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# Tortricidae (Lepidoptera) from the Mountains of Ecuador and remarks on their geographical distribution. Part IV: Eastern Cordillera

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Abstract. This paper constitutes part four of the series on Tortricidae from the mountains of Ecuador. 141 species are treated; 2 genera and 67 species are described as new and one new combination is proposed. These are: Henricus sangayanus sp. n., Saphenista pyrczi sp. n., Saphenista chanostium sp. n., Saphenista runtuna sp. n., Åethes albogrisea sp. n., Deltophalonia termasia sp. n., Acleris tungurahuae sp. n., Acleris supernova sp. n., Atrocenta gen. n., Atrocenta centrata sp. n., Anopinella yangana sp. n., Anopinella shillanana sp.n., Thalleulia pondoana sp. n., Ernocornutia altonapoana sp. n., Subterinebrica festivaria sp. n., Subterinebrica labyrinthana sp. n., Clarkenia pantherina sp.n., Netechma tenuifascia sp. n., Netechma napoana sp. n., Netechma simulans sp. n., Netechma guamotea sp. n., Netechmodes gravidarmata sp. n., Furcinetechma sangaycola sp. n., Furcine-techma labonitae sp. n., Rhytmologa polyfenestra sp. n., Galomecalpa quatrofascia sp. n., Romanaria leuca sp. n., Inape parelegans sp. n., Inape parastella sp. n., Inape stella sp. n., Inape eltabloana sp. n., Transtillaspis tungurahuana sp. n., Transtillaspis cosangana sp. n., Transtillaspis costipuncta sp. n., Lobogenesis primitiva sp. n., Mosaiculia gen.n., Mosaiculia mosaica sp. n., Dimorphopalpa rutruncus sp. n., Oregocerata magna sp. n., Hynhamia runtuana sp. n., Seticosta szeptyckii sp. n., Seticosta concava sp. n., Seticosta subariadnae sp. n., Seticosta albicentra sp. n., Seticosta droserana sp. n., Punctapinella guamoteana sp.n., Punctapinella viridargentea sp. n., Ptyongnathosia harpifera sp. n., Anacrusis gutta sp. n., Sisurcana rufograpta sp. n., Sisurcana tabloneana sp. n., Sisur-cana sangayana sp. n., Sisurcana ruficilia sp. n., Sisurcana microbaccata sp. n., Sisur-cana pululahuana sp. n., Argyrotaenia posticicnephaea sp. n., Argyrotaenia atrata sp. n., Argyrotaenia rufescens sp. n., Hilarographa castanea sp. n., Auratonota sucumbiosa sp. n., Pseudocomotis chingualana sp. n., Statherotis sangaica sp. n., Statherotis hyeroglypha sp. n., Ancylis ecuadorica sp. n., Epinotia runtunica sp. n., Epinotia rotundata sp. n., Epinotia brunneomacula sp. n., Quebradnotia tubuligera (RAZOWSKI & WOJTUSIAK, 2008), comb. n., Laculataria splendida sp. n., Mesochariodes tablonica sp. n.

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

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### I. INTRODUCTION

This paper is the last part of four which were aimed to present results of the research on diversity of Tortricidae fauna of Ecuador. The project was especially focused on species inhabiting the high altitude environments of the Andes, especially the cloud forest and cloud forest/paramo ecotone zones. When planning the field work special attention was payed to chose collection sites in areas that were wery little explored by entomologists before, or not visited at all.

This paper consists of systematic part and contains a list of species found in the East Cordillera with descriptions of the new taxa and a short disscussion of results.

Material and methods. These studies are based on the material collected by the junior author and co-workers in the period of May-August during eight expeditions to the mountains of Ecuador organized by the Zoological Museum of the Jagiellonian University (Kraków, Poland).

During five years of carrying out a research project in 1998-1999 and 2003-2005 a large collection of Lepidoptera was gathered for laboratory studies. The area of each sampling was carefully selected from the geographical perspective in order to obtain a comparative material from various locations along Eastern Cordillera at different elevations from 2200-3700 m. Specimens collected during the field work were pinned and mounted and genitalia prepared for further taxomic evaluation.

Upon identification, the number of species recorded for Eastern Cordillera was calculated and compared to that of Western Cordillera. Species recorded from the areas of Saraguro and Zenen were calculated seperately because of their geographical location. The Andes ridge of southern Ecuador (Cañar, Azuay, and Loja) are broken into a complex pattern of ridges and knots, the most important of which is known as the Nudo de Sabanillas. The mountains forming up the Nudo de Sabanillas are also exceptional for their climate, in particular and for significantly different composition of vegetation when compared to the Eastern and Western Cordilleras in central and northern Ecuador. Therefore, in the the comparative study presented herein we separated the results for Nudo de Sabanillas and Saraguro from those obtained for Western and Eastern Cordillera.

No	Prowince	Collection site	Altitude	Latitude	Longitude
1.	Napo	Papallacta (I)	2930m	S 00°23'10''	W 78°07'48''
2.	Napo	Papallacta – Chalpi Grande	2650m	S 00°21'56''	W 78°05'07''
3.	Napo	Papallacta (II)	3650m	S 00°21'50''	W 78°10'02''
4.	Napo	Papallacta (III)	3450m	S 00°20'31''	W 78°08'57''
5.	Napo	Cosanga, Yanayacu	2200m	S 00°36'16''	W 77°53'19''
6.	Tungurahua	Baños, El Tablon	3050m	S 01°21'00''	W 78°26'35''
7.	Tungurahua	Baños, Pondoa	3750m	S 01° 26' 49''	W 78°26' 34''
8.	Tungurahua	Baños, Runtun	3150m	S 01° 26' 35''	W 78°26' 34''
9.	Sucumbios	La Bonita	2150m	N 00° 29' 59''	W 77° 31' 43''
10.	Morona Santiago	vía Guamote – Macas	3100m	S 02° 21'	W 78° 18'
11.	Morona Santiago	Gualaceo – Limon (I)	2750m	S 03°00'42''	W 78°36'48''
12.	Morona Santiago	Gualaceo – Limon (II)	2950m	S 03°00'22''	W 78°38'33''
13.	Morona Santiago	Gualaceo – Limon (III)	3100m	S 03°00'10''	W 78°33'50''
14.	Morona Santiago	Gualaceo – Limon (IV)	3359m	S 03°00'10''	W 77°39'34''
15.	Morona Santiago	Atillo	3300m	S 02°14'	W 78°26'

The geographical positions of fifteen collection sites in this area of Ecuador are given as follows: R e s u l t s a n d d i s c u s s i o n. When summarizing results of our research on diversity of Tortricidae of Ecuadoran Andes we also added distributional data obtained by other authors (RAZOWSKI, 1994, 1967, 1988, 1999, 2004; CLARKE, 1968; RAZOWSKI & PELZ, 2001, 2002, 2003, 2004, 2005, 2006, 2007; RAZOWSKI & BECKER, 1983, 1986, 1994, 2002, 2007; MEYRICK, 1912, 1917, 1930, 1932; BROWN & ADAMSKI, 2003; BROWN & RAZOWSKI, 2003).

It appears, that species composition of Tortricidae in Eastern and Western Cordillera are significantly different. The number of species recorded in Eastern Cordillera is higher (300) than in the Western Cordillera (211). For the Saraguro area we reported 27 species, and for Nudo de Sabanillas 25 species.

We found only five species, *Transtillaspis plagifasciata* RAZOWSKI & PELZ, 2005, *Anacrusis eriocheir* RAZOWSKI & WOJTUSIAK, 2006, *Paramorbia aureocastanea* RAZOWSKI & WOJTUSIAK, 2006, *Ancylis ecuadorica* sp. n., and *Epinotia tenebrica* RAZOWSKI & WOJTUSIAK, 2006, which are recorded from both, the Western and Eastern Cordillera. All other species are characteristic either for Western or for Eastern Cordillera.

The first and the most important reason for development of such a high distinctiveness of two faunal stocks, of West and East Andean chains, is the high elevation of the Andes. Generally, in Ecuador they exceed 4000 m elevation in the northern half of the country but are becoming lower southwards. In this condition the cloud forest environment of Western and Eastern Cordillera is isolated from each other, mainly because the upper tree line in both chains does not exceed 3600 m on the eastern and 3200 on the western slopes. Such an isolation obviously favors different speciation patterns.

The second reason is that the two major cordilleras are separated by intermontane basin, or plateau. This plateau, also called the Central Valley, plays an important role as an efficient zoogeographical barrier preventing small and weakly flying cloud forest tortricid species from reaching the opposite range.

However, the exchange of some faunal elements between the two ranges is possible to some extent, but only in the south of the Ecuador where transversal mountain spurs, called nudos, are forming natural bridges between the two mountainous chains and also where the lowest elevation of the Andes at this latitude permits some cloud forest corridors to exist. Therefore, the Nudo del Azuay and Nudo de Sabanillas are the most important areas for providing the only possible passageways for some, weakly flying species of cloud forest Lepidoptera. The efficiency of the exchange depends on several factors, among them on insect body size, the degree of its vagility and its food preference, which all are known to differ within particular families of the order. For example, in some sites located on the Nudo de Sabanillas, the ratio of species of butterflies of the subfamily Satyrinae of the tribe Pronophilini, which are characteristic for the Western and Eastern Cordiellera, is almost equal, suggesting similar tendencies and opportunities for migration (PyrcZ, personal communication). However, when tortricid moths are concerned, only few species were recorded in both cordilleras so far.

The reason for such a very high diversity and distinctness of the Tortricidae fauna of each cordillera can be better understood, if we assume that the both chains of mountains are in fact archipelagos of ecological islands. The rivers flowing from intermontane valleys separating Eastern and Western Cordilleras, cut through the Andes draining the water either West to the Pacific, or East to the Amazon. For example, when going from the south to the north, the mountainous chain of Eastern Cordillera is cut by deep transverse valleys of the rivers Chinchipe, Zamorra, Upano, Paute, Pastaza, Papallacta and Aguarico. Those valleys divide mountains into fragments with the upper parts of the cloud forest well separated from each other. Deep valleys act then as efficient barriers preventing the gene flow between populations of higher altitude species, and therefore act for the favor of the process of speciation.

It is therefore not surprising that in the case of very small, weakly flying tortricid moths which are usually closely depending on their locally available food resources, the process of speciation within each ecological island could obviously lead to the development of different species composi-

tion. This resulted in the development of a very high species diversity of the Tortricidae fauna of the Andes.

Our research also clearly shows how poorly the Tortricidae fauna of these mountains was known. The conclusion is that further, extensive research is needed to obtain more data from the field, before the geographical distribution and species diversity patterns can be properly evaluated.

## **II. SYSTEMATIC PART**

## Tortricinae

### Tortricini

## Acleris tungurahuae sp.n.

(Figs 1, 2, 139)

D i a g n o s i s. Distinct from all other New World *Acleris*-species; rather comparable with *A. emera* RAZOWSKI, 1993 from Bolivia and *A. matthewsi* RAZOWSKI, 1986 from Peru but *tungura-huae* with large process of subscaphium, drooping socii, and broad spined termination of sacculus.

E t y m o l o g y. The name refers to the terra typica, the Province of Tungurahua.

D e s c r i p t i o n. Wing span 20 mm. Head yellowish white, labial palpus 1.5, tinged ochreous except for terminal part; thorax brownish with brown marks. Forewing not expanding terminad; costa strongly bent basally, then rather straight; termen to cubital veins straight, not oblique. Ground colour pale brownish with browner suffusions and brown remnants of markings; dorsum orange, tornal area more brownish. Cilia brownish. Hindwing whitish grey mixed brown in apical area; cilia concolorous with middle of wing, in apex part more brown.

V a r i a t i o n. Paratypes with larger, variably situated orange areas.

Male genitalia (Figs 1, 2). Terminal lobes of tegumen large, somewhat expanding at bases laterally; basal part of socius large, terminal portion hairy, small; subscaphium well sclerotized in distal half, slender posteriorly; valva broad; brachiola slender terminally; sacculus straight to angle; rounded sclerite at spined termination, ventrally; aedeagus short, weakly sclerotized ventroposteriorly; coecum penis slender; cornuti two small spines and a plate.

Female not known.

Holotype male: "Ecuador, Prov. Tungurahua, Baños–Runtun, 22.01.2002, 3170 m, leg. J. WOJ-TUSIAK"; GS 137 MZUJ; Paratype male, the same label (GS 138 MZUJ).

## Acleris supernova sp. n.

(Figs 3, 4, 140)

D i a g n o s i s. Facies somewhat similar to that of the Palaearctic *A. leechi* (WALSINGHAM, 1900) an *A. conchyloides* (WALSINGHAM, 1900) in which dorsal part of forewing is occasionally strongly suffused but in male genitalia it differs from all known species of this genus especially in the presence of the spine of end of the sacculus. Among the Neotropical species it could be compared to *A. nishidai* BROWN, 2008 from Costa Rica but the ground colour of *nishidai* is orange ferruginous.

E t y m o l o g y. The name refers to the excellent ("super") colouration of this moth.

D e s c r i p t i o n. Wing span 17 mm. Head whitish yellow, labial palpus ca 2, yellow; thorax yellow. Forewing rather not expanding posteriorly; costa weakly convex throughout; apex rounded; termen weakly oblique, straight. Ground colour yellow preserved in costal, dorsopostbasal (paler), and terminal (slightly tinged rust) parts of wing. Remaining area suffused rustbrown except for dorsal half where blackish brown. Markings blackish brown in form of incomplete postbasal and me-

dian fasciae. Refractive markings weak, both on ground colour and markings. Cilia yellow, in tornal part blackish. Hindwing pale brownish grey, whiter towards base; cilia white cream, in anal part tinged brownish.

Male genitalia (Figs 3, 4). Apical lobes of tegumen broad expanding laterally and distally; sclerotization of subscaphium strong, its terminal process curved, expanding ventrally; costa of valva concave; sacculus broad to middle where angulate, with terminal part strongly tapering posteriorly, armed with small apical spine; trachiola broad; transtilla expanding dorsoposteriorly; aedeagus short, somewhat tapering terminally.

Female not known.

Holotype male: "Ecuador, East Cordillera, Prov. Napo, Papallacta, 17.01.2003, 2950 m, leg. J. WOJTUSIAK"; GS 1013 MZUJ.

## Cochylini

#### Henricus sangayanus sp. n.

### (Figs 111, 141)

D i a g n o s i s. Comparable with *H. exploratus* RAZOWSKI & BECKER, 1986 and *H. ellampus* RAZOWSKI, 1992, both from Costa Rica but *sangayanus* with smaller sterigma than in *exploratus* and broad, short ductus bursae (in *ellampus* it is longer and slender); from the two it is quite distinct externally especially by its ochreous rust strigulation and brown dorsum of forewing.

E t y m o l o g y. The name refers to the type locality.

D e s c r i p t i o n. Wing span 24.5 mm. Head and thorax ferruginous cream, labial palpus 2. Forewing not expanding terminad; costa curved outwards basally, then weakly so; apex pointed; termen distinctly oblique, straight. Ground colour yellow cream strigulated ochreous rust; concolorous spots represent costal parts of the usual markings of this genus; dorsum brown with some rust scales near posterior part of inner edge and blackish scales at tornus. Cilia cream. Hindwing cream tinged yellowish in apical part; cilia white cream.

Male not known.

Female genitalia (Fig. 111). Papilla analis broad medially; apophyses moderately long; sterigma short with cup-shaped part, transverse median fold, and well sclerotized lateral arms; ductus bursae short, membranous; corpus bursae pear-shaped, densely spined.

Holotype female: "Ecuador, Prov. Morona Santiago, N.P. Sangay, via Guamote-Macas, 24.01.2004, 3400 m, leg. WOJTUSIAK & PYRCZ"; GS 279 MZUJ.

## Henricus generosus RAZOWSKI, 1994

M a t e r i a l e x a m i n e d. One male from Prov. Carchi, Res. Forest. Golondrinas, West Cordillera, 28-30.01.2005, 2000 m, leg. J. WOJTUSIAK. Described from the Napo Province where collected at the altitude of 2400 m.

### Saphenista pyrczi sp. n.

## (Figs 5, 6, 142)

D i a g n o s i s. This species is close to *S. sphragidias* (MEYRICK, 1932) from Bolivia but *pyrczi* with well developed median and basal markings of forewing, shorter sacculus, and broader, rounded apically socius.

E t y m o l o g y. The name is the patronym for Dr. Tomasz PYRCZ, acknowledged Polish lepidopterist.

D e s c r i p t i o n. Wing span 24 mm. Head creamish, labial palpus 3, mixed brownish proximally; thorax brownish. Forewing expanding posteriorly; costa weakly convex; termen moderately oblique, straight. Ground colour cream tinged and sprinkled brown; suffusions brownish. Markings brown: basal blotch convex posteriorly; dorsal blotch accompanied by median fascia divided into three dif-

fuse parts followed by postmedian suffusion; terminal area broad, fused with ill-defined subapical blotch. Cilia worn. Hindwing brownish cream, browner in apex area and periphery; cilia creamish.

Male genitalia (Figs 5, 6). Socii broad, rounded apically; valva slender; sacculus short, convex postbasally; median part of transtilla broad, moderately long; aedeagus somewhat shorter than costa of valva; cornutus thick, short, slightly curved.

Female not known.

Holotype male: "Ecuador, Prov. Napo, Papallacta, 19.01.2004, 3250 m, leg. WOJTUSIAK & PYRCZ"; GS 216 MZUJ.

### Saphenista subsphragidias RAZOWSKI & BECKER, 1992

M a t e r i a l e x a m i n e d. One specimen from Prov. Tungurahua, Baños, El Tablon, 17.09.2004, 3100 m. This species was described from the same province and altitude.

### Saphenista chanostium sp. n.

## (Figs 7, 8, 112, 143, 144)

D i a g n o s i s. Facies comparable with *sphragidias* and *pyrczi* but *chanostium* with black dot at end of median cell of forewing; resembling also the patternles *S. splendida* RAZOWSKI & BECKER, 2002 from Province of Morona but distinct by very broad sclerite of ductus bursae.

E t y m o l o g y. The name refers to the shape of ostium; Greek: chanos - open mouth.

D e s c r i p t i o n. Wing span 26 mm. Head cream, labial palpus ca 4, tinged ochreous proximally. Forewing weakly expanding posteriorly; costa gently convex; termen moderately oblique, straight. Ground colour cream suffused yellow along costa and subterminally, with brownish dorsally and apically. Markings brown: basal blotch reduced to costal blotch and basal suffusion; dorsal blotch extending costally and at median cell posteriorly; subapical blotch divided into three spots; three spots along termen; subterminal area with ochreous shade marked by black dot. Cilia worn. Hindwing brownish grey, brownish at wing apex; cilia creamish (worn).

Male genitalia (Figs 7, 8). Socii rather slender; base of median part of transtilla short; posterior half of valva slender; sacculus simple, short; aedeagus longer than valva, with slender posterior part; cornutus large.

Female genitalia (Fig. 112). Papilla analis and apophyses fairly long; postostial sterigma subsquare; cup-shaped part of sterigma broad, rather weakly sclerotized; ductus bursae broad, well sclerotized except for short terminal portion, convex medially; ductus seminalis originating near middle of ductus bursae, rigid basally; corpus bursae membranous.

Holotype female: "Ecuador, Prov. Morona Santiago, N.P. Sangay, via Guamote–Macas, 24.01.2004, 3400 m, leg. WOJTUSIAK & PYRCZ"; GS 215 MZUJ. Paratype male is from Papallacta, Province of Napo., 3450 m.

## Saphenista splendida RAZOWSKI & BECKER, 2002

M a t e r i a l e x a m i n e d. One female from Prov. Morona Santiago, N.P. Sangay, via Guamote–Macas, 24.01.2004, 3400 m. Described from the same province of Morona-Santiago.

## Saphenista runtuna sp. n.

### (Figs 9, 10, 145)

D i a g n o s i s. Related to *S. carchiana* RAZOWSKI & BECKER, 2002 from Province of Carchi but *runtuna* distinct by larger socii, short median part of transtilla, large aedeagus with long ventro-terminal part, and long cornutus.

E t y m o l o g y. The name refers to the type locality of this species.

D e s c r i p t i o n. Wing span 16 mm. Head whitish, labial palpus 1.5, pale brownish cream, white terminally; thorax brownish, end of tegula and collar partially whitish. Forewing slender,

rather uniformly broad; costa straight; termen strongly oblique, tolerably straight. Ground colour whitish with indistinct greyish cream admixture; dots along costa and dorsum brownish grey larger than terminal dots; suffusions greyish brown. Markings indistinct, concolorous with suffusions: dorsal blotch slender; median fascia in form of costa blotch; some spots replacing subapical blotch, one beneath apex. Cilia concolorous with ground colour. Hindwing whitish tinged brownish at apex; cilia whitish.

Male genitalia (Figs 9, 10). Uncus large, broad, triangular in basal third, somewhat expanding terminally; socius broad; end of sacculus short; aedeagus moderate.

Female not known.

Holotype male: "Ecuador, Tungurahua, Baños, Runtun, 22.01.2002, 3170 m, leg. J. WOJTUSIAK"; GS 322 MZUJ.

## Aphalonia praeposita (MEYRICK, 1917)

## (Fig. 113)

M a t e r i a l e x a m i n e d. Two females from Prov. Morona Santiago, N.P. Sangay, via Guamote–Macas, 24.01.2004, from the elevation of 3400 m. Described from Peru.

D e s c r i p t i o n of female genitalia (Fig. 113). Sterigma in major part membranous, with lateroposterior arms incomplete; ostium protected by a short sclerite fused with sclerite of antrum; ductus bursae short, with longitudinally folded sclerite; corpus bursae large with weak sclerites and spines; accessory bursa originating ventrally from before middle of corpus bursae, surrounded by a weak sclerite.

## Aethes albogrisea sp. n.

#### (Figs 114, 146)

D i a g n o s i s. Externally similar to several species of various genera eg. *Aphalonia praeposita* (MEYRICK), *Phalonidia walkerana* RAZOWSKI, 1967, and *A. agelasta* RAZOWSKI, 1967 but close to *A. macasiana* RAZOWSKI & PELZ, 2001 from the Morona-Santiago Province. From this last and its allies *albogrisea* differs in slenderer forewing and white and grey colouration.

E t y m o l o g y. The name refers to colouration of forewing: Latin: alba-white, grisea - grey.

D e s c r i p t i o n. Wing span 20.5 mm. Head and thorax white, labial palpus ca 3. Forewing expanding terminad; costa straight to 3/4, then bent; termen weakly bent and convex. Ground colour white; strigulation and diffuse spots greyish; costa dark grey to middle. Markings grey with darker marks developed as a costal triangle fused with large dorsal blotch extending from middle of costa to tornus; apical marking consisting of grey spots and fasciae; subterminal fascia slender blackish; black dots near middle of median cell. Cilia white with basal line grey. Hindwing whitish basally becoming grey on periphery; strigulation dense, grey; cilia whitish, with grey basal line.

Male not known.

Female genitalia (Fig. 114). Papilla analis large with slender anterior part; apophyses anteriores short, apophyses posteriores five times longer; cup-shaped part of sterigma short; postostial sterigma broad, weakly sclerotized; ductus bursae short; corpus bursae large with a belt of weak sclerites and one stronger sclerite in middle; accessory bursa originating in distal part of corpus bursae.

Holotype female: "Ecuador, Prov. Morona Santiago, N.P. Sangay, via Guamote-Macas, 24.01.2004, 3400 m, leg. WOJTUSIAK & PYRCZ"; GS 198 MZUJ.

## Deltophalonia termasia sp. n.

(Figs 11, 12, 147)

D i a g n o s i s. Facies as in *D. obscura* RAZOWSKI & WOJTUSIAK, 2008 from the Province of Bolivar but in this species median part of transtilla very large, stout, with terminal portion tapering apicad.

E t y m o l o g y. The name refers to the type locality, Las Termas.

D e s c r i p t i o n. Wing span 26 mm. Head and thorax dark greyish brown; labial palpus ca 3. Forewing broad, weakly expanding terminad; costa uniformly convex; termen weakly oblique, straight. In posterior third of wing ground colour brownish grey with browner suffusions and indistinct fascia, browner in remaining areas; costal spots and markings dark brown, this last represented chiefly by oblique fascia extending from mid-dorsum, basal blotch and costal portion of median fascia. Cilia grey-brown, paler, greyer at tornus. Hindwing broad with costal portion long scaled to beyond middle, creamish, densely strigulated brownish grey, suffused with same colour apically; cilia grey cream.

Paratype paler than holotype with forewing ground colour more creamish.

Male genitalia (Figs 11, 12). Uncus large, tapering terminad with small apical thorn; socius slender; gnathos submembranous slender belt; valva and aedeagus typical of the genus; sacculus with small termination; transtilla large with median part broad terminating in slenderer, tapering apicad lobe.

Female not known.

Holotype male: "Ecuador, Prov. Napo, Papallacta, Las Termas, 18.02.2004, 2650 m, leg. WOJTUSIAK & PYRCZ"; GS 268 MZUJ. Paratype male: Ecuador, Prov. Tungurahua, Baños–El Tablon, 17.09.2004, 3100 m; GS 265 MZUJ.

### Euliini

## Atrocenta gen. n.

Type-species: Atrocenta centrata sp.n.

D i a g n o s i s. This genus has a separate position within Euliini; facies and some parts of male genitaia (a weak transtilla, slender aedeagus) are similar to *Dogolion* RAZOWSKI & PELZ, 2003 but *Atrocenta* with peculiar, sharp processes of dorsolateral parts of transtilla and its discontinuous median part, coecum penis is long, slender, and valva without groups of spines. Also similar to *Meridogena* RAZOWSKI & WOJTUSIAK, 2006 but in this genus the processes extends from sclerotized parts of transtilla (not from membrane) and shoulders of uncus are present.

E t y m o l o g y. The generic name is an anagran of the name of the type-species.

D e s c r i p t i o n. Venation. In forewing R5 to termen; chorda not preserved, M-stem long, CuA2 originating opposite 1/5 distance between R1-R2. In hindwing Rs-M1 strongly approaching to one another in basal third, base of M2 close to M3, M3-CuA1 connate.

Male genitalia. Uncus long, slender, pointed, with short shoulders; socius large, drooping; gnathos with lateral arm broadening distally, simple, and terminal plate small; vinculum complete, slender; valva elongate, broadest medially, without pulvinus; sacculus short accompanied by elongate lobe situated above its end; small thorn at the end of this last; transtilla membranous medially, with strong, pointed lateral processes; juxta moderate; aedeagus slender, protruding ventrally; coecum penis long, slender; caulis short; cornuti absent.

Female not known.

Distribution and biology. Mountains of Ecuador, Province of Tungurahua. Monotypic; collected at 3000 m.

#### Atrocenta centrata sp. n.

### (Figs 13, 14, 148)

D i a g n o s i s. The only species of the new genus with facies somewhat similar to *Goryt-vesica cidnozodion* RAZOWSKI & WOJTUSIAK, 2006.

E t y m o l o g y. The name refers to the shape of transtilla; Greek: kentrotos – provided with a thorn.

D e s c r i p t i o n. Wing span 20 mm. Head creamish, labial palpus ca 4, pale brownish ochreous; thorax pale brownish. Forewing indistinctly expanding terminad; costa weakly convex; apex

pointed; termen weakly oblique, rather straight. Ground colour cream suffuse reddish rust in dorsoposterior and median parts of wing, with pale brownish suffusions between veins in subcostal area; dots along costa and dorsum dark brown, subapical spots more grey. Marking: incomplete brownish fascia along median cell broadening towards apex but reaching subapical spots, with white spot on black radial fascia at end of median cell; small brown-grey mark at mid-termen. Cilia cream with some rust and brown scales. Hindwing cream tinged pale brownish near apex; strigulation weak, grey; cilia concolorous with adjacent parts of wing.

Female not known.

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

Holotype male: "Ecuador, Prov.Tungurahua, Baños-El Tablon, 16.01.2002, 3000 m, leg. WOJTUSIAK & PYRCZ"; GS 416 MZUJ.

## Anopinella yangana sp. n.

#### (Figs 115, 149)

D i a g n o s i s. This species is closely related with *chinguala*, as the shapes of posterior apophyses and bursa copulatrix which has a large ventrolateral sac show; from *A. niphochroa* RAZOWSKI & BROWN this species differs in simple, short ductus bursae.

E t y m o l o g y. The name refers to the type locality: Yangana.

D e s c r i p t i o n. Wing span 19 mm. Head grey cream scaled white; labial palpus ca 5, brownish grey, rust brown in terminal third; thorax whitish grey, dark scaled. Forewing distinctly expanding terminally; costa almost straight; termen slightly oblique, straight. Ground colour white with indistinct yellowish hue; reticulation olive grey, browner on markings. Markings brownish grey with weak reddish rust suffusions near base and end of median cell; basal blotch represented by costal part of postbasal fascia; costal blotch large, triangular; terminal fascia slender; other markings concolorous with, or darker than reticulation; white spot at end of median cell accompanied by black shade; black dots on terminal markings beneath apex. Cilia from beneath apex reddish rust. Hindwing greyish cream with brownish grey reticulation and periphery (worn).

Male not known.

Female genitalia (Fig. 115). Apophyses short, in large membranous shelters; ductus bursae with minute, dense longitudinal folds; ductus seminalis originating submedially; sterigma delicate with short anteostial part; large ventrolateral sac with slender termination extending from posterior part of corpus bursae to base of ductus bursae; no sclerites in corpus bursae.

Holotype female: "Ecuador, Prov. Zamora Chinchipe, P.N. Podocarpus, Yangana, 8.09.2004, 2480 m, leg. WOJTUSIAK & PYRCZ"; GS 156 MZUJ.

## Anopinella shillanana sp.n.

(Figs 116, 150)

D i a g n o s i s. Related to *yangana* (cf apophyses and bursa copulatrix) but *shillanana* without reddish rust suffusions of forewing and cilia, long apophyses, median origin of ductus seminalis, and large sac from anterior portion of ductus bursae.

E t y m o l o g y. The species is named after its type locality at Rio Chingual.

D e s c r i p t i o n. Wing span 18.5 mm. Head and thorax creamish; labial palpus 3, suffused brownish. Forewing somewhat expanding posteriorly; costa almost straight; termen straight, moderately oblique. Ground colour cream slightly tinged olive, densely strigulated olive brownish; some strigulae forming transverse lines. Marking darker and browner than strigulae, forming large costal triangle. Cilia (worn) cream with brownish scales. Hindwing cream densely strigulated and suffused brownish, more white towards base; cilia whitish.

Male not known.

Female genitalia (Fig. 116). Apophyses slender, long, surrounded by membranous sacs; anteostial sterigma convex proximally, well sclerotized; postostial sterigma submembranous distally; ductus seminalis originating in anterior part of ductus bursae.

Holotype female: "Ecuador, Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote-Macas, 24.01.2004, 3100 m, leg. WOJTUSIAK & PYRCZ"; GS 155 MZUJ.

### Anopinella tinalandana BROWN & ADAMSKI, 2003

M a t e r i a l e x a m i n e d. One specimen from Baños-El Tablon 3000 m, 16. I. 2000. Described from Province of Pinchincha.

## Anopinella parambana BROWN & ADAMSKI, 2003

M a t e r i a l e x a m i n e d. Two males from Sozoranga-Utuana, Res. El Tundo, 2400 m, Province of Loja. Described from Paramba, Imbabura, Ecuador.

### Thalleulia pondoana sp. n.

## (Figs 15, 16, 151)

D i a g n o s i s. Related to *T. gracilescens* RAZOWSKI, 2004 from Pichicha-Septimo Paraiso but this species with short sacculus devoid a free termination.

E t y m o l o g y. The name refers to the type locality, Pondoa.

D e s c r i p t i o n. Wing span 18 mm. Head brown scaled cinnamon; labial palpus 1.5, greyish brown; thorax browner than head. Forewing fairly brown; costa convex to middle; apex very short; termen not oblique. Ground colour yellowish brown sprinkled brownish, densely strigulated greyish brown; markings reduced to a subterminal line. Cilia yellowish with some brownish scales. Hindwing pale brownish; cilia cream.

Male genitalia (Figs 15, 16). Uncus slender, long, slightly broadening basally; socius suboval; terminal process of arm of gnathos, long, curved terminally; valva elongate-oval; sacculus short, somewhat convex medially, sharp terminally; aedeagus rather short, with broad ventral termination; coecum penis rather large.

Holotype male: "Ecuador, Prov. Tungurahua, Baños-Pondoa, 17.01.2002, 3750 m, leg. J. WOJTUSIAK"; GS 420 MZUJ.

### Ernocornutia firna RAZOWSKI & WOJTUSIAK, 2008

M a t e r i a l e x a m i n e d. One male from Pime, N. Cañar, 3200 m. Described from Ecuador, Prov. Cañar.

## Ernocornutia paracatopta RAZOWSKI & WOJTUSIAK, 2008

M a t e r i a l e x a m i n e d. Four males and three females from Papallacta, from the elevation 3450 m.

Described from Province of Napo.

### Ernocornutia chiribogana RAZOWSKI & WOJTUSIAK, 2008

M a t e r i a l. One male and one female from Chiriboga, West Cordillera from the elevation 3100 m. Described from Ecuador, Prov. Pichincha.

#### Ernocornutia termasiana RAZOWSKI & WOJTUSIAK, 2008

M a t e r i a l. One male and three females from Papallacta, Las Termas from elevation 3650 m. Described from Ecuador, Province of Napo.

#### Ernocornutia sangayana RAZOWSKI & WOJTUSIAK, 2008

M a t e r i a l e x a m i n e d. Two males and one female from via Guamote–Macas from the elevation 3400 m. Described from Ecuador, Prov. Morona Santiago.

### Ernocornutia carycodes (MEYRICK, 1926)

D i a g n o s i s. Closely related with *E. pilaloana* but *carycodes* distinct by much shorter terminal process of arm of gnathos, short spiny termination of sacculus, and medially convex ventral portion of aedeagus.

R e m a r k s. Described in the genus *Eulia* HÜBNER, [1825]; illustrated by CLARKE (1958, also under *Eulia*); known only from the type locality (Mt. Tolima, Colombia).

#### Ernocornutia altonapoana sp. n.

(Figs 17, 18, 152)

D i a g n o s i s. Closely related and externally similar to *Ernocornutia firna* RAZOWSKI & WOJTUSIAK, 2008 from Ecuador: Panar but *altonapoana* easily distinguished by lack of subterminal process of sacculus, and larger aedeagus.

D e s c r i p t i o n. Wing span 18 mm. Head and thorax pale brownish. Forewing somewhat expanding terminad; costa uniformly convex; apex pointed; termen tolerably straight, moderately oblique. Ground colour cream with slight brownish admixture, brown dots and suffusions. Markings (partly worn) brown consisting of basal (blotch) and median (fascia) suffusions and subapical curved fascia fused with apical suffusion, terminating at tornus, pale edged anteriorly. Cilia cream brown, paler at tornus, with brown basal line. Hindwing cream with weak, grey strigulation; cilia creamish.

Male genitalia (Figs 17, 18). Uncus uniformly broad except for terminal part which is tapering apicad; socius rather small; broadening of lateroterminal part of arm of gnathos distinct with some fine thorns; valva moderately broad with setose disc and ventral angulation beyond sacculus; sacculus simple, slightly sinuate; transtilla in major part weakly sclerotized; aedeagus fairly large; cornutus moderate.

Female not known.

Holotype male: "Ecuador, Prov. Napo, Papallacta, 6.02.2005, 3450 m, leg. J. WOJTUSIAK"; GS 537 MZUJ.

## Subterinebrica festivaria sp. n.

(Figs 19, 20, 153)

D i a g n o s i s. Related to *S. impolluta* RAZOWSKI & BECKER, 2002 from Carchi, Ecuador but *festivaria* with spiny lobes of transtilla by which distinctly separate from the other.

D e s c r i p t i o n. Wing span 22 mm. Head black except for frons and end of median joint of labial palpus (1.5) which are white; thorax white except for collar and base of tegula. Ground colour of forewing white with indistinct yellowish admixture. Markings black, typical of the genus, with subapical blotch connected with terminal blotch and tornal blotch almost subsquare. Cilia black except at apex and tornus. Hindwing whitish; transverse strigulation weak, greyish; cilia whitish.

Male genitalia (Figs 19, 20). Uncus short, broadest postbasally, triangular in distal half; sacculus slender with 2 or 3 slender thorns, last situated terminaly; transtilla large: median part broad, convex dorsally; two densely spined lobes sublaterally; lateral processes of juxta almost equally long, slender; aedeagus moderately broad; caulis very large.

Female not known.

Holotype male: "Ecuador, Tungurahua, Baños-Runtun, 22.01.2002, 3170 m, leg. J. WOJTUSIAK"; GS 108 MZUJ.

#### Subterinebrica labyrinthana sp. n.

(Figs 21, 22, 154)

D i a g n o s i s. Similar and closely related to *impolluta* and *festivaria* but *labyrinthana* with large, curved, short spiny sublateral parts of juxta medially separated by a short, distinctly convex median lobe. Tornal blotch in this species is triangular whilst in *festivaria* it is subsquare.

E t y m o l o g y. The name refers to the forewing pattern; Greek: labyrinthos - labyrinth.

D e s c r i p t i o n. Wing span 23 mm. Head blackish; frons white; labial palpus 1.5, black, whitish terminally; thorax whitish, collar and base of tegula black. Ground colour and black elements of forewing as in *festivaria* but subapical and terminal blotches separate from one another, tornal blotch triangular and white tornal part of cilia large. Hindwing white; delicate brownish grey spots mainly in terminal part of wing; cilia whitish.

Male genitalia (Figs 21, 22). Basal portion of uncus fairly broad; sacculus rather broad basally, with several ventral spines in postmedian half; lobes of transtilla curved invardly, armed with outer, rather short thorns; median part of transtilla small, convex; processes of juxta strong, pointed terminally.

Female not known.

Holotype male: "Ecuador, Prov. Morona Santiago, N.P. Sangay, via Guamote-Macas, 24.01.2004, 3400 m, leg. WOJTUSIAK & PYRCZ"; GS 107 MZUJ.

## *Clarkenia pantherina* sp.n.

## (Figs 23, 24, 155)

D i a g n o s i s. Very close to *C. superba* RAZOWSKI, 1988 from Colombia but *pantherina* with broad, minutely thorny lateral parts of transtilla and broader dorsal process of sacculus. Also close to *E. cantamen* RAZOWSKI & BECKER, 2002 from Tungurahua Province but *cantamen* with subtriangular lateral parts of transtilla, non-angulate sacculus and low number (3 only) of cornuti of the terminal group.

D e s c r i p t i o n. Wing span 35 mm. Head brownish cream; labial palpus 3.3, cream densely scaled black in basal third; thorax cream with brown marks. Forewing expanding posteriorly; costa almost straight; termen tolerably straight, somewhat oblique. Groud colour whitish cream with slight yellowish admixure especially along edges of spots and in apical area. Markings brownish black in form of series of spots and blotches representig interrupted fasciae, best visible in dorsal area of wing; costal spots smaller, atrophying towards apex; termen marked by fused median spots. Cilia worn; probably cream with black elements. Hindwing white cream in apical area tinged with brownish; strigulation pale brown; cilia worn (remnants cream).

Male genitalia (Figs 23, 24). Uncus long, slender; hairy part of socius rounded; gnathos slender; sacculus broad, rather weakly sclerotized except for a very strong dorsal process; terminal part of valva broadly rounded; median part of transtilla slender, lateral parts extending dorsoposteriorly, minutely thorny distally; aedeagus slender, slightly convex ventrally; cornuti two grups of slender spines and posterior group of shorter, thicker spines.

Female not known.

Holotype male: "Ecuador, Prov. Napo, Papallacta, S 00°21'50", W 78°10'02", 3650 m, 19.01.2004. Leg. R. Garlacz"; GS 127 MZUJ.

#### Netechma triangulum RAZOWSKI & WOJTUSIAK, 2006

(Fig. 117)

M a t e r i a l e x a m i n e d. Male and female from via Guamote–Macas, N.P. Sangay at elevation of 3400 m. Described from Morona-Santiago Province where it was collected at the altitude of 2450 m.

D e s c r i p t i o n of female (not known until now). Wing span 25 mm. Forewing expanding terminad, ground colour darker than in male and oblique lines broder.

Female genitalia (Fig. 117). Anteostial sterigma well sclerotized medially, with broad lateral, submembranous parts; postostial sterigma in form of a pair of very large, rounded lobes extending in a strong sclerite near ostium; antrum forming two lateral slender lobes; ductus bursae fairly broad, irregularly sclerotized in proximal third; ductus seminalis median; trace of sclerite in corpus bursae.

R e m a r k s. This species was described from one male from the Province of Morona-Santiago where it was collected at the altitude of 2450 m.

### Netechma tenuifascia sp. n.

## (Figs 25, 26, 156)

D i a g n o s i s. Related to *N. bicerithium* RAZOWSKI, 1997 from Peru and *N. projuncta* RAZOWSKI, 1999 from Colombia but *tenuifascia* with small aedeagus and cornuti absent. Facies resembling that in Venezuelan *N. gnathocera* RAZOWSKI & WOJTUSIAK, 2006

D e s c r i p t i o n. Wing span 20 mm. Head and thorax brownish yellow; labial palpus ca 2, cream, slightly tinged brownish. Forewing slightly expanding terminad; termen weakly oblique, rather straight. Ground colour yellowish cream with slight brownish admixture; dots brown. Markings dark brown consisting of two parallel slender fasciae almost interrupted (left wing) subcostally. Cilia slightly darker than ground colour. Hindwing white cream, creamer apically; strigulation weak, brownish grey; cilia whitish except for apical area where tinged brown.

Male genitalia (Figs 25, 26). Uncus and gnathos moderate; valva broad tapering terminad with costa weall sclerotized; sacculus long, arch-shaped, with small, sharp termination; median part of transtilla in form of pair of submedian lobes each terminating in a minute spine; aedeagus short, slender; coecum penis small; cornuti absent.

Female not known.

Holotype male: "Ecuador, Tungurahua, Baños-Runtun, 22.01.2002, 3170 m, leg. J. WOJTUSIAK"; GS 91 MZUJ. Paratype male: same label.

#### *Netechma napoana* sp.n.

## (Figs 27, 28, 157)

D i a g n o s i s. Related to *tenuifascia* but *napoana* with slender sclerites of sacculus and longer processes of dorsal part of trantilla. From Peruvian *I. bicerithium* RAZOWSKI, 1997 this species differs in the longer processes of transtilla, simple juxta and slender, strongly curved aedeagus.

D e s c r i p t i o n. Wing span 20 mm. Head whitish with brownish suffusions; labial palpus over 2, cream, tinged brownish anteriorly; thorax pale brownish, end of tegula cream. Forewing slightly expanding terminally; costa weakly convex; termen straight, fairly oblique. Ground colour white; suffusions pale brownish, strigulation darker. Markings rust brown consisting of two parallel fasciae connected by means of a large costal suffusion; small terminal marking medially. Cilia worn; probably whitish. Hindwing white cream, in distal half of wing suffused brownish; strigulation indistinct, brownish; remnants of cilia cream.

Male genitalia (Figs 27, 28). Uncus moderate; terminal part of gnathos rather short; valva broad, convex ventrally with costa fully developed and caudal edge oblique; sacculus with small ventrobasal part and long dorsal sclerites; dorsal part of transtilla consisting of two slender, pointed submedian lobes; aedeagus slender with long ventral termination; coecum penis small; cornuti absent.

Female not known.

Holotype male: "Ecuador, Prov. Napo, Papallacta, Las Termas, 19.01.2004, 3650 m, leg. WOJTUSIAK & PYRCZ"; GS 104 MZUJ.

#### Netechma simulans sp. n.

(Figs 29, 30, 118, 158, 159)

D i a g n o s i s. Facies somewhat resembling *N. camelana* but with stronger elements of posterior fascia; sacculus with several processes similar to *N. phaedroma* RAZOWSKI & BECKER, 2001 from Santa Catarina, Brazil but the basal process in *simulans* very large and median part of transtilla stout, uniform.

E t y m o l o g y. The specific name refers to the resemblance of other species. Latin: simulo-faign.

D e s c r i p t i o n. Wing span 25 mm (male), 27 mm (female). Head whitish, labial palpus 2.5 blackish, white terminally; thorax whitish with black marks. Forewing fairly broad; costa slightly curved outwards; termen weakly oblique, straight. Ground colour white. Markings black consisting of several blotches and spots the remanants of transverse fascia. Cilia white. Hindwing whitish, cream on periphery; strigulation grey cream; cilia whitish.

Male genitalia (Figs 29, 30). Uncus rather short, slender; socius rounded; gnathos moderate; arms of vinculum fairly broad; valva broad at base, rather slender, uniformly broad in remaining part, rounded dorsocaudally, with slender, well sclerotized costa; sacculus strongly sclerotized with very large basal process directed caudally, strong median process and a few small (5 in right sacculus, two in left one) thorns in terminal portion; median part of transtilla large, stout, slightly expanding apically; aedeagus moderate with small ventroterminal portion; coecum penis fairly large; cornuti a cluster of short posterior thorns and two anterior groups of slender spines.

Female genitalia (Fig. 118). Sterigma large with broad anterostial part consisting of median and lateral sclerites; postostial sterigma in form of median, moderately sclerotized folds; ductus bursae short, membranous; sclerites of corpus bursae large; accessory bursa originating postmedially.

Holotype male: "Ecuador, Prov. Napo, Papallacta, Las Termas, 19.01.2004, 3650 m, leg. WOJTUSIAK & PYRCZ:"; GS 114 MZUJ.

Paratype female: the same label as holotype; GS 110 MZUJ.

*Netechma guamotea* sp. n.

(Figs 31, 32, 160)

D i a g n o s i s. Facies resembling that of Brazilian *N. altobrasiliana* RAZOWSKI & BECKER, 2001 and Colombian *I. juncta* (MEYRICK, 1926) but *guamotea* with simple, broadening medially transtilla, broad valva and triangular termination of sacculus.

E t y m o l o g y. The specific name refers to the type locality.

D e s c r i p t i o n. Wing span 15 mm. Head cream; labial palpus 1.5, cream scaled brownish; thorax brownish cream. Forewing uniformly broad throughout; costa weakly convex; termen distinctly oblique. Ground colour cream, in terminal one-third whiter; suffusions (at base, middle of wing and termen); dots and strigulae dark brown. Markings dark brown at dorsum, brownish with dark brown marks at costa and near middle, consistig of antemedian and postmedian fasciae parallel to termen. Cilia white except for median area of wing where brownish. Hindwing white cream, in distal half mixed brownish with brownish reticulation; cilia whitish with brownish suffusions.

Male genitalia (Figs 31, 32). Tegumen large; vinculum small; uncus fairly long; gnathos arms short, terminal plate large bilobed; valva broad with costa distinctly convex basally, arched medially; disc of valva with group of scales ventrocaudally; ventral edge of sacculus weakly concave submedially and postmedially, with broad, triangular termination; transtilla with broad dorsomedian part; aedeagus broad, short; coecum penis tapering proximad; cornuti numerous slender spines.

Female not known.

Holotype male: "Ecuador, Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote-Macas, 24.01.2004, 3100 m, leg. WOJTUSIAK & PYRCZ"; GS 121 MZUJ.

#### *Netechmodes gravidarmata* sp. n.

(Figs 33, 34, 119, 161)

D i a g n o s i s. Very distinct from the two known species of this genus (*N. harpago* RAZOWSKI & PELZ, 2003 from and *N. landryi* RAZOWSKI 2004, both from Ecuador) by the presence of a mushroom-shaped process of the dorsobasal portion of disc of valva and extremely large, complicate sacculus.

E t y m o l o g y. The specific name refers to the heavily sclerotisation of female genitalia. Latin: gravic – heavy, armatus – armed.

D e s c r i p t i o n. Wing span 20 mm. Head and thorax pale brownish cream; labial palpus ca 3, brownish cream, creamish dorsoposteriorly and terminally. Forewing slender, weakly expanding posteriorly; costa hardly convex; termen fairly oblique, straight. Ground colour cream slightly mixed brownish, distinctly suffused yellowish brown except for dorsal and subterminal area; similar suffusions and some spots between veins of posterior area of wing. Marking in form of rust brown triangular dorsal blotch postbasaly. Cilia pale rust brown. Hindwing white cream, cream terminally; some indistinct strigulae present; cilia whitish.

Male genitalia (Figs 33, 34). Unucus moderately slender; socius elongate; arm of gnathos broad; broad lobe at 1/3 of costal portion of valva; ventral edge of sacculus deeply concave between postbasal lobe and subterminal sharp process; median part of transtilla broad; aedeagus slender, pointed ventroterminally; coecum penis large.

Female genitalia (Fig. 119). Sterigma large; anteostial part consisting of well sclerotized anterior cup membranously connected with slender posterior portion which fuses with membranous lateral parts to form a circular structure; postostial part of sterigma sclerotized medially, with lateral, submembranous lobes; ductus bursae with long sclerite reaching corpus bursae.

Holotype male: "Ecuador, Prov. Tungurahua, Baños-El Tablon, 17.09.2004, 3100 m, leg. WOJTUSIAK & PYRCZ"; GS 103 MZUJ.

Paratype female: Ecuador, Prov. Loja, East Cordillera, Saraguro-Las Antenas, 24.08.2004, 3100 m, leg. J. WOJTUSIAK; GS 1015 MZUJ.

### Furcinetechma sangaycola sp. n.

## (Figs 120, 162)

D i a g n o s i s. Facies similar to that of *magnifurca* but *sangaycola* with termen slightly sinuate and posterior edge of posterior fascia with two median concavities.

E t y m o l o g y. The specific name refers to the name of national Park – Sangay, were the specimen was collected.

D e s c r i p t i o n. Wing span 20 mm. Head cream; labial palpus ca 3, creamish with median joint suffused brownish along middle; thorax brownish cream with base of tegula blackish brown. Forewing slender; costa indistinctly convex; termen hardly concave beneath apex. Ground colour cream tinged brownish, suffused brown along costa and termen; dots blackish brown. Markings brownish black in form of the elements of the usual fasciae connected with much paler suffusions; a similar suffusion connecting the two fasciae in median cell; terminal blotch brownish, indistinct. Cilia concolorous with posterior part of wing blackish posteriorly except for tornus. Hindwing brownish cream, cream basally; strigulation greyish cream; cilia cream.

Male not known.

Female genitalia (Fig. 120). Papilla analis large, broad proximally; apophyses posteriores very large, broad; apophyses anteriores very short; sterigma large, convexely rounded proximally, in major part membranous and sculptured; posterior part with oval moderately sclerotized structure from which extend rather delicate lateral arms; ductus bursae short; broad sclerite in posterior half of corpus brsae; ductus of accessory bursae originating at proximal edge of the latter.

Holotype male: "Ecuador, Prov. Morona Santiago, N.P. Sangay, via Guamote–Macas, 24.01.2004, 3400 m, leg. WOJTUSIAK & PYRCZ"; GS 123 MZUJ.

#### Furcinetechma labonitae sp. n.

(Figs 35, 36, 121, 163)

D i a g n o s i s. Facies as that of *sangaycola* and some species of *Netechma* (cf. with *sangaycola*) but termen of forewing straight, posterior fascia cream ochreous, concave medially, anterior part of sterigma subsquare, and apophyses posteriores slender.

E t y m o l o g y. The specific name refers to the type locality.

D e s c r i p t i o n. Wing span 24 mm (female), 21 mm (male). Head cream; labial palpus ca 3, whitish, scaled black (in male over 2, less scaled black); thorax concolorous with black marks. Forewing moderately slender; costa slightly convex; termen weakly oblique, straight. Ground colour white; suffusions ochreous cream and yellow-brown; spots black. Markings yellowish brown with black spots and blotches; posterior fascia pale except at wing edges, with posterior edge concave medially. Cilia white, blackish in costal half. Hindwing whitish suffused pale brownish in posterior half; strigulation greyish; cilia whitish.

Male genitalia (Figs 35, 36). Uncus strong broad terminally, sligthly concave apically; socius well sclerotized except for broad terminal part; gnathos short, with broad arms; valva broad; sacculus large, broadening terminally, rounded apically, armed with dorsosubterminal process accompanied by 1 or 2 small thorns; median part of transtilla slender, lateral parts broad; aedegus slender with small ventral termination; cornuti a group of 3 or 7 short spines.

Female genitalia (Fig. 121). Papilla analis rather small, slender; apophyses slender, apophyses posteriores very long; proximal part of sterigma very large, with slender sclerotized parts; posterior portion of sterigma with well developed posterior arms; median portion slender; ductus bursae with large sclerites extending into corpus bursae; ductus of accessory bursa beyond middle of corpus bursae.

Holotype female: "Ecuador, Prov. Sucumbios, La Bonita, East Cordillera, 2.02.2005, 2000 m, leg. J. WOJTUSIAK"; GS 510 MZUJ.

Paratypes: one male with the same label as holotype, GS 511 MZUJ; one male from Ecuador, Prov. Sucumbios, Rio Chingual, La Bonita, 26.06.1999. Leg. J. WOJTUSIAK; GS 118 MZUJ.

#### Hasteulia emmeles RAZOWSKI, 1999

## (Fig. 122)

M a t e r i a 1 e x a m i n e d. One female from Prov. Napo, Papallacta, Las Termas from the elevation of 2650 m. This species was described from Azuay Province and was collected at the altitude of 2600 m.

D e s c r i p t i o n of the female genitalia (Fig. 122, not known until now). Sterigma large, rounded proximally, with distinct, well sclerotized lateral folds and submembranous postostial part with a pair of posterior, sclerotized lobes; ostium bursae protected by sclerites with lateral projections; antrum broad fused with cup-shaped part of sterigma; ductus bursae with long sclerite from before which extends ductus seminalis and distally originates accessory bursa; no sclerites in corpus bursae. Subgenital sclerite reduced to lateroposterior parts fusing with the lateral folds of sterigma.

## Rhytmologa polyfenestra sp.n.

### (Figs 37, 38, 164)

D i a g n o s i s. This species is closely related to Peruvian *R. dentparypha* RAZOWSKI, 1997 but *polyfenestra* differs chiefly in densely reticulate ground colour of forewing, long terminal process of sacculus and small claw like caudal thorn of valva.

E t y m o l o g y. The name refers to numerous pale spots of ground colour of forewing; Greek: poly - numerous, Latin: fenestra - window.

D e s c r i p t i o n. Wing span 18 mm. Head and thorax brownish cream, labial palpus 2, creamish; tegula brownish proximally. Forewing typical of the genus, not expanding terminad;

costa uniformly weakly convex; apex pointed; termen distinctly oblique, straight. Ground colour whitish cream densely strigulate olive grey, slightly mixed greyish basally. Markings darker than reticulation consisting of postbasal fascia, remnants of median marking; long marking along posterior half of costa and weak subterminal marking. Cilia (worn) concolorous with ground colour with some grey scales. Hindwing creamish slightly mixed brownish ochreous posteriorly; cilia cream.

Male genitalia (Figs 37, 38). Socius slender, bent; valva slightly narrowing postmedially; sacculus long, concave beyond middle, terminating in a ventral process; claw-shaped process immediately below costa of valva, caudally; aedeagus broad, slightly curved ventroposteriorly; coecum penis large; cornuti numerous small spines and a sclerite.

Female not known.

Holotype male: "Ecuador, Prov. Zamora Chinchipe, Loja-Zamora, "Arcoiris" Estacion Cientifica, 12.09.2004, 2200 m, leg. WOJTUSIAK & PYRCZ"; GS 323 MZUJ.

## Rhythmploga numerata MEYRICK, 1926

M a t e r i a l e x a m i n e d. One female (GS 959 MZUJ) from Prov. Tungurahua, Baños-Runtun at the elevation of 3170 m.

This species was described from Mt. Tolima, Colombia.

#### Galomecalpa quatrofascia sp.n.

### (Figs 39, 40, 165)

D i a g n o s i s. Related to Bolivian G. megalocalpa (MEYRICK, 1932) and Venezuelan G. meridana RAZOWSKI & BROWN, 1904 but quatrofascia with four brown fasciae of forewing and broad aedeagus.

E t y m o l o g y. The specific epithet refers to number of fasciae of forewing; Latin: quatro – four.

D e s c r i p t i o n. Wing span (probably, hence ends of forewings are broken) 34 mm. Head yellowish cream, labial palpus 3.5, browner; thorax cream, collar brownish. Forewing broad, expanding posteriorly; costa weakly concave medially. Ground colour cream, glossy whitish along edges of markings, mixed brownish ochreous medially. Markings in form of four brownish ochreous fasciae, brown along edges, with some brown lines; brown, indistinct basal blotch; and large, brown costal blotch. Remainders of cilia cream, brown scaled. Hindwing broad, cream slightly tinged yellowish brown; strigulation grey-brown; cilia (worn) cream.

Male genitalia (Figs 39, 40). Uncus long, weakly bent; socius broad, short; arm of gnathos long with short terminal plate; basal half of valva broad, distal part weakly tapering terminally, short; sacculus convex to middle, with distinct, sharp termination; transtilla with dorsolateral prominences; juxta short, broad; aedeagus short, broad, with lateroterminal lobe and ventropostmedian prominence.

Female not known.

Holotype male: "Ecuador, Prov. Pichincha, Chiriboga, West Cordillera, 5.02.2005, 3100 m, Leg. J. WOJTUSIAK"; GS 452 MZUJ.

R e m a r k . This species was omitted from the paper (RAZOWSKI & WOJTUSIAK 2008e) on West Cordillera.

### Badiaria plagiostriata RAZOWSKI & WOJTUSIAK, 2006

Material examined. One male from Ecuador, Tungurahua, Baños-Runtun, 22.01.2002, 3170 m. Described form Morona-Santiago Province.

### Gorytvesica cerussolinea RAZOWSKI & WOJTUSIAK, 2004

M a t e r i a l e x a m i n e d. One female from, P.N. Podocarpus, Cajanuma, Province of Zamora Chinchipe, 2700 m. Described from Province Morona-Santiago (Gualaceo–Limon, 2750 m).

#### Gorytvesica derelicta RAZOWSKI & BECKER, 2002

M a t e r i a l e x a m i n e d. One male from Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote–Macas, 24.01.2004 at 3100 m. Described from Province of Loja (2750 m).

## Gorytvesica sachatamiae RAZOWSKI & PELZ, 2005

M a t e r i a 1 e x a m i n e d. One male from Prov. Cotopaxi, San Francisco de las Pampas, Res. La Otonga at 1935 m. This species was described from the Province of Pichincha, Sachatamia Forest, where it was taken at 1700 m.

R e m a r k. This specimen was omitted from the paper on the Western Cordillera (RAZOWSKI & WOJTUSIAK, 2008e).

## Inape cinnamobrunnea RAZOWSKI & WOJTUSIAK, 2006

M a t e r i a 1 e x a m i n e d. Six male specimens from Prov. Tungurahua, Baños-Runtun, 22.01.2002, 3170 m; two male specimens from Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote–Macas, 24.01.2004, 3100 m, one specimen from Prov. Napo, Papallacta, Las Termas, 19.01.2004, 3650 m.

R e m a r k s. The holotype of this species (described from Prov. Morona-Santiago from the altitude of 2450 and 2950 m) differs from the present examples in a possession of two long cornuti. These specimens have one strong cornutus and shows a small variation in its length.

#### Romanaria leuca sp. n.

(Figs 123, 166)

D i a g n o s i s. This species is closely related to *R. spasmaria* RAZOWSKI & WOJTUSIAK, 2006 from the Province of Morona-Santiago but *leuca* without any dorsal markings and ochreous cream head and thorax.

E t y m o l o g y. The specific epithet refers to the colouration of the moth; Latin: leuca – pale.

D e s c r i p t i o n. Wing span 16 mm. Head pale ochreous cream, labial palpus brownish; thorax slightly darker than head. Forewing slightly expanding terminad; costa weakly convex; termen hardly sinuate. Ground colour cream with slight admixture of ochreous brownish; dorsum sprinkled brownish, remaining areas hardly so; some pale brownish dots along termen. Markings pale brown, bucklet-shaped with posterior part long, oblique, terminating subapically. Cilia concolorous with ground colour. Hindwing cream with similar cilia.

Male not known.

Female genitalia (Fig. 166). Apophyses very slender, moderately long, cup-shaped part of sterigma large, rounded proximally; postostial sterigma with large lateral parts; ductus bursae very short; ductus seminalis posterior; signum small.

Holotype female: "Ecuador, Prov. Napo, Papallacta, Las Termas, 19.01.2004, 3650 m, leg. WOJTUSIAK & PYRCZ"; GS 452 MZUJ.

## Inape elegans RAZOWSKI & PELZ, 2006

## (Fig. 124)

M a t e r i a l e x a m i n e d. Four male specimens from Prov. Napo, Papallacta, Las Termas, 19.01.2004, 3650 m; one male specimen from Prov. Napo, Papallacta, 19.01.2004, 3200 m, two female specimens from Prov. Napo, Papallacta, 19.01.2004, 3200 m, two male specimens from Tungurahua, Baños-Runtun, 22.01.2002, 3170 m, leg. J. WOJTUSIAK, one male specimen from Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote–Macas, 24.01.2004, 3100 m, one male specimen from Prov. Morona Santiago, N.P. Sangay, via Guamote–Macas, 24.01.2004, 3400 m.

This species was described from the Napo Province (Papallacta, 3430 m).

Description of female. Wing span 30-32 mm. Forewing somewhat expanding terminad, termen slightly variable, more or less oblique. Ground colour browner than in male with dark brown markings; basal blotch with a tendency to reduction.

Female genitalia (Fig. 124). Sterigma very large, rounded proximally, membranous lateroposteriorly; antrum short; posterior portion of ductus bursae sclerotized; posterior part of corpus bursae forming a sac strongly sclerotized distally; signa: one long, slender spiny sclerite and one shorter, broad sclerite, with one serrate edge.

R e m a r k s. Our males (wing span 25-26 mm) are greyer than the holotype, with distinct, brown markings.

## Inape parelegans sp. n.

#### (Figs 125, 167)

D i a g n o s i s. This species is very closely related to *elegans* but differs from it in distinctly oblique termen of forewing, short bursa copulatrix with posterior sac membranous terminally but with slender lateral sclerite, and short sclerites of corpus bursae one of which armed with long spines.

E t y m o l o g y. The name refers to similarity with *I. elegans*; Latin: para – similar.

D e s c r i p t i o n. Wing span 25 mm. Head and thorax brownish cream, labial palpus ca 3, with terminal joint brownish. Forewing rather slender, somewhat expanding terminad; costa uniformly convex; termen distinctly oblique, straight. Ground colour pale brownish cream mixed ferruginous, finely strigulated brownish; costal dots blackish brown. Markings dark grey with blackish strigulae, consisting of costal and dorsal spots representing median fascia and subapical blotch. Cilia brownish. Hindwing cream tinged yellowish apically; strigulation weak, greyish; cilia whitish.

Male not known.

Female genitalia (Figs 125). Papilla analis and sterigma broad, the latter with short median part of anteostial sclerite and semioval lateral parts; postostial part of sterigma weakly sclerotized except for posterior lateral arms; ductus bursae very short; corpus bursae broad, with membranous posterior sac from which a slender belt like sclerite extends; signa a large, spiny sclerite and a shorter lateral sclerite serrated laterally.

Holotype female: "Ecuador, Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote-Macas, 24.01. 2004, 3100 m, leg. WOJTUSIAK & PYRCZ"; GS 289 MZUJ.

## Inape sororia sororia RAZOWSKI & PELZ, 2006

M a t e r i a l e x a m i n e d. One female from Morona Santiago, N.P. Sangay, via Guamote–Macas, 24.01.2004, 3400 m.

Described from the Napo Province (Papallacta, at 3430 and 3350 m).

#### Inape commoda RAZOWSKI & PELZ, 2006

M a t e r i a l e x a m i n e d. One male from Prov. Tungurahua, Baños-Runtun, 22.01.2002, 3170 m, leg. J. WOJTUSIAK.

This species was described from the Province of Napo from the altitude of 2180 m.

### Inape homeotypa RAZOWSKI & PELZ, 2006

M a t e r i a l e x a m i n e d. One male from Prov. Loja, East Cordillera, Saraguro-Las Antenas, 3100 m. Described from the Province of Loja where it was found at the altitude of 2850 m.

#### *Inape parastella* sp. n.

(Figs 126, 168)

D i a g n o s i s. Related to Bolivian *I. simiana* ZELLER, 1866, **comb.n.**, but *parastella* with large broadening of posterior part of ductus bursae and small proximal part of corpus bursae.

E t y m l o l o g y. The name refers to the similarity to stella (cf. below).

D e s c r i p t i o n. Wing span 21 mm. Head brownish, labial palpus light brownish sufussed with dark brown scales on outer side; thorax darker than head. Forewing not expanding terminally; costa curved outwards in basal part, then weakly so; apex broad; termen rather not oblique. Ground colour cream with some whiter parts; suffusions brownish, broad, fusing; some spots brown; costal strigulae cream, divisions brown. Markings brown consisting of ill-defined basal blotch, median fascia darkest medially and terminal dark brown fascia. Cilia (worn) brownish with some parts cream and some divisions brown. Hindwing brownish with darker, diffuse strigulation; cilia cream; divisions brownish.

Male not known.

Female genitalia (Fig. 126). Papilla analis rather small; posterior portion of postostial sterigma with slender lateral sclerites and weak median sclerite; anterior sclerite small; posterior part of ductus bursae large, proximal portion of corpus bursae not differentiated; crowned sclerite of corpus bursae large, with long spines.

Holotype female: "Ecuador, Prov. Carchi, Res. Forest. Golondrinas, West Cordillera, 28-30.01.2005, 2000 m, leg. J. WOJTUSIAK; GS 451 MZUJ.

R e m a r k . This species was omitted from the paper on Western Cordillera (RAZOWSKI & WOJTUSIAK 2008e).

## Inape stella sp. n.

## (Figs 127, 169)

D i a g n o s i s. Closely related to *parastella* and *I. simiana* (ZELLER, 1866) from which *stella* differs chiefly in small crowned signum and large sclerite of anteostial sterigma; proximal part of corpus bursae small separated by a short neck.

E t y m o l o g y. This name refers to the shape of signum; Latin: stella – a star.

D e s c r i p t i o n. Wing span 23 mm. Head cream brown, thorax darker, scaled olive grey with some darker marks; labial palpus 3.3, creamish scaled dark olive grey. Forewing not expanding posteriorly; costa rather weakly convex; apex short, rounded; termen hardly oblique, straight. Ground colour white in proximal half partly tinged brownish; dots, strigulae and suffusions brown; terminal area and tornus with dark brown spots. Markings brownish with dark brown spots and somewhat paler strigulae: basal blotch incomplete, median fascia diffuse broadening at costa and tornus. Cilia brownish cream with brown suffusions and dark brown parts. Hindwing brownish white, whitish basally, pale brownish on periphery, with weak strigulation; cubital pecten a large group of blackish brown scales; cilia concolorous with median area of wing.

Male not known.

Female genitalia (Fig 127). Papilla analis small; postostial sterigma weakly sclerotized except for posterior, median and lateral portions; anterior part of sterigma with broad median sclerite ill-defined medially and broad, transverse sclerite; distal part of ductus bursae large, broad; crowned sclerite small, with spines similarly sized.

Holotype female: "Ecuador, Prov. Napo, Cosanga, Res. Yanayacu, 18.09.2004, 2150 m, leg. WOJTUSIAK & PYRCZ"; GS 412 MZUJ.

## Inape eltabloana sp. n.

## (Figs 41, 42, 170)

D i a g n o s i s. Closest to *I. penai* RAZOWSKI, 1988 from Bolivia but distinct by pale ferruginous orange suffusions on cream ground colour of forewing, simple sacculus, and broad termination of uncus.

E t y m o l o g y. The name refers to the type locality: El Tablon.

D e s c r i p t i o n. Wing span 24.5 mm. Head and thorax cream cinnamon, labial palpus ca 3, pale brownish cream, tegula brown. Forewing weakly expanding posteriorly; costa gently convex; termen moderately oblique, straight. Ground colour cream, in distal part of wing irregularly suffused pale orange ferruginous especially at costa where forming a large triangular blotch; black dots along costa and at end of median cell. Remnants of markings: brown basal blotch and costal half of median fascia. Cilia pale orange. Hindwing and cilia cream; greyish dots on almost all wings.

Male genitalia (Figs 41, 42). Terminal part of uncus broad; valva rather slender; sacculus slender, simple; processes of transtilla rather short; aedeagus rather small; cornutus single, strongly curved.

Female not known.

Holotype male: "Ecuador, prov. Tungurahua, Baños – El Tablon, 16.01.2002, 3000 m, leg. WOJTUSIAK & PYRCZ"; GS 136 MZUJ.

#### Transtillaspis tungurahuana sp. n.

#### (Figs 43, 44, 171)

D i a g n o s i s. Related to *T. baea* and *T. chiribogana* but *T. tungurahuana* with distinct sublateral lobes of dorsal portion of transtilla and broad sacculus.

E t y m o l o g y. The specific name refers to the Province of Tungurahua.

D e s c r i p t i o n. Wing span 18 mm. Head and thorax brownish, scaled cream and dark brown; labial palpus 2, pale brownish. Forewing uniformly broad throughout; costa curved outwards in basal third; termen fairly oblique, straight. Ground colour whitish cream to middle of wing, mixed brownish in basal and costal parts, distinctly suffused brownish in distal part of wing; strigulation, suffusions, and dots brownish. Marking brown: basal blotch indistinct, brown posteriorly forming an incomplete postbasal fascia and basal suffusion; median fascia concave in middle of proximal edge; subapical blotch and terminal marking diffuse. Cilia concolorous with ground colour of postmedian area of wing, browner in apical and tornal portions. Hindwing white, brownish on peripheries; basal tuft pale brownish; cilia concolorous with peripheries.

Male genitalia (Figs 43, 44). Uncus rather broad, slender; socius large; arm of gnathos fairly long; valva beyond sacculus slender, rather uniformly broad; sacculus ca twice shorter than costa of valva, broad, straight ventrally; transtilla with distinct subtriangular dorsal lobes; aedeagus broad, with short ventral termination; coecum penis broad, short; cornuti two large, slightly curved spines.

Female not known.

Holotype male: "Ecuador, Prov. Tungurahua, Baños-El Tablon, 16.09.2002, 3000 m, leg. WOJTUSIAK & PYRCZ;" GS 101 MZUJ.

Paratypes, two males: Ecuador, Prov. Tungurahua, Baños-El Tablon, 16.09.2002, 3000 m, leg. WOJTUSIAK & PYRCZ.

## Transtillaspis galbana RAZOWSKI & PELZ, 2005

M a t e r i a l e x a m i n e d. One male from prov. Sucumbios, Rio Chingual, La Bonita, at 1500 m. This species was described from the Napo Province.

## Transtillaspis toledana RAZOWSKI & WOJTUSIAK, 2008

M a t e r i a l e x a m i n e d. One male from prov. Morona Santiago, N.P. Sangay, via Guamote–Macas, at 3400 m. Described from the Province of Loja (3000 m).

### Transtillaspis cosangana sp. n.

(Figs 45, 46, 172)

D i a g n o s i s. Related to *T. parummaculatum* but *cosangana* distinguished by medioproximal fold of transtilla and two sublateral, ventroproximal lobes.

E t y m o l o g y. The name refers to the type locality – Cosanga.

D e s c r i p t i o n. Wing span 17.5 mm. Head pale brownish, thorax browner; labial palpus 2, pale brownish grey, whitish terminally. Forewing weakly expanding terminad; costa gently convex; apex rounded; termen slightly oblique, straight medially. Ground colour creamish partly suffused pale ferruginous and olive grey, densely spotted and strigulated brown, with darkest spots along costa; some black dots along mid-termen. Markings olive brown, diffuse: remnants of basal blotch and discontinuous median fascia followed by a paler suffusion. Cilia (partly worn) brownish cream, brownish in median area. Hindwing brownish, paler basally; strigulation brown, diffuse; cilia brownish cream.

Male genitalia (Figs 45, 46). Uncus moderate, slender; socii small; gnathos slender; valva rather short, convex caudally; sacculus simple, tapering terminad; transtilla with broad proximal portion directed dorsally and two peculiar sublateral, short pockets; processes of juxta long, slender, almost symmetric; aedeagus rather slender, with long ventroterminal portion; cornuti absent.

Holotype male: "Ecuador, Prov. Napo, Cosanga, Res. Yanayacu, 19.09.2004, 2150 m, leg. WOJTUSIAK & PYRCZ"; GS 422 MZUJ.

## Transtillaspis papallactana sp. n.

## (Figs 47, 48, 173)

D i a g n o s i s. Related to Brazilian (from Pará) *T. cherada* RAZOWSKI & BECKER, 2001 but *papallactana* distinct by large terminal processes of sacculus, asymmetric processes of juxta, and flat lobes of transtilla.

E t y m o l o g y. The name refers to the type locality.

D e s c r i p t i o n. Wing span 21 mm. Head and thorax brownish, frons and distal half of tegula more cream; labial palpus 3. Forewing fairly broad, not expanding terminad; costa gradually conevx; termen somewhat oblique, almost straight. Ground colour cream with slight brownish admixture; suffusions, dots, and strigulae brownish. Markings indistinct, brown. Cilia brownish cream, brown posteriorly. Hindwing whitish tinged pale brownish; strigulation pale greyish brown; cilia (worn) concolorous with wing.

Male genitalia (Figs 47, 48). Uncus slender; socius short, broad; valva rather slender, curved upwards; sacculus slender with strong terminal processes; juxta slender medially, with weak, thorny dorsosubmedian prominences; right process of juxta large, bent; aedeagus stout; coecum penis broad; cornuti absent.

## Female not known.

Holotype male: "Ecuador, Prov. Napo, Papallacta, Las Termas, 19.01.2004, 3650 m, leg. WOJTUSIAK & PYRCZ"; GS 314 MZUJ.

Paratype male: Ecuador, Prov. Napo, Papallacta, Las Termas, 19.01.2004, 3650 m, leg. WOJTUSIAK & PYRCZ; GS 953; paratype male: Ecuador, Prov. Tungurahua, Baños-El Tablon, 17.09.2004, 3100 m. GS 261.

## Transtillaspis saragurana RAZOWSKI & WOJTUSIAK, 2008

M a t e r i a l e x a m i n e d. Two male specimens from Prov. Loja, Saraguro at elevations 2980m and 3100 m. This species was described from Province of Loja where it was found at 3100 m.

## Transtillaspis costipuncta sp. n.

## (Figs 128, 174)

D i a g n o s i s. This species is closely related to *T. mindoana* RAZOWSKI & PELZ, 2005 (with similar proximal part of sterigma) from Province of Pichincha but *costipuncta* with long, distinct sclerite of bursa copulatrix. *T. costipuncta* differs externally from all known species of this genus by its brownish cream forewing and its black costal spots.

E t y m o l o g y. This name refers to the presence of costal spots (Latin: punctum -a spot) of the forewing.

D e s c r i p t i o n. Wing span 19.5 mm. Head cream, labial palpus over 2, cream brown; thorax pale brownish cream. Forewing somewhat expanding terminad; costa rather gradually convex; termen weakly oblique, hardly sinuate. Ground colour cream tinged brownish, paler in basal third of wing, more ochreous in terminal part; sparse brown scales especially posteriorly. Markings in form of a series of black costal dots two of which larger than the remaining ones. Cilia orange cream. Hindwing cream brown, paler towards base; cilia similarly coloured.

## Male not known.

Female genitalia (Fig. 128). Papilla analis large, broadening proximally and distally; apophyses short, slender; sterigma with small cup-shaped part and almost twice broader remaining anteostial part; bursa copulatrix elongate with long sclerite provided with a median long fold.

Holotype female: "Ecuador, Prov. Tungurahua, El Tablon, 16.01.2004, 3000 m, leg. J. WOJTUSIAK"; GS 1004 MZUJ.

## Clarkeulia magnana sp. n.

## (Figs 49, 50, 175)

D i a g n o s i s. This species is distinct from its congeners by the very broad wings. In male genitalia it resembles Brazilian *C. fortuita* RAZOWSKI & BECKER, 1984 and *C. medanosa* RAZOWSKI & PELZ, 2007 from Argentina but is distinct by strongly sinuate sacculus and lack of its postbasal group of hairs.

E t y m o l o g y. The name refers to the size of moth; Latin: magna – large.

D e s c r i p t i o n. Wing span 38.5 mm. Head and thorax whitish cream; labial palpus over 4.5, and base of tegula brownish. Forewing broad, somewhat expanding terminad; costa curved outwards at base, then weakly so; termen rather not oblique, tolerably straight. Ground colour light brownish, in distal third more cream, spotted and suffused brown; costa spotted brown. Marking ill-defined, brown, consisting of costal part of basal blotch, costal half of diffuse median fascia in form of a blotch, and slender subapical blotch; subterminal fascia indistinct marked by a few brown spots. Cilia worn. Hindwing brownish cream densely spotted brownish grey; cilia worn.

Male genitalia (Figs 49, 50). Uncus slender, curved, without ventro-terminal group of hairs; socius large drooping; arm of gnathos rather short, terminal plate long; vinculum large; valva broad basally, slender posteriorly; sacculus strongly sinuate, with short free termination; transtilla slender, broadened dorsomedially; juxta simple, broad; aedeagus slender with two longitudinal folds; coecum penis long, slender.

Female not known.

Holotype male: "Ecuador Prov. Napo, Papallacta, Las Termas, 19. 01. 2004, 3650 m, leg. WOJTUSIAK & PYRCZ"; GS 244 MZUJ.

### Lobogenesis primitiva sp. n.

## (Figs 51, 52, 129, 176)

D i a g n o s i s. In the shape of the uncus and socii this species resembles Venezuelan *L. larana* BROWN, 2000 and *L. lobata* RAZOWSKI, 1992 from Costa Rica but *primitiva* differing from them chiefly in the simple costa of valva, a reduction of spines of valva, the very broad aedeagus, and large sclerite of bursa copulatrix.

E t y m o l o g y. The specific name refers to the presence of several primitive genital characters.

D e s c r i p t i o n. Wing span 18.5 mm (paratype female 22.5 mm). Head and thorax brownish cream; labial palpus ca 2.5, brownish; tegula brownish. Forewing slightly expanding terminad; costa gently convex; termen rather straight, weakly oblique. Base of wing cream dotted brown; re-

maining parts brownish with brown suffusions and remnants of median fascia; dorsopostmedian area cream brown with rows of dark brown spots between veins. Cilia brown in major parts suffused blackish brown. Hindwing brown cream, creamer towards base, browner on periphery; strigulation brownish. Cilia brownish cream.

Female forewing darker than in holotype with reduced brown punctation but with several dark brown strigulae. Cilia brown.

Male genitalia (Figs 51, 52). Pedunculi of tegumen slender, weak medially; uncus slender with long terminal arms; socius large, rounded proximally and distally; gnathos arms rather broad, terminal plate short; valva broad to middle; costa of valva simple; pulvinus reduced to small hairs; disc without any spines; sacculus slender, with pointed free termination; transtilla reduced to weak basal sclerites; aedeagus broad, short, with munerous thorns, the largest posteriorly; coecum penis broad, very short; cornuti absent.

Female genitalia (Fig. 129). Papilla analis large; sterigma a large, anteostial slightly sclerotized plate with attached very short apophyses anteriores; postostial sterigma very small; antrum a membranous cup; ductus bursae expanding towards corpus bursae; corpus bursae with two larger and some small irregular sclerites.

Holotype male: "Ecuador, Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote-Macas, 24.01.2004, 3100 m, leg. WOJTUSIAK & PYRCZ; GS 272 MZUJ;

Paratype female: Ecuador, Prov. Napo, Papallacta, Las Termas, 18.02.2004, 2650 m, leg. WOJTUSIAK & PYRCZ; GS 269 MZUJ.

R e m a r k s. We include this species in *Lobogenesis* basing chiefly on the terminal furcation of the uncus, broad socii, large anteostial sterigma, and small apophyses anteriores. Other characters are dissimilar to any representatives of this genus but they are of plesiomorphic importance (the shape of valva, its costa, sacculus, simple gnathos) or represent reductions e.g. membranised transtilla. The aedeagus seems apomorphic, very broad and thorny but such shape may be convergent as found in some other Euliini.

## Pseudomeritastis emphanes RAZOWSKI, 2004

M a t e r i a l e x a m i n e d. One male from Ecuador, Prov. Sucumbios, (East Cordillera) Rio Chigual, La Bonita, 25.06.1999, 1500 m (GS 354 MZUJ), second male from Prov. Pichincha, (West Cordillera) Pacto, Rio Mashpi, 8.02.2004, 1150 m (GS 1010 MZUJ). Described from the Province of Pichincha, taken at ca 1300 m, known also from West Cordillera.

#### Exoletuncus similis RAZOWSKI & PELZ, 2005

M a t e r i a l e x a m i n e d. One male from Prov. Sucumbios, La Bonita, East Cordillera, 2.02.2005, 2000 m; GS 525; one male from Prov. Napo, Cosanga, Res. Yanayacu, at 2150 m.

Described from the Province Zamora-Chinchipe, Ecuador (E. of Loja), 2200 m, 9. X. 2002.

## Exoletuncus angulatus RAZOWSKI & PELZ, 2005

M a t e r i a l e x a m i n e d. One male from Prov. Sucumbios, La Bonita, East Cordillera, 2.02.2005, 2000 m, leg. J. WOJTUSIAK.

Described from the Napo Province (SE Cosanga, 2120 m, 24. X. 2002).

#### Exoletuncus consertus RAZOWSKI, 1994

M a t e r i a l e x a m i n e d. One male from Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote-Macas, 24.01.2004, 3100 m, leg. WOJTUSIAK & PYRCZ; GS 956 MZUJ. Described from the Napo-Pastaza Province.

#### Exoletuncus pleregraptus RAZOWSKI & PELZ, 2005

M a t e r i a l e x a m i n e d. One male from Prov. Napo, Papallacta, Las Termas, 19.01.2004, 3650 m, leg. WOJTUSIAK & PYRCZ; GS 196 MZUJ. *E. pleregraptus* was described from the provinces of Pichincha and Azuay where it was collected at the altitudes of 3300 m and 3990 m.

## Exoletuncus canescens RAZOWSKI & PELZ, 2005

### (Fig. 130)

M a t e r i a l e x a m i n e d. Male and female from Baños-Runtun, Tungurahua 3000 m and 3170 m, 16 and 22. I. 2002, respectively. Described from the Napo Province from 2180 m.

Description of female genitalia (Fig. 130) not known until now. Papilla analis proportionally large, rather slender; sterigma moderately large, with broad cup-shaped part and gently rounded proximal corners; ductus bursae fairly broad; signum absent.

#### Mosaiculia gen. n.

## Type-species: Mosaiculia mosaica sp.n.

D i a g n o s i s. Facies very similar to that in *Exoletuncus* RAZOWSKI, 1988 and some other black-and-white Neotropical taxa. Male genitalia reminescent of *Pseudapina* BROWN, 2003 but *Mosaicula* with rigid, very broad socii, very weak vinculum, and strong sacculus.

E t y m o l o g y. The name refers to the markings of forewing; Latin: mosaicus - mosaic and the genus *Eulia*.

D e s c r i p t i o n. Venation. In forewing R5 to termen, chorda strong originating at 1/4 distance between R1-R2, more anteriorly than base of opposite of CuA2, terminating between bases of R4-R5; M-stem atrophied. In hindwing Rs-M1 strongly approached to middle, M3-CuA1 connate, M2 distinctly separate from the latter.

Forewing slender; ground colour white, markings consisting of several black spots.

Male genitalia. Tegumen extremely large with broad pedunculi; socii atrophied or represented by large lateral sclerites of dorsolateral parts of tegumen (as interpreted by BROWN in description of his *Pseudapina*) with terminal processes and broad base; uncus slender; gnathos with median lobe of lateral arm and large terminal plate; vinculum rudimentary, slender, but with lateral portions fusing ventrally; valva slender, long, distinctly sclerotized dorsally, slender beyond costal convexity; sacculus large with slender directed dorsally terminal portion armed with marginal thorns; lateral parts of transtilla moderate, dorsomedian portion large, convexely rounded apically; juxta with submedian dorsal lobes; aedeagus moderate with pointed ventral termination and large dorsoposterior sclerite; coecum penis moderate; caulis strongly reduced.

Female not known.

B i o l o g y. Moth collected at the altitude of 3100 m.

D i s t r i b u t i o n. Ecuador only.

#### *Mosaiculia mosaica* sp. n.

## (Figs 53, 54, 178)

D i a g n o s i s. Facies as in *Exoletuncus consertus* RAZOWSKI, 1997 and *Netechma simulans* sp. n., but *mosaica* with more oblique terminal markings of forewing. Other characters as described for the genus.

E t y m o l o g y. The name refers to the markings of forewing; Latin: mosaicus - mosaic.

D e s c r i p t i o n. Wing span 22 mm. Head and thorax white, the latter with black spots; labial palpus 1.5, white with black anterior half of median joint. Forewing rather uniformly broad throughout; costa hardly convex; termen oblique. Ground colour cream white, slightly mixed with brownish

in basal third. Markings black consisting of numerous spots of usual *Exoletuncus* type. Cilia white. Hindwing weakly mixed cream brownish terminally; strigulation cream brownish; cilia white.

Male genitalia (Figs 53, 54) as described for the genus.

Holotype male: Ecuador, Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote-Macas, 24.01.2004, 3100 m, leg. WOJTUSIAK & PYRCZ"; GS 111 MZUJ.

#### Dimorphopalpa rutruncus sp. n.

### (Figs 55, 56, 179)

D i a g n o s i s. Related to *D. teutoniana* BROWN, 1999 from Santa Catarina, Brazil but *rutruncus* with broader subterminal part of uncus and short, broadening basally terminal process of arm of gnathos.

E t y m o l o g y. The name refers to the shape of uncus; Latin: rutrum - shovel.

D e s c r i p t i o n. Wing span 17.5 mm. Head cream slightly tinged brownish; labial palpus over 3, browner ventrally; thorax browner than head. Forewing not expanding terminad; costa uniformly convex; termen weakly oblique, straight. Ground colour yellow-brown; suffusions brown finely scaled whitish; veins suffused brownish. Markings ill-defined consisting of diffuse brown spot at end of median cell and brown subapical blotch. Cilia concolorous with ground colour. Hindwing cream brown, browner on periphery; cilia concolorous with middle of wing.

Male genitalia (Figs 55, 56). Uncus large, strongly broadened beyond middle, with small, slender termination; arm of gnathos with strong, broad basally lateroterminal process; valva broad to end of sacculus; sacculus simple, very slender, with indistinct termination; median part of juxta large, fairly broad; aedeagus stout; coecum penis very short.

Female not known.

Holotype male: "Ecuador, Prov. Napo, Cosanga, Res. Yanayacu, 18.09.2004, 2150 m, leg. WOJTUSIAK & PYRCZ"; GS 316 MZUJ.

### Oregocerata magna sp. n.

## (Figs 57, 58, 180)

D i a g n o s i s. Closely related to *O. orcula* but differing in its shorter uncus, much longer process of arm of gnathos, very broad transtilla and small aedeagus.

E t y m o l o g y. The name refers to the size of adult; Latin: magna – large.

D e s c r i p t i o n. Wing span 30 mm. Head grey; labial palpus 3.5 mixed ferruginous to middle; thorax slightly tinged brownish. Forewing somewhat expanding posteriorly; costa uniformly convex throughout; termen hardly sinuate beneath apex, weakly oblique. Ground colour grey tinged brownish except for terminal third and some small areas basally, with weak ferruginous suffusion along radial stem; strigulae brownish, suffusions paler. Markings pale brown with brown strigulae represented by median fascia which is slender in costal half, broad and diffuse in dorsal portion. Cilia brownish, basal line more orange, grey in tornal fourth. Hindwing cream slightly tinged brownish towards apex; strigulae grey; cilia whitish.

Male genitalia (Figs 57, 58). Uncus small, bent postbasally; socius moderate; terminal process of arm of gnathos very long; valva moderately broad; sacculus simple reaching to beyond one-third of valva; transtilla broad with very large lateral parts; aedeagus small.

Female not known.

Holotype male: "Ecuador, Prov. Napo, Papallacta, 6.02.2005, 3450 m, leg. J. WOJTUSIAK"; GS 463 MZUJ.

#### Oregocerata zonalis RAZOWSKI & BECKER, 2002

M a t e r i a l e x a m i n e d. One male from Prov. Bolivar, Balzapamba–Guaranda old road, 4.09.2004, 2200 m. Leg J. WOJTUSIAK. This species was described from the Province of Loja (from 2750 m) and also found in Saraguro (same province), at 2980 m.

#### Oregocerata cladognathos RAZOWSKI, 1988

M a t e r i a l e x a m i n e d. One female from Ecuador, Prov. Morona Santiago, N.P.Sangay, via Guamote–Macas, 24.01.2004, 3100 m, leg. WOJTUSIAK & PYRCZ. *O. cladognathos* was described from Province of Pichincha.

## Hynhamia runtuana sp. n.

### (Figs 59, 60, 181)

D i a g n o s i s. Very close and similar to *H. lasgralariae* RAZOWSKI & PELZ, 2007 from Province of Pichincha but differing from it in shorter processes of transtilla and broader end of uncus; from *H. obscura* RAZOWSKI & PELZ, 2007 (from Province of Loja) it differs in pale colouration, broader end of uncus and shorter socii.

E t y m o l o g y. The name refers to the the type locality.

D e s c r i p t i o n. Wing span 22 mm. Head creamish, thorax browner, labial palpus ca 4, brownish except for base. Forewing weakly expanding terminad; costa slightly convex; termen weakly oblique, straight. Ground colour pale yellowish cream i costal area slightly mixed brownish; dots brown, some along basal third of costa larger dark brown; some veins, especially last radial and median veins suffused brownish; termen suffused brown chiefly in median area, weaker suffusion along costal part of median cell. Markings rudimentary in form of pale brownish, diffuse costal half of median fascia marked with dark dot at the end. Cilia brownish. Hindwing cream dotted pale brownish terminally; cilia cream.

Male genitalia (Figs 59, 60). Uncus broad at base, somewhat expanding terminally; socius broad to before end; angle of sacculus well expressed; termination of sacculus small; aedeagus broadest beyond base, with long, slender ventroterminal part; coecum penis short.

Female not known.

Holotype male: "Ecuador, Tungurahua, Baños-Runtun, 22.01.2002, 3170m, leg. J. WOJTUSIAK"; GS 144 MZUJ.

#### Seticosta chlorothicta RAZOWSKI & PELZ, 2004

M a t e r i a l e x a m i n e d. Two males from Prov. Napo, Papallacta, Las Termas at 3650 m; three males from Prov. Tungurahua, Tungurahua volcano, Runtun at 3150 m, one female from Prov. Morona Santiago N.P. Sangay, via Guamote–Macas (GP 87).

This species was described from the Loja Province (NP Podocarpus, 2850 m).

#### Seticosta szeptyckii sp. n.

## (Figs 61, 62, 131, 182, 183)

D i a g n o s i s. This species is closely related to *S. phrixotricha* RAZOWSKI & PELZ, 2004 from the Province of Loja but *szeptyckii* with shorter uncus and its ventrolateral lobes originating medially, the shorter aedeagus, and the slenderer, not spiny dorsum of transtilla. Facies resembling *S. ariadnae* RAZOWSKI & PELZ, 2004 from Loja and *S. cigcligrapha* RAZOWSKI & PELZ, 2004 from the Napo Province but these two species with concave distal edge of subterminal interfascia.

E t y m o l o g y. This species is named in honour of our friend Prof. Dr. Andrzej SZEPTYCKI the leading specialist to Protura, Apterytota who passed away this October.

D e s c r i p t i o n. Wing span 24 mm (female 27 mm). Head cream tinged brown, labial palpus 3, brownish; thorax brown, collar creamish, tegula brown finely edged white. Forewing broad, some-what expanding terminad; apex pointed; termen moderately oblique, gently sinuate. Wing brown with orange rust and dark brown suffusions; costal strigulae whitish, fine, divided brownish. Pale markings in form of whitish fasciae with brown dense inner scaling: postbasal almost reaching dorsum connected with short fascia extending from base of wing along anal veins; subterminal fascia

from tornus to apex followed by indistinct whitish terminal marking; dorsum mixed white with brown dots. Cilia rust brown with some brown interruptions and rust basal line. Hindwing creamish; strigulation brownish grey; cilia creamish.

Female with more rust suffusions of forewing and browner hindwing.

Male genitalia (Figs 61, 62). Uncus rather short with median, large ventrolateral lobes; socius broad; arm of gnathos weak; valva broad basally; sacculus convex, posterior part of valva weakly differentiated with dense group of setae; transtilla weakly sclerotized, without spines; aedeagus proportionally short, slender posteriorly; dorsoproximal process of zona rather short, curved.

Female genitalia (Fig. 131). Apophyses long, slender; sterigma with small proximal part and distinct lateroposterior lobes; ductus bursae short; corpus bursae long with ductus seminalis extending from its mid-area; accessory bursa posterior.

Holotype male: "Ecuador, Prov. Cotopaxi,San Francisco de las Pampas, Res. La Otonga, 2.02.2002, 1935 m, leg. J. WOJTUSIAK"; GS 82 MZUJ.

Paratypes: 2 females from Ecuador, Prov. Cotopaxi, San Francisco de las Pampas, Res. La Otonga, 2.02.2002, 1935 m, leg. J. WOJTUSIAK (one with GS 81 MZUJ) and one male from Ecuador, Prov. Napo, Papallacta, las Termas, 19.01.2004, 3650 m, leg. WOJTUSIAK & PYRCZ; GS 944 MZUJ.

#### Seticosta concava sp. n.

## (Figs 63, 64, 184)

D i a g n o s i s. Close to *S. ariadnae* RAZOWSKI & PELZ, 2004 from the Loja Province but *concava* with simple, slender uncus and extremely long dorsoanterior process of aedeagus. Very distinct by its concave posterior edge of pale basal area of forewing.

E t y m o l o g y. The specific epithet refers to the shape of posterior edge of basal area of forewing; Latin: concave - concave.

D e s c r i p t i o n. Wing span 21 mm. Head and thorax cream brown, labial palpus 4.5, brown; tegula brownish basally. Forewing weakly expanding terminally, costa gently convex; termen oblique, sinuate. Basal area of wing cream white with pale brownish suffusions between veins. Remaining part of wing brown edged by means of a concave whitish line, indistinctly dotted creamish in tornal area, with triangular whitish blotch just before apex. Cilia brown. Hindwing cream, slightly mixed brownish on periphery, with brownish grey strigulation; cilia cream.

Male genitalia (Figs 63, 64). Uncus slender, without lateral lobes; socius moderate; valva with large group of costal setae; sacculus angulate; transtilla slender medially, with large, thorny lateral lobes; aedeagus with short postzonal part, very large dorsoanterior process and well developed coecum penis.

Female not known.

Holotype male: "Ecuador, Prov. Morona Santiago, N.P. Sangay, via Guamote-Macas, 24.01.2004, 3400 m, leg. WOJTUSIAK & PYRCZ"; GS 135 MZUJ.

Paratype: one male with the same label.

## Seticosta egregia RAZOWSKI & PELZ, 2004

## (Figs 65, 66)

M a t e r i a l e x a m i n e d. Single male from Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote Macas at 3100 m; GS 89 MZUJ.

Described from one female collected in the Province Zamora-Chinchipe (PN Podocarpus, San Franciso Ranger Station, 2200 m).

Description of male genitalia (Figs 65, 66) unknown until now. Uncus broad in basal portion, with small lateral prominences; socius rather small; valva, broad distinctly convex beyond sacculus,

slender terminally; sacculus one third length of valva, without free end; group of rather short spines in ventral convexity of valva; aedeagus proportionally short, slightly curved upwards beyond zone, with weak dorsoproximal lobe; coecum penis rather large.

R e m a r k s. Originally this species was compared to *S. arachnogramma* (MEYRICK, 1926) on basis of the external characters. The present discovery of the male allows us to compare it to *S. chlorothicta* RAZOWSKI & PELZ, 2004 from the Loja Province from which *egregia* differs by its weak submedian convexities of uncus and indistinct dorsoproximal process of aedeagus.

## Seticosta subariadnae sp. n.

## (Figs 67, 68, 185)

D i a g n o s i s. Closely related to *S. ariadnae* RAZOWSKI & PELZ, 2004 from the Loja Province but in *subariadnae* four first whitish lines meet at inner dorsal line (like in *S. cigcligrapha* RAZOWSKI & PELZ, 2004 from the Napo Prov.) and are not distanced, the subterminal line forms a shallow concavity, the uncus is large (longer than aedeagus), and the dorsoproximal lobe is long.

E t y m o l o g y. The name refers to a similarity with ariadnae; Latin: sub - near.

D e s c r i p t i o n. Wing span 28 mm. Head and thorax brownish, the latter edged whitish laterally; labial palpus ca 4. Forewing expanding terminally; costa slightly convex; apex pointed; termen hardly sinuate. Wing brownish with median area in larger part tinged ferruginous whilst basal, subdorsal, and terminal area dark brown. Whitish lines distinct, veins between two posterior lines whitish; dorsum concolorous. Cilia worn. Hindwing dirty white suffused brownish on periphery, strigulation brownish grey. Cilia worn.

Male genitalia (Figs 67, 68). Uncus large with short terminal part and lateral lobes; socius rather broad; terminal part of gnathos distinct; neck of valva rather broad; sacculus short, ventral lobe of cucullus rounded; submedian portion of costa with long setae; transtilla broad, deeply incised dor-sally; aedeagus rather short, with large coecum penis and very long dorsoposterior lobe at zone.

Female not known.

Holotype male: "Ecuador, Prov. Napo, Papallacta, 6.02.2005, 3450 m, leg. J. WOJTUSIAK"; GS 464 MZUJ.

#### Seticosta albicentra sp. n.

## (Figs 69, 70, 132, 186)

D i a g n o s i s. Close to Colombian *P. sagmatica* (MEYRICK, 1912) and Brazilian *S. charagma* RAZOWSKI & BECKER, 1999 but *albicentra* with longer terminal part of uncus and rather uniformly broad transtilla. From *S. cerussograpta* RAZOWSKI 1999 (from Morona-Santiago Prov.) *albicentra* differs in without dorsal concavity of transtilla and slender terminal part of uncus.

E t y m o l o g y. The specific name refers to presence of white dot at end of median cell of forewing; Latin: albus - white, centrum - center.

D e s c r i p t i o n. Wing span 25 mm (in male 22 mm). Head and median part of thorax white; labial palpus ca 5 cream (in male ca 3, brownish cream); tegula brownish basally. Forewing broad, expanding posteriorly; costa indistinctly convex; termen hardly concave beneath apex, moderately oblique. Ground colour silver white preserved as a postbasal fascia and confluent elements of posterior third of wing where pale brownish and grey markings occur; white dot at end of median cell. Markings yellow-brown in form of postbasal fascia; large median area developed by a fusion of at least three fasciae marked with blackish along middle of median cell. Cilia orange rust with white and brown elements (worn). Hindwing cream slightly mixed brownish, densely strigulated brownish; cilia worn.

Male genitalia (Figs 69, 70). Uncus slender basally and terminally, with apical portion tapering terminad and median part distinctly expanding laterally; socius broad; gnathos arm long; valva rather slender with well expressed neck and a group of 9 strong costal setae; sacculus angulate; cu-

cullus tapering terminad, with broad ventral corner; transtilla hardly concave in middle dorsally; aedeagus moderate, without dorsoanterior process.

Female genitalia (Fig. 132). Cup-shaped part of sterigma short followed by large median part and triangular lateral portions; antrum broad, membranous; ductus bursae slender, long.

Holotype female; "Ecuador, Prov.Morona Santiago, N.P. Sangay, via Guamote-Macas, 24.01.2004, 3400 m, leg. WOJTUSIAK & PYRCZ"; GS 84 MZUJ.

Paratype male: same label.

#### Seticosta droserana sp. n.

### (Figs 71, 72, 187)

D i a g n o s i s. This species is related to *S. chlorothicta* RAZOWSKI & PELZ, 2004 described from the Province of Loja but differs from it in the short process of zone and the broad lateral parts of transtilla. *D. droserana* differs from all known species of this genus in yellowish olive colouration of forewing and markings rather resembling those in some Chlidanotini.

E t y m o l o g y. The specific epithet refers to the colouration of forewing; Greek: droseros – moistened by dew.

D e s c r i p t i o n. Wing span 24 mm. Head and thorax cream ca 5, olive brown, base of tegula olive cream. Forewing distinctly expanding terminally; costa gradually convex; termen moderately oblique, sinuate. Ground colour pale yellowish with slight olive hue, paler along edges of some parts of markings, strigulated brown olive. Markings darker than strigulation consisting of slender fasciae extending from 1/5 of costa to before mid-dorsum, from 1/3 of costa to before tornus crossed with a fascia extending from mid-dorsum to 2/3 of costa; subapical short fascia connected with sub-terminal curved fascia extending from apex of wing to before tornus. Cilia concolorous with ground colour with several brown interruptions. Hindwing cream with pale brownish terminal suffusion and paler, sparse strigulae; cilia pale cream.

Male genitalia (Figs 71, 72). Uncus proportionally large with short submedian processes; socius broad; gnathos slender; valva slender with long cucullus; costa with group of strong setae; sacculus rounded at angle, then sinuate; transtilla with flat, helmet-shaped median prominence; aedeagus short and almost straight zonal process.

Female not known.

Holotype male: "Ecuador, Prov. Napo, Papallacta, Las Termas, 19.01.204, 3650 m. leg. WOJTUSIAK & PYRCZ"; GS 152 MZUJ.

#### Punctapinella cosangana RAZOWSKI & PELZ, 2004

M a t e r i a 1 e x a m i n e d. One male from Prov. Zamora Chinchipe, P.N. Podocarpus, Yangana at elevation of 2480 m. *P. cosangana* was described from the Napo Province (near Cosanga, 2180 m.).

#### Punctapinela paraconchitis RAZOWSKI & WOJTUSIAK, 2008

M a t e r i a 1 e x a m i n e d. One female from Prov. Sucumbios, Rio Chigual, La Bonita at elevation 1500 m. Described from Zamora Chinchipe Province where it was collected at the altitude of 2480 m.

## Punctapinella guamoteana sp. n.

## (Figs 73, 74, 188)

D i a g n o s i s. Related to *A. rastafariana* BROWN & ADAMSKI, 2003 from Jamaica but *guamoteana* with short uncus, concave sacculus, broad median part of transtilla and with small cornutus in vesica.

E t y m o l o g y. This name refers to the type locality.

D e s c r i p t i o n. Wing span 20.5 mm. Head white; labial palpus ca 3, pale cinnamon; thorax cream with tegula and posterior portion rust. Forewing moderately expanding porteriorly; costa weakly convex; termen rather oblique, hardly sinuate beneath apex. Ground colour white; suffusions and terminal area pale brownish with rust admixture; dorsal spot rust. Markings pale brownish with rust parts: basal blotch atrophying dorsally, strongly tinged brown; median triangle at costa with white spot at end of median cell. Cilia white, pale rust to middle and at wing apex. Hindwing whitish, in apical portion slightly tinged with cream, with indistinct reticulation. Cilia white.

Male genitalia (Figs 73, 74). Uncus fairly broad, short; socius long, rather well sclerotized in basal half, hairy in distal portion; arm of gnathos slender with lateroterminal process, terminal plate long; valva slender, tapering in distal portion terminally; sacculus slender, with ventroterminal process; median part of transtilla broad, expanding dorsally, finely spined; aedeagus short, with small ventral termination and broad coecum penis; cornutus capitate, small.

Female not known.

Holotype male: "Ecuador, Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote-Macas, 24.01.2004, 3100 m, leg. WOJTUSIAK & PYRCZ"; GS 90 MZUJ.

## Punctapinella viridargentea sp. n.

## (Figs 75, 76, 189)

D i a g n o s i s. Close to *P. guamotea* (short uncus, long terminal plate of gnathos, broad transtilla etc) and *P. tinajilana* RAZOWSKI & PELZ, 2004 (from the Azuay Province) but *viridargentea* with lateral prominence of arm of gnathos, stronger setae of valva and broad terminal portion of valva. From another Ecuadoran species, *P. Cosangana*, it differs differs chiefly by short uncus and very short cornutus.

E t y m o l o g y. The name refers to the colouration of forewing; Latin: viridis – green and argentens – silver.

D e s c r i p t i o n. Wing span 19.5 mm. Head grey-black, frons white; labial palpus 2.3, blackish; thorax whitish, tegula blackish basally. Forewing expanding terminally; costa almost straight; termen moderately oblique, straight. Ground colour silver white strigulated greenish olive with rows of appressed scales; terminal area suffused brownish. Markings dark grey diffusely spotted blackish, consisting of indistinct basal blotch and large costal triangular blotch extending to beneath median cell. Cilia blackish brown with rust basal line and a few whitish and dark brown divisions. Hindwing white tinged pale brownish, reticulate brownish grey. Cilia white.

Male genitalia (Figs 75, 76). Uncus short; socius long, uniformly broad postbasally; valva moderately broad; costal setae distinct, cucullus elongate-oval, setose; sacculus concave near middle with short terminal projection; median part of transtilla broad, spiny, lateral portions small; aedeagus short, broad; cornutus short, spiniform.

Female not known.

Holotype male: "Ecuador, Tungurahua, Baños-Runtun, 22.01.2002, 3170m, leg. J. WOJTUSIAK"; GS 157 MZUJ.

## Strophotina strophota MEYRICK, 1926

M a t e r i a l e x a m i n e d. One male and one female from Ecuador, Prov. Morona Santiago, N.P. Sangay, via Guamote–Macas, 24.01.2004, 3100 m, leg. WOJTUSIAK & PYRCZ. S. strophota was described from Mt. Tolima, Colombia.

## Ptyongnathosia harpifera sp. n.

## (Figs 77, 78, 190)

D i a g n o s i s. Externally similar to *P. spinosa* RAZOWSKI & WOJTUSIAK, 2008 and *P. flaminia* (MEYRICK, 1926), **comb. n.** from Colombia (described in *Eulia* HÜBNER) but *harpifera* without fer-

ruginous subapical edge of costa of forewing and orange basal part of cilia; from *spinosa* it differs in strong spines of gnathos and almost straight right process of base of sacculus and from the latter chiefly by the pointed terminal part of uncus; from Colombian *P. oxybela* RAZOWSKI, 1988 it differs mainly by numerous thorns of gnathos and *P. cotopaxiana* RAZOWSKI & WOJTUSIAK, 2008 from Province of Cotopaxi chiefly by short terminal process of arm of gnathos and straight processes of base of sacculus.

E t y m o l o g y. The name refers to large dorsobasal processes of sacculus; Latin: harpa -sickle, fero -I carry.

D e s c r i p t i o n. Wing span 19.5 mm. Head, terminal part of labial palpus (3), and thorax creamish, other lateral parts of palpus pale rust, collar tinged rust laterally. Forewing broadening terminad; costa uniformly convex; termen weakly oblique, somewhat sinuate. Ground colour greyish cream dotted blackish grey. Base of costa grey with rust mark; median marking convex subcostally; subapical marking consisting of three grey spots; pale grey suffusion subapically. Cilia cream tinged rust in costal half. Hindwing whitish, dotted grey; cilia whitish.

Male genitalia (Figs 77, 78). Uncus strong expanding terminally, pointed apically; socius typical of the genus; gnathos with several (three larger) sharp processes; valva slender; sacculus with large dorsobasal processes; transtilla broadening medially; aedeagus with slender terminal process.

Female not known.

Holotype male: "Ecuador, Prov. Napo, Cosanga, Res. Yanayacu, 18.09.2004, 2150 m, leg. WOJTUSIAK & PYRCZ"; GS 312 MZUJ.

### Runtunia runtunica RAZOWSKI & WOJTUSIAK, 2008

M a t e r i a l e x a m i n e d. One male from Baños-Runtun, Tungurahua volcano, at elevation 3170 m. Described from Province of Pinchincha, collected at the altitude of 1500 m.

#### Toreulia imminuta RAZOWSKI, PELZ & WOJTUSIAK, 2007

M a t e r i a l e x a m i n e d. One specimen from N.P. Sangay, Qda Shillñan, via Guamote-Macas (3100 m, 24. I. 2004). Described from Province of Napo.

## Toreulia runtuana RAZOWSKI, PELZ & WOJTUSIAK, 2008

Described from Baños-Runtun, Province of Tungurahua, 3170 m.

#### Toreulia acanthina RAZOWSKI, PELZ & WOJTUSIAK, 2007

M a t e r i a l e x a m i n e d. One male from La Bonita, Prov. Sucumbios, 2000 m (2. II. 2005, J. WOJTUSIAK). Described from the Napo Province (vicinity of Cosanga, 2180 m).

## Vulpoxena falcaria RAZOWSKI & WOJTUSIAK, 2008

Described from Qda Shillñan, via Guamote-Macas, 3100 m.

#### Bidorpitia columna RAZOWSKI & WOJTUSIAK, 2008

Described from Saraguro, 2980 m, the Loja Province: (RAZOWSKI & WOJTUSIAK 2008).

## Bidorpitia banosana RAZOWSKI & WOJTUSIAK, 2008

Described from Baños-Runtun, 3170 m, Tungurahua Province.

## Bidorpitia paracolumna RAZOWSKI & WOJTUSIAK, 2008

Described from Baños-Runtun, 3170 m, Tungurahua Province.

#### Archipini

## Argyrotaenia dispositana (ZELLER, 1877)

M a t e r i a l e x a m i n e d. One female from Prov. Sucumbios, La Bonita (GS 470 MZUJ) at elevation 2000 m. Described from Colombia.

### Argyrotaenia haemothicta (MEYRICK, 1926)

#### (Fig. 134)

M a t e r i a l e x a m i n e d. One male from Prov. Napo, Papallacta, at 3250 m, and two females from Prov. Napo, Papallacta, Las Termas, at 3650 m. *A. haemothicta* was described from Colombia (Mt. Tolima, 12,500 feet).

D e s c r i p t i o n. Wing span of our male specimen is 17.5 mm. From the lectotype it differs in paler, whitish grey ground colour of forewing and strong blackish grey markings of terminal third of the wing.

Description of female (not known until now). Wing span 24.5 mm. Head and thorax brownish; labial palpus 2. Forewing not expanding terminad; costa distinctly convex to middle, then sinuate; apex slightly protruding; termen rather not oblique, straight. Ground colour whitish suffused cinnamon and grey. Markings brown, diffuse; subapical blotch slender, rust; subterminal markings diffuse, brown. Cilia yellowish rust, whitish at tornus. Hindwing whitish suffused brown on periphery; cilia whitish brownish at apex, cream brownish beneath.

Male genitalia. Uncus rather broad, expanding posteriorly, rather rounded apically; valva broad, elongate, weakly convex caudally; sacculus long with large posterior broadening; aedeagus slender, somewhat tapering terminad; cornuti not found.

Female genitalia (Fig. 134). Apophyses anteriores long; cup-shaped part of sterigma large, tapering proximally, postostial part with transverse median sclerite; antrum membranous; basal sclerite of ductus bursae slender; signum with long, curved blade.

### Argyrotaenia posticicnephaea sp. n.

## (Figs 81, 82, 192)

D i a g n o s i s. Closely related to Peruvian *A. oriphanes* (MEYRICK, 1930) and *A. haemothicta* having similar shape of the uncus, valva, and aedeagus but the new species with dark greyish brown hindwing and grey ground colour of forewing which in *oriphanes* is white. In *haemothicta* the hindwing is white except the apical portion. Male genitalia of *oriphanes* characterize with slender uncus, and in those of *haemothicta* end of uncus is strongly broadened.

E t y m o l o g y. This name refers to the colouration of the hindwing; Latin: posticus - hind, cnephaeus - dark.

D e s c r i p t i o n. Wing span 17 mm. Head and thorax brownish grey, labial palpus 2.5 whitish beneath. Forewing not expanding posteriorly; costa convex basally, hardly sinuate posteriorly; termen weakly oblique, slightly convex. Ground colour grey with weak brownish grey, short lines. Markings brownish grey with some much darker marks weakly developed or pale in costal half of wing; subapical blotch and subterminal fascia weak, slender; row of spots along termen. Cilia greyish with some browner scales. Hindwing grey-brown, whiter towards base; cilia brownish grey.

Male genitalia (Figs 81, 82). Uncus fairly large, broadening in distal half, rounded apically; valva elongate, with rather straight dorsal edge; sacculus concave near middle, somewhat oblique basally and caudally; aedeagus slender especially at middle.

Female not known.

Holotype male: "Ecuador, Tungurahua, Baños-Runtun, 22.01.2002, 3170m, leg. J. WOJTUSIAK"; GS 188 MZUJ.

#### Argyrotaenia onorei RAZOWSKI & PELZ, 2004

M a t e r i a l e x a m i n e d. Two male specimens from Prov. Napo, Cosanga, Yanayacu at elevation 3100 m. This species was described from the Province of Morona-Santiago.

## Argyrotaenia atrata sp. n.

### (Figs 83, 84, 193)

D i a g n o s i s. This species is close to Bolivian *A. lobata* RAZOWSKI, 1988 (similar arrangement of valvan scent scales, shape of the valva, broad lobes of transtilla, etc.) but this species with longer aedeagus and slenderer and longer uncus.

E t y m o l o g y. The name refers to the presence of black marks in the forewing; Latin: atratus - marked black.

D e s c r i p t i o n. Wing span 21 mm. Head and thorax grey; base of tegula and lateral parts of head scaled black-grey; labial palpus 1.2, greyish brown. Forewing slender; costa weakly convex basally, then almost straight; termen weakly oblique, hardly sinuate. Ground colour grey with some whitish grey suffusions and diffuse grey strigulation. Markings grey with black marks: basal blotch incomplete; median fascia brown, diffuse distally; subapical blotch grey with dark grey costal spots. Cilia whitish suffused grey, with some dark grey scales. Hindwing whitish grey with brownish admixture on peripheries; cilia paler than wing.

Male genitalia (Figs 83, 84). Uncus slender, expanding in distal third, broad terminally; valva broad, oval, with long hairs in ventral part of the discal fold; sacculus long, weakly concave postbasally, extending almost to end of caudal edge; transtilla with two large lateral lobes; aedeagus slender, rather long.

Female not known.

Holotype male: "Ecuador, Tungurahua, Baños-Runtun, 22.01.2002, 3170 m, leg. J. WOJTUSIAK"; GS 329 MZUJ.

## Argyrotaenia cacaoticaria RAZOWSKI & WOJTUSIAK, 2006

M a t e r i a l e x a m i n e d. One male from Prov. Morona Santiago, Gualaceo–Limon road at 2950 m. Described from the Morona-Santiago Province where collected at 2950 m.

## Argyrotaenia rufescens sp. n.

## (Figs 85, 86, 135, 194, 195)

D i a g n o s i s. Judging from the shape of sacculus this species is closely related to *dispositana* but differs from it in smaller size, rust colouration of forewing, almost uniformly broad uncus, long median process of sacculus and indistinctly tapering cup-shaped part of sterigma.

E t y m o l o g y. The name refers to colour of forewing; Latin: rufescens - becoming rust.

D e s c r i p t i o n. Male. Wing span 14 mm. Head and thorax cinnamon brown, labial palpus over 1.5. Forewing not expanding terminally; costa curved basally, costal fold to before middle; apex rounded; termen not oblique. Ground colour brownish with diffuse refractive dots. Markings rust brown, typical of the genus. Cilia ochreous rust. Hindwing grey-brown; cilia similar.

Female. Wing span 16 mm. Forewing paler than in male, markings rust consisting of diffuse median fascia and curved subapical blotch reaching mid-termen.

Male genitalia (Figs 85, 86). Uncus fairly broad, slightly narrowing subterminally, rounded apically; valva broad, oval; sacculus to beyond middle of caudal edge of valva, with distinct median process; aedeagus slender, not tapering terminad; cornuti fairly long.

Female genitalia (Fig. 135). Cup-shaped part of sterigma hardly tapering proximally; antrum with weak sclerite; ductus bursae without proximal sclerite; blade of signum long, slender.

Holotype male: "Ecuador, Prov. Morona Santiago, N.P. Sangay, Qda Shilñian, via Guamote-Macas, 24.01.2004, 3100 m, leg. WOJTUSIAK & PYRCZ"; GS 398 MZUJ.

Paratype female: same label; GS 399 MZUJ.

#### Atteriini

#### Sisurcana aluminias (MEYRICK, 1912)

M a t e r i a l e x a m i n e d. Five males from Prov. Cotopaxi, San Francisco de las Pampas, Res. La Otonga, at 1935 m, four males from Prov. Carchi, Res. Forest. Golondrinas at 2000 m. Described from Colombia. This species was omitted from the paper on Western Cordillera.

#### *Sisurcana somatina* (DOGNIN, 1912)

M a t e r i a 1 e x a m i n e d. One female from Prov. Cotopaxi, San Francisco de las Pampas, Res. La Otonga at 1935 m. Described from Colombia. This species has not been included in the paper on the West Cordillera (RAZOWSKI & WOJTUSIAK 2008d).

## Sisurcana rufograpta sp.n.

## (Figs 87, 88, 196)

D i a g n o s i s. *S. rufograpta* is related to *S. shora* but *S. rufograpta* with shorter uncus, gently concave sacculus, subtriangular ventroterminal lobe of sacculus, and broad, uniform dorsal lobe of transtilla.

E t y m o l o g y. The name refers to presence of postbasal mark of forewing; Latin: rufus - rust, Greek: graptos - marked.

D e s c r i p t i o n. Wing span 30.5 mm. Head and thorax brown; labial palpus 2.3 ferruginous. Forwewing slightly expanding terminad; costa curved basally; termen weakly convex beneath postapical concavity. Ground colour yellowish brown to middle, brownish densely strigulated grey postmedially, with two reddish rust marks postbasally; distal third of wing dark brown. Markings dark brown in basal half partially edged whitish; fasciae incomplete: postbasal fascia double convex posteriorly, atrophied at dorsum; median fascia brownish costally and in dorsal half, with slender prominence in median cell directed basad; subapical blotch ill-defined. Cilia brown. Hindwing cream with slight brown admixture, brownish on periphery; cilia brownish.

V a r i a t i o n. One specimen ferruginous brown, rather pale, with brown median fascia marked dark brown subcostally; dark brown costal part of postbasal fascia and brownish subterminal fascia.

Male genitalia (Figs 87, 88). Uncus slender, broadening basally; socius slender posteriorly; valva broad with weak postmedian sclerite and long caudal edge; sacculus concave postmedially, with ventroposterior lobe; dorsum of transtilla convex, in major part thorny; aedeagus short; cornuti short, numerous; coecum penis broad.

Female not known.

Holotype male: "Ecuador, Prov. Tungurahua, Baños- El Tablon, 16.01.2002, 3000 m, leg. WOJTUSIAK & PYRCZ"; GS 178 MZUJ.

Paratypes: One male from Ecuador, Tungurahua, Baños-Runtun, 22.01.2002, 3170 m, leg. J. WOJTUSIAK; GS 961 MZUJ; one male from Ecuador, Prov. Tungurahua, Baños- El Tablon, 16.01.2002, 3000 m, leg. WOJTUSIAK & PYRCZ.

## Sisurcana tabloneana sp.n.

#### (Figs 89, 90, 136, 197, 198)

D i a g n o s i s. Related to *S. temna* RAZOWSKI & BECKER, 2002 from Province of Morona Santiago but *S. tabloneana* with two small submedian prominences of dorsal edge of transtilla.

E t y m o l o g y. The name refers to the type locality: El Tablon.

D e s c r i p t i o n. Male. Wing span 27 mm. Head and thorax cinnamon brown, labial palpus 2, rather concolorous. Forewing weakly expanding posteriorly; costa convex chiefly in basal third; termen concave beneath apex, then convex. Ground colour pale rust brown with refractive dots and brown suffusions. Markings dark rust brown, diffuse, consisting of elements usual of this group of species. Cilia brown, paler at tornus. Hindwing whitish slightly mixed brownish on periphery, with weak brownish strigulae and some concolorous spots; cilia whitish slightly tinged brown.

Female. Wing span 32 mm. Forewing broadest medially, apex longer than in male. Ground colour pale brownish with weak brown strigulae and suffusions; markings slightly darker than suffusions, preserved at costa and base of wing; brown spot submedially. Hindwing with indistinct strigulation.

Male genitalia (Figs 89, 90). Uncus broad basally, tapering towards middle; socius semioval; arms of gnathos slender, terminal plate short; sacculus slightly concave near middle, with slender ventroposterior lobe and moderate free termiation; dorsum of transtilla with pair of small submedian prominences each with a few thorns (in *temna* thorns on large mediolateral edges); aedeagus slender; cornuti a few short spines.

Female genitalia (Fig. 136). Sterigma broad with large, rather weakly sclerotized anteostial part and sharp, short lateroproximal lobes; antrum membranous; sclerite of ductus bursae long, tapering posteriorly; signum broad wth large basal plate.

Holotype male: "Ecuador, Tungurahua, Baños-Runtun, 22.01.2002, 3170 m, leg. WOJTUSIAK & PYRCZ"; GS 248 MZUJ.

Paratypes: one labelled as above, one male from Ecuador, Prov. Tungurahua, Baños-El Tablon, 17.09.2004, 3100 m, leg. WOJTUSIAK & PYRCZ; GS 260 MZUJ; and one female from Ecuador, Prov. Tungurahua, Baños-El Tablon, 16.01.2002, 3000 m, leg. WOJTUSIAK & PYRCZ GS 255 MZUJ.

### Sisurcana sangayana sp. n.

## (Figs 91, 92, 199)

D i a g n o s i s. Close to Ecuadoran *S. temna* RAZOWSKI & BECKER, 2004 described from the Morona Province) but *S. sangayana* with slender base and sickle-shaped postbasal part of uncus, and shorter ventral incision of sacculus.

E t y m o l o g y. The specific name refers to the type locality.

D e s c r i p t i o n. Wing span 28 mm. Head and thorax dark brown. Forewing broad, expanding posteriorly; costa convex to middle; termen convex beneath short postuncal concavity. Ground colour pale rust brown densely spotted whitish grey especially beyond median fascia. Markings typical of the group with postbasal fascia fusing with median fascia in dorsal area similar to all elements of terminal fourth of wing. Cilia concolorous with markings, tinged cream towards tornus. Hindwing whitish suffused with brownish on periphery; strigulation greyish, in apical area and periphery brownish; cilia whitish tinged brownish at apical half of wing.

Male genitalia (Figs 91, 92). Uncus slender, curved postbasally; sacculus concave medially with rather broad ventroposterior portion and short free termination; dorsosubmedian parts of transtilla rather broad, thorny; aedeagus moderately long; cornuti a group of several short spines.

Female not known.

Holotype male: "Ecuador, Prov. Morona Santiago,, N.P. Sangay, via Guamote-Macas, 25.01.2004, 3400 m, leg. WOJTUSIAK & PYRCZ"; GS 266 MZUJ.

## Sisurcana umbellifera (MEYRICK, 1926)

M a t e r i a l e x a m i n e d. Three males. One from Ecuador, Prov. Cotopaxi, San Francisco de las Pampas, Res. La Otonga, 1.02.2002, 1935 m, leg. J. WOJTUSIAK; GS 243 MZUJ; one from Ecuador, Prov. Carchi, volc. Chiles massive, Res. Forest. Golondrias, 2050 m, 28.06.1999, leg.

J. WOJTUSIAK; GS 164 MZUJ; one from Ecuador, Prov. Morona Santiago. N.P. Sangay, Qda Shillñan via Guamote–Macas, 24.01.2004, 3100 m, leg. WOJTUSIAK & PYRCZ; GS 439 MZUJ. This species was described from Colombia.

## Sisurcana ruficilia sp. n.

(Figs 93, 94, 200)

D i a g n o s i s. Close to *umbellifera* but easily distinguished by the very large socius and the bilobed dorsal edge of transtilla.

E t y m o l o g y. The name refers to colouration of cilia; Latin: rufus - rusty.

D e s c r i p t i o n. Wing span 21.5 mm. Head and thorax dark rust brown; labial palpus 2.5, ferruginous. Forewing rather slender; costa convex with fold reaching its 1/3; apex pointed; termen slightly sinuate. Ground colour brown with slight rust admixture; scales extending from distal third of costa ferruginous; refractive dots numerous. Markings reduced to two brown blotches representing costal half of median fascia and one concolorous blotch near middle of terminal area. Cilia orange rust.

Male genitalia (Figs 93, 94). Uncus very slender; socius very large, elongate oval, broadening ventrally; costa of valva rather short; sacculus long, weakly convex postmedially, with pointed ventral termination; transtilla with paired, thorny dorsal portion; aedeagus rather small with dorsal process at 3/4; cornuti fairly long; coecum penis moderate.

Female not known.

Holotype male: "Ecuador, Prov. Carchi, Res. Forest. Golondrias, 2000 m, 28.-30.01.2005, leg. J. WOJTUSIAK"; GS 588 MZUJ.

### Sisurcana microbaccata sp. n.

(Figs 95, 96, 201)

D i a g n o s i s. Facies similar to *umbellifera* and several allied species but male genitalia quite distinct reminding those of *S. margaritae* RAZOWSKI & PELZ, 2004. From all these species *microbaccata* differs chiefly in two caudal processes of sacculus and very short, broad aedeagus.

E t y m o l o g y. The name refers to refractive dots of forewing; Greek: micros – small, baccatus – covered with pearls.

D e s c r i p t i o n. Wing span 20 mm. Head and thorax brown with some cream brown scales; labial palpus 1.5, ferruginous, creamer basally. Shape of forewing as in *umbellifera*. Ground colour cream brown; suffusions, some costal spots, base and terminal area of wing brown. Cilia brownish. Hindwing pale greyish brown; cilia paler.

Male genitalia (Figs 95, 96). Uncus slender, broad basally, tapering towards middle, rounded apically; socius moderate; gnathos slender with long terminal part; valva broad basally, tapering posteriorly; sacculus convex, with large free termination and small dorsoposterior process; transtilla with median lobe; juxta broad; aedeags short, broad, with small ventroterminal thorn; coecum penis short; cornuti ca 15 slender spines with small capituli.

Female not known.

Holotype male: "Ecuador, Prov. Carchi, Res. Forest. Golondrias, 2000 m, 28.-30.01.2005, leg. J. WOJTUSIAK"; GS 479 MZUJ.

### Sisurcana ranunculata (MEYRICK, 1912)

M a t e r i a l. Six males from Prov. Carchi, Res. Forest. Golondrias at 2000 m, one with GS 459 MZUJ; one male from Prov. Cotopaxi, San Francisco de las Pampas, Res. La Otonga, at 1935 m; GS 160 MZUJ. Described from Colombia.

#### *Sisurcana pululahuana* sp. n.

(Figs 97, 98, 202)

D i a g n o s i s. Related to *S. furcatana* POWELL, 1986 from Venezuela but *pululahuana* with the uniform, not bifurcate uncus and long, slender lateral parts of terminal plate of gnathos.

E t y m o l o g y. The name refers to the type locality.

D e s c r i p t i o n. Wing span 20 mm. Head and thorax grey cream, tegula browner; labial palpus 2, brownish. Forewing as in *umbellifera* and other species of this group; costa slightly concave near middle; termen weakly convex medially. Ground colour brownish cream with brownish suffusions and venation, creamer at 1/3 of costa. Markings dark brown, diffuse: base and dorsal areas of wing and partially subapical half of costa and termen brown. Cilia concolorous with ground colour of subterminal area of wing, with brown divisions and tornal third. Hindwing brownish, darker, in posterior half, with diffuse strigulation; cilia concolorous with postbasal part of wing.

Male genitalia (Figs 97, 98). Uncus rather short, moderately slender, broadest medially, with indistinct terminal furcation; socius slender dorsally, broadening ventrad; gnathos arms long, terminal plate large with slender lateroterminal lobes; valva broad to middle, tapering terminally, with short caudal edge; sacculus long, slender, with submedian convexity and small free termination; transtilla slender; juxta small; aedeagus moderately broad; coecum penis short; cornuti numerous capitate spines.

Female not known.

Holotype male: "Ecuador, Prov. Pichincha, Crater Pululahua, West Cordillera, N00°03'07", W78°30'44", 4.02.2005, leg. J. WOJTUSIAK"; GS 495 MZUJ.

# *Tinacrusis consobrina* (BUSCK, 1914)

M a t e r i a l e x a m i n e d. Three male specimens from Prov. Sucumbios, Rio Chigual, La Bonita at 1500 m. Described from Panama.

## Anacrusis rubida RAZOWSKI, 2004

M a t e r i a l e x a m i n e d. Two male specimens from Prov. Pichincha, Pacto, Rio Mashpi at 1150 m. Described from Prov. Chimborazo, Pallatanga at 2800 m.

# Anacrusis gutta sp. n.

# (Figs 79, 80, 191)

D i a g n o s i s. This new species is externally very similar to Colombian *A. aerobatica* (MEYRICK, 1917) but *gutta* with drop-shaped subterminal blotch, long sacculus, and transversly ellipse termination of uncus.

E t y m o l o g y. The specific epithet refers to the drop shaped forewing blotch; Latin: gutta - a drop.

D e s c r i p t i o n. Wing span 28 mm. Head dark rust brown; labial palpus 1.5, brownish, dark brown beneath; thorax brownish cream, dark rust brown proximally. Forewing weakly expanding terminally; costa curved basally; apex very short; termen not oblique, hardly depressed beneath apex. Ground colour creamish densely strigulated and suffused brownish; four transverse irregular brownish lines edged cream. Marking in form of large dark brown blotch edged cream, convex proximally, pointed towards tornus. Cilia (worn) brownish, cream in tornal part. Hindwing pale brownish, tinged creamish basad; cilia (worn) creamish.

Male genitalia (Figs 79, 80). Uncus triangularly expanding basad, slender before broad, oval terminal part provided with slender dorsal rib; socius broad basally; valva tapering terminad, weakly sclerotized beyond sacculus, strengthened by broad ventrobasal sclerite extending dorsoposteriorly almost to end of valva; posterior part of sacculus long; transtilla with pair of dorsomedian, spiny lobes; aedeagus slender; group of short cornuti in vesica.

Holotype male: "Ecuador, Prov. Pichincha, Pacto, Rio Mashpi, 8.02.2004, 1150 m, leg. WOJTUSIAK & PYRCZ"; GS 954 MZUJ.

# Anacrusis eriocheir RAZOWSKI & WOJTUSIAK, 2006

## (Fig. 133)

M a t e r i a l e x a m i n e d. One female from Prov. Cotopaxi, via La Mana, Pilalo, 2.09.2004, 2800 m, leg. WOJTUSIAK & PYRCZ; GS 163 MZUJ. This specimen is the first known female of this species. Described from Prov. Morona Santiago, Gualaceo-Limon road from a single male.

Female genitalia (Fig. 133). Sterigma short, broad with rounded proximal corners; sclerite of antrum slender, ductus bursae broadening, curved proximally.

# Sparganothini

# Sparganothoides acrocharis MEYRICK, 1932

M a t e r i a l e x a m i n e d. One male from Prov. Bolivar, Balzapamba, Guaranda old road at 1250 m. (GS 183 MZUJ). Described from Colombia; from Ecuador known from the Pinchincha Province.

### Chlidanotinae

#### Hilarographini

## Hilarographa castanea sp. n.

(Figs 99, 100, 203)

D i a g n o s i s. This species externally resembles Brazilian *H. refluxana* (WALKER, 1863) but *castanea* has slenderer forewing, more brownish colouration and distinct orange markings; the new species differs from all Neotropical taxa in very broad aedeagus, broader than in *H. belloica* MEYRICK, 1912 from Dutch Guinea.

E t y m o l o g y. The specific name refers to the colouration of forewing; Latin: castaneus - bronze.

D e s c r i p t i o n. Wing span 20 mm. Head brownish cream, frons cream and labial palpus (1.5) cream; thorax brownish, tegula with postbasal cream stripe. Forewing slightly expanding terminad; costa weakly convex; termen obliqe beneath middle, concave beneath apex. Wing ferruginous brown, dark brown in terminal area; ground colour reduced to yellowish cream oblique lines extending from costal strigulae and dorsum; two subapical strips orange yellowish and cream yelowish stripe between them; line from tornus fairly large separating terminal area where ferruginous orange marked by brown dots present. Cilia brown, cream at tornus. Hindwing rust brown, dark, more brown on periphery; cilia more orangeous cream then wing base.

Male genitalia (Figs 99, 100). Uncus large, narrowing basally and terminally, pointed; socius large, drooping; hamus short; valva uniformly broad to before end where convexly rounded; median part of transtilla large, helmet-shaped; juxta broad; aedeagus stout, short, with reduced ventral termination; cornuti numerous large unequally long spines.

Female not known.

Holotype male: "Ecuador, Prov. Pichincha, Pacto, Rio Mashpi, 10.02.2004, 1150 m, leg. WOJTUSIAK & PYRCZ"; GS 205 MZUJ.

### Chlidanotini

## Auratonota sucumbiosa sp.n.

# (Figs 137, 204)

D i a g n o s i s. Related to A. maldonada RAZOWSKI & BECKER, 1999 from the Carchi Province, and Colombian A. hydrogramma (MEYRICK, 1912) but sucumbiosa with broad fascia extending from apex to before tornus with three pale concavities of the posterior edge. Female genitalia of this species characterise also by broad papilla analis and plate-shaped signum.

E t y m o l o g y. The name refers to the type locality of this species.

D e s c r i p t i o n. Wing span 36 mm. Head and thorax pale cream brown; labial palpus 2, yellowish cream densely scaled pale brown; tegula brown. Forewing broad similar to all species of this group. Ground colour brownish cream, cream along pattern elements; suffusions yellowish brown. Markings dark brown consisting of a series of smaller and larger costal blotches, two large dorsal blotches accompanied by a small blotch at tornus and three fasciae at wing base; median markings small, the largest two markings in median cell. Large fascia from wing apex to before tornus connecting with tornal blotch by paler elements, with dentate posterior edge and concave anterior edge between R5 and M1; terminal area slightly darker than remaining ground colour with some marks between veins. Cilia cream, divisions brownish. Hindwing dark, brown; cilia brownish.

#### Male not known.

Female genitalia (Fig. 137). Papilla analis very broad with lagre posterior part; apophyses very slender; sterigma in form of slender lateroposterior arms; antrum rather slender, membranous; ductus bursae short; signum a plate with a few small thorns and large proximal spine.

Holotype female: "Ecuador, Prov. Sucumbios, La Bonita, East Cordillera, 2.02.2005, leg. J. WOJTUSIAK"; GS 450 MZUJ.

# Auratonota flora RAZOWSKI & BECKER, 1999

M a t e r i a 1 e x a m i n e d. One specimen from Prov. Sucumbios, La Bonita, East Cordillera, at 2000 m; GS 507 MZUJ. This species was described from the Tungurahua Province (Rio Verde, from the altitude of 1600 m).

# Heppnerographa ardea RAZOWSKI & BECKER, 1999

M a t e r i a 1 e x a m i n e d. One female from Francisco de las Pampas, Res. La Otonga, Proc. Cotopaxi, 1935 m (1. II, 2003, J. WOJTUSIAK). This species was described from the Province of Carchi where was collected at 2200 m.

### Macrochlidia major BROWN, 1990

M a t e r i a l e x a m i n e d. Two males from Chiriboga, Province of Pinchincha, 3100 m (5. II. 2005, J. WOJTUSIAK). This species was described from Colombia (Magdalena, Sierra Nevada de Santa Marta, 2800 m, V-X).

## Psudocomotis scardiana (DOGNIN, 1905)

M a t e r i a l e x a m i n e d. One specimen from La Bonita, Province of Sucumbios, 2000 m, (2. II. 2005, J. WOJTUSIAK). Described from the Loja Province.

# Pseudocomotis chingualana sp. n.

### (Figs 101, 102, 205)

D i a g n o s i s. Male genitalia similar to *citroleuca* but uncus much longer, curved submedially and subterminally.

E t y m o l o g y. The name refers to the type locality.

D e s c r i p t i o n. Wing span 21.5 mm. Head and thorax brown cream, labial palpus 2.3, browner terminally. Forewing weakly expanding terminad; costa hardly convex; termen almost straight, not oblique. Ground colour white in form of fasciae with pale orange inner dots; distal third of wing suffused and reticulate brown, with some white and orange dots; a few orange spots on the markings. Markings brown with paler parts forming basal and median blotch, and indistinct subterminal elements. Cilia brown with some white interruptions. Hindwing whitish with weak brownish admixture, in distal part diffusely strigulated brownish grey; cilia concolorous with median part of wing.

Male genitalia (Figs 101, 102). Uncus large, slender, doubly curved, with small hooked termination; hamus broad, much shorter than socius; caudal part of valva rather uniformly rounded; sacculus with atrophied free termination; saccus large with distal portion slender.

Female not known.

Holotype male: "Ecuador, Prov. Sucumbios, Rio Chingual, La Bonita, 25.06.1999, 1500 m, Leg. J. WOITUSIAK"; GS 231 MZUJ.

#### Olethreutini

# Statherotis sangaica sp. n.

# (Figs 103, 206)

D i a g n o s i s. Related to Australian *S. euryphaea* (TURNER, 1916) and *S. antisema* DIAK ON OFF, 1973 from Borneo but *sangaica* with reduced ventral lobe of cucullus and small ventral process of uncus.

E t y m o l o g y. The specific name refers to the type locality (National Park Sangay).

D e s c r i p t i o n. Wing span 18 mm. Head and thorax brownish; labial palpus greyish with brown lateral marks, tegula concolorous basally. Forewing expanding terminally; costa straight; termen weakly oblique, indistinctly sinuate towards middle. Ground colour grey cream with minute brownish strigulae and dots and refractive fasciae in distal third of wing; costa and basal half of dorsum suffused brown. Markings brown with some dark brown spots preserved in form of a diffuse fascia extending from 1/3 of dorsum to beyond mid-costa; apex and some terminal marks brown. Cilia brownish grey. Hindwing brownish; cilia paler and greyer.

V a r i a t i o n. Forewing of paratype brownish rust with rather well developed brown fasciae.

Male genitalia (Fig. 103). Uncus large, rounded, bristled terminally, with subterminal ventral sharp process; socius broad, drooping; gnathos arms tapering terminally; terminal plate very large, well sclerotized, rounded apically; valva slender with ill-defined neck; spines of fold grouped proximally, longer than spines near end of basal cell; cucullus slender with a few marginal spines; aedeagus short.

Female not known.

Holotype male: "Ecuador, Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote Macas, 24.01.2004, 3100 m, leg. WOJTUSIAK & PYRCZ"; GS 389 MZUJ.

Paratype male, same label; GS 388 MZUJ.

### Statherotis hyeroglypha sp. n.

# (Figs 104, 207)

D i a g n o s i s. Related to *S. sangaica* sp. n. from Western Range and the species mentioned in its diagnosis but *hyeroglypha* with rounded ventral prominence of uncus, broader valva, single marginal spine of cucullus and submedian group of strong spines of valva.

E t y m o l o g y. The name refers to characteristic pattern of colouration. Latin: hieroglyphicus – hieroglyphic.

D e s c r i p t i o n. Wing span 12.5 mm. Head grey-brown, labial palpus brown; thorax blackbrown proximally, greyer distally. Forewing somewhat expanding terminad; costa rather uniformly convex; termen long, almost straight to M2. Ground colour dark grey with indistict violet hue. Markings dark brown: basal blotch well preserved in dorsal area and dorsoposteriorly, reduced to two spots at costa; median fascia in form of costal spot and a median marking extending to middle of basal blotch; tornal blotch reaching posterior end of perpendicular marking; subterminal fascia slender, ill-defined in costal third, and apical spot. Cilia greyish brown. Hindwing brown, paler in basal half; cilia brownish grey.

Male genitalia (Fig. 104). Uncus strong with rounded ventral prominence; socius fairly long; terminal plate of gnathos large; valva moderately broad with strong spines of subventral lobe and well separate proximal part of the fold group and anterior group of sacculus; cucullus with postmedian lobe marked with a spine; aedeagus short.

Female not known.

Holotype male: "Ecuador, Prov. Pichincha, Pacto, Rio Mashpi,10.02.2004, 1150 m., leg. WOJTUSIAK & PYRCZ; GS 391 MZUJ.

# Episimus vermiculatus (MEYRICK, 1912)

M a t e r i a l e x a m i n e d. One male from Prov. Napo, Cosanga from elevation 2150 m.

Described from Colombia. Known also from Venezuela and Costa Rica.

#### Enarmoniini

# Ancylis ecuadorica sp. n.

(Figs 138, 208)

D i a g n o s i s. Comparable with *A. plumbata* (CLARKE, 1951) from Argentina but *ecuadoriana* with longer antrum and short ductus bursae. Externally the new species is distinct by brown blotch at mid-costa of forewing.

E t y m o l o g y. The name refers to the country of origin.

D e s c r i p t i o n. Wing span ca 14 mm. Head and thorax creamish. Forewing slender; costa slightly convex; apex sicle-shaped; termen sinuate. Ground colour whitish sprinkled grey, preserved in costobasal third of wing; remaining area suffused pale ochreous and brownish (in dorsal third) with adequate strigulation; costal strigulae white, divisions brown; costal half of termen white edged. Markings brown consisting of costal part of median fascie extending at the end posteriorly followed by a line along last radial vein; ocellus brownish cream with remnants of inner spots; brownish suffusion along basal portion of cubital arm of median cell.

Male not known.

Female genitalia (Fig. 138). Sterigma short, half-moon shaped, slightly extending anterolaterally; antrum broad, weakly sclerotized, tapering proximally; ductus bursae short; signa two, large.

Holotype female: "Ecuador, Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote Macas, 24.01.2004, 3100 m, leg. WOJTUSIAK & PYRCZ"; GS 393 MZUJ.

# Paranthozela spiloma RAZOWSKI & WOJTUSIAK, 2007

M a t e r i a l e x a m i n e d. Two specimens from Rio Chingual, La Bonita. This species was described from Province of Sucumbios from the elevation of 1500 m.

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### Eucosmini

### Epinotia panda RAZOWSKI & WOJTUSIAK, 2008

M a t e r i a l e x a m i n e d. One male from Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote Macas, at 3100 m. Described from the Province of Pichincha where collected at 2200 m.

### *Epinotia runtunica* sp. n.

# (Figs 105, 209)

D i a g n o s i s. Very close to *E. zamorata* RAZOWSKI, 1999 from the Zamora-Chinchipe Province but *runtunica* with group of spines at angle of sacculus and broader cucullus.

E t y m o l o g y. The name refers to the type locality.

D e s c r i p t i o n. Wing span 25 mm. Head and thorax brownish cream with brownish marks. Forewing slightly expanding terminally; costa somewhat convex; termen moderately oblique, straight. Ground colour brownish cream sprinkled and spotted brown; costal strigulae weak, divisions short, brown. Markings rudimentary, brown, consisting chiefly of median and costal parts of median fascia and a suffusion extending from end of median cell towards apex. Cilia cream, brownish near apex and at median part of termen. Hindwing dirty cream, slightly tinged brownish at apex of wing; strigulation dense cream grey; cilia cream.

Male genitalia (Fig. 105). Uncus slender, slightly tapering terminally; lateral parts of henion and subscaphium well sclerotized; ventral edge of sacculus weakly concave; angular area with dense setae and a group of spines; caudal edge rather oblique; cucullus slender at base, expanding in distal part terminally, with large dorsoterminal lobe; aedeagus moderate, tapering terminally.

Female not known.

Holotype male: "Ecuador, Prov. Tungurahua, Baños-Runtun, 22.01.2002, 3170 m, leg. J. WOJTUSIAK"; GS 294 MZUJ.

#### Epinotia rotundata sp.n.

# (Figs 106, 210)

D i a g n o s i s. Close to *E. zamorata* but *rotundata* distinct by uncus moderately broad, tapering terminally and oval saccular portion of valva.

E t y m o l o g y. This specific epithet refers to the shape of sacculus; Latin: rotundatus - rounded.

D e s c r i p t i o n. Wing span 23 mm. Head cream brown, thorax darker with brown marks. Forewing expanding terminally; costa weakly curved outwards; termen weakly oblique, slightly convex. Ground colour yellowish brown; suffusions and spots brown; costal strigulae weakly developed, divisions small, brown; dorsal spots larger than divisions. Markings dark brown, incomplete consisting chiefly of dorsal elements and median remnants of median, postmedian and subterminal fasciae. Cilia brown. Hindwing dirty cream, tinged brownish in apical part, with grey-ish brown strigulation. Cilia rather concolorous with postmedian part of wing, browner in apical half.

Male genitalia (Fig. 106). Uncus moderate, broadest medially, pointed apically; socius rather broad; henion well sclerotized laterally; basal part of valva broad, oval ventrally; angle of sacculus rounded, marked with group of short spines and numerous setae, with caudal edge slightly convex; cucullus broadening distally, with small dorsal lobe; aedeagus tapering postmedially.

Female not known.

Holotype male: "Ecuador, Prov. Napo, Papallacta, 6.02.2005, 3450 m, leg. J. WOJTUSIAK"; GS 573 MZUJ.

#### *Epinotia brunneomacula* sp. n.

## (Figs 107, 211)

D i a g n o s i s. Facies similar to some *Strepsicrates* MEYRICK, 1888 and *multistrigata*, and *zamorata* but *brunneomacula* with uncus long, broadening terminally.

E t y m o l o g y. The name refers to the colouration of forewing; Latin: brunneus - brown, macula - a blotch.

D e s c r i p t i o n. Wing span 15 mm. Head and thorax brownish, labial palpus creamer with brown marks; tegula creamish. Ground colour of forewing brownish cream suffused and dotted brownish, brown in costal third of wing and along dorsum; costal strigulae cream; divisions and spots along dorsum brown; ocellus cream with inner brownish suffusions and spots, edged dark brown along costal edge; brownish cream spot below the latter; tornal blotch rather concolorous with costal remnants of median fascia. Cilia brownish, cream at tornus. Hindwing brown, scent scales at wing base darker; cilia pale brown.

Male genitalia (Fig. 107). Uncus fairly long, broadening in distal third, rather rounded apically; socius large, gradually tapering terminally; sclerites of henion moderate; ventral edge of sacculus slightly concave in middle, angle broad, rounded with dense group of setae reaching mid-breadth of basal cavity; neck of valva distinct, ventral incision shallow, rather broad; cucullus elongate with weak lobes, rounded terminally; aedeagus proportionally large; cornuti long.

Female not known.

Holotype male: "Ecuador, Prov. Sucumbios, La Bonita, 20.06.1999. Leg. J. WOJTUSIAK"; GS 432 MZUJ.

### Quebradnotia saragurae RAZOWSKI & WOJTUSIAK, 2008

M a t e r i a l e x a m i n e d. Two specimens from Prov. Tungurahua, Baños-El Tablon at 3100 m, one specimen from Prov. Tungurahua, Baños-Runtun at 3170 m, one specimen from Prov. Napo, Papallacta at 3450 m. Described from Province of Loja (taken at the altitude of 2980 m).

# Quebradnotia tubuligera (RAZOWSKI & WOJTUSIAK, 2008), comb.n.

#### (Fig. 108)

M a t e r i a 1 e x a m i n e d. One pair from Prov. Morona Santiago, Ecuador, Prov. Morona Santiago, N.P. Sangay, Qda Shillñan, via Guamote Macas, at 3100 m. Described from the Province of Zamora-Chinchipe from 2480 m.

The female does not differ from the holotype but the male is distinct by pearl white maculation of the forewing ground colour. We assume this may be a sexual dimorphism as the two were collected contemporarily.

Male. 16.5 mm. Forewing slender, expanding terminad; costal fold to before mid-costa, termen fairly oblique. Ground colour greenish densely spotted silver white; costal strigulae numerous, white; divisions balckish. Markings blackish: basal blotch reaching beyond 1/3 of dorsum; median fascia broad medially, connected with tornal blotch and apex of wing. Cilia blackish to mid-termen, white otherwise (on reverses greenish in middle). Hindwing whitish tinged brownish on periphery; cilia concolorous.

Male genitalia (Fig. 108). Uncus slender, expanding terminad; socius large with posterior part weakly sclerotized, tapering terminad and proximal part better sclerotized rectangular-elongate, provided with longer terminal setae; basal part of valva broad; neck distinct; cucullus with rounded ventral lobe; angle of sacculus broadly rounded; aedeagus small, slender.

R e m a r k s. Based on male genitalia we are satisfied to transfer *tubuligera* from *Epinatia* to *Quebradnotia*. This species is comparable with *Q. ouralia* RAZOWSKI & WOJTUSIAK, 2006 from Venezuela but differs from it in broad proximal lobe of socius, slender aedeagus, and distinct neck of valva. We have also to correct the mistakes done in the arrangement of plates in the paper by RAZOWSKI & WOJTUSIAK (2008e): Fig. 57 concerns *Epinotia tubuligera* (and not *lineana*), Fig. 57 – *E. tubuligera* (not *zamorlojae*) and Fig. 58 *E. zamorlojae* (not *tubuligera*).

### Epinotia opposita HEINRICH, 1931

M a t e r i a l e x a m i n e d. One female from Prov. Napo, Papallacta, Las Termas at 3650 m. Described from Peru; from Ecuador known from the provinces of Carchi and Bolivar (RAZOWSKI & WOJTUSIAK 2008).

# Laculataria splendida sp. n.

# (Figs 109, 212)

D i a g n o s i s. Related to *L. asymmetra* RAZOWSKI & WOJTUSIAK, 2006 from Venezuela but *splendida* with separate brown spot near tornus, shorter uncus, slender cucullus, and long, slender neck of valva.

D e s c r i p t i o n. Wing span 18 mm. Head and thorax brown, labial palpus creamish suffused brown terminally, with transverse mark in middle of median joint. Forewing slender; costa straight, termen sinuate medially. Ground colour cream preserved in costobasal half of wing where dotted brown; other areas strongly suffused brown; ocellus brownish, cream near inner spots. Markings dark brown in part edged whitish consisting of a blotch along cubital arm of median cell fused with dorsal suffusion, median remnants of median fascia, subsquare spot near tornus, elongate marking in distal third of wing along median wing slender subterminally where curved towards tornus. Cilia brownish. Hindwing brownish cream, brownish on periphery; cilia paler.

Male genitalia (Fig. 109). Tegumen expanding terminad; uncus long, slender; socius broad basally with beak-shaped posterior part; valva long, slender; with long neck; cucullus slender, curved upwards, armed with long marginal spines rather separated from terminal group of spines; aedeagus moderate, slender; cornuti long.

Female not known.

Holotype male: "Ecuador, Prov. Tungurahua, Baños-El Tablon, 17.09.2004, 3100 m, leg. WOJTUSIAK & PYRCZ"; GS 351 MZUJ.

## Strepsicrates smithiana WALSINGHAM, 1891

M a t e r i a l e x a m i n e d. One female from Prov. Bolivar, Balzapamba–Guaranda old road at 2200 m. Described from St. Vincent, West Indies but also known from Eastern United States and British Guiana; it was introduced to Galapagos and Hawaii.

#### Mesochariodes tablonica sp. n.

# (Figs 110, 213)

D i a g n o s i s. Facies similar to *M. polytrichota* RAZOWSKI & WOJTUSIAK, 2006 from Venezuela but *tablonica* with spine of the lateral lobe of terminal part of tegumen, broad ventral part of socius, and long neck of valva. From another Venezuelan species, *M. secunda* RAZOWSKI & WOJTUSIAK, 2006 known from a female only, this species differs in pale, triangular blotch at dorsum of forewing.

E t y m o l o g y. The name refers to the type locality, El Tablon.

D e s c r i p t i o n. Wing span 25 mm. Head dirty cream, labial palpus browner with brown postmedian mark; thorax darker than head, base of tegula more brown. Forewing rather broad, costa bent at 2/3, termen weakly oblique, sligthly concave near middle. Ground colour cream with slight brown admixture, dotted brownish and dark brown; costal divisions brown, strigulae not differentiated; ocellus ill-defined partly tinged greyish. Markings brown: costal remnants of postbasal fascia, interrupted median fascia, broad subapical blotch, weak cream-brown fasciae directed towards tor-

nus, and radial line from base of wing to median cell. Cilia cream with basal line in costal half of wing and some scales near middle brown. Hindwing brownish cream browner on periphery; cilia concolorous with base of wing.

Male genitalia (Figs. 110). Tegumen broadening terminally with two large lateral lobes each armed with minute inner spine and group of long setae; socius consisting of two broad, setose lobes; valva slender with very slender, long neck; sacculus with broadly rounded angle; cucullus long, slender with subtriangular spiny ventral lobe and a few distinct marginal spines; aedeagus proportionally short; cornuti long.

Female not known.

Holotype male: "Ecuador, Prov. Tungurahua, Baños-El Tablon, 16.09.2002, 3000 m, leg. WOJTUSIAK & PYRCZ"; GS 344 MZUJ.

#### Grapholitini

### Gymnandrosoma aurantianum LIMA, 1927

M a t e r i a l e x a m i n e d. One male from Prov. Sucumbios, Rio Chigual, La Bonita, at 1500 m. Described from Brazil but also known from West Indies.

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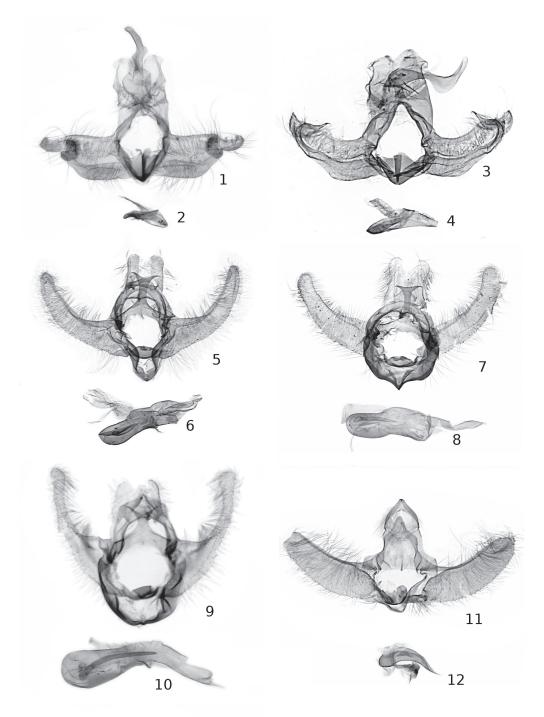
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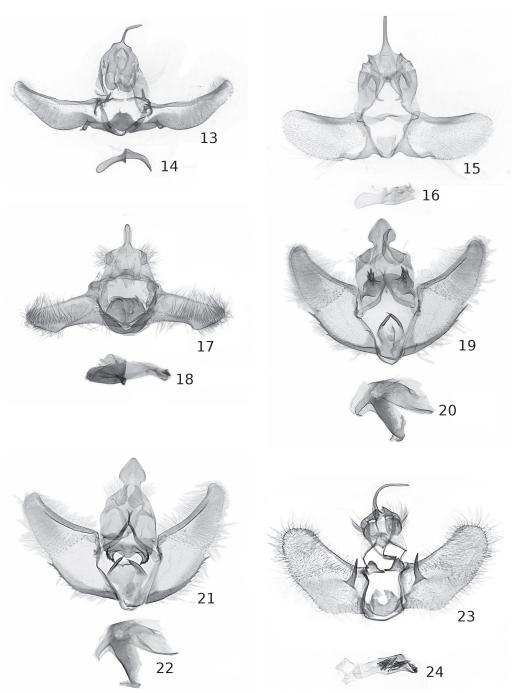
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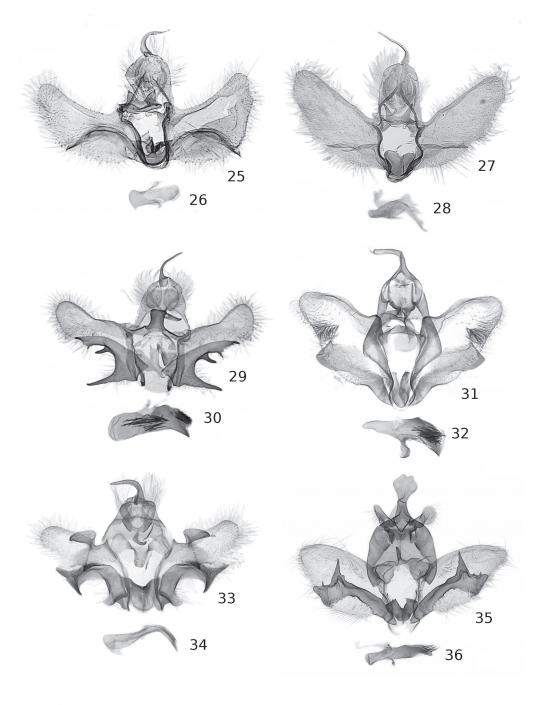


Figs 1-12. Male genitalia: 1, 2 – Acleris tungurahuae sp. n., holotype, 3, 4 – Acleris supernova sp. n., holotype, 5, 6 – Saphenista pyrczi sp. n., holotype, 7, 8 – Saphenista chanostium sp. n., paratype, 9, 10 – Saphenista runtuna sp. n., holotype, 11, 12 – Deltophalonia termasia sp. n., holotype.

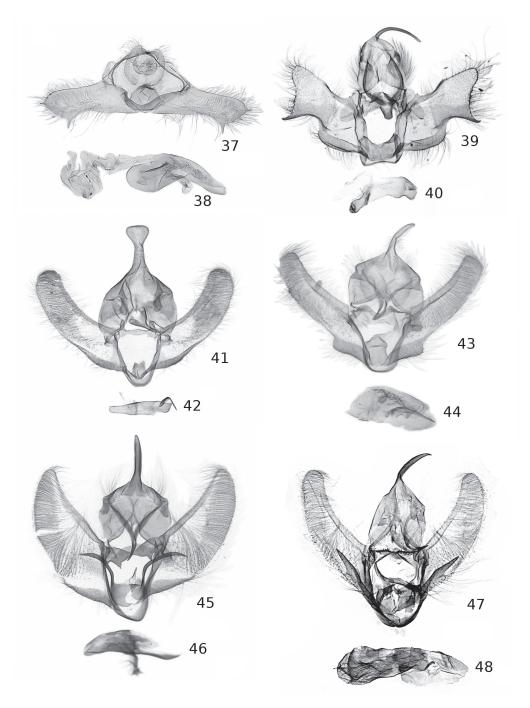
Tortricidae from Mountains of Ecuador



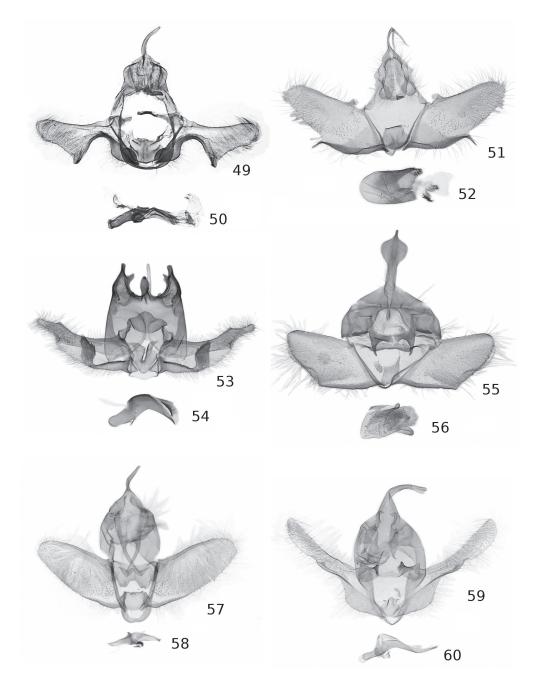
Figs 13-24. Male genitalia: 13, 14 – Atrocenta centrata sp. n., holotype, 15, 16 – Thalleulia pondoana sp. n., holotype, 17, 18 – Ernocornutia altonapoana sp. n., holotype, 19, 20 – Subterinebrica festivaria sp. n., holotype, 21, 22 – Subterinebrica labyrinthana sp. n., holotype, 23, 24 – Clarkenia pantherina sp. n., holotype.



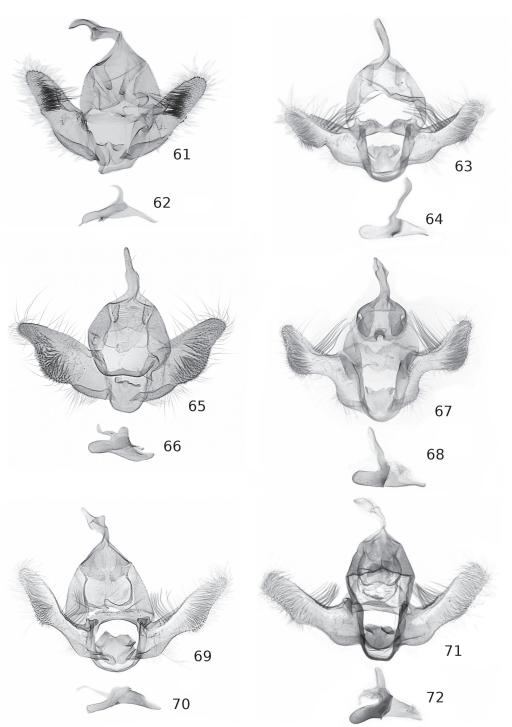
Figs 25-36. Male genitalia: 25, 26 – *Netechma tenuifascia* sp. n., holotype, 27, 28 – *Netechma napoana* sp. n., holotype, 29, 30–*Netechma simulans* sp. n., holotype, 31, 32 – *Netechma guamotea* sp. n., holotype, 33, 34 – *Netechmodes gravidarmata* sp. n., holotype, 35, 36 – *Furcinetechma labonitae* sp. n., paratype.



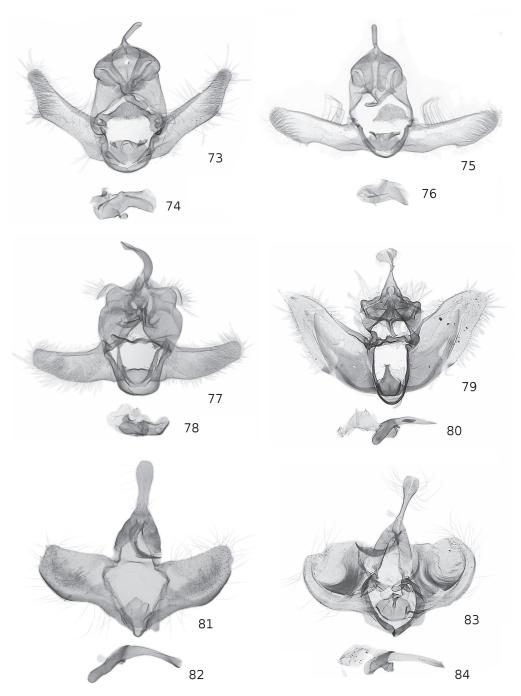
Figs 37-48. Male genitalia: 37, 38 – *Rhytmologa polyfenestra* sp. n., holotype, 39, 40 – *Galome calpa quatrofascia* sp. n., holotype, 41, 42 – *Inape eltabloana* sp. n., holotype, 43, 44 – *Transtillaspis tungurahuana* sp. n., holotype, 45, 46 – *Transtillaspis cosangana* sp. n., holotype, 47, 48 – *Transtillaspis papallactana* sp. n., holotype.



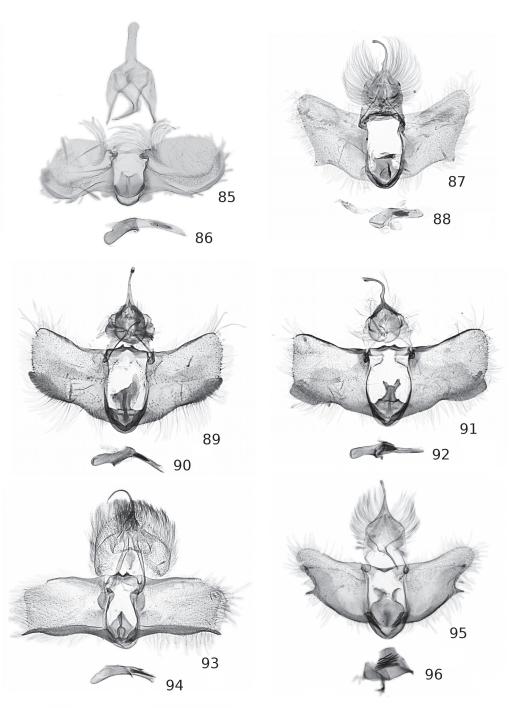
Figs 49-60. Male genitalia: 49, 50 – *Clarkeulia magnana* sp. n., holotype, 51, 52 – *Lobogenesis primitiva* sp. n., holotype, 53, 54 – *Mosaiculia mosaica* sp. n., holotype, 55, 56 – *Dimorphopalpa rutruncus* sp. n., holotype, 57, 58 – *Oregocerata magna* sp. n., holotype, 59, 60 – *Hynhamia runtuana* sp. n., holotype.



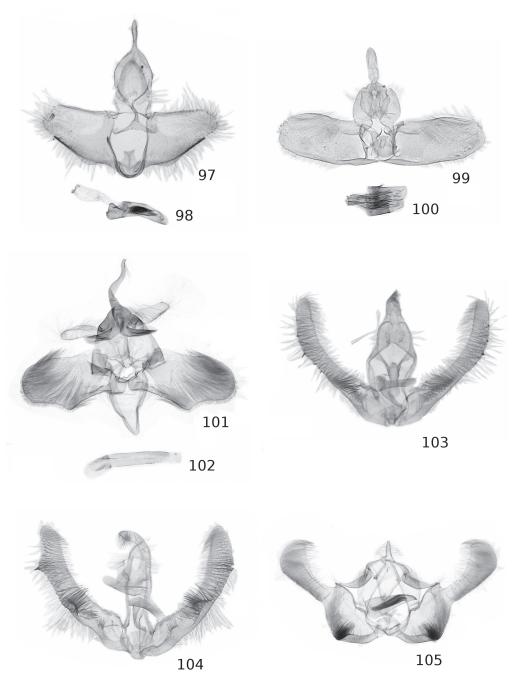
Figs 61-72. Male genitalia: 61, 62 – Seticosta szeptyckii sp. n., holotype, 63, 64 – Seticosta concava sp. n., holotype, 65, 66 – Seticosta egregia RAZOWSKI & PELZ, 2004, 67, 68 – Seticosta subariadnae sp. n., holotype, 69, 70 – Seticosta albicentra sp. n., holotype, 71, 72 – Seticosta droserana sp. n., holotype



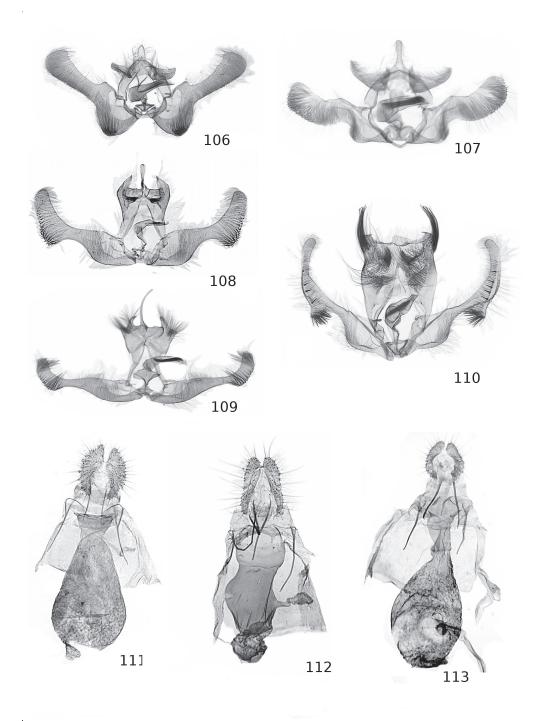
Figs 73-84. Male genitalia; 73, 74 – Punctapinella guamoteana sp. n., holotype, 75, 76 – Punctapinella viridargentea sp. n., holotype, 77, 78 – Ptyongnathosia harpifera sp. n., holotype, 79, 80 – Anacrusis gutta sp. n., holotype, 81, 82 – Argyrotaenia posticicnephaea sp. n., holotype, 83, 84 – Argyrotaenia atrata sp. n., holotype.



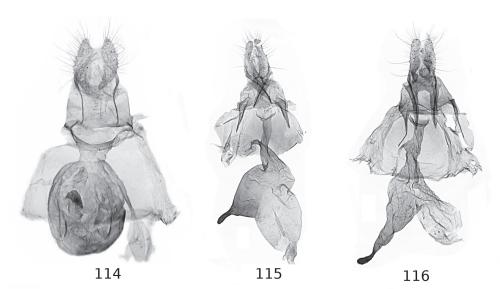
Figs 85-96. Male genitalia: 85, 86 – Argyrotaenia rufescens sp. n., holotype, 87, 88 – Sisurcana rufograpta sp. n., holotype, 89, 90 – Sisurcana tabloneana sp. n., holotype, 91, 92 – Sisurcana sangayana sp. n., holotype, 93, 94 – Sisurcana ruficilia sp. n., holotype, 95, 96 – Sisurcana microbaccata sp. n., holotype.

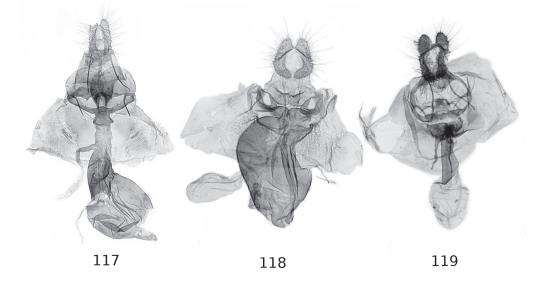


Figs 97-105. Male genitalia: 97, 98 – Sisurcana pululahuana sp. n., holotype, 99, 100 – Hilarographa castanea sp. n., holotype, 101, 102 – Pseudocomotis chingualana sp. n., holotype, 103 – Statherotis sangaica sp. n., holotype, 104 – Statherotis hyeroglypha sp. n., holotype, 105 – Epinotia runtunica sp. n., holotype.

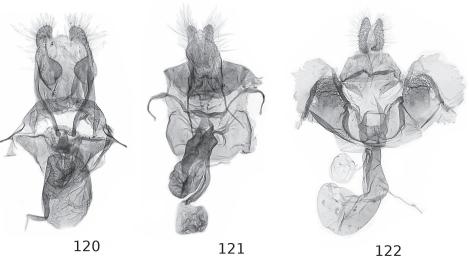


Figs 106-113. Male and female genitalia: 106 – *Epinotia rotundata* sp. n., holotype, 107 – *Epinotia brunneomacula*, sp. n., holotype, 108 – *Quebradnotia tubuligera* (RAZOWSKI & WOJTUSIAK, 2008), 109 – *Laculataria splendida* sp. n., holotype, 110 – *Mesochariodes tablonica* sp. n., holotype, 111 – *Henricus sangayanus* sp. n., holotype, 112 – *Saphenista chanostium* sp. n., holotype, 113 – *Aphalonia praeposita* (MEYRICK, 1917), Ecuador.

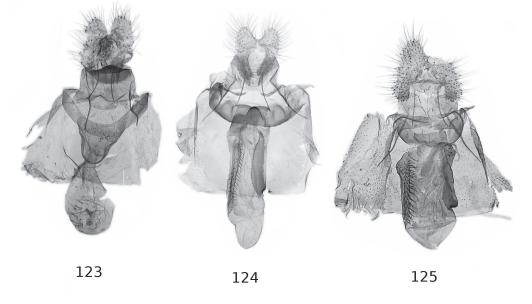




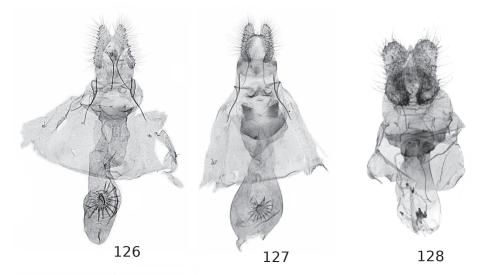
Figs 114-119. Female genitalia: 114 – Aethes albogrisea sp. n., holotype, 115 – Anopinella yangana sp. n., holotype, 116 – Anopinella shillanana sp. n., holotype, 117 – Netechma triangulum RAZOWSKI & WOJTUSIAK, 2006, 118 – Netechma simulans sp. n., paratype, 119 – Netechmodes gravidarmata sp. n., paratype.







Figs 120-125. Female genitalia: 120 – Furcinete chma sangaycola sp. n., holotype, 121 – Furcinete chma labonitae sp. n., holotype, 122 – Haste ulia emmeles RAZOWSKI, 1999, Napo Prov., 123 – Romanaria leuca sp. n., holotype, 124 – Inape elegans RAZOWSKI & PELZ, 2006, 125 – Inape parelegans sp. n., holotype.





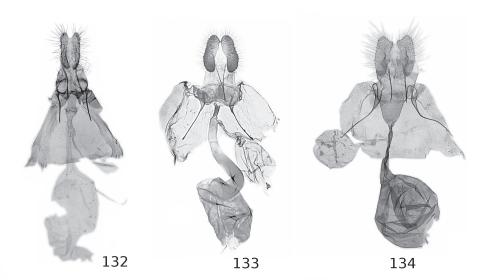
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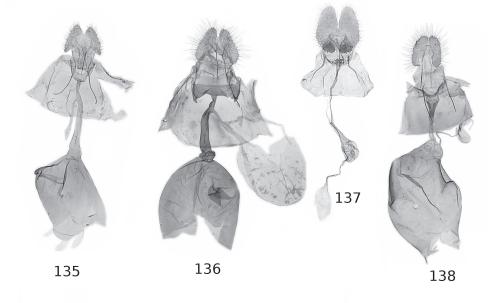


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Figs 126-131. Female genitalia: 126 – Inape parastella sp. n., holotype, 127 – Inape stella sp. n., holotype, 128 – Transtillaspis costipuncta sp. n., holotype, 129 – Lobogenesis primitiva sp. n., paratype, 130 – Exoletuncus canescens RAZOWSKI & PELZ, 2005, 131 – Seticosta szeptyckii sp. n., paratype.





Figs 132-138. Female genitalia: 132 - Seticosta albicentra sp. n., paratype, 133 – Anacrusis eriocheir RAZOWSKI & WOITUSIAK, 2006, 134 – Argyrotaenia haemothicta (MEYRICK, 1926), 135 – Argyrotaenia rufescens sp. n., paratype, 136 – Sisurcana tabloneana sp. n., paratype, 137 – Auratonota sucumbiosa sp. n., holotype, 138 – Ancylis ecuadorica sp. n., holotype.

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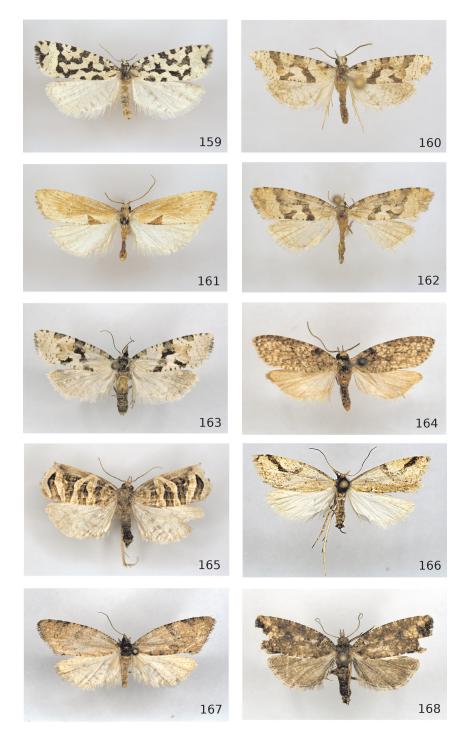


Figs 139-148. Adults: 139 – Acleris tungurahuae sp. n., holotype, 140 – Acleris supernova sp. n., holotype, 141 – Henricus sangayanus sp. n., holotype, 142 – Saphenista pyrczi sp. n., holotype, 143 – Saphenista chanostium sp. n., paratype, 144 – Saphenista chanostium sp. n., holotype, 145 – Saphenista runtana sp. n., holotype, 146 – Aethes albogrisea sp. n., holotype, 147 – Deltophalonia termasia sp. n., holotype, 148 – Atrocenta centrata sp. n., holotype.



Figs 149-158. Adults: 149 – Anopinella yangana sp. n., holotype, 150 – Anopinella shillanana sp. n., holotype, 151 – Thalleulia pondoana sp. n., holotype, 152 – Ernocornutia altonapoana sp. n., holotype, 153 – Subterinebrica festivaria sp. n., holotype, 154 – Subterinebrica labyrinthana sp. n., holotype, 155 – Clarkenia pantherina sp. n., holotype, 156 – Netechma tenuifascia sp. n., holotype, 157 – Netechma napoana sp. n., holotype, 158 – Netechma simulans sp. n., holotype, 157 – Netechma napoana sp. n., holotype, 158 – Netechma simulans sp. n., holotype, 157 – Netechma napoana sp. n., holotype, 158 – Netechma simulans sp. n., holotype, 157 – Netechma napoana sp. n., holotype, 158 – Netechma simulans sp. n., holotype, 157 – Netechma napoana sp. n., holotype, 158 – Netechma simulans sp. n., holotype, 157 – Netechma napoana sp. n., holotype, 158 – Netechma simulans sp. n., holotype, 157 – Netechma napoana sp. n., holotype, 158 – Netechma simulans sp. n., holotype, 157 – Netechma napoana sp. n., holotype, 158 – Netechma simulans sp. n., holotype, 157 – Netechma napoana sp. n., holotype, 158 – Netechma simulans sp. n., holotype, 157 – Netechma napoana sp. n., holotype, 158 – Netechma simulans sp. n., holotype, 157 – Netechma napoana sp. n., holotype, 158 – Netechma simulans sp. n., holotype, 157 – Netechma simulans sp. n., holotype, 158 – Netechma simulans sp. n., holotype, 157 – Netechma simulans sp. n., holotype, 158 – Netechma simulans

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Figs 159-168. Adults: 159 – Netechma simulans sp. n., paratype, 160 – Netechma guamotea sp. n., holotype, 161 – Netechmodes gravidarmata sp. n., paratype, 162 – Furcinetechma sangaycola sp. n., holotype, 163 – Furcinetechma labonitae sp. n., holotype, 164 – Rhytmologa polyfenestra sp. n., holotype, 165 – Galomecalpa quatrofascia sp. n., holotype, 166 – Romanaria leuca sp. n., holotype, 167 – Inape parelegans sp. n., holotype, 168 – Inape parastella sp. n., holotype.

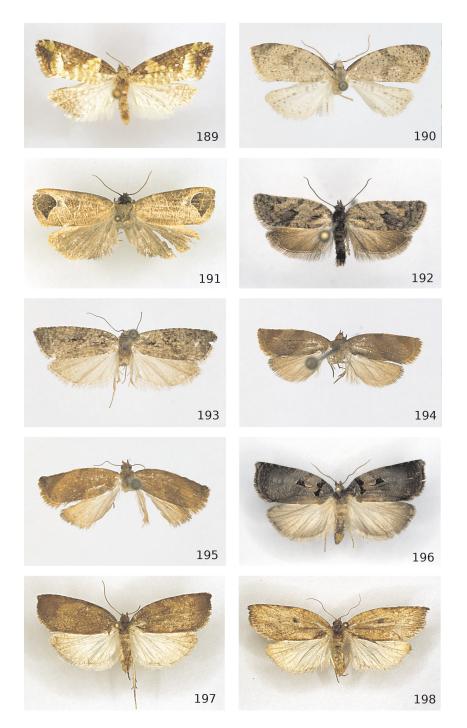


Figs 169-178. Adults: 169 – Inape stella sp. n., holotype, 170 – Inape eltabloana sp. n., holotype, 171 – Transtillaspis tungurahuana sp. n., holotype, 172 – Transtillaspis cosangana sp. n., holotype, 173 – Transtillaspis papallactana sp. n., holotype, 174 – Transtillaspis costipuncta sp. n., holotype, 175 – Clarkeulia magnana sp. n., holotype, 176 – Lobogenesis primitiva sp. n., paratype, 177 – Exoletuncus canescens RAZOWSKI & PELZ, 2005, 178 – Mosaiculia mosaica sp. n., holotype.

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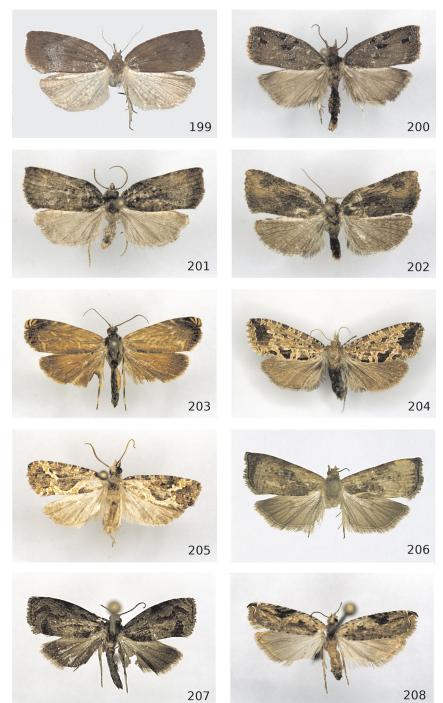


Figs 179-188. Adults: 179 – Dimorphopalparutruncus sp. n., holotype, 180 – Oregocerata magna sp. n., holotype, 181 – Hynhamia runtuana sp. n., holotype, 182 – Seticosta szeptyckii sp. n., holotype, 183 – Seticosta szeptyckii sp. n., paratype, 184 – Seticosta concava sp. n., holotype, 185 – Seticosta subariadnae sp. n., holotype, 186 – Seticosta albicentra sp. n., holotype, 187 – Seticosta droserana sp. n., holotype, 188 – Punctapinella guamoteana sp. n., holotype.



Figs 189-198. Adults: 189 – Punctapinella viridargentea sp. n., holotype, 190 – Ptyongnathosia harpifera sp. n., holotype, 191 – Anacrusis gutta sp. n., holotype, 192 – Argyrotaenia posticicnephaea sp. n., holotype, 193 – Argyrotaenia atrata sp. n., holotype, 194 – Argyrotaenia rufescens sp. n., holotype, 195 – Argyrotaenia rufescens sp. n., paratype, 196 – Sisurcana rufograpta sp. n., holotype, 197 – Sisurcana tabloneana sp. n., holotype, 198 – Sisurcana tabloneana sp. n., paratype.

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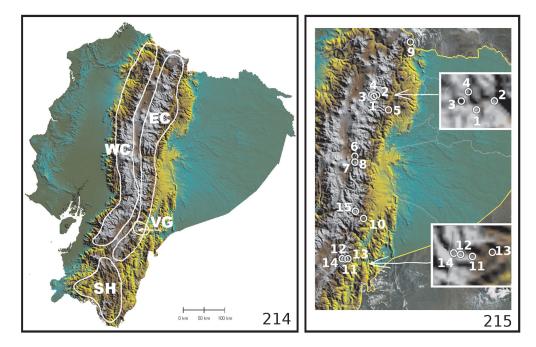


Figs 199-208. Adults: 199 – Sisurcana sangayana sp. n., holotype, 200 – Sisurcana ruficilia sp. n., holotype, 201 – Sisurcana microbaccata sp. n., holotype, 202 – Sisurcana pululahuana sp. n., holotype, 203 – Hilarographa castanea sp. n., holotype, 204 – Auratonota sucumbiosa sp. n., holotype, 205 – Pseudocomotis chingualana sp. n., holotype, 206 – Statherotis sangaica sp. n., holotype, 207 – Statherotis hyeroglypha sp. n., holotype, 208 – Ancylis ecuadorica sp. n., holotype.

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Figs 209-213. Adults: 209 – Epinotia runtunica sp. n., holotype, 210 – Epinotia rotundata sp. n., holotype, 211 – Epinotia brunneomacula sp. n., holotype, 212 – Laculataria splendida sp. n., holotype, 213 – Mesochariodes tablonica sp. n., holotype.



Figs 214-215. Maps: 214 – Ecuador (WC – West Cordillera, EC – East Cordillera, VG – Valley of Rio Gualaceo in East Cordillera, SH Southern Highlands), 215 – Collection sites in East Cordillera (1 – Papallacta I, 2 – Papallacta – Chalpi Grande, 3 – Papallacta II, 4 – Papallacta III, 5 – Cosanga, Yanayacu, 6 – Bańos, El Tablon, 7 – Bańos, Pondoa; 8 – Baños, Runtun, 9 – La Bonita, 10 – via Guamote – Macas, 11 – Gualaceo – Limon I, 12 – Gualaceo – Limon II; 13 – Gualaceo – Limon III, 14 – Gualaceo – Limon IV, 15 – Atillo).