

***Orthocomotis* DOGNIN, 1905 (Lepidoptera: Tortricidae) from Ecuador**

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Abstract. The Ecuadoran species of the Neotropical genus *Orthocomotis* DOGNIN, 1905 are listed and the new distributional data are included. Of 25 species treated 18 are described as new (*Orthocomotis sachatamiae* sp.n., *O. parexpansa* sp.n., *O. lactistrigata* sp.n., *O. ferruginea* sp.n., *O. yanayacu* sp.n., *O. albobasalis* sp.n., *O. andina* sp.n., *O. carolina* sp.n., *O. puyoana* sp.n., *O. golondrina* sp.n., *O. gielisi* sp.n., *O. pactoana* sp.n., *O. cosangana* sp.n., *O. mediana* sp.n., *O. sucumbiana* sp.n., *O. volochilesia* sp.n., *O. shuara* sp.n., *O. alshiana* sp.n.). *Orthocomotis domonoana* RAZOWSKI & PELZ, 2003 n. stat. originally described as subspecies of *O. euchaldera* CLARKE 1956 is raised to full specific rank. Some general data on the genus are provided.

Key words: Lepidoptera, Tortricidae, *Orthocomotis*, Ecuador, Andes, cloudforest, new species.

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I. INTRODUCTION

Orthocomotis DOGNIN was erected to include only one species, *O. olivata* DOGNIN, 1905. Then BUSCK (1920) erected *Sociphora* for *Penthina magicana* ZELLER, 1866 and also placed *Penthina muscosana* ZELLER, 1866 in *Sociphora* and described a new species, *Sociphora herbaria* BUSCK, 1920. CLARKE (1956) was first to provide a revision of *Orthocomotis* and placed in it 28 species. He based both on the habitus of the species and their genitalia, however, neglected the descriptions of these last.

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Recently several species were described in *Orthocomotis* (RAZOWSKI 1982, RAZOWSKI 1999, RAZOWSKI & BECKER 1990, RAZOWSKI & PELZ 2003). The recent publication (BROWN 2003) devoted to the fauna of Costa Rica includes some general data and a discussion.

The morphology was treated by RAZOWSKI (1982) who characterized the musculature of the male genitalia and described a new closely related genus *Paracomotis* for *Eulia smaragdophaea* MEYRICK, 1932. BROWN (1989) studied the chaetosema and then (BROWN 2003) reviewed some morphological, biological and distributional (including elevational) data for 10 Costarican species. He included nine of the most conspicuous characters distinguishing the species of *Orthocomotis*.

The tribal assignment of this genus is still doubtful. CLARKE (1956) has not defined a tribal position of *Orthocomotis* and regarded it as belonging in Tortricinae. RAZOWSKI (1982) transferred it (and *Paracomotis* RAZOWSKI) to Polyorthini. POWELL (1986) placed *Orthocomotis* in Euliini, BROWN (1989) transferred to Schoenotenini on basis of the modified chaetosema and POWELL & al. (1995) followed that assignment. HORAK (1999) questioned the interpretation by BROWN (1989) showing that a band-shaped chaetosema occurs exclusively in more advanced Schoenotenini and provisionally agreed with placing it in Euliini. There is thus a provisional consensus (RAZOWSKI 1999, RAZOWSKI & PELZ 2003 and others) as to a provisional placement of *Orthocomotis* and *Paracomotis*. However, in the recent catalogue BROWN (2005) suggested to place it in a separate tribe.

In the Ecuadoran fauna *Orthocomotis* is represented by 25 known species. This number constitutes ca. 50% of the total number of known representatives of this genus (56 species). The discussed fauna does not differ from the entire Neotropical fauna morphologically. We can distinguish two main groups of species, i.e., (1) the species with simple valva, stout aedeagus and short, broad coecum penis and (2) with variable valva (often with free termination of sacculus present), slender aedeagus and slender coecum penis. Some modifications of these characters are, however, realized.

The differences between species are often slight (some are presented by BROWN 2003) both in facies and genitalia. The status of some specimens is therefore difficult for interpretations (cf. the text). In the groups of similar species some minor characters seem of importance. These are the number and the shape of cornuti, the shape of valva and the shapes of uncus and the socii. Some differences have been also found in spinulation of anellus. A similarity in colouration may occasionally be not correlated with the structures of genitalia and some externally very similar species belong to different groups. The cornuti form two or three groups of larger spines which may be well separated from one another or connected. Apart of distinct (always non-capitate) spine-like cornuti there are numerous minute thorns which in tortricines are often called "a sculpture". Structurally, at least the larger of them, do not differ from typical, large cornuti. The vesica is large or very large, bulbous proximally, often with additional, lateral lobe; the terminal part is long, slender, extending laterally, devoid of any "sculpture" or larger cornuti.

M a t e r i a l. The present paper is based on the collections by the second author (CVPR; Volker PELZ Collection, Ruppichteroth, Germany) done in the years 1996-2005 and Janusz WOJTUSIAK (MZUJ; Zoological Museum of the Jagiellonian University, Cracow) gathered in 1998-2005. The holotypes of the CVPR Collection shall be finally deposited in the Senckenberg Museum, Frankfurt/Main, Germany (SMFL). The authors also included the earlier published data.

N o t e. Numbers included in descriptions of the labial palpus refer to the proportion of their total length to the horizontal diameter of the compound eye.

Abbreviations:

> – road from to >

CREA – Centro de Reconversión Económica del Austro (Azuay, Cañar y Morona-Santiago, Ecuador)

GS – Genitalia slide

HT – Holotype

ISEZ – Institute of Systematics and Evolution of Animals PAS, Cracow, Poland

PAS – Polish Academy of Sciences

PN – National Park

Prov. – Province

sta – collecting station

N, E, S, W – compass points

II. SYSTEMATIC PART

Orthocomotis grandisocia RAZOWSKI, 1999

M a t e r i a l e x a m i n e d. Two males: Ecuador, Río Chingual, La Bonita, Province Sucumbios, 1500 m, GS 226; MZUJ.

To this date known from Carchi Province (Chical, 1250 m). Paratypes, female with abdomen missing and male collected at Río Topo (4500 feet) differ from the holotype (male: uncus broadest before middle and not subterminally with distal half slender, tapering apicad; aedeagus larger; valva broader) and may represent a distinct species or subspecies.

Orthocomotis expansa RAZOWSKI, 1999

(Figs 5, 34)

This species was described from Carchi Province (Chical, 1250 m). It characterizes with socius broadest postbasally, tapering apically. A further specimen (Fig. 5) before us from Ecuador, Morona-Santiago – Prov., Macas, Proaño Alshi, 5 km SO Alshi, 1700 m, 5. VII. 1999, leg. Volker PELZ (GS 1001-V.P.), CVPR which was mentioned yet by RAZOWSKI & PELZ (2003). Its male genitalia (Fig. 34) differ from *O. expansa* in longer uncus and broader distal part of socius. Based on this scarce material we cannot identify it and do not include it in *O. expansa*. We only like to show the diversity in this group of species and in the genus in question.

Orthocomotis sachatamiae sp.n.

(Figs 3, 4, 33, 61)

D i a g n o s i s. Closely related to *O. expansa* but forewing of *O. sachatamiae* sp.n. without green refractive scales and valva more curved upwards, ventral edge rounded.

E t y m o l o g y. The species epithet refers to the type locality. The name is defined as a noun in apposition.

D e s c r i p t i o n. Wing span 23.5 mm (in male paratypes 24 mm and 20.5 mm, in female 24.5 mm). Head and thorax cream brown, thorax darker brown proximally and medially, labial palpus ca 1.5. Ground colour of forewing cream. Dorsal area suffused with brown and rust brown scales, spots and fascia on ground colour in costal area. Markings brown in form of three anterior fasciae, the posterior of which is angulate. Costal spots and subterminal fascia and subterminal blotch brown scaled with rust. Cilia cream spotted with brown. Hindwing cream-brown, suffused with brownish, browner on periphery. Cilia brownish cream.

Male genitalia (Fig. 33). Uncus expanding terminally; ends of socii broad, rounded; costa of valva concave submedially, sacculus convex; aedeagus short, vesica with numerous small thorns.

Female genitalia (Fig. 61). Sterigma cup-shaped, bursa copulatrix membranous sparsely sculptured; accessory bursa with long ductus.

Holotype, male: "Ecuador, Pichincha – Prov., 7 km NW Mindo, Sachatamia, 1700m, 0°1'35"S 78°45'34"W, 8.-11. XII. 2004, leg. Volker PELZ"; GS 2454-V.P.; CVPR.

Paratypes: (3): 2 males (GS 2445-V.P., GS 2530-V.P.): same data as holotype; 1 female (GS 2906-V.P.): Ecuador, Pichincha – Prov., 2,5 km SE Santa Rosa, Reserva Las Gralarias, 2050m, 0°0'33"S 78°44'15"W, 27. IX.-5. X. 2005, leg. D. ROSS & J. MILLER; all CVPR.

***Orthocomotis parexpansa* sp.n.**

(Figs 1, 2, 31, 32, 60)

D i a g n o s i s. Closely related with *O. expansa* and *O. longuncus* RAZOWSKI & PELZ, 2003 but *O. parexpansa* sp.n. distinguished by the convex median part of outer edge of socius.

E t y m o l o g y. The species name refers to similarity with *O. expansa*; Greek: para- near to. It is defined as a noun in apposition.

D e s c r i p t i o n. Wing span 28 mm in holotype (in the male paratypes from Pichincha-Province wing span varies between 20 mm and 22 mm, female 25.5 mm). Head and thorax blackish grey with groups of white scales; labial palpus over 1, brownish grey with white terminal marks. Ground colour of forewing snow white; suffusions and inner parts of some markings grey, remaining markings blackish; costal spots blackish. Groups of reddish and yellowish green scales both on ground colour and markings. Cilia white with blackish grey divisions, some with green scales. Hindwing brownish grey; some more cream spots in terminal area; cilia more whitish especially in anal area.

Male genitalia (Figs 31, 32). Uncus moderately slender; socius expanding near middle of outer edge; valva elongate; sacculus simple; aedeagus very broad, short; cornuti numerous minute thorns.

Female genitalia (Fig. 60). Sterigma simple; ostium bursae transversly oval; ductus bursae short; corpus bursae large, without sclerites; ductus of accessory bursa long.

Holotype, male: "Ecuador, Prov. Carchi, Res. Forest. Golondrinas, West Cordillera, 28-30.01.2005, 2000 m, leg. J. WOJTUSIAK"; GS 445; MZUJ.

Paratypes (11): 5 males: labelled as holotype (one with GS 444); 1 male: Ecuador, Prov. Morona Santiago, N.P. Sangay, Qda Shillnan via Guamote Macas, 24.01.2004, 3100m, leg. WOJTUSIAK & PYRCZ, GS 232; all MZUJ; 1 male (GS 2922-V.P.): Ecuador, Pichincha – Prov., 2,5 km SE Santa Rosa, Reserva Las Gralarias, 2050 m, 0°0'33"S 78°44'15"W, 27. IX.-5. X. 2005, leg. D. ROSS & J. MILLER; 2 males (GS 2943-V.P., GS 3024-V.P.) same locality but 2068 m, 0°0'37"S 78°43'50"W, 3.-5. XI. 2005, leg. Volker PELZ; 1 male (GS 2931-V.P.): Ecuador, Pichincha – Prov., 7 km SW Tandayapa, Bellavista Research Station, F-Trail, 2258m, 0°0'54"S 78°41'04"W, 1. XI. 2005, leg. Volker PELZ; 1 female (GS 2908-V.P.): same locality but 2300 m, 0°0'41"S 78°41'17"W, 30.X. 2005, leg. Volker PELZ; all CVPR.

***Orthocomotis lactistrigata* sp.n.**

(Figs 6, 35)

D i a g n o s i s. Similar to *O. parexpansa* sp.n. and *O. herbacea* CLARKE, 1956 but *O. lactistrigata* sp.n. distinct chiefly in the presence of small pale streak near end of median cell. Male genitalia differing from those in *O. parexpansa* sp.n. by the much broader uncus, the less convex sacculus and the larger cornuti and from *O. herbacea* in the lack of spiniform termination of sacculus.

E t y m o l o g y. Latin: lac – milk, strigatus – with streaks, refer to small whitish streak near end of median cell of forewing. The name is defined as a noun in apposition.

D e s c r i p t i o n. Wing span ca 15 mm. Head brown scaled with cream ochreous, front cream in ventral part, collar pale rust; thorax dark brown scaled cream distally. Ground colour of forewing whitish, paler along costa, snow white beneath apex; remaining surface suffused with grey-brown and dark brown, with similar dots; costal spots black-brown. Markings black brown strongly scaled with greenish except for subapical blotch; markings and ground colours suffused

with greenish especially in basal area of wing. Cilia white; divisions and basal line broad, blackish. Hindwing dark greyish brown, cilia almost concolorous.

Male genitalia (Fig. 35). Uncus rather short, broadening postmedially; distal part of socius broad, lateral angle rounded; valva fairly broad; sacculus simple; aedeagus large; cornuti numerous small and minute thorns.

Female not known.

Holotype, male: "Ecuador, Prov. Carchi, Res. Forest. Golondrinas, West Cordillera, 28-30.01.2005, 2000 m, leg. J. WOJTUSIAK"; GS 443; MZUJ.

Paratypes (3): 2 males: labelled as above; 1 male: Ecuador, Prov. Carchi, Volc. Chiles massive, Res. Forest. Golondrinas, 2050 m, 28.06.1999; GS 227; all MZUJ.

***Orthocomotis ferruginea* sp.n.**

(Figs 7, 36)

D i a g n o s i s. *Orthocomotis ferruginea* sp.n. is close to *O. albobasalis* sp.n. but *O. ferruginea* sp.n. distinguished by the absence of terminal process of sacculus; from *O. herbaria* (BUSCK, 1920) known from Costa Rica and Venezuela and its allies the new species differs chiefly in the short, well sclerotized sacculus.

E t y m o l o g y. Latin: ferrugineus – rust coloured. The species epithet refers to the characteristic orange rust elements of the wing pattern. It is defined as a noun in apposition.

D e s c r i p t i o n. Wing span 26 mm (in paratype 28 mm). Head and thorax rust brown; labial palpus over 1, paler terminally, thorax with whitish marks and rust termination of tegula. Ground colour white preserved in subterminal area of wing and along edges of markings; median parts of interfasciae grey and orange rust; glossy green suffusions in basal, subdorsal and postmedian areas. Markings dark brown with indistinct purple violet hue. Cilia brownish with rust anterior parts and white interruptions. Hindwing cream grey suffused and diffusely strigulated with grey; cilia greyish.

Male genitalia (Fig. 36). Uncus moderate, slightly expanding terminally; socius tapering in distal one-third terminally; valva fairly slender, hardly convex beyond sacculus; this last slender, concave postbasally; aedeagus short, broad; cornuti numerous minute and small thorns, with anterior group not separated from main thorny area but distinct.

Female not known.

R e m a r k. In the paratype the rust elements of wing pattern are less developed but the genitalia hardly differ from the holotype.

Holotype, male: "Ecuador, Napo Prov., 12 km SSE Cosanga, 2120 m, 0°37'26"S 77°48'51"W, 24.X.2002, sta 36, leg. GIELIS & PELZ"; GS 1564-V.P.; CVPR.

Paratype: 1 male (GS 1650-V.P.): Ecuador, Loja – Prov., 10 km SE Loja, PN Podocarpus, Cananuma Ranger Stt, 2850 m, 0°46'58"S 79°10'19"W, 7.X.2002, sta 20, leg. GIELIS & PELZ; CVPR.

***Orthocomotis yanayacu* sp.n.**

(Figs 8, 37)

D i a g n o s i s. Externally resembling *O. volochilesia* sp.n. especially in presence of the oblique pale streak near middle of forewing. In male genitalia close to *O. albobasalis* sp.n. but *O. yanayacu* sp.n. distinguished chiefly in much longer uncus and very small termination of sacculus.

E t y m o l o g y. The name refers to the name of the reservation where the moth was collected. It is defined as a noun in apposition.

D e s c r i p t i o n. Wing span 25.5 mm. Head pale brownish cream, thorax more brown with darker tegula; labial palpus ca 1.5, brownish cream, paler terminally, browner along middle of median joint. Ground colour of forewing white limited to edges of markings and blotches in termi-

nal part of wing; remaining surface grey or scaled with orange and green; spots brown. Markings brown sparsely scaled with orange and green. Cilia white; divisions blackish. Hindwing brownish, cilia slightly paler.

Male genitalia (Fig. 37). Uncus slender, rounded apically; socii fairly broad, with small proximal parts; valva broad with costa concave postbasally; sacculus slender, with rather straight ventral edge and very short termination; aedeagus broad; cornuti numerous spines of various lengths.

Female not known.

Holotype male: "Ecuador, Prov. Napo, Cosanga, Res. Yanayacu, 18.09.2004, 2150 m, leg. WOJTUSIAK & PYRCZ"; GS 801; MZUJ.

***Orthocomotis albobasalis* sp.n.**

(Figs 9, 38)

D i a g n o s i s. *Orthocomotis albobasalis* sp.n. is related with *O. ferruginea* sp.n. and Colombian *O. magicana* (ZELLER, 1866) but *O. albobasalis* sp.n. distinguished by short uncus and free termination of sacculus; from another Colombian species, *O. olivata* CLARKE, 1956, *O. albobasalis* sp.n. differs in much broader aedeagus.

E t y m o l o g y. Latin: albus – white, basalis – basal. The name refers to the whitish base of the hindwing. It is defined as a noun in apposition.

D e s c r i p t i o n. Wing span 29 mm (in paratype 26 mm). Head brownish; labial palpus ca 1.5; thorax brown proximally, otherwise whitish grey. Ground colour of forewing white in form of large terminal blotch reaching apex; other parts of interfascia greyish with brownish spots and weak green scaling; no rust orange suffusions so well developed in *O. ferruginea*. Markings brown. Cilia worn. Hindwing whitish to middle, tinged grey cream postmedially where diffuse grey strigulation present. Cilia whitish grey (worn).

Male genitalia (Fig. 38). Uncus fairly broad, slightly tapering in distal fourth terminally; socius broad, rounded distally; costa of valva slightly concave postbasally, terminal part short; sacculus broad basally, weakly concave medially, provided with short termination; aedeagus broad, short; cornuti numerous short spines, some cornuti slender with broad bases.

R e m a r k s. Male genitalia of this species resemble those in original illustration of *O. subolivata* CLARKE, 1956 (only valva illustrated). BROWN (2003) synonymized *O. subolivata* with *O. herbacea* and stated that the male genitalia figured in CLARKE (1956) as *O. herbacea* belong to a different species.

Holotype, male: "Ecuador, Loja – Prov., 10 km SE Loja, PN Podocarpus, Cajanuma Ranger Stt, 2850 m, 0°46'58"S 79°10'19"W, 7.X.2002, sta 20, leg. GIELIS & PELZ"; GS 1651-V.P.; CVPR.

Paratype: 1 male (GS 1652-V.P.): same data as holotype; CVPR.

***Orthocomotis herbacea* CLARKE, 1956**

(Figs 10, 39)

M a t e r i a l e x a m i n e d. One male (GS 2455-V.P.): Ecuador, Pichincha – Prov., 7 km NW Mindo, Sachatamia, 1700m, 0°1'35"S 78°45'34"W, 8.-11. XII. 2004, leg. Volker PELZ; CVPR; 1 male (GS 228): Ecuador, Res. El Tundo, Sozoranga Utuana, Province Loja, 2400 m, 24.VII.1998; MZUJ.

The examined specimens slightly differ in the male genitalia from the specimens illustrated by CLARKE (1956) and BROWN (2003) but do not show any genital differences among themselves. *O. herbacea* was described from Costa Rica and is known from five provinces throughout that country.

***Orthocomotis andina* sp.n.**

(Figs 11, 40)

D i a g n o s i s. Similar to *O. herbacea* from Costa Rica but *O. andina* sp.n. differing from it chiefly by the browner ground colour of forewing; from all allied species *O. andina* sp.n. is distinguished by the distinct ventroterminal process of aedeagus.

E t y m o l o g y. The species epithet refers to the distribution of the new species in the Andes. It is herewith defined as a noun in apposition.

D e s c r i p t i o n. Wing span 28 mm (in paratypes between 26 and 27 mm). Head brownish; labial palpus ca 1.5 brownish cream in distal third; thorax brown in posterior half mixed with grey, tegula scaled with green. Ground colour of forewing whitish suffused with grey, scaled with green chiefly in tornal area, rather cream along costa, dotted with pale brown. Subterminal marking reaching apex of wing white, edging subterminal blotch; concolorous mark near middle of wing beneath median cell; green spots in basal and median parts of wing, yellowish green along termen between veins. Markings dark blackish brown with some paler, greyer places: basal blotch small, postbasal fascia broad terminating subdorsally followed by small postmedian mark almost connecting a very large subterminal blotch. Cilia white tinged with cream grey in dorsal half; interruptions brown. Hindwing brown, cilia similar.

V a r i a t i o n. Ground colour of forewing more or less dark, occasionally dotted with black-brown; costal spots forming an elongate blotch at mid-costa.

Male genitalia (Fig. 40). Uncus about twice shorter than costa of valva, slightly expanding terminally; socius rounded terminally; valva moderately broad; sacculus indistinctly convex terminally; aedeagus very broad terminating in a ventral process; cornuti numerous small and minute spines and thorns.

Female not known.

Holotype, male: "Ecuador, Napo – Prov., 15 km SE Cosanga, Cocodrilo, 1850 m, 0°38'56"S 77°47'34"W, 25.X.2002, sta 37, leg. GIELIS & PELZ"; GS 1572-V.P.; CVPR.

Paratypes (6): 1 male (GS 1559-V.P.): same data as holotype; 1 male (GS 1768-V.P.): same locality but 23.-26. VI 2003, leg. Volker PELZ; 2 males (one with GS 1138-V.P.): Ecuador, Morona-Santiago – Prov., Macas, Proaño Alshi, 5 km SO Alshi, 1700 m, 27. IX.-4. X. 2000, leg. Volker PELZ; all CVPR; 1 male (GS 225 MZUJ): Ecuador Province Carchi, Res. Forest Golondrinas, 1950 m, 24. VI. 1996, leg. WOJTUSIAK and PYRCZ; 1 male: same reserve, 2050 m, 28.VI. 1999, leg. J. WOJTUSIAK; both MZUJ.

***Orthocomotis carolina* sp.n.**

(Figs 12, 41)

D i a g n o s i s. Externally similar to *O. trissophricta* (MEYRICK, 1932) described from Santa Catarina, Brazil, but *O. carolina* sp.n. distinguished by postmedially expanding socius, the broad valva and the completely reduced terminal prominence of sacculus.

E t y m o l o g y. The specific name is derived from the name of the village La Carolina near the Reserve Golondrinas, the locus typicus of this species. It is defined as a noun in apposition.

D e s c r i p t i o n. Wing span 24 mm. Head pale ochreous yellow; labial palpus about 1.5, brownish with cream ends of two posterior joints; thorax concolorous with head with areas of grey scales. Ground colour of forewing cream, greyish surfaces in dorsal half and along edges of wing. Markings pale ochreous yellow scaled with black-brown; costal spots black-brown. Cilia yellowish cream with small black-brown divisions. Hindwing brown-grey with numerous grey cream dots; cilia paler than wing.

Male genitalia (Fig. 41). Uncus slender; socius broad, rounded terminally; valva elongate, slightly upcurved; sacculus long, slender, without free termination; juxta small; aedeagus stout; coecum penis rounded; cornuti numerous very small thorns.

Female not known.

Holotype, male: "Ecuador, Prov. Carchi, Res. Forest. Golondrinas, West Cordillera, 28-30.01.2005, 2000 m, leg. J. WOJTUSIAK; GS 441; MZUJ.

Paratype: 1 male (not dissected): identically labelled; MZUJ.

***Orthocomotis puyoana* sp.n.**

(Figs 13, 42)

D i a g n o s i s. *Orthocomotis puyoana* sp.n. is close to *O. herbaria* CLARKE, 1956 from Costa Rica and Ecuadoran *O. longuncus* RAZOWSKI & PELZ, 2003 but *O. puyoana* sp.n. distinguished by much longer, slender cornuti.

E t y m o l o g y. The specific epithet refers to the type locality. The name is defined as a noun in apposition.

D e s c r i p t i o n. Wing span 19 mm. Head cream brown, labial palpus 1.5, brownish; thorax worn, brownish. Forewing (worn) ground colour cream except for a few white spots at costa, beyond median cell and larger spot in subapical area; strigulae and small spots brownish. Markings dark brown. Cilia worn. Hindwing dark brown; cilia worn.

Male genitalia (Fig. 42). Uncus slender; socius broadest medially; valva moderately broad; sacculus convex; aedeagus broad; coecum penis short; cornuti numerous slender unequally sized spines accompanied by many minute thorns.

Female unknown.

Holotype, male: "Ecuador, Pastaza – Prov., 10 km NO Puyo, 1000 m, 123°25'S 7759'45"W, 18.-19. VI. 2003, leg Volker PELZ"; GS 1771-V.P.; CVPR.

***Orthocomotis golondrina* sp.n.**

(Figs 14, 43)

D i a g n o s i s. Close to *O. puyoana* sp.n. but quite distinct externally; *O. golondrina* sp.n. with ground colour parts reduced to slender lines and by the broader aedeagus, the longer uncus and the reduced cornuti.

E t y m o l o g y. The species name refers to the name of the cloud forest reserve, Reserva Forestal Golondrinas in the Carchi Province, where the species was collected. The name is herewith defined as a noun in apposition.

D e s c r i p t i o n. Wing span ca 25 mm. Head cream; labial palpus 1.3, cream suffused with brownish along middle; thorax cream brown. Ground colour of forewing brownish grey suffused with brown, with diffuse purple brown spots in distal third of wing. Sharp, white lines along edges of markings and some concolorous spots along costa; refractive green sclale between white lines and at base of wing. Cilia white; divisions broad, brown. Hindwing brown; cilia more cream.

Male genitalia (Fig. 43). Uncus moderately broad, not expanding terminally; socius broad terminally; valva long; costa up-curved; sacculus long, convex; aedeagus short, broad; cornuti reduced to small spines.

Female not known.

Holotype, male: "Ecuador, Prov. Carchi, Res. Forest. Golondrinas, West Cordillera, 28-30.01.2005, 2000m, leg. J. WOJTUSIAK"; GS 447; MZUJ.

***Orthocomotis longuncus* RAZOWSKI & PELZ, 2003**

(Figs 15, 16, 45, 46)

M a t e r i a l e x a m i n e d. 1 male (GS 2465-V.P.): Ecuador, Tungurahua – Prov., 17 km E Baños, Río Verde, 1500 m, 1°24'11"S 78°17'22"W, 1.-3. XII. 2004, leg Volker PELZ; 3 males (GS 2460-V.P., GS 2459-V.P., GS 2458-V.P.): same locality but 16.-18. XII. 2004, leg Volker PELZ; 1 male (GS 1140-V.P.): Ecuador, Morona-Santiago – Prov., Macas, Proaño-Inapula, CREA – Domono, 1100 m, 2. X. 2000, leg. Volker PELZ; all CVPR.

This species was described from Macas (Proaño-Inapula), Province Morona-Santiago, collected at the altitude of 1100 m.

The genitalia of the four males from Río Verde exactly match those of the holotype of *O. longuncus* but the colouration is somewhat different. Forewing is more olive cream, green scaling is much stronger. The further specimen from Macas is intermediate in colouration but the thorns of vesica are stronger.

***Orthocomotis ?euchaldera* CLARKE, 1956**

(Figs 17, 18, 47, 48)

M a t e r i a l e x a m i n e d. One male (GS 1136-V.P.): Ecuador, Morona-Santiago – Prov., Macas, Proaño Alshi, 5 km SO Alshi, 1700 m, 27. IX.– 4. X. 2000, leg. Volker PELZ; 1 male (GS 1514-V.P.): Ecuador, Napo – Prov., 15 km SE Cosanga, Cocodrilo, 1850 m, 0°38'56"S 77°47'34"W, 27.X.2002, sta 39, leg. GIELIS & PELZ; 2 males (GS 2938-V.P., GS 2939-V.P.): Ecuador, Pichincha – Prov., 2,5 km SE Santa Rosa, Reserva Las Gralarias, 2068 m, 0°0'37"S 78°43'50"W, 3.-5. XI. 2005, leg. Volker PELZ; all CVPR.

O. euchaldera was described from Colombia. The examined specimens seem to represent at least two taxa. The specimens from the Pichincha Province on the western slope of the Andes (Figs 18, 48) are clearly distinguished especially by the narrower uncus, only hardly broadening terminally and the broader aedeagus from the two specimens from the eastern slopes of the Andes (Figs 17, 47). They differ slightly among themselves in the proportions of aedeagus, number of cornuti and the terminal prominence of costa of valva. As in the original figure of *O. euchaldera* by CLARKE (1956) the uncus is bent forward and therefore not clearly visible we cannot decide on the basis of so sparse material if one of them represents *O. euchaldera*. At the moment as mentioned above for *O. expansa*, we only like to show the diversity in this group of species.

***Orthocomotis domonoana* RAZOWSKI & PELZ, 2003, n. stat.**

(Fig. 49)

Orthocomotis euchaldera domonoana RAZOWSKI & PELZ, 2003, Nachr. entomol. Ver. Apollo, N.F., **24**(4): 207, figs 44, 45, 97. Type locality: Ecuador: Morona-Santiago Province: Macas, (Proaño-Inapula).

The genital characters of *O. domonoana* are reassessed. We found that the shape of aedeagus, the proportions of coecum penis and the arrangement of cornuti are of specific importance. An additional character, the spine from end part of costa of valva is also characteristic but some variation could be expected (cf. similar species). The differences in forewing markings are small; the apical white mark is smaller and the subterminal blotch broader, more convex, limited by a row of greenish spots.

***Orthocomotis gielisi* sp.n.**

(Figs 19, 50)

D i a g n o s i s. Close to *O. euchaldera* CLARKE, 1956 from Colombia but *O. gielisi* sp.n. distinguished by the very broad terminal part of uncus, the rudimentary prominence of end part of costa of valva and the shorter aedeagus.

E t y m o l o g y. The species name is a patronym for Dr. Cees GIELIS, Lexmond, The Netherlands.

D e s c r i p t i o n. Wing span 27 mm. Head pale rust brown; labial palpus concolorous with head, 1.3; thorax brown scaled with cream. Ground colour white with reddish rust and olive brown suffusions marked with brown scales; some parts of interfasciae greenish brown or olive brownish, without white edges; costal strigulae and subapical marking white, the latter with weak inner scaling. Marking dark brown, typical of the genus. Cilia dark brown with a few white divisions. Hindwing dark brown; cilia rather concolorous.

Male genitalia (Fig. 50). Uncus strongly expanding postmedially, gradually tapering terminad, rounded apically; socius broadening terminally; valva moderately broad; costa terminating in a small, rounded prominence; sacculus simple, short; aedeagus fairly broad, gently convex beyond middle ventrally; coecum penis slender, short; vesica not longer than aedeagus with numerous short spines forming indistinct three or four posterior groups and anterior compact group consisting of somewhat longer spines.

Female not known.

Holotype, male: "Ecuador, Napo – Prov., 12 km SSE Cosanga, 2120 m, 0°37'26"S 77°48'51"W, 24.X.2002, sta 36, leg. GIELIS & PELZ"; GS 1563-V.P.; CVPR.

***Orthocomotis pactoana* sp.n.**

(Figs 20, 44)

D i a g n o s i s. Close to *O. marmorobrunnea* RAZOWSKI & WOJTUSIAK, 2006 but *O. pactoana* sp.n. distinguished by the lack of green scaling of forewing, the rather uniformly broad valva and the longer, almost straight sacculus.

E t y m o l o g y. The specific epithet is derived from the name of the type locality.

D e s c r i p t i o n. Wing span 23 mm. Head whitish brown, labial palpus about 1.5; thorax brownish with cream scales, base of tegula and collar brown. Ground colour of forewing white cream tinged with grey in dorsal area, sparsely scaled with dark brown, with innumerable orange scales. Markings dark brown similar to *O. marmorobrunnea*. Cilia whitish with small brown divisions. Hindwing greyish brown with similar cilia.

Male genitalia (Fig. 44). Uncus rather slender, slightly expanding terminally, rounded apically; socius broad with small proximal part; valva weakly tapering terminally; sacculus with moderately large free termination; lateroterminal part of aedeagus thorny; cornuti numerous spines of various sizes.

R e m a r k s. Two examined specimens are similar to the type of *O. pactoana* sp.n. One of them, from Res. Forest Golondrin, Province Carchi, 2050 m (MZUJ) differs from it in having somewhat longer sacculus and stronger, more numerous cornuti, the other, from same locality (30.I. 2005, 2000 m; MZUJ) characterizes with more curved sacculus, number of large cornuti similar to this in the former specimen and the presence of distinct orange maculation of the forewing ground colour. They are not included in the type series.

Holotype male: "Ecuador, Prov. Pichincha, Pacto, Río Mashpi, 10.02.2004, 1150m, leg. WOJTUSIAK & PYRCZ" GS 803; MZUJ.

***Orthocomotis marmorobrunnea* RAZOWSKI & WOJTUSIAK, 2006**

(Figs 21, 51)

M a t e r i a l e x a m i n e d. Four males (GS 2441-V.P., GS 2448-V.P., GS 2449-V.P., GS 2451-V.P.) 1 female (GS 2450-V.P.): Ecuador, Pichincha – Prov., 7 km NW Mindo, Sachatamia, 1700m, 0°1'35"S 78°45'34"W, 8.-11. XII. 2004, leg. Volker PELZ; 1 male (GS 2902-V.P.): Ecuador, Pichincha – Prov., 2,5 km SE Santa Rosa, Reserva Las Gralarias, 2068 m, 0°0'37"S 78°43'50"W, 3.-5. XI. 2005, leg. Volker PELZ; 1 male (GS 1565-V.P.): Ecuador, Napo –

Prov., 12 km SSE Cosanga, 2120 m, 0°37'26"S 77°48'51"W, 24.X.2002, sta 36, leg. GIELIS & PELZ; all CVPR.

This species was recently found in Gualaceo-Limon, Province Morona-Santiago where collected at the altitude of 2200 m.

R e m a r k s. Externally *O. marmorobrunnea* characterizes by slight variation especially in the size and number of cornuti and terminal part of sacculus. The length of valva and sacculus are less variable.

***Orthocomotis cosangana* sp.n.**

(Figs 22, 52)

D i a g n o s i s. Facies of *O. cosangana* sp.n. as in *O. marmorobrunnea* but *O. cosangana* sp.n. is easily distinguished by the genitalia especially by the presence of postbasal process of sacculus.

E t y m o l o g y. The species epithet refers to the type locality. It is defined as a noun in apposition.

D e s c r i p t i o n. Wing span 24 mm. Head and thorax brownish, end of tegula whitish; labial palpus 1.3, brownish, rather cream terminally. Ground colour of forewing whitish, white in terminal area, grey in dorsal part of wing and between some elements of markings; refractive green scaling along vein CuA2, in median cell and at disc; numerous scattered brown scales and a few rust ones present; spots along edges and markings brown; terminal marking very slender. Cilia white, divisions brown. Hindwing brownish grey with traces of whitish strigulae; cilia brownish grey.

Male genitalia (Fig. 52). Uncus short, moderately broad; valva broad at base, with short postsaccular portion; sacculus provided with sharp process near one fourth of ventral edge and terminal process; aedeagus rather slender; coecum penis moderately large; cornuti one group consisting of ca 10 fairly short spines.

Female not known.

Holotype, male: "Ecuador, Napo – Prov., 15 km SE Cosanga, Cocodrilo, 1850 m, 0°38'56"S 77°47'34"W, 27.X.2002, sta 39, leg. GIELIS & PELZ"; GS 1515-V.P.; CVPR.

Paratype: 1 male (GS 1765-V.P.): Ecuador, Napo – Prov., 15 km SE Cosanga, Cocodrilo, 1850 m, 0°38'56"S 77°47'34"W, 23.-26. VI 2003, leg. Volker PELZ; CVPR

***Orthocomotis mediana* sp.n.**

(Figs 23, 24, 53, 62)

D i a g n o s i s. Closely related to *O. exolivata* CLARKE, 1956 from Brazil and *O. sucumbiana* and *O. volochilesia* but *O. mediana* is distinguished by the median position of the process of sacculus.

E t y m o l o g y. Latin: mediana – median. The name refers to the median position of the process of sacculus. It is defined as a noun in apposition.

D e s c r i p t i o n. Wing span 21 mm (in male paratypes 22 mm to 24.5 mm, in female 26.5 mm). Head brownish cream, vertex browner; labial palpus brownish with cream end parts of two posterior segments; thorax brown with group of brownish cream scales. Forewing ground colour cream white, in terminal area white, in dorsal and basal portions grey; brown dots with a few rust scales on interfasciae; green scales on markings. Markings dark brown typical of the group with small blotch at mid-dorsum followed by a large rather rounded blotch just before tornal spot. Cilia whitish with brown interruptions. Hindwing greyish brown; cilia slightly paler.

Male genitalia (Fig. 53). Uncus rather slender, short; ventral edge of sacculus slightly concave before middle; process slender; termination minute; aedeagus slender, provided with dorsolateral lobe; cornuti numerous slender spines arranged in weakly separated groups.

Female genitalia (Fig. 62). Anteostial part of sterigma concave proximally, with two submedian prominences of distal edge; lateral portions convex; postostial part with two mediolateral, rounded lobes; corpus bursae with weak but large sclerites, the posterior of them extending into ductus bursae; distinct, bilobed sclerite in median portion of ductus bursae; accessory bursa large, with short ductus.

Holotype, male: "Ecuador, Tungurahua – Prov., 20 km E Baños, San Francisco, 1290 m, 1°24'39"S 78°14'23"W, 21.X.2002, sta 33, leg. GIELIS & PELZ"; GS 1579 VP.; CVPR.

Paratypes (5 males, 1 female): 1 male (GS 2919-V.P.) 1 female (GS 2907-V.P.): Ecuador, Pichincha – Prov., 7 km SW Tandayapa, Bellavista Research Station, F-Trail, 2258 m, 0°0'54"S 78°41'04"W, 1. XI. 2005, leg. Volker PELZ; 2 males (GS 2452-V.P., GS 2453-V.P.): Ecuador, Pichincha – Prov., 7 km NW Mindo, Sachatamia, 1700 m, 0°1'35"S 78°45'34"W, 8.-11. XII. 2004, leg. Volker PELZ; 1 male (GS 1578-V.P.): Ecuador, Napo – Prov., 15 km SE Cosanga, Cocodrilo, 1850 m, 0°38'56"S 77°47'34"W, 30.IX.2002, sta 12, leg. GIELIS & PELZ; 1 male (GS 1139-V.P.): Ecuador, Morona-Santiago – Prov., Macas, Proaño Alshi, 5 km SO Alshi, 1700 m, 27. IX.- 4. X. 2000, leg. Volker PELZ; all CVPR.

R e m a r k s. One specimen ("Ecuador, Prov. Pichincha, Pacto, Río Mashpi, 08.02.2004, 1150 m, leg. WOJTUSIAK & PYRCZ"; GS 802; MZUJ) differs from the above mentioned examples in the lack of orange dots of forewing, the shorter uncus and the shorter basal portion of sacculus.

***Orthocomotis sucumbiana* sp.n.**

(Figs 25, 54)

D i a g n o s i s. Closely related with *O. mediana* sp.n. but *O. sucumbiana* sp.n. with much broader aedeagus, the longer group of larger cornuti and the broader uncus.

E t y m o l o g y. The species name refers to the name of the province Sucumbios, the collection site of holotype. The name is defined as a noun in apposition.

D e s c r i p t i o n. Wing span 22 mm. Head and thorax brownish scaled with cream and brown; labial palpus over 1.5, brownish cream. Ground colour cream white, greyish in dorsal area and between some costal spots, sprinkled with brown and orange, with small green groups of refractive scales; similar scaling on some marking elements. Cilia white, divisions small, brownish. Hindwing greyish brown; cilia similar.

Male genitalia (Fig. 54). Uncus not tapering basally; posterior part of socius subtriangular; median process of sacculus broad, bent apically; posterior part straight ventrally; aedeagus stout, approximately as long as costa of valva, finely thorny dorsally; cornuti two groups of spines.

Female not known.

Holotype, male: "Ecuador, Prov. Sucumbios, Río Chigual, La Bonita, 25.06.1999, 1500 m"; GS 230; MZUJ.

***Orthocomotis volochilesia* sp.n.**

(Figs 26, 59)

D i a g n o s i s. Externally very similar and closely related to *O. cosangana* sp.n. and *O. mediana* sp.n. but *O. volochilesia* sp.n. distinguished by the long termination of sacculus and the slender aedeagus.

E t y m o l o g y. The name refers to the Volcan Chiles Massive. It is defined as noun in apposition.

D e s c r i p t i o n. Wing span ca 26 mm. Head cream with areas of brownish scales; labial palpus whitish cream, median joint brown along middle; thorax brownish cream. Ground colour of forewing whitish, in dorsal and median parts suffused with greyish, scaled with brown and orange; markings and costal spots dark brown, terminal spots paler. Cilia concolorous with ground

colour; divisions small, brownish. Hindwing pale brown-grey with indistinct brownish cream dots; cilia more cream than wing.

Male genitalia (Fig. 59). Uncus moderately broad, slightly expanding subterminally; valva broad with short terminal part; sacculus very long, convex, provided with postmedian thorn and long free termination; sclerite of transtilla distinct connected with median thorny part of anellus; juxta large, slightly tapering terminad; aedeagus slender with dentate dorsoposterior lobe; coecum penis moderately large, rather slender; cornuti numerous small spines and minute thorns.

Female not known.

Holotype, male: "Ecuador, Prov. Carchi, Volc Chiles massive. Res. Forest. Golondrinas, 2050 m, 28.06.1999"; GS 224; MZUJ.

***Orthocomotis shuara* sp.n.**

(Figs 27, 55)

D i a g n o s i s. Closely related with Brazilian *O. exolivata* CLARKE, 1956 but *O. shuara* sp.n. distinguished by the absence of the dorsopostmedian thorny area of sacculus and the shorter dorsolateral lobe of aedeagus.

E t y m o l o g y. The species is named for the Shuar Indians who live in the region around Macas. It is defined as noun in apposition.

D e s c r i p t i o n. Wing span 20 mm. Head and thorax cream ochreous; labial palpus 1.3. Ground colour of forewing cream suffused with pale brownish orange and brownish; some suffusions forming spots; marginal spots brown; some veins suffused with brown. Markings rust brown with dark brown parts and suffusions (e.g. on veins); basal blotch preserved at dorsum, postbasal marking consisting of median and weak costal parts; median fascia well developed at costa and dorsum, with a few spots in median part of wing; subterminal blotch extending from costa to postmedian part of termen; terminal marking weak. Cilia cream with brownish and ferruginous scales and brown divisions. Hindwing dark brown; cilia paler.

Male genitalia (Fig. 55). Uncus rather short, fairly broad terminally; socius broadest near middle; ventral edge of sacculus distinctly convex, subterminal process moderate, distinctly tapering terminally; aedeagus fairly long, provided with large dorsolateral lobe terminating in a curved process; cornuti arranged in two groups; smaller anterior, consisting of short spines and larger posterior with numerous cornuti of various sizes.

Female not known.

R e m a r k. The adult was already mentioned and figured by RAZOWSKI & PELZ (2003) as *Orthocomotis* sp. near *exolivata* CLARKE, 1956.

Holotype, male: "Ecuador, Morona-Santiago – Prov., Macas, Proaño Inapula, CREA- Domono, 1100 m, 23.-26. III. 1998, leg. Volker PELZ"; GS 893-V.P.; CVPR.

***Orthocomotis alshiana* sp.n.**

(Figs 28, 56)

D i a g n o s i s. Very close to *O. volochilesia* sp.n. and *O. shuara* sp.n., but *O. alshiana* sp.n. with the broader uncus and subterminal process of sacculus, the postmedian broadening of socius and the shorter laterally spined aedeagus.

E t y m o l o g y. The specific epithet refers to the locality where the holotype was collected. It is defined as noun in apposition.

D e s c r i p t i o n. Wing span 24 mm. Head and thorax cream scaled with pale ferruginous and brown; labial palpus ca. 1.7. Ground colour of forewing whitish dotted and sprinkled with brown; dorsum suffused with brownish with orange, green and brown scales; greenish scales also on markings. Markings brown consisting of broad, incomplete basal blotch and postbasal fascia;

median fascia interrupted medially where weak brown spots present; subapical blotch extending towards end of termen, with costal strong spots. Cilia whitish; divisions brown. Hindwing greyish brown with paler spots; cilia concolorous with median part of wing.

Male genitalia (Fig. 56). Uncus club-shaped gradually tapering terminally; socius not longer than uncus; ventral edge of sacculus moderately convex; subterminal process broad basally; aedeagus moderate with short dorsolateral lobe and some thorns of terminal third laterally.

Female not known.

Holotype, male: "Ecuador, Morona-Santiago – Prov., Macas, Proaño Alshi, 5 km SO Alshi, 1700 m, 5. VII. 1999, leg. Volker PELZ"; GS 940-V.P.; CVPR.

R e m a r k s. The adult was already mentioned and figured in RAZOWSKI & PELZ (2003) as *Orthocomotis* sp. near *exolivata* CLARKE, 1956.

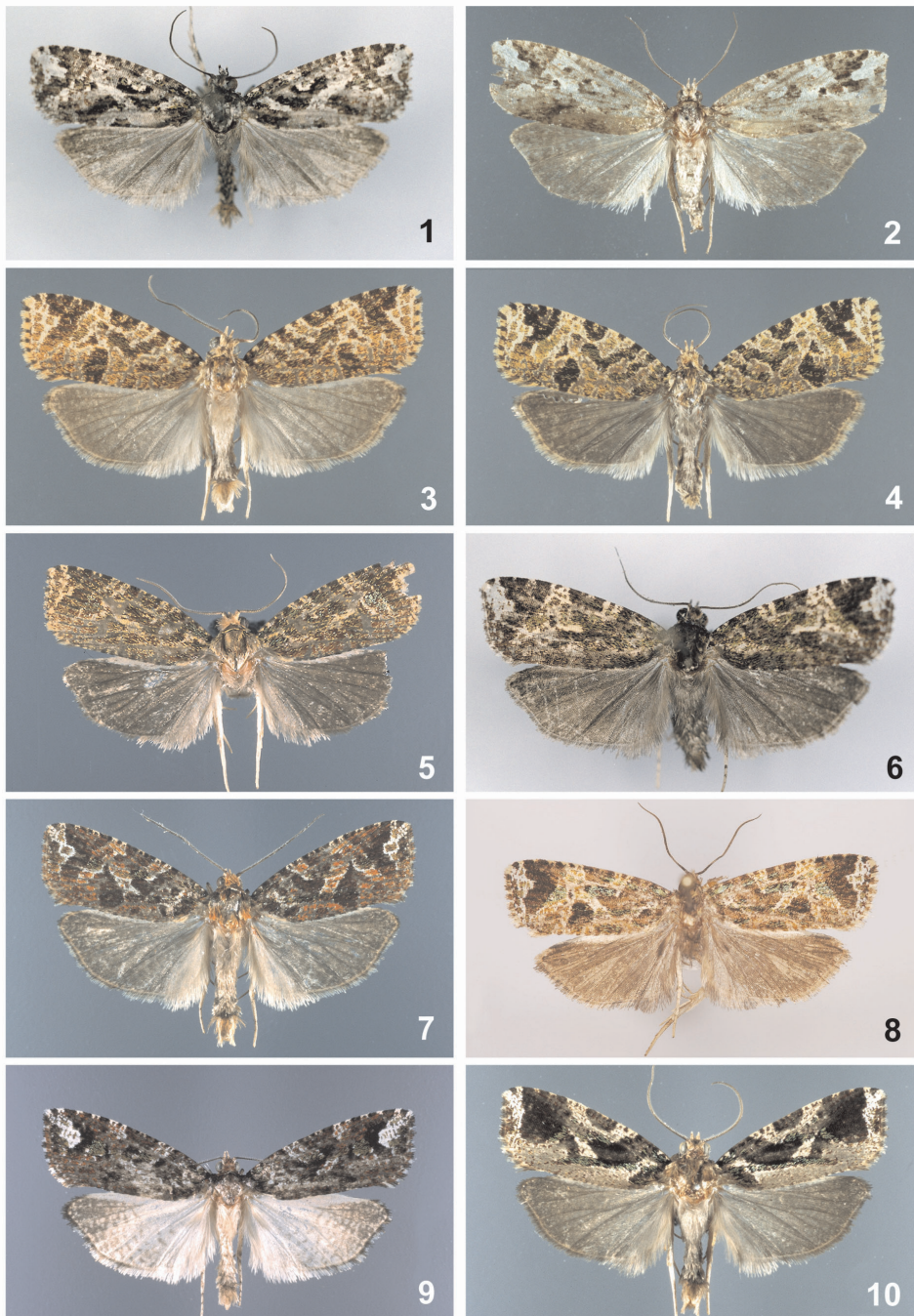
There are two specimens which may represent close species differing from the above described holotype in the shapes of aedeagi and the size and number of cornuti: 1 male (GS 1575-V.P.): Ecuador, Napo – Prov., 15 km SE Cosanga, Cocodrilo, 1850 m, 0°38'56"S 77°47'34"W, 25.X.2002, sta 37, leg. GIELIS & PELZ; (Figs 29, 57) and 1 male (GS 2464-V.P.): Ecuador, Tungurahua – Prov., 17 km E Baños, Río Verde, 1500 m, 1°24'11"S 78°17'22"W, 1.-3. XII. 2004, leg Volker PELZ. (Figs 30, 58), both CVPR. Their systematic position cannot be solved on basis of so scarce material.

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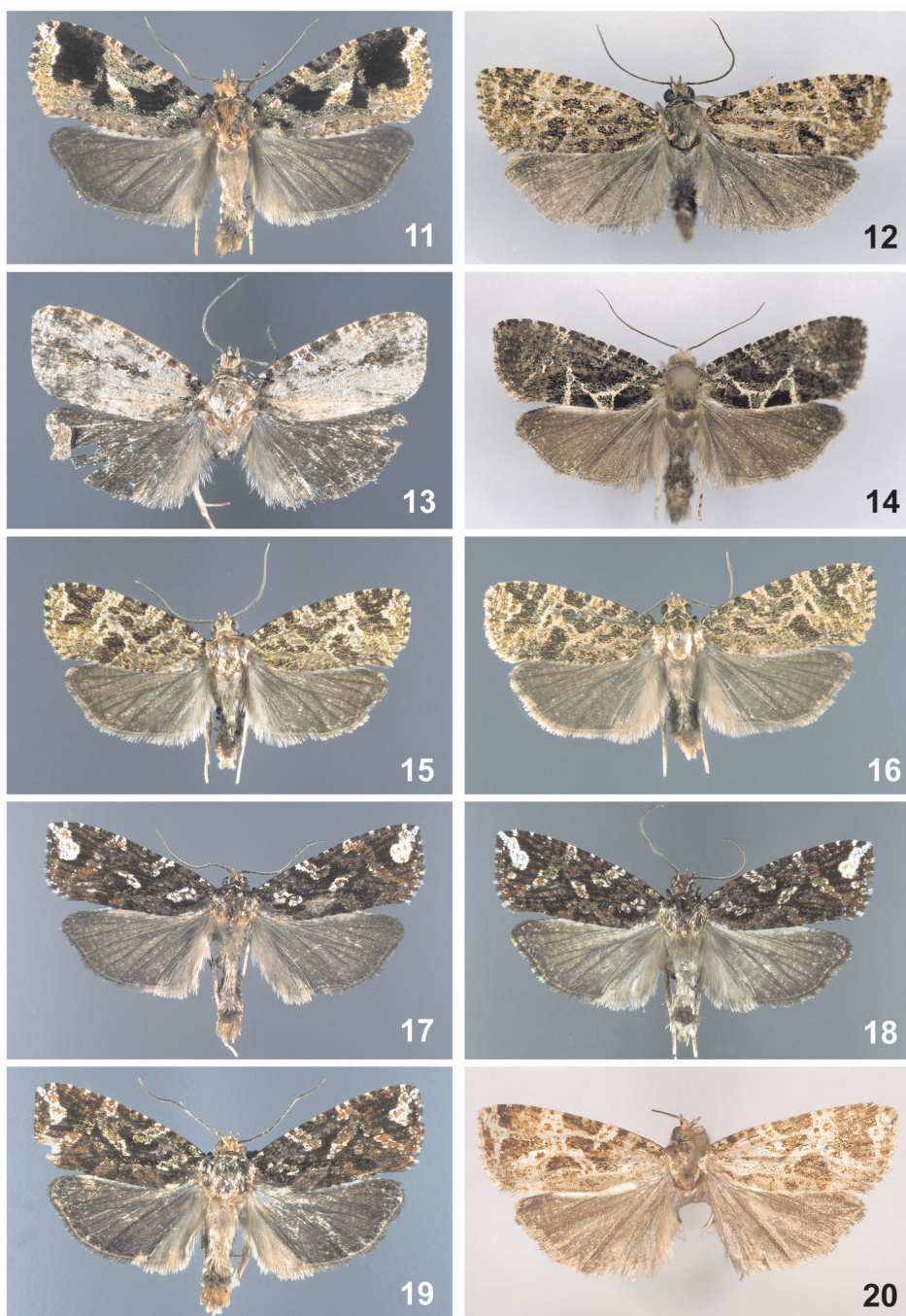
We thank Mr. Artur CZEKAJ for his help in processing digital images.

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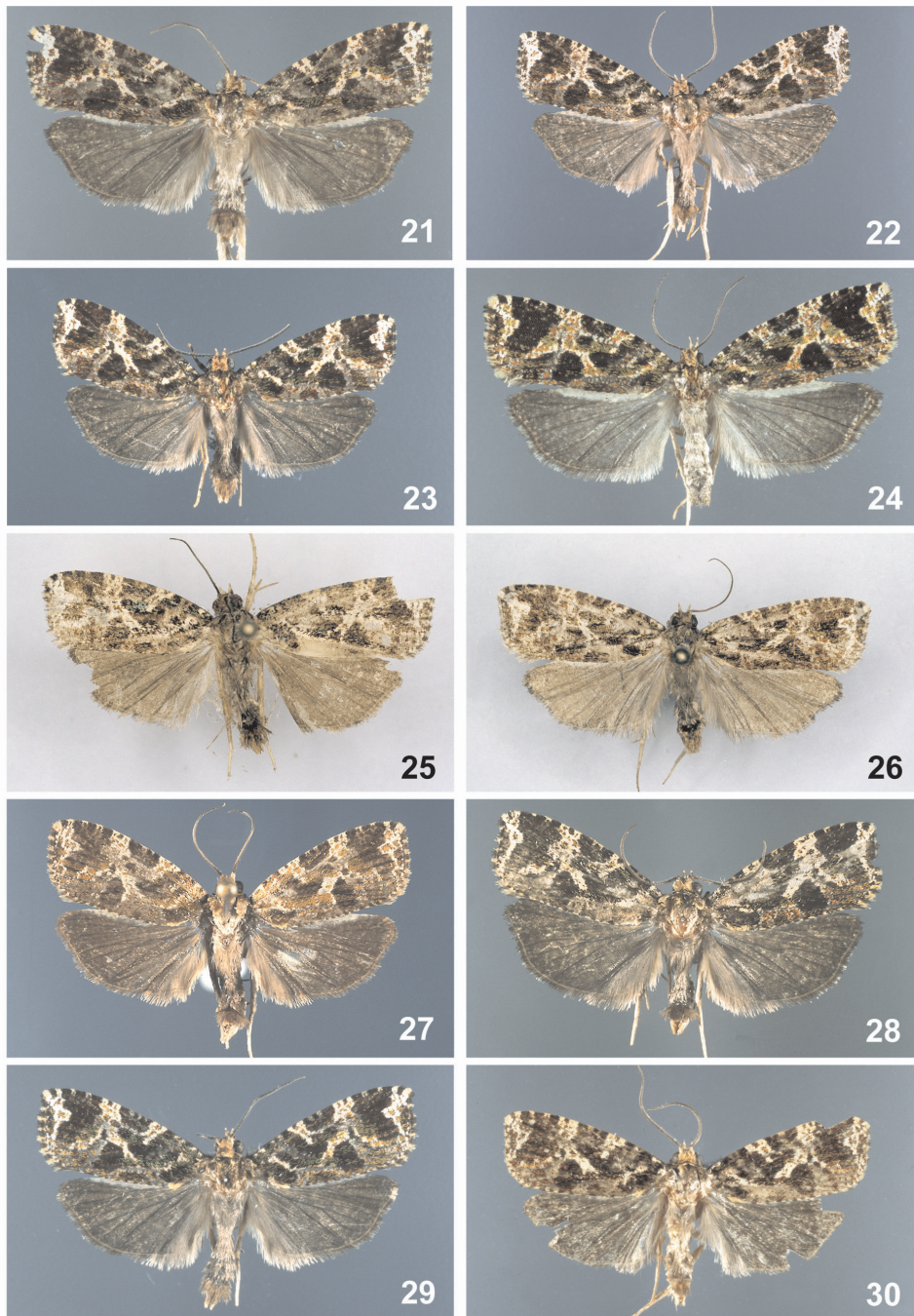
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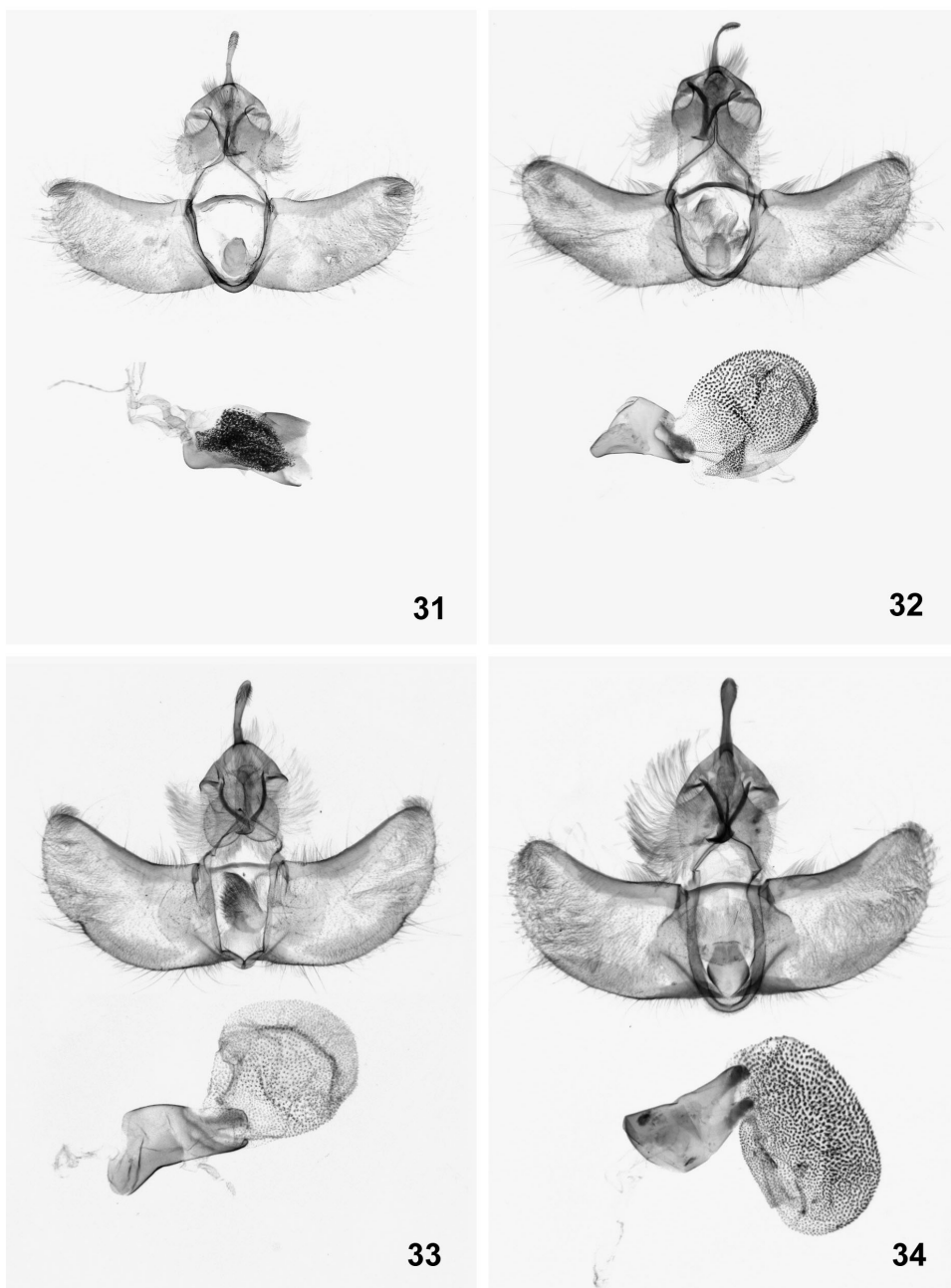
Figs 1-10. Adults: 1,2 – *Orthocomotis parexpansa* sp.n., 1 – holotype, 2 – paratype female (GS 2908-V.P.), Tandayapa, Belavista, wing span 25.5 mm, 3,4 – *Orthocomotis sachatamiae* sp.n., 3 – holotype, 4 – paratype female (GS 2906-V.P.), Mindo, Las Gralarias, wing span 24.5 mm, 5 – *Orthocomotis* sp. near *expansa* RAZOWSKI 1999, male (GS 1001-V.P.), Macas, Alshi, wing span 23 mm, 6 – *Orthocomotis lactistrigata* sp.n., holotype, 7 – *Orthocomotis ferruginea* sp.n., holotype, 8 – *Orthocomotis yanayacu* sp.n., holotype, 9 – *Orthocomotis albobasalis* sp.n., holotype, 10 – *Orthocomotis herbacea* CLARKE, 1956, male (GS 2455-V.P.), Mindo, Sachatamia, wing span 23 mm.



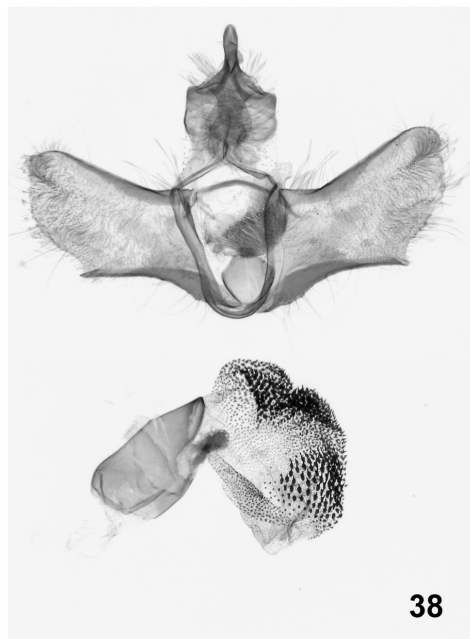
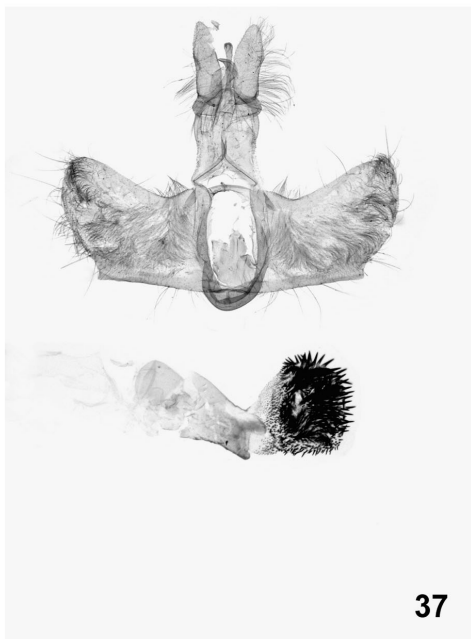
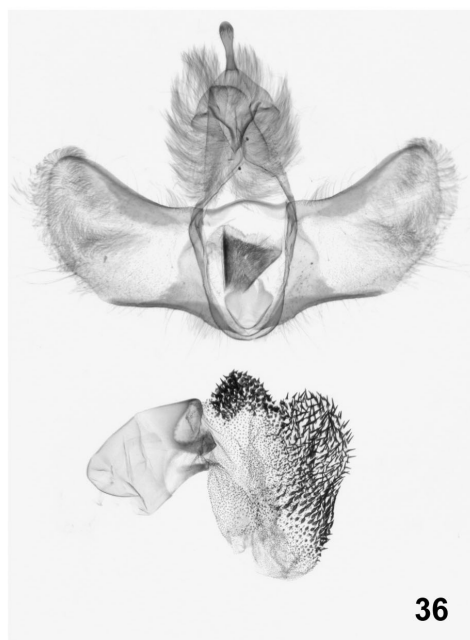
Figs 11-20. Adults: 11 – *Orthocomotis andina* sp.n., holotype, 12 – *Orthocomotis carolina* sp.n., holotype, 13 – *Orthocomotis puyoana* sp.n., holotype, 14 – *Orthocomotis golondrina* sp.n., holotype, 15,16 – *Orthocomotis longuncus* RAZOWSKI & PELZ, 2003, 15 – male, GS 2465-V.P., Baños, Río Verde, wing span 20 mm, 16 – male (GS 1140-V.P.), Macas, ProañoInapula, wing span 22 mm, 17,18 – *Orthocomotis ?euchaldera* CLARKE, 1956: 17 – male (GS 1514-V.P.), Cosanga, wing span 29 mm, 18 – male (GS 2938-V.P.), Mindo, Las Gralarias, wing span 29.5 mm, 19 – *Orthocomotis gielisi* sp. n., holotype male, 20 – *Orthocomotis pactoana* sp.n. holotype.



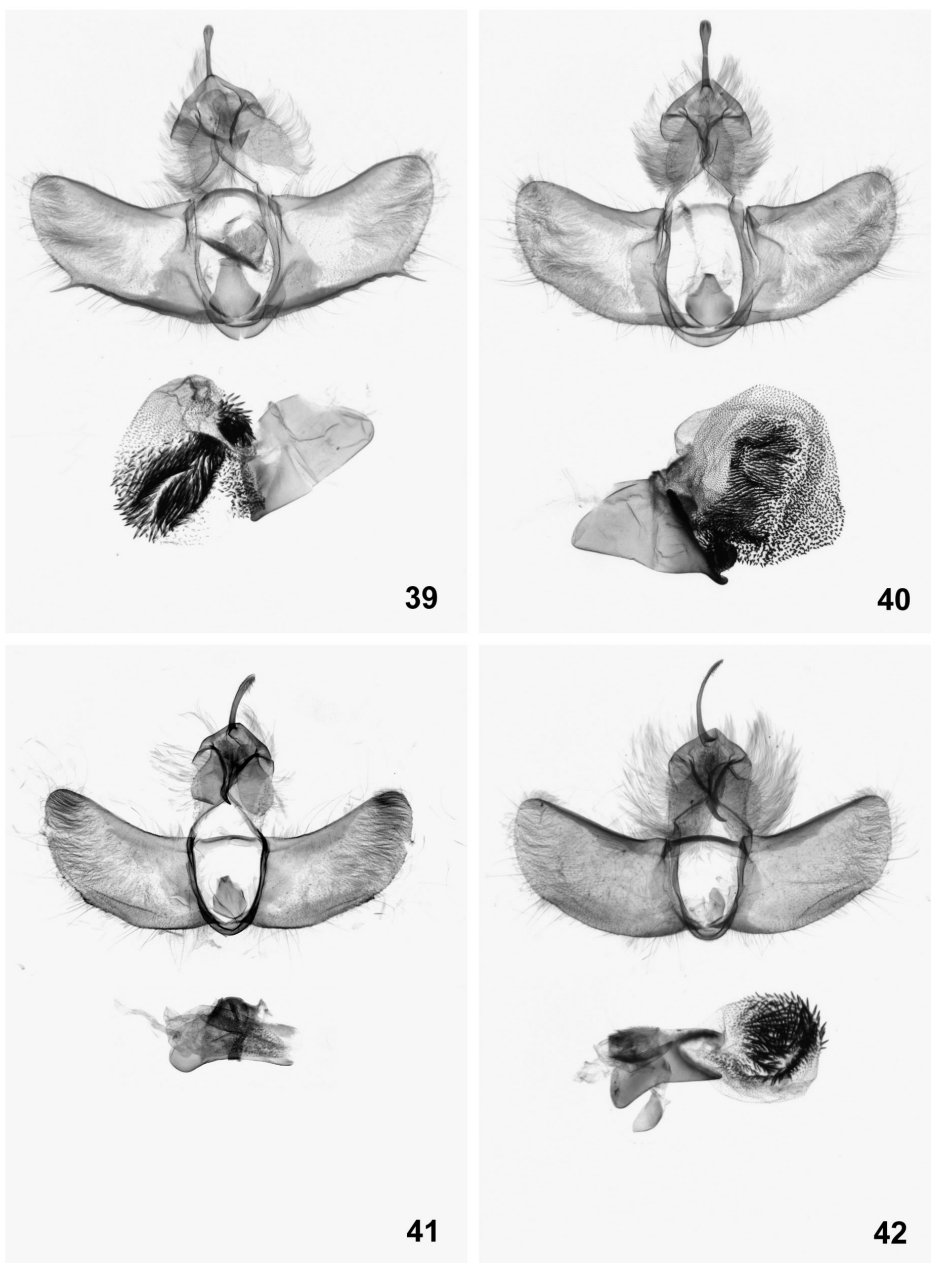
Figs 21-30. Adults: 21 – *Orthocomotis marmorobrunnea* RAZOWSKI & WOJTUSIAK, 2006, male (GS 2448-V.P.), Mindo, Sachatamia, wing span 26.5 mm, 22 – *Orthocomotis cosangana* sp.n., holotype, 23,24 – *Orthocomotis mediana* sp.n., 23 – holotype, 24 – paratype female (GS 2907-V.P.), Tandayapa, Bellavista, wing span 26.5 mm, 25 – *Orthocomotis sucumbiana* sp.n., holotype, 26 – *Orthocomotis volochilesia* sp.n., holotype, 27 – *Orthocomotis shuara* sp.n., holotype, 28 – *Orthocomotis alshiana* sp.n., holotype, 29 – *Orthocomotis* sp. near *alshiana* sp.n., male (GS 1575-V.P.), Cosanga, wing span 24 mm, 30 – *Orthocomotis* sp. near *alshiana* sp.n., male (GS 2464-V.P.), Baños, Río Verde, wing span 24.5 mm.



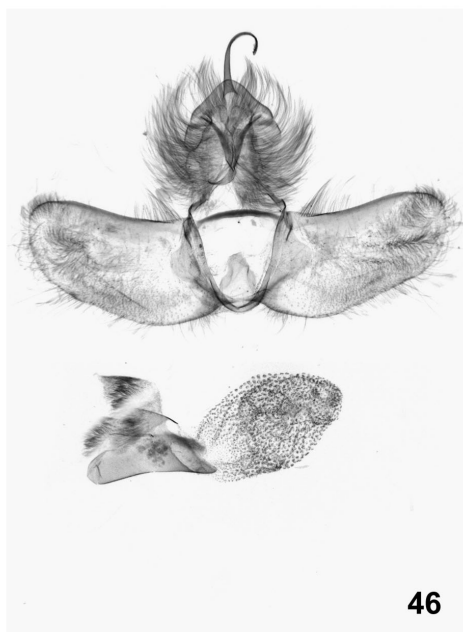
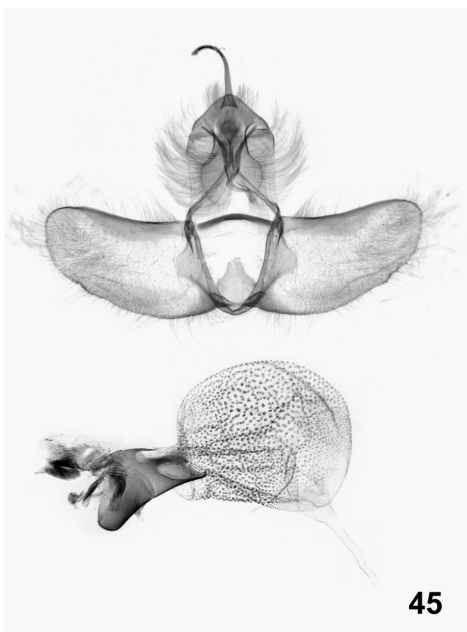
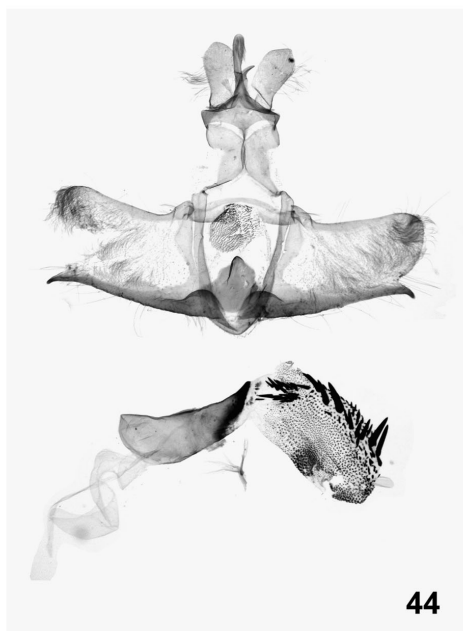
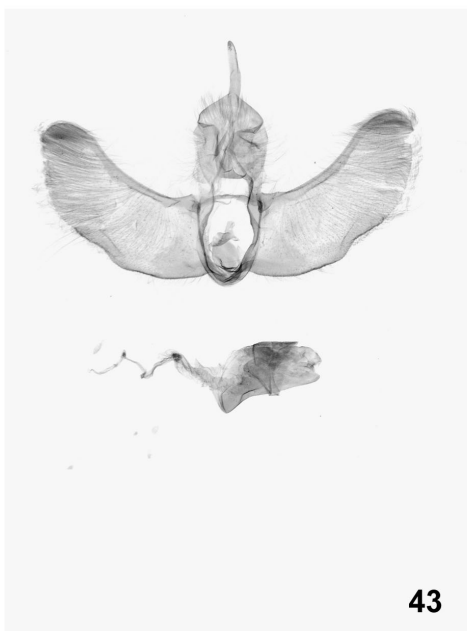
Figs 31-34. Male genitalia: 31,32 – *Orthocomotis parexpansa* sp.n., 31 – holotype, 32 – paratype, GS 2931-V.P., 33 – *Orthocomotis sachatamiae* sp.n., holotype, 34 – *Orthocomotis* sp. near *expansa* Razowski 1999, GS 1001-V.P.



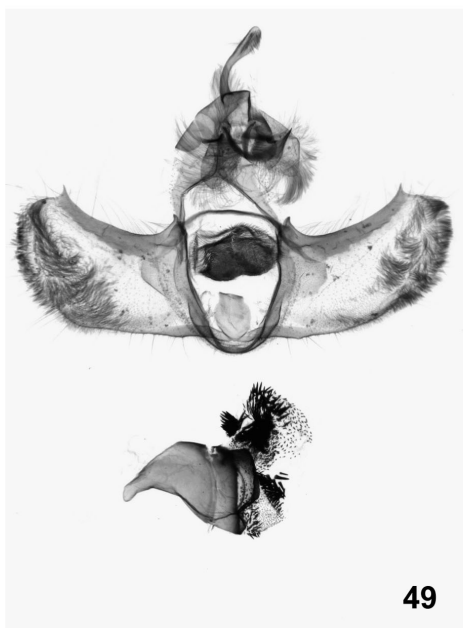
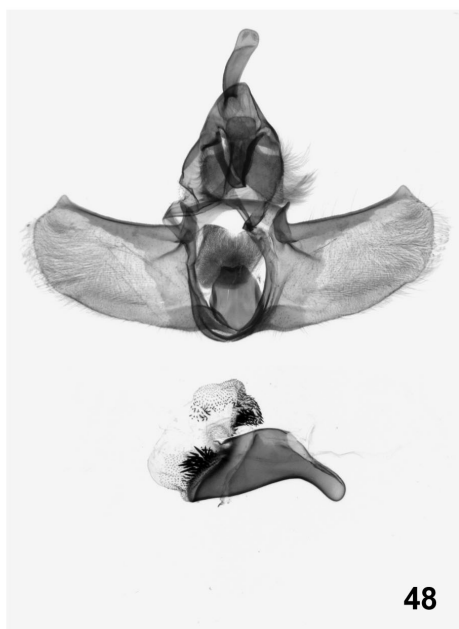
Figs 35-38. Male genitalia: 35 – *Orthocomotis lactistrigata* sp.n., holotype, 36 – *Orthocomotis ferruginea* sp.n., holotype, 37 – *Orthocomotis yanayacu* sp.n., holotype, 38 – *Orthocomotis albobasalis* sp.n., holotype.



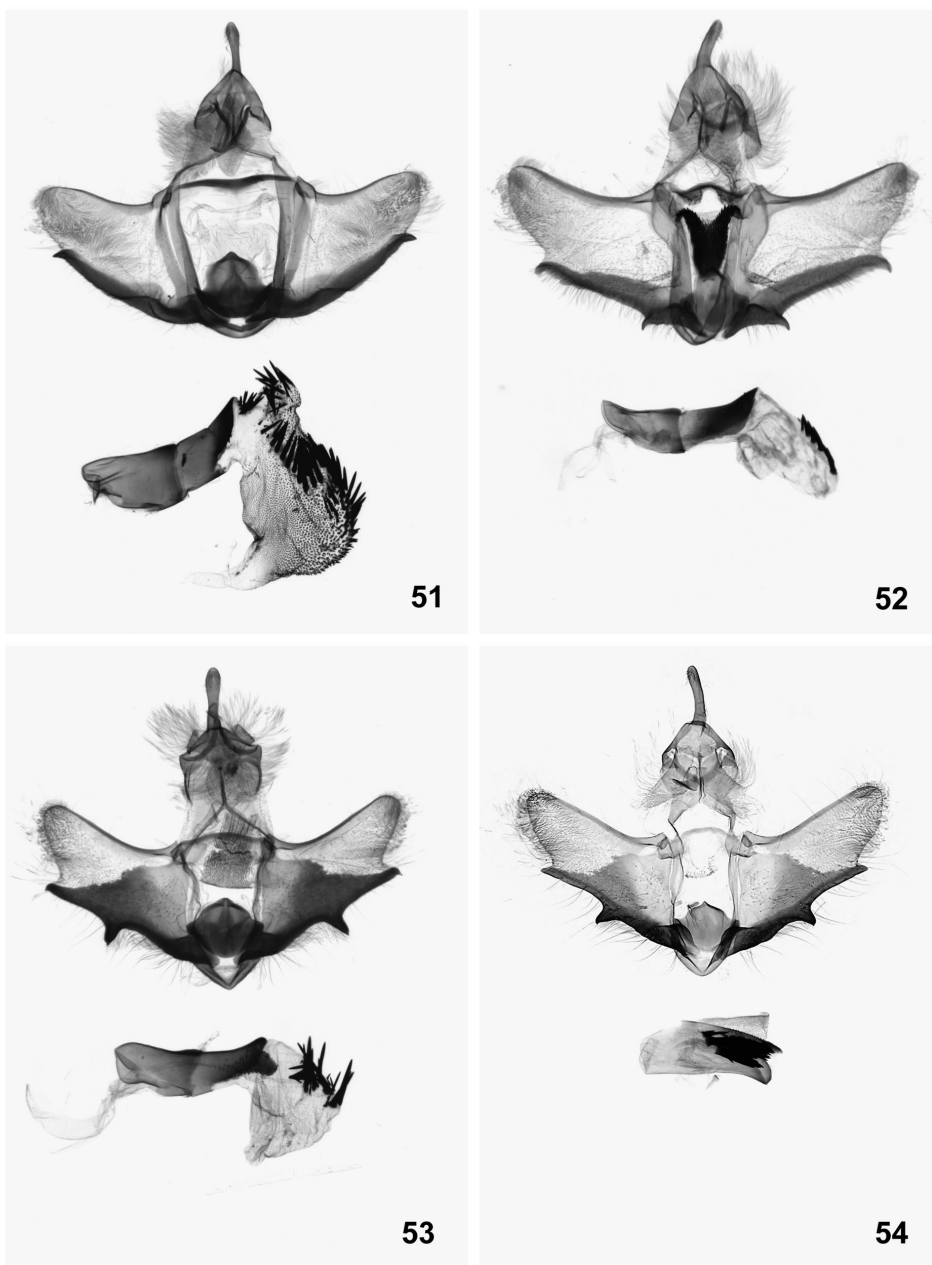
Figs 39-42. Male genitalia: 39 – *Orthocomotis herbacea* CLARKE, 1956, Mindo, Sachatamia (GS 2455-V.P.), 40 – *Orthocomotis andina* sp.n., paratype, Cosanga, (GS-1768-V.P.), 41 – *Orthocomotis carolina* sp.n., holotype, 42 – *Orthocomotis puyoana* sp.n., holotype.



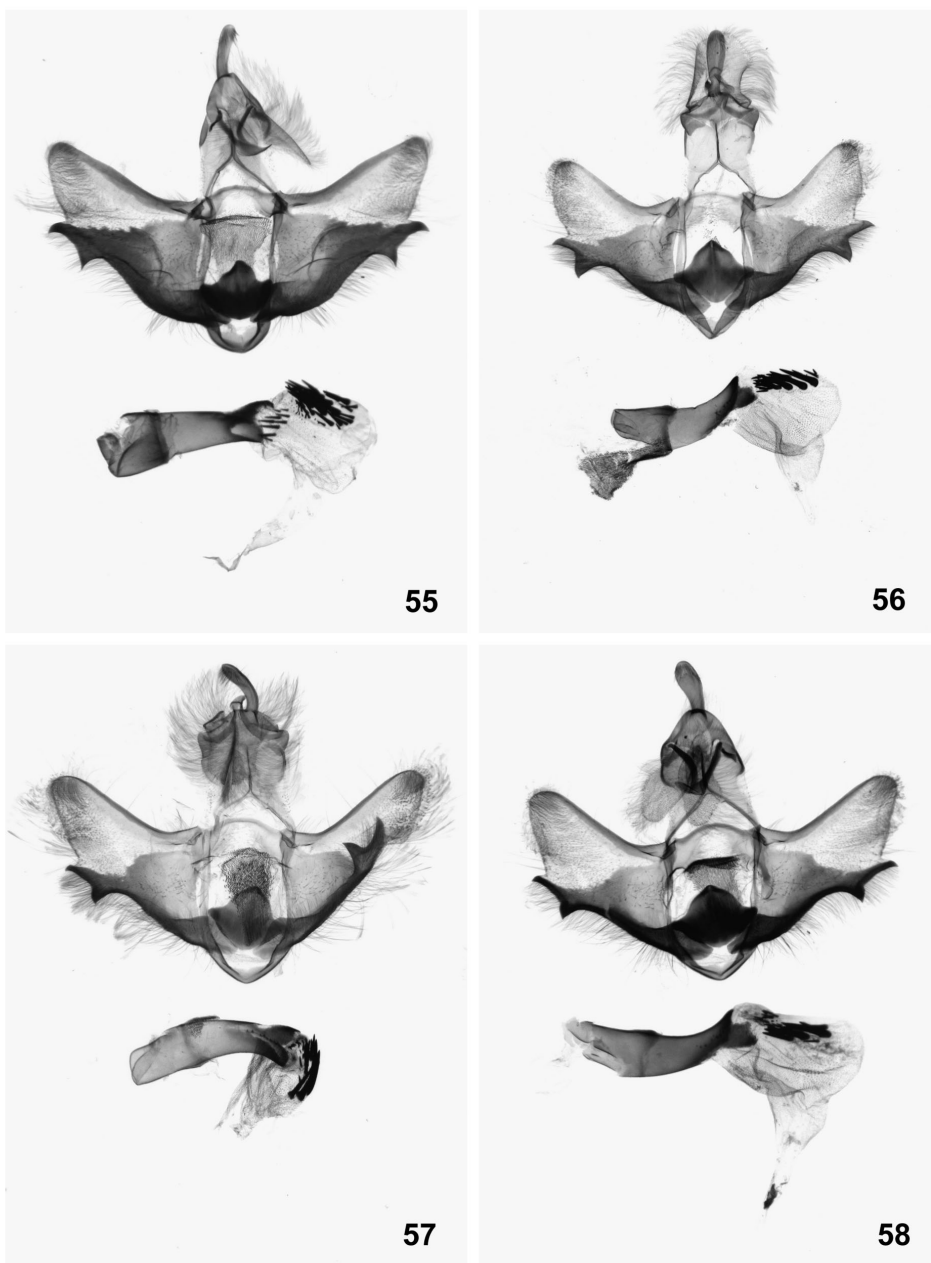
Figs 43-46. Male genitalia: 43 – *Orthocomotis golondrina* sp.n., holotype, 44 – *Orthocomotis pactoana* sp.n. holotype, 45,46 – *Orthocomotis longuncus* RAZOWSKI & PELZ, 2003, 45 – Baños, Río Verde (GS 2465-V.P.), 46 – Macas, ProañoInapula (GS 1140-V.P.).



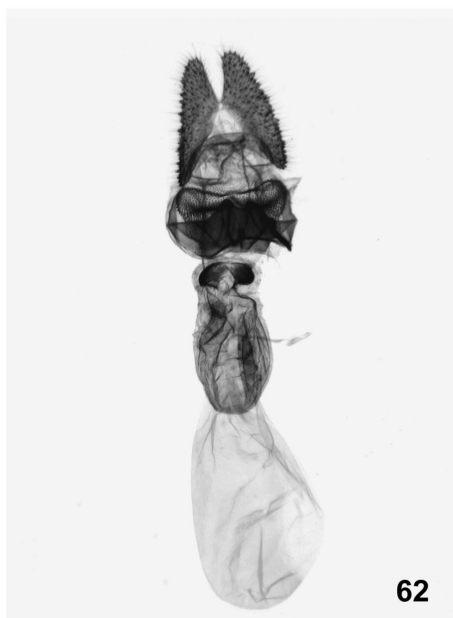
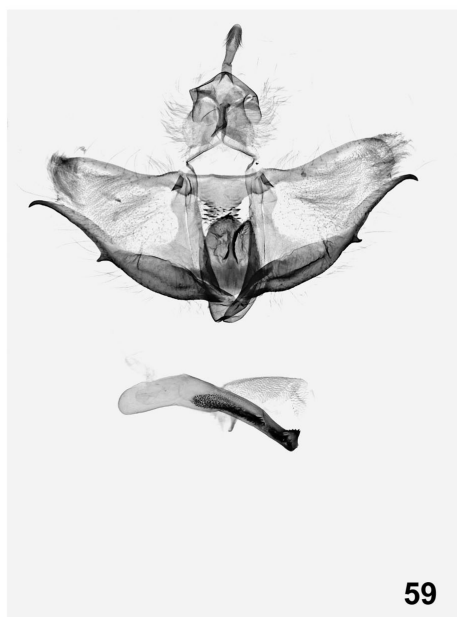
Figs 47-50. Male genitalia: 47,48 – *Orthocomotis ?euchaldera* CLARKE, 1956: 47 – Cosanga, GS 1514-V.P., 48 – Mindo Las Gralarias, GS 2939-V.P., 49 – *Orthocomotis domonoana* RAZOWSKI & PELZ, 2003, holotype, 50 – *Orthocomotis gielisi* sp.n., holotype.



Figs 51-54. Male genitalia: 51 – *Orthocomotis marmorobrunnea* RAZOWSKI & WOJTUSIAK, 2006, Mindo, Sachatamia (GS 2448-V.P.), 52 – *Orthocomotis cosangana* sp.n., holotype, 53 – *Orthocomotis mediana* sp.n., holotype, 54 – *Orthocomotis sucumbiana* sp.n., holotype.



Figs 55-58. Male genitalia: 55 – *Orthocomotis shuara* sp.n., holotype, 56 – *Orthocomotis alshiana* sp.n., holotype, 57 – *Orthocomotis* sp. near *alshiana* sp.n., Cosanga (GS 1575-V.P.), 58 – *Orthocomotis* sp. near *alshiana* sp.n., Baños, Río Verde (GS 2464-V.P.).



Figs 59-62. Male and female genitalia: 59 – *Orthocomotis volochilesia* sp.n., holotype, 60 – *Orthocomotis parexpansa* sp.n., paratype female (GS 2908-V.P.), Tandayapa, Bellavista, 61 – *Orthocomotis sachatamiae* sp.n., paratype female Mindo, Las Gralarias (GS 2906-V.P.), 62 – *Orthocomotis mediana* sp.n., paratype female, Tandayapa, Bellavista (GS 2907-V.P.).