa extending from base of the former; ductus seminalis from end part of corpus bursae.

### ***Orthocomotis longuncus* sp. n.**

(Figs. 42, 43, 96)

**Holotype:** ♂, "Ecuador, Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 20.–23. IV. 1998, leg. Volker PELZ"; GS 894-V.P. (CVPR).

**Etymology:** The species name refers to the shape of the uncus which is long and very slender (Latin: LONGUS = long). The name is a noun in apposition.

### **Diagnosis**

Although genitally similar to *O. trissophricta* from Brazil, *O. longuncus* is not similar superficially to that species. In the ♂ genitalia the new species is easily distinguished by the very slender uncus which in *O. trissophricta* is broad and rather short. Other distinguishing characters are in the shapes of the socii and the sacculus, and in the length of the aedeagus.

### **Description**

**♂** (Fig. 96): Wing span 23 mm. Head brownish ochreous, front paler, labial palpus 1.5, browner, cream terminally; thorax yellowish brown, browner basally, cream distally; forelegs ochreous cream ringed brown. Forewing as in *O. parattonsa* but with costa more bent at apex. Ground colour glossy ochreous, partially mixed light pinkish between some veins, with longitudinal greenish ochreous

fasciae; veins marked brown; strigulae along costa and some transverse strips of wing surface whitish cream. Cilia ochreous cream with small, brown divisions. Hindwing brown; cilia slightly paler.

♂ **genitalia** (Figs. 42, 43): Uncus very slender; socius moderately large, tapering dorsally; valva simple; aedeagus short.

***Orthocomotis euchaldera domonoana* ssp. n.**

(Figs. 44, 45, 97)

**Holotype:** ♂: "Ecuador, Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 23.–24. vi. 1999, leg. Volker PELZ"; GS 943-V.P. (CVPR).

**Etymology:** The name of the new subspecies refers to the locality name Domono and is a noun in apposition.

**Diagnosis**

This subspecies differs from *O. euchaldera euchaldera* CLARKE, 1955 described from Colombia mainly in the shape of the terminal process of costa of valva, which in the new subspecies is pointed, and in a greater number of cornuti in the vesica.

**Description**

♂ (Fig. 97): Wing span 22 mm. Head brown, flagellum of antenna blackish, labial palpus over 1, dark grey, whitish terminally; thorax blackish brown with sparse rust scales; inner edge of tegula mixed whitish; forelegs white, ringed brown-grey. Forewing brown with grey refractive reticulation, some orange rust scales, groups of white scales in subdorsal median and terminal parts of wing; the large white, refractive area from apex subterminally spotted green; green fasciae or spots between black-brown markings. Cilia blackish with some small white divisions. Hindwing greyish brown; cilia similar.

♂ **genitalia** (Figs. 44, 45): as in nominate subspecies but with shape of the terminal process of costa of valva more pointed, and with a greater number of cornuti in the vesica.

***Orthocomotis* sp. near *expansa* RAZOWSKI, 1999**

(Fig. 98)

**Material examined:** 1 ♂, "Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 23.–24. vi. 1999, leg. Volker PELZ"; GS 1001 (CVPR).

**Description**

The specimen listed above differs from *O. expansa*, described from Carchi, Ecuador, in forewing maculation and in the shapes of uncus and socii. It is characterized as follows: Wingspan 23 mm. Head light ochreous cream; labial palpus 1; thorax dirty cream, browner proximally, with some green scales on base of tegula. Ground colour of forewing cream with leaden grey marks, rust red groups of scales subdorsally and black suffusions. Markings brown-black scaled green. Cilia cream; divisions small, blackish. Hindwing greyish brown; cilia paler.

***Orthocomotis* sp. near *exolivata* CLARKE, 1956**

(Figs. 99, 100)

**Material examined:** 1 ♂ (GS 893-V.P.), Morona-Santiago-Prov., Macas, Proaño > Inapula, CREA-Domono, 1100 m, 23.–26. iv. 1998; 1 ♂ (GS 940-V.P.), Morona-Santiago-Prov., Macas, Proaño > Alshi, 5 km SO Alshi, 1700 m, 5. vii. 1999 (both CVPR).

The two specimens differ in colouration but are similar in genitalia. Further material is required to assess their systematic position.

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