

# Review of the Neotropical species of the family Pterophoridae, part I: Ochyroticinae, Deuterocopinae, Pterophorinae (Platyptiliini, Exelastini, Oxyptilini) (Lepidoptera)

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The Pterophoridae (Ochyroticinae, Deuterocopinae, Pterophorinae (Tribus: Platyptiliini, Exelastini, Oxyptilini)) species of the Neotropical fauna are reviewed. The species are redescribed. Moths are illustrated in colour for the first time, their genitalia are illustrated in line drawings. The examination of type specimens revealed the presence of four new synonyms: *Platyptilia juanvoinas* Gielis, 1999, is a junior synonym of *Platyptilia gravior* Meyrick, 1932; *Platyptilia jonesi* Gielis, 1996, is a junior synonym of *Platyptilia sennopis* Meyrick, 1931; *Oxyptilus maleficus* Meyrick, 1926, is a junior synonym of *Leptodeuterocopus neales* (Walsingham, 1915); *Lioptilus parvus* Walsingham, 1880, is a junior synonym of *Lioptilodes albistriolatus* (Zeller, 1871). During the study of much new material 40 new species were discovered: *Leptodeuterocopus tungurahue*, *L. angulatus*, *L. panamaensis*, *L. duchicela*, *Sochchora mulinus*, *Melanoptilia nigra*, *Platyptilia spicula*, *Stenoptilodes maculatus*, *S. agricultura*, *S. heppneri*, *S. medius*, *S. altiaustralis*, *Postplatyptilia nebuloarbustum*, *P. antillae*, *P. caribica*, *P. uruguayensis*, *P. pluvia*, *P. seitetazas*, *P. transversus*, *P. carchi*, *P. boletus*, *P. ugartei*, *P. drechseli*, *P. corticis*, *P. zongoensis*, *P. vorbecki*, *Amblyptilia landryi*, *A. kosteri*, *Lioptilodes altivolans*, *L. arequipa*, *L. yungas*, *L. salarius*, *L. cocodrilo*, *Michaelophorus margaritae*, *M. bahiaensis*, *Geina integumentum*, *Capperia browni*, *Buckleria brasilia*, *Megalorhipida paraiso*, *M. dubiosa*. In the larger genera the species are arranged in groups. For a distinct group of species a new genus: *Melanoptilia* is proposed. A comprehensive checklist of the species has been made. To facilitate identification a key is presented to the genus level.

## Introduction

After a request to review the results of the Danish expeditions to Patagonia, I took on the task of reviewing the Neotropical fauna as a whole. At that time, in 1985, this seemed a nice job, with only a limited number of species. From the entire Neotropical region approximately 125 species were known, so this should not present too many problems. Examining the type specimens was time consuming, but the types were almost all available. What had not been taken into account was the vast amount of material which was present in numerous collections. After the first publications on the Pterophoridae of the Neotropical fauna, it became apparent that there were countless specimens waiting to be identified.

After the first series of specimens were identified, I had the impression that collecting had been done in a number of areas, omitting areas that in my opinion needed to be examined as well. For this reason two major expeditions were undertaken by Dutch microlepidopterists. Each of these expeditions lasted three and a half months. The first was devoted to northern Argentina, the second to central Chile. The author later undertook a six week collecting trip to Ecuador, focussing on the forests of the high Andes

slopes, with less attention to the lowland rain forest of the Amazon Basin. During these trips a large number of Pterophoridae were collected. It became evident that the limited number of species known in 1985 represented only the tip of the iceberg. With increasing knowledge at species level it became clear that the generic position of some of these species needed to be reviewed. The genus concept, based on (West) Palaearctic species, and formed by mainly European authors in the 18<sup>th</sup>, 19<sup>th</sup>, and early 20<sup>th</sup> century, needed an update. In 1993 a generic revision of the superfamily Pterophoroidea (Gielis) was published which reflects our current knowledge of the taxonomy of plume-moths; as our knowledge increases this will be revised by a later author. For the Neotropical fauna this revision was an essential step in classifying the species that were encountered. It turned out that five new genera were needed at that time. One genus, described for the Afrotropical fauna, appeared to have representatives in this fauna as well. With the present publication knowledge has further increased and an additional genus is proposed. The examination of material so far has led to the recognition of more than 300 species.

The subfamilies and tribes mentioned in the title of this publication comprise 166 species. The study of the presently available material from these subfamilies is complete, and because it comprises a distinct group, it is worthwhile compiling into a publication. The remaining tribes, Oidaematophorini and Pterophorini in the subfamily Pterophorinae, will be treated in the second volume on this fauna. The manuscript of the second volume is in preparation, but numerous specimens need to be checked before it can be finished.

The descriptions in this publication follow a consistent format: name of the taxon with author and year of publication; the original spelling of the taxon and the page number of the publication, and the recognized synonyms; the heading 'Material' lists the type-specimens and their data; identification notes are given; a (re)description including: external characteristics; genitalia; flight period; hostplant records; parasite records; distribution information (country: province: town); remarks if applicable, and in case of a new species, the etymology. Each species is illustrated in colour and the male and female genitalia are illustrated by line drawings. In a few cases larvae were collected and reared by the author, these will be illustrated in future publications in colour.

### Key to the genera of Pterophoridae in the Neotropical region

1. Wings not cleft ..... *Ochyrotica* Walsingham
- Wings cleft ..... 2
2. Forewing cleft twice (second cleft may be poor) or three times .....  
..... *Leptodeuteroecopus* Fletcher
- Forewing cleft once ..... 3
3. Third lobe of hindwing with one vein ..... 4
- Third lobe of hindwing with two veins ..... 26
4. Large species (>30 mm) with wide, rectangularly shaped forewings .....  
..... *Quadriptilia* Gielis
- Smaller species with acute tipped, or oblique termen to forewing ..... 5
5. Forewing with a double spot before the base of the cleft ..... *Bipunctiphorus* Gibeaux
- Forewing with different or with additional markings ..... 6

6. Uncus double .....	<i>Paraamblyptilia</i> Gielis	
- Uncus single .....		7
7. Uncus with bifid tip .....	<i>Stockophorus</i> Gielis	
- Uncus tip not bifid .....		8
8. Sacculus absent or poorly developed .....		9
- Sacculus well developed .....		16
9. Forewing lobes acutely tipped, without distinct termen .....		10
- Forewing lobes with distinct termen .....		11
10. Valva without a large spine or spines .....	<i>Megalorhipida</i> Amsel	
- Valva with large spine or spines .....	<i>Michaelophorus</i> Gielis	
11. Valva with spine .....		12
- Valva without spine .....		14
12. Spine in valva with circular shape .....	<i>Marasmarcha</i> Meyrick	
- Spine or spines in valva not circular .....		13
13. Spines originate from saccular edge .....		
..... <i>Cnaemidophorus</i> Wallengren/ <i>Exelastis</i> Meyrick (partim)		
- Spines originate from saccular and cucullar edge .....	<i>Melanoptilia</i> Gielis <b>gen. nov.</b>	
14. Valva ellipsoidal .....	<i>Sochchora</i> Walker	
- Valva with basal stalk, widened distally .....		15
15. Third lobe without scale-tooth .....	<i>Exelastis</i> Meyrick (partim)	
- Third lobe with scale-tooth .....	<i>Sphenarches</i> Meyrick	
16. Sacculus simple .....		17
- Sacculus bilobed or tending to be so .....		20
17. Dorsally at base of valva a pronounced anti-saccus .....	<i>Lioptilodes</i> Zimmerman	
- Dorsally at base of valva a weak anti-saccus .....		18
18. Sacculus enlarged blister-like .....	<i>Uroloba</i> Walsingham	
- Sacculus not enlarged or slightly enlarged .....		19
19. Sacculus not enlarged .....	<i>Platyptilia</i> Hübner	
- Sacculus basally slightly enlarged .....	<i>Gillmeria</i> Tutt	
20. Saccus forked .....		21
- Saccus simple .....		22
21. Saccus long, more than twice the width at the base .....	<i>Lantonophaga</i> Zimmerman	
- Saccus short, not more than one and a half times the width at the base .....		
..... <i>Anstenoptilia</i> Zimmerman		
22. Vinculum and saccus simple, saccus not enlarged .....		23
- Vinculum and saccus complex .....		25
23. Saccus ending in bristle-like structure .....	<i>Amblyptilia</i> Hübner	
- Saccus in the shape of a thorn or spine .....		24
24. Uncus small, hardly exceeding the tegumen .....	<i>Stenoptilia</i> Hübner	
- Uncus well developed .....	<i>Paraplatyptilia</i> Bigot & Picard	
25. Distal sacculus segment complex .....	<i>Stenoptilodes</i> Zimmerman	
- Distal sacculus segment simple .....	<i>Postplatyptilia</i> Gielis	
26. Forewing vein R1 absent .....		27
- Forewing vein R1 present .....		28
27. Forewing veins R3 and R4 present .....	<i>Pselnophorus</i> Wallengren	
- Forewing veins R3 and R4 absent .....		
..... <i>Patagonophorus</i> Gielis/ <i>Chocophorus</i> Gielis & Matthews (partim)		

28. Forewing veins R2 and R3 absent ..... *Chocophorus* Gielis & Matthews (partim)  
 - Forewing veins R2 and R3 present ..... 29
29. Tibiae of mid legs with erect scale-brushes around base of spur pairs .....  
 ..... *Oidaematophorus* Wallengren  
 - Tibiae without scale-brushes around base of spur pairs ..... 30
30. Proximal spur pair of hindleg of equal length ..... *Adaina* Tutt  
 - Proximal spur pair of hindleg of unequal length ..... 31
31. Inner spur of proximal spur pair of hindleg less than twice the outer spur .....  
 ..... *Hellinsia* Tutt  
 - Inner spur of proximal spur pair of hindleg twice the length of outer spur .....  
 ..... *Emmelina* Tutt

**Checklist of Neotropical Pterophoridae (Ochyroticinae, Deuterocopinae,  
 Pterophorinae: tribus Platyptiliini, Exelastini, Oxyptilini),  
 with type localities and synonyms**

- Ochyrotica fasciata* Walsingham, 1891. Brazil.  
*O. placozona* Meyrick, 1921. Peru.  
*O. mexicana* Arenberger, 1990. Mexico.  
*O. gielisi* Arenberger, 1990. Panamá.  
*Leptodeuterocopus exquisitus* (Meyrick, 1921) (*Deuterocopus*). Brazil.  
*L. fortunatus* (Meyrick, 1921) (*Deuterocopus*). Brazil.  
*L. hipparchus* (Meyrick, 1921) (*Deuterocopus*). Brazil.  
*L. trinidad* Gielis, 1996. Trinidad.  
*L. tungurahue* **spec. nov.** Ecuador.  
*L. panamaensis* **spec. nov.** Panamá.  
*L. angulatus* **spec. nov.** Brazil.  
*L. duchicela* **spec. nov.** Ecuador.  
*L. neales* (Walsingham, 1915) (*Oxyptilus*). Mexico.  
*Oxyptilus maleficus* Medyrick, 1926. Peru. **Syn. nov.**  
*L. sochchoroides* Fletcher, 1910. Brazil.  
*L. zonites* (Meyrick, 1913) (*Oxyptilus*). Guyana.  
*L. gratus* (Meyrick, 1921) (*Deuterocopus*). Peru.  
*Sochchora albipunctella* Fletcher, 1911. Brazil.  
*S. donatella* Walker, 1864. Brazil.  
*S. dotina* Walsingham, 1915. Panamá.  
*S. mulinus* **spec. nov.** Brazil.  
*Quadriptilia philorectis* (Meyrick, 1926) (*Platyptilia*). Peru.  
*Q. rectangulodactylus* Gielis, 1994. Peru.  
*Q. obscurodactylus* Gielis, 1994. Colombia.  
*Melanoptilia arsenica* (Meyrick, 1921) (*Platyptilia*). Peru.  
*M. nigra* **spec. nov.** Ecuador.  
*M. chalcogastra* (Meyrick, 1921) (*Platyptilia*). Guyana.  
*M. haemogastra* (Meyrick, 1926) (*Platyptilia*). Peru.  
*Platyptilia gentiliae* Gielis, 1991. Argentina.  
*P. davisi* Gielis, 1991. Chile.

- P. vilema* B. Landry, 1993. Ecuador, Galapagos Islands.  
*P. semnopis* Meyrick, 1931. Brazil.  
     *P. jonesi* Gielis, 1996. Brazil. **Syn. nov.**  
*P. gravior* Meyrick, 1932. Costa Rica.  
     *Platyptilia juanvinas* Gielis, 1999. Costa Rica. **Syn. nov.**  
*P. spicula* **spec. nov.** Surinam.  
*P. carduidactylus* Riley, 1869. USA.  
     *Platyptilia cardui* Zeller, 1873. USA.  
     *Platyptilia hesperis* Grinnell, 1908. USA.  
*P. thyellopa* Meyrick, 1926. Colombia.  
*P. anniei* Gielis, 1997. Ecuador.  
*P. onias* Meyrick, 1916. Peru.  
*Gillmeria pallidactyla* (Haworth, 1811) (*Alucita*). Great Britain.  
     *Pterophorus migadactylus* Curtis, 1827. Great Britain.  
     *Alucita ochrodactyla* Treitschke, 1833. Austria/Hungary.  
     *Pterophorus marginidactylus* Fitch, 1855. USA.  
     *Pterophorus nebulaedactylus* Fitch, 1855. USA.  
     *Platyptilus bertrami* Roessler, 1864. Germany.  
     *Platyptilus bischoffi* Zeller, 1867. Terra typica unknown.  
     *Pterophorus cervinidactylus* Packard, 1873. USA.  
     *Platyptilus adustus* Walsingham, 1880. USA.  
     *Platyptilia chapmani* Tutt, 1896. Norway.  
     *Platyptilia bertrami* var. *foculella* Fuchs, 1901. Germany.  
     *Platyptilia sachalinensis* Matsumura, 1911. Russia.  
     *Platyptilia pallidiola* Matsumura, 1931. Japan.  
*Bipunctiphorus nigroapicalis* B. Landry & Gielis, 1992. Ecuador, Galapagos Islands.  
*B. pelzi* Gielis, 2003. Ecuador.  
*Anstenoptilia marmorodactyla* (Dyar, 1903) (*Platyptilia*). USA.  
     *Platyptilia fuscicornis* auct., nec Zeller, 1877.  
     *Platyptilia pasadenensis* Grinnell, 1908. USA.  
*A. hugoiella* Gielis. Colombia.  
*Lantanophaga pusillidactyla* (Walker) (*Oxyptilus*). Jamaica.  
     *Platyptilia tecnidion* Zeller, 1877. Virgin Islands.  
     *Platyptilia hemimetra* Meyrick, 1886. Réunion Island.  
     *Platyptilia lantana* Busck, 1914. Hawaiian Islands.  
     *Platyptilia teleacma* Meyrick, 1932. Indonesia, Java.  
     *Platyptilia lantanadactyla* Amsel, 1951. Morocco.  
*L. minima* (B. Landry & Gielis, 1992) (*Postplatyptilia*). Ecuador, Galapagos Islands. **Comb. nov.**  
*Stenoptilodes taprobanes* (Felder & Rogenhofer, 1875) (*Amblyptilia*). Sri Lanka.  
     *Platyptilia brachymorpha* Meyrick, 1888. India.  
     *Platyptilia seeboldi* Hofmann, 1898. Syria.  
     *Platyptilia terlizzii* Turati, 1926. Libya.  
     *Amblyptilia zavatterii* Hartig, 1953. Italy.  
     *Platyptilia legrandi* Bigot, 1962. Seychelles.  
     *Stenoptilodes vittata* Service, 1966. Nigeria.

- S. brevipennis* (Zeller, 1874) (*Platyptilia*). Peru.  
*Platyptilia crenulata* Barnes & McDunnough, 1913. USA.  
*Stenoptilodes amrishi* Makhan, 1994. Surinam.  
*Platyptilia taprobanes* auct., not Felder & Rogenhofer, 1875.
- S. duckworthi* Gielis, 1991. Argentina.
- S. gilvicolor* (Zeller, 1877) (*Platyptilia*). Colombia.
- S. agricultura* **spec. nov.** Venezuela.
- S. stigmatica* (Felder & Rogenhofer, 1875) (*Platyptilia*). Colombia.  
*Platyptilia ptyrhina* Zeller, 1877. Colombia.
- S. limaicus* Gielis, 1996. Peru.
- S. debbiei* Gielis, 1996. Ecuador.
- S. hypsipora* (Meyrick, 1916). Peru.
- S. juanfernandicus* Gielis, 1991. Chile, Juan Fernandez Islands.
- S. sematodactyla* (Berg, 1885) (*Platyptilia*). Argentina.  
*Platyptilia epidelta* Meyrick, 1907. Argentina.
- S. gielisi* B. Landry, 1993. Ecuador, Galapagos Islands.
- S. maculatus* **spec. nov.** Ecuador.
- S. umbrigeralis* (Walker, 1864) (*Pterophorus*). Colombia.
- S. heppneri* **spec. nov.** Venezuela.
- S. thrasydoxa* (Meyrick, 1926) (*Platyptilia*). Colombia. **Comb. nov.**
- S. medius* **spec. nov.** Ecuador.
- S. altiaustralis* **spec. nov.** Peru.
- S. posticus* (Felder & Rogenhofer, 1875) (*Mimeseoptilus*). Colombia.
- S. huanacoicus* Gielis, 1996. Peru.
- S. sordipennis* (Zeller, 1877) (*Platyptilia*). Colombia.
- Paraamblyptilia eutalanta* (Meyrick, 1931) (*Platyptilia*). Argentina.
- P. ridouti* Gielis, 1996. Peru.
- Uroloba calycospila* (Meyrick, 1932) (*Utuca*). Argentina.
- U. fuscicostata* Walsingham, 1891. Chile.
- Stenoptilia zophodactylus* (Duponchel, 1838) (*Pterophorus*). France.  
*Pterophorus loewii* Zeller, 1847. Italy.  
*Pterophorus canalis* Walker, 1864. Australia.  
*Mimeseoptilus semicostata* Zeller, 1873. USA.
- S. neblina* Gielis, 1995. Venezuela.
- S. karsholti* Gielis, 1995. Peru.
- S. pallistriga* Barnes & McDunnough, 1913. USA.
- S. suprema* Meyrick, 1927. Colombia.
- S. tenuis* (Felder & Rogenhofer, 1875) (*Mimesaeoptilus*). Colombia.  
*Mimeseoptilus gilvidorsis* Zeller, 1877. Colombia.
- Paraplatyptilia fragilis* (Walsingham, 1880) (*Platyptilia*). USA.
- P. azteca* Gielis, 1996. Mexico.
- Postplatyptilia huigraica* B. Landry & Gielis, 1992. Ecuador, Galapagos Islands.
- P. antillae* **spec. nov.** Cuba.
- P. talcaica* Gielis, 1991. Chile.
- P. nebuloarbustum* **spec. nov.** Ecuador.
- P. caribica* **spec. nov.** Dominica.

- P. sandraella* Gielis, 1996. Bolivia.  
*P. carchi* **spec. nov.** Ecuador.  
*P. vorbecki* **spec. nov.** Ecuador.  
*P. boletus* **spec. nov.** Peru.  
*P. uruguayensis* **spec. nov.** Uruguay.  
*P. zongoensis* **spec. nov.** Bolivia.  
*P. flinti* Gielis, 1991. Argentina.  
*P. ugartei* **spec. nov.** Chile.  
*P. pluvia* **spec. nov.** Ecuador.  
*P. parana* Gielis, 1996. Brazil.  
*P. palmeri* Gielis, 1996. Mexico.  
*P. transversus* **spec. nov.** Colombia.  
*P. fuscicornis* (Zeller, 1877) (*Platyptilia*). Colombia.  
*P. alexisi* Gielis, 1991. Chile.  
*P. nubleica* Gielis, 1991. Chile.  
*P. akerbergi* Gielis, 1991. Chile.  
*P. genisei* (Pastrana, 1989) (*Stenoptilia*). Argentina.  
*P. biobioica* Gielis, 1991. Chile.  
*P. triangulocosta* Gielis, 1996. Peru.  
*P. machupicchu* Gielis, 1996. Peru.  
*P. drechseli* **spec. nov.** Paraguay.  
*P. corticus* **spec. nov.** Venezuela.  
*P. seitetazas* **spec. nov.** Chile.  
*P. saeva* (Meyrick, 1930) (*Platyptilia*). Peru.  
*P. camptosphena* (Meyrick, 1931) (*Platyptilia*). Argentina.  
*P. eelkoi* Gielis, 1991. Chile.  
*P. naranja* Gielis, 1991. Argentina.  
*P. nielseni* (Gielis, 1991) (*Lantanophaga*). Argentina.  
*P. aestuosa* (Meyrick, 1916) (*Platyptilia*). Peru.  
*P. paraglyptis* (Meyrick, 1907) (*Platyptilia*). Argentina.  
*P. pusillus* (Philippi, 1864) (*Pterophorus*). Chile.  
*Stockophorus charitopa* (Meyrick, 1908) (*Platyptilia*). Bolivia.  
*Amblyptilia scutellaris* (Felder & Rogenhofer, 1875) (*Platyptilia*). Colombia.  
*A. landryi* **spec. nov.** Honduras.  
*A. kosteri* **spec. nov.** Argentina.  
*A. punoica* Gielis, 1996. Peru.  
*Lioptilodes subantarcticus* Gielis, 1991. Argentina.  
*L. cuzcoicus* Gielis, 1996. Peru.  
*L. altivolans* **spec. nov.** Peru.  
*L. salarii* **spec. nov.** Argentina.  
*L. topali* Gielis, 1991. Argentina.  
*L. arequipa* **spec. nov.** Peru.  
*L. albistriolatus* (Zeller, 1877) (*Mimeseoptilus*). Colombia.  
     *Lioptilus parvus* Walsingham, 1880. USA. **Syn. nov.**  
     *Stenoptilia insperata* Meyrick, 1921. Peru.  
     *Stenoptilia trigonometra* Meyrick, 1931. Paraguay.



- Stenoptilia partiseca* Meyrick, 1931. Argentina.  
*L. rionegroicus* Gielis, 1991. Argentina.  
*L. neuquenicus* Gielis, 1991. Argentina.  
*L. zapalaicus* Gielis, 1991. Argentina.  
*L. aguilaicus* Gielis, 1991. Argentina.  
*L. fetisi* Gielis, 1991. Chile.  
*L. alolepidodactylus* Gielis, 1991. Argentina.  
*L. testaceus* (Blanchard, 1852) (*Pterophorus*). Chile.  
*L. parafuscicostata* Gielis, 1996. Peru.  
*L. prometopa* (Meyrick, 1909) (*Utuca*). Peru.  
*L. doeri* Gielis, 1996. Brazil.  
*L. brasilius* Gielis, 1996. Brazil.  
*L. ockendeni* Gielis, 1996. Peru.  
*L. yungas* **spec. nov.** Bolivia.  
*L. antarcticus* (O. Staudinger, 1899) (*Mimaeseoptilus*). Argentina.  
*L. tribonia* (Meyrick, 1921) (*Stenoptilia*). Peru.  
*L. limbani* Gielis, 1996. Peru.  
*L. cocodrilo* **spec. nov.** Ecuador.  
*Michaelophorus nubilus* (Felder & Rogenhofer, 1875) (*Oxyptilus*). Colombia.  
*Platyptilia virilis* Meyrick, 1916. Colombia.  
*M. dentiger* (Meyrick, 1916) (*Oxyptilus*). Guyana.  
*M. indentatus* (Meyrick, 1930) (*Oxyptilus*). USA.  
*M. margaritae* **spec. nov.** Ecuador.  
*M. hodgesi* Gielis, 1999. Puerto Rico.  
*M. shafferi* Gielis, 1999. Brazil.  
*M. bahiaensis* **spec. nov.** Brazil.  
*Sphenarches anisodactylus* (Walker, 1864) (*Oxyptilus*). Sri Lanka.  
*Pterophorus diffusalis* Walker, 1864. Australia.  
*Sphenarches synophrys* Meyrick, 1886. New Hebrides/Tonga.  
*Sphenarches chroesus* Strand, 1913. Cameroun.  
*Megalorhipida rishwani* Makhani, 1994. Surinam.  
*S. nanellus* (Walker, 1864) (*Oxyptilus*). Brazil.  
*S. languidus* Felder & Rogenhofer, 1875. Colombia.  
*Cnaemidophorus smithi* Gielis, 1992. Colombia.  
*Marasmarcha brevirostris* (Walsingham, 1915) (*Platyptilia*). Panamá.  
*Exelastis phlyctaenias* (Meyrick, 1911) (*Marasmarcha*). Sri Lanka.  
*E. montischristi* (Walsingham, 1897) (*Pterophorus*). Dominica.  
*Pterophorus cervinicolor* Barnes & McDunnough, 1913. USA.  
*E. pumilio* (Zeller, 1873) (*Mimeseoptilus*). USA.  
*Marasmarcha liophanes* Meyrick, 1886. Réunion Island.  
*Mimaeseoptilus gilvidorsis* Hedemann, 1896 (not Zeller, 1877). Virgin Islands, St. Croix.  
*Geina integumentum* **spec. nov.** Puerto Rico.  
*Capperia browni* **spec. nov.** Mexico.  
*O. scutifer* Meyrick, 1930. Ecuador.  
*Buckleria brasilia* **spec. nov.** Brazil.  
*Megalorhipida leucodactylus* (Fabricius, 1794) (*Pterophorus*). Virgin Islands.



- Pterophorus defectalis* Walker, 1864. Sierra Leone.  
*Pterophorus congrualis* Walker, 1864. Sierra Leone.  
*Pterophorus oxydactylus* Walker, 1864. Sri Lanka.  
*Aciptilia hawaiiensis* Butler, 1881. Hawaiian Islands.  
*Trichoptilus ochrodactylus* Fish, 1881. USA.  
*Trichoptilus centetes* Meyrick, 1886. New Guinea.  
*Trichoptilus compsochondes* Meyrick, 1886. Cape Verde Islands.  
*Trichoptilus adelphodes* Meyrick, 1887. Australia.  
*Trichoptilus ralumensis* Pagenstecher, 1900. Bismarck Islands.  
*Trichoptilus subtilis* Rebel, 1907. Aden.  
*Trichoptilus derelictus* Meyrick, 1926. Ecuador, Galapagos Islands.  
*Megalorhipida palaestinensis* Amsel, 1935. Israel.  
*M. pseudodefectalis* Gielis, 1991. Argentina.  
*M. dulcis* (Walsingham, 1915) (*Trichoptilus*). Mexico.  
*M. paraiso* **spec. nov.** Brazil.  
*M. dubiosa* **spec. nov.** Brazil.

### Abbreviations

List of abbreviations of museums and institutions where the material examined is deposited:

- |       |  |
|-------|--|
| AME   | Allyn Museum of Entomology, Sarasota/Florida Museum of Natural History, Gainesville, Florida, U.S.A. |
| Ar    | Collection E. Arenberger, Vienna, Austria.   |
| BL    | Bernard Landry, CNC, Ottawa, Canada.   |
| BMNH  | British Museum (Natural History), London, U.K. (now called The Natural History Museum).              |
| BPBM  | Bishop Museum, Honolulu, Hawaii, USA.  |
| CDRS  | Charles Darwin Research Station, Santa Cruz Island, Ecuador.   |
| CG    | Collection C. Gielis, Lexmond, The Netherlands.  |
| CNC   | Canadian National Collection, Ottawa, Canada.  |
| InBio | Instituto Nacional de Biodiversidad, Santa Domingó, Heredia, Costa Rica.                             |
| INER  | Italian Natural History Museum, Rome, Italy.   |
| ITZ   | Instituut voor Taxonomische Zoologie, Amsterdam, The Netherlands.                                    |
| LACM  | Los Angeles County Museum, Los Angeles, California, USA.   |
| MACN  | Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", Buenos Aires, Argentina.               |
| MECN  | Museo Ecuatoriano de Ciencias Naturales, Quito, Ecuador.   |
| MLPA  | Museo de La Plata, La Plata, Argentina.  |
| MNHC  | Museo Nacional de Historie Naturales, Santiago, Chile.   |
| MNHN  | Muséum National d'Histoire Naturelle, Paris, France.   |
| MNHU  | Museum für Naturkunde der Humboldt Universitaet, Berlin, East Germany.                               |
| MZUC  | Museo de Zoologia de la Universidad de Concepcion, Concepcion, Chile.                                |
| NHM   | British Museum (Natural History), London, U.K. (now called The Natural History Museum).              |
| NMW   | Naturhistorisches Museum Wien, Austria.  |

NNM	see RMNH.
RMNH	National Natural History Museum, Leiden, The Netherlands.
USNM	U.S. National Museum of Natural History, Smithsonian Institution, Washington, D.C., USA.
VOB	Collection Vitor O. Becker, Planaltina, Distrito Federal, Brazil.
VP	Collection V. Pelz, Sankt Augustin, Germany.
ZMA	Zoologisch Museum Amsterdam, The Netherlands.
ZMBH	Zoologisches Museum, Humboldt Universitaet, Berlin, Germany.
ZMUC	Zoological Museum, University of Copenhagen, Denmark.
ZSM	Zoologische Staatssammlung München, Germany.

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### Family *Pterophoridae* Zeller, 1841

*Pterophoridae* Zeller, 1841: 757.

### Subfamily *Ochyroticinae* Wasserthal, 1970

*Ochyroticinae* Wasserthal, 1970: 205.

### *Ochyrotica* Walsingham, 1891

*Ochyrotica* Walsingham, 1891: 217.— Type species: *Ochyrotica fasciata* Walsingham, 1891, by monotypy and original designation.

*Steganodactyla* Walsingham, 1891: 241.— Type species: *Steganodactyla concursa* Walsingham, 1891, by original designation.

Redescription.— Head appressedly scaled, without frontal tuft. Palps short and without hair brush along third segment.

Forewings not cleft. Without costal triangular marking. Terminal margin well defined. Forewing veins: R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; origin of Cu1 and Cu2 not examined. Hindwing not cleft. Underside with well-defined row of venous scales.

Male genitalia.— Valvae elongate and symmetrical. Cucullus almost as long as valva, of simple shape. Valvae with processes directed peripherally. Saccus simple, small. Tegumen simple, arched. Uncus as long as tegumen. Aedeagus slightly curved, without cornutus.

Female genitalia.— Ostium and antrum centrally positioned. Ductus bursae simple, without sclerite. Ductus seminalis from near bursa copulatrix. Bursa copulatrix vesicular without signum.

Ecology.— Recorded hostplants are *Ipomoea* and *Argyreia* (Convolvulaceae).

Distribution.— Circumtropical.

*Ochyrotica fasciata* Walsingham, 1891  
(figs 1, 160, 282)

*Ochyrotica fasciata* Walsingham, 1891: 218.

Material.— Holotype ♂: **Brazil**, Espiritu Santo (without abdomen) (Schmidt), (coll. Walsingham, BMNH) [examined].

Diagnosis.— The species is characterized by its forewing margin with the transverse marking at two thirds of the wing length, and in the structure of the genitalia.

Redescription.— Male, female. Wingspan 12-16 mm. Head ferruginous-brown, with erect large bifid scales. Face ferruginous-white. Above the eye a cream-white line, progressing into the basal segments of the antennae. Collar ferruginous-brown, with erect bifid scales. Palps slender, protruding, one and a half times eye diameter; colour pale cream-brown, with some ferruginous scales laterally placed on terminal part of segments. Antennae shortly ciliated, faintly ringed, pale grey-white and white. Part of the thorax closest to the head and tegulae ferruginous; centrally silvery-white and anteriorly ferruginous mixed. Abdomen with mixed cream and numerous ferruginous scales. The dorsum of segments two and four with a shining white, slightly raised, triangular group of scales. The dorsum of segments six, seven, and eight creamish. Hindlegs cream with faint ferruginous spotting. The distal part of the segments, around the base of the spur pairs, with a ring of pronounced ferruginous scales. Spur pairs of equal length. Tarsi ferruginous and white, dark at the end of the segments.

Forewings white, speckled with ferruginous scales. A ferruginous line runs along the costa; at two thirds from base, it widens to form a triangular mark and then gradually narrows again as it nears the apex. On the dorsum opposite the triangular mark, a faint triangular spot. The tips of both spots meet and enclose the white outer patch of the wing. A arrow ferruginous margin along outer margin. Fringes grey, basally with brown-grey line. Underside brown, with two white areas on outer half of wing.

Hindwings grey-brown. Fringes grey, with faint line at one third near apex. Underside grey. Venous scales dark brown, in a pronounced costal and a faint dorsal row.

Male genitalia.— Valvae symmetrical, lanceolate. Sacculus with stout process, at half the valva-length. A small harpe facing the juxta basally on the sacculus. Tegumen

bilobed. Uncus moderate, rather stout. Vinculum broadly arched. Juxta short and wide. Aedeagus gradually narrowing, with flattened top. Ductus ejaculatorius pronounced.

Female genitalia.— Ostium as a sclerotized curved ridge. Antrum gradually narrowing and progressing into the long and slender ductus bursae. Bursa copulatrix vesicular. A signum of sclerotized transverse small ridges in the junction between the ductus and the bursa. Papilles anales one and a half times longer than apophyses posteriores. Apophyses anteriores absent.

Variation.— The specimens show a variation in intensity of the brown scaling in the forewing, the abdomen and colour of the legs. Specimens from Cocos Island and Costa Rica are smaller than those from the mainland and the Caribbean Islands.

The saccular process has a fine dentated surface in some specimens.

Ecology.— The moth flies in almost every month of the year. The recorded hostplant is sweet-potato (*Ipomaea batatas*) (Ortiz & Wong, 1985).

Distribution.— **Brazil**: Espiritu Santo; Sao Paulo; Distrito Federal: Planaltina. **Costa Rica**: Cocos Island: Wafer Bay, Chatham Bay; Turrialba. **Cuba**: Pinar del Rio: Sierra del Rosario, Soroa. **Dominica**: Clarke Hall. **Ecuador**: Morona-Santiago: Macas. **Grenada**. **Guatemala**: Vera Paz: San Geromimo; Volcan Santa Maria. **Jamaica**: Runaway Bay. **Peru**: Lima, La Molina. **Puerto Rico**: Patillas, Reserva Forestal Guajataca.

Remarks.— The species is widely distributed in the tropical zone of the Neotropical region. It differs from *O. placoazona* by the smaller and rounder pale outer area; and from *O. mexicana* by the less marked dorsal margin of the forewings.

*Ochyrotica placoazona* Meyrick, 1921  
(figs 2, 161, 283)

*Ochyrotica placoazona* Meyrick, 1921: 423.

Material.— Lectotype ♀: **Peru**, Jurimaguas, iii.(19)20 (Parish), gent BM 17994 (BMNH) [examined]. Paralectotype ♀: same locality and data (BMNH) [examined].

Diagnosis.— The species is characterized by the double narrowing in the white forewing area.

Redescription.— Male, female. Wingspan 16-19 mm. Head appressedly scaled. Collar with prominent, erect, bifid scales. Vertex, collar and face ferruginous-brown; between the bases of the antennae white. Palps slightly drooping, slender, one and a half times eye diameter, white mixed ferruginous. Antennae above ferruginous-white, below white. Thorax and tegulae with a transverse white band as a continuation of the wing markings, margined ferruginous golden-brown. Abdomen brown, dorsally segments three, four, six and seven white. The ninth segment dorsally white. Hind legs pale golden-brown, with faint white rings. Two pairs of spurs of equal length.

Forewings with falcate terminal margin, colour shining white. Along the costa a golden-brown margin, widened twice, at halfway and two thirds of the wing length. Along the dorsum a golden-brown margin, widened at two thirds of the wing length. The widenings at two thirds of the wing, enclose a white terminal area. In this area are some brown scales and a central spot at the outer margin. Fringes grey-brown. Under-side dark brown.

Hindwings grey-brown. Fringes grey-brown. Underside dark brown. Venous scales black, arranged in a 'Y' shape.

Male genitalia.— Valvae symmetrical. Basal half of sacculus one third the length of the valva and progressing in a gently curved spine. Tegumen arched. Uncus two thirds of the length of tegumen. Vinculum arched. Juxta wide. Anellus arms short. Aedeagus rather stout, straight. Cornutus absent.

Female genitalia.— Antrum very wide, funnel-shaped, deeply excavated. Ductus bursae as long as antrum, with two small sclerotized plates below the antrum. Bursa copulatrix vesicular; no signum. The ductus seminalis enters top of bursa copulatrix. Apophyses anteriores absent. Apophyses posteriores one and a half times longer than papillae anales.

Ecology.— The moth flies in March. The hostplant is unknown.

Distribution.— **Panama:** Canal Zone: Barro Colorado Isl. **Peru:** Jurimaguas; **Venezuela:** Aragua: Rancho Grande.

*Ochyrotica mexicana* Arenberger, 1990  
(figs 3, 162, 284)

*Ochyrotica mexicana* Arenberger, 1990: 238.

Material.— Holotype ♂: **Mexico**, Puebla Mexico, Villa Juarez, 1069 m., 27.xi.1952 (F. Hartig), gent Ar. 2632 (INER). Paratypes: 1 ♂, 2 ♀ ♀, same locality, 20.x.1952, 22.xi.1952, 27.xi.1952 (INER, Ar).

Diagnosis.— The species is characterized by the three divisions of the white area in the forewing.

Redescription.— Male, female. Wingspan 15-16 mm. Head loosely scaled cream-white, with erect long, bifid ochreous scales. Frons white. Palps slender protruding; cream, mixed with ochreous-ferruginous scales; nearly twice the eye diameter. Antennae shortly ciliated; cream-white, faintly ferruginous ringed. Anterior of the thorax and tegulae coloured brown-ferruginous and the posterior silvery-white. Mesothorax white, mixed ferruginous. Abdominal segments four, six and seven dorsally silvery-white, other segments brown-ferruginous mixed with some white scales. Hind legs with two pairs of spurs of equal length; yellow-white and pale ferruginous ringed.

Forewings silvery-white, with sinuate outer margin. Markings bright brown-ferruginous consisting of a costal line, and an interrupted dorsal line. These lines are obliquely connected at one third of the wing length. The dorsal line at the outer margin is white interrupted. At 3/4 of the forewing the costal line widens in a triangular shape, the top touching the gradually widening dorsal line. A white outer area, which has a diffuse ferruginous scaling and a small spot centrally at the outer margin. At the costa four small paler spots are present, at the triangular widening, centrally above the white outer area, and two subterminal near the apex. Fringes brown-grey, with a continuous dark basal line at the outer margin. Underside brown, the outer area indicated as a paler region.

Hindwings grey. Fringes grey-brown. Underside grey. Venous scales in a single, long, black row.

Male genitalia.— Valvae symmetrical, lanceolate. A long saccular arm, rather stout, with hooked tip and before top a costal spiculated surface. A saccular process, strongly backward curved, pointing towards the costa; some small spiculae on the surface. A costal harpe. Tegumen bilobed. Uncus slender. Vinculum bridge-like with a rectangular shape. Juxta symmetrical, double forked. Aedeagus conical, straight.

Female genitalia.— Ostium excavated with distinct lateral margins. Antrum wide, hardly narrowing. At the junction of the ductus bursae and the bursa copulatrix a sclerotized ring which progresses into the upper part of the bursa as a dentated wide spine. The top of this spine is rounded. Bursa copulatrix vesicular; no signum. Lamina postvaginalis with two 'U' shaped small processes at the ostium. Apophyses anteriores absent. Apophyses posteriores twice the papillae anales.

Ecology.— The moth flies in July, August and November. The hostplant is unknown.

Distribution.— **Guatemala:** Volcan Sta Maria, Cerro Zunil. **Mexico:** Mexico City; Michoagan: Tuxpan; Veracruz: Huatusco. **Venezuela:** Aragua: Rancho Grande.

Remarks.— The species resembles the *O. cretosa* group from the Indo-Australian region in the shape of the male genitalia. The wing markings are close to *O. fasciata* which has the basal transverse band on the forewing missing, and *O. placozona* which has a pronounced and larger outer white area on the forewing.

*Ochyrotica gielisi* Arenberger, 1990  
(figs 4, 285)

*Ochyrotica gielisi* Arenberger, 1990: 242.

Material.— Holotype ♀: **Panama**, Chiriqui, V. de Chiriqui, 3000-4000 ft, (19)19 (Chapman), gent BM 18626 (BMNH) [examined].

Diagnosis.— The species has similar markings to *placozona*, but differs in the proximal spur pair of the hind legs and the female genitalia.

Description.— Female. Wingspan 16 mm. Head pale brown. Palps protruding, two and a half times eye diameter, white with longitudinal dark brown lines. Antennae grey-brown, shortly ciliated. Thorax pale brown. Tegulae white. Hind legs pale brown. The inner spur of the proximal pair one third longer than the outer spur. The tarsal segments basally white.

Forewings with markings as in *fasciata*, but slightly heavier. Fringes grey-brown. Underside dark brown in the basal parts, cream-white area distally as above.

Hindwings grey-brown. Fringes grey. Underside grey-brown. Venous scales black, in a double row; the costal row longer than the dorsal row.

Male genitalia.— Unknown.

Female genitalia.— Ostium flat. Antrum gradually narrowing in terminal half and tube-like in proximal half, with a basal knot. Ductus bursae slender and progressing into the minimally enlarged bursa copulatrix. Apophyses anteriores absent. Apophyses posteriores one and a half times papillae anales.

Ecology.— Neither the flight period nor the hostplant are known.

Distribution.— **Panama:** V. de Chirique.

Subfamily **Deuterocopinae** Gielis, 1993

Deuterocopinae Gielis, 1993: 63.

*Leptodeuterocopus* Fletcher, 1910*Leptodeuterocopus* Fletcher, 1910: 107.— Type species: *Leptodeuterocopus citrogaster* Fletcher, 1910, by original designation.

Redescription.— Head appressedly scaled; without frontal tuft. Palps slender, up-curved, more than twice eye diameter.

Forewings cleft twice; first cleft from  $3/5$ , second cleft from  $3/4$  of second lobe. The cleft may be very poorly developed in some species. Forewings without costal triangular marking. Forewing veins: R1 absent; R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from basal half of M3 in second lobe; Cu2 from cell.

Hindwing with terminal scale-tooth at dorsum of third lobe and between scale-tooth and wing base one or two smaller scale-teeth; third lobe with one vein.

Male genitalia.— (*L. sochchoroides* Fletcher, 1910) Valvae symmetrical. Top indented, saccular half well-extending over cucullar half. Tegumen arched. Uncus small. Vinculum arched, narrow. Saccus not developed. Aedeagus slightly curved, slender; no cornutus.

Female genitalia.— Ostium narrow, excavate, centrally positioned. Antrum narrow, progressing in slender ductus bursae. Ductus bursae without sclerite. Bursa copulatrix without signum. Lamina ante-vaginalis easily visible, poorly sclerotized ridge. Centrally, eighth tergite with small sclerotized transverse ridges. Apophyses anteriores absent. Apophyses posteriores twice papillae anales.

Ecology.— Unknown.

Distribution.— **Indonesia**: Amboina; Neotropical region.

*Leptodeuterocopus exquisitus* (Meyrick, 1921)*Deuterocopus exquisitus* Meyrick, 1921: 419.

Material.— Holotype ♂: **Brazil**, Manaus, xi (Parish) (BMNH).

Diagnosis.— The species is characterized by the white spots on the forewing and the scale-tooth pattern on the third lobe of the hindwing.

Redescription (after Meyrick).— Wingspan 11 mm. Head shining coppery-brown with a yellow line between the eyes. First and second segment of palps white, with a dark brown ring at the terminal part of second segment; third segment basally and apically white, centrally dark brown. Thorax coppery-brown. Mesothorax pale yellow. Abdomen dark ferruginous-brown; first segment and spots on segments four and six pale yellow; ventrally white-yellow.

Forewings coppery-brown, darker towards the termen. The first cleft starting half-way along the wing and the second at  $3/4$  length. Yellow-white spots on the dorsum at  $1/4$ ; an oblique spot in the disc at  $2/5$ , and an elongate spot near the base of the cleft in the first lobe; a blackish edged line round the base of the cleft. A whitish-ochreous spot at the costa at two thirds; white spots at two thirds of the costa and dorsum of the first



lobe; and a spot at the costa and dorsum of the second lobe just before the base of the second cleft. Fringes shining ferruginous-grey, at the costa dark brown; and around the apices with a basal row of blackish scales; in the second cleft a whitish patch; a dark patch at the anal angle of the third lobe; and on the dorsum two small scale-teeth near the base of the cleft.

Hindwings dark brown. Fringes rosy-grey. On the dorsum of the second lobe a blackish scale-tooth at two thirds; dorsum of third lobe with the following scale-teeth: a very small one at  $1/5$ ,  $1/3$ , before  $2/3$ , and at the apical  $1/5$ ; and at the costa in the apical quarter.

Male genitalia.— Unknown.

Female genitalia.— Unknown.

Ecology.— The moth flies in November. The hostplant is unknown.

Distribution.— **Brazil**: Amazon: Manaos.

Remarks.— The species could not be found in the British Museum of Natural History. Neither have I seen it in other museums I have visited. The description has been composed after the original text.

*Leptodeuterocopus fortunatus* (Meyrick, 1921)  
(figs 5, 286)

*Deuterocopus fortunatus* Meyrick, 1921: 418.

Material.— Holotype ♀: **Brazil**, Teffe, xii.(19)19 (Parish), gent BM 18857 (BMNH) [examined].

Diagnosis.— The species is characterized by the wing markings and the female genitalia.

Redescription.— Male, female. Wingspan 12 mm. Head appressedly scaled, dark brown. Palps slender, curved up, two and a half times eye diameter. Antennae faintly ringed, grey-brown and dark brown, shortly ciliated. Thorax and tegulae dark brown. Mesothorax bright yellow. Abdomen dorsally pale brown, the end of the segments with yellow hairs; ventrally yellow. Hindlegs dark brown, with brushes around the base of the spurs and at the end of the tarsal segments; centrally each segment ringed yellow; with two pairs of long spurs, the proximal pair the longer.

Forewings cleft from  $2/3$ , dark brown, mottled ferruginous-brown. Markings are faint yellow spots in the disc and at the base of the cleft; a faint subterminal line in the first lobe. The terminal half of the second lobe dark grey. Fringes grey-yellow, black at the anal angle of both lobes and the apex of the second lobe. A dorsal scale-tooth at  $3/4$ . Underside dark grey with a complete white subterminal line in both lobes.

Hindwings reddish-brown. Fringes ferruginous-grey. A terminal scale-tooth around the apex of the third lobe; dorsum of this lobe also with small scale-teeth at one third and two thirds. Underside ferruginous. Venous scales in a single row, grey-brown.

Male genitalia.— Unknown.

Female genitalia.— Ostium excavated. Antrum narrow funnel-shaped. Ductus bursae very long and slender, distally slightly widened. Ductus seminalis arising from the junction with the bursa copulatrix. Bursa copulatrix vesicular with a pair of longitudinal and curved signa. Apophyses anteriores short, a quarter of the papillae anales. Apophyses posteriores with rounded tips, three times the papillae anales.

Ecology.— The moth flies in December. The hostplant is unknown.  
 Distribution.— **Brazil**: Teffe.

*Leptodeuterocopus hipparchus* (Meyrick, 1921)  
 (figs 6, 163)

*Deuterocopus hipparchus* Meyrick, 1921: 420.

Material.— Lectotype ♂ (designated here): **Brazil**, Para, vi.(19)19 (Parish), gent BM 18476 (BMNH) [examined]. Paralectotype ♂ (designated here): **Brazil**, Parintins, x.(19)19 (Parish) (BMNH).

Diagnosis.— The species is characterized by the wing pattern and the male genitalia.

Redescription.— Male. Wingspan 11-14 mm. Head appressedly scaled, some erect scales at the collar, shining ferruginous. Palps slender, erect, orange-ferruginous, distally darkened and with isolated white scales. Antennae orange-ferruginous, with regular distributed white scales, shortly ciliated. Thorax and tegulae shining orange-ferruginous, with two pairs of long spurs of equal length. Around the base of the spurs a scale-brush.

Forewings cleft from 3/5, dark and shining ferruginous. An indistinct orange-ferruginous spot at the disc, beyond the base of the cleft in both lobes. An indistinct subterminal white line. The terminal margin of the second lobe less excavated as in the old world species. Fringes grey-white; with basal dark scales in first lobe terminally and around anal angle; in the second lobe around the apex and anal angle. Underside dark brown with a shining white subterminal line.

Hindwings dark brown, third lobe mixed ferruginous. Fringes dark-grey. On the third lobe a large terminal scale-tooth occupying the costa and dorsum. Centrally on the costa some pronounced scales similar to those on the dorsum but more sparse. Underside ferruginous, the first lobe with white scales. Venous scales orange in a double row.

Male genitalia.— Valvae symmetrical. Valva with a basal stack, sharply widening. Margins almost parallel. Tip rounded, the cucullar side gradually and saccular side sharply. Tegumen basally with gradually narrowing extensions to the valvae, and distally simple, wide. Uncus double; in lateral view with three extensions. Anellus arms short and slender. Aedeagus as long as tegumen, slightly curved. No cornutus.

Female genitalia.— Unknown.

Ecology.— The moth flies in June and October. The hostplant is unknown.

Distribution.— **Brazil**: Parra, Parinthis. **Venezuela**: Zulia: Sierra de Perija.

*Leptodeuterocopus trinidad* Gielis, 1996  
 (figs 7, 164, 287)

*Leptodeuterocopus trinidad* Gielis, 1996: 82.

Material.— Holotype ♂: **Trinidad**, W.I., Lasaivar, Maracas Valley, 5.ii.1961 (CNC). Paratypes: 2 ♂ ♂, 1 ♀, same locality and date, gent CG 6178 (♀), 6179 (♂) (CNC, CG); 1 ♂, **Trinidad**, W.I., San Juan, 16.iii.1961 (N. Gopaul) (CNC); 1 ♀, **Trinidad**, Port of Spain, 30.i.(19)12 (G.A.K. Marshall), gent CG 5029 (BMNH).

Diagnosis.— The species is characterized by the male and female genitalia.

Description.— Male, female. Wingspan 12-14 mm. Head brown-ferruginous, appressedly scaled. Palps ferruginous, curved up, twice the eye diameter. Antennae shortly ciliated, dark brown. Thorax and tegulae brown-ferruginous. Mesothorax ferruginous-white. Hind legs ferruginous, at the base of the spur pairs a pronounced scale brush. The spurs are long, the proximal pair of equal length, the distal pair of unequal length.

Forewing cleft from 6/10, colour ferruginous. Markings darker brown, consisting of a spot before the base of the cleft extending toward the costa, a transverse spot in the centre of the first lobe and a faint discal spot. On both lobes a faint, subterminal, ochreous line. The terminal margin of the second lobe deeply excavated. Fringes grey-brown. Underside dark brown, densely speckled with black.

Hindwings basally ferruginous, the distal parts of the lobes black-brown. Fringes brown-grey. At the apex of the third lobe a scale-tooth. Underside as above. Venous scales in a single, ferruginous row.

Male genitalia.— Valvae symmetrical. The base of the valva narrow. The distal 3/4 lanceolate. Tegumen arched. Uncus short, stout, reduced. Vinculum arched. Anellus arms short. Aedeagus slightly curved, coecum pronounced. No cornutus.

Female genitalia.— Ostium small, round. Antrum in shape of a “volcano” with a large, offset, tooth on both sides. Ductus bursae slender. Bursa copulatrix vesicular. Apophyses posteriores two and a half times longer than the papillae anales. Apophyses anteriores absent.

Ecology.— The moth flies from January till March. The hostplant is unknown.

Distribution.— **Trinidad:** Lasaivar, San Juan, Port of Spain. **Venezuela:** Zulia: El Tucuco.

*Leptodeuterocopus tungurahue* **spec. nov.**  
(figs 8, 288)

Material.— Holotype ♀: **Ecuador**, Tungurahue, 20 km E Baños, San Francisco, 1°24'39"S 78°14'23"W, 1290 m, 26.ix.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4927 (CG).

Diagnosis.— The species is characterized by the wing pattern, which differentiates it from other species in this genus, and the female genitalia.

Description.— Female. Wingspan 12 mm. Head appressedly scaled, ferruginous. Palps slightly curved up, white mixed with numerous ferruginous scales, almost twice the eye diameter. Antennae ciliated, ringed dark brown and ferruginous-white. Collar with some erect, bifid scales. Thorax and tegulae ferruginous. Mesothorax white with numerous ferruginous scales. Hind legs ferruginous, with two white irregularly shaped rings on the tibiae; a ring on the first tarsal segment, and pronounced whitening of the more distal tarsal segments. The spur pairs bear scale bristles. The spur pairs of equal length, the proximal pair longer than the distal pair; the spurs ferruginous, with a central white section.

Forewings cleft from 5/8, ferruginous. Markings brown: diffusely scaled brown at the wing base; a transverse spot at the base of the cleft; a transverse spot centrally in the first lobe; a central spot in the second lobe. In addition there is a poorly defined, white discal spot and the spots in both lobes are bordered with white basal and subterminal

lines. Fringes grey-brown. In the fringes are whiter sections at the termen of the second lobe and on the dorsum opposite the spot in the second lobe. The dark brown fringe sections are: at the termen and anal region of the first lobe, continuing into the cleft; around the apex and anal angle of the second lobe; and in the shape of two small scale-teeth on the dorsum at halfway and 3/4. Underside dark brown, with pale markings in the basal half of the first lobe, and centrally and terminally in the second lobe.

Hindwings dark brown, with some white scales in the terminal half of the first, and diffusely distributed in the third lobe. Fringes grey-brown. On the dorsum of the third lobe a small scale-tooth at 2/5, and a large scale-tooth around the tip of the lobe. Underside dark brown, with some white scales subterminal in the first lobe. Venous scales ferruginous, in a double row, the costal row longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium curved in. Antrum narrow, four times longer than wide. Ductus bursae slender, and gradually widening. The ductus progresses into the vesicular bursa copulatrix. Bursa with a pair of horn-like signa. Lamina ante-vaginalis apparant as a small roof-like structure. Lamina post-vaginalis in the shape of a poorly sclerotized plate. Seventh sternite deeply indented. Eighth sternite rectangular. Apophyses anteriores absent. Apophyses posteriores three times longer than papillae anales.

Ecology.— The moth flies in September. The hostplant is unknown.

Distribution.— **Ecuador**: Tungurahue: San Francisco.

Etymology.— The species is named after the province in which is was collected.

*Leptodeuterocopus panamaensis* **spec. nov.**  
(figs 9, 289)

Material.— Holotype ♀, **Panama**, Canal Zone, Barro Colorado Island, 24.iii.1978 (Silberglied, ao), gent CG 4885 (USNM).

Diagnosis.— The species is characterized by the clefts in both the first and second forewing lobes.

Description.— Female. Wingspan 14 mm. Head appressedly scaled, dark brown, above the eye a white line. Palps one and a half times eye diameter, protruding, slender, dark brown and basally all segments white. Antennae ciliated, ringed; dark brown and grey-white. Thorax and tegulae dark brown. Mesothorax white. Hind legs dark brown; proximal tibia white; between the spur pairs two white rings and a single white ring centrally in the tarsal segments.

Forewings cleft from 3/5, brown-grey. Both lobes cleft in the middle of the termen. Markings black: a row of small longitudinal spots along the costa; three costal spots in the first lobe, each followed by an ochreous patch; a longitudinal dorso-medial spot in both lobes; and a single spot distad from the white subterminal line in the first lobe and in each of the secondary lobes of the second lobe. Small ochreous spots costally from the base of the cleft and basally from the dorso-central spot in the second lobe. Fringes grey. Around the apex, termen and anal angle of both lobes a basal black setae and scale pattern; the fringes at the apex of the first lobe and at the anal region of the second lobe black; in the cleft mixed with numerous black scales; on the dorsum before the black anal fringes a white patch, and scale-teeth at two thirds and 4/5. Underside dark brown, with pale markings as above.

Hindwings and fringes brown-grey. On the dorsum of the third lobe five scale-teeth at 1/8, 1/5, at halfway, two thirds, and terminally, a large one. At the costa of the third lobe scattered black scales, pronounced in the terminal region. Underside dark brown, on first lobe mixed with some white scales and a faint subterminal spot. Venous scales ferruginous-orange, in a double row, the dorsal the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium excavated. Antrum two and a half times longer than wide. Ductus bursae long and slender. Bursa copulatrix vesicular. No signum. Apophyses anteriores wide and blunt. Apophyses posteriores long and slender, just over twice the papillae anales.

Ecology.— The moth flies in March. The hostplant is unknown.

Distribution.— **Panama**: Canal Zone: Barro Colorado Island.

Etymology.— The name reflects the country of origin of the species.

*Leptodeuterocopus angulatus* **spec. nov.**  
(figs 10, 165, 290)

Material.— Holotype ♂: **Brazil**, Goiás, Alto Paraiso, 1100 m, 4.x.1985 (V.O. Becker) (V.O. Becker nr 64683). Paratypes: 1 ♂, 1 ♀, same locality and date, gent CG 3651 (♂), 6042 (♀) (V.O. Becker nr 64683, CG); 2 ♂♂, 2 ♀♀, **Brazil**, Distrito Federal, Planaltina, 15°35'S 47°42'W, 1000 m, 25.ix.1985, 10.x.1983, 25.x.1983, 5.xii.1985 (V.O. Becker), gent CG 6043 (♀) (V.O. Becker nrs 58085, 57893, 41546, 41668; CG).

Diagnosis.— The species is characterized by the curved subterminal line in the second lobe of the forewing, and the genitalia.

Description.— Male, female. Wingspan 13-15 mm. Head appressedly scaled, ferruginous. Above the eye, and between the base of the antennae mixed with white scales. Palps drooping, white, third segment with a central, pale brown ring. Antennae ciliated, longitudinally striped dark brown and white. Thorax and tegulae ferruginous. Mesothorax mixed with white scales. Abdomen pale ferruginous, dorsally with two longitudinal narrow, white lines; dorsally the fifth segment brown; laterally with a narrow white line and a small terminal dot on segments four to seven. Hind legs dark brown, mixed with white scales, the intensity of the white scales increases distally; at the base of the spur pairs a small scale bristle; the spurs longitudinally dark brown and white. The spur pairs of unequal length; the medial spurs longer than the lateral spurs, and the proximal pair longer than the distal pair.

Forewings cleft from halfway, ferruginous. Markings brown: a small discal spot; a spot at the base of the cleft, and darker in the subterminal area of both lobes. A silvery subterminal line in both lobes, in the second lobe strongly curved, and a small silvery spot in the centre of the second lobe. Fringes pale grey-ferruginous; in the middle of the cleft a row of large black-brown scales along both sides; at the subterminal dorsum of the second lobe a dark grey dash; fringes dark ferruginous; a pale ferruginous scale-tooth at the mid-dorsum. Underside dark brown; a pale spot dorso-basal in the wing, a pale costal dash in the first lobe from the base of the cleft to the mid-costa; a transverse pale dash in the middle of the second lobe, and a white subterminal line on both lobes.

Hindwings and fringes on the first and second lobe, dark ferruginous-brown, on the third lobe, ferruginous. On the costa of the third lobe a row of black-brown scales

from one third to the apex; and along the dorsum black-brown and white scales from the base to the apex; a ferruginous scale-tooth subterminally, almost triangular in shape. Underside of the first and second lobe dark brown, the first lobe mixed with numerous white scales and with a small subterminal spot; the third lobe almost white, sparse ferruginous scales are present in the basal parts, at the scale-tooth numerous ferruginous scales are present. Venous scales ferruginous, in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical. Valve oval in shape. Sacculus simple, gradually narrowing towards the tip. Cucullus simple. Tegumen simple. Uncus bifid, 1/4 of the tegumen. Saccus almost rectangularly shaped, with a central more sclerotized ridge. Aedeagus curved. Coecum poorly developed. Cornutus a longitudinal sclerotization.

Female genitalia.— Ostium slightly excavated. Antrum gradually narrowing, five times as long as wide. The antrum is positioned in a conical extension, bulging out of the seventh sternite and positioned alongside the eighth sternite. The seventh sternite is widened laterally with a membrane. Ductus bursae slender, three times longer than the antrum. In the antrum and the distal ductus bursae a longitudinal sclerite. Bursa copulatrix vesicular, with a pair of irregularly shaped signa, and a double ridge of minute spiculae. Apophyses anteriores absent. Apophyses posteriores short, one and a half times the papillae anales.

Ecology.— The moth flies in September, October and December. The hostplant is unknown.

Distribution.— **Brazil**: Goiás: Alto Paraiso; Distrito Federal: Planaltina.

Etymology.— The name refers to the angular shape of the subterminal line in the second forewing lobe.

*Leptodeuterochopos duchicela* **spec. nov.**  
(figs 11, 291)

Material.— Holotype ♀: **Ecuador**, Carchi, Maldonado, 2200 m, 9-1.i.1993 (V.O. Becker), gent CG 4899 (V.O. Becker nr 105098). Paratypes: 2 ♀ ♀, same locality and date, gent CG 4898 (V.O. Becker nr 105098, CG).

Diagnosis.— The species resembles *L. neales* in the external appearance, but differs in the structure of the female genitalia.

Description.— Female. Wingspan 14-15 mm. Head appressedly scaled, grey-brown; above the eye a narrow white line. Palps slender, protruding, twice the eye diameter, ringed grey-brown and white. Antennae pectinate, ringed grey-white and dark brown. Thorax and tegulae grey-brown. Mesothorax with numerous white scales. Abdomen with first segment brown-ochreous-white, and the other segments dark brown. Hind leg femur ochreous-white; tibia dark brown, with white scales in the mid sections, and scale bristles at the base of the spur pairs. Tarsal segments dark brown, centrally some white scales, and terminally with a scale bristle in the first and second segment.

Forewings cleft from 5/9, grey-brown. Markings black-brown in the terminal two thirds of the lobes; this dark area preceded by an ochreous-white transverse line in the second lobe. Fringes grey, black basal scales at the anal region of the first lobe and around the anal angle of the second lobe; a small scale-tooth at the mid dorsum. Underside dark ferruginous-brown.

Hindwings and fringes grey. On the third lobe a large scale-tooth at the termen and a smaller one at one third of the dorsum. Underside dark brown, with a bright white subterminal spot in the first lobe. Venous scales orange, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium narrow, excavated. Antrum and ductus bursae not differentiated; narrow, slender, and gradually progressing into the bursa copulatrix. Bursa copulatrix vesicular, with a pair of bean-like signa. Lamina ante-vaginalis in a basally open wedge shape, on the tip changing into a round sclerotized structure. Lateral of the lamina the eighth tergite is built up with numerous spiculae; the tip of the spiculae from the lamina and laterally on the abdomen towards the lamina, centrally pointed upwards, giving the lateral parts a ridged appearance. Apophyses anteriores absent. Apophyses posteriores slender, three times longer than wide.

Ecology.— The moth flies in January. The hostplant is unknown.

Distribution.— **Ecuador**: Carchi: Maldonado.

Eymology.— The name commemorates the ruling people in the north of Ecuador before the Inca period.

Remarks.— The species closely resembles *L. neales*, but differs in the pattern of the abdomen, the hind legs, and the female genitalia.

*Leptodeuterocopus neales* (Walsingham, 1915)  
(figs 12, 166, 292)

*Oxyptilus neales* Walsingham, 1915: 435.

*Oxyptilus maleficus* Meyrick, 1926: 296. **Syn. nov.**

Material.— Holotype of *Oxyptilus neales* Walsingham ♂: **Mexico**, Tabasco, Teapa, III (H.H. Smith) (BMNH). Paratype ♀: **Mexico**, Vera Cruz, Atoyac, iv.18(..) (H.H. Smith), gent CG 5059 (BMNH) [examined].

Lectotype of *Oxyptilus maleficus* Meyrick (designated here) ♂: **Peru**, Cocapata, 12000 ft, (19)20, gent CG 5055 (BMNH) [examined].

Diagnosis.— The species is characterized by the ochreous-brown colour and the distinct dark brown terminal areas in both forewing lobes.

Redescription.— Male, female. Wingspan 13 mm. Head mainly appressedly scaled, dark brown. Frons smooth, mixed with ochreous scales. Palps ochreous-brown, slender and protruding, twice the eye diameter. Antennae ringed white and dark brown, shortly ciliated. Thorax and tegulae dark brown. Mesothorax with a ferruginous tinge. Abdominal segments one to three, five, seven, eight and nine ochreous-brown, and segments four and six dark brown. Hindlegs white with two small dark brown rings before the first pair of spurs, a ring just beyond this spur pair, a large ring of pronounced brown scales at the base of the second pair of spurs and a dark ring at the distal half of the tarsal segments. Spur pairs grey-brown, the inner spurs slightly longer than the outer spurs.

Forewings cleft from 3/5, colour ferruginous-brown. Markings dark brown, consisting of a transverse area stretching from just before the base of the cleft to the terminal half of both lobes. At the costa of the first lobe a subterminal ferruginous-brown spot. Fringes grey, at the termen near the apex of both lobes basally with black-brown



scales and in the cleft and at the anal area of the second lobe dark brown. Underside ferruginous-brown, with two ochreous yellow spots on the costa of the first lobe at one third and 3/4.

Hindwings dark brown. Fringes ferruginous-grey, with on the third lobe a subterminal scale-tooth which is twice as long on the dorsum than on the costa, and a faint scale-tooth halfway along the dorsum. Underside dark brown. Venous scales dark brown, in a single, short row.

Male genitalia.— Valvae symmetrical. Sacculus basally wide, gradually narrowing. Cucullus membranous rounded, around sacculus. Tegumen simple, with parallel margins and an indented tip. Anellus arms well developed, longer than tegumen. Saccus arched. Aedeagus basally rather wide, gradually narrowing towards the tip. No cornutus.

Female genitalia.— Ostium excavated. Antrum funnel shaped. Ductus bursae long and slender. Ductus seminalis from junction with bursa copulatrix. Bursa vesicular and simple. No signum. Lamina ante-vaginalis arched. No apophyses anteriores. Apophyses posteriores two and a half times papillae anales.

Ecology.— The moth flies in April, August, September, October, November and December. The hostplant is unknown.

Distribution.— **Costa Rica**: Cartago: Ref Nac Fauna Silv Tapanti; Puntarenas: PN Manuel Antonio. **Ecuador**: Morona-Santiago, Macas; Napo: Misahualli. **Guatemala**, Zac, Usamatlan. **Mexico**: Vera Cruz: Atoyac; Tabasco: Teapa. **Surinam**: Paramaribo. **Paraguay**: Gualra: Zorilla, Calle Florida. **Peru**: Cocapata. **Venezuela**: Aragua: Rancho Grande.

*Leptodeuterocopus sochchoroides* Fletcher, 1910  
(figs 13, 167)

*Leptodeuterocopus sochchoroides* T.B. Fletcher, 1910: 140.

Material.— Holotype ♂: **Brazil**, Ega, no date (Bates) (BMNH) [examined].

Diagnosis.— The species is characterized by the white spot on the anal area of the forewing.

Redescription.— Male, female. Wingspan 12-14 mm. Head appressedly scaled. Collar shining red-ferruginous, with erect bifid scales. Vertex shining ferruginous, caudally and between base of antennae white. Palps slender, erect, twice the diameter of the eye, pale ferruginous mixed with shining white scales laterally on second segment and at top of third segment. Antennae ringed dark brown and shining white, shortly ciliated. Thorax and tegulae shining ferruginous. Mesothorax yellow. Abdomen shining red-ferruginous, segments seven to nine darkened; proximal margin of segments four and six with small transverse white line and segment seven distal laterally with a small white spot. Hindlegs with two pairs of long spurs of equal length.

Forewings cleft from 3/5; second lobe cleft from two thirds. Colour shining reddish-ferruginous, along the costa darkened blackish. White spots present at one third of costa, dorsum of first lobe, subapical in first lobe, at 3/4 of costa of second lobe and at 5/6 of dorsum of wing, the last spot large and obliquely placed. Fringes grey-black,

around the apices white, with black basal scales. At the dorsal white spot white fringe hairs. Underside black-brown, with white spots as above.

Hindwings, lobes one and two brown-black, lobe three ferruginous. Opposite the dorsal forewing spot in the first hindwing lobe and at the apex of the second lobe white. Fringes of lobes one and two dark grey, of third lobe pale grey. At dorsum of second lobe a small central scale-tooth. Third lobe with a large, subapical scale-tooth extending to both sides. On the costa between the subapical scale-tooth and the wing base two small scale-teeth and on the dorsum four. Underside as above. Venous scales in a double row of orange-ferruginous scales, the costal row the longer.

Male genitalia.— Genitalia symmetrical. Valvae indented at the tip. Tegumen simple arched. Uncus simple, rounded. Anellus arms short. Saccus narrow, arched. Aedeagus slender, rather long. No cornutus.

Female genitalia.— Unknown.

Ecology.— The moth flies in June. The hostplant is unknown.

Distribution.— **Brazil**: Amazon: Ega; Distrito Federal: Planaltina.

*Leptodeutero copus zonites* (Meyrick, 1913)  
(figs 14, 168)

*Oxyptilus zonites* Meyrick, 1913: 105.

Material.— Lectotype ♂ (designated here): **British Guyana**, Bartica, ii.(19)13 (Parish), gent BM 18470 (BMNH) [examined]. Paralectotype ♂ (designated here): same locality, i.(19)13 (Parish), gent BM 18469 (BMNH) [examined].

Diagnosis.— The species is characterized by the color and pattern of the abdomen, and the colour and scaling on the hindlegs.

Redescription.— Male. Wingspan 12 mm. Head appressedly scaled, ferruginous-brown. Vertex near collar mixed cream-white. Palps slender, erect one and a half times eye diameter; cream-white with a brown ring at the end of segment two and segment three brown. Antennae faintly ringed brown and white-grey; shortly ciliated. Thorax and tegulae brown. Mesothorax and dorsum of abdominal segments one, four and six yellow; other abdominal segments brown. Abdomen ventrally white-grey. Hindlegs brown and white ringed; at the bases of the spur pairs brown brushes of scales.

Forewings cleft from 3/5, colour brown. Markings cream-white consisting of a dorsal spot at 1/5; a costal spot at one third; a spot on the dorsum of the first lobe, directly beyond the base of the cleft; a costal spot in the middle of the first lobe. Fringes grey-brown. On the wing dorsum a small scale-tooth at 3/4. Underside pale brown. First lobe with cream spots on the dorsum near the base of the cleft and in the middle of the costa; and a narrow subterminal line. Hindwings brown. Fringes grey-brown. Around the apex of the third lobe a pronounced scale-tooth. The dorsum of this lobe sparsely scaled at one third and two thirds. Underside pale-brown. Venous scales pale-ferruginous, in a single row.

Male genitalia.— Valvae symmetrical, slender. Saccus blister-like, enlarged. Tegumen bilobed. Uncus wide and short. Vinculum arched, progressing into a vesicular saccus. Anelles arms short. Aedeagus arched. Five minute thorn-like cornuti at the end of the aedeagus.

Female genitalia.— Unknown.

Ecology.— The moth flies in January and February. The hostplant is unknown.

Distribution.— **British Guyana**: Bartica.

*Leptodeuterocopus gratus* (Meyrick, 1921)  
(figs 15, 169)

*Deuterocopus gratus* Meyrick, 1921: 419.

Material.— Holotype ♂: **Peru**, Jurimaguas, iii (Parish), gent BM 18858 (BMNH) [examined].

Diagnosis.— The species is characterized by the male genitalia.

Redescription.— Male. Wingspan 12 mm. Head ferruginous. Palps slender, curved up; ferruginous, the tip white. Thorax and tegulae ferruginous. Mesothorax orange-yellow. Abdomen ferruginous; dorsally on segments one, four and six yellow; ventrally the abdomen pale yellow.

Forewings first cleft from halfway and a second cleft from 4/5. Colour ferruginous-brown. Whitish spots occur on the dorsum at 1/4; in the disc; at the base of the first cleft; in the centre of the first lobe; and as a subterminal line in all lobes. Fringes dark brown; at the termen of the first lobe and the terminal region in the second and third lobe with a black row of basal scales; in the second cleft the fringes whitish; black dashes at the terminal half of the dorsum of the first and third lobe; small black scale-teeth on the dorsum at halfway and 3/5.

Hindwings ferruginous-brown. Fringes coppery-grey, towards the apices blackish-grey. Dorsal fringes in second lobe with blackish tinge; on the dorsum of the third lobe small scale-teeth just before and beyond the middle and a large scale-tooth at the apical 1/4, and at the costa a small scale-tooth opposite the middle one and scattered scales at the apical third.

Male genitalia.— Genitalia symmetrical. Saccular part of valva simple; cucullar part extended, confined to the centre part of the sacculus; at the dorsal saccular margin an erect spine at the terminal margin of the cucullar extension. Tegumen arched, simple. Uncus as an extension and integrated with the tip of the tegumen. Vinculum arched. Aedeagus curved, tapering towards the almost acute tip. No cornutus. Coecum moderate, extended basally.

Female genitalia.— Unknown.

Ecology.— The moth flies in March. The hostplant is unknown.

Distribution.— **Peru**: Puno: Jurimaguas.

Subfamily **Pterophorinae** [Zeller, 1841]

Pterophorinae Zeller, 1841: 755.

Platyptiliinae Tutt, 1906: 152.

Tribus **Platyptiliini** Tutt, 1906

Platyptiliini; Bigot, Gibeaux, Nel & Picard, 1998: 292.

*Sochchora* Walker, 1864

*Sochchora* Walker, 1864: 952.— Type species: *Sochchora donatella* Walker, 1864, by monotypy.

Redescription.— Head appressedly scaled, no frontal tuft. Palps twice eye diameter, protruding, segments two and three of equal length. Forewings cleft from 4/5, before base of cleft a poorly defined reddish-brown, incomplete, transverse spot. Termen of first lobe sinuate, of second lobe discretely waved.

Forewing veins: R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate, both from the cell.

Hindwings with black scale-teeth present: (1) at anal angle of the second lobe, (2) subterminal at costa and dorsum of third lobe, and (3) halfway along the dorsum of third lobe. Pronounced black scales in fringes between last scale-tooth and the base of the wing. Third lobe with one vein.

Male genitalia.— Valvae symmetrical, rounded. Sacculus gradually narrowing toward top of valva. Cucullus with spine equal of width of valva at midway valval length. Tegumen wide. Uncus basally wide, rather short. Vinculum wide. Juxta symmetrical. Aedeagus curved, slender; no cornutus.

Female genitalia.— Ostium centrally positioned. Antrum square, distally progressing in a funnel-like section. From here, rather slender ductus bursae reaches to vesicular bursa copulatrix. Ductus bursae without sclerite. Signum double, horn-like. Lamina post-vaginalis fusing distal of antrum, and proximally progressing into lamina ante-vaginalis. Laterally, lamina ante-vaginalis progressing into apophyses anteriores. Apophyses anteriores half as long as papillae anales. Apophyses posteriores two and a half times papillae anales.

Ecology.— Unknown.

Distribution.— Neotropical region.

*Sochchora albipunctella* Fletcher, 1911  
(figs 16, 170, 293)

*Sochchora albipunctella* Fletcher, 1911: 347.

Material.— Holotype ♂: (**Brazil**), Ega, no date (BMNH) [examined].

Diagnosis.— The species is well differentiated from related species by the white tip of the first hindwing lobe.

Redescription.— Male, female. Wingspan 13-15 mm. Head appressedly scaled, with some erect scales at the collar, ferruginous. Palps slender curved upward, pale ferruginous, three time eye diameter. Dorsal surface of antennae with a row of dark brown scales, laterally blocked white and dark brown scales, shortly ciliated. Thorax, proximal part of tegulae, mesothorax and dorsal part of abdomen ferruginous. Distal part of tegulae ochreous-ferruginous and ventral part of abdomen white. Hindlegs grey-brown, with two pairs of spurs of equal length. Around the base of the spurs some pronounced scaling.

Forewings cleft from 3/4, ferruginous-shining brown. Some darkening at a poorly defined costal triangle. A small white spot above the base of the cleft in the first lobe, a

white spot reaching to the dorsum of the wing beyond the base of the cleft in the second lobe and a white subterminal line in both lobes. Fringes grey, basally margined at the termen by a continuous row of black scales. Underside dark chocolate-brown, with pale markings as above.

Hindwings basally orange-ferruginous, progressing in the first and second lobe black-brown and in the third lobe at the apex dark-brown. Apex of first lobe shining white. Fringes grey-white. At anal angle and mid dorsum of second lobe a small scale-tooth; at third lobe small scale-teeth at one third and 4/5. Underside as above, apex of second lobe white as well. Venous scales dark brown, in a double row, extending well into the second lobe.

Male genitalia.— Genitalia symmetrical. Valvae ellipsoidal. Sacculus basally pronounced. Tegumen simple, arched. Uncus simple, stout. Anellus arms short, slender. Saccus simple, arched. Aedeagus arched, gradually narrowing and ending in a sharp tip. Coecum well developed. No cornutus.

Female genitalia.— Ostium excavated. Antrum with parallel margins; distal two thirds sclerotized. Ductus bursae slender, three times the length of the antrum. Bursa copulatrix vesicular, with a pair of short horn-like signa. Lamina post-vaginalis with a roof-like ridge over the ostium. Apophyses anteriores as long as papillae anales. Apophyses posteriores slender, four times papillae anales.

Ecology.— The moth flies in January. The hostplant is unknown.

Distribution.— **Brazil**: Para: Belem; Amazon: Ega.

*Sochchora donatella* Walker, 1864  
(figs 17, 171, 294)

*Sochchora donatella* Walker, 1864: 952.

Material.— Holotype ♀: (**Brazil**), Ega, no date (Bates), gent BM 1696 (BMNH) [examined].

Diagnosis.— The species is easily recognized by the shining white part of the basal half of the costa of the first hindwing lobe and the combination of scale-teeth.

Redescription.— Male, female. Wingspan 14 mm. Head appressedly scaled, dark brown. Palps two times eye diameter, dark brown, protruding; segments two and three of equal length. Antennae above dark brown, regularly mixed with white scales, underside white. Thorax and tegulae dark brown, distally margined shining white, middle with ferruginous-ochreous scales. Laterally the thorax shining white, mixed with a few ochreous-brown scales. Abdomen dark brown, dorsally first segment shining white; ventrally grey-white. Legs ochreous-white, hind tibiae at end of segments brown.

Forewings cleft from 4/5, shining dark brown, with reddish gloss. Before the base of the cleft a poorly defined reddish-brown, incomplete, transverse spot. Subterminally an incomplete grey-white transverse line in both lobes. At the costa of the first lobe, between the line and apex a dark spot, terminally margined with white. Termen of first lobe sinuate, of second lobe discretely waved. Fringes grey, basally with black scales which form a complete line. In the dorsal fringes small scale-teeth at halfway and 3/4. Underside shining dark brown, with incomplete subterminal white line.

Hindwings dark brown. The basal half of the costa of the first lobe with a shining white area. The basal half of the third lobe mixed with reddish scales. Fringes grey.

Black scale-teeth are present at anal angle of second lobe, subterminal at costa and dorsum of third lobe and on dorsum of third lobe in the middle with pronounced black scales in the fringes between this tooth and base of the wing. Underside dark brown with reddish gloss. Venous scales reddish black-brown, in a single row.

Variation.— The colour in some specimens is more red-brown. The reddish-brown area before the base of the cleft may be much more pronounced, and is in such cases preceded by a dark brown poorly defined spot. The female specimen from Peru (gent CG 3432) has an ostium reduced in size.

Male genitalia.— Valvae symmetrical, rounded. Sacculus gradually narrowing toward top of valva. Cucullus with a spine the same width as the valva but half the length. Tegumen wide. Uncus basally wide, rather short. Vinculum wide. Juxta symmetrical. Anellus arms short and slender. Aedeagus curved, slender. No cornutus.

Female genitalia.— Antrum square, distally progressing in a funnel-like section. From here the rather slender ductus bursae reaches to the vesicular bursa copulatrix. Signum double, horn-like. Lamina post-vaginalis fuses distally from the antrum, and proximally progresses into the lamina ante-vaginalis. Laterally the lamina ante-vaginalis progresses into the apophyses anteriores. Apophyses anteriores half as long as papillae anales. Apophyses posteriores two and a half times papillae anales.

Ecology.— The moth flies in July. The hostplant is unknown.

Distribution.— **Brazil**: Amazon: Ega; Goiás: Ilha do Bananal; Pará: Capitaó, Belém; Taperinha. **British Guyana**: Esseq: Wineperu; Bartica: Kartabo. **Venezuela**: Aragua: Rancho Grande. **Peru**: no data.

Remarks.— The species is well differentiated by the white spot on the hindwing.

*Sochchora dotina* Walsingham, 1915  
(figs 18, 172, 295)

*Sochchora dotina* Walsingham, 1915: 436.

Material.— Holotype ♀: **Panama**, Chiriqui, Bugaba, 800-1500 ft, 1881 (Chapman), gent BM 18860 (BMNH) [examined].

Diagnosis.— The species is characterized by the dark costa of the first lobe of the hindwing.

Redescription.— Male, female. Wingspan 14 mm. Head appressedly scaled, dark ferruginous-brown. Palps ferruginous-brown, curved up, slender, three times eye diameter. Antennae dark brown, with a lateral blocking of white and dark brown scales, shortly ciliated. Thorax, tegulae and mesothorax dark brown. Abdomen dark brown, proximal part of second segment and ventral side of abdomen white. Hindlegs ferruginous, (spurs absent).

Forewings cleft from 4/5, dark ferruginous-brown. The poorly defined costal triangle and the outer parts of both lobes dark brown. Both lobes have a poorly defined subterminal white line. Fringes grey-brown basally with a continuous row of black scales at the termen of both lobes; on the dorsum of the wing, ferruginous. Underside basally ochreous gradually turning dark brown in the outer part of the wing. A faint subterminal white line in both lobes.

Hindwings dark brown. Fringes brown-grey. Scale-teeth at 1/4 and 4/5 on the dorsum of the third lobe. Underside pale ferruginous, toward apex of first and second lobe grey-brown, here in the first lobe a subterminal white line. Venous scales grey-brown, in a single long row.

Male genitalia.— Genitalia symmetrical. Valvae broadly elliptic Sacculus basally with a rounded protrusion. Cucullus with a diagonal rim. Tegumen simple. Uncus simple, but very stout. Anellus arms short, slender. Saccus rectangularly widened. Aedeagus slender, curved. Coecum rather small. No cornutus.

Female genitalia.— Ostium rounded, surrounded by the membraneous semicircular extended antrum. Antrum towards bursa extended tooth-like. In the distal part of the ductus bursae a small pair of sclerites, and longitudinal sclerite at 1/6. Ductus bursae slender, gradually widening towards the bursa copulatrix. Bursa copulatrix vesicular, with a pair of horn like signa, almost half the size of the bursa. Lamina ante-vaginalis as a simple rim. Lamina post-vaginalis integrated with the dorsal parts of the antrum. Apophyses anteriores as long as papillae anales. Apophyses posteriores two and a half times papillae anales.

Ecology.— The moth flies in November. The hostplant is unknown.

Distribution.— **Brazil**: Pará: Capitão. **Panama**: Chiriqui: Bugaba.

*Sochchora mulinus* **spec. nov.**  
(fig. 296)

Material.— Holotype ♀: **Brazil**, Pará, Capitão Poço, 17-22.xi.1984 (V.O. Becker), gent CG 3902 (V.O. Becker nr 53831).

Diagnosis.— The species resembles *S. donatella* and *dotina*, but differs in the less abundant orange spots on the hindwing, and the female genitalia.

Description.— Female. Wingspan 10 mm. Head appressedly scaled, ferruginous, around the eye some white scales. Palps protruding, slender, two and a half times eye diameter, orange. Antennae ciliated, dark brown with some ochreous scales on the first segments. Collar and caudal margin of the eye with numerous long, erect, orange, bifid scales. Thorax and tegulae rostrally ferruginous, caudally orange. Mesothorax orange. Hind legs orange, terminal part of tibiae and tarsal segments brown; at the spur pairs small scale bristles. The spur pairs of equal length, brown.

Forewings cleft from 3/5, dark brown. On the wing, irregular shaped small and dull orange-ferruginous spots between the wing base to around the base of the cleft. Just before the base of the cleft a narrow black transverse line, progressing into the costal triangle and darkening the centre of the first lobe. A narrow, poorly developed, grey-white subterminal line. Fringes pale grey, with a basal row of black scales around the apex, along the termen and around the anal angle of both lobes. Small scale-teeth at the middle and 4/5 of the dorsum. Underside dark brown-grey, with a narrow white subterminal line in both lobes.

Hindwings of first and second lobe dark brown-grey; third lobe richly mixed orange; basal costal area of first lobe silvery, shining. Fringes as on lobes. In the fringes pronounced scales around the apex of the first and second lobe; at 4/5 of the dorsum and the anal angle of the second lobe, and at the mid-dorsum and around the apex of the



third lobe, the last pronounced in shape. Underside dark brown-grey, with an orange streak from the base into the second lobe and an orange third lobe. Venous scales ferruginous-orange, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium round. Antrum gradually progressing into the slender ductus bursae. Bursa copulatrix vesicular, with a pair of small, longitudinal signa. Lamina ante-vaginalis in a semicircular ridge. Lamina post-vaginalis extending into two rostrally positioned brushes along the antrum and the ostium. Apophyses anteriores as long as the papillae anales. Apophyses posteriores rather stout, proximally curved around the ostium; two and a half times papillae anales.

Ecology.— The moth flies in November. The hostplant is unknown.

Distribution.— **Brazil:** Pará: Capitão Poço

Etymology.— The name reflects that the colour of the species resembles that of a mule.

### *Quadriptilia* Gielis, 1994

*Quadriptilia* Gielis, 1994: 181.— Type species: *Platyptilia philorectis* Meyrick, 1926, by original designation.

Diagnosis.— This genus is characterized by large, rectangularly shaped wings. The male genitalia show valvae with an overriding cucullus and a sacculus which is not lobed.

Description.— Head appressedly scaled. Palps protruding, twice eye diameter. Antennae rather short, ciliated.

Forewing cleft from 4/5. The apical and dorsal angles of both lobes almost rectangular, giving a broad appearance to the wing.

Hindwing with a row of scales on the dorsum of the third lobe, condensed to a sub-terminal scale-tooth. At the underside a double row of venous scales; the costal row longer than the dorsal row.

Male genitalia.— Valvae symmetrical. Cucullus overriding. Sacculus not lobed, slightly widened. Tegumen arched, bilobed. Uncus nearly as long as tegumen, stout. Vinculum arched, with a short and stout single pointed saccus. Juxta with two short and stout anellus arms. Aedeagus moderately curved. Cornutus in shape of minute spiculae.

Female genitalia (*Q. rectangulodactyla*).— Ostium oblique, right lateral positioned. Antrum gradually narrowing and progressing into the curled ductus bursae. A sclerite in the ductus bursae. Ductus seminalis originating near the bursa copulatrix. Bursa copulatrix vesicular. Signum double, in shape of small horns surrounded by minute spiculae. Lamina ante-vaginalis well developed, widely arched. Lamina post-vaginalis expressed as two small sclerotized arches above the lamina ante-vaginalis. Apophyses anteriores present, as long as papillae anales. Apophyses posteriores two and a half times the papillae anales.

Ecology.— No hostplant records are known.

Distribution.— Andes region from Peru to Colombia. In the mountains at elevations of 1000 to 3700 m.

*Quadriptilia philorectis* (Meyrick, 1926)  
(figs 19, 173)

*Platyptilia philorectis* Meyrick, 1926: 298.

Material.— Holotype ♂: **Peru**, Andes, (19)20, gent BM 18853 (BMNH) [examined]. Paratype: 1 without abdomen, **Peru**, Carabaya, La Oroja, Rio Inambari, 3100 ft, ix.1905 (G. Ockenden) (BMNH) [examined].

Diagnosis.— This species is characterized by its large size, the dark brown colour and the ochreous-white mesothorax.

Redescription.— Male. Wingspan 39-41 mm. Head appressedly scaled, dark brown. Palps protruding, slender, two and a half times eye diameter. The basal segment pale brown; second segment dorsally pale brown, ventrally ochreous; third segment ochreous. Antennae grey-brown, shortly ciliated. Thorax and tegulae dark brown. Mesothorax ochreous-white. Abdomen dark brown. Hind legs ochreous, brown ringed at the base of the spur pairs. Spur pairs of equal length.

Forewings cleft from 5/6, dark brown. A small spot before the base of the cleft. Costa of first lobe ochreous, with three small longitudinal brown spots. Fringes brown-grey. Underside dark-brown, markings of first lobe as above.

Hindwings grey-brown. Fringes brown-grey. Along the dorsum of the third lobe a row of black pronounced scales. Underside grey-brown. Venous scales in a double row of ferruginous scales; the dorsal row longer than the costal row.

Male genitalia.— Valvae symmetrical. The cucullus overriding. Sacculus not lobed. Tegumen arched. Uncus stout, as long as tegumen. Vinculum expanding into the pointed saccus. Juxta broad. Anellus arms short and stout. Aedeagus curved, with a small cornutus of minute spiculae.

Female genitalia.— Unknown.

Ecology.— The moth flies in September. The hostplant is unknown.

Distribution.— **Peru**: Carabaya: La Oroja.

*Quadriptilia rectangulodactyla* Gielis, 1994  
(figs 20, 297)

*Quadriptilia rectangulodactyla* Gielis, 1994: 185.

Material.— Holotype ♀: **Peru**, Carabaya, Agualani, 9000 ft, vi.1905 (G. Ockenden), dry season, gent CG 5012 (BMNH). Paratypes: 1 ♀, **Peru**, Carabaya, Agualani, 9000 ft, xii.1905 (G. Ockenden), wet season, gent CG 5028 (BMNH).

Diagnosis.— This species is characterized by the rectangular wing-shape.

Description.— Female. Wingspan 27 mm. Head covered with appressed and erect scales, mixed ferruginous-white and white. Palps three times eye diameter, ferruginous-white and white scaled; second segment very long and widened by the scales, third segment small. Antennae a little over half the wing length, with poorly defined pale and dark brown rings, shortly ciliated. Thorax and tegulae ferruginous-white. Mesothorax distally margined white. Abdomen pale brown, with a cream-white, narrow, dorsal line.

Forewings cleft from 4/5; colour grey-white, rectangular. Markings dark brown, consisting of two transverse spots well before the base of the cleft. A dark scaling along the veins, especially in the distal wing parts and further scaling along the costa. Fringes grey-brown. In the outer margin of the first lobe and in the second lobe near the apex are two darker basal fringe segments. On the dorsum two small groups of dark scales at half and 3/4. Underside pale brown, in the area before the first lobe and in the first lobe cream-white with dark brown scales on the veins.

Hindwings cream-white mixed with brown on the first and second lobe. Third lobe cream-white. Fringes grey-white. On the dorsum of the first lobe a small subapical scale-tooth, and between the wing base and the scale-tooth some isolated dark scales. Underside cream-white mixed with ferruginous and dark brown scales. Venous scales ferruginous-brown, in a double row; the costal row long and extending into the second lobe.

Male genitalia.— Unknown.

Female genitalia.— Antrum twice as long as wide, laterally positioned. Ductus bursae near antrum spiralled and extending into a slender tube leading to the vesicular bursa copulatrix. Signa in shape of a pair of very small horn-like structures, in an area of minute spiculae. Lamina ante-vaginalis in a large, broad sclerotized plate, laterally progressing into the apophyses anteriores. Lamina post-vaginalis linear, centrally with two small sclerotized plates, laterally progressing into the lamina ante-vaginalis. Apophyses posteriores two and a half times longer than papillae anales. Apophyses anteriores as long as papillae anales.

Ecology.— The moth flies in June and December. The hostplant is unknown.

Distribution.— **Peru**: Carabaya: Agualani.

Remarks.— The species is closely related to the larger and darker coloured species *Q. obscurodactyla* and *philorectis*, from which it differs by the elongated shape and grey-white colour of the forewing.

*Quadriptilia obscurodactyla* Gielis, 1994  
(figs 21, 174)

*Quadriptilia obscurodactyla* Gielis, 1994: 184.

Material.— Holotype ♂: **Colomb(ia)**, West Cord., Rio Aguacatal, 2000 m, n.d. (Fassl), gent CG 5069 (BMNH).

Diagnosis.— This species is characterized by the dark, brown-black colour, with two small costal spots in the first forewing lobe.

Description.— Male. Wingspan 32 mm. Head appressedly scaled. Colour of head, thorax, tegulae, mesothorax, abdomen, fore and hindwings dark brown-black. Palps ferruginous, protruding, slightly longer than eye diameter. Distal part of second segment gradually widening. Antennae grey-brown, shortly ciliated. Hind legs brown with two pairs of brown-white spurs of unequal length.

Forewings cleft from 4/5. On the wings a diffuse white-grey scaling, condensed centrally in the first lobe into a wedge shape, with the top facing the apex. At the costa of the first lobe two small grey-brown spots. Fringes grey-black. Underside as above.

Hindwings with dark grey fringes. On the dorsum of the third lobe a continuous row of pronounced black fringe scales. Venous scales ferruginous, in a double row; the costal row slightly longer than the dorsal row.

Male genitalia.— Valvae symmetrical. Cucullus overriding. Sacculus not lobed, wide. Tegumen arched, indented at top. Uncus stout, short. Vinculum expanding into the short blunt saccus. Juxta small. Anellus arms short and wide. Aedeagus curved, without noticeable cornutus.

Female genitalia.— Unknown.

Ecology.— The only known specimen bears no collecting date. The hostplant is unknown.

Distribution.— **Colombia:** West Cordilla: Rio Aguacatal. **Ecuador:** Napo: Cocodrilo.

Remarks.— The species closely resembles *philorectis*, but differs in the terminal margins of the forewing, which are more rounded than indented; by the absence of pale markings at the forewing, and the dark mesothorax.

### *Melanoptilia* gen. nov.

Type species.— *Platyptilia arsenica* Meyrick, 1921.

Description.— Head appressedly scaled, brown-black. Frons smooth. Palps erect, slender, brown-black, two times eye diameter. Thorax, tegulae, mesothorax and abdomen brown-black. Hindlegs brown-black; two pairs of spurs, the proximal pair longer than the distal pair.

Forewings cleft from 3/4, brown-black.

Hindwings brown-black.

Male genitalia.— Valvae with saccular and cucullar spines.

Female genitalia.— Antrum and ductus bursae long and rather slender. Bursa copulatrix with a pair of rather small signa: shaped like an arrowhead or boat-hook. Lamina post-vaginalis well developed.

Ecology.— The hostplant is not known.

Distribution.— Neotropical region.

Etymology.— The genus name reflects the dark brown to black wing colour of these species.

### *Melanoptilia arsenica* (Meyrick, 1921) (figs 22, 175, 298)

*Platyptilia arsenica* Meyrick, 1921: 420.

Material.— Lectotype (designated here) ♂: **Peru**, Iquitos; Jurimaguas, iii.1920 (Parish), gent CG 5020 (BMNH). Paralectotype (designated here) 1 ♀: same locality and data, (BMNH).

Diagnosis.— The species is characterized by its brown-black colour, without noticeable pattern.

Redescription.— Male, female. Wingspan 16-17 mm. Head appressedly scaled, brown-black, speckled with white scales. Frons smooth. Palps erected, slender, brown-

black, twice the eye diameter; with white scales dorsally on the first segment and at the proximal and distal ends of the second segment. Antennae half as long as the wing length, brown-black with regular, isolated white scales, shortly ciliated. Thorax, tegulae, mesothorax and abdomen brown-black. Hindlegs brown-black, with isolated white scales; two pairs of spurs, the proximal pair longer than the distal pair.

Forewings cleft from 3/4, brown-black with reddish-purple shine. Minute white costal spots before base of cleft and in middle of first lobe. A poorly defined white sub-terminal white line in both lobes. Fringes dark grey, basally black-brown. Dark groups of hairs at the apex and anal angle of both lobes, and in middle of termen of the second lobe. Underside dark-brown with a purplish shine; isolated white scales in wing base and near termen.

Hindwings brown-black. Fringes grey. On the dorsum of the third lobe a sub-apical triangular scale-tooth and a smaller one before the middle of the dorsum. Underside dark-brown with a purplish shine, mixed with isolated white scales. Venous scales black in a double row; in the subapical part of second lobe a linear group of these scales, separated from the basal ones.

Male genitalia.— Valvae symmetrical, broad lanceolate. Sacculus poorly developed. A small saccular process at one third of the valva length, and a fibulum beside it in the central part of the valva. Tegumen bilobed, wide. Uncus moderate, stout. Vinculum wide, arched. Juxta symmetrical, small. Anellus arms short and slender. Aedeagus curved, slender and long. Cornutus long and slender. Coecum poorly developed. Ductus ejaculatrix well developed, with a slender and very long sclerotized ridge.

Female genitalia.— Ostium flattened. Antrum simple, rectangular. Ductus bursae long, slender; towards the bursa curved and gradually widening. Bursa copulatrix vesicular, with a pair of horn like signa which have a serrate extension towards the tip of the bursa and are situated in a spiculated area. Lamina post-vaginalis with a transversely oriented half-moon shaped structure, on a gradually narrowing stalk; and followed by two small extensions. Apophyses anteriores one and a half times the papillae anales; in the lamina ante-vaginalis the apophyses have a centrally pointed branch two thirds of the length of the apophyses. Apophyses posteriores slender, four times papillae anales.

Ecology.— The moth flies in March. The hostplant is unknown.

Distribution.— **Bolivia:** Sara: Sta. Cruz. **Brazil:** Amazon: Ega. **Costa Rica:** Guanacasta: La Pacifica. **Peru:** Amazon: Iquitos.

*Melanoptilia nigra* **spec. nov.**

(figs 23, 176, 299)

Material.— Holotype ♂: **Ecuador**, Pastaza, 11 km N Puyo, La Florida, 1°23'35"S 77°58'38"W, 1090 m, 27.ix.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4928 (CG). Paratype ♀: **Ecuador**, Tungurahue, Rio Verde, 1600 m, 26.xii.1992 (V.O. Becker), gent CG 4907 (V.O. Becker nr 103983).

Diagnosis.— The species is characterized by the almost uniform blackish colour. Similar species either differ in the genitalia, or the colour of the hindwing.

Description.— Male, female. Wingspan 14 mm. Head appressedly scaled, brown-black. On the frons a narrow white line between the eyes. Palps slightly curved up, brown-black. The basal segment and the basal half of the second segment with numerous white scales. Antennae shortly ciliated, ringed black and white. Thorax and tegulae

brown-black. Mesothorax white. Abdomen brown-black. Hind legs brown-black, the end of the tibia and tarsal segments with some white scales; Ventral aspect of tibiae with a longitudinal white line. Spur pairs of unequal length, the proximal spurs longer than the distal spurs.

Forewings cleft from two thirds, brown-black. In the lobes an obscure subterminal, white line, in darker subterminal region of the wing. Fringes blackish from the costa to about the anal area of the first lobe; in the cleft dark grey; and blackish around the apex and anal area of the second lobe. On the dorsum a small scale-tooth in the middle and a minute one at 3/4. Underside shining brown-black, with scattered white scales along the costa and a subterminal line on both lobes; at the costa just beyond the base of the cleft a brighter dash.

Hindwings and fringes brown-black. Around the apex of the first lobe a black basal fringe line; on the dorsum of the second lobe small black hair brushes at 3/4, the anal angle and at the apex; on the dorsum of the third lobe a subterminal scale-tooth and scattered scales between the base and the scale-tooth. Underside shining brown-black. Venous scales black, in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical, blunt. A saccular curved process, half the width of the valva, passing the cucullus. The tip of the valva bears numerous spiculae. Junction with tegumen blunt, knob-like. Tegumen simple. Uncus narrow and short, reaching just past the tip of the tegumen. Anellus arm simple and stout, half the tegumen length. Saccus heavily sclerotized, arched. Aedeagus curved, one and one half times valva length, simple. No cornutus.

Female genitalia.— Ostium funnel-shaped. Antrum narrowing before the ostium, length two times width. Ductus bursae four times the antrum, gradually progressing into the bursa copulatrix. Singum in shape of a pair of arrows, with surrounding spiculations. Lamina ante-vaginalis extended along the 8th tergite, covering the antrum. Apophyses anteriores as long as papillae anales. Apophyses posteriores five times the papillae anales.

Ecology.— The moth flies in September and December. The hostplant is unknown.

Distribution.— **Ecuador**: Pastaza: La Florida; Tungurahue; Rio Verde.

Etymology.— The name reflects the almost unicolourous appearance of the moth.

Remarks.— There are so far three other species in the neotropics with a habitus similar to the present species. The present species differs from *M. arsenica* and *M. chalcogastra* in the male genitalia. *Melanoptilia haemogastra* differs in the colour of the hindwing and the markings on the palps. *Postplatyptilia sandraella* resembles the present species in the female genitalia, but differs in the orange colour of the thorax and abdomen.

*Melanoptilia chalcogastra* (Meyrick, 1921)  
(figs 24, 177, 300)

*Platyptilia chalcogastra* Meyrick, 1921: 420.

Material.— Lectotype ♂ (designated here): **British Guyana**, Mallali, iii (Parish), gent BM 18475 (BMNH) [examined]. Paralectotype ♀ (designated here): same locality and data, gent CG 5064 (BMNH) [examined].

Diagnosis.— The species is characterized by the male and female genital structures.

Redescription.— Male, female. Wingspan 12-13 mm. Head appressedly scaled, copper red-brown. Palps erect, dark brown with scattered white scales, two and a half times eye diameter. Antennae dark brown with regularly distributed white scales. Thorax and tegulae dark brown. Mesothorax dark brown with a reddish gloss. Abdomen reddish, dark brown. Hindlegs dark brown with white scales, two pairs of spurs of equal length.

Forewings cleft from 7/10, colour dark brown. Some sparse, isolated white scales at the costa and in the first lobe. Fringes dark grey. Underside dark brown.

Hindwings dark brown; third lobe mixed with white scales. Fringes dark-grey. Small scale-teeth subterminally and halfway along the dorsum of the third lobe; the subterminal one extending to the costa. Underside grey-brown. Venous scales in a double row, black; the costal row shorter than the dorsal row.

Male genitalia.— Genitalia symmetrical. Valvae lanceolate. From the sacculus two spiny structures arise. Cucullus base with a knob shaped extension. Tegumen arched. Uncus as long as tegumen. Anellus arms slender and rather short. Saccus lobed. Aedeagus slightly curved, tip acute. Coecum small. Cornutus stretched. Ductus ejaculatrix long and curved.

Female genitalia.— Ostium oval. Antrum short. In distal part of ductus bursae two small, longitudinal sclerites. Ductus gradually widening near bursa copulatrix. Bursa copulatrix vesicular, with a pair of elongated, horn-like signa. Lamina ante-vaginalis with a bilobed extension along and past the antrum and ostium. Apophyses anteriores slender, as long as papillae anales. Apophyses posteriores slender, two and a half times papillae anales.

Ecology.— The moth flies in March and July. The hostplant is unknown.

Distribution.— **British Guyana:** Mallali. **Costa Rica:** Guanacasta: La Pacifica.

*Melanoptilia haemogastra* (Meyrick, 1926)  
(figs 25, 301)

*Platyptilia haemogastra* Meyrick, 1926: 297.

Material.— Lectotype ♀: **Peru**, Cocapata, 12000 ft, (19)20, gent BM 18851 (BMNH) [examined]. Paralectotype ♀: same data as lectotype (BMNH) [examined].

Diagnosis.— The species is characterized by the dark brown colour, and by limited markings on the forewing.

Redescription.— Female. Wingspan 15 mm. Head appressedly scaled, black-brown. Palps dark brown, as long as eye diameter. Antennae faintly ringed dark brown and grey-brown, shortly ciliated. Thorax, tegulae and mesothorax black-brown. Abdomen dark brown. Hindlegs with scale brushes around the base of the spurs. Spur pairs long, dark brown.

Forewings cleft from 5/7, colour dark brown. A faint line on the first lobe just beyond the base of the cleft and proceeding to the dorsum, just before the base of the cleft. A faint grey subterminal line on both lobes. Fringes grey, basally at the termen of both lobes black-brown. Underside shining reddish dark brown.



Hindwings grey-brown. Fringes grey-brown, with an apical scale-tooth on the third lobe. Underside dark brown. Venous scales in a single row, black.

Male genitalia.— Unknown.

Female genitalia.— Ostium flattened. Antrum gradually narrowing, with two sclerites in the tip. Ductus bursae long and rather slender, gradually widening towards the bursa copulatrix. Bursa copulatrix vesicular, with a pair of small, horn-like signa. Lamina ante-vaginalis a narrow rim, laterally with the small, short and blunt apophyses anteriores. Lamina post-vaginalis in shape of two central, slender extensions to the papillae anales, one and a half times the papillae anales. Apophyses posteriores four times the papillae anales.

Ecology.— The moth collected was not dated. The hostplant is unknown.

Distribution.— **Peru**: Cocapata.

### *Platyptilia* Hübner, [1825]

*Platyptilia* Hübner, [1825]: 429.— Type species: *Alucita megadactyla* [Denis & Schiffermüller, 1775], (= *Alucita gonodactyla* [Denis & Schiffermüller, 1775], by subsequent designation by Tutt, 1905.

*Platyptilus* Zeller, 1841: 764.— Invalid emendation.

*Fredericina* Tutt, 1905a: 37.— Type species: *Alucita calodactyla* [Denis & Schiffermüller], 1775, by original designation.

Redescription.— Head appressedly scaled; frontal tuft absent or small. Palps protruding, second segment widened by numerous scales; one and a half to two times eye diameter. Forewing cleft from 4/5; costal triangle in most species well developed; termen of both lobes well developed.

Forewing veins R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from angle of cell; Cu2 from cell.

Hindwing with centrally placed scale-tooth at dorsum of third lobe; third lobe with one vein.

Male genitalia.— Valvae symmetrical oval to lanceolate; sacculus and cucullus not overriding each other. Tegumen normal. Uncus slender, conical towards end. Vinculum arched. Saccus in shape of small pentagonal plate, top sometimes indented. Aedeagus curved, well developed coecum; minute spiculae as cornutus.

Female genitalia.— Ostium centrally positioned, oval. Antrum in shape of tubular sclerotized segment of variable length, ending centrally at distal margin of seventh sternite. Ductus bursae without sclerite. Lamina post-vaginalis with two blotches lateral of ostium, laterally progressing into short apophyses anteriores. Bursa copulatrix vesicular. Signum double, horn-like.

Ecology.— The hostplants belong to the Compositae.

Distribution.— Holarctic, Neotropical, African and Indo-Australian regions.

### *Platyptilia gentiliae* Gielis, 1991 (figs 26, 178)

*Platyptilia gentiliae* Gielis, 1991: 37.

Material.— Holotype ♂: **Argentina**, Neuquen, Junin de Los Andes, Catán, 825 m., 20.x.1981 (Gentili, sta.

33), gent CG 4092 (ZMUC). Paratype ♂: **Chile**, Nuble, Shangri-la, SW. side Volcan Chillan, 1600 m., 19-21.i.1979 (Davis & Akerbergs), gent CG 6053 (USNM).

**Diagnosis.**— The species is characterized by its greyish brown colour and by an almost complete absence of markings.

**Description.**— Male. Wingspan 17 mm. Head appressedly scaled, grey-brown. Palps protruding, rather slender, grey. Antennae dark brown, shortly ciliated. Thorax and abdomen grey-brown, abdomen laterally ochreous-brown in segments one to three. Legs ferruginous-brown. Proximal pair of spurs in hindleg of unequal length, the lateral two thirds of the inner. Distal pair equal.

Forewings cleft from 3/4, grey-brown, gradually changing to ochreous-brown terminally. A vague impression of the triangular spot before the base of the cleft, some dark scales along the costa and a poorly defined spot at the costa in the middle of the first lobe. Between this spot and the termen an almost white area, extending into the subterminal area of the second lobe. Fringes grey, with dark scales at the anal angle of both lobes. Along the dorsal margin two scale-teeth: at two thirds and 3/4. Underside grey-brown, first lobe ochreous and subterminal areas in both lobes whitish.

Hindwing in first two lobes as in forewing, third lobe ochreous. Fringes grey, in third lobe ochreous-grey. In the dorsal fringes of the third lobe a poorly defined scale-tooth at half distance. Underside grey-brown. Venous scales black, present in two rows between the clefts of the lobes. The costal row shorter than the dorsal.

**Male genitalia.**— Genitalia symmetrical, gradually narrowing. Sacculus undivided. Tegumen bilobed. Uncus stout. Vinculum normal, saccus little pronounced, bidentated. Anellus arms half as long as tegumen; the basal half rather wide, divided to form a slender longer segment with a short thorn adjacent. Aedeagus curved.

**Female genitalia.**— Unknown.

**Ecology.**— The moth flies in October and January. The hostplant is unknown.

**Distribution.**— **Argentina:** Neuquen: Catán. **Chile:** Nuble: Volcan Chillan.

**Remarks.**— The species resembles the Palearctic *P. tesseradactyla* Zeller, but differs in the line at the base of the cleft. Here it is longitudinal and in *P. tesseradactyla* transverse. The Nearctic *P. albicans* Fish is more intensely marked.

*Platyptilia davisi* Gielis, 1991  
(figs 27, 302)

*Platyptilia davisi* Gielis, 1991: 38.

**Material.**— Holotype ♀: **Chile**, Nuble Prov., Shangri-la, SW. side Volcan Chillan, 1600 m., 19-21.i.1979 (Davis & Akerbergs), gent CG 6051 (USNM). Paratype: 1 ♀, same locality and data, gent CG 6052 (USNM).

**Diagnosis.**— The species is characterized by its size and pale colour and the centrally placed scale-tooth on the third lobe of the hindwing. The pronounced and elongated costal triangle is only present in the holotype.

**Description.**— Female. Wingspan 22 mm. Head appressedly scaled, pale ochreous-grey. Frons with small conical protrusion, almost as long as eye diameter. Palps grey-white, one and a half times eye diameter. Third segment as long as second segment, col-

our more brownish mixed. Antennae ringed grey-white and grey-brown; shortly ciliated. Thorax and tegulae pale ochreous-grey. Mesothorax grey-white. Legs grey-white. Hindlegs with two pairs of spurs. The proximal pair longer than the second pair.

Forewings cleft from 4/5; white-grey. Along the costa dark brown scales, from the base toward the costal triangle, in a gradually widening row. A faint transverse marking centrally in the first and second lobe. Before apex of first lobe, at the costa, two small dark brown dashes. Fringes grey. In the first lobe a row of dark brown scales at the base of the fringes, near the apex narrow but gradually widening toward the anal angle. The second lobe shows a small group of black fringe hairs near the apex. Along the outer margin brown scales in poorly defined groups. On the dorsum of the wing dark brown scale-teeth at 3/4 and 4/5. Underside dark brown. The first lobe gradually turning paler; a subterminal grey-white dash in both lobes.

Hindwings brown-grey; third lobe mixed grey-white. Fringes grey. On the dorsum of the third lobe a centrally placed scale-tooth. Between the base and the scale-tooth some isolated brown scales. Underside as above, with a small dash subterminally in the first lobe, as an extension of those seen on the forewing. Venous scales dark brown, in a double row. The costal row the longer, but centrally placed.

Male genitalia.— Unknown

Female genitalia.— Antrum gradually narrowing toward bursa copulatrix; five times longer than wide. Ductus bursae half as long as antrum. Bursa copulatrix vesicular, with a pair of, rather short, horn-like signa. Between signa and ductus bursae an area of small spiculae. Lamina ante-vaginalis centrally with two blotches beside the antrum, laterally progressing into the very short apophyses anteriores. Apophyses posteriores three times longer than papillae anales.

Ecology.— The moth flies in January. The hostplant is unknown.

Distribution.— **Chile:** Nuble: Volcan Chillan.

Remarks.— The species belongs to the group of *Platyptilia gentiliae/tesseradactyla*, but differs in size and markings.

*Platyptilia vilema* B. Landry, 1993  
(figs 28, 179, 303)

*Platyptilia vilema* B. Landry, 1993: 475.

Material.— Holotype ♂: **Ecuador**, Galapagos Islands, Isla Isabela, Volcan Darwin, 1000 m, 18.v.1992 (B. Landry) (CNC). Paratypes: 5 ♂♂, same locality, 630 m, 16.v.1992, 17.v.1992, gent BL 314 (BL, CG, MECN, NHM, CDRS); 1 ♂, Isla Isabela, 15 km N Villamil, 25.v.1992 (B. Landry) (CNC); 1 ♂, Isla Pinta, 400 m, 17.iii.1992 (B. Landry) (CNC).

Diagnosis.— A large species from the Galapagos Islands with a distinct black colour.

Redescription.— Male, female. Wingspan 16-21 mm. Head appressedly scaled, black-brown, mixed with sparse white scales. Frons smooth, rounded. Palps dark brown, protruding, twice the eye diameter. Antennae dark brown, shortly ciliated. Thorax and tegulae dark brown, mixed with numerous white scales. Mesothorax centrally dark brown, laterally white. Abdomen dark brown with white groups of scales at the end of the segments laterally and, in the terminal segments, dorsally. Hindlegs grey-

brown, darker at the base of the spur pairs and terminally in the tarsal segments. Spur pairs of unequal length, the proximal pair the longer, the medial spurs shorter than the lateral spurs.

Forewings cleft from 5/7, dark grey-brown. Markings black: a row of costal spots from the base to the base of the cleft; a discal spot; a dorsal spot before the base of the cleft; a costal triangle just before the base of the cleft; and a central spot on the first lobe. A white subterminal line in both lobes, angular in the second lobe; and diffuse but heavy white scaling on the entire wing. Fringes dark grey-brown, with a basal black row of scales in the termen of both lobes; fringes greyish on the dorsum, with two scale-teeth at 4/5 and 5/6. Underside dark brown, with a white costal spot just beyond the base of the cleft and the subterminal line as above.

Hindwings and fringes dark brown-grey. On the dorsum of the third lobe a central black scale-tooth; between the scale-tooth and the wing base are scattered black scales. Underside dark brown. Venous scales in a single ferruginous row; this row is surrounded by pronounced dark brown scales.

Male genitalia.— Genitalia symmetrical. Valvae lanceolate. Sacculus gradually narrowing and ending just before the tip of the valva. Tegumen bilobed. Uncus stout, as long as tegumen. Anellus arms short, and curved; with a central bulge and an acute tip. Saccus trapezoidal, the terminal surface with two small lateral bulges. Aedeagus moderately curved, gradually tapering toward the tip. Coecum well developed. Cornutus in shape of rows of delicate spiculae.

Female genitalia.— Ostium slightly curved outwards. Antrum gradually narrowing, eight times longer than wide. Ductus bursae two-thirds of the antrum, with two complete twists. Ductus seminalis from the junction of the ductus bursae and the bursa copulatrix. Bursa copulatrix vesicular, with a pair of horn-like signa. Beside the ostium sclerotized blotches, laterally progressing into the lamina ante-vaginalis. Apophyses anteriores very short, less than half the papillae anales. Apophyses posteriores three times the papillae anales.

Ecology.— The moth flies in March and April. The hostplant is *Darwiniathamus* (Landry et al., 2003)

Distribution.— **Ecuador**: Galapagos Archipelago: Isla Isabela, Isla Pinta.

*Platyptilia semnopis* Meyrick, 1931  
(figs 29, 180, 304)

*Platyptilia semnopis* Meyrick, 1931: 176.

*Platyptilia jonesi* Gielis, 1997: 88. **Syn. nov.**

Material.— Holotype *Platyptilia semnopis* Meyrick ♂: **Brazil**, Guandu, Espirito Santo, 1920 (F. Hoffmann) (NMW). Holotype *Platyptilia jonesi* Gielis ♀: **Brazil**, Parana, Castro, 1898 (Jones), gent CG 5017 (BMNH). Paratypes: **Brazil**: 1 ♀, Parana, Curitiba, 920 m., 19.x.1974 (V.O. Becker nr. 9316); 1 ♀, same locality, 20.xii.1974 (V.O. Becker nr. 9317); 1 ♂, same locality, 6.i.1975 (V.O. Becker nr. 9315); 1 ♂, same locality, 15.xii.1974 (V.O. Becker), gent CG 6231 (Becker nr. 9323); 1 ♀, same locality, 7.v.1975 (V.O. Becker), gent CG 6229 (Becker nr. 9313); 1 ♂, Parana, Rio Negro, 800 m., 8.vii.1970 (V.O. Becker), gent CG 6232 (Becker nr. 9340); 1 ♀, Banhado, Quatro Barras, 850 m., 27.ii.1970 (V.O. Becker nr. 9356); 1 ♂, Rio Janeiro, Park Nat. Itatiaia, 2400 m., 18.x.1985 (V.O. Becker nr. 66323); 3 ♂♂, 1 ♀, SP, Campos do Jordão, 1500 m., 8.i.1983 (V.O. Becker nr. 51504, CG); 1 ♂, 2 ♀♀, RJ, Teresopolis, 1000 m., 15.i.1985 (V.O. Becker), gent CG 6138 ♀ (Becker nr. 54981, CG); 2 ♀♀, **Brazil**, Sao Paulo, Est. Biol. Bozaceai nr. Salesopolis, 810 m., 20.ix.1971, 24.ix.1971 (E. Munroe), gent CG 6107 (CNC, CG).

Diagnosis.— The species is characterized by its shape and colour.

Description.— Male, female. Wingspan 24 mm. Head appressedly scaled on vertex and some erect scales at frons, brown. Palps one and a half times eye diameter; dark brown mixed with white scales; the second and third segments of almost equal length. Antennae ringed dark brown and grey-white, shortly ciliated. Thorax and tegulae brown, mixed with ochreous-white scales. Abdomen brown, except for the grey-white segment one. Laterally the end of the segments show small, erect scale brushes. Hindlegs ochreous-brown, ringed dark brown towards the pairs of spurs.

Forewings cleft from 4/5; colour brown mixed with ochreous-white scales. Markings dark brown, consisting of: a dorsal spot at 1/4, and a poorly defined one halfway along the wing; irregular scaling along the costa; a well-defined costal triangle margined ochreous-white terminally, being above the base of the cleft; darkening in the first lobe, margined by a poorly defined ochreous subterminal line, which continues on the second lobe. Fringes grey-white. In the fringes black scales at two thirds and 4/5 of the dorsum and terminally in both lobes as an almost complete row of scales. Terminal margin of first lobe sinuate as in the palaeartic *P. gonodactyla* Denis & Schiffermueller. Underside dark brown, with ochreous transverse lines as above.

Hindwings brown. Fringes grey. In the dorsal fringes of the third lobe an almost complete row of grey-brown scales, which are black-brown centrally, forming a small scale-tooth. Underside brown. Venous scales orange-ferruginous, rather small, in a double row. The costal row extends towards the termen.

Male genitalia.— Genitalia symmetrical. Valvae wide, slightly narrowing at tip. Saccus gradually narrowing towards the tip of the valva. Tegumen bilobed. Uncus rather stout, as long as tegumen. Anellus arms rather short, bifid. Saccus a little longer than wide; basally wide, the distal half rapidly narrowing toward the narrow but blunt tip. Aedeagus curved. Coecum moderate. Cornutus in shape of numerous rows of spiculae.

Female genitalia.— Antrum four times longer than wide, gradually narrowing into the slender ductus bursae. Bursa copulatrix vesicular, with a pair of short horn-like signa. Distal part of bursa copulatrix covered with minute spiculae. Lamina ante-vaginalis originating from two blotches besides the antrum and laterally progressing into the short apophyses anteriores. Apophyses posteriores three to four times longer than papillae anales.

Ecology.— The moth flies in January, February, May, July, September, October, and December. The hostplant is unknown.

Distribution.— **Brazil:** Parana: Curitiba, Castro, Rio Negro, Quatro Barras; Rio Janeiro: Park Nat. Itatiaia, Teresopolis; Sao Paulo: Campos do Jordão, Salesopolis.

Remarks.— There is some resemblance to the North American *Platyptilia carduidactyla*, but the colour of this species is much darker brown, and the ductus bursae lacks the angled section.

*Platyptilia gravior* Meyrick, 1932  
(figs 30, 181, 305)

*Platyptilia gravior* Meyrick, 1932: 250.

*Platyptilia juanvinas* Gielis, 1999: 306. **Syn. nov.**

Material.— Holotype of *Platyptilia gravior* Meyrick ♀: **Costa Rica**, Irazu, v (Reimoser) (Vienna Mus) [examined]. Holotype of *P. juanvinas* Gielis ♂: **Costa Rica**, Heredia, Braulio Carrillo NP, Estacion Barva, 2500 m, iv.1990 (A. Fernandez), gent CG 3865 (Inbio). Paratypes: 2 ♂♂, 1 ♀, **Costa Rica**, Heredia, Braulio Carrillo NP, Estacion Barva, 2500 m, iv.1990, vi.1990 (A. Fernandez), gent CG 3864 (♂), 3866 (♂) and 3867 (♀) (Inbio, CG); 1 ♀, **Costa Rica**, Juan Vinas, no date, no collector, gent CG 3446 (USNM).

Diagnosis.— The species is characterized by its grey-brown colour, the faint forewing markings and genitalia distinguishing it from *Platyptilia carduidactyla* Riley, from North America.

Description.— Male, female. Wingspan 24–28 mm. Head grey-brown, with some loose scales at the collar and the conical frontal protrusion, which measures 3/4 of eye diameter. Palps grey-brown, protruding, one and one half times eye diameter. Antennae faintly ringed grey-brown and pale brown, shortly ciliated. Thorax, tegulae and abdominal segments brown. Mesothorax whitish-grey. Hindlegs pale grey-brown with some darkening towards the base of the spur pairs; spur pairs of equal length.

Forewings cleft from 7/10. Colour brown-grey. Markings dark brown: a costal triangle is present. Just before the base of the cleft, a costal dash in the first lobe and a poorly developed spot in the cell. The costal triangle distally margined by an ochreous line and an ochreous subterminal line in both lobes. Fringes grey-white; with a dark dash at the anal angle of the first lobe and at the apical angle of the second lobe; a blackish scale-tooth at the mid point of the dorsum, and a dark basal scale line at the distal margin of both lobes. Underside brown with ochreous markings as above.

Hindwings brown-grey. Fringes grey-brown, paler in the basal parts. On the dorsum of the third lobe the fringes are basally white, in the middle of the dorsum a triangular, blackish scale-tooth, and scattered dark basal scales. Underside brown. Venous scales ferruginous, in a very short, basally positioned costal row and a pronounced dorsal row extending into the second lobe.

Male genitalia.— Valvae symmetrical, gradually narrowing. Sacculus basally rather wide, from the middle of the valva narrow, not reaching the apex. Cucullus poorly developed. Tegumen double arched. Uncus moderate, strongly developed. Vinculum bifurcate. Anellus arms with a heavy sclerotized spine at one third, a poorly developed spine at two thirds and a blunt tip. Aedeagus curved with cornuti present as rows of minute spines. Coecum well developed.

Female genitalia.— Antrum long and gradually narrowing. The junction to the ductus bursae is rather smooth and not abruptly curved as in *carduidactyla*. Ductus bursae short. Bursa copulatrix vesicular, with two horn-like signa. Lamina ante-vaginalis well developed as a sclerotized ridge and progressing into the short apophyses anteriores. Lamina post-vaginalis with two small arched, poorly sclerotized ridges. Apophyses posteriores long, four times papillae anales.

Ecology.— The moth flies in April, May and June. The hostplant is unknown.

Distribution.— **Costa Rica**: Heredia, Juan Vinas; Irazu.

Remarks.— The present species is closely related to and resembling the North American species *Platyptilia carduidactyla*. It differs in the greyish colour, the male genitalia, the shape of the vinculum and anellus arms. In the female the ductus bursae is attached to the antrum in a different manner.



*Platyptilia spicula* **spec. nov.**  
(figs 31, 306)

Material.— Holotype ♀: **Surinam**, Paramaribo, v.1965 (v. Brussel), gent CG 3447 (USNM).

Diagnosis.— The species is characterized by the thorn-like extension of the ostium/antrum in the female genitalia.

Description.— Female. Wingspan 22 mm. Head appressedly scaled, pale ferruginous. Frons with a conical protrusion, almost as long as the eye diameter. Palps ferruginous, protruding, twice the eye diameter, second segment thickened with dense scales, third segment short. Thorax and tegulae pale ferruginous, with a brown longitudinal, central line; and darkened towards the caudal end. Mesothorax mixed with white scales. The abdomen is glued to the thorax and the first two segments have stuck in the glue. Hind legs pale ferruginous; at the base of the spur pairs and the first tarsal segment brown; the terminal tarsal segments white. The spur pairs white; of unequal length, the medial spurs longer than the lateral spurs and the proximal pair longer than the distal pair.

Forewings cleft from two thirds, pale ferruginous. Markings brown: a costal dash from the discal spot to the costal triangle, a dorsal spot at 1/4, and a less pronounced transverse band centrally in both lobes. Fringes pale grey; with a continuous row of basal brown scales at the termen; black-brown fringes at the apex and anal angle of both lobes; scale-teeth on the dorsum at the mid point and 4/5. Underside pale ferruginous-brown, with an ochreous spot beyond the costal triangle and a bright sub-terminal line.

Hindwing lobes one and two pale grey-brown; third lobe pale brown. Fringes pale grey. Around the apex of the first and second lobe a row of basal pale grey-brown scales; and at the third lobe a row of grey-white scales around the apex and along the dorsum; this row interrupted in the middle of the dorsum by a dark scale-tooth and subapically by a poorly defined dark area in the fringe scales. Underside pale brown, terminally in the first and in the third lobe turning orange. In the first lobe a diffuse mix with white scales. Venous scales ferruginous-orange, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium/antrum with an extending lateral spine, almost as long as the width of the ostium. Antrum gradually narrowing, approximately nine times longer than wide. Ductus bursae slender, short. Bursa copulatrix vesicular, with a pair of, rather small, horn-like signa. Apophyses anteriores slender, without hooks, three and a half times the papillae anales; centrally beside the ostium with poorly sclerotized blotches. Apophyses posteriores slender, five times longer than papillae anales.

Ecology.— The moth flies in May. The hostplant is unknown.

Distribution.— **Surinam**: Paramaribo.

Etymology.— The name reflects the spine-like, lateral, extension of the antrum

Remarks.— The species closely resembles *P. carduidactylus* (Riley), but clearly differs in the female genitalia.



*Platyptilia carduidactylus* (Riley, 1869)  
(figs 32, 182, 307)

*Pterophorus carduidactylus* Riley, 1869: 180.

*Platyptilia cardui* Zeller, 1873: 318.

*Platyptilia hesperis* Grinnell, 1908: 316.

Diagnosis.— The species is characterized by the more slender build of the valvae in the male genitalia and the strongly curved junction between the ductus bursae and the bursa copulatrix in the female genitalia.

Redescription.— Male. Wingspan 22–24 mm. Head appressedly scaled ferruginous. A small frontal tuft, half the eye diameter. Palps slender, one and a half times eye diameter. Antennae weakly ringed, grey-white and grey-brown, shortly ciliated. Thorax and tegulae ferruginous to pale ferruginous. Mesothorax dark brown, distally pale brown to brown, with some small lateral scale projections. Hindleg ringed ochreous and brown; the brown sections before the spurs. The proximal pair of spurs unequal, the outer spurs shorter; the distal pair of equal length.

Forewings cleft from 3/4, colour pale ferruginous, markings dark brown. Markings consisting of a poorly defined dash near the base of the dorsum; a small triangular spot at the costa between the wing base and the large costal triangle just before the base of the cleft. This last costal triangle distally pale margined. Both forewing lobes toward termen gradually darkening. A faint white subterminal line. Fringes white, in outer margin with a basal black line. On the dorsum three, small scale-teeth. Underside brown, with a yellow-white spot at the distal margin of the costal triangle above and a yellow-white subterminal line.

Hindwings pale brown-grey. Fringes grey. Around the apex of the first and second lobe a basal dark line is present in the fringes. On the dorsum of the third lobe, a centrally placed pronounced scale-tooth, distally gradually narrowing. Between the scale-tooth and the base isolated dark scales. Underside ferruginous to grey-brown. Venous scales orange, in a double row, the costal row progressing into the second lobe.

Variation.— The colour of both sexes may vary in intensity, giving the insect an ochreous to dark-brown appearance.

Male genitalia.— Genitalia symmetrical. Valvae gradually narrowing. Saccus simple, not reaching the top of the valva. Tegumen bilobed. Uncus moderate, rather stout. Vinculum narrow. Saccus in a small rectangular plate, with two lateral projections. Anellus arms slender. Aedeagus curved. No cornutus. Coecum moderate.

Female genitalia.— Antrum six times longer than wide; gradually narrowing. Ductus bursae short, angulated. Bursa copulatrix vesicular, with a pair of small, horn-like signa. Besides the antrum two blotches, progressing laterally into the lamina post-vaginalis and the short apophyses anteriores. Apophyses posteriores four times longer than papillae anales.

Ecology.— The moth flies in July; in North America from May till September. Recorded host genera include: *Arctium*, *Carduus*, *Cirsium*, *Cynara*, and *Silybum* (*Asteraceae*). Several species of *Cirsium* are used. The larvae are well known pests of the Globe Artichoke, *Cynara scolymus* (L.).

Parasites.— *Elfia* spec., *Plectops* spec., *Lispidae* spec., *Hyalomyodes triangulifer* (Loew) (Diptera).

*Angitia platyptiliae* Cushman, *Gelis* spec., *Dibrachys cavus* (Walker), *Epiurus bicoloripes* Ashmead, *Phaeogenes* spec., *Pachyneuron allograptae* Ashmead, *Colpognathus helvus* (Cresson), *Microbracon neoadensis* (Ashmead), *Hyalomyodes triangulifera* Loew (Hymenoptera).

Distribution.— **Mexico:** Chiapas: Teopisca. Widely distributed in North America.

Remarks.— The species is differentiated from *Platyptilia percnodactyla* (Walsingham) by the narrower forewings, the more pronounced scale-tooth on the dorsum of the third lobe of the hindwing, the shorter frontal tuft, the shorter aedeagus in the male genitalia; the longer ductus bursae and the shorter signa in the female genitalia.

*Platyptilia thyellopa* Meyrick, 1926  
(figs 33, 183, 308)

*Platyptilia thyellopa* Meyrick, 1926: 298.

Material.— Lectotype ♂: **Colombia**, Mt. Tolina, 12500 ft (= 3800 m), vii.1920 (BMNH).

Diagnosis.— The species is characterized by the generally larger wingspan and somewhat broader forewings, which distinguishes the species from *Platyptilia anniei* Gielis, combined with the costal triangular spot which proceeds into the second forewing lobe, towards the anal angle.

Redescription.— Male, female. Wingspan 22-28 mm. Head appressedly scaled, pale ferruginous, with some erect scales at the collar. Frons pale ferruginous, rounded. Palps two and a half times eye diameter, first segment and basal half of second segment ferruginous, distal half of second and third segment and upper surface ferruginous-white; second segment thickened with pronounced scales. Antennae shortly ciliated; faintly ringed brown and dark brown. Thorax ferruginous-brown. Tegulae brown. Mesothorax grey-white, speckled brown. Abdomen pale brown, with a lateral dark brown spot on the third segment. Forelegs: femur dark brown, tibiae and tarsi ochreous with brown scales near joints. Midlegs ochreous with brown scales around the joints. Hindlegs with two pairs of spurs; outer spur of proximal pair shorter than inner spur, distal pair of equal length, ochreous gradually darkening brown toward spur pairs and end of tarsal segments.

Forewings cleft from 4/5, ochreous-brown. Markings dark brown, all poorly defined, a costal spot at one third, a costal triangle which progresses obliquely into the second lobe to the dorsal margin; dorsal spots at 1/4 and halfway along the dorsum. The first lobe distal from the triangular spot and in the second lobe distal from the oblique extension bright ochreous yellow. A subterminal ochreous-white line in both lobes, with a dark brown margin. Fringes greyish with a dark basal line at the termen; dark brown patches at the apex and anal angle of both lobes and at half and 3/4 of the dorsum. Underside dark brown, with ochreous-white spots in both lobes; a large central spot in the first lobe interrupted by brown scales on the veins and a subterminal line in both lobes.

Hindwings grey-brown, near apex of first lobe ochreous-white. Fringes brown-grey. On the dorsum of the third lobe a central black scale-tooth. Underside dark brown, in the first lobe mixed ochreous, at apex condensed to subterminal spot. Venous scales bright ferruginous, in a double row, the costal row longer than the dorsal row.

Male genitalia.— Valvae symmetrical, lanceolate. The sacculus gradually narrowing to the apex. A small cucullar patch near base of valve. Vinculum arched, rather wide. Tegumen simple, with well developed uncus. Anellus arms up to half the tegumen, moderately thick, with small caulis. Aedeagus curved, coecum well developed. No cornuti.

Female genitalia.— Ostium slightly excavated. Antrum four times longer than wide; gradually narrowing; the distal part sclerotized. Ductus bursae as long as antrum. At the junction of the antrum and ductus bursae a small sclerite. Vesica seminalis at the junction of the ductus bursae and the bursa copulatrix. Bursa copulatrix vesicular, with a pair of horn-like signa. Apophyses anteriores slender, well developed. Apophyses posteriores three times the papillae anales.

Ecology.— The moth flies from October till February, at an altitudes of 2170 to 3800 m. The hostplant is unknown.

Distribution.— **Bolivia:** Songo Valley; **Colombia:** Mt Tolima; **Ecuador:** Carchi: El Angel; Napo: Cosanga; Pichincha: San Juan.

Remarks.— The species is extremely difficult to separate from *P. anniei* Gielis. The size of the species seems in a different range, although there is overlap. In the male genitalia the species are well distinguished; in the female genital structures the differences are delicate.

*Platyptilia anniei* Gielis, 1997  
(figs 34, 184, 309)

*Platyptilia anniei* Gielis, 1997: 40.

Material.— Holotype ♂: **Ecuador**, Pichincha, Rd Quito/Chiriboga k40, 2480 m, 22.iii.1982 (N. Venedictoff), gent CG 3569 (AME). Paratypes: **Bolivia:** 9 ♂♂, Yungas de Corani, 2500 m, 29.ix.1953, 1.x.1953, 3.x.1953 (W. Forster), gent CG 3563, 3564 (ZSM, CG). **Ecuador:** 5 ♂♂, Pichincha, Rd Quito/Chiriboga k34, 2750 m, 6.vi.1977 (N. Venedictoff), gent CG 3548, 3552 (AME, CG); 1 ♂, Pichincha, Rd Quito/Chiriboga k33, 2750 m, 20.xi.1984 (N. Venedictoff) (AME); 6 ♂♂, Pichincha, Nono/Nanegal km 3.6, 2810 m, 14.v.1982 (N. Venedictoff), gent CG 3571 (AME, CG); 1 ♂, Lumbaqui, 25.ix.1975 (N. Venedictoff) (AME); 3 ♂♂, Napo, Santa Elena/Guacama + 2.7k, 1730 m, 14.xii.1984 (N. Venedictoff), gent CG 3568 (AME, CG); 1 ♂, Napo, Rd Cosanga/Tena 6.5k, 2200 m, 14.iv.1985 (N. Venedictoff) (AME); 1 ♂, Napo, Papallacta + 10 km, 2750 m, 11.xii.1984 (N. Venedictoff) (AME); 1 ♂, Napo, San Francisco de Borja, 15.v.1975 (Spangler, Gurney, Langley & Cohen), gent CG 3448 (USNM); 1 ♂, Carchi, des El Carmelo k15, 3250 m, 7.i.1983 (N. Venedictoff) (AME). **Peru:** 1 ♀, Huanaco, 25 km NE Huanaco, Cordillera Carpish, Pattytrail 2600 m., 8-10.ii.1987 (O. Karsholt, sta. 15), gent CG 4170 (ZMUC). **Venezuela:** 2 ♂♂, Merida, Mucuy Fish Hatchery, 7 km E Tabay, 6600' (= 2000 m), 10-13.ii.1978 (J.B. Heppner), gent CG 3464 (USNM, CG); 2 ♂♂, Merida, 4 km S Santo Domingo, 19-23.ii.1976 (C.M. & O.S. Flint), gent CG 3458 (USNM, CG).

Diagnosis.— The species is characterized by the generally smaller wingspan and more slender forewing shape, which distinguishes the species from *Platyptilia thyellopa* Meyrick, combined with the costal triangular spot which proceeds into the second forewing lobe, towards the anal angle.

Redescription.— Male, female. Wingspan 19-24 mm. Head appressedly scaled, with some erect scales at collar, grey-white. Palps three times eye diameter, protruding, pale brown, upper parts whitish. Third segment slender, same length as second. Antennae grey-white and brown ringed, shortly ciliated. Thorax and tegulae brown-grey. Meso-

thorax ferruginous-white. Abdomen pale brown, with a lateral dark brown spot at third segment. Legs brown-grey. Hindlegs with two pairs of spurs of equal length.

Forewings cleft from 3/4, colour ferruginous. Markings dark brown, consisting of a costal triangle; from the base of the cleft this triangle continues in an oblique dash in the second lobe which reaches the anal angle. Some irregular dark scaling on the dorsum at half the wing length, diffuse along the costa. In both lobes a pale subterminal line; a pale dash in the first lobe between this line and the costal triangle. Fringes grey, at the anal angles dark. On the dorsum at half distance and 3/4 a small scale-tooth. Underside brown with pale markings in both lobes, as above.

Hindwings grey-brown, near apex of first lobe a subterminal pale spot, as in the forewing lobes. Fringes grey. At the mid-dorsum of the third segment a scale-tooth, and along the entire dorsum isolated dark scales in the fringe. Underside brown. Venous scales orange, in a double row. The dorsal row longer and extending into the second lobe.

Male genitalia.— Valvae symmetrical. The sacculus gradually narrowing towards 3/4 of the valva. A well developed triangular cucullar process midway along the valva, and basal of this a small cucullar patch. Vinculum longitudinal with a saccus tooth. Tegumen simple, uncus stout. Anellus arms slender, one third of tegumen, with small caulus. Aedeagus curved, stout. Top bifurcate, coecum well developed.

Female genitalia.— The structure is closely resembling the structures of *Platyptilia thyellopa* Meyrick, but differing in the slightly longer antrum; the apophyses anteriores less distinct from the lamina ante-vaginalis; and the signa more slender and longer.

Ecology.— The moth flies in September, October, December, February, May and June; at altitudes of 1730-2810 m. The hostplants are unknown.

Distribution.— **Bolivia:** Yungas de Corani. **Ecuador:** Napo: Nono, Lumbaqui, Cosanga, San Francisco de Borja, Papillacta, Cocodrilo, Pichincha; Carchi: El Carmelo. **Peru:** Huanaco: Cordillera Carpath. **Venezuela:** Merida: Tabay, Santo Domingo.

Remarks.— The species is hardly distinguishable from *P. thyellopa* Meyrick. Only the smaller size and the male genitalia are diagnostic; in the female genitalia the differences are delicate.

*Platyptilia onias* Meyrick, 1916  
(fig. 35)

*Platyptilia onias* Meyrick, 1916: 559.

Material.— Holotype ♀ (without abdomen): **Peru**, Lima, 150 m, viii (Parish) (BMNH).

Diagnosis.— The species is characterized by the grey-brown forewings.

Redescription.— Female. Wingspan 18 mm. Head, thorax and tegulae grey-brown. Between the eyes a narrow white, transverse line. Palps one and a half times the eye diameter, curved up, white laterally with a longitudinal black line.

Forewings cleft from two thirds, grey-brown, speckled with sparse white scales. In the disc a dark spot. Subterminally a faint whitish line in both lobes, best expressed in the first lobe. Fringes grey-white, at the anal angles of both lobes and at the apex of the first lobe dark grey; black scales present basally at the termen of the first lobe, on the

dorsum of the first lobe in the cleft, and at the apex and anal angle of the second lobe. On the dorsum of the wing black scale-teeth at the middle and 4/5.

Hindwings brown-grey. Fringes grey. Along the dorsum of the third lobe scattered black-brown scales.

Male genitalia.— Unknown.

Female genitalia.— Unknown.

Ecology.— The moth flies in August. The hostplant is unknown.

Distribution.— **Peru:** Lima.

### *Gillmeria* Tutt, 1905

*Gillmeria* Tutt, 1905a: 37.— Type species: *Alucita ochrodactyla* [Denis & Schiffermüller], 1775, by original designation.

Redescription.— Head appressedly scaled, with frontal scale brush. Palps long and slender, protruding.

Forewings in general with acute apices. Forewing markings poorly developed, costal triangle only indicated by some small lines and dots. Forewing veins: R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from angle of cell; Cu2 from cell.

At dorsum of hindwing third lobe centrally positioned, poorly developed scale-tooth; third lobe with one vein.

Male genitalia.— Valvae symmetrical. Base of sacculus often wider than, and well differentiated from, terminal part. Tegumen simple. Uncus as long as tegumen, stout. Vinculum arched. Saccus in shape of pentagonal plate, with occasional indentation at top. Aedeagus moderately curved, with pronounced coecum.

Female genitalia.— Ostium centrally positioned. Antrum sometimes pronounced, three times longer than wide. Ductus bursae as long as, or shorter than antrum; without sclerite. Bursa copulatrix with pair of horn-like signa. Lamina ante-vaginalis poorly developed. Apophyses anteriores small. Apophyses posteriores two to three times papillae anales.

Ecology.— The recorded hostplants are *Achillea ptarmica* L., *A. millefolium* L., *A. ochroleuca* Ehrh. and *Tanacetum vulgare* L. (Compositae).

Distribution.— The genus has a Holarctic distribution, and a single specimen of *G. pallidactyla* has been collected in Brazil.

### *Gillmeria pallidactyla* (Haworth, 1811) (figs 36, 185, 310)

*Alucita pallidactyla* Haworth, 1811: 478.

*Alucita ochrodactyla* Treitschke, 1833: 225.

*Pterophorus marginidactylus* Fitch, 1855: 848.

*Pterophorus nebulaedactylus* Fitch, 1855: 849.

*Platyptilus bertrami* Roessler, 1864: 54.

*Platyptilus bischoffi* Zeller, 1867: 333.

*Pterophorus cervinidactylus* Packard, 1873: 266.

*Platyptilus adustus* Walsingham, 1880: 5.

*Platyptilia chapmani* Tutt, 1896: 293.

*Platyptilia bertrami* var. *foculella* Fuchs, 1901: 71.

*Platyptilia sachalinensis* Matsumura, 1911: 58.

*Platyptilia pallidiola* Matsumura, 1931: No. 2069.

Diagnosis.— The species is characterized by its brown-yellow colour and the faint pattern.

Redescription.— Male, female. Wingspan 23-27 mm. Head appressedly scaled, straw-yellow, with isolated erect scales. Collar with erect scales. Frons with a conical tuft as big as eye diameter. Palps slender protruding, twice eye diameter. Antennae ringed grey-yellow and grey, half the wing-length, shortly ciliated. Thorax, tegulae, mesothorax and abdomen ferruginous-yellow. Legs grey-yellow, almost unicolorous. Hindlegs with two pairs of spurs of equal length.

Forewings cleft from 3/4, colour brown-yellow, markings pale brown. The markings consist of an indistinct costal triangular spot and costal dark area between the base of the wing and the triangle. Beyond the costal triangle at the costa, a small, white dash. Indistinct pale grey-brown darkening in the lobes and a small group of dark scales before the base of the cleft. Fringes with a brown basal line in the outer margin. The hairs basally whitish, distally greyish. On the dorsum the fringes white with some dark hairs at half distance, 5/6 and at the anal angle of the second lobe. Underside brown, pale marking at costa as above.

Hindwings grey. Fringes grey-brown. The fringes on the dorsum of the third lobe with a cream-white basal row of small scales. No scale-tooth. Underside grey-brown; top of first lobe and third lobe ferruginous-brown. Venous scales in a double row. The costal row the longer, split into two parts. The dorsal row shorter and with greater concentration of scales.

Variation.— Some specimens from colder areas are smaller and tinged with greyish.

Male genitalia.— Valvae symmetrical, rounded. Sacculus basally well developed, not reaching top of valva. Tegumen bilobed. Uncus stout. Vinculum wide. Juxta well developed. Anellus arms stout, bold ending, with a lateral pointed projection. Aedeagus curved; coecum pronounced; vesica with numerous spiculae.

Female genitalia.— Antrum long tube-like, four times longer than wide. Antrum elliptoid. Ductus bursae a little longer than antrum. Bursa copulatrix vesicular, with a pair of horn-like signa, and spiculation in the distal half. Lamina post-vaginalis along distal margin of seventh sternite; centrally beside the antrum with two blotches, laterally progressing into the apophyses anteriores. Apophyses anteriores as long as papillae anales. Apophyses posteriores two and half times longer than papillae anales; ending in a small club.

Ecology.— The Neotropical specimen from Brazil is not dated. In the Holarctic region the moth flies from June till August. The recorded hostplants are *Achillea ptarmica* L., *A. millefolium* L. and *Tanacetum vulgare* L.

Distribution.— **Brazil**: without further data. The moth is known from the Holarctic region.

Remarks.— The specimen was found in the collection of the Paris Museum. It stood among a series of Pterophoridae specimens from Ecuador and Mexico. The label of the present specimen is of the same type and writing as those seen on the other Neotropical specimens. I consider the specimen is indeed from Brazil.



*Bipunctiphorus* Gibeaux, 1994

*Bipunctiphorus* Gibeaux, 1994: 55.— Type species: *Bipunctiphorus etiennei* Gibeaux, 1994, by original designation.

Redescription.— Head appressedly scaled, with rounded frons. Palps short, tubular.

Forewings with a distinct termen in both lobes and a pair of dots before the base of the cleft. Veins R1 and R2 separate, R3 and R4 stalked, R5 to anal angle; M2 absent; Cu1 from beyond cross vein; Cu2 from just before cross vein.

Hindwing veins Sc + R1, R, M3, Cu1, Cu2, and An1 present. An1 as a single vein in lobe three.

Male genitalia.— See *B. nigroapicalis* (B. Landry & Gielis).

Female genitalia.— See *B. nigroapicalis* (B. Landry & Gielis).

Ecology.— The hostplants are not known.

Distribution.— East Africa, Madagascar, Réunion Island, east and south-east Asia and the Neotropical region.

*Bipunctiphorus nigroapicalis* (B. Landry & Gielis, 1992)  
(figs 37, 186, 311)

*Platyptilia nigroapicalis* B. Landry & Gielis, 1992: 9.

Material.— Holotype: ♂, **Ecuador**, Galápagos Islands, Sta Cruz, 2 km W Bella Vista, 27.ii.1989 (B. Landry) (CNC). Paratypes: 1 ♂, 1 ♀, **Ecuador**, Galápagos Islands, San Cristóbal, 1 km S El Progreso, 14.ii.1989 (B. Landry), gent BL 241 (♂), 225 (♀) (CNC); 2 ♂♂, Santa Cruz, Los Gemelos, 31.i.1989 (B. Landry), gent BL 215; 2 ♂♂, 1 ♀, Tortuga Reserve W Santa Rosa, 6.ii.1989 (B. Landry), gent BL 217 (♂); 1 ♂, Media Luna, pampa zone, 8.ii.1989 (B. Landry); 2 ♂♂, 1 ♀, 2 km W Bella Vista, 27.ii.1989 (B. Landry); 1 ♂, 1 ♀, Finca S. Devine, 17.iii.1989 (B. Landry) (B. Landry, CNC, CG, MECN); 1 ♂, Isla Santiago, Highlands, Los Jabonillos, 520 m, 6-13.iv.1974 (B. Landry), gent BL 303 (BMNH). 1 ♀, **Venezuela**, Caracas, El Avila, 28.ix-3.x.1974 (BV Rigout), gent CG 5037 (BMNH).

Diagnosis.— The species is characterized by the dark coloured apical portion of the forewing lobes contrasting with a pale brown colour.

Redescription.— Male, female. Wingspan 11-15 mm. Head appressedly scaled, brown; between antennae white. Frons smooth. Palps protruding, without scale tuft, as long as eye diameter; laterally dark brown, ventrally white and dorsally yellowish-brown. Antennae longitudinally striped dark brown and white on basal third, dark brown apically. Thorax dark brown frontally, yellowish-brown to beige caudally. Abdomen dorsally pale brown with a very thin longitudinal stripe of dark-brown scales from base to last segment; dark brown scales at apex of each segment medially bordered with white scales; ventro-laterally with a large longitudinal stripe of dark brown scales from base to apex; ventrally pale brown in the middle, except for a white patch apically in the middle of each segment. Hind legs pale brown.

Forewing cleft from two thirds, reddish-brown. Markings dark brown: a patch before cleft, a small spot at middle discus and near inner margin. Fringes beige with: two dark brown patches at anal angle of first lobe, one patch at apex of both lobes, and a double patch at anal angle of second lobe. Scale-teeth at dorsum of wing at middle and 3/4. Underside brown, with ochreous-white subterminal spots.



Hindwing greyish-brown. Fringes mainly greyish-brown, with some isolated dark scales on the dorsum of the third lobe. Underside brown. Venous scales ferruginous, in a double row, the costal row the longer.

Male genitalia.— Genitalia symmetrical. Valva basally narrow, distal two thirds widened. Tegumen bilobed. Uncus basally positioned in tegumen, rather stout and short. Anellus arms slender. Juxta flat, well sclerotized, more or less triangular, apically produced into a sharp point, basally concave with angles rounded. Vinculum weakly sclerotized, very narrow. Saccus bilobed. Aedeagus very slender, well sclerotized, down-curved to almost a 45° angle near the base, apically pointed.

Female genitalia.— Ostium deeply excavated. Antrum narrow, longitudinal. Ductus bursae slender. Ductus seminalis originates from junction between ductus bursae and bursa copulatrix. Bursa copulatrix vesicular. The specimen from Venezuela with a pair of signa. Signa centrally with a longitudinal sclerotisation, laterally mildly sclerotized. The specimen from the Galápagos Islands without signa. Lamina post-vaginalis with numerous parallel sclerotized ridges. Apophyses anteriores absent. Apophyses posteriores twice the papillae anales.

Ecology.— The moth flies from January until April and in September and October. The hostplant is unknown.

Distribution.— **Ecuador:** Galápagos Islands: San Cristóbal, Santa Cruz, Isabela. **Venezuela:** Caracas.

*Bipunctiphorus pelzi* Gielis, 2002  
(figs 38, 187, 312)

*Bipunctiphorus pelzi* Gielis, 2002: 298.

Material.— Holotype ♂: **Ecuador**, Morona-Santiago Prov. Macas, 1000 m, 11-23.xii.1997 (V. Pelz), gent CG 4504 (CG). Paratypes: 1 ♀, **Ecuador**, Morona-Santiago, Macas, Gral. Proaño, Rio Jurumbaino, 1100 m, 11-23.xii.1997 (V. Pelz) (CG); 1 ♀, **Ecuador**, Morna-Santiago, Macas, Proaño-Inalpula, CREA-Domono, 1100 m, 23-24.vi.1999 (V. Pelz), gent CG 4499 (CG).

Diagnosis.— The species is characterized by the almost uniformly dark brown forewings with a small double spot near the base of the cleft and a narrow white sub-terminal line on both forewing lobes.

Description.— Male, female. Wingspan 15-16 mm. Head appressedly scaled, brown-grey. Palps protruding, one and a half times eye diameter, slender, ventrally dark brown and dorsally grey-white. Antennae slender, shortly ciliated, ventrally greyish, dorsally dark brown. Thorax and tegulae brown-grey. Front legs grey-brown; mid legs longitudinally striped greyish and dark brown; hind legs with brownish femur, tibia ventrally greyish and dorsally brownish. Hind legs with two pairs of spurs, the proximal pair the longer, the two proximal and the two distal spurs of equal length, the dorsum of the spurs dark brown, ventrally greyish.

Forewings cleft from 3/5, dark grey-brown. Markings dark brown, consisting of a spot in the cell, a double spot at the base of the cleft, two spots at the costa of the first lobe and some darkening in the terminal half of both lobes. Fringes brown-grey, with scale-teeth on the dorsum at half distance and 3/4, dark fringes at the anal angle of both lobes and some dark scales at the termen of the second lobe. Underside grey-brown.

Hindwings grey-brown. Fringes brown-grey, on the dorsum of the third lobe with scattered black scales in the basal half. Underside grey-brown, Venous scales in a double row, ferruginous, the costal row the longer.

Male genitalia.— Valvae symmetrical. The valvae widened at 2/5 and distally tapering towards top. Tegumen arched, indented at the apex. Uncus centrally in tegumen, knob-like. Saccus rectangular with lateral sclerotized ridges. Aedeagus moderately curved, tapering towards apex.

Female genitalia.— Ostium in indented lamina ante-vaginalis. Antrum narrow, gradually tapering towards ductus bursae and less sclerotized. Ductus bursae rather short, narrow, poorly sclerotized. Bursa copulatrix simple, without signum. Ductus seminalis from top of bursa copulatrix. Lamina post-vaginalis with parallel, delicate sclerotized arches. Apophyses anteriores short. Apophyses posteriores one and a half times papillae anales.

Ecology.— The moth flies in June, September and December at altitudes around 1000 metres. The hostplant is unknown.

Distribution.— **Ecuador**: Morona-Santiago: Macas; Tungurahua: San Francisco.

### *Anstenoptylia* Zimmerman, 1958

*Anstenoptylia* Zimmerman, 1958: 404.— Type species: *Platyptilia marmarodactyla* Dyar, 1902, by original designation and monotypy.

Redescription.— Head appressedly scaled with minute frontal conical protrusion. Palps, protruding, one and a half times eye diameter. Second segment widened by numerous scales. Antennae shortly ciliated.

Forewings with easily recognizable costal triangle. Veins R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from basal half of M3 in second lobe, Cu2 from cell. Both forewing lobes with well developed termen.

Hindwings with scale-tooth placed subterminally. Third lobe with one vein.

Male genitalia.— Valvae are symmetrical; saccus and cucullus of equal length. Vinculum arched, saccus wide, bifid. Tegumen slender with long and slender uncus. Aedeagus regularly arched, with small coecum.

Female genitalia.— Ostium rectangular, wide. Antrum three times longer than wide, progressing into slender ductus bursae. Ductus bursae twisted in three places. Bursa copulatrix vesicular, with pair of horn-like signa. Apophyses anteriores as long as papillae anales, stout. Apophyses posteriores slender, four times longer than papillae anales.

Ecology.— Hostplants include *Ageratum conyzoides* L. and *Lantana* (Zimmerman, 1958).

Distribution.— The species are known from the southern half of the Nearctic and the Neotropical areas including the Hawaiian Islands.

Remarks.— The valva structure in the type species of the genus is as described. However, an additional species is recognized from the Neotropical area, which has an overriding saccus.

*Anstenoptilia marmarodactyla* (Dyar, [1903])  
(figs 39, 188, 313)

*Platyptilia marmarodactyla* Dyar, 1902 [1903]: 442.

*Platptilia fuscicornis* auct., nec Zeller, 1877.

*Platyptilia pasadenensis* Grinnell, 1908: 317.

Diagnosis.— The species is characterized by its genital structure.

Redescription.— Male, female. Wingspan 16-18 mm. Head appressedly scaled, dark-brown. Palps one and a half times eye diameter. Colour brown, basal part of first segment and distal part of first and second segment speckled with white scales. Second segment distally widening. Third segment slender and short. Antennae dark-brown, shortly ciliated. Thorax and tegulae dark grey-brown. Mesothorax dark-brown, distally margined cream-white. Abdomen brown with some dark-brown and white scale groups dorsally and laterally. Legs pale-brown, with two pairs of spurs of equal length. The spurs are dark-brown, with a central section ringed with white.

Forewings cleft from 4/5, colour dark-brown. Markings dark black-brown, consisting of a poorly defined costal triangle before the base of the cleft and a dark triangular spot centrally in the first lobe, the top not reaching the dorsal margin. Next a small discal spot. Along the costa between the base and the costal triangle alternating dark-brown and white scales. The outer margin of both lobes dark grey-brown, preceded by a poorly defined subterminal ferruginous-white line. Between the costal triangle and the costal spot in the first lobe a ferruginous section preceding along the dorsum of the first lobe. Fringes grey. In the basal half of the fringes, in the outer margin of both lobes, two groups of black-brown scales. On the dorsum of the wing two scale groups at half distance and 3/4 of its length and on the dorsum of the first lobe a sub-anal group of scales. Underside dark-brown. Along the costa alternating dark-brown and white scales. At the costa above the base of the cleft a small white spot, preceded by a small spot halfway along the costa on the first lobe. A subterminal white line across both forewing lobes.

Hindwings ferruginous-grey-brown. Fringes grey. At the apex and at 3/4 of the dorsum of the third lobe, dark grey-brown scale-teeth. Between the wing base and the scale-tooth scattered pronounced black scales. Underside dark-brown on lobes one and two and dark-brown mixed with white scales on lobe three. Venous scales ferruginous orange, in a double row. The costal row proceeding into the second lobe, where it branches and proceeds in a row along the costa of the second lobe.

Male genitalia.— The valvae are symmetrical. Sacculus bilobed, the basal 2/5 wide, the distal 3/5 gradually widening towards the top of the valvae. Cucullus as long as sacculus. Tegumen bilobed slightly rounded. Uncus slender and long. Vinculum narrow, arched, proceeding in a forced pronounced saccus. Juxta simple. Aedeagus curved, coecum pronounced.

Female genitalia.— Antrum as wide as long, almost rectangular. Ductus bursae straight and wide for a short distance, then a sharp turn and a section with a tortuous shape, progressing into the vesicular bursa copulatrix. In the distal half of the ductus bursae a sclerotized plate following the twisted shape of the ductus. Signum double, horn-like. Apophyses posteriores three times longer than papillae anales. Apophyses anteriores short and stout.

Ecology.— The moth flies in May and September. In the Nearctic area from July to November. The recorded hostplants genera are: *Ageratum* (Asteraceae); *Salvia*, *Agastache*, *Mentha*, *Pycnanthemum*, *Monardella* (Lamiaceae); *Scrophularia* (Scrophulariaceae); and *Lantana* (Verbenaceae).

Parasites.— *Posocentrus* spec., *Hesperauximus sternitzkii* Gertsch (Hymenoptera, Ichneumonidae).

Distribution.— **Costa Rica:** Cartagena: Cerro de la Muerte. **Mexico:** Tamaulipas: Gomez Farias.

*Anstenoptilia hugoiella* Gielis, 1996  
(figs 40, 189, 314)

*Anstenoptilia hugoiella* Gielis, 1996: 86.

*Platyptilia pediculosa* Walsingham (nomen nudem).

Material.— Holotype ♂: **Colombia**, no date, Nr. 101543, Nolcken, Zell. coll., Wlshm. 1910: 427, gent CG 5016 (BMNH). Paratypes: 1 ♀, same data, Nr. 101547, gent CG 5015 (BMNH).

Diagnosis.— The species is characterized by the genitalia.

Description.— Male, female. Wingspan 18-20 mm. Head appressedly scaled, dark brown. Palps one and one half times eye diameter, dark brown. The second segment roughly scaled, the third segment smooth, short. Antennae dark brown, shortly ciliated. Thorax and tegulae dark brown. Abdomen dark brown, laterally and ventrally mixed with white scales. Legs dark brown, hindlegs with two pairs of spurs of equal length.

Forewings cleft from 4/5, colour dark brown. Markings black-brown, consisting of an irregular scaling on the costa; a moderate defined costal triangle and darkening in both lobes. In the first lobe this darkening is terminally margined by an undulating poorly defined white line. In the second lobe this line is almost obscure. Fringes on the dorsum white and on the termen of both lobes and in the cleft, grey. Black scale bristles at half and 3/4 of the length of the dorsum, at the anal angle of the second lobe, and in an almost continuous row on the termen of both lobes. Isolated dark scales in the basal half of the dorsum and in the cleft. Underside reddish dark brown.

Hindwings grey-brown. Fringes grey. On the dorsum of the third lobe a row of black scales, condensed into a poorly defined scale-tooth at two thirds. Underside brown, mixed with white scales, especially in the third lobe. Venous scales orange-ferruginous, in a double row. The costal row being the longer.

Variation.— The colour may have a strong chestnut tinge.

Male genitalia.— Genitalia symmetrical. Valva with poorly developed bird-head like shape. Sacculus bilobed, in basal half twice as wide as in distal half. Tegumen bilobed. Uncus moderate, slender. Vinculum wide, arched. Saccus moderate, forked. Anti-saccus small. Aedeagus arched. No cornutus. Coecum moderate.

Female genitalia.— Antrum laterally ending in the double arched, pronounced distal margin of the seventh sternite, which has a bilobed shape. Antrum three times longer than wide. The ductus bursae twisted, slender. Bursa copulatrix vesicular, with a pair of very pronounced horn-like signa. In distal bursal area some spiculae. Lamina postvaginalis laterally progressing into the apophyses anteriores, which are as long as papillae anales. Apophyses posteriores two and a half times longer than papillae anales.

Ecology.— The moth flies in February, March and August. The hostplant is unknown.

Distribution.— **Brazil:** Sao Paulo: Petropolis. **Colombia;** **Ecuador:** Morona-Santiago: Macas. **Peru:** Puno: Limbani; Cuzco: Pillahuata. **Venezuela:** Paramo el Batallon: Quebrada de los Pios

*Lantanophaga* Zimmerman, 1958

*Lantanophaga* Zimmerman, 1958: 400.— Type species: *Oxyptilus pusillidactylus* Walker, 1864, by original designation and monotypy.

Redescription.— Head appressedly scaled; without frontal tuft. Palps upcurved, second segment thickened by some scales; just over eye diameter.

Forewing cleft from 4/5 in *L. pusillidactyla*, and 5/8 in *L. minima*; with costal triangle. Forewing veins: R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from angle of cell; Cu2 from cell.

Hindwing with terminally placed scale-tooth at dorsum of third lobe; third lobe with one vein.

Male genitalia.— Valvae symmetrical. Valvae “bird head”-like, with smooth extension of top. Saccus bilobed, proximal and distal half of equal length. Tegumen simple, but long. Uncus slender, 3/4 of tegumen length. Vinculum with long and slender, forked saccus. In *L. minima* tegumen bilobed, and saccus with blunt tip.

Female genitalia.— Ostium centrally positioned, slightly excavated. Antrum rather short and curved. Ductus bursae long and slender, with sclerite. Lamina post-vaginalis well developed and showing a bilobed sclerotized plate distad of the ostium bursae, laterally progressing into apophyses anteriores. Signum consisting of a sclerotized double S shape, with an irregular margin.

Ecology.— Hostplant *Lantana*.

Distribution.— Tropical and subtropical regions.

*Lantanophaga pusillidactylus* (Walker, 1864)  
(figs 41, 190, 315)

*Oxyptilus pusillidactylus* Walker, 1864: 933.

*Platyptilia tecnidion* Zeller, 1877: 13.

*Platyptilia hemimetra* Meyrick, 1886: 18.

*Platyptilia lantana* Busck, 1914: 103.

*Platyptilia teleacma* Meyrick, 1932: 250.

*Platyptilia lantanadactyla* Amsel, 1951a: 66.

Diagnosis.— The species is characterized by its size and genitalia. *L. pusillidactyla* is the only member to have scattered scales all along both the inner and the costal margins of the 3<sup>rd</sup> forewing lobe in addition to a single scale-tuft on the inner margin of the 3<sup>rd</sup> lobe.

Redescription.— Male, female. Wingspan 11-14 mm. Head appressedly scaled, pale to dark brown. Collar ochreous-white. Antennae upperside dark brown, underside ochreous-white, shortly ciliated. Palps rather short; length of third segment two thirds

of second; some scales on second segment longer than third segment, dark brown. Thorax dark ochreous to pale brown. Abdomen with no pattern, covered with a mixture of ochreous and dark brown scales. The dark scales more intense on the proximal parts of the sternites. Legs generally white, with an irregular mixture of dark brown scales.

Forewings cleft from two thirds. Colour ochreous-brown. Along the costa eight small white dots between base and the base of cleft. An indistinct dark brown costal triangle, with small free margin to base of cleft. First lobe with two white straight transverse bands. The first indistinct, the second well marked. Between these markings dark brown scales, the distal area lighter. The bands continue in the second lobe, but are less distinct. The area between these markings is darker as in the first lobe. Fringes white with dark base. In the termen of the first lobe three distinct scale groups, in the basal third of the fringes in the termen of the hind lobe a comparable configuration, but the scale groups join together in a wavy pattern. Underside orange-yellow. The transverse markings on the lobes yellow-white.

Hindwings pale orange-yellow. Fringes white. On dorsum of third lobe irregularly distributed black scales; in distal part forming a scale-tooth, narrowly separated from the apex. Underside brown. On first lobe a yellow-white transverse marking opposite the inner light marking of the forewing. Two rows of orange-brown venous scales.

Male genitalia.— Valvae symmetrical. Sacculus bilobed, the basal half vesicular, the distal half narrow. Cucullus longer than sacculus. Tegumen simple, slightly indented at middle. Uncus slender, moderately long. Tegumen narrow. Saccus slender and long, with a bifid tip. Juxta with slender caules. Aedeagus curved, small.

Female genitalia.— Antrum twice as long as wide. Ductus bursae slender, tortuous. Ductus seminalis in proximal part. Bursa copulatrix vesicular. A Pair of S-shaped signa. Apophyses posteriores three and a half times as long as papillae anales. Apophyses anteriores slender, as long as papillae anales. Lamina post-vaginalis centrally sclerotized in a bilobed shape.

Ecology.— The moth flies in January, April, June, August and October. The host-plants are *Lantana camara* L., *L. hispida* H.B.K., *L. peduncularis*, *L. indica*, *L. involucrata*, *Lippia alba*, *Phyla nodiflora* (L.) Green, *P. lanceolata*, *Caperonia palustris*, *Mentha* spec., *Utricularia* spec.

Distribution.— **Brazil:** Minas Gerais: Nova Lima, Sete Lagoas, Nova Teutonia; Rio de Janeiro: Pq. Nat. Itatiaia. **Dominica:** Grande Savanne. **Ecuador:** Galápagos Islands: Santa Cruz; Manabi: Punto Lopez; Napo: Cosanga; Tungurahua: Ambato. **Jamaica:** San Antonie. **Mexico:** Guerrero: Chilpancingo, Iguala; Morelos: Cuernavaca; Tamaulipas: El Ensino; Veracruz: Ciudad Mendoza. **Paraguay:** Caaguazu: Tayao; Central: Asuncion; Gualra: Melgarejo; Misiones: Villa Florida. **Peru:** Lima: Miraflores. **Puerto Rico:** Maricao. **Virgin Islands:** Guana Island.

*Lantanophaga minima* (B. Landry & Gielis, 1992) **comb. nov.**  
(figs 42, 191, 316)

*Postplatyptilia minima* B. Landry & Gielis, 1992: 13.

Material.— Holotype ♂ (BL slide 244), **Ecuador**, Galápagos Islands, Isabela, 8.5 km N Pto Villamil, 11.iii.1989, MVL, B. Landry [CNC no. 21252].

Diagnosis.— This species is one of the smallest Pterophoridae with a wingspan of 10 mm.

Description.— Male, female. Wingspan 10 mm. Head dark brown, with few white scales between antennae. Collar dark brown and white. Palps porrect, about as long as vertical eye diameter, dark brown with scattered white scales. Antennae dark brown and white. Thorax dark brown. Tegulae darker brown laterally, apically bordered by white scales. Legs: coxa and femur dark brown with patches of scattered white scales; hindleg tibia dark brown on outer side, pale greyish-brown on inner side with scattered white scales; tarsi laterally dark greyish-brown, medially pale greyish-brown, but white at base. Spurs dark brown and white with yellowish-brown apex.

Forewing cleft from 5/8, dark brown. Markings darker brown: a triangular spot before cleft; on first lobe medially near inner margin and in middle of second lobe; on both lobes a transverse white line near the middle; subterminal part of both lobes yellowish-brown. Fringes pale greyish-brown; a row of dark brown scales on the termen and around the anal angle of both lobes; this row interrupted by about five small white scale patches; on the dorsum dark brown scale-teeth at halfway and 3/4.

Hindwing and fringes greyish-brown. On the dorsum of the third lobe a subapical dark brown scale-tooth, and scattered white and dark brown scales between the base and the scale-tooth.

Male genitalia.— Valvae symmetrical. Sacculus bilobed; basal lobe widened and bulging. Cucullus slightly wider near the middle, just overriding; apically with a pair of small ventral and dorsal pointed extensions. Tegumen large, apically bilobed; these lobes small and pointed. Uncus short, slender, down-curved, its base near middle of tegumen. Anellus visible as two weakly-sclerotized lobes. Juxta well sclerotized, about half length of sacculus, lozenge-shaped at base with longer, slender dorsal extension. Vinculum narrow. Saccus about half length of sacculus, subapically upturned, gradually tapering into a blunt tip. Aedeagus slender, broadly curved. Cornutus a small, semi-circular, sclerotized mark. Coecum extremely poorly developed.

Female genitalia.— Ostium positioned to the right side. Antrum gradually narrowing. Ductus bursae long and slender, curved twice. Ductus seminalis originates from the distal part of the ductus bursae. Bursa copulatrix vesicular, with a pair of "S" shaped signa. Lamina ante-vaginalis double bilobed. Apophyses anteriores short. Lamina post-vaginalis as an extended, bilobed plate along eighth sternite. Apophyses posteriores slender, three times the papillae anales.

Ecology.— The moth flies in March. The hostplant is unknown.

Distribution.— **Ecuador**: Galápagos Islands: Isabela, Pinta.

### *Stenoptilodes* Zimmerman, 1958

*Stenoptilodes* Zimmerman, 1958: 407.— Type species: *Platyptilus littoralis* Butler, 1882, by original designation and monotypy.

Redescription.— Head appressedly scaled; no frontal tuft. Palps protruding, second segment thickened by numerous scales, twice eye diameter.

Forewings cleft from 4/5; costal triangle well developed; both lobes with well developed termen. Forewing veins (after Zimmerman, 1958): R1, R2, R3, R4 and R5



present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from angle of cell; Cu2 from cell.

Hindwings with terminal scale-tooth at dorsum of third lobe. Third lobe with one vein.

Male genitalia.— Valvae symmetrical. Valvae with “bird head”-like shape, top smooth. Sacculus bilobed, terminal segment small. Tegumen simple. Uncus slender, length from half to the same length as the tegumen. Vinculum arched, saccus not developed.

Female genitalia.— Ostium may be positioned centrally or to one side. Antrum square to longitudinal, sclerotized. Ductus bursae often with sclerite. Lamina ante-vaginalis as a curved ridge. Lamina post-vaginalis with a central sclerotized ridge, often indented. Bursa copulatrix vesicular; signum double, horn-like. Apophyses anteriores short. Apophyses posteriores two to three times papillae anales.

Ecology.— Recorded hostplants include *Vaccinium* and *Plectranthus* (Zimmerman, 1958).

Distribution.— Tropical and subtropical regions of the world.

*Stenoptilodes taprobanes* (Felder & Rogenhofer, 1875)  
(figs 43, 192, 317)

*Amblyptilia taprobanes* Felder & Rogenhofer, 1875: plate 140, fig. 54.

*Platyptilia brachymorpha* Meyrick, 1888: 240.

*Platyptilia seeboldi* Hofmann, 1898: 33.

*Platyptilia terlizzii* Turati, 1926: 67.

*Amblyptilia zavatterii* Hartig, 1953: 67.

*Platyptilia legrandi* Bigot, 1962b: 86.

*Stenoptilodes vittata* Service, 1966: 11.

Diagnosis.— The species is characterized by the genitalia.

Redescription.— Wingspan 12-17 mm. Head appressedly scaled; no frontal tuft. Palps protruding, second segment thickened by numerous scales, twice eye diameter. Forewings cleft from 4/5; grey-brown; costal triangle well developed; both lobes with well developed termen. Forewing veins (after Zimmerman, 1958): R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from angle of cell; Cu2 from cell.

Hindwings with terminal scale-tooth on dorsum of third lobe. Third lobe with one vein.

Male genitalia.— Valvae with bird-head like top. Sacculus bilobed, the terminal segment small. Vinculum arched, saccus not developed. Tegumen simple. Uncus long and slender.

Female genitalia.— Antrum square to longitudinal, sclerotized, centrally placed at the distal margin of the seventh sternite. In the ductus bursae a sclerotized plate. Bursa copulatrix vesicular, with a double, horn-like signum. The lamina post-vaginalis not developed. Apophyses anteriores short.

Ecology.— The moth flies in February, April, July and September. The species are polyphagous. Numerous host have been recorded from several families. Host genera include: *Antirrhinum*, *Campylanthus*, *Limnophila*, *Penstemon*, *Veronica* (Plantaginaceae); *Clinopodium*, *Oncimum*, *Plectranthus*, *Scutellaria* (Laminaceae); *Verbascum* (= *Celsia*)

(Scrophulariaceae); *Striga* (Orobanchaceae); *Hypoestes* (Acanthaceae); *Sobatia* (Gentianaceae); *Samalus* (Theophrastaceae); *Hydrolea* (Hydroleaceae); *Vaccinium* (Ericaceae); and *Centipeda* (Asteraceae).

Parasites.— *Pristomerus hawaiiensis* Perkins (Hymenoptera, Ichneumonidae).

Distribution.— **Bolivia**: Rio Yacuma: Espiritu. **Ecuador**: Napo: Tena. **Mexico**: Hidalgo: Real del Monte. **Paraguay**: Alto Paraguay: Bahia Negra; Pte Hayes: Estancia Jui. **Venezuela**: Amazon: Cerro de la Neblina.

*Stenoptilodes brevipennis* (Zeller, 1874)  
(figs 44, 193, 318)

*Platyptilia brevipennis* Zeller, 1874: 442.

*Platyptilia crenulata* Barnes & McDunnough, 1913: 185.

*Stenoptilodes amrishi* Makhan, 1994: 354.

*Platyptilia taprobanes* auct., not Felder & Rogenhofer, 1875.

Material.— Lectotype (designated by B. Landry & Gielis, 1992) (without abdomen): **Peru**, Payta, Piura, iv.1873 (G.F. Mathews) (BMNH) [examined]. Paralectotype (without abdomen): same locality and data (BMNH) [examined].

Diagnosis.— The species is characterized by the shape of the genitalia.

Redescription.— Male, female. Wingspan 12-14 mm. Head appressedly scaled, ferruginous-white. Palps erect, as long as eye diameter, ferruginous-white. Last segment brown ringed. Antennae white and brown ringed; shortly ciliated. Thorax and tegulae ferruginous-white. Abdomen pale brown. Legs ferruginous-white, hindlegs with two pair of spurs of equal length.

Forewings cleft from 3/4, colour ferruginous-white. Markings pale brown, consisting of an ill defined costal triangle before the base of the cleft and an ill defined costal spot between the wing base and the costal triangle. In the centre of the first lobe a dark brown spot, and a cream-white subterminal line. This line progresses into the second lobe, where it is less distinct. Fringes grey. In the outer margin of both lobes some basal black-brown scaling in the fringes. On the dorsum small scale-teeth at half and 3/4 distance, and some isolated scales between the base and the anal angle. Underside pale brown, with a cream-white subterminal line in both lobes.

Hindwings grey-white. Fringes grey. On the dorsum of the third lobe a subapical scale-tooth, and between the base and the scale-tooth some isolated scales. Underside pale brown. Venous scales bright orange, in three rows. Basally two rows opposite and in the second lobe a separate single row.

Male genitalia.— Genitalia symmetrical. Valva with bilobed sacculus. Distal part of sacculus almost rectangular. Cucullus overriding the sacculus, ending in an acute tip. Tegumen bilobed. Uncus long and slender. Anellus arms two thirds of tegumen length, slender. Vinculum arched, poorly developed. Aedeagus curved. Coecum small, narrow. No cornutus.

Female genitalia.— Ostium excavated. Antrum five to six times longer than wide, gradually narrowing. Top margin of antrum with two small sclerotized hooks. Ductus bursae as long as antrum. Bursa copulatrix vesicular with a pair of horn-like signa. Mar-

gin of the seventh sternite with three lobes. Apophyses anteriores absent. Apophyses posteriores three times longer than papillae anales.

Ecology.— The moth flies in January, March, April, May, July, November and December. The hostplants are *Mecardonia acuminata* (Walt.) Small and *Russelia equistiformis* Schlecht. and Cham.

Distribution.— **Argentina:** Jujuy: PN Calilegua. **Belize:** Cayo: Macal River, Gales Point. **Brazil:** Santa Catarina: Seara, São Joaquim, Brusque; São Paulo: Bertioiga; Parana: Mandiriñba; Rondonia: Porto Velho. **Costa Rica:** Turrialba; Heredia: Est Biol La Selva; Puntarenas: P.N. Manuel Antonio, Golfito United Fruit co. **Cuba:** Matanzas: Santo Tomas. **Ecuador:** Galapagos Islands: Isabela, Santa Cruz; Morona-Santiago: Macas; Tungurahua: San Francisco. **Mexico:** Mexico: Mexico City; Michosacan: San Jose Purva; Vera Cruz: Atoyac. **Paraguay:** Caaguazu: Tayao; Central: Asuncion; Alto Parana: Primavera. **Peru:** Apurimac: Abancay; Arequipa: Lomas; Ica: Pisco; Payta: Piura. **Puerto Rico.** **Suriname:** Paramaribo. **Trinidad:** San Augustina. **Uruguay:** Montevideo.

*Stenoptilodes duckworthi* Gielis, 1991  
(figs 45, 194)

*Stenoptilodes duckworthi* Gielis, 1991: 63.

Material.— Holotype ♂: **Argentina**, Catamarca, Rio Portrero near Andalmana, 15.ii.1972 (Duckworth), gent CG 6089 (USNM).

Diagnosis.— The species is characterized by the male genitalia. The rather wide valva, with the sharp top and the long and slender uncus are diagnostic.

Description.— Male. Wingspan 19 mm. Head appressedly scaled, mixed ochreous and brown; some erect scales at the collar. Frons with a small conical protrusion, less than half the eye diameter. Palps ferruginous-brown, with erect scales and a gradual widening of the second segment. Segments two and three equally long; third segment shorter and slender, with a cream-white colour and a pale ferruginous ring. Antennae grey-brown, shortly ciliated. Thorax and tegulae mixed ochreous and brown. Mesothorax cream-white. Hindlegs brown-white, the proximal spur pair of unequal length, the distal ones of equal length.

Forewings cleft from 3/4, colour ochreous-brown. (The specimen is in a bad state, and worn. The colour is poorly defined, but the markings are recognizable). Markings darker brown: a spot in the center of the costa reaching obliquely toward the dorsum beneath the base of the cleft, a costal triangle before the base of the cleft, a costal spot in the centre of the first lobe terminally margined parallel to the termen of the first lobe. Between these spots an ochreous-white oblique band and triangular spot bordering the costal triangle; the terminal area in first lobe cream-white. Fringes too worn to be described. Underside pale brown, with a cream-white terminal area as above, and a pale irregular area between the costal triangles at the base of the cleft and in the first lobe. Hindwings grey-brown. Fringes grey.

Male genitalia.— Valvae symmetrical, rather wide; top resembling a bird's head, sharp. Sacculus bilobed. Tegumen slender, bilobed. Uncus slender, long. Vinculum arched. Anellus arms moderate, up to 3/4 of the tegumen. Aedeagus arched, slender. Coecum rounded, caulus slender.

Female genitalia.— Unknown.

Ecology.— The moth flies in February. The hostplant is unknown.

Distribution.— **Argentina**: Catamarca: Portrero.

*Stenoptilodes gilvicolor* (Zeller, 1877)  
(figs 46, 195, 319)

*Platyptilia gilvicolor* Zeller, 1877: 462.

Material.— Holotype ♀: **Colombia**, Bogota, 22.iii, gent BM 4968 (BMNH) [examined].

Diagnosis.— The species is characterized by the shape of the double costal triangle and the pale colour.

Redescription.— Male, female. Wingspan 17-18 mm. Head appressedly scaled, ochreous-brown. A small frontal, conical tuft. Palps ochreous-brown, first segment with erect scales; second segment with some loose scales, terminal part of second segment and third segment cream-white, slightly longer than eye diameter. Antennae incompletely ringed with grey-white and brown scales; shortly ciliated. Thorax, tegulae, mesothorax and abdomen ochreous-brown mixed with dark brown. Hindlegs dark brown, with proximal parts of the segments cream-white; two pairs of spurs of equal length.

Forewings cleft from 3/4, ochreous-brown. Markings dark brown consisting of an irregularly margined costal streak, followed by a costal triangle in the middle of the first lobe. This last spot reaches the dorsal margin of the first lobe and widens when it reaches the dorsum. The triangular spots margined by a small white line. Indistinct spots on the dorsum of the wing at 1/4 and 1/3, and a small spot in the basal half of the second lobe. There is a mixture of white scales in the ochreous-brown parts. Fringes grey-white. Along the dorsum are small groups of dark scales. The fringes are dark grey on the dorsum of the second lobe, and at the apex and anal angles of both lobes. Underside ferruginous-brown, with pale lines, as on the upperside along the costal triangle in the first lobe and subterminally in the second lobe.

Hindwings first and second lobe grey-brown, third lobe ochreous-brown. Fringes grey in lobes one and two, and grey-white in the third lobe. On the dorsum of the third lobe a black scale-tooth at two thirds, and between this scale-tooth and the wing base are isolated prominent dark scales. Underside ferruginous-brown. Venous scales black-brown, in a double row. The dorsal row extending far into the second lobe.

Male genitalia.— Valvae symmetrical. Valva with bilobed sacculus and a top resembling a bird's head. Tegumen bilobed, moderately wide. Uncus slender. Vinculum arched. Juxta symmetrical. Anellus arms rather stout, half the tegumen length, hooked at the top. Aedeagus arched. Cornutus small, surrounded by small sclerotized ridges in a concentric, wavy pattern. Coecum moderate.

Female genitalia.— Antrum rectangular, progressing into a gradually narrowing ductus bursae. In the middle of the ductus bursae a single twist. Bursa copulatrix vesicular, with a pair of horn-like signa. Along the antrum, a lamina post-vaginalis laterally progressing into the proximally localized distal margin of the seventh sternite. Apophyses anteriores absent. Apophyses posteriores as long as papilles anales.

Ecology.— The moth flies in March. The hostplant is unknown.

Distribution.— **Chile**: Valparaiso: Quillota. **Colombia**: Bogota.

*Stenoptilodes agricultura* **spec. nov.**  
(figs 47, 196)

Material.— Holotype ♂: **Venezuela**, Aragua, Rancho Grande, 1100 m, 16-23.x.1966 (S.S. & W.D. Duckworth), gent CG 4868 (USNM).

Diagnosis.— The species is characterized by the male genitalia.

Description.— Male. Wingspan 14 mm. Head appressedly scaled, pale brown, above the eye mixed with white scales. Palps curved up, pale brown, twice the eye diameter, first segment ventrally white, terminal part of second and third segment mixed ochreous. Antennae dark brown with some pale brown scales. Collar and lateral part of thorax dark brown. Thorax dorsally and tegulae ochreous-brown. Mesothorax white.

Forewings cleft from two thirds, ferruginous ochreous. Markings dark brown: a discal spot extended towards the costa; an elongated costal triangle, from the discal spot, around the base of the cleft into the first lobe, just before the base of the cleft; dorsal spots at 1/5, 2/5 and in the middle; central in the first lobe a large costal spot which has a trapezoid shape and reaches to just before the dorsum; and diffuse dark shading extending into the centre of the second lobe. Fringes mainly grey but blackish grey at the apex and anal region of both lobes, and mid terminal in the second lobe; on the dorsum in the middle and at 4/5. Underside brown, with an ochreous spot beyond the costal triangle and a subterminal line on both lobes.

Hindwings; first and second lobes grey-brown, and pale brown in third lobe. Fringes grey-brown. On the dorsum of the third lobe a large dark scale-tooth, and between the scale-tooth and the base of the wing numerous dark basal scales. Underside dark brown, mixed with white scales on the first and third lobe. Venous scales ferruginous-orange, in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical. Sacculus bilobed, basal part large and wide, second part narrow and short. Cucullus overriding the sacculus, with an acute tip. Tegumen arched, bilobed. Uncus half the tegumen length, not widened. Anellus arms, rather slender, blunt tipped, almost as long as tegumen. Saccus wide, and short, ending in a sharp tip. Aedeagus curved. Coecum small. Cornutus in shape of a small sclerotized ridge.

Female genitalia.— Unknown.

Ecology.— The moth flies in October. The hostplant is unknown.

Distribution.— **Venezuela**: Aragua: Rancho Grande.

Etymology.— The name "Rancho Grande" means, large cattle farm. This locality has provided many interesting plume moth species.

*Stenoptilodes stigmatica* (Felder & Rogenhofer, 1875)  
(figs 48, 197, 320)

*Platyptilia stigmatica* Felder & Rogenhofer, 1875: plate 140, fig. 55.

*Platyptilia pyrhhina* Zeller, 1877: 464.

Material.— Holotype of *stigmatica* ♀: **Colombia**, Bogota, no date, gent BM 18195 (BMNH) [examined]. Holotype of *pyrhhina* ♀: **Colombia**, Bogota, 23.ii (Nolcken), gent BM 18198 (BMNH) [examined].

Diagnosis.— The species is characterized by its ferruginous red colour and the genitalia.

Redescription.— Male, female. Wingspan 19-20 mm. Antennae dark brown, shortly ciliated. Head appressedly scaled, ferruginous ochreous. Frons with conical protrusion, approximately of eye diameter. Palps ferruginous ochreous, a little extending over the frons. Third segment small. Thorax and abdomen ferruginous ochreous. The third abdominal segment brown at the sides and with a double brown line on the ventral surface. Hind legs ringed dark brown and cream-white.

Forewing cleft from 4/5, ferruginous. Markings dark brown, consisting of scaling along the costa from the base to the costal triangle. The costal triangle does not touch the base of the cleft. The sides of the triangle almost straight. Halfway between the base and the costal triangle an indistinct, oblique transverse line; the dorsal end approaching the base of the wing. An indistinct transverse line in the middle of the first lobe. The termen of the first lobe sinuate, of the second rounded. Fringes grey-white, with a basal row of dark scales in the termen of both lobes. On the dorsum scale-teeth at half and 3/4 distance. Underside dark brown; first lobe and middle of second lobe ochreous.

Hindwing brown-grey. Fringes grey. In the middle of the dorsal fringes of the third lobe a small, black scale-tooth. Underside grey-brown. Venous scales, dark ferruginous-brown, in two rows, the costal row long, the dorsal small.

Male genitalia.— Genitalia symmetrical. Top of the valva with pronounced bird's head like shape. Sacculus bilobed, the basal half pronounced and wide, the distal part small. Tegumen wide. Uncus curved, slender. Vinculum arched, narrow. Juxta symmetrical. Anellus arms up to half the length of the tegumen, top hooked. Aedeagus curved. A long spine-like cornutus. Coecum moderate.

Female genitalia.— Antrum as long as wide, laterally ending in the margin of the seventh sternite, which progresses to the other side in an asymmetrical pointed shape. Ductus bursae moderate, with a sclerotized plate in the distal third. Bursa copulatrix vesicular, with a pair of slender, horn-like signa. Lamina post-vaginalis centrally with a small, double arched sclerotized plate; laterally progressing into the margin of the seventh sternite, and the small apophyses anteriores. Apophyses anteriores half as long as papillae anales. Apophyses posteriores three times longer than papillae anales.

Ecology.— The moth flies in February, September and October. The hostplant is unknown.

Distribution.— **Colombia:** Bogota. **Ecuador:** Pichincha: Nono; Guachayacu. **Venezuela:** Merida: Tabay.

*Stenoptilodes limaicus* Gielis, 1996  
(figs 49, 198)

*Stenoptilodes limaicus* Gielis, 1996: 91.

Material.— Holotype ♂: **Peru**, Dept. Lima, 12 km SE Chosica Zárate, 2200-2600 m., 23-25.i.1987 (O. Karsholt, St. 3), gent CG 4169 (ZMUC).

Diagnosis.— The species is characterized by its pale colour with a pronounced dark costal triangle.

Description.— Male. Wingspan 18 mm. Head appressedly scaled, colour pale ferruginous. Frons with small conical tuft, half the eye diameter. Palps ferruginous, twice the eye diameter; curved upward. Tip of third segment white. Antennae grey-brown with isolated white scales; shortly ciliated. Thorax and tegulae ferruginous. Mesothorax ferruginous with white distal margin. Abdomen dorsally ferruginous, ventrally white on segments six to eight. Legs grey-white and brown ringed. Hindlegs with two pairs of spurs of equal length.

Forewings cleft from two thirds; colour yellow-white. Markings brown, consisting of an indistinct costal scaling; an oblique fascia at one third of the wing length; a small dorsal scale group halfway along the dorsum and a costal triangle just before the base of the cleft. Next a diffuse ferruginous scaling on the wing and lobes. Fringes grey (but only partly present); at two thirds of dorsum a small scale-tooth. Underside grey-brown, the lobes yellow cream-white with ferruginous scales.

Hindwings pale ferruginous-grey; top of first lobe grey-white. Fringes brown-grey. Underside grey-brown; top of first lobe cream-white mixed with ferruginous. Venous scales ferruginous to orange brown; in a double row; the costal row longer and extending into the second lobe.

Male genitalia.— Valvae symmetrical. Tip of valvae with a moderately acute bird head-like shape. Sacculus bilobed, the basal part well extended and wide, three times longer than the distal part, which is rather poorly developed. Tegumen arched. Uncus rather slender, tapering. Vinculum in the shape of a "W". Saccus poorly developed. Juxtal arms two thirds of tegumen length, rather stout with blunt tip. Aedeagus arched, with a longitudinal cornutus in the central part and a fine spiculated cornutus in the distal half. Coecum well developed.

Female genitalia.— Unknown.

Ecology.— The moth flies in January. The hostplant is unknown.

Distribution.— **Peru**: Lima: Chosica Zárate.

Remarks.— The species resembles *P. carduidactyla* but has a more contrasting wing-pattern and is smaller. It differs from *P. camtosphena* in the shape of the costal triangle.

*Stenoptilodes debbiei* Gielis, 1996  
(figs 50, 199)

*Stenoptilodes debbiei* Gielis, 1996: 90.

Material.— Holotype ♂: **Ecuador**, Pichincha, Rd Quito/Chiriboga 34 km, 2750 m, 6.vi.1977 (N. Venedictoff), gent CG 3549 (AME).

Diagnosis.— The species is characterized by the wing pattern and the genitalia.

Description.— Male. Wingspan 26 mm. Head appressedly scaled, brown. Palps protruding, two and a half times the eye diameter, first segment with wide drooping scales, second segment dark brown with some ochreous scales at one third, third segment short slender ochreous-brown. Antennae faintly ringed dark brown and ochreous-brown, shortly ciliated. Thorax and tegulae ochreous-brown, the distal parts slightly darkened. Mesothorax dark brown distally margined creamish. Hindlegs dark brown with four ochreous rings. Both spur pairs of equal length, brownish cream, the basal and distal parts dark brown.



Forewings cleft from  $3/4$ , ochreous-brown. Markings dark brown, consisting of two spots on the dorsum at  $1/5$  and  $1/4$  distance. The costa consisting of an indistinct dark brown margin with some widening at one third of the length of the costa and a double triangular spot, the first just before the base of the cleft and the second in the centre of the first lobe. The costa terminally from the second costal triangle dark brown. On the dorsum numerous small groups of creamish spots. The termen of the first lobe sinuate, the termen of the second lobe double sinuate with an extension centrally. Fringes greyish, darkened at the anal region of both lobes, in the center of the termen of both lobes and with three scale groups on the dorsum of the wing at half,  $3/4$  and  $4/5$  distance. Underside dark brown with a creamish costal spot just beyond the base of the cleft and a white subterminal line on the first lobe, becoming less distinct on the second lobe. Hindwings grey-brown fringes grey-brown. On the dorsum of the third lobe a scale-tooth at  $3/4$ ; between the scale-tooth and the base of the wing some irregularly placed, prominent, brown scales. Underside dark brown. Venous scales ferruginous in a double row. The costal row shorter than the dorsal row.

Male genitalia.— Valvae symmetrical. Tip of valva in the shape of a blunt bird's head. Sacculus bilobed, the basal part large and wide, the distal part small. Vinculum arched. Tegumen bilobed. Uncus almost straight, as long as tegumen. Anellus arms as long as tegumen. Aedeagus arched, without cornutus.

Female genitalia.— Unknown.

Ecology.— The moth flies in June. The hostplant is unknown.

Distribution.— **Ecuador**: Pichincha: Quito.

*Stenoptilodes hypsipora* (Meyrick, 1916)  
(figs 51, 200)

*Platyptilia hypsipora* Meyrick, 1916: 559.

Material.— Holotype ♂: **Peru**, Huancayo, 10650', vii.(19)11 (P.), gent BM 18854 (BMNH) [examined].

Diagnosis.— The species is characterized by the ferruginous ochreous colour, and the distinct costal triangle with straight edges.

Redescription.— Male. Wingspan 23 mm. Head appressedly scaled, ochreous ferruginous. Frons with a small cone. Palps one and one half times eye diameter, basal segment whitish; second segment ochreous ferruginous, ventrally creamish, distally widened; third segment ochreous ferruginous. Antennae grey-brown, shortly ciliated. Thorax, tegulae, and abdomen ochreous ferruginous. Hindlegs ferruginous-white, with faint pale ferruginous rings at the base of the spurs. Spur pairs of equal length.

Forewings cleft from  $5/7$ , colour ferruginous ochreous. Markings dark brown: a costal triangle well before the base of the cleft, a costal longitudinal spot at the first lobe, at the termen of both lobes a narrow line, and a faint costal scaling in the basal half of the wing, distally extended to the dorsum, obliquely. Fringes grey, with a scale-tooth on the dorsum at two thirds distance. Underside as above, but less distinctly marked.

Hindwing lobes one and two grey; lobe three ochreous-grey. Fringes pale grey. Underside ferruginous. Venous scales in a double row, basally tinged with blackish, distally ferruginous. The costal row longer than the dorsal row.

Male genitalia.— Genitalia symmetrical. Valvae with bilobed sacculus, distal part small and flattened. Cucullus overriding, stout, with a large blunt tip. Tegumen bilobed. Uncus as long as tegumen, slender. Anellus arms almost as long as tegumen, slender. Juxta “U”-shaped. Saccus small, triangular. Aedeagus gently curved, with a blunt tip. Coecum small. No cornutus.

Female genitalia.— Unknown.

Ecology.— The moth flies in July. The hostplant is unknown.

Distribution.— **Peru**: Huancayo.

*Stenoptilodes juanfernandicus* Gielis, 1991  
(figs 52, 201, 321)

*Stenoptilodes juanfernandicus* Gielis, 1991: 60.

*Platyptilia epidelta*; J.F.G. Clarke, 1958: 70-71. Misidentification.

Material.— Holotype ♀: (**Chile**), Masatierra, Bahia Cumberland, 20.iii.1951 (Kuschel), gent CG 1983 (MNHC). Paratype ♀: same locality, 4.iii.1951 (Kuschel) (MNHC). **Chile**: 2 ♂♂, 4 ♀♀, Masatierra, Bahia Cumberland, 1.i.1952, 4.i.1952, 5.i.1952, 8.ii.1952, 10.iii.1952, 23.xii.1954 (P.G. Kuschel) (USNM, CG).

Diagnosis.— The species is characterized by its pale yellow to ferruginous yellow colour and the distinct genitalia.

Description.— Male, female. Wingspan 17-18 mm. Head appressedly scaled, ferruginous-brown. Palps ochreous-brown, twice the eye diameter, curved upward. Third segment pale yellow-white. Antennae brown, with indistinct indications of grey-brown rings, shortly ciliated. Thorax dark brown. The dorsal parts of abdominal segments one, three and five yellow brown, and of segments two, four, six and seven dark brown; the lateral parts dark brown with some pale scales. Legs brown, tarsal segments whitish, distally dark brown. Hindlegs with two pairs of spurs of equal length.

Forewings cleft from 3/5, colour straw yellow to ferruginous yellow. Markings as in *Stenoptilodes sematodactyla* Berg. Underside brown, with yellow-white markings, consisting of a costal spot above the base of the cleft and a subterminal, transverse, but incomplete line on both lobes.

Hindwings greyish brown. Fringes grey. On the dorsal margin of the third lobe a black scale-tooth at two thirds. Between the wing base and the scale-tooth isolated dark, prominent scales. Underside brown. At the tip of first lobe a continuation of the pale sub-terminal line of forewing. Third lobe grey-brown. Venous scales ferruginous orange, in a double row. The costal row longer and extending into the second lobe.

Male genitalia.— Uncus slightly shorter than tegumen, moderately sclerotized, rather broad in diameter, slightly hooked apically; setae moderately abundant at base, short; base of uncus at apex of tegumen. Tegumen moderate in size and level of sclerotization, apically incised in the middle; apical lobes short, rounded. Valvae symmetrical, with very short harpe: sacculus slightly longer than length of valva, of mostly even width; ventral part of cucullus gently rounded, not projected or setose; cucullus dorsally forming a rather stout projection directed ventrally and blunt apically. Anellus base broad, triangular; single pair of arms directed dorsally, weakly sclerotized, about half the length of tegumen. Vinculum narrow. Saccus absent. Aedeagus rather stout, moderately long and sclerotized, with small diagonal ridges dorsally; vesica with small

sclerotized markings; coecum penis very short, rounded; ventral process slightly longer than coecum penis, more slender.

Female genitalia.— Antrum laterally ending at the margin of the seventh sternite, one and a half times longer than wide. Ductus bursae in distal half little sclerotized; centrally exhibiting one twist and containing a slender sclerotized plate between this twist and the bursa. Bursa copulatrix vesicular, with a pair of horn-like signa. Distal half of bursa with minute spiculae. Lamina post-vaginalis in a wide M-shape sclerotized plate. Lamina ante-vaginalis fused with distal margin of seventh sternite; centrally a funnel-shaped ridge, laterally progressing into the apophyses anteriores, which are as long as the papillae anales. Apophyses posteriores slender, four to five times longer than the small papillae anales.

Variation.— The specimens show some variation in the yellow colour of the forewing.

Ecology.— The moth flies from December until March. The hostplant is unknown.

Distribution.— **Chile:** Juan Fernandez Islands. **Ecuador:** Galapagos Islands: Isabela; Cotopaxi: Latacunga.

Remarks.— The species resembles *S. sematodactyla* in wing pattern, but differs in the more yellow colour. The female genitalia differ from both *S. sematodactyla* and *S. gilvicolor*.

*Stenoptilodes sematodactyla* (Berg, 1885)  
(figs 53, 202, 322)

*Platyptilia sematodactyla* Berg, 1885: 283.

*Platyptilia epidelta* Meyrick 1908: 486.

Material.— Lectotype of *Platyptilia sematodactyla* Berg ♂: [**Argentina**], Banda Oriental, no date, gent CG 1998; Data; Nr. 2291; “*Platyptilia sematodactyla* Berg, 1885” (MLPA) [examined]. Paralectotypes of *Platyptilia sematodactyla* Berg (without abdomen): 2 specimens, [**Argentina**], Buenos Aires, no date; Data; nr. 2291; “*Platyptilia sematodactyla* Berg, ej que acompanaha el tipo” (MLPA) [examined].

Lectotype of *Platyptilia epidelta* Meyrick ♂: **Argentina**, Parana, (19)07 (R.), gent BM 5008 (BMNH). Paralectotypes of *Platyptilia epidelta* Meyrick: 2 ♂♂, 5 ♀♀, 2 without abdomen, **Argentina**, Parana, (19)07 (R) (BMNH) [examined].

Diagnosis.— The species is very easily identified by the presence of two costal triangles, the second located in the centre of the first forewing lobe. The double scale-tooth on the dorsum of the third hindwing lobe is also characteristic of this species.

Redescription.— Male, female. Wingspan 18-22 mm. Head appressedly scaled, ferruginous-brown. Frons with small conical protrusion. Palps protruding one and a half times eye diameter, grey-brown. Second segment stout, third short. Antennae indistinct grey-brown and dark brown ringed, shortly ciliated. Thorax, abdomen and legs ferruginous-brown.

Forewings cleft from 3/4, ferruginous-brown, with dark brown markings. The markings consist of dark scaling along the costa, a poorly defined costal triangle before the base of the cleft and a sharply defined costal triangle in the centre of the first lobe. This last triangle bordered by oblique ferruginous ochreous lines, the subterminal one, which is parallel to the termen, continues indistinctly in the second lobe. Fringes grey,

basal black scales (the pattern cannot be examined due to the state of the specimen). Dorsal margin with scale-teeth at half and 3/4 distance. Underside dark brown, with pale markings as on upperside.

Hindwing ferruginous-brown, fringes grey-brown. Along the dorsum of the third lobe a scale-tooth at 4/5 and at the tornus. Between the wing base and the scale-tooth isolated prominent scales in the fringes. Underside ferruginous-brown, third lobe dark brown. Venous scales orange brown in a double row, the costal row interrupted.

Male genitalia.— Valvae symmetrical. The apex resembling a bird's head. The sacculus is bilobed, the distal part swollen and half as long as the basal part. Tegumen bilobed. Uncus slender, long. The anellus arms centrally widened, half as long as the tegumen. The vinculum rather narrow, extended between the valvae. Aedeagus curved, with a group of small cornuti near its top.

Female genitalia.— The antrum one and a half time longer than wide. Ostium bursae laterally positioned in the slightly curved and narrow sclerotized end of the seventh sternite. Ductus bursae slender, with a spiral section in the distal half with two twists. Bursa copulatrix simple, with a double horn-like, and rather long signum. Papilles anales normal. Apophyses posteriores approximately two and a half times longer than papilles anales. Apophyses anteriores slender, short. Between the lobes of the eighth sternite a triangular sclerotized plate, above the sclerotized, curved margin of the seventh sternite, delicately inserted at the top.

Ecology.— The moth flies in December. The hostplant is a species of *Mentha* (Lamiaceae), bred from 1 ♂ and 1 ♀, La Plata, 19.x.1970 (Arona), el. *Mentha* (USNM).

Distribution.— **Argentina**: Buenos Aires: Banda Oriental, Ramos Mejia, La Plata; Parana.

Remarks.— *Stenoptilodes gilvicolor* differs by having a yellowish colour, a sharper-edged top to the valvae and the square shaped lamina ante-vaginalis. *S. duckworthi* has wide valvae and a long uncus in the male genitalia; and *S. juanfernandica* which has a yellowish colour and in the shape of the lamina ante-vaginalis and ductus bursae.

*Stenoptilodes gielisi* B. Landry, 1993  
(figs 54, 323)

*Stenoptilodes gielisi* B. Landry, 1993: 477.

Material.— Holotype ♀: **Ecuador**, Galapagos Islands, Isla Isabela, Volcan Darwin, 300 m, 20.v.1992 (B. Landry), gent BL 316 (CNC).

Diagnosis.— The species is characterized by the genitalia.

Redescription.— Female. Wingspan 15 mm. Head appressedly scaled, brown. Palps protruding, just over the eye diameter. Antennae dark brown. Thorax and tegulae brown.

Forewings cleft from 3/4, colour a mixture of dark brown, yellow brown, and white scales. A faint whitish longitudinal line in the disc and a subterminal line in both lobes. A dark costal triangle just before the base of the cleft, and in the centre of the first lobe. Fringes grey; at the termen with a row of black basal scales, which are interrupted once in the first lobe and twice in the second lobe. On the dorsum scale-teeth at one third, the middle and at 5/6.

Hindwings and fringes grey. On the dorsum of the third lobe an apical scale-tooth and between the scale-tooth and the wing base a row of prominent scales.

Male genitalia.— Unknown.

Female genitalia.— Ostium positioned to the right side. Antrum slender, curved. Ductus bursae long and slender, and with a double twist. Ductus seminalis from the junction between the ductus bursae and the bursa copulatrix. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis lateral a central extension. The central extension twice the length of the lateral, wide and with a flattened tip which is gently indented. Apophyses anteriores as long as the small papillae anales. Apophyses posteriores four times the papillae anales.

Ecology.— The moth flies in May. The hostplant is unknown.

Distribution.— **Ecuador**: Galapagos Islands: Isabela.

*Stenoptilodes maculatus* **spec. nov.**  
(figs 55, 324)

Material.— Holotype ♀: **Ecuador**, Azuaj, PN Cajas, Laguna Llaviuco, 3225 m, 2°5'38"S 79°8'35"W, 12.x.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4926 (CG).

Diagnosis.— The species is characterized by the distinctive female genital structure.

Description.— Female. Wingspan 21 mm. Head appressedly scaled, ferruginous ochreous. Palps three times eye diameter, protruding, ferruginous ochreous with numerous black scales basilaterally on the second segment. Antennae dark brown, shortly ciliated. Collar black-brown, with some erect bifid scales. Thorax rostrally and caudally black-brown, centrally ferruginous ochreous. Tegulae ferruginous ochreous. Mesothorax white. Hind legs dark brown, at the base of the spur pairs and terminally at the tarsal segments black-brown. The spur pairs of unequal length, the medial spurs the longer, the distal and proximal pairs of the same shape; grey, darker near the base and the tip.

Forewings cleft from 7/10, ferruginous ochreous. Markings blackish: a dark diffuse costal patch interrupted at the base of the cleft and at the subterminal line; a discal spot; a costal triangular spot just before the base of the cleft and emerging from the costal patch; a small spot just below and before the base of the cleft; a small spot between the base of the cleft and the costa; a diffuse dark area basally and terminally from the subterminal line, more pronounced in the second lobe; a transverse terminal spot in the first lobe. The costal spot and subterminal line pale ferruginous ochreous. Fringes: on the termen of the first lobe, ferruginous ochreous and terminally darker; at the anal angle of the first lobe, black; in the cleft black with some ferruginous ochreous streaks; on the termen of the second lobe black, interrupted twice with ferruginous ochreous; on the dorsum ferruginous ochreous with black scale-teeth at two thirds and 4/5 and some scattered scales between the wing base and the first scale-tooth. Underside brown. Ochreous scales in the discal area, at the costa, at the base of the cleft and as a subterminal line.

Hindwings brown-grey. Fringes grey, with a darker basal line around the tips of the first and second segment. Along the dorsum of the third lobe a black scale-tooth at two thirds, between the base and the scale-tooth scattered black and white scales and a faint scale-tooth at the apex. Underside brown, on the first lobe mixed with numerous whitish scales. Venous scales ferruginous, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium positioned just right of centre, slightly curved. Antrum twice as long as wide, centrally with a single twist, progressing into the slender and straight ductus bursae. The curved part of the antrum with a diffuse sclerotization. Bursa copulatrix vesicular with a pair of rather small, horn-like signa. Lamina antevaginalis well developed, rather wide and bilobed. Apophyses anteriores small, one third of the papillae anales. Apophyses posteriores just over three times papillae anales, terminally club-shaped.

Ecology.— The moth flies in October, at an altitude of 3225 metres. The hostplant is unknown.

Distribution.— **Ecuador**: Azuay: PN Cajas.

Etymology.— The name reflects the mottled black spots on the forewings.

Remarks.— The generic position of this species is not certain yet. The female genitalia and the scale-teeth on the dorsum of the third hindwing lobe suggest the present genus. A male specimen is needed for confirmation.

*Stenoptilodes umbrigeralis* (Walker, 1864) **comb. nov.**  
(figs 56, 203, 325)

*Pterophorus umbrigeralis* Walker, 1864: 942.

Material.— Holotype (without abdomen): **Colombia**, Bogota, no date (BMNH) [examined].

Diagnosis.— The species is characterized by the the oblique, brown transverse band at one third of the forewing.

Redescription.— Male, female. Wingspan 22 mm. Head appressedly scaled, with some erect scales at the collar, dark brown. Frons conical, slightly shorter than the eye diameter. Palps ferruginous-brown, protruding, twice the eye diameter. The basal segment has a delicate ventral mixture including white scales; the second segment widened by pronounced scales. Antennae ringed grey-white and dark brown, shortly ciliated. Thorax, tegulae, mesothorax and abdomen dark brown. Hindlegs dark brown, ringed with white; twice at the base of the spurs, and beyond the base of the spurs and the beginning of the tarsal segments.

Forewings cleft from 3/4, colour dark brown with a purplish gloss, markings dark brown, consisting in an oblique band at one third of the wing, a costal triangle just before the base of the cleft and a transverse band in the basal half of both lobes. Fringes grey, with a black basal line at the termen of both lobes and dorsal scale-teeth at two thirds and 3/4. Underside dark brown, spotted ochreous in the terminal area, forming a subterminal line in both lobes.

Hindwings grey-brown. Fringes grey. On the dorsum of the third lobe a poorly defined scale-tooth at two thirds. Underside dark brown, with a ferruginous tinge. Venous scales in a double row, ferruginous; the costal row longer than the dorsal row.

Male genitalia.— Genitalia symmetrical. The valvae have an overriding tip to the cucullus. Sacculus bilobed. Tegumen arched, simple. Uncus short, also simple. Anellus arms long and slender, as long as tegumen. Saccus in the shape of a blunt tooth. Aedeagus curved. Coecum small. No cornutus.

Female genitalia.— Ostium asymmetrical. Antrum twice as long as wide. Ductus bursae with a single twist. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis centrally, above the ostium, with a trapezoid sclerotized plate, which is indented in the centre. Apophyses anteriores short, half the length of the papillae anales. Apophyses posteriores two and a half times the papillae anales.

Ecology.— The moth flies in July. The hostplant is unknown.

Distribution.— **Ecuador:** Napo: Papallacta. **Peru:** Carabaya: Oconeque.

Remarks.— The species closely resembles *pyrrhina*, but differs in the presence of the oblique band in the basal third of the forewing.

*Stenoptilodes heppneri* **spec. nov.**  
(figs 57, 326).

Material.— Holotype ♀: **Venezuela**, Aragua, 5 km W Tovar, 1920 m, 24.i.1978 (J.B. Heppner), gent CG 3457 (USNM).

Diagnosis.— The species is characterized by the female genitalia.

Description.— Female. Wingspan 17 mm. Head appressedly scaled, brown mixed with white, above the eye white, and at the frons a white transverse line. Palps twice the eye diameter, protruding; first and second segment brown, dorsally white; third segment slender, white with a brown ring. Antennae ciliated, faintly ringed with pale and dark brown. Thorax and tegulae rostrally grey-brown, caudally mixed white. Mesothorax white.

Forewings cleft from two thirds, grey-brown. Markings dark brown: a small discal spot; a spot on the dorsum at 1/5; a costal triangle at the base of the cleft; and a transverse band in the centre of both lobes. White scales are scattered along the costa; a subterminal line in both lobes and an ochreous spot in the first lobe beyond the costal triangle. Fringes grey, with black patches at the apex and anal angle of both lobes; a continuous row of black-brown basal scales at the termen of both lobes; and scale-teeth on the dorsum at 1/4, one third, halfway, and 4/5. Underside dark brown, with pale spots as above.

Hindwings and fringes grey-brown. No evident scale-tooth. Underside grey-brown. Venous scales dark ferruginous, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium wide. Antrum gradually narrowing, just over twice the width of the ostium. Ductus copulatrix as long as antrum, slender, with a blunt sclerite of half the length of the ductus. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina post-vaginalis with a central, narrow ridge. Apophyses anteriores short, two thirds of the papillae anales. Apophyses posteriores slender, three and a half times the papillae anales.

Ecology.— The moth flies in January. The hostplant is unknown.

Distribution.— **Venezuela:** Aragua: Tovar.

Etymology.— The species is named after its collector, a promoter of the research of Lepidoptera, Dr J.B. Heppner.



*Stenoptilodes thrasydoxa* (Meyrick, 1926)  
(figs 58, 204, 327)

*Platyptilia thrasydoxa* Meyrick, 1926: 297.

Material.— Holotype ♂: **Colombia**, Mt. Socorro, vii.1920, 12.500 ft. (BMNH) [examined].

Diagnosis.— Examination of the genitalia is the only way to separate this and the following two species.

Redescription.— Male, female. Wingspan 27-29 mm. Head appressedly scaled, with some erect scales at the collar; above grey-brown, laterally cream-white. Palps erect, two times eye diameter, brown and above on the third segment cream-white. Antennae brown, shortly ciliated. Thorax brown, with a transverse cream-white line beyond the collar and before the mesothorax. Colour of tegulae as a continuation of the thoracic colour. Mesothorax proximally dark brown, distally cream-white. Abdomen in first three segments dorsally and laterally alternating dark brown and cream-white; distal segments four to eight dark brown speckled with cream-white scales; segment nine ochreous-white. Legs white with distal parts of segments dark brown. The femur shows the same pattern at the spurs, which are of equal length.

Forewings cleft from 4/5, colour cream-white and markings dark brown. Markings consist of a broad costal line which narrows before the costal triangle, the costal triangle situated just before the base of the cleft and the line progresses obliquely into the second lobe toward the anal angle; a costal spot in the first lobe which does not reach the dorsal margin of this lobe. There is irregular spotting on the dorsal margin of the wing. The costal triangle in the first lobe distally margined by a ochreous-white subterminal line, which features a "V" pointed toward the base of the wing. This subterminal line becomes wavy and continues into the second lobe, with two "V" shapes. Fringes grey, basally whitish. At the anal angle of the first lobe one and at the termen of the second lobe four small groups of black fringe-hairs. On the dorsum four black groups of fringe hairs and scales. Underside dark brown, with a ferruginous spot between the places of the costal spots above. The subterminal line as above, clear cream-white.

Hindwings grey. Centrally in the first lobe a group of white scales. Fringes brown-grey. On the costa of the first lobe, at the anal angle of the second lobe and at the apex of the third lobe a small white dash. Centrally on the dorsum of the third lobe a pronounced scale-tooth, with a white margin of fringe-hairs, and between this scale-tooth and the base of the wing prominent scales in the fringe. Underside dark brown, with white spots in the first and second lobe. Venous scales in a double row, grey ferruginous-brown. The costal row the longer.

Male genitalia.— Genitalia symmetrical. Valva with bilobed sacculus, the distal part small. The cucullus overrides the sacculus with a blunt, curved tip. Tegumen bilobed. Uncus slender, two thirds the length of the tegumen. Anellus arms moderate, with club-like tip. Juxta with "U"-shape. Saccus twice as long as wide, with a rounded tip. Aedeagus curved, with a blunt tip. Cornuti in the shape of numerous rows of spiculae. Coecum moderate.

Female genitalia.— Ostium positioned towards the right side. Antrum two and a half times longer than wide; progressing from the arched, semi-lunar shaped lamina

ante-vaginalis. Ductus bursae three times longer than antrum, with a long central sclerite. Bursa copulatrix vesicular, with a pair of horn-like signa. Apophyses anteriores short, half the length of the papillae anales. Apophyses posteriores slender, two and a half times the papillae anales.

Ecology.— The moth flies in May and July. The hostplant is unknown.

Distribution.— **Colombia**: Mt. Socorro.

*Stenoptilodes medius* **spec. nov.**

(figs 59, 205, 328)

Material.— Holotype ♂: **Ecuador**, Azuay, PN Cajas, Laguna Llaviuco, 2°50'38"S 79°83'5"W, 3225 m, 12.x.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4933 (CG). Paratype ♀: **Ecuador**, Sucum, Sta Barbara, 3400 m, 8.i.1993 (V.O. Becker), gent CG 4890 (Becker nr 104320); 1 ♂, **Ecuador**, Napo, 5 km W Papallacta, 3430 m, 0°22'27"S 78°9'50"W, 28.x.2002 (C. & F.K. Gielis & V. Pelz) (CG).

Diagnosis.— This species may only be differentiated from related species by the genitalia.

Description.— Male, female. Wingspan 27 mm. Head appressedly scaled, beige. Frons with a small conical protrusion, two thirds of the eye diameter. Palps protruding, twice the eye diameter, first and third segment whitish, second segment brown. Antennae pectinate, brown. Thorax brown, with a central white transverse spot. Tegulae beige. Mesothorax rostrally dark brown, caudally white. Hind legs beige, at the base of the spur pairs and the terminal parts of the tarsal segments pale brown. The spur pairs of unequal length, the medial spurs longer than the lateral spurs and the proximal pair longer than the distal pair.

Forewings cleft from 5/7, beige. Markings dark brown: a dark costal streak widening to the discal spot and the costal triangle just before the base of the cleft; a triangular spot basally from the subterminal line in the first lobe; a small costal spot terminally from the subterminal line in the first lobe; three poorly defined dorsal spots at one third, halfway and 3/5; a dorsal spot in the second lobe basally from the subterminal line. Fringes grey, and white in the cleft; on the dorsum with scale-teeth at 3/5 and 5/6. Underside brown, with an irregular yellow ochreous costal spot at the base of the cleft and a subterminal line consisting of a yellow ochreous costal spot and a hooked white spot in the first lobe, and two white hooked spots in the second lobe.

Hindwings and finges grey-brown. At the mid-dorsum of the third lobe a large triangular scale-tooth, broad at the base and gradually narrowing towards the tip. Underside brown-grey. Venous scales black-brown, in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical. Sacculus bilobed: the basal lobe two thirds of the length of the valva, followed by a small blotch. Cucullus overrides sacculus, with a bunt tip. Tegumen arched, bilobed. Uncus slender, nearly as long as the tegumen. Anellus arms rather stout, blunt. Saccus large and spade-like. Aedeagus curved, coecum small. No cornuti.

Female genitalia.— Ostium right lateral positioned, excavated. Antrum four times longer than wide. The antrum gradually narrows towards the ductus bursae. Ductus bursae very short. Bursa copulatrix vesicular with a pair of small horn-like signa. Lamina ante-vaginalis extends left lateral with a poorly sclerotized ridge. Apophyses anteriores absent. Apophyses posteriores five times longer than papillae anales.

Ecology.— The moth flies in October and January. The hostplant is unknown.

Distribution.— **Ecuador**: Azuay: PN Cajas; Sucum.

Etymology.— The name indicates that this is the central of three closely related species. The present species occurs in Ecuador, *Stenoptilodes thrasydoxa* Meyrick flies to the north, in Colombia, and there is a third species, *S. altiaustralis*, to the south, in Peru.

*Stenoptilodes altiaustralis* **spec. nov.**

(figs 206, 329)

Material.— Holotype ♂: **Peru**, Apurimac, 12 km N Abancy, Cerro Turonmocco, 3500 m, 17-18.iii.1987 (O Karsholt, St. 47), gent CG 4171 (ZMUC). Paratype ♀, **Peru**, Cuzco, Pillahuata, 2600 m., 18.viii.1972 (Mathews, a.o.), gent BM 18480 (BMNH).

Diagnosis.— The species resembles *S. thrasydoxa* in its external characteristics, but the genitalia are distinct.

Description.— Male, female. Wingspan 30 mm. Head appressedly scaled, very pale grey-brown; above the eye white. Collar brown. Frons pale brown. Palps protruding, two and a half times the eye diameter; dark brown, but for the white drooping scales of the first and the third segments. Antennae ciliated, dark brown. Thorax and tegulae centrally pale brown white, cranially and caudally dark brown. Mesothorax white. Hind legs dark brown with the following white rings: at the femur; three on the tibia; at the base of the first and second tarsal segments. The third to fifth tarsal segments white. Spurs white, with dark brown rings at the base and near the tip. Spur pairs of unequal length, the medial spurs longer than the lateral spurs and the proximal pair longer than the distal pair.

Forewings cleft from 7/11, ochreous-white to pale ochreous in the lobes. Markings dark brown: seven dorsal spots from base of the wing to the base of the cleft; a costal band from the base to the costal triangle, widened between the discal region and the costal triangle; a costal triangle just before the base of the cleft, and progressing to the dorsum and anal angle of the second lobe; a costal spot shaped like a trapezium, indented laterally on both oblique sides just below the short side. Subterminal line consisting of a straight section and one half moon shape in the first lobe, and two half moons in the second lobe. Fringes brown-grey. At the termen of the first lobe a dark brown basal patch near the anal angle, and at the second lobe four smaller patches at the apex, in the middle and near the anal angle; on the dorsum scale-teeth at two thirds and 4/5 distance. Underside dark chocolate brown, with white spots at the discus, and the subterminal line shaped as above. An ochreous spot in the base of the first lobe.

Hindwings and fringes dark grey-brown. In the fringes on the dorsum of the second lobe a white patch at two thirds, and a white mark at the tip of the third lobe. On the dorsum of the third lobe a large scale-tooth in the middle, and another at one third distance. Between the two scale-teeth a white patch. Underside dark chocolate brown. In the first and second lobe a small central white spot and a white mark at the apex of the third lobe. Venous scales dark ferruginous, in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical. Sacculus bilobed; basally simple, large; terminally small. Cucullus overriding, ending in a sharp tip. Tegumen simple. Uncus half the length of the tegumen, narrow. Anellus arms half the tegumen, bluntly pointed.

Saccus, triangular, with a rather sharp tip. Aedeagus curved, blunt. Coecum small. Cornutus in shape of a poorly sclerotized ridge.

Female genitalia.— Ostium positioned to the right side. Antrum wide, parallel, progressing into the equally wide ductus bursae. Ductus bursae with two twists. Bursa copulatrix vesicular, with a pair of small horn-like signa, embedded in an area of very small spiculae. Lamina ante-vaginalis as a left lateral extension of the antrum. Apophyses anteriores a little shorter than the papillae anales. Apophyses posteriores slender, three times the papillae anales.

Ecology.— The moth flies in March and August. The hostplant is unknown.

Distribution.— **Peru**: Apurimac: Turanmocco; Cuzco: Pillahuata.

Etyymology.— The name reflects the high altitude and southern latitude at which the species occurs.

*Stenoptilodes posticus* (Felder & Rogenhofer, 1875)  
(figs 60, 207, 330)

*Mimaesoptilus posticus* Felder & Rogenhofer, 1875: plate 140, Fig. 51.

Material.— Holotype (abdomen missing) (♂): (**Colombia**), Bogota, no date (Lindig), (BMNH) [examined].

Diagnosis.— This species is characterized by the female genitalia. The male is unknown. At the present time it cannot be separated from *Platyptilia stigmatica* Felder & Rogenhofer on external features.

Redescription.— Male, female. Wingspan 24 mm. Head appressedly scaled, with a conical frons, ferruginous-brown. Palps twice the eye diameter, second segment pronounced, third segment slender and short. Thorax and tegulae brown. Abdomen not present. Midlegs ringed cream-white and dark brown. The dark brown segments are near the spurs and distal margin of the segments.

Forewings cleft from 3/4; colour ferruginous-brown. Markings dark brown, consisting of a costal triangle before the base of the cleft and a poorly defined oblique dash in the basal third of the wing. The dorsal end of the dash is closer to the wing base than the costal end. The basal half of both the forewing lobes have dark brown scaling. The distal margin of the costal triangle pale brown progressing at the costa to a small, almost white, spot. Along the dorsum a ferruginous scaling. Outer margin fringes grey, in the cleft black-brown. Along the dorsum white, with four small dark brown scale groups at 2/5, half, 3/4 and 7/8 of the length. Underside dark brown, with a white spot around the base of the cleft and a wavy, ochreous, marginal line in both forewing lobes, margins cream-white and ferruginous-brown.

Hindwings brown-grey. In the subterminal area of the first lobe a pale spot. Fringes grey. An indication of a scale-tooth of ferruginous scales halfway along the dorsum of the third lobe. Underside ferruginous. In the subterminal area of the first lobe, a white dash. Venous scales dark ferruginous-brown, in a double row.

Male genitalia.— Symmetrical. Valva with a bilobed sacculus; the basal half pronounced and large, the distal half small. Cucullus overriding the sacculus with a short, blunt tip. Tegumen bilobed, as long as the valva. Uncus as long as tegumen, slender. Anellus arms two thirds of the tegumen, rather stout. Juxta rather small, "U"-shaped.

Saccus triangular, with a rounded tip. Aedeagus curved, with a blunt tip. Coecum moderate. No cornutus.

Female genitalia.— Antrum laterally ending; six times longer than wide, gradually narrowing. Ductus bursae very short. Bursa vesicular, with minute speckles in the distal half, and a horn-like double signum. Lamina post-vaginalis with a central, small sclerotized plate. Lamina ante-vaginalis laterally progressing into the short apophyses anteriores. Apophyses anteriores half as long as papillae anales. Apophyses posteriores three times longer than papillae anales.

Ecology.— The moth flies in September. The hostplant is unknown.

Distribution.— **Colombia:** Bogota; **Peru:** Carabaya: Agaulani.

*Stenoptilodes huanacoicus* Gielis, 1996  
(figs 61, 208)

*Stenoptilodes huanacoicus* Gielis, 1996: 90.

Material.— Holotype ♂: **Peru**, Dept. Huánaco, 25 km NE Huánaco, Cordillera Carpish, Pattytrail, 2600 m., 8-10.ii.1987 (O. Karsholt, st. 15), gent CG 4156 (ZMUC).

Diagnosis.— The species is characterized by its subterminal line and its shape.

Description.— Male. Wingspan 22 mm. Head with some erect scales, brown-grey. Frons with minimal protrusion. Palps twice the eye diameter; second segment wide; above cream-white, below grey-brown. Antennae grey-brown, shortly ciliated. Thorax and tegulae grey-brown with a dirty white transverse line near the dorsal margin of the forewing. Mesothorax cream-white. Abdomen brown; distal margins of segments black; centrally with white scale groups. Hindlegs ringed cream-white and dark brown; the dark markings before the spurs and at the distal parts of the segments.

Forewing cleft from 4/5; cream-white; markings dark grey-brown. The markings consist of a rather wide, but uniform, costal dash which reaches the costal triangle; a costal triangle just before the base of the cleft; a costal triangle in the first lobe, not reaching the dorsum of this lobe. The outer margin has a cream-white subterminal line, with dark spots on the dorsum; from the top of the costal triangle an oblique dash goes into the second lobe reaching the white subterminal line. Between the costal triangles a cream-white area. Fringes white, on both lobes three dark dorsal scale groups; along the dorsum scale bristles at one third, halfway and 3/4. Underside ferruginous-brown, with white spots at the costa and above the base of the cleft, a subterminal line and a small costal dot between the former.

Hindwings brown-grey. Fringes grey-brown, with a faint basal dark area in lobes one and two. Before the anal angle of the second lobe white. On the dorsum of the third lobe a centrally placed scale-tooth and between this scale-tooth and the wing base scattered dark scales. Underside dark grey. At the top of the first lobe a continuation of the subterminal line of the forewing. Venous scales ferruginous to dark brown, in a double row; the costal row the longer.

Male genitalia.— Valvae symmetrical. The tip of the valvae acute, in the shape of a bird's head. Sacculus bilobed, the basal structure four times longer than the small and poorly developed distal part. The basal half well extended and widened. Tegumen bilobed. Uncus tapering towards tip, as long as tegumen. Vinculum arched with a

slightly pronounced and extended saccus. Juxtal arms stout and blunt, of equal length. Aedeagus arched, with a delicately spiculated cornutus. Coecum well developed.

Female genitalia.— Unknown.

Ecology.— The moth flies in February. The hostplant is unknown.

Distribution.— **Peru**: Huánaco: Cordillera Carpish.

*Stenoptilodes sordipennis* (Zeller, 1877)  
(figs 62, 331)

*Platyptilia sordipennis* Zeller, 1877: 466.

Material.— Lectotype ♀: (**Colombia**), Bogota, n.d., gent BM 18852 (BMNH) [examined]. Paralectotype ♀: Ubaque, n.d. (BMNH) [examined].

Diagnosis.— The species is characterized by the grey-brown colour, the presence of a costal triangle, the three (sub)terminal costal spots on the first lobe and the two sub-terminal semilunar spots at the second lobe.

Redescription.— Female. Wingspan 20 mm. Head appressedly scaled, dark brown. Frons smooth. Palps dark brown, protruding, one and a half times eye diameter; the second segment distally widened. Antennae ringed, dark and pale brown, shortly ciliated. Thorax ferruginous-brown. Tegulae dark brown. Mesothorax white. Abdomen brown. Hindlegs pale ochreous-brown, with two pairs of spurs of equal length. The proximal spur pair dark tipped.

Forewings cleft from two thirds, grey-brown. A dark brown, slightly faint costal triangle just before the base of the cleft. The first lobe gradually darkening, terminally with one and subterminally with two costal spots. Termen of second lobe with two small semilunar spots. Fringes grey, mixed with dark, prominent scales along the dorsum. Underside brown, ochreous along the costa of the first lobe with the dark costal spots as above.

Hindwings grey-brown. Fringes grey. A scale-tooth at the third lobe almost centrally placed. Underside dark brown. Venous scales in a double row, the costal row longer than the dorsal row.

Male genitalia.— Unknown.

Female genitalia.— Ostium positioned to the right side, excavated. Antrum twice as long as wide, curved. Ductus bursae rather pronounced, five times the length of the antrum. Ductus seminalis from the tip of the bursa copulatrix. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina post-vaginalis with lateral sclerotized trapezoidal plates, with on the lateral side, the apophyses anteriores, and medial a spine like extension. Centro-distal from the lamina the margin of the seventh sternite, with a medial sclerotized ridge, and lateral on seventh sternite, a small semi-circular sclerotization. Apophyses posteriores slender, four times the papillae anales.

Ecology.— The flight period of the moth is unknown. The hostplant is unknown.

Distribution.— **Colombia**: Bogota, Ubaque.

*Paraamblyptilia* Gielis, 1991

*Paraamblyptilia* Gielis, 1991: 68.— Type species: *Platyptilia eutalanta* Meyrick, 1931, by original designation.

Description.— Head appressedly scaled; no frontal tuft. Palps protruding, twice eye diameter.

Forewings with costal triangle. Dorsum of forewing with scale-teeth. Both forewing lobes with termen. Forewing veins: R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from angle of cell; Cu2 from cell.

Hindwing without scale-tooth at dorsum of third lobe; third lobe with one vein.

Male genitalia.— Valvae symmetrical. Cucullus prolonged into a shape like a bird's head. Sacculus not lobed, but in basal half enlarged, widened. Tegumen bilobed. Uncus double, slender. Vinculum arched. Saccus poorly developed. Aedeagus curved; small cornutus.

Female genitalia.— Ostium centrally positioned. Antrum funnel-shaped. Ductus bursae slender, without sclerite. Bursa copulatrix vesicular with pair of horn-like signa. Lamina ante-vaginalis not expressed. Apophyses anteriores small, half the papillae anales. Apophyses posteriores two and a half times papillae anales.

Ecology.— Unknown.

Distribution.— South and Central America.

*Paraamblyptilia eutalanta* (Meyrick, 1931)  
(figs 63, 209, 332)

*Platyptilia eutalanta* Meyrick, 1931: 379.

Material.— Lectotype ♀: **Argentina**, Rio Negro, Lago Nahuel Huapi (eastern end), 17.x.1926 (Edwards), gent BM 18194 (BMNH).

Diagnosis.— The moth is characterized by its poorly developed double costal triangle. The male genitalia are also unmistakable.

Redescription.— Male, female. Wingspan 15-16 mm. Head appressedly scaled, grey-brown. Palps grey-brown, protruding, twice the eye diameter. Distal part of second and third segment with scattered white scales. Antennae indistinctly ringed grey-brown and dark brown. Thorax, abdomen and legs grey-brown. Spurs of hind tibiae of equal length.

Forewings cleft from 3/4, dark grey-brown, markings dark brown. The markings consist of poorly defined dorsal spots at one third and halfway and a costal triangular spot at the base of the cleft. The middle segment of both forewing lobes dark brown scaled. This dark scaling in the first lobe is proximally margined with a pale area toward the costal triangle; distally a well defined transverse line, grey-white, almost at right angles to the dorsal margin of the first lobe. In the second lobe this line is almost parallel to the termen. Fringes dark grey-white, in termen of first lobe with three groups of dark basal scales, in termen of second lobe a dark basal row of scales. Along the dorsal margin three scale-teeth, at one third, halfway and 3/4. Underside dark brown, a pale transverse line in both lobes.

Hindwings brown-grey. Fringes grey, In the dorsal fringes of the third lobe no prominent scales are observed. Underside grey. Venous scales ferruginous, in three incomplete rows.

Male genitalia.— Valvae symmetrical. Sacculus dilatated into a large blotch. The cucullus slender, ending in a shape resembling a bird's head. Tegumen bilobed. Uncus



forked, long and slender. Vinculum narrow. Anellus arms as long as tegumen. Aedeagus basally curved. Cornutus small, and a pronounced group of spiculated cornuti.

Female genitalia.— Antrum conical, one and a half time longer than wide. Ductus bursae slender, with a small sclerotized plate in the central segment. Bursa copulatrix simple, with a double, rather stout, horn-like signum. Apophyses posteriores two and a half times longer than papilles anales. Apophyses anteriores short.

Ecology.— The moth flies in November and December. The hostplant is unknown.

Distribution.— **Argentina:** Rio Negro: San Carlos de Bariloche, Puerto Blest; Buenos Aires: La Plata. **Chile:** Santiago: Santiago, El Alfalfal; Valparaiso: Quillota, Las Palmas.

Remarks.— The cornutus shows some variation in size.

*Paraamblyptilia ridouti* Gielis, 1996  
(figs 64, 210, 333)

*Paraamblyptilia ridouti* Gielis, 1996: 87.

Material.— Holotype ♂: **Peru**, Cuzco, 1.viii.(19)73 (B.V. Ridout), gent CG 5071 (BMNH). Paratype ♂: same locality 27.viii.(19)73 (B.V. Ridout), gent CG 5072 (BMNH).

Diagnosis.— The species is characterized by the faint costal triangle, the gradual darkening of both forewing lobes up to the white subterminal line. The third lobe of the hindwings without a scale-tooth. Male genitalia with pronounced, but slender, double uncus.

Description.— Male, female. Wingspan 17-18 mm. Head appressedly scaled dark brown, mixed with scattered grey-white scales. Along the dorsal margin of the eyes and between the eyes, just dorsal of the palps, a narrow white line. Palps grey-brown, protruding, one and one half times eye diameter. The second segment terminally widened by pronounced scales. Antennae faintly ringed pale brown and grey-white, however on the ventral surface there are shortly ciliated, white, and dark brown scales arranged longitudinally. Thorax, tegulae, mesothorax and abdomen grey-brown, mixed with sparse greyish scales. Hindlegs dark brown mixed with sparse white scales; the proximal parts of the tarsal segments white.

Forewings cleft from two thirds, colour dark grey-brown. Markings dark brown, consisting of a costal triangle, a gradual darkening of both lobes towards the white subterminal line, along the costa numerous small dark spots, a small white costal spot just beyond the base of the cleft. Fringes grey-white with a small brown dash at the apex of both lobes and a black basal line at the termen of both lobes. In the first lobe this black line is twice interrupted with white. Along the dorsum seven small scale-teeth, regularly spaced. Underside dark brown, with a white subterminal line on both lobes and a small white costal spot just beyond the base of the cleft.

Hindwings grey-brown. Fringes grey-brown, no scale-tooth on the dorsum of the third lobe. Underside dark brown. Venous scales in a double row, ferruginous black; the costal row longer than the dorsal row.

Male genitalia.— Valvae symmetrical. Tip of valvae in the shape of a bird's head. Sacculus extended and broad, almost as long as the tip of the valvae. At the cucullus a small blunt, rather short, process. Tegumen bilobed, laterally widened. Uncus double,

long and slender. Vinculum arched, narrow. Juxtal arms short, half tegumen length. Aedeagus slightly curved, with a cornutus consisting of a dense group of minute spiculae. Coecum well developed.

Female genitalia.— Ostium positioned to the right of the centre. Antrum three times longer than wide, gradually narrowing. In the antrum a delicate, longitudinal sclerite. Ductus bursae slender, as long as antrum. Bursa copulatrix vesicular, with a pair of horn-like signa. Apophyses anteriores as long as papillae anales. Apophyses posteriores slender, four times the papillae anales.

Ecology.— The moth flies in August and September. The hostplant is unknown.

Distribution.— **Costa Rica**: Cartago: Cerra de la Muerta. **Peru**: Cuzco: Cuzco.

### *Uroloba* Walsingham, 1891

*Uroloba* Walsingham, 1891: 262.— Type species: *Uroloba fuscicostata* Walsingham, 1891, by original designation and monotypy.

Redescription.— Head appressedly scaled; no frontal tuft. Palps long, two to four times the eye diameter.

Forewings with cleft located near costa; first lobe approximately 1/5 of forewing width; no costal triangular marking. Forewing veins: R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from angle of cell; Cu2 from cell.

Hindwing without scale-tooth at dorsum of third lobe. Third lobe with one vein.

Male genitalia.— Valvae symmetrical. Sacculus bilobed. Shape of end of cucullus resembling a bird's head, with acute tip. Tegumen arched. Uncus short and stout. Vinculum progressing into pronounced stout saccus. Aedeagus arched, slender; coecum pronounced. Vesicula seminalis with numerous small cornuti.

Female genitalia.— Unknown.

Ecology.— Unknown.

Distribution.— Southern part of South America.

### *Uroloba calycospila* (Meyrick, 1932) (figs 65, 211, 334)

*Utuca calycospila* Meyrick, 1932: 336.

Material.— Holotype ♂: **Argentina**, Alta Gracia, (19)32 (Bruch), gent BM 18191 (BMNH) [examined].

Diagnosis.— The species is characterized by the very narrow first lobe in the forewing and the nearby presence of a grey-white costal spot.

Redescription.— Male, female. Wingspan 19-20 mm. Head appressedly scaled, grey-brown white. A prominent frontal protrusion, above ochreous-white and below ferruginous-white, one and a half times eye diameter. Palps slender, brown-ochreous, as long as eye diameter, basal segment mixed white. Antennae shortly ciliated, grey-brown. Thorax grey-brown. Mesothorax and tegulae grey-brown mixed with ferruginous. Abdomen grey-brown. Legs brown-ochreous. Hindlegs with two spur pairs of equal length.

Forewings cleft from 9/10. First lobe very narrow. Colour dark brown mixed with white scales. A costal spot at 4/5 of the wing length, grey-white, margined dark. Apex of first lobe darkened. Radial veins indicated by a poorly defined row of white scales. Fringes brown-grey. Underside grey-brown.

Hindwings grey-brown. Fringes grey-brown. Underside grey-brown. Venous scales in a double row, orange ferruginous.

Male genitalia.— Valvae symmetrical, ending in a shape resembling a bird's head. Sacculus blister shaped extended and as long as valvae. Tegumen simple. Uncus short and stout. Vinculum widened, arched and with a small saccus. Juxta symmetrical, with rather stout anellus arms. Aedeagus terminally narrowing and arched; basally with pronounced coecum.

Female genitalia.— Ostium centrally positioned. Antrum funnel-shaped. Antrum covered by a spade-like plate as an extension of the lamina ante-vaginalis. Ductus bursae slender, five times the length of the extension. Bursa copulatrix vesicular, with a pair of horn-like signa. Apophyses anteriores blunt, 1/4 of the papillae anales. Apophyses posteriores slender, twice the papillae anales.

Ecology.— The moth flies in January and February. The hostplant is unknown.

Distribution.— **Argentina**: Alta Gracia; Catamarca: Portrero; Salta: Quebrada del Toro.

Remarks.— The species is closely related to *U. fuscicostata* Walsingham, differing by the presence of the costal spot and the shape of the sacculus in the male genitalia.

*Uroloba fuscicostata* Walsingham, 1891  
(figs 66A, 66B, 212, 336)

*Uroloba fuscicostata* Walsingham, 1891: 262.

Material.— Lectotype ♂ (abdomen lost): **Chile**, Valparaiso, no date (Walker) (BMNH) [examined]. Paralectotype ♂ (abdomen lost): same data (BMNH) [examined].

Diagnosis.— The species is characterized by the narrow and short first lobe of the forewing, and the costal black scaling on the underside of both wings.

Redescription.— Male, female. Wing length 21-24 mm. Head appressedly scaled, frons with protruding scales. Colour brown fuscous, frons mixed whitish. Palps slender, as long as eye diameter, brown fuscous, some erect scales on second segment. Antennae ringed grey-brown and grey-white, shortly ciliated. Thorax, tegulae, mesothorax and abdomen brown fuscous. Legs brown fuscous; hindlegs with two pairs of short spurs.

Forewings cleft from 9/10; first lobe very narrow, colour brown fuscous, speckled with dark brown scales. Markings dark brown, consisting of an obliquely placed pair of dots before the base of the cleft, which are fused by the brown speckling. A faint whitish costal spot at 4/5. Fringes grey, basal half dark grey-brown. Underside grey-brown, becoming paler towards the termen. Along the costa, from the base toward the pale costal spot, black scaling reaching to half the width of the wing. Towards the termen the scaling shows an indication of a fork.

Hindwings pale brown-grey. Fringes grey-brown, on the dorsum of the third lobe grey ochreous. Underside grey-brown, third lobe mixed ferruginous and cream-white. Along the costa of the first lobe some black scaling similar to that along the costa of the

forewing. Venous scales black, in a double row. The costal row the longer, but centrally interrupted. The dorsal row short.

Variation.— The intensity of the black scaling along the underside of the costa of the fore and hindwing varies.

Male genitalia.— Valvae symmetrical. Sacculus bilobed, pointed, longer than valva. Valvae ending in a shape resembling a bird's head. Tegumen bilobed. Uncus short and stout. Vinculum progressing into a pronounced stout saccus. Juxta with two stout and pronounced anellus arms, two thirds tegumen length. Aedeagus arched, slender. Coecum pronounced. Vesica with numerous small cornuti.

Female genitalia.— Ostium rounded, centrally positioned. Antrum short, and rounded. The antrum covered by an extension of the lamina ante-vaginalis, which has a capstan-like shape. Ductus bursae slender, four times the length of the extension. Ductus seminalis from the tip of the bursa copulatrix. Bursa copulatrix vesicular, with a pair of horn-like signa. Apophyses anteriores twice the papillae anales. Apophyses posteriores slender, four times the papillae anales.

Ecology.— The moth flies in October, November and December. The hostplant is unknown.

Distribution.— **Chile:** Valparaiso: Valparaiso, Cabildo; Coquimbo: Illapel, MN Pichasca, Vicuña, Combarbala, Coquimbo; Santiago: Porteruelo.

Remarks.— The species has genitalia which resemble the *Amblyptilia* group, but lacks a scale-tooth on the hindwing.

### *Stenoptilia* Hübner, [1825]

*Stenoptilia* Hübner, [1825]: 430.— Type species: *Phalaena Alucita pterodactyla* Linnaeus, 1761, by subsequent designation by Tutt, 1905.

*Mimaeseoptilus* Wallengren, 1862: 18.— Type species: *Alucita mictodactyla* [Denis & Schiffermüller], 1775, by subsequent designation by Meyrick, 1910.

*Mimeseoptilus* Zeller, 1867.— Emendation.

*Mimaeseoptilus* Snellen, 1884.— Incorrect spelling.

*Doxosteres* Meyrick, 1886: 10.— Type species: *Pterophorus canalis* Walker, 1864, by monotypy.

*Mimaeseoptilus* Barrett, 1904.— Incorrect spelling.

*Adkinia* Tutt, 1905a: 37.— Type species: *Phalaena bipunctidactyla* Scopoli, 1763, by original designation.

*Adkina* Yano, 1963.— Incorrect spelling.

Redescription.— Head appressedly scaled; no frontal tuft. Palps protruding, second segment distally widened by numerous scales, third segment small; one to two times eye diameter. Forewing cleft from 3/4; costal triangle reduced to some dark spots; both lobes with well developed termen. Forewing veins: R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from angle of cell; Cu2 from cell. Hindwing without scale-tooth at dorsum of third lobe. Third lobe with one vein.

Male genitalia.— Valvae symmetrical. Tip of valva shaped like a bird's head. Sacculus bilobed, terminal segment small. Tegumen simple. Uncus small. Vinculum arched, saccus not developed. Aedeagus curved, coecum well developed; cornuti in shape of minute spiculae.

Female genitalia.— Ostium centrally positioned. Antrum tube-like, centrally placed at the distal margin of the seventh sternite. Ductus bursae with sclerite. Lamina

post-vaginalis not developed, apophyses anteriores absent. Bursa copulatrix vesicular, with double horn-like signum.

Ecology.— Hostplants belong to Gentianaceae, Lamiaceae, Plantaginaceae, Primulaceae, Saxifragaceae, and Dipsacaceae.

Distribution.— Holarctic, Neotropic, Ethiopian and Indo-Australian regions.

*Stenoptilia zophodactylus* (Duponchel, 1838)  
(figs 67, 213, 336)

*Pterophorus zophodactylus* Duponchel, 1840b: 668.

*Pterophorus loewii* Zeller, 1847: 38.

*Pterophorus canalis* Walker, 1864: 944.

*Mimeseoptilus semicostata* Zeller, 1873a: 323.

Material.— Holotype ♀: (France), (Pyrénées-Orientales), no date, gent ZMHB 4221 (MNHN) [examined].

Diagnosis.— The species is characterized by the double fringe spot in the termen of the first lobe of the forewing and by its genitalia.

Redescription.— Male, female. Wingspan 16-23 mm. Head grey-brown. Above eye a white line. Palps one and a half times eye diameter. Second segment distally widening, third segment slender and short. Antennae longitudinally grey-white and brown, shortly ciliated. Thorax pale brown. Tegulae pale brown, distally gradually bleaching. Mesothorax cream-white. Abdomen pale brown, with faintly visible white longitudinal lines. At the distal margin of the segments small groups of dark brown scales. Legs pale brown, slender, with two pairs of spurs of equal length.

Forewing cleft from 3/5, colour pale brown. Markings of dark brown scales; a distal spot and two spots before the base of the cleft: the costal one a little more basally placed than the dorsal one. Sparse dark scales along the costa and dorsum and in the first lobe. The costa of the first lobe narrow, white. Fringes grey, basally grey-white, two scale groups on the outer margin of the first lobe, and three on the second lobe. Underside ferruginous-brown, speckled white in the apical parts of both lobes.

Hindwing ferruginous-brown. Fringes grey-brown. Underside ferruginous-brown, with white speckling in the top of the first lobe. Venous scales ferruginous orange, in a double row. The costal row extending into the second lobe, and branching off a third row along the costa of the second lobe.

Variation.— The intensity of the markings is variable. The colour may be dark brown to pale brown.

Male genitalia.— Valvae symmetrical, shaped like a bird's head. Sacculus bilobed, basal segment three times longer than distal part. Tegumen simple, with two tiny lateral sclerotized projections at the top. Uncus small, the top not exceeding the distal margin of the tegumen. Vinculum arched, small. Anellus arms half as long as tegumen. Aedeagus strongly curved. Coecum pronounced. Cornutus in a linear configuration.

Female genitalia.— Antrum three times longer than wide; distal margin pointed. Ductus bursae bent, with a centrally placed sclerotized plate. Bursa copulatrix vesicular with a pair of horn-like signa and minute spiculation in the distal half. Apophyses posteriores three times longer than papillae anales. Apophyses anteriores absent.

Ecology.— The moth flies in January, May, September and October. The recorded hostplants are *Centaureum erythraea* Rafn. (= *C. minus* Mönch, = *C. umbellatum* Gilib.), *C. littoralis* (D. Turner) Gilmour, *C. pulchellum* (SW.) Druce, *Blackstonia perfoliata* (L.) Hudson, *Gentianella germanica* (Willd.) E.F. Warb., *G. diemensis* (Griseb.) J.H. Willis, *Gentiana lutea* L., *Centaureum venusta* A. Gray., *Sopubia trifida* Buch.-Ham ex D. Don, *Blumea balsamifera* (L.) DC.

Distribution.— **Ecuador**: Azuay: Cuenca; Tungurahua: Ambato. **Mexico** (in litt.). **Paraguay**: Paraguay: Sapucay.

*Stenoptilia neblina* Gielis, 1995  
(figs 68, 214, 337)

*Stenoptilia neblina* Gielis, 1995: 147.

Material.— Holotype ♂: **Venezuela**, TF Amaz, Cerro de la Neblina, Camp III, 0° 56' 10" N, 66° 3' 53" W, 1820 m, 15-17.ii.1984 (D.R. Davis), gent CG 3408 (USNM). Paratype: 1 ♂, same data (CG); 1 ♀, **Venezuela**, TF Amaz, Cerro de la Neblina, Camp XI, 1450 m, 0° 52' N, 65° 58' W, 25-28.ii.1985 (P.J. & P.M. Spangler & R.A. Faitoute), Malaise trap in *Bonnetia* & *Tyleria* montane scrubs, gent CG 3415 (USNM).

Diagnosis.— This species is characterized by the well developed double spot before the base of the cleft and the saccular extension in the male genitalia which is not encountered elsewhere in the New World *Stenoptilia* species.

Redescription.— Male, female. Wingspan 21 mm. Head appressedly scaled, brownish grey. Above the eye a white line. Collar with some erect scales. Frons slightly conical, grey-brown. Palps twice eye diameter, protruding. Pale brown with white base of first segment and distal second segment. The second segment with a pronounced scale brush extending along the underside of the third segment and longer than third segment. Antennae dark brown-grey, shortly ciliated. Thorax and tegulae pale brown-grey. Mesothorax pale brown, laterally whitish. Abdomen grey-brown with a faint dorso-lateral white longitudinal line. Fore and mid legs dark brown with white longitudinal line. Hind legs pale brown, with two pairs of spurs, all spurs of equal length. The spurs longitudinally black and white.

Forewings cleft from two thirds, colour pale brown. Markings dark brown. A double spot just before the base of the cleft, the costal spot twice the dorsal spot and extended toward the wing base; a small discal spot, a longitudinal spot in the centre of the first lobe and isolated dark scales dispersed along the wing. On the wing dispersed white scales concentrated between the discal spot and the spots at the cleft, between the spots at the cleft and the cleft, and in the first lobe. Fringes brown-grey. On the termen of the first lobe two spots and on the second lobe an almost complete basal row. Underside dark brown.

Hindwings and fringes grey-brown. Underside brown-grey. Venous scales dark ferruginous, in a double row. The costal row longer than the dorsal row.

Male genitalia.— Valvae symmetrical. Cucullus in the shape of a bird's head, over-riding the sacculus. Sacculus bilobed, distal part small, complex. Margin of basal saccular half distally slightly extended. Tegumen arched with lateral, pointed, extensions near the top. Uncus short, not reaching the margin of the tegumen. Anellus arms half the tegumen length, slender. Juxta a well developed plate. Vinculum arched. Aedeagus rather stout in basal half, with long, slender cornutus.

Female genitalia.— Ostium strongly excavated, with laterally extended margins which converge centrally. Antrum one and one half times longer than wide, proximally gradually narrowing. Ductus bursae slender with a sclerite reaching almost the entire length. Bursa copulatrix vesicular with a pair of horn-like signa. Lamina ante-vaginalis with a double small extension. Lamina post-vaginalis not noticeable. Apophyses anteriores extremely small. Apophyses posteriores four times the small papillae anales.

Ecology.— The moth flies in February. The hostplant is unknown, but a specimen was collected in a malaise trap near *Tyleria* and *Bonnetia* plants.

Distribution.— **Venezuela:** Amazon: Cerra de la Neblina.

*Stenoptilia karsholti* Gielis, 1995  
(figs 69, 215)

*Stenoptilia karsholti* Gielis, 1995: 146.

Material.— Holotype ♂: **Peru**, Dept Puno, 10 km N Lampa, Quebrada Metara, 3900 m, 31.iii.-3.iv.1987 (O. Karsholt, sta 58), gent CG 4182 (ZMUC). Paratypes: 13♂♂, **Peru**, Dept. Puno, 15 km E Ayaviri, Laguna Asnacocha, 3940 m, 26-27.iii.1987, (O. Karsholt, sta 54), gent CG 4181 (ZMUC, CG); 2 ♂♂, **Peru**, Dept Puno, 10 km E Crucero, 4300 m, 30.iii.1987 (O. Karsholt, sta 57) (ZMUC); 2 ♂♂, **Peru**, Dept Puno, 4 km N Lampa, Laguna Colorado, 3800 m, 3.iv.1987 (O. Karsholt, sta 59) (ZMUC).

Diagnosis.— The species is characterized by two small scale-groups in the fringes of the second forewing lobe and the distinct spot at the base of the cleft.

Description.— Male. Wingspan 15-17 mm. Head appressedly scaled, dark grey-brown. Vertex conical, half the eye diameter. Above the eye a cream-white line. Palps olive brown-grey twice the eye diameter; first segment, distal part of second segment, and third segment mixed creamish. Antennae shortly ciliated; dark brown-grey, mixed white-grey. Thorax and tegulae anterior brown-grey, posterior ochreous-brown, laterally with a faint white line. At end of segments laterally, above and beyond the white line, a few dark scales. Hindlegs white-grey, with two pairs of spurs of equal length.

Forewings cleft from two thirds, brown-grey speckled with white scales. Dorsum from base to half the second lobe ochreous-brown. Markings dark brown: a spot at the base of the cleft, an indistinct discal spot, a centrally placed longitudinal line in the first lobe and some darkening at the anal angle of the second lobe. Fringes basally white, terminally grey; at anal angle of first lobe a group of black hairs; at the apex and in middle of termen of second lobe some dark scales. Fringes at dorsum more grey in basal part. Underside dark brown, around anal angle of first lobe grey-white scales.

Hindwings lobes one and two brown-grey and third lobe ochreous-grey. Fringes grey. Underside dark brown-grey on lobes one and two; lobe three cream-white. Venous scales orange, in a double row. The costal row longer, but more sparsely scaled, the dorsal row intensely scaled and the shorter.

Male genitalia.— Valvae symmetrical. The cucullus is overriding. The sacculus bilobed, the terminal part small and complex. Tegumen terminally irregularly dentate. Uncus small and stout, reaching just to the tegumen margin. Vinculum arched. Juxta curved. Anellus arms short, half as long as the tegumen. Aedeagus curved and very strong. No cornutus, with some sclerotized ridges at the termen near the vesica.

Female genitalia.— Unknown.



Ecology.— The moth flies at the end of March and the beginning April, at an altitude between 3800 and 4300 metres. The hostplant is unknown. The collector mentioned that the species was flying around a *Gentiana* sp. (personal communication).

Distribution.— **Peru:** Puno: Quebrada Metara, Laguna Asnacochoa, Crucero, Laguna Colorado.

Remarks.— The species belongs to the genus *Stenoptilia* Hübner and probably has to be placed in the *Gentiana* feeding group.

*Stenoptilia pallistriga* Barnes & McDunnough, 1913  
(figs 70, 216, 338)

*Stenoptilia pallistriga* Barnes & McDunnough, 1913: 186.

Diagnosis.— This species is characterized by the oblique ochreous-white line in the first forewing lobe.

Description.— Male, female. Wingspan 14-16 mm. Head appressedly scaled, brown-grey. Above the eye a cream line. Collar with some erect grey scales. Frons conical, half the eye diameter, mixed with white scales. Palps protruding, twice eye diameter, pale brown, on upper and under side mixed with white scales. Some extended scales from second segment along the underside of third segment. Antennae shortly ciliated grey-brown. Thorax and tegulae grey-brown, mixed with ochreous-brown scales. Mesothorax ochreous-brown, laterally whitish. Hind legs pale brown with two pairs of spurs all of equal length. The distal spur pair longitudinally black-grey and grey-white.

Forewings cleft from 3/4, colour pale brown. Markings dark brown; a double spot at the base of the cleft, the dorsal spot bigger than the costal spot. Towards wing base dark scales, condensed to a small discal spot. In first lobe an oblique line, with a white margin on the costal side. Fringes grey with prominent basal scales, interrupted once in the termen of the first lobe and twice in the termen of the second lobe. Underside pale brown with a white dash in the termen of the first lobe.

Hindwings grey-brown. Fringes brown-grey. Underside brown-grey, whitish in the top of the first lobe and entire third lobe. Venous scales in a double ferruginous row, the costal row longer than the dorsal row.

Male genitalia.— Genitalia symmetrical. Valva with bilobed sacculus, the distal part of sacculus small; the proximal part ending in a short, blunt extending tip. Cucullus overriding in a curved, blunt shape. Tegumen bilobed. Uncus short, the tip of the uncus reaching the margin of the tegumen. Anellus arms two thirds the length of the tegumen, slender. Juxta almost rounded. Vinculum arched, rather narrow. Aedeagus curved, with rounded tip. Cornutus in shape of poorly sclerotized ridges. Coecum rather small.

Female genitalia.— Symmetrical. Antrum two and a half times longer than wide; gradually narrowing. Ostium slightly excavated. Ductus bursae as long as antrum, with sclerite. Bursa copulatrix vesicular with a pair of horn-like signa. Lamina ante vaginalis with small, poorly defined extending margin. Apophyses anteriores absent. Apophyses posteriores three times papillae anales.

Ecology.— The moth flies February to June, August to October and December. The hostplant is unknown.

Distribution.— **Dominica:** Pont Casse. **Ecuador:** Azuay: PN Cajas. **Jamaica:** Kellits.

**Paraguay:** Alto Paraguay: Madrajou; Boqueron: Filadelfia; Caaguazu: Tayao; Central: Asuncion; Gualra: Melgarejo; Misiones: Villa Florida; Paraguari: Sapucay. **Surinam:** Paramaribo.

*Stenoptilia suprema* Meyrick, 1926  
(figs 71, 217, 339)

*Stenoptilia suprema* Meyrick, 1926: 301.

Material.— Holotype ♂: **Colombia**, Mt. Tolima, 15,200 ft, (19)20, gent BM 18461 (BMNH) [examined].

Diagnosis.— The species is characterized by the slender dark-brown longitudinal streak in the first forewing lobe and the white basal fringe pattern in the forewing.

Redescription.— Male, female. Wingspan 26 mm. Head appressedly scaled, olive-brown. Frons with a protrusion as long as eye diameter. Above eye a white line. Palps, third segment not present in the type specimen, second segment distally widening. Antennae olive-brown, shortly ciliated. Thorax, tegulae and mesothorax compressed and glued to pin. Abdomen olive-brown with two lateral, delicate white lines and a broader ventral white line. Hindlegs grey-white, with two pairs of spurs of unequal length.

Forewings cleft from two thirds, olive-brown with a scattering of white scales. A small brown dot before the base of the cleft and the dorsal side of the base. A small, central, longitudinal dark-brown line in the first lobe. Fringes grey-brown; in the cleft and at the termen of the second lobe a basal row of white scales. Underside pale brown. At the costa of the first lobe three yellow-white lines.

Hindwings pale olive-brown. Fringes grey-brown. Underside basal half of first and second lobe and entire third lobe brown. Terminal half of first and second lobe grey-white. Venous scales ferruginous in a double row; the costal row shorter than the dorsal row.

Male genitalia.— Valvae symmetrical, slender, the top shaped like a bird's head. Saccus bilobed, distal part small. Tip of valve slender. Tegumen bilobed. Uncus small, the top just reaching the margin of the tegumen. Vinculum wavy. Anellus arms long, almost 3/4 of tegumen length. Aedeagus arched, long and slender. Coecum pronounced.

Female genitalia.— Ostium excavated, with laterally extending margins. The lateral margins progress and centrally fuse in the shape of a delicate ridge covered with spicules of the lamina post-vaginalis. Antrum three and a half times longer than wide, hardly narrowing. Ductus bursae slender, with a central sclerite, of 2/5 the ductus length. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis with a small central excavation. Apophyses anteriores very small. Apophyses posteriores two and a half times the papillae anales.

Ecology.— The moth flies in January and August, at an altitude of 3,500-4,500 metres. The hostplant is unknown.

Distribution.— **Colombia:** Mt. Tolima. **Ecuador:** Carchi: El Angel. **Peru:** Cuzco: Cuzco.

Remarks.— The species resembles *S. tenuis*, but differs in the absence of dark fringe scales in the termen of the second lobe of the forewing.

*Stenoptilia tenuis* (Felder & Rogenhofer, 1875)  
(figs 72, 218, 340)

*Mimeseoptilus tenuis* Felder & Rogenhofer, 1875: plate 140, fig. 50.

*Mimeseoptilus gilvidorsis* Zeller, 1877: 471.

Material.— Holotype of *S. tenuis* (without abdomen): (Colombia), Bogota, no date (Novara) (BMNH) [examined]. Lectotype of *M. gilvidorsis* ♂: Bogota, no date, gent BM 18453 (BMNH) [examined]. Paralectotype: 1 ♀, same data, gent BM 18452 (BMNH) [examined].

Diagnosis.— The species is characterized by the longitudinal black line in the first forewing lobe, combined with the black scales in the terminal forewing fringes.

Redescription.— Male, female. Wingspan 18-23 mm. Head appressedly scaled grey-brown. Above the eye a white line progressing into the frontal conus. Frontal conus two thirds of the eye diameter. Palps ferruginous, one and a half times eye diameter, second segment distally widened, in frontal view white. Antennae faintly ringed grey-white and grey-brown. Thorax and tegulae have grey-white scales with brown-grey tips. Mesothorax grey-white. Abdomen grey-brown, at posterior end of segments with two small black dots. Hind legs grey-brown, with two pairs of unequal spurs.

Forewing cleft from 3/4; colour grey-brown. Mixed ochreous in the dorsal area. A small discal spot, a spot at the dorsal half before the base of the cleft and a small longitudinal line in the first lobe. Fringes grey-brown; in termen and at anal angle of first lobe and at apex and termen of second lobe a small black group of fringe scales. Underside ferruginous-brown, with some white scales in the subterminal part of both lobes.

Hindwing grey-brown. In first lobe subterminally some dark scales. Fringes grey-brown. Underside ferruginous-brown. Venous scales orange-ferruginous, in a double row. The costal row longer than the dorsal row and extending into the second lobe.

Variation.— The specimens from Peru have a darker colour. The scales at the subtermen of the first lobe of the hindwings are less distinct.

Male genitalia.— Valvae symmetrical, slender, in the shape of a bird's head. Top of tegumen arched. Uncus small and slender; top reaching up to the margin of the tegumen. Vinculum curved, slender. Juxta small. Anellus arched slender, two thirds of tegumen length. Aedeagus curved, moderate. Cornuti in shape of numerous small ridges; coecum pronounced.

Female genitalia.— Antrum three times longer than wide, with a large rounded ostium, gradually narrowing anteriorly. Ductus bursae as long as antrum with a longitudinal sclerotized plate. Bursa copulatrix vesicular. A pair of horn-like signa, and in the posterior part of bursa numerous spiculae. Apophyses anteriores absent. Apophyses posteriores three times longer than papillae anales.

Ecology.— The moth flies from February till May, at an altitude of 3250-5000 metres. The hostplant is unknown.

Distribution.— **Bolivia:** Jllimani. **Colombia:** Bogota. **Ecuador:** Carchi: El Angel; Azuay: Cuenca. **Peru:** Cerro de Pasco: Pariama; Lima: Pueblo Quichas.

Remarks.— The species is closely related to *S. suprema* Meyrick, but differs in the presence of the scale dots in the outer fringes of the forewing and the easily recognizable discal spot.

*Paraplatyptilia* Bigot & Picard, 1986

*Paraplatyptilia* Bigot & Picard, 1986: [17].— Type species: *Pterophorus metzneri* Zeller, 1841, as a replacement name for *Mariana*, Tutt, 1907.

*Mariana* Tutt, 1906: 160.— Homonym of *Mariana* Locard, 1899 (Mollusca).

Redescription.— Head appressedly scaled; small frontal tuft, as long as eye diameter. Palps protruding; second segment in distal half thickened by numerous scales; almost twice eye diameter.

Forewing cleft from 4/5; costal triangle present; both lobes with well-defined termen. Forewing veins: R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from angle of cell; Cu2 from cell.

Hindwing with distally placed scale-tooth on dorsum of third lobe; third lobe with one vein.

Male genitalia.— Valvae symmetrical; distal part shaped like a bird's head and with a smooth top. Saccus bilobed, terminal segment small, poorly developed. Vinculum arched. Saccus small. Tegumen bilobed. Uncus broad spoon-like.

Female genitalia.— Ostium right, laterally in well-sclerotized lamina ante-vaginalis. Antrum tube-like. In ductus bursae a well developed sclerite. Lamina post-vaginalis centrally fused with the sclerotized distal margin of seventh sternite. Bursa copulatrix vesicular; signum double, horn-like. Apophyses anteriores as long as papillae anales. Apophyses posteriores two to three times longer than papillae anales.

Ecology.— Hostplant probably Scrophulariaceae.

Distribution.— Holarctic and Neotropical regions.

*Paraplatyptilia fragilis* (Walsingham, 1880)  
(figs 73, 219, 341)

*Platyptilus fragilis* Walsingham, 1880: 16.

Diagnosis.— The species is characterized by the relatively small size, and the genitalia.

Redescription.— Male, female. Wingspan 17-19 mm. Head appressedly scaled, pale ferruginous-ochreous. Palps twice eye diameter, pale ferruginous-ochreous; the second segment distally widened, the third segment short. Antennae ringed beige and dark brown, shortly ciliated. Thorax beige, tegulae pale ferruginous-ochreous. Mesothorax ferruginous-white. Abdomen pale brown. Hind legs pale grey-white, with pale grey rings at the base of the spur pairs and terminally in the tarsal segments.

Forewings cleft from two thirds, a grey-ochreous-white mixture of scales. Markings dark brown: a discal spot; a costal triangular spot just before the base of the cleft; a costal dark area between the base and the costal triangle; and a subterminal dark area in both lobes, between the pale white subterminal line and the termen. Fringes pale ochreous-white. In the termen fringes with a continuous basal row of dark brown scales. Underside pale grey-brown. In both lobes pale grey-white.

Hindwings and fringes pale grey. No distinct scale-tooth. Underside in basal half of first and entire second lobe pale brown; in the first and third lobe white. Venous scales ferruginous, in a double row, the costal row the longer.

Male genitalia.— Genitalia symmetrical. Valva with a bilobed sacculus, the terminal part two thirds of the basal part. Cucullus overriding in the shape of a bird's head; tip rather acute. Tegumen arched. Uncus with spade-like tip, a little longer than tegumen. Anellus arms as long as tegumen; gradually widening towards the blunt tip. Juxta triangular, with a central U-shaped sclerotized part. Saccus triangular. Aedeagus moderately curved, long. No cornutus. Coecum rather long and slender.

Female genitalia.— Ostium on right lateral side of abdomen. Antrum three times longer than wide, gradually narrowing. Ductus bursae as long as antrum, with a central sclerite. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis centrally double dentated; laterally with a small dent from which the apophyses anteriores originates. Lamina post-vaginalis a wide well developed rim, which laterally progresses into the antrum. Apophyses anteriores as long as papillae anales. Apophyses posteriores three times longer than the papillae anales.

Ecology.— The moth flies in April. The hostplant is *Pentstemon cyananthus* Hook.

Distribution.— **Mexico**: Baja California Norte: Zapopita.

*Paraplatyptilia azteca* Gielis, 1996  
(figs 74, 220, 342)

*Paraplatyptilia azteca* Gielis, 1996: 89.

Material.— Holotype ♂: **Mexico**, 5 mi E Tulancingo, Hgo., 24.vii.1963 (Duckworth & Davis), gent CG 3417 (USNM). Paratypes: 1 ♀, same data as holotype, gent CG 3416 (CG); 1 ♀, **Mex(ico)**, Hgo., Real del Monte, no date (W.D. Kearfott), gent CG 3393 (USNM); 1 ♂, **Mexico**, Distrito Federal, Mexico, 2600 m, 24.viii.1981 (V.O. Becker), gent CG 6235 (Becker nr. 41812).

Diagnosis.— This species is characterized by the markings reduced to a double spot at the base of the cleft and a discal spot.

Redescription.— Male, female. Wingspan 21-23 mm. Head and collar appressedly scaled, grey-brown. Frons with small conical protrusion, half the eye diameter brown-ochreous. Palps slightly curved up, twice eye diameter, pale brown. Antennae faintly ringed pale and dark brown, shortly ciliated. Thorax grey-brown. Tegulae more greyish on the caudal half. Fore legs and mid legs pale brown. Hind legs cream-white distally gradually turning pale brown; with two pairs of spurs all of equal length.

Forewings cleft from  $3/4$ , colour dark brown, densely speckled with white scales giving a greyish impression. Just before the base of the cleft an almost confluent dark brown double spot. At the costa of the first lobe two poorly defined spots and a discal spot. Fringes grey-white with a complete basal line at the termen of both lobes. Underside brown, in the terminal half of both lobes increasingly speckled with white. A faint white subterminal line in both lobes.

Hindwings grey-brown. Fringes brown-grey. Underside brown-grey. Terminally in the first lobe and the entire third lobe speckled white. Venous scales orange-ferruginous, in a double row. The costal row longer than the dorsal row.

Variation.— The specimen from Real del Monte shows a further reduction of the markings and only a few white scales on the forewing.

Male genitalia.— Valvae symmetrical. Cucullus overriding. Sacculus bilobed. Tegumen bilobed. Uncus with a spoon-like top, as long as tegumen. Vinculum extended into

the pointed saccus, which is one and one half times longer than wide. Juxta a trapezoidal plate progressing into two short, stout anellus arms. Aedeagus slightly curved, with prolonged caulis. No cornutus.

Female genitalia.— Ostium right lateral positioned, the lamina ante-vaginalis wide, sclerotized and hairy. Antrum short, gradually narrowing. Ductus bursae long with long and slender sclerite. Ductus seminalis originating just above bursa copulatrix. Bursa copulatrix vesicular with a pair of horn-like signa. Lamina post-vaginalis with a small sclerotized, central ridge. Apophyses anteriores as long as papillae anales.

Ecology.— The moth flies in July. The hostplant is unknown.

Distribution.— **Mexico**: Hildago: Tulancingo, Real del Monte; Distrito Federal: Mexico.

### *Postplatyptilia* Gielis, 1991

*Postplatyptilia* Gielis, 1991: 39.— Type species: *Platyptilia camptosphenae* Meyrick, 1931, by original designation.

Description.— Head without frontal tuft. Palps protruding, distinct second segment, one and a half times eye diameter.

Forewing generally cleft from 3/4; in most cases with costal triangle. Forewing veins: R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from angle of cell; Cu2 from cell.

Hindwing at dorsum of third lobe with, sometimes very indistinct, scale-tooth, located from two thirds to subapical. In some species a second scale-tooth is present between this subterminal scale-tooth and wing base. Third lobe with one vein.

Male genitalia.— Valvae symmetrical. Cucullus longer than sacculus. Sacculus not or poorly bilobed. Distal part of sacculus, if bilobed, simple. Tegumen bilobed. Uncus rather slender, half to 3/4 of tegumen length. Saccus pronounced thorn-like. Aedeagus curved with pronounced coecum.

Female genitalia.— Ostium in some species centrally positioned, in other species to one side (right). Antrum sometimes with very pronounced lamina ante-vaginalis, which laterally progresses into apophyses anteriores. Ductus bursae occasionally with sclerite. Bursa copulatrix with pair of horn-like signa, which may be small.

Ecology.— A recorded hostplant is *Lantana urticoides* Hayek (= *L. hispida* H.B.K.).

Distribution.— Neotropical region.

### *Postplatyptilia huigraica* B. Landry & Gielis, 1992 (figs 75, 221, 343)

*Postplatyptilia huigraica* B. Landry & Gielis, 1992: 11.

Material.— Holotype ♂: **Ecuador**, Huigra, 4500 ft., vi.1914 (Parish), gent CG 5022 (BMNH). Paratypes: 1 ♀, same locality and data, gent CG 5021 (BMNH). 1 ♀, **Brazil**, D.F., Planaltina, 1000 m., 15.viii.1985 (Becker), gent CG 6030, Becker nr. 57719; 1 ♂, same locality, 21.iv.1977 (Becker), Becker nr. 19855; 1 ♀, **Brazil**, M.G., Nova Lima, 850 m., 8.x.1985 (Becker), gent CG 6031, Becker nr. 63131; 1 ♀, **Brazil**, Paraná, Marumbi, Morrestea, 500 m., 17.xii.1969 (Becker), Becker nr. 9365; 1 ♀, **Brazil**, P.R., Mandirituba, 29.xi.1969 (Becker), Becker nr. 11031.



Diagnosis.— The species is characterized by the genitalia. The male genitalia have a short uncus, almost the same as in the genus *Stenoptilia*. The female genitalia show a marked bidentated, plate-like extension of the seventh tergite.

Description.— Male, female. Wingspan 14-15 mm. Head appressedly scaled, pale brown, with some erected scales. Frons smooth. Palps as long as eye diameter; second segment triangular widened, third segment small. Antennae half as long as wing length, pale brown, shortly ciliated. Hind legs pale brown, with two pairs of spurs, the proximal pair a little longer than the second. Thorax and tegulae pale brown. Mesothorax cream-white. Abdomen pale brown.

Forewings cleft from  $3/4$ , pale brown. Markings dark brown, consisting of an ill-defined costal triangle before the base of the cleft; the margin before the cleft dark edged. In the middle of both lobes a transverse band-like spot, margined distally white by a subterminal line in both lobes. In the lobes mixed with ferruginous scales and at the base of the cleft a small white costal spot. Fringes grey, in the second lobe basally dark. A scale-tooth on the dorsum at two thirds and pronounced scales along its margin. Darkening at the apex and anal angle of both lobes. Underside pale brown, mixed ferruginous. In the lobes grey-brown with a white subterminal line.

Hindwings brown-grey mixed ferruginous. Fringes grey on the dorsum of the third lobe. A scale-tooth at two thirds, with prominent scales between the wing base and the scale-tooth; apically a small dark scale group. Underside pale grey-brown, mixed with ferruginous scales. Venous scales ferruginous, in a double row; the costal one interrupted, but progressing into the second lobe.

Male genitalia.— Valvae symmetrical. Sacculus in basal half wide and distally narrow. Cucullus a little longer than sacculus. Tegumen bilobed. Uncus short. Vinculum narrow, saccus pointed, well developed. Aedeagus slender, curved. No cornutus. Coecum moderate.

Female genitalia.— Antrum narrow. Ductus bursae progressing into a curved tube which becomes a spiral in the mid section. Bursa copulatrix vesicular, with a pair of irregular shaped signa. Between these signa a spiculated area is present. The distal margin of the seventh sternite distally progressing into a large bilobed plate, covering  $3/4$  of the ventral surface of the eighth sternite. Apophyses anteriores short. Apophyses posteriores three times longer than papillae anales.

Ecology.— The moth flies in February, June, August, and October to December. The hostplant is unknown.

Distribution.— **Brazil:** Distrito Federal: Planaltina; Mato Grosso: Nova Lima; Paraná: Mandirituba, Marumbi. **Colombia:** Medellín: La Estrella. **Costa Rica:** Cartago: Cerro de la Muerte. **Ecuador:** Azuay: Huigra; Galapagos Islands: Isabela. **Peru:** Lima: RN de Lachay. **Venezuela:** Aragua: Rancho Grande.

Remarks.— The species shows a tendency to the development of a second scale-tooth on the dorsum of the third lobe.

*Postplatyptilia antillae* spec. nov.  
(fig. 344)

Material.— Holotype ♀: **Cuba**, Santiago, Srta Maestra, P Cuba, 1500 m, 31.vii.1990 (V.O. Becker), gent CG 3650 (V.O. Becker nr 73509). Paratype ♀: **Jamaica**, St Anne Parish, 0 m, no date (EL Bell), gent CG 4886 (USNM).



Diagnosis.— The species is characterized by the female genitalia.

Description.— Female. Wingspan 18 mm. Head appressedly scaled, grey-brown, around the eye some white scales. Palps protruding, twice the eye diameter, grey-brown and mixed with sparse white scales. Antennae pectinate, grey-brown. Thorax and tegulae grey-brown. Mesothorax white. Hind legs grey-brown, at the base of the spurs a small scale bristle. Spur pairs of unequal length, the medial spurs longer than the lateral spurs, and the proximal pair longer than the distal pair.

Forewings cleft from 7/11, brown. Markings dark brown: a costal triangle just before the base of the cleft; a central transverse spot basally from the subterminal line in both lobes. A row of small white spots along the costa; a white subterminal line in both lobes; and distinct narrow white transverse lines in the dark spots in the lobes. Fringes grey; around the apex, termen and anal angle of both lobes a basal row of black scales, interrupted once at the termen and anal angle of the first lobe, and twice at the termen of the second lobe; on the dorsum of both lobes interrupted white as an extension of the subterminal line; and scale-teeth on the dorsum at two thirds and 3/4. Underside dark brown; a longitudinal white spot at the dorsum near the base of the wing; a costal spot beyond the base of the cleft; and a bright subterminal line.

Hindwings dark grey-brown. Fringes grey; with a basal row of dark scales around the tip of the first lobe; and dorsally at the third lobe a subterminal scale-tooth. Underside dark brown; in the first lobe a small subterminal line, and in the first and third lobe scattered white scales. Venous scales dark ferruginous, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium simple. Antrum slender, four times longer than wide. Ductus bursae as long as antrum. Bursa copulatrix vesicular, with a pair of small horn-like signa. Lamina ante-vaginalis laterally with two small thorn-like processes, and medial of these a blunt, stout process. Lamina post-vaginalis with a semicircular sclerotization around the ostium, and caudally a large blunt, bifid process. Apophyses anteriores absent. Apophyses posteriores slender, three times longer than papillae anales.

Ecology.— The moth flies in July. The hostplant is unknown.

Distribution.— **Cuba**: Santiago, Srta Maestra. **Jamaica**: St Anne Parish.

Etymology.— The name reflects the origin of the species, being the first to be recorded in the present genus from the Greater Antillean Islands.

Remarks.— This species has, together with *P. palmeri*, the most northern distribution within the present genus.

*Postplatyptilia talcaica* Gielis, 1991  
(figs 76, 345)

*Postplatyptilia talcaica* Gielis, 1991: 53.

Material.— Holotype ♀: (**Chile**), Alto Vilches, Cord.(illa) Talca, i.1989 (Elgueta), gent CG 1984 (MNHC).

Diagnosis.— The species is characterized by its genitalia.

Description.— Female. Wingspan 18 mm. Head grey-brown, appressedly scaled. Collar with some erect scales. Frons with small conical protrusion. At the base of antennae, above the eye, a white-yellow line, progressing on to the lateral side of the frontal

conus. Palps grey-brown, twice the eye diameter; second segment widened by pronounced scales, third segment slender and short. Antennae dark brown, shortly ciliated. Thorax dark grey-brown. Tegulae grey-brown. Mesothorax grey-white. Legs pale brown, tarsal segments grey-white, distally darkening.

Forewings cleft from 3/4; colour grey-brown and markings dark brown. The markings consist of an indistinct dorsal spot at 1/4; a costal triangle just before the base of the cleft with a hooked shape; a dark section centrally in the first lobe and some dark scales in the centre of the second lobe; some isolated dark scales along the costal margin. The costal triangle is margined basally by a poorly defined and terminally by a pronounced yellow-white spot. Subterminally on both lobes a transverse, narrow white line. Fringes grey-white, basally in the outer margin black scales. In the first lobe three dark, rather narrow groups of fringe hairs; a dark group of fringe hairs at the anal angle of the first lobe; at the second lobe three wide groups, narrowly interrupted. Underside brown, with yellow-white markings as above.

Hindwings grey-brown. Fringes grey. On the dorsum of the third lobe dark scales toward two thirds of the length. (A scale-tooth is missing, because of the state of the insect). Underside grey-brown. Venous scales in a double row. The costal row is the longer, extending into the second lobe, and is composed of three groups of scales.

Male genitalia.— Unknown.

Female genitalia.— Antrum almost square, edges rounded. Ductus bursae slender, almost straight. Bursa copulatrix vesicular with a pair of short, horn-like signa. The distal margin of the seventh sternite excavated, stout, laterally progressing into the stout apophyses anteriores, which are as long as the papillae anales. Apophyses posteriores three times longer than papillae anales, ending in a widened, club-like, shape.

Ecology.— The holotype was collected in January. The hostplant is unknown.

Distribution.— **Chile:** Talca: Alto Vilches.

Remarks.— The species resembles in external characters *Paraamblyptilia eutalanta* Meyrick but has a different colour in the first lobe of the forewing.

*Postplatyptilia nebuloarbustum* **spec. nov.**  
(figs 77, 346)

Material.— Holotype ♀: **Ecuador**, Azuay, PN Cajas, Laguna Llaviuco, 3225 m, 79°8'35"W 2°50'38"S, 5.x.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4859 (CG).

Diagnosis.— The species is characterized by the double costal spot in the forewing, with minimal additional markings, and by the female genitalia.

Description.— Female. Wingspan 20 mm. Head appressedly scaled, ferruginous-brown. Face with a spade-like protrusion, half the eye diameter in length. Palps grey-brown, protruding, twice the eye diameter; the first segment dorsally and ventrally white; the second segment distally widened; the third segment small and short. Antennae grey-brown, pectinate. Thorax, tegulae and mesothorax ferruginous-grey-brown. Hind legs grey-brown; tarsal segments pale grey, terminally grey-brown. The spur pairs of unequal length: the first pair longer than the distal pair and the medial spur longer than the lateral spur.

Forewings cleft from two thirds, ferruginous. Markings grey-brown: a diffuse dark

area along the costa extending into the costal triangle, well before the base of the cleft; a large central spot in the first lobe basally from the subterminal line, and a small costal spot terminally from the subterminal line; a small spot dorsally from the costal triangle. Terminal fringes grey with a dark basal line; In the cleft grey-white, mixed with scattered black scales; on the dorsum grey-white with black scale-teeth at halfway and 4/5. Underside dark grey-brown, with a whitish costal spot just beyond the base of the cleft and a subterminal line.

Hindwings and fringes grey-brown. Third lobe with coarse grey-brown scales, numerous along the dorsum and with a subterminal scale-tooth. Underside brown-grey. Venous scales in a double row, bright ferruginous, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium right lateral; deeply excavated. Antrum three times longer than wide. Ductus bursae slender and long, in the last segment before the bursa three twists, with a sclerite in the ductus. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis built up with two pairs of pointed protrusions. Lamina post-vaginalis with a single central, dented protrusion three times longer than those from the lamina ante-vaginalis. Apophyses anteriores as long as the papillae anales. Apophyses posteriores four times the papillae anales, slender.

Ecology.— The moth flies in October, at an altitude of 3225 metres. The hostplant is unknown.

Distribution.— **Ecuador**: Azuay: PN Cajas.

Etymology.— The names reflects the conditions of the collecting spot, a high altitude cloud-forest.

*Postplatyptilia caribica* **spec. nov.**  
(figs 78, 347)

Material.— Holotype ♀: **Dominica**, Clarke Hall, 11.iii.1965 (W.W. Wirth), gent CG 3431 (USNM). Paratype ♀: **Puerto Rico**, Centro Vacacional Monte del Estado, nr Maricao, 650 m, 1-9.iii.1971 (C.P. Kimball), gent CG 4878 (CG).

Diagnosis.— The species is characterized by the dark forewings with a simple white subterminal line, and the female genitalia.

Description.— Female. Wingspan 14 mm. Head brown, above the eye and between the antennae white. Palps two and a half times the eye diameter, protruding, grey-white; first segment with drooping scales, mixed with some brown scales; second segment longitudinally brush shaped, with numerous brown scales; and third segment slender, mainly dorsally mixed with brown scales. Antennae pectinate, faintly ringed pale and dark brown. Thorax and tegulae grey-brown. Mesothorax dorsally brown, ventrolaterally white. Hind legs grey-brown, tarsal segments proximally grey-white, distally grey-brown. The spur pairs of equal size, the proximal pair longer than the distal pair.

Forewings cleft from two thirds, dark brown. Markings black-brown: a discal spot; a dorsal spot at 1/5; a costal triangle at the base of the cleft; and a central transverse band in both lobes. In both lobes a white subterminal line; and scattered white scales along the costa. Fringes grey, around the apex and anal angles darker; on the dorsum

scale-teeth at halfway and  $3/4$ . Underside dark brown, with a costal ochreous spot beyond the costal triangle and a white subterminal line.

Hindwings brown in first and second lobe; third lobe mixed with numerous white scales. Fringes grey. On the dorsum of the third lobe a subterminal scale-tooth, extending minimally at the costa. Underside dark brown. Venous scales ferruginous-orange, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium plate-like. Antrum long and slender, extending into the slender ductus bursae. Bursa copulatrix vesicular, with a pair of signa. In the holotype the signa have an longitudinal shape, in the paratype the shape is a small horn or a large thorn-like shape. Lamina ante-vaginalis with a central long caudal extension, and a smaller lateral one. The extensions are heavily scaled. No apophyses anteriores. Apophyses posteriores slender, three times the papillae anales.

Ecology.— The moth flies in March. The hostplant is unknown.

Distribution.— **Dominica**: Clark Hall. **Puerto Rico**: Maricao.

Etymology.— The name reflects the area of distribution, the Caribbean Islands.

*Postplatyptilia sandraella* Gielis, 1996  
(figs 79, 348)

*Postplatyptilia sandraella* Gielis, 1996: 95.

Material.— Holotype ♀: **Bolivia**, Yungas de la Paz, 1908 (Seebold), gent CG 5041 (BMNH). Paratype ♀: same locality and date as holotype (BMNH).

Diagnosis.— The species is characterized by the orange colour of the head, thorax, tegulae, abdomen and base of the forewing. The dark brown, delicate white lined forewings and the sub-apical scale-tooth on the dorsum of the third hindwing lobe.

Description.— Male, female. Wingspan 12-14 mm. Head orange, centrally at vertex and frons appressedly scaled, at the collar and lateral with erect bifid scales. Palps two times eye diameter, orange; second segment distally thickened by numerous scales; third segment slender, with an ochreous-basal ring and top. Antennae dark brown, shortly ciliated, with regular white scales. Thorax, mesothorax and tegulae orange. Abdomen orange, ventrally pale orange and second and third segment whitish. Hind legs shining dark brown, with two pairs of spurs of equal length. Around the base of the spurs some prominent scales.

Forewings basally orange, gradually turning dark brown towards the apex. Along the costa and across the wing numerous delicate small white lines and spots. A sub-terminal white transverse line. Termen of both lobes waved, with a dark grey basal fringe line, white interrupted twice in the second lobe. Underside basally orange, gradually turning dark purplish brown toward the apex. Except for the white sub-terminal line no markings.

Hindwings basally orange, dark brown at apex, as in forewing. Fringes grey, around the apex of the first and second lobe with a basal dark fringe line. Underside as above, subterminal in the first lobe a small white line. Venous scales dark brown, in a double row.

Male genitalia.— Unknown.

Female genitalia.— Antrum a little longer than wide. Ostium excavated. Ductus bursae rather slender, with a two stroke spiral twist. Bursa copulatrix with numerous small spiculae and a pair of asymmetrical, rounded triangular, signa. The margin of the seventh tergite with a central extension as long as the papillae anales. Apophyses posteriores three and a half times longer than the papillae anales; apophyses anteriores as long as these.

Ecology.— The moth flies in January. The hostplant is unknown.

Distribution.— **Bolivia:** Yungas de la Paz. **Paraguay:** Paraguari: Sapucay.

*Postplatyptilia carchi* **spec. nov.**  
(figs 80, 222, 349)

Material.— Holotype ♀: **Ecuador**, Carchi, 12.5 km N El Angel, 3500 m, 12.i.1985 (N. Venedictoff), gent CG 3559 (AME). Paratype ♂: **Venezuela**, Merida, Mucay Fish Hatchery, 7 km E Tabay, 2000 m, 10-13.ii.1978 (J.B. Heppner), gent CG 3454 (USNM); 1 ♂, **Colombia**, Medellin, La Estrella, 1700 m, 12-14.v.1963 (B. Schneble), gent CG 3904 (ZSM).

Diagnosis.— The species is characterized by the slender wings with the ochreous-brown colour and the characteristic female genitalia.

Description.— Male, female. Wingspan 13-15 mm. Head appressedly scaled with some erect scales at the collar. Face pale brown. Palps twice the eye diameter, pale brown, the second segment distally widened and third segment short. Antennae pale brown, shortly ciliated. Thorax, tegulae and mesothorax pale grey-brown. Abdomen pale grey-brown. Fore legs ochreous-brown toward the joints darker; first tarsal segment long. Mid legs ochreous-brown, near joints and spur pairs dark brown. Hind legs ochreous-brown gradually darkening toward joints and spur pairs, spur pairs both with lateral spur shorter than medial spur.

Forewings cleft from 3/4, colour ochreous-brown, markings dark brown. The markings consist of speckling along the costa from the base and ending in the costal triangle which is situated just before the base of the cleft; a longitudinal and a short spot at the costa of the first lobe, some darkening in the dorsal half of the first lobe and an almost complete dark area of the second lobe; a spot halfway in the discus and a small spot on the dorsum at one third distance. Fringes grey with a dark row of scales from the apex of the first lobe, through the cleft to the anal angle of the second lobe; scattered scales on the dorsum of the wing and a small scale brush at two thirds. Underside grey-brown, gradually darkening towards the termen; a yellow-ochreous costal spot at the base of the cleft and a subterminal line in both lobes.

Hindwings grey-brown. Fringes brown-grey; with some scattered scales and an oblique scale-tooth at two thirds on the dorsum of the third lobe. Underside grey-brown. Venous scales in a double row, the costal row longer than the dorsal row, colour ferruginous.

Male genitalia.— Genitalia symmetrical. Valvae with bilobed sacculus. Distal sacculus with a large spine from the middle of valva. Cucullus just overriding, with a blunt tip. Tegumen simple. Uncus slender, as long as tegumen. Anellus arms rather crude, two thirds of the tegumen length. Vinculum narrow, with a long and acute saccus. Aedeagus curved, with a thickened tip. Cornuti in shape of two small sclerotized parts near the tip. Coecum small.

Female genitalia.— Ostium slightly excavated. Antrum gradually narrowing, twice as long as wide. Ductus bursae twisted, twice the length of the antrum; with a small and slender sclerite. Ductus seminalis from the top of the bursa copulatrix. Bursa copulatrix with a pair of horn-like signa. Lamina ante-vaginalis wedged towards the thorax, with a central semi-circular extension. Apophyses anteriores short. Apophyses posteriores three times papillae anales.

Ecology.— The moth flies in January, February and May, at an altitude of 2000-3500 metres. The hostplant is unknown.

Distribution.— **Colombia**: Medellin: La Estrella. **Ecuador**: Carchi: El Angel. **Venezuela**: Merida: Mucuy Fish Hatchery.

Etymology.— The species is named after the province where it was collected: Carchi.

*Postplatyptilia vorbecki* **spec. nov.**  
(figs 81, 223)

Material.— Holotype ♂: **Ecuador**, Guachayacu, ix-x.1926 (Vorbeck), gent CG 3474 (ZMUC).

Diagnosis.— The species is characterized by the male genitalia.

Description.— Male. Wingspan 17 mm. Head appressedly scaled, beige-brown. Frons with a conical protrusion, two thirds of the eye diameter. Palps protruding, beige-brown, just over twice the eye diameter. Antennae ciliated, beige-brown. Thorax, tegulae and dorsal part of mesothorax beige-brown. Hind legs beige-brown. The spur pairs of unequal length, the medial spurs longer than the lateral spurs, and the proximal pair longer than the distal pair.

Forewings cleft from two thirds, beige-brown. Markings brown: Numerous scattered scales over the entire wing; a small discal spot; a double spot before the base of the cleft, the costal spot at the base of the cleft and the dorsal spot well below the cleft. A pale, white, subterminal line, seen clearly in the first lobe, poorly in the second lobe. Fringes beige-brown. Underside pale beige-brown. A pale subterminal line in both lobes.

Hindwings and fringes beige-brown. On the dorsum of the third lobe a terminal scale-tooth. Underside beige. Venous scales orange, in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical. Sacculus bilobed, basally gradually narrowing, and distally narrowing towards the acute tip, with a basal excavation. Cucullus with a spine which directs towards the tip, and is positioned opposite the separation between the saccular lobes. Tegumen simple, rather stout. Uncus half the tegumen, slender. Anellus arms half the tegumen, blunt tip. Saccus one and a half times longer than wide, with a lateral knob at the base, and a rather acute tip; aedeagus curved; coecum well developed; no cornutus.

Female genitalia.— Unknown.

Ecology.— The moth flies in September and October. The hostplant is unknown.

Distribution.— **Ecuador**: Guachayacu.

Etymology.— The species is named after its collector, Mr Vorbeck.

Remarks.— Based on external characteristics this species belongs to the *aestuosa*

group, which so far may only be identified by examination of the genitalia. The male genitalia resemble *nielsenii*, but differ in the position of the valvular spine, and the tip of the saccus.

*Postplatyptilia boletus* **spec. nov.**  
(figs 82, 350)

Material.— Holotype ♀, **Peru**, Machu Picchu, 2450 m, 16-18.x.1981 (D.R. Davis), gent CG 3463 (USNM).

Diagnosis.— The species is characterized by the female genitalia.

Description.— Female. Wingspan 14 mm. grey-brown, with a white line above the eye and a transverse white line on the frons. Palps protruding, two and a half times the eye diameter; first segment grey-white, mixed brown; the second segment thickened, grey-brown; third segment slender, grey-brown. Thorax and tegulae rostrally and caudally dark brown, mid-section grey-brown. Mesothorax dorsally with a narrow black-brown line, laterally white. Hind legs and first tarsal segment dark brown-grey, from second tarsal segment on, basally grey-white and terminally brown-grey. At the base of the distal spur pair a small scale brush. Spur pairs of unequal length, the medial spurs longer than the lateral spurs, and the proximal pair longer than the distal pair.

Forewings cleft from 5/7, grey-brown. Markings dark brown: two faint dorsal spots at 1/4 and halfway; a discal spot; a costal triangle well before the base of the cleft; in both lobes a darker area, gradually increasing in intensity towards the termen, interrupted by the poorly developed subterminal line. Fringes grey; at termen and around the apex and anal angle of both lobes a dark grey row of basal scales; on the dorsum scale-teeth at two thirds and 4/5. Underside dark brown, with four ochreous spots on the costa and a faint subterminal line in the first lobe.

Hindwings and fringes brown-grey; around the apex of the first lobe a basal row of grey-brown scales. On the dorsum of the third lobe a black scale-tooth at two thirds, and between the base and the scale-tooth some black scales. Underside grey-brown, mixed with some white scales in the first lobe and densely mixed white in the third lobe. Venous scales ferruginous, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium curved. Antrum in shape of a mushroom, basally with a twist in the ductus. Ductus bursae slender, gradually progressing into the bursa copulatrix. Bursa with a pair of horn-like signa. Lamina post-vaginalis laterally extended; central part bilobed, a further lobular extension on top of the lobes. Apophyses anteriores short, half the papillae anales. Apophyses posteriores slender, ending club-like; four times the papillae anales.

Ecology.— The moth flies in October. The hostplant is unknown.

Distribution.— **Peru**: Machu Picchu.

Etymology.— The name reflects the mushroom shaped antrum.

*Postplatyptilia uruguayensis* **spec. nov.**  
(figs 83, 351)

Material.— Holotype ♀: **Uruguay**, Montevideo, Sayago, 28.iii.1974 (MS Moratorio), gent CG 3460 (USNM).



Diagnosis.— The species is characterized by the female genitalia.

Description.— Female. Wingspan 18 mm. Head appressedly scaled, ferruginous-brown. Above the eye a white line. Palps twice the eye diameter, brown. Antennae dark brown, pectinate. Thorax rostrally and caudally dark brown, centrally ferruginous-brown. Tegulae rostrally dark brown, caudally ferruginous-brown. Mesothorax with a white rim. Hind legs dark brown, with two white spots before the spurs and one white spot between the spur pairs. Spurs white with some brown scales.

Forewings cleft from  $3/4$ , ferruginous-brown. Markings dark brown: a broad diffuse dark area along the costa, and a discrete dark patch along the dorsum; a discal spot extending to the costal triangle; a costal triangle just before the base of the cleft; a dorsal spot at  $1/5$ , and a streak at  $2/5$ ; a costal triangular spot in the middle of the first lobe, between the tip of the triangle and the dorsum a narrow longitudinal streak; a diffuse dark area in the centre of the second lobe. The costal triangle in the first lobe margined by a bright white line; in the second lobe a faint white subterminal line as an extension of the terminal white line in the first lobe. Fringes grey; on the termen of both lobes and around the anal angles a row of dark brown-grey scales; a dark fringe brush at the anal angle of the second lobe; scale-teeth on the dorsum at the middle and two thirds. Underside dark brown, with white markings as above.

Hindwings and fringes brown-grey. Around the tip of the first and second lobe a basal fringe line; on the dorsum of the third lobe a scale-tooth at  $4/5$  and another at the termen, and between the wing base and the scale-teeth scattered prominent scales. Underside dark brown, with scattered white scales in the first and third lobe. Venous scales dark ferruginous, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium bulging out. Antrum twice as long as the width of the ostium, the tip shaped like a mushroom on a stalk. Ductus bursae long and slender, centrally in the ductus a longitudinal sclerite. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina post-vaginalis with a central sclerite, more or less trapezoidal in shape. Apophyses anteriores absent. Apophyses posteriores slender, three times the papillae anales.

Ecology.— The moth flies in March. The hostplant is unknown.

Distribution.— **Uruguay**: Montevideo: Sayago.

Etymology.— The species is named after the country in which it was discovered.

*Postplatyptilia zongoensis* **spec. nov.**  
(figs 83a, 352)

Material.— Holotype ♀, **Bolivia**, La Paz, 30 km N La Paz, Rio Zongo Valley, 2850 m, Hidroelectrica Sta Rosa, 8-9.iv.1987 (P. Anctander), gent CG 4173 (ZMUC).

Diagnosis.— The species is characterized by the female genitalia, and the distinct heavy black mark on the forewing just before the base of the cleft.

Description.— Female. Wingspan 27 mm. Head grey-brown. Collar brown. Palps protruding, three times eye diameter, grey with, in the centre of the segments, dark brown scales. Antennae shortly ciliated, dark brown. Thorax and tegulae cranially grey-brown and caudally dark brown. Mesothorax dark brown. First abdominal segment

greyish, terminally and dorsally dark brown; segments two and three ferruginous-greyish.

Forewings cleft from two thirds. The wings are very worn. Recognisable features are: a reddish tinge of the scales; a large costal, dark brown, triangle just before the base of the cleft, extended into the second lobe towards the anal angle in a brown dash; a costal triangle in the middle of the first lobe reaching to the centre of the lobe. On the dorsum of the wing, from the base of the cleft towards the base of the wing prominent fringe scales. Underside ferruginous-brown, towards the tip of the lobes gradually turning ferruginous-yellow.

Hindwings, the first and second lobes brown-grey, the third lobe brown. Fringes brown-grey. At 4/5 of the dorsum of the third lobe a large black scale-tooth, and between this scale-tooth and the wing base isolated black fringe scales. Underside grey-brown. Venous scales ferruginous, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium slightly excavated. Antrum gradually narrowing, one and a half times longer than wide; lateral of the antrum a sclerotized ridge, directed towards the junction between the antrum and the ductus bursae. Ductus bursae slender, three times the antrum, with a central sclerite. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis as a membranous ridge. Lamina post-vaginalis with a sclerotized trapezoidal shaped plate, in which the top side is indented. Apophyses anteriores short, half the papillae anales. Apophyses posteriores long and slender, four times the papillae anales.

Ecology.— The moth flies in April, at an altitude of 2850 m. The hostplant is unknown.

Distribution.— **Bolivia**: La Paz: Rio Songo Valley.

Etymology.— The name reflects the river valley where it occurs, the Rio Zongo valley.

*Postplatyptilia flinti* Gielis, 1991  
(figs 84, 224, 353)

*Postplatyptilia flinti* Gielis, 1991: 55.

Material.— Holotype ♀: **Argentina**, B(ueno)s A(ire)s, Rio Santiago, Palo Blanco, Berisso, 19.xii.1979 (Flint), gent CG 6081 (USNM).

Diagnosis.— The species is characterized by the ferruginous colour, the spotting on the underside of the forewing and the lamina post-vaginalis in the female genitalia.

Description.— Male, female. Wingspan 15 mm. Head appressedly scaled, dark ferruginous-brown. Some erect scales at collar. Frons rounded. Palps one and a half times eye diameter; ferruginous-brown mixed grey-white. Second segment as long as first, both with pronounced scales; third segment short. Antennae grey-brown, shortly ciliated. Thorax and tegulae dark brown, with a transverse orange-brown band as a continuation of the orange-brown mixed dorsum of the forewings. Mesothorax white. Hindlegs grey-brown; at the base of the spurs some pronounced scales; spur pairs of equal length. Tarsi pale-greyish, distally darker ringed.

Forewings cleft from 4/5, colour ferruginous-brown. Markings dark brown: a small discal spot, a costal triangle just before the base of the cleft and an incomplete transverse band centrally in both lobes. This band terminally margined by an ochreous-white subterminal line. Between the costal triangle and the transverse spot in the first lobe a poorly defined ochreous-white spot, positioned more or less on the costa. Fringes grey, in termen of both lobes a continuous row of basal, ferruginous scales. On the dorsum two scale-teeth at 3/4 and 4/5. Underside dark brown, with a grey-white subterminal line in both lobes, and a costal spot as above.

Hindwings dark brown. Fringes grey, with a grey row of scales on the terminal part of all three lobes. On the dorsum of the third lobe a black scale-tooth at 5/6 and some apical scales. Between the scale-tooth and the wing base isolated dark scales. Underside grey-brown, mixed with isolated white scales, which in the first lobe form a continuation of the subterminal line of the forewing. Venous scales orange-ferruginous, basally as a double row, fusing at 1/5 and continuing as a single row.

Male genitalia.— Genitalia symmetrical. Valva with bilobed sacculus; basal part of sacculus ellipsoidal, distal part almost parallel to margin of valva. At the base of the distal sacculus part a small spine. Cucullus overriding, and ending in a short rather acute tip. Tegumen arched, simple. Uncus slender two thirds of tegumen length. Vinculum arched, with a long and spine-like saccus, twice as long as wide. Aedeagus slightly curved. No cornutus. Coecum poorly developed.

Female genitalia.— Antrum large, funnel-shaped, ending at the centre of the lamina ante-vaginalis. Ductus bursae pronounced, short. Bursa copulatrix vesicular, with a double horn-like signum. Lamina post-vaginalis in shape of a trapezium with excavated top, laterally margined by two large, stout spines as long as the trapezoid shape. The lamina ante-vaginalis laterally progresses into the stout apophyses anteriores, which are as long as the papillae anales. Apophyses posteriores slender, four times longer than papillae anales.

Ecology.— The moth flies in December. The hostplant is unknown.

Distribution.— **Argentina**: Buenos Aires: Buenos Aires, Rio Santiago. **Brazil**: Parana: Castro, Rio Negro; Sao Paulo: Campinas. **Paraguay**: Caaguazu: Tayao; Central: Asuncion; Gualra: Zorilla, Melgarejo, Calle Florida; Paraguani: Sapucay; Villarrica.

*Postplatyptilia ugartei* **spec. nov.**

(figs 85, 225)

Material.— Holotype ♂: **Chile**, Copiapo. El Maray, 17.i.1996 (A. Ugarte Peña), gent CG 2723 (CG). Paratype ♂: **Chile**, Copiapo. El Maray, 17.i.1996 (A. Ugarte Peña), gent CG 2730 (CG).

Diagnosis.— The species is characterized by the male genitalia and the markings in the first lobe of the forewing, distinguishing it from *P. triangulocosta* Gielis.

Description.— Male. Wingspan 19-21 mm. Head appressedly scaled, pale brown. A small frontal hump. Above the eye a narrow row of white scales. Palps moderately curved upwards, twice the eye diameter; first segment pale brown, dorsally and ventrally whitish; second segment pale brown, terminally whitish; third segment short, whitish. Antennae shortly ciliated pale brown. Hind legs pale brown, darker at the base of the spur pairs and the terminal parts of the tarsal segments. Spur pairs of unequal

length and the inner spurs longer than the outer spurs; centrally pale brown, proximally and distally dark brown. Thorax and mesothorax descaled in specimens examined. Tegulae pale brown.

Forewings cleft from 3/4, pale brown. Most of the wing descaled. Just before the base of the cleft a costal triangle, extended in both apical and basal directions along the costa. The first lobe with a ferruginous-orange subterminal line, terminally and basally from this line a dark area. Between the dark area and the costal triangle a ferruginous-orange tinged area. In the second lobe the subterminal line is less expressed, also margined dark brown. Fringes grey-brown, darker at the apex of both lobes and at the anal angle of the first lobe. A dorsal scale-tooth at 3/4. Underside grey-brown, with a ferruginous-orange subterminal line in both lobes and a dash in the first lobe as above.

Hindwings and fringes brown-grey. Along the dorsum of the third lobe prominent blackish scales. Underside grey. Venous scales black-brown, in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical. Sacculus bilobed, but only slightly narrowed centrally. A small, narrow saccular spine from two thirds towards the base of the valva. Cucullus simple. Valva with small hooked tip. Tegumen simple. Uncus as long as tegumen, curved, gradually narrowing. Saccus wide and gradually narrowing into a sharp tip. Aedeagus curved, coecum poorly developed; near the tip along the external margin some hooklets.

Female genitalia.— Unknown.

Ecology.— The moth flies in January. The hostplant is unknown.

Distribution.— **Chile:** Copiapo: El Maray.

Remarks.— The holotype is badly worn, but the essential part of the wing, needed to separate it from *P. triangulocosta* Gielis is recognizable.

Etymology.— The species is named after its collector, Ing. Alfredo Ugarte Peña, who is very active in the research of the fauna of Chile and a good friend.

*Postplatyptilia pluvia* **spec. nov.**  
(figs 86, 226)

Material.— Holotype ♂: **Ecuador**, Azuay, PN Cajas, Laguna Llaviuco, 2°50'38"S 79°8'35"W, 3225 m, 12.x.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4923 (CG). Paratypes 7 ♂♂: same locality, 5.x.2002, 12.x.2002 (C. & F.K. Gielis & V. Pelz) (CG).

Diagnosis.— The species is characterized by the combination of the wing pattern and genitalia.

Description.— Male. Wingspan 18-21 mm. Head appressedly scaled, grey-white. Frons with a conical protrusion, two thirds of the eye diameter. Palps one and a half times eye diameter, grey-brown, last segment dark brown, protruding. Antennae pectinate, dark brown. Collar grey-white, with numerous erect bifid scales. Thorax and tegulae grey-white with a ferruginous tinge. Mesothorax grey-white. Abdomen segments one and two grey-white, distal segments brown. Hind legs grey-white, at the base of the spurs and the distal parts of the tarsal segments dark grey-brown. The spur pairs of equal length. The spurs centrally grey-white, at the base and tip dark brown.

Forewings cleft from two thirds, pale ferruginous. Markings dark brown: along the costa numerous small spots interrupted white; a discal spot; a costal triangle well before the base of the cleft; a small semicircular spot around and at the base of the cleft; a dorsal spot at 1/6; and a diffuse grey area towards the termen, interrupted by the narrow grey-white subterminal line. Fringes grey, on the termen and around the apex and anal angle of both lobes a basal dark brown row of scales; the terminal row of scales interrupted grey-white once in the first lobe and twice in the second lobe. On the dorsum scale-teeth at two thirds and 4/5. Underside dark brown-grey, with a narrow white subterminal line and an ochreous-white costal line interrupted at the base of the cleft, and twice in the first lobe.

Hindwing and fringes brown-grey. On the dorsum of the third lobe a subterminal, rectangular black scale-tooth. Between the scale-tooth and the wing base numerous ochreous-white and sparse black scales. Underside grey-brown, with a white spot in the first lobe just beyond the base of the cleft. Venous scales ferruginous, in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical. Sacculus basal half, gradually narrowing, second half almost parallel, ending in a sharp tip. Cucullus overriding with a sharp curved tip. Tegumen bilobed. Uncus moderate, as long as tegumen. Anellus arms short, and stout. Saccus triangular shaped, with a double sharp tip. Aedeagus slightly curved. Coecum poorly developed. No cornutus.

Female genitalia.— Unknown.

Ecology.— The moth flies in October, at an altitude of 3225 metres. The hostplant is unknown.

Distribution.— **Ecuador**: Azuay: PN Cajas.

Etymology.— The name reflects the rainy conditions under which the species was collected. On those nights which were dry and moonlit the temperature dropped to freezing, and no collecting could be done.

*Postplatyptilia parana* Gielis, 1996  
(figs 87, 227, 354)

*Postplatyptilia parana* Gielis, 1996: 92.

Material.— Holotype ♀: South **Brazil**, Parana, Castro, 1898 (Jones), gent BM 18467 (BMNH). Paratype: 1 without abdomen (attacked by museum pests), **Brazil**, Petropolis, no date (Doer) (BMNH); 1 ♀, Sta. Catharina, 26.iii.1936 (F. Hoffman), gent CG 3452 (USNM).

Diagnosis.— The species is characterized by the well marked pattern on the forewings.

Description.— Male, female. Wingspan 20 mm. Head appressedly scaled, mixed dark brown and grey-white above the eye. Collar with some erect scales. Frons slightly conical protruding, half the eye diameter. Palps protruding, twice the eye diameter; basal segment and basal half of second segment dark brown, terminal half of second and third segment white. Antennae in basal segments ringed, dark brown and white, shortly ciliated. Thorax centrally dark-brown, frontal margin of thorax, tegulae, mesothorax and terminal margin of thorax grey-white. Abdomen dark ferruginous-brown,

with speckled white scales. Along the dorsum of segments one, two and three poorly defined white lines; segments one and three laterally white. Hindlegs grey-brown ringed grey-white, with two pairs of spurs of equal length.

Forewings cleft from 7/10, colour white. Markings dark brown consisting of poorly defined costal and dorsal streaks; a large costal triangle near, but before the base of the cleft; a transverse band in both forewing lobes, margined by clear white lines; irregular intense scaling in the terminal areas of both lobes. Fringes grey-white, basally with a wavy narrow dark line, followed by a black and white blocked basal zone. Small scale-teeth on the dorsum at two thirds, 3/4 and near the anal angle of the second lobe. Underside dark chocolate-brown with white line markings above the base of the cleft, and a subterminal line in both lobes.

Hindwings dark brown. Fringes grey-brown. A scale-tooth subterminally on the dorsum of the third lobe. Between the scale-tooth and the base of the wing fringe scales dark. Underside brown in lobes one and two, dark brown in lobe three. Venous scales ferruginous-orange in a double row. The costal row longer than the dorsal row.

Male genitalia.— Valvae symmetrical. Tip of valvae with the shape of a bird's head. Sacculus bilobed, both saccular halves of approximately equal length, the basal half slightly wider than the distal half. Cucullus not pronounced. Tegumen arched with an elongation in the mid-central part. Uncus short and slender, just longer than the tip of the tegumen. Vinculum with a pronounced bifid saccus, twice as long as wide. Juxtal arms rather short, half the tegumen length, stout. Aedeagus arched, with delicately spiculated cornutus; coecum moderate.

Female genitalia.— Antrum right laterally ending in the lamina ante-vaginalis, gradually narrowing and progressing into the slender ductus bursae. Ductus bursae with a slender, sclerotized plate. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis laterally with the slender apophyses anteriores, which are as long as the papillae anales. Lamina post-vaginalis extending terminally and centrally excavated. Apophyses posteriores three times papillae anales.

Ecology.— There is no collecting data. The hostplant is unknown.

Distribution.— **Argentina:** Jujuy: PN Calilegua. **Brazil:** Parana: Castro; Rio de Janeiro: Petropolis; Santa Catarina: Sta Catarina. **Costa Rica:** Cartago: Turrialba.

*Postplatyptilia palmeri* Gielis, 1996  
(figs 88, 355)

*Postplatyptilia palmeri* Gielis, 1996: 94.

Material.— Holotype ♀: **Mexico**, Veracruz, Jalapa, 19°30'N, 96°56'W, 14.xii.1989 (W.A. Palmer), ex larva *Lantana hispida* H.B.K. (89348-20-5), gent CG 6315, (ex coll. Palmer 4877, CG).

Diagnosis.— The species is characterized by the ferruginous colour with the dark brown markings, and the peculiar shape of the antrum region in the female genitalia.

Description.— Female. Wingspan 14 mm. Head appressedly scaled, with some erect scales at the collar and frons, ferruginous-brown. Palps protruding, ferruginous, as long as eye diameter. The second segment distally gradually thickened. Antennae dark brown, with sparse ochreous-brown scales, shortly ciliated. Thorax and tegulae ferruginous.

The abdominal margin of the thorax dark brown. Mesothorax grey-white. Hindlegs grey-brown, with two pairs of spurs of equal length.

Forewings cleft from 7/10, ferruginous. The spots dark brown, consisting of a costal line from the wing base to the cleft base and gradually widening towards the apex; a costal spot in the middle of the first lobe; an oblique spot from the dorsum of the first lobe to the apex, margined by a pale subterminal line; a small discal spot and a double spot before the base of the cleft; a solid dark area on the second lobe from the base of the cleft onward to the apex. Fringes grey, with a continuous dark basal line in both terminal areas. Underside dark brown, with a pale subterminal line in the first lobe and above the base of the cleft.

Hindwings dark brown with a reddish gloss. Fringes grey. On the dorsum of the third lobe a subterminal scale-tooth and between this scale-tooth and the base of the wing isolated, prominent dark scales. Underside dark brown with a reddish gloss. Venous scales ferruginous, in a double row.

Male genitalia.— Unknown.

Female genitalia.— Ostium weakly excavated. Antrum short, as long as wide. Ductus bursae with a short and stout sclerite. Bursa copulatrix vesicular, with a pair of small horn-like signa. Lamina ante-vaginalis well developed, almost trapezoid in shape. Apophyses anteriores short. Apophyses posteriores two and a half times papillae anales.

Ecology.— The moth flies in December. The hostplant is *Lantana hispida* H.B.K.

Distribution.— **Mexico:** Veracruz: Jalapa.

Remarks.— This species extends further north than any other in the genus. The genitalia resemble *P. akerbergi* Gielis and *P. flinti* Gielis, both from Chile and Argentina.

*Postplatyptilia transversus* **spec. nov.**  
(figs 89, 228, 356)

Material.— Holotype ♂: **Colombia** Oriental, Cundinamarca, Monteredondo, 1420 m, 17.iii.1961 (J. Förster), gent CG 3574 (ZSM). Paratype ♀: **Brazil**, Sao Paulo, Ubatuba, Pichinguabe, 0-20 m, 22-24.ix.2001 (V.O. Becker), gent CG 4892 (VOB nr 132860).

Diagnosis.— The species is characterized by the ferruginous-brown colour and the characteristic genitalia.

Description.— Male, female. Wingspan 15-16 mm. Head appressedly scaled ferruginous-brown, frons slightly pronounced; above the eye, and continuing into the lateral frons a narrow white line. Palps twice the eye diameter, ferruginous-brown, protruding. Antennae pectinate, dark brown. Thorax and tegulae ferruginous-brown. Mesothorax brown-white. Hind legs (paratype) dark black-brown, medially mixed with irregular white spots; tarsal segments three to five white. Spur pairs of unequal length, the medial spurs longer than the lateral spurs, and the proximal pair longer than the distal pair.

Forewings cleft from 3/5, ferruginous-brown to grey-ferruginous-brown. Markings dark brown: a costal dash progressing into the discal and costal triangular spots, the last just before the base of the cleft; dorsal spots at 1/4 and mid dorsum; large central spots in both lobes, basally from the white subterminal line. The costal dark area and the spots in the lobes are interrupted by many, narrow, wavy grey-white lines, which



run almost transverse over the wing. Fringes grey, in the cleft and on the dorsum white. Around the apex, along the termen and around the anal angle of both lobes a row a black, basal fringe scales, interrupted twice in both lobes. On the dorsum scale-teeth at halfway and 3/4. Underside dark brown; a white subterminal line in both lobes; and an ochreous-white dash at the costa, at the terminal margin of the costal triangle above.

Hindwings and fringes dark grey-brown. Around the tip of the first lobe a dark basal row of scales. On the dorsum of the third lobe a subterminal scale-tooth, and some scattered scales (sub)terminally at the costa. Underside dark brown; a white subterminal line in the first lobe; scattered white scales in the first and third lobe. Venous scales ferruginous-orange (paratype: dark ferruginous), in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical. Sacculus bilobed. The distal half of sacculus with a spot from which a seta or bristle arises. Cucullus simple, overriding and ending in a sharp tip. Tegumen simple, tip bifurcate. Anellus arms as long as tegumen, with the tips club-like. Saccus triangular, one and a half times longer than wide; ending with a blunt tip. Aedeagus curved. Coecum poorly developed. No cornutus.

Female genitalia.— Ostium simple. Centrally positioned. Antrum quickly merging into the slender, rather long ductus bursae. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis curved around the ostium and antrum. Apophyses anteriores almost as long as papillae anales. Apophyses posteriores long and slender, four times papillae anales.

Ecology.— The moth flies in March (Colombia) and September (Brazil). The host-plant is unknown.

Distribution.— **Brazil**: Sao Paulo: Pichinguabe. **Colombia**: Cundinamarca: Montere-dondo.

Remarks.— The external characters of the holo- and paratype, are minimal. For this reason I found no contrasting characteristics, and I have decided to combine the descriptions of both specimens. When more material becomes available it is possible that these specimens will be found to belong to different species.

Etymology.— The name reflects the transcontinental difference between the collecting localities of the type specimens.

*Postplatyptilia fuscicornis* (Zeller, 1877)  
(figs 90, 229, 357)

*Platyptilia fuscicornis* Zeller, 1877: 460.

Material.— Holotype ♂: **Colombia**, Bogota, 23.ii, gent BM 15762 (BMNH) [examined].

Diagnosis.— The species is characterized by the genitalia.

Redescription.— Male, female. Wingspan 15-17 mm. Head appressedly scaled, brown-grey. Collar with some erect scales and above the eye some white scales. A small frontal tuft, half the eye diameter. Palps grey-brown, prominent, twice the eye diameter. Second segment distally widened by pronounced scales, third segment small. Antennae dark brown, shortly ciliated. Thorax, tegulae and mesothorax brown-grey. Hindlegs slender, dark brown, with two pairs of spurs of equal length.

Forewings cleft from 3/4; colour grey-brown. Markings dark brown. A large number of small dark scale groups on the costa between the wing base and the costal triangle, a

small costal spot at one third of the costa; a trapezoid costal spot in the first lobe, the costal triangle and two dorsal spots at 1/4 and one third. A subterminal white line in both lobes. Fringes grey, with a basal dark line of brown scales at the outer margin, twice interrupted with white near the apex of the first lobe and twice at equal intervals on the second lobe. Pronounced dark scales at the anal angles of both lobes. On the dorsum of the wing three small scale-teeth, and some separate dark scales. Underside dark, chocolate-brown with a pale subterminal line.

Hindwings grey-brown. Fringes grey, a vague basal line on the outer margin of the first and second lobes, gradually becoming faint at the dorsum of these lobes. A small apical scale-tooth on the third lobe; a scale-tooth at 4/5 of the dorsum and isolated scales between the scale-tooth and the wing base. Underside chocolate-brown with some white scales in the first lobe. Venous scales orange-ferruginous, in a double row. The dorsal row longer than the costal row.

Male genitalia.— Valvae symmetrical. Sacculus in basal third gradually narrowing and distal two thirds of equal width. Cucullus longer than sacculus. Tegumen bilobed. Uncus moderate. Vinculum narrow. Saccus pointed, poorly developed. Aedeagus stout, wide. No cornutus.

Female genitalia.— Antrum tube-like, four times longer than wide. Ductus bursae lightly sclerotized and as long as antrum. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis with lateral apophyses anteriores that are as long as papillae anales. Lamina post-vaginalis rounded around the ostium, proximally not completely closed. Apophyses posteriores three to four times longer than papillae anales.

Ecology.— The moth flies in February. The hostplant is unknown.

Distribution.— **Brazil**: Santa Catarina: Sao Joaquim. **Chile**: Concepcion: Concepcion; Nuble: Cobquecura; Maule: Forel Corrizalillo. **Colombia**: Bogota. **Ecuador**: Pichincha: Nono. **Uruguay**: Montevideo: Sayago.

Remarks.— The species shows a tendency to the development of a second scale-tooth on the dorsum of the third lobe.

*Postplatyptilia alexisi* Gielis, 1991  
(figs 91, 230, 358)

*Postplatyptilia alexisi* Gielis, 1991: 49.

Material.— Holotype ♂: **Chile**, Nuble, Alto Tregualemu, ca. 20 km SE Chovellen, 500 m., 1-3.xii.1981 (Davis), gent CG 6087 (USNM). Paratypes: 9 ♂♂, 2 ♀♀, same locality, 1-3.xii. 1981, 26-27.i.1979, 27-28.i.1981 (Davis & Akerbergs; Davis; Peña), gent CG 6058, 6094, 6097, 6099 (♂), 6098 (♀) (USNM, CG). 1 ♀, **Chile**, Nuble, near coastal stream 17.5 km S. Curanipe, 50 m., 25.i.1979 (Davis & Akerbergs), gent CG 6088 (USNM).

Diagnosis.— The species is characterized by the faint markings and subterminal line.

Description.— Male, female. Wingspan 15-18 mm. Head appressedly scaled, grey-brown; some erect scales at collar. Frons rounded. Palps one and a half times eye diameter, brown-grey. Second segment pronounced, third segment small. Antennae grey and brown, shortly ciliated. Thorax and tegulae brown-grey. Mesothorax white. Abdo-

men grey-brown. Hindlegs brown-grey, tarsi ringed grey-white and brown-grey; two pairs of spurs of equal length, the proximal pair longer than the distal pair of spurs.

Forewings cleft from 4/5, colour dark brown. Markings blackish; a costal triangle before the base of the cleft and an incomplete transverse band in both the forewing lobes. This band terminally margined by a faint grey-white subterminal line. Fringes grey-white, terminally with a complete basal row of black scales on both lobes. On the dorsum a small scale-tooth at 4/5 and between this scale-tooth and the base of the wing a row of prominent black scales. Underside dark brown, terminally mixed with grey; a white subterminal line in both lobes.

Hindwings dark grey-brown. Fringes grey, with a dark basal margin on the termen of all three lobes. A pronounced scale-tooth at 3/4 of the dorsum of the third lobe; and between this scale-tooth and the base of the wing numerous black scales. Underside brown-grey. Venous scales ferruginous, in a double row; the costal row longer than the dorsal row.

Male genitalia.— Valvae symmetrical, with top resembling the shape of a bird's head. Sacculus bilobed, basal half swollen, distal half swollen in terminal part. Tegumen vesicular. Uncus long, slender. Vinculum arched. Saccus short, pointed. Aedeagus curved. Coecum poorly developed. No cornutus.

Female genitalia.— Antrum almost square, centrally placed in lamina ante-vaginalis. Ductus bursae with a single twist and a longitudinal sclerite. Bursa copulatrix vesicular with two very small horn-like signa, which are surrounded by minute spiculae. The lamina ante-vaginalis laterally progressing into the short apophyses anteriores. The lamina post-vaginalis with small central excavation. Apophyses posteriores three times longer than papillae anales.

Ecology.— The moth flies in December and January. The hostplant is unknown.

Distribution.— **Chile**: Nuble: Curanipe, Alto Tregualemu; Maule: RN del Lircay, Forel Carrizalillo; Linares: El Castillo.

Remarks.— The species resembles *P. nubleica*, but differs by the presence of the subterminal line in the forewings. It may be separated from *P. flinti* and *P. biobioica* by the female genitalia.

*Postplatyptilia nubleica* Gielis, 1991  
(figs 92, 231, 359)

*Postplatyptilia nubleica* Gielis, 1991: 48.

Material.— Holotype ♂; **Chile**, Nuble, near coastal stream 17.5 km. S Curanipe, 50 m., 25.i.1979 (Davis & Akerbergs), gent CG 6057 (USNM).

Diagnosis.— The species is characterized by the absence of markings on the forewing, with the exception of three small costal spots.

Description.— Male, female. Wingspan 18-21 mm. Head appressedly scaled, brown-grey; some erect scales at the collar. Frons with small bulge. Palps one and a half times eye diameter, grey-brown. Second segment pronounced, third segment short. Antennae brown-grey, shortly ciliated. Thorax and tegulae brown-grey. Mesothorax white. Hindlegs grey-brown, tarsi ringed grey-white and grey-brown; two pairs of spurs of equal length, grey-white with a dark ring near top.

Forewings cleft from 4/5, colour brown-grey. At the costa at the base of the cleft, and central in the first lobe, small yellow-white spots. Fringes grey; along the termen of both lobes a continuous dark row of basal scales. On the dorsum two small scale-teeth at 3/4 and 4/5. Underside brown-grey with costal spots as above.

Hindwings brown-grey. Fringes grey. On the dorsum of the third lobe a black scale-tooth at 3/4 and between this scale-tooth and the wing base some isolated dark scales. Underside grey-brown. Venous scales dark brown, in a double row, the costal row longer than the dorsal row.

Male genitalia.— The top of the valva resembling the shape of a bird's head. Sacculus bilobed. The basal half widened, the distal half with parallel margins. Tegumen bilobed. Uncus long, of moderate width. Vinculum curved. Saccus extended, pointed. Aedeagus rather short, stout, top widened. Coecum poorly developed. No cornuti.

Female genitalia.— Ostium right lateral in abdomen. Antrum basally rounded, as long as wide. Ductus bursae four times longer than antrum, with a sclerite of two-thirds of the length of the ductus. Bursa copulatrix vesicular, without signum. Lamina antevaginalis as a simple sclerotized ridge. Apophyses anteriores shorter than papillae anales. Apophyses posteriores four times the papillae anales, with a widened, rounded tip.

Ecology.— The moth flies in January. The hostplant is unknown.

Distribution.— **Argentina**: Salta: Campo Quijano **Chile**: Maule: Altos del Lircay; Nuble: Curanipe, Tregualemu, Los Marangos; Santiago: RN Yerba Loca.

*Postplatyptilia akerbergi* Gielis, 1991  
(figs 93, 360)

*Postplatyptilia akerbergi* Gielis, 1991: 51.

Material.— Holotype ♀: **Chile**, Nuble, Alto Tregualemu, ca. 20 km. SE. Chovellen, 500 m., 26-27.i.1979 (Davis & Akerbergs), gent CG 6085 (USNM).

Diagnosis.— The species is characterized by the female genitalia and the ferruginous tinge on the forewing.

Description.— Female. Wingspan 19 mm. Head appressedly scaled, dark brown mixed with yellow-brown scales. At collar some erect scales. Palps twice the eye diameter, dark brown, first and second segment equally long, third segment small. Second segment distally widening. Antennae ringed dark and pale brown, shortly ciliated. Thorax and tegulae dark brown, mesothorax cream-white. Hindlegs dark brown; tarsi grey-white, terminally dark ringed. The two spur pairs of equal length.

Forewings cleft from 3/4, colour dark brown with a ferruginous tinge. At the costa some cream-white scales. A small dark brown discal spot, a faint costal triangle just before the base of the cleft, and a costal spot in the centre of the first lobe progressing into the second lobe, margined terminally by a small but clearly demarcated white line. A small ochreous-white costal spot above the base of the cleft. Fringes grey, at the termen of both lobes a basal row of dark brown scales which are once interrupted at the first lobe. Underside dark brown with a strong ferruginous tinge; a small costal spot and the white subterminal line as above.

Hindwings grey-brown with a ferruginous tinge. Fringes grey. On the dorsum of the third lobe a black scale-tooth at 3/4, and between this scale-tooth and the wing base an

irregular row of scales. Underside dark ferruginous-brown, in the first lobe mixed with numerous white scales. Venous scales dark ferruginous, in a double row, fusing at 1/4.

Male genitalia.— Unknown.

Female genitalia.— Antrum centrally ending in the lamina ante-vaginalis, three times longer than wide. Ductus bursae slender, twice the length of the antrum. The lamina ante-vaginalis laterally ending into the apophyses anteriores, which are as long as the, short, papillae anales. Lamina post-vaginalis centrally progressing distally and excavated. Apophyses posteriores four and a half times longer than papillae anales, ending club-like.

Ecology.— The moth flies in January. The hostplant is unknown.

Distribution.— **Chile:** Nuble: Alto Tregualemu; Valparaiso: Valparaiso.

Remarks.— The species is closely related to *P. alexisi*, but differs in the forewing colour and the narrower and longer shape of the antrum.

*Postplatyptilia genisei* (Pastrana, 1989)  
(figs 94, 232, 361)

*Stenoptilia genisei* Pastrana, 1989: 253.

Material.— Holotype ♂: **Argentina**, Cordoba, Capilla del Monte, 1985 (Genise) (MACN). Paratypes: 9 ♂♂, 10 ♀♀, same data as holotype [not yet examined].

Diagnosis.— The species is characterized by the genitalia.

Redescription.— Male, female. Wingspan 19-21 mm. Head appressedly scaled, grey-brown. Palps slightly curved up, twice the eye diameter, grey-brown and ventrally whitish. Antennae shortly ciliated, ringed grey-brown and grey-white. Thorax and tegulae dark brown. Mesothorax grey-brown. Abdomen grey-brown. Hind legs grey-brown to dark brown, with two pairs of spurs, the medial spurs longer than the lateral spurs.

Forewings cleft from two thirds, grey-brown. Markings dark brown: a faint dorsal spot at 1/5; a discal spot; a costal triangle just before the base of the cleft; in both lobes a dark area before the subterminal line. Fringes grey, on the termen of both lobes a continuous row of dark, basal scales; dark fringe pencils at the anal angles of both lobes; and scale-teeth on the dorsum of the wing at 3/4 and 4/5. Underside brown to dark brown, with a white costal spot just beyond the base of the cleft and a white subterminal line in both lobes.

Hindwings and fringes grey-brown. In the fringes around the apex of the first lobe a basal row of dark scales. On the dorsum of the third lobe a faint scale-tooth at two thirds, and some scattered scales between the wing base and the scale-tooth. Underside brown to dark brown, with scattered white scales in the first and third lobe. Venous scales dark ferruginous, in a double row, the costal row the longer.

Male genitalia.— Genitalia symmetrical. Valva with bilobed sacculus, of simple structure. Cucullus overriding, short, wide and blunt. tegumen bilobed. Uncus simple, as long as tegumen. Saccus one and a half times longer than wide, forked. Aedeagus curved, with rounded tip. Cornutus in shape of a sclerotized ridge. Coecum very poorly developed.

Female genitalia.— Ostium central. Antrum with triangular tip, gradually narrowing, three times longer than wide. Ductus bursae as long as antrum, with a short, but rather wide, sclerite. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis as a triangular plate with lateral extended tips. Apophyses anteriores in the lamina ante-vaginalis. Apophyses posteriores three times the papillae anales. Papillae anales large.

Ecology.— The moth flies in December, January, March and May. The hostplant is unknown.

Distribution.— **Argentina**: Cordoba: Capilla del Monte; Huerta Grande.

*Postplatyptilia biobioica* Gielis, 1991  
(figs 95, 233, 362)

*Postplatyptilia biobioica* Gielis, 1991: 52.

Material.— Holotype ♀: **Chile**, Bio Bio, Est. Huequecura, 25 km. E. Santa Barbara, 24.i.1978 (Flint), gent CG 6083 (USNM).

Diagnosis.— The species is characterized by the double costal triangle and the single scale-tooth on the dorsum of the third hindwing lobe.

Description.— Male, female. Wingspan 19 mm. Head appressedly scaled. Vertex dark brown mixed ferruginous. Frons with protrusion, half the eye diameter, pale ferruginous. Palps twice the eye diameter, ferruginous. First and second segment heavily scaled; third segment small, ferruginous, tipped with white. Antennae faintly ringed dark brown and grey-brown, with scattered white scales; shortly ciliated. Thorax and tegulae brown-grey, with a transverse ferruginous band as a continuation of the ferruginous scaling on the dorsum of the forewing. Mesothorax white. Hindlegs grey; tarsi proximally grey-white and distally greyish; with two pairs of spurs of equal length.

Forewings cleft from  $3/4$ , colour dark ferruginous-brown, mixed with numerous white scales. Markings dark-brown consisting of costal scaling, a small discal spot, a costal triangle just before the base of the cleft and a costal triangular spot in the first lobe. This last spot terminally margined by a white subterminal line which continues into the second lobe. Between both costal triangles a small white costal spot, dorsally progressing into a faint ochreous-white spot. Fringes grey, with a basal row of black scales in the termen, interrupted once in both lobes by a group of white scales. A black scale-tooth at two thirds of the dorsum. Underside dark brown, with a subterminal white line and costal spot as above.

Hindwings ferruginous-brown. Fringes grey. A small scale-tooth at  $4/5$  of the dorsum of the third lobe. Underside grey-brown with white scales.

Male genitalia.— Genitalia symmetrical. Valva with bilobed sacculus. Basal sacculus  $2/5$  of valva, gradually narrowing; distal part parallel to margin. Cucullus overriding with a short tip shaped like a bird's head. Tegumen bilobed, simple. Uncus a little shorter than tegumen. Anellus arms as long as tegumen, rather stout. Juxta simple. Sacculus triangular, slightly elongated. Aedeagus curved, with three rows of spiculae near the tip. Coecum small.

Female genitalia.— Ostium part of antrum low, trapezoidal, laterally progressing into the lamina ante-vaginalis and the small apophyses anteriores: below a narrow

tube, three times longer than wide. Lamina post-vaginalis placed centrally with a small excavation. The ductus bursae with a double twist, slender. Bursa copulatrix vesicular with a pair of, rather small, horn-like signa. Apophyses posteriores long, four times longer than papillae anales, ending in a club.

Ecology.— The moth flies in January. The hostplant is unknown.

Distribution.— **Chile:** Bio Bio: Santa Barbara; Santiago: RN Yerba Loca; Valparaiso: PN la Campana.

*Postplatyptilia triangulocosta* Gielis, 1996  
(figs 96, 363)

*Postplatyptilia triangulocosta* Gielis, 1996: 93.

Material.— Holotype ♀: **Peru**, Cuzco, 19.viii.(19)73 (B.V. Ridout), gent CG 5070 (BMNH).

Diagnosis.— The species is characterized by the clearly marked dark brown costal triangle in the first forewing lobe, with the bright ochreous-white margins.

Description.— Female. Wingspan 20 mm. Head appressedly scaled, grey-brown. Palps dark brown, protruding, twice the eye diameter. The third segment very small, the second segment distally widened by pronounced scales. Antennae dark brown, shortly ciliated. Thorax and tegulae near head grey-brown, and near abdomen ferruginous-brown. Mesothorax ochreous-white. Abdomen dark brown, mixed with sparse white scales, the latter more evident ventrally. Hindlegs grey-brown, with two pairs of spurs of unequal length. The fore and middle legs white with dark brown scale brushes at the base of the spurs and dark brown at the end of the tarsal segments.

Forewings cleft from  $3/4$ , colour grey-brown, the dorsal area near the wing base more ferruginous mixed. A dark brown costal triangle just before the base of the cleft, extending into the basal third of the second lobe. Centrally in the first lobe a pronounced dark brown costal triangle, margined ochreous-white; and a small subapical dark brown costal spot. The terminal margin of the costal spot is continued in the second lobe as a less distinct subterminal line. Fringes grey, with a basal black scale line on the termen of both lobes, and two small scale-teeth on the dorsum at two thirds and near the anal angle. Underside ferruginous tinged brown. On the costa two ochreous-white spots as above, the basal spot margined black.

Hindwings brown-grey. Fringes grey. On the dorsum of the third lobe a small black scale-tooth at  $4/5$ , and between the wing base and this scale-tooth a row of isolated scales. Underside brown-grey. The venous scales ferruginous, dark tipped, in a double row. The costal row longer than the dorsal row.

Male genitalia.— Unknown.

Female genitalia.— Ostium slightly excavated. Antrum towards the ostium is twice as wide as in the middle section. Antrum as long as the width of the ostium, gradually tapering towards ductus bursae. Ductus bursae twice the antrum. Ductus seminalis originating near bursa copulatrix. Bursa copulatrix vesicular with two horn-like signa. Apophyses anteriores half the papillae anales. Apophyses posteriores three to four times papillae anales. Lamina ante-vaginalis poorly developed. Lamina post-vaginalis hardly recognizable.



Ecology.— The moth flies in January and August. The hostplant is unknown.

Distribution.— **Argentina**: Salta: Campo Quijano. **Peru**: Cuzco.

*Postplatyptilia machupicchu* Gielis, 1996  
(figs 97, 364)

*Postplatyptilia machupicchu* Gielis, 1996: 94.

Material.— Holotype ♀: **Peru**, Cuzco, 21.viii.(19)73 (B.V. Ridout), gent CG 5068 (BMNH).

Diagnosis.— The species is characterized by the grey-brown colour with sparse and poorly-developed markings on the forewing.

Description.— Wingspan 20 mm. Head appressedly scaled, ochreous-grey-brown, with some erect scales at the collar. Frons slightly conical, two thirds of diameter of the eye. Palps protruding, four times longer than eye diameter, ventrally a whitish longitudinal line. Antennae dorsally dark brown and ventrally for the basal third white and the more distal two thirds with regularly separated white scales, shortly ciliated. Thorax and tegulae brown-grey. Hind legs grey-brown, with two pairs of spurs of equal length.

Forewings cleft from two thirds, grey-brown. Markings brown-black; a small discal spot, a transverse spot just before the base of the cleft and isolated scales on the costa and dorsum of the wing. Three faint brown spots on the costa of the first lobe, followed by a white subterminal line on both lobes which margins the darker terminal areas on both lobes. Fringes basally white, distally brown. Underside brown, with some white scales on the first lobe.

Hindwings grey-brown. Fringes grey-brown, basally lighter tinged than distally. No scale-tooth on the dorsum of the third lobe. Underside brown. Venous scales ferruginous, in a double row; the costal row longer than the dorsal row, but less intensely scaled.

Male genitalia.— Unknown.

Female genitalia.— The ostium slightly excavated. The antrum curved and gradually narrowing. Membraneous part of the ductus bursae as long as the antrum. Bursa copulatrix vesicular, the top part spiculated, with a pair of horn-like signa. Lamina ante-vaginalis centrally gradually excavated. Apophyses anteriores, pronounced, as long as papillae anales. Apophyses posteriores three times longer than papillae anales.

Ecology.— The moth flies in August. The hostplant is unknown.

Distribution.— **Peru**: Cuzco.

*Postplatyptilia drechseli* **spec. nov.**  
(figs 98, 365)

Material.— Holotype ♀: **Paraguay**, Gualra, Zorilla, 16-20.x.1992 (U. Drechsel), prep CG 2475 (CG).

Diagnosis.— The species resembles *P. machupicchiu* Gielis in the female genitalia. The shape and length of the antrum differentiates the two species.

Description.— Female. Wingspan 15 mm. Head appressedly scaled with dark brown and some white scales. Palps one and a half times eye diameter, protruding, dark brown, at the termen of the segments mixed with white scales. Antennae absent on specimen.

Thorax and Tegulae dark brown. Mesothorax white. Hind legs dark brown, proximal part of tibia and directly beyond the base of the spurs mixed with white scales; first tarsal segment basally whitish, distal 4/5 dark brown; second to fifth segments only terminally dark brown.

Forewings cleft from 5/8, dark ferruginous-brown. Markings black-brown: a costal triangle just before the base of the cleft; basally margining the subterminal line in both lobes. The terminal area in both lobes dark grey-brown. In the basal half of the wing poorly defined white transverse lines as in the basal half of both lobes; a bright costal spot beyond the base of the cleft; and a well-defined subterminal line. Fringes grey, basally a row of brown scales, this row twice interrupted on the termen of the second lobe. At the anal angle of both and the apex of the second lobe black hair brushes, and scale-teeth on the dorsum at 3/4 and 4/5. Underside dark brown, with whitish spots along the costa, the bright costal spot in the first lobe and subterminal line.

Hindwings dark brown. Fringes grey, with a basal line around the tips of the first and second lobe. Along the dorsum of the third lobe scattered blackish scales and a black scale-tooth subterminally. Underside dark brown. Venous scales blackish, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium curved. Antrum asymmetrical curved to the left, one and a half times longer than wide. Ductus bursae four times longer than the antrum, slender, without sclerites. Bursa copulatrix vesicular, with a pair of small, horn-like signa. Lamina ante-vaginalis in shape of two poorly sclerotized blotches. Apophyses anteriores slender, as long as papillae anales. Apophyses posteriores two and a half times longer than papillae anales.

Ecology.— The moth flies in October. The hostplant is unknown.

Distribution.— **Paraguay:** Gualra: Zorilla.

Etymology.— The species is named after its collector, Mr Ulf Drechsel, to honor his work in collecting Pterophoridae in Paraguay. Until his collecting, minimal knowledge of the fauna of this country was available.

*Postplatyptilia corticus* **spec. nov.**  
(figs 99, 366)

Material.— Holotype ♀: **Venezuela**, TF Amazon, Cerro de la Neblina Camp, 2050 m, 0°41'49"N 65°58'56"W, 15-22.ii.1984 (T. McCabe), gent CG 4861 (USNM).

Diagnosis.— The species is characterized by the grey-brown, bark-like colour, and the female genitalia.

Description.— Female. Wingspan 20 mm. Head appressedly scaled, grey-brown; above the eye and between the base of the antennae grey-white. Palps curved upwards, grey-brown, twice the eye diameter; second segment distally thickened, and extending as a scale brush along the third segment; third segment slender and short. Antennae pectinate, dark grey-brown, mixed with sparse grey-white scales. Thorax, tegulae and mesothorax grey-brown, caudally turning greyish. Hind legs brown in the tibiae and first tarsal segment, other tarsal segments grey-white. Spur pairs of unequal length, the medial spurs longer than the lateral spurs and the proximal pair longer than the distal pair.

Forewings cleft from 5/8, grey-brown. Markings dark brown: a discal spot; a dorsal spot at 1/5; a costal triangle at the base of the cleft; and a spot in the centre of the first lobe, gradually darkening towards the termen, abruptly margined by the grey-white, narrow subterminal line. Subterminal line extending faintly into the second lobe. Fringes pale grey; a row of basal black scales around the apex, termen and anal angle, continuous in the first lobe, and interrupted twice in the second lobe; dark fringe setae at the apex and anal angle of both lobes; scattered dark scales in the cleft; and two scale-teeth on the dorsum at the middle and 3/4. Underside Dark brown, with a faint white subterminal line.

Hindwings and fringes grey-brown. Around the tip of the first lobe a brown basal fringe line; on the dorsum of the third lobe a subterminal scale-tooth, and between the base of the wing and the scale-tooth scattered scales. Underside dark brown; with some white scales in the subterminal region of the first lobe, and scattered in the third lobe. Venous scales ferruginous-orange, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium slightly excavated. Antrum gradually narrowing, long. Ductus bursae short, slender. Bursa copulatrix vesicular, with a pair of horn-like signa. Apophyses anteriores absent. Apophyses posteriores very slender, three times the papillae anales.

Ecology.— The moth flies in February, at an altitude of 2100 metres. The hostplant is unknown.

Distribution.— **Venezuela**: Amazon: Cerro de la Neblina.

Etymology.— The name reflects the bark-like colour of this species.

Remarks.— The species belongs to the *aestuosa* group in its external appearance. The genitalia differ considerably.

*Postplatyptilia seitetazas* **spec. nov.**  
(figs 100, 367)

Material.— Holotype ♀: **Chile**, Maule, Curico, 60 km SE Molina, RN Radal Seite Tazas, 35°28'S 71°W, 1100 m, 17.i.2001 (C. Gielis & H.W. v.d. Wolf), gent CG 4853 (CG).

Diagnosis.— The species is characterized by the female genitalia, distinguishing it from other species in this genus.

Description.— Female. Wingspan 15 mm. Head appressedly scaled, grey-brown. Frons with a small protrusion, half the eye diameter. Palps grey-brown, protruding, twice the eye diameter. The basal segment dorsally and ventrally with white scales; the second segment distally moderately widening; third segment small and short. Antennae dark brown, pectinate. Thorax and tegulae grey-brown. Mesothorax white. Hind legs grey-brown; tarsal segments basally pale greyish; distally grey-brown. Spur pairs of unequal length, the medial spur longer than the lateral spur, and the proximal pair longer than the distal pair. The spurs are white with a grey-brown base and tip.

Forewings cleft from 7/10, grey-brown with a ferruginous tinge. Markings dark brown: a costal dark area, interrupted by numerous small transverse white scale groups, proceeding into the costal triangle, which is positioned just before the base of the cleft; a spot in both lobes basally from the white subterminal line; a poorly defined discal

spot and a small costal spot in the first lobe just terminal from the subterminal line. Fringes pale grey, with: at the termen of both lobes and around the anal angles, a basal row of black scales; in the cleft some isolated black scales; on the dorsum small scale-teeth at 3/4 and 4/5. Underside brown-grey, with a row of white scales along the costa; an ochreous-white spot at the costa just beyond the base of the cleft; and a white subterminal line.

Hindwings and fringes grey-brown. On the dorsum of the third lobe a scale-tooth at 3/4, and between the scale-tooth and the wing base scattered scales. Underside brown-grey, with scattered white scales in the first and third lobe. Venous scales bright ferruginous, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium right lateral. Antrum four times longer than wide. ductus bursae with a single twist and a central sclerite. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis as an extension of the antrum with a central excavation. Apophyses anteriores as long as the papillae anales. Apophyses posteriores slender, three times longer than the papillae anales.

Ecology.— The moth flies in January, at an altitude of 1100 metres. The hostplant is unknown.

Distribution.— **Chile:** Maule: RN Radal Seite Tazas.

Etymology.— The species is named after the locality in which it was collected.

*Postplatyptilia saeva* (Meyrick, 1930)  
(figs 101, 234, 368)

*Postplatyptilia saeva* Meyrick, 1930: 566.

Material.— Holotype ♀: **Peru**, Carabaya, Agualani, 9000 ft., vi.(19)05 (G. Ockenden), dry season, gent BM 18197 (BMNH) [examined].

Diagnosis.— The species is characterized by its dark colour, the double costal triangle, and its genitalia.

Redescription.— Male, female. Wingspan 16-18 mm. Head appressedly scaled, dark brown. Above eye some white scales. Palps one and a half time eye diameter, dark brown. The second segment widened by pronounced scales, the third segment slender. Antennae dark brown, shortly ciliated. Thorax and tegulae dark brown. Mesothorax ferruginous-white. Abdomen dark brown, mixed with paler scales. Legs brown.

Forewings cleft from 3/4, colour dark brown mixed with paler brown and grey-white scales. Markings black-brown, consisting of a poorly defined costal scaling, a costal triangle just before the base of the cleft, an irregular spot from the base of the cleft continuing into the basal half of the second lobe, and a costal triangle in the first lobe, margined with ochreous-yellow. This triangle has straight margins and the point touches the dorsum of the first lobe. Fringes grey-brown. An almost complete brown basal fringe row of scales is present on the termen of both lobes and the dorsum of the second lobe where it breaks up into isolated and basally scattered scales. Underside dark brown, with a clear ochreous-yellow spot on the costa above the base of the cleft and two thirds of the costa in the first lobe.

Hindwings dark brown. Fringes grey-brown. At the apex of the first lobe a group of white hairs. On the dorsum of third lobe a subterminal scale-tooth. Between this scale-tooth and the wing base are scattered dark, prominent scales. Underside dark brown. Venous scales in a double row. The costal row longer, the scales have a ferruginous-dark brown colour. The dorsal row shorter and with a black-brown colour.

Male genitalia.— Genitalia symmetrical. Valvae lanceolate. Sacculus bilobed, both parts of equal length. Cucullus longer than sacculus, approaching the shape of a bird's head, but indefinite. Tegumen bilobed, normal. Uncus long, distally widened. Vinculum arched, narrow. Saccus poorly developed. Juxta small. Aedeagus arched. No cornutus. Coecum small.

Female genitalia.— Antrum laterally ending in the double arched, pronounced distal margin of the seventh sternite, which has a bilobed shape. Antrum twice as long as wide. Ductus bursae twisted and rather slender. Bursa copulatrix small, vesicular. A pair of pronounced horn-like signa. Between the signa a small section of minute spiculation, and toward the ductus bursae striation. Lamina post-vaginalis laterally progressing into the apophyses anteriores. Apophyses anteriores as long as papillae anales. Apophyses posteriores four times longer than papillae anales.

Ecology.— The moth flies in January, February, April, July and October. The host-plant is unknown.

Distribution.— **Ecuador:** Carchi: El Angel; Loja: Loja, PN Podocarpus. **Peru:** Carabaya: Agualani, Oconeagra. **Venezuela:** Merida: Mucubaji Res Sta.

Remarks.— The species belongs to the group with double costal triangles. It is similar to *Anstenoptilia hugoiella* Gielis, and is difficult to separate from this species both on external appearance and female genitalia; the male genitalia are characteristic.

*Postplatyptilia camptosphena* (Meyrick, 1931)  
(figs 102, 235, 369)

*Platyptilia camptosphena* Meyrick, 1931: 379.

Material.— Holotype ♂, **Chile**, Llai-Llai, 1.i.1927 (Edwards), gent BM 18193 (BMNH) [examined].

Diagnosis.— The species is characterized by its colour and its well developed, angled costal triangle.

Redescription.— Male, female. Wingspan 15-22 mm. Head appressedly scaled, orange-brown. Palps with pronounced second segment, pale brown. Antennae ringed white and dark brown, shortly ciliated. Collar and thorax brown-ochreous. Abdomen brown. Hindlegs grey-white and dark brown ringed, the dark sections before the short spurs. Spurs grey-white, dark tipped.

Forewings cleft from 3/4, brown-ochreous, markings dark brown. Along costa a dark line, and at one third a spot. Before the base of the cleft a costal triangular marking, of which the basal margin is straight and the terminal margin is meandering. The costal line is interrupted by the pale terminal margin of the triangular spot, as well as by the pale subterminal line, which is present in both forewing lobes. The colour of the lobes is darker than the basal part of the wing. In the terminal fringes an almost complete basal line. Fringes grey-brown. On the dorsal margin two groups of dark scales: at half-

way and at the base of the cleft. Underside dark brown. The pale markings are pronounced and the first lobe is brown-ochreous.

Hindwing dark brown. Third lobe brown-ochreous. Fringes grey-brown. Along the dorsal margin of the third lobe scattered black scales, and a dark scale-tooth at 3/4. Underside dark brown. Venous scales ferruginous, in a double row; at the base of the cleft between the second and third lobe in three rows.

Variation.— The colour varies from pale yellow-brown to chestnut-brown. There is some variation in the intensity of the dark scales forming the costal triangular spot, but this spot is always well defined.

Male genitalia.— Valvae symmetrical. Sacculus in basal third, wider than in distal two thirds; slightly shorter than apex of cucullus. Tegumen bilobed. Uncus slender, long. Anellus arms slender, half as long as tegumen. Vinculum band-like. Saccus poorly developed. Aedeagus slightly curved, terminally widened.

Female genitalia.— Antrum three times as long as wide, poorly sclerotized. The ostium bursae laterally localized in the curved and sclerotized margin of the seventh sternite. Ductus bursae twisted, slender with a long, almost linear, sclerotized plate for 9/10 of its length. Bursa copulatrix simple, with a double horn-like signum. Papilles anales normally shaped. Apophyses posteriores three times as long as papilles anales. Apophyses anteriores short.

Ecology.— The moths flies from November till February. The hostplant is unknown.

Distribution.— **Argentina:** Chubut: Corcovado; Rio Negro: San Carlos de Bariloche, El Bolson, Puerto Blest; Neuquen: Pucura, Hua-Hum, San Martin de los Andes, Lago Tromen. **Chile:** Maule: Curanipe, Curico, RN Frederique Albert, RN Radal Seite Tazas, RN Altos del Lircay; Nuble: Alto Tregualemu, Volcan Chillan; Osorno: Anticura; O'Higgins: RN Los Cipreses, Sta Cruz; Santiago: Santiago, RN Yerba Loca, Pta Yeso, Portezuelo; Aconcagua: Los Andes; Temuco: Nueva Imperial; Melipilla: Melipilla; Valparaiso: Cabildo, Las Palmas, Olmué, Putaendo; Coquimbo: Canela Baja, MN Pichasca.

*Postplatyptilia eelkoi* Gielis, 1991  
(figs 103, 236, 370)

*Postplatyptilia eelkoi* Gielis, 1991: 43.

Material.— Holotype ♂: **Chile**, Nuble, Alto Tregualemu, ca. 20 km SE Chovellen, 500 m., 1-3.xii.1981 (Davis), gent CG 6059 (USNM). Paratype ♀: **Chile**, Nuble, Shangri-la, SW side Volcan Chillan, 1600 m., 19-21.i.1979 (Davis & Akerbergs), gent CG 6080 (USNM).

Diagnosis.— The species is characterized by the pale area in the first lobe of the forewing and in particular, the female genitalia.

Description.— Male, female. Wingspan 16-18 mm. Head appressedly scaled, some erect scales near collar and in the area between the base of the antennae; colour dark brown. A small frontal tuft, half the eye diameter. Palps one and a half times the eye diameter, grey-brown. Second segment widened by pronounced scaling. Third segment short and slender. Antennae brown, shortly ciliated. Thorax and tegulae grey-brown. Across the thorax and terminal tegulae a transverse orange-brown band, as a continuation of the dorsal colour of the forewing. Mesothorax white. Hindlegs grey-brown.

Tarsi ringed brown-orange and grey-brown. Spur pairs of unequal length, grey-white with a basal and subterminal dark grey ring.

Forewings cleft from 3/4; colour grey-brown, dorsum orange-brown mixed. Markings dark brown: a costal triangle before the base of the cleft; in both lobes a centrally placed transverse band not reaching either of the dorsal margins, terminally bordered by a grey-white subterminal line. Between the costal triangle and the transverse band an orange-white spot, more whitish at the costa and reaching the dorsum of the first lobe. Termen sinuate. Fringes white, termen of both lobes with an uninterrupted row of black basal scales. On the dorsum scale-teeth at two thirds and 3/4, and regular scaling between the base of the wing and the scale-tooth at two thirds. Underside dark brown, with a pale costal spot beyond the base of the cleft and a subterminal line in both lobes.

Hindwings grey-brown. Fringes grey. In the fringes on the dorsum of the third lobe a black scale-tooth at 4/5; and between this scale-tooth and the base of the wing an irregular row of black scales. Underside dark brown, mixed with white scales in the first and third lobe. Venous scales ferruginous-brown in a double row, fusing to a single row at one third of the wing length.

Male genitalia.— Valvae symmetrical, ending in a small hook, resembling the shape of a bird's head. Sacculus bilobed, basal third wide, terminal two thirds narrow. Tegumen lobated. Uncus small, slender. Vinculum arched. Saccus stout, rather short. Aedeagus curved. Coecum small. No cornutus.

Female genitalia.— Antrum laterally placed in the pronounced lamina post-vaginalis. Antrum four times longer than wide. Ductus bursae tortuous with a long slender sclerotized plate. Bursa copulatrix vesicular with a pair of horn-like signa. Apophyses anteriores short. Apophyses posteriores stout, twice the length of the papillae anales.

Ecology.— The moth flies in December and January. The hostplant is unknown.

Distribution.— **Chile:** Maule: Curanipe, RN Altos del Lircay; Nuble: Alto Tregualemu, Volcan Chillan, Las Trancas; Santiago: Tiltit; Valparaiso: Cabildo, PN la Campana.

Remarks.— The species is similar to *P. camptosphena* in the female genitalia. These differ by the wider and flatter lamina ante-vaginalis in *P. eelkoi*.

*Postplatyptilia naranja* Gielis, 1991  
(figs 104, 371)

*Postplatyptilia naranja* Gielis, 1991: 45.

Material.— Holotype ♀: **Argentina**, Neuquen, Lago Lacar, Pucara, 750 m., 26.xii.1978 (Mision Cientifica Danesa, Sta. 9), gent CG 4090 (ZMUC). Paratype ♀: **Argentina**, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 810 m., 1.i.1979 (Mision Cientifica Danesa, Sta. 7) (CG).

Diagnosis.— The species is well recognized by its almost unicolorous orange-brown appearance. The incomplete costal triangular spot, and the poorly developed scale-tooth on the third lobe of the hindwing, characterize this species very well.

Description.— Female. Wingspan 17-19 mm. Head appressedly scaled, ferruginous. Palps slender, porrected; third segment short. Antennae ringed white and orange-brown; shortly ciliated. Thorax and abdomen ferruginous. Hind-legs ringed grey-white and ferruginous, the brownish parts proximal of the pair of spurs. Spurs of equal length,



grey-white, dark tipped. Forewings cleft from 4/5, ferruginous, with dark brown markings. The markings consist of a poorly defined cellular spot, a transverse spot before, and free from, the base of the cleft, of approximately one third of the wing width. Indistinct dark scaling at the costa, gradually increasing up to the base of the cleft, the terminal margin of the scaling merges with the terminal margin of the spot at the base of the cleft, bordered by a yellow-brown segment in the first lobe. Fringes grey, basal half dark grey. On the dorsal margin a scale-tooth at halfway and another at 3/4. Underside ferruginous, becoming paler towards the termen.

Hindwings brown, third lobe ferruginous. Fringes grey. In the dorsal fringes of the third lobe grey scales from base of the wing to the middle. Underside ferruginous. Between the bases of the clefts in the second lobe two rows of venous scales: the costal row small, the dorsal extending further terminally.

Male genitalia.— Unknown.

Female genitalia.— Antrum conical, ostium bursae as wide as the length of the antrum. Ductus bursae slender. Bursa copulatrix simple, with two signa in the shape of a horn. Margin of eighth sternite bilobed, distally dentated. Apophyses posteriores twice the length of the papilles anales. Apophyses anteriores as long as papilles anales.

Ecology.— The moth flies at the end of December and early in January. The host-plant is unknown.

Distribution.— **Argentina**: Rio Negro: San Carlos de Bariloche; Neuquen: Pucara.

Remarks.— The species is difficult to place in a genus. The shape of the antrum is unlike those seen in the genus *Platyptilia*. The central part of the lamina post-vaginalis is developed in the form of blotches, posterior to the antrum. These structures strongly support inclusion in the present genus.

*Postplatyptilia nielseni* (Gielis, 1991)  
(figs 105, 237, 372)

*Lantanophaga nielseni* Gielis, 1991: 33.

Material.— Holotype ♂: **Argentina**, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 27.xii.1981 (Nielsen & Karsholt, sta. 9), gent CG 4096 (ZMUC). Paratypes: 4 ♂♂, 5 ♀♀, **Argentina**, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m., 4.xii.1981, 7.xii.1981, 23.xii.1981, 24.xii.1981, 5-7.i.1982 (Nielsen & Karsholt, sta. 9), gent CG 4094, 4095, 4097 (ZMUC, CG); 1 ♀, **Argentina**, Chubut, Esquel, SE. shore of Lago Futalaufquen, 600 m., 22.ii.1979 (Mision Cientifica Danesa, sta. 48) (ZMUC).

Diagnosis.— The species is characterized by the pale distal area in the first lobe of the forewing, and by the genitalia.

Description.— Male, female. Wingspan 16-18 mm. Head appressedly scaled, dark brown. Palps porrected, with pronounced second segment, dark brown; on the underside an indistinct row of white scales on all segments. Antennae dark brown, with isolated white scales, shortly ciliated. Collar and thorax dark brown. Abdomen dark brown, on upperside of first two segments ochreous. Underside with isolated white scales. Legs grey-brown, spurs of hind tibiae of equal length, grey-brown and dark tipped.

Forewings cleft from 3/4, dark brown. The colour toward termen gradually becoming darker, up to the transverse grey-yellow line beyond the middle of the cleft, present in both forewing lobes. In the first lobe, the terminal area between the transverse line

and the termen ferruginous-brown; in the second lobe more mixed with dark brown scales. Terminal fringes grey, with a basal line of black scales. This line continues along the dorsal margin to a little before the transverse line. An indistinct scale-tooth halfway along the dorsal margin and between this scale-tooth and the wing base isolated dark scales in the fringes. Underside dark brown, with the pale markings of the transverse line across the two lobes.

Hindwings brown, the third lobe dark brown. Fringes grey-brown. On the third lobe a subterminal black scale-tooth. Between the scale-tooth and the base irregularly distributed dark scales. Underside dark brown. Venous scales ferruginous, in a double row from the base of the cleft between the second and third lobe to 3/4 of the second lobe. The costal row interrupted in the terminal 3/4.

Male genitalia.— Valvae symmetrical. Sacculus interrupted in middle. Basal sacculus half wide, densely haired. Cucullus slightly longer than sacculus. Tegumen arched. Uncus slender, rather short. Vinculum broad, progressing into a basally swollen saccus; saccus narrowing distally and with a bidentate tip. Anellus arms half as long as tegumen, ending in a small, hairy, triangular plate. Aedeagus slender and curved. Cornutus poorly developed.

Female genitalia.— Antrum twice as long as wide, laterally ending; margin of the seventh sternite curved and more distally placed than the end of the antrum. Ductus bursae slender, containing a long sclerotized ridge over two-thirds of its length. Bursa copulatrix with a double horn-like signum. Apophyses posteriores twice as long as the papilles anales. Apophyses anteriores short, well developed.

Ecology.— The moth flies from December until February. The hostplant is unknown.

Distribution.— **Argentina:** Chubut: Esquel; Rio Negro: San Carlos de Bariloche.

Remarks.— The species is differentiated from *P. aestuosa* by the orange coloured top of the first lobe of the forewing. And in the genitalia the short and stout anellus arms, the stout saccus in the male, and the different shape of the lamina ante-vaginalis in the female.

*Postplatyptilia aestuosa* (Meyrick, 1916)  
(figs 106, 238, 373)

*Platyptilia aestuosa* Meyrick, 1916: 558.

Material.— Lectotype ♂: **Peru**, Lima, 500 ft., viii.(19)14 (Parish), gent BM 18196 (BMNH). Paralectotypes: 2 ♂♂, 5 ♀♀, 2 without abdomen, same locality and date (BMNH).

Diagnosis.— The species is characterized by its dark colour and the white sub-terminal line in the forewings. The genitalia are characteristic.

Redescription.— Male, female. Wingspan 17-21 mm. Head appressedly scaled, grey-brown. Palps protruding, grey-brown, twice eye diameter. Antennae ringed dark brown and white. Thorax grey-brown. Abdomen dark grey-brown, laterally mixed with grey-brown. First segment on upperside cream-white. Legs grey-brown, spurs of hindlegs cream-white, distally brown.

Forewing cleft from 4/5, grey-brown. Markings dark brown, consisting of a costal spot before the base of the cleft, being the basis of the triangle normally present here,

and a dark central area in the first lobe. This last spot terminally margined by a small distinct white transverse line, which continues in the second lobe. Fringes grey, in the second lobe basally interrupted by three groups of dark scales. Underside dark brown, with a transverse yellow-white line crossing both lobes.

Hindwing grey-brown. Third lobe mixed with prominent dark-brown scales. Fringes grey. Along the dorsum of the third lobe a subterminal scale-tooth, and between this scale-tooth and the base of the wing isolated dark scales. Underside grey-brown. Venous scales dark ferruginous-brown, in a double row, the costal row longer than the dorsal one.

Male genitalia.— Valvae symmetrical, lanceolate. The sacculus is divided into a wider basal third and a narrower distal two thirds. Tegumen not lobed, with a short, slender uncus. Vinculum wide, progressing into a gradually narrowing, saccus with a double tip. Antisaccus slender. Aedeagus slender, slightly curved; coecum small. No cornuti.

Female genitalia.— Antrum funnel-like, laterally ending at the margin of the seventh sternite. Ductus bursae curved toward centre of abdomen, rather slender, twisted once. Bursa copulatrix vesicular, with a pair of, very small, horn-like signa. These signa progress and fuse into a sclerotized area which is arched. Lamina ante-vaginalis well developed, lamina post-vaginalis poorly developed. Apophyses posteriores twice as long as papillae anales. The proximal margin of the eighth sternite with two slender apophyses anteriores, which are almost as long as papillae anales.

Ecology.— The moth flies from August until October. The hostplant is *Oxalis tuberosa* Molina (Oxalidaceae). Data from a bred specimen from: Ecuador, Chimbaroza, Riobamba, Guayllabamba, 18.v.1982 (C. Ruales) (USNM).

Distribution.— **Argentina:** Jujuy: Purmamarca. **Bolivia:** Yungas: Coroico. **Chile:** Coquimbo: Elqui, MN Pichasca; Nuble: Cobquecura. **Ecuador:** Chimbaroza: Riobamba; Guachayacu. **Peru:** Lima: Lima.

*Postplatyptilia paraglyptis* (Meyrick, 1908)  
(fig. 107)

*Platyptilia paraglyptis* Meyrick, 1908: 484.

Material.— Holotype (without abdomen): **Argentina**, Parana, (19)07 (R.) (BMNH) [examined].

Diagnosis.— The species is characterized by the four small costal spots on the first forewing lobe.

Redescription.— Male. Wingspan 14 mm. Head appressedly scaled, ferruginous-brown. Palps one and a half times eye diameter; ferruginous; curved; third segment slender and short. Antennae ringed white and brown; shortly ciliated. Thorax, tegulae and mesothorax ferruginous-brown. Hindlegs ochreous-ferruginous, with one pair of spurs of almost equal length.

Forewings cleft from 3/4, ferruginous. Markings brown, consisting of a costal spot at one third, the costal triangle and four costal spots on the first lobe. A small dorsal spot at 1/4; the apex of both lobes darkened. A pale subterminal line, originating between the third and fourth costal spot in the first lobe and continuing into the second lobe.

Fringes grey-brown; a basal brown scaled margin on the outer margin of the wing, not interrupted in the first lobe, but twice in the second lobe; anal angles of both lobes brown fringed. Some scales on the dorsum in the fringes. Underside brown with a pale subterminal line in both lobes.

Hindwings brown. Fringes grey-brown. On the dorsum of the third lobe a subapical dark brown scale-tooth in the fringes, and between the scale-tooth and the wing base isolated prominent scales. Underside of first and second lobes ferruginous, the third lobe dark brown. Venous scales orange-ferruginous, in a double row; the costal row longer than the dorsal row.

Ecology.— The specimen was collected in (19)07, with no indication of the collecting date or the biology.

Distribution.— **Argentina:** Parana.

Remarks.— The forewing markings differentiate this species from all similar species. The generic position of the species is very difficult to determine because of the complex relationships in this area. Nevertheless I consider the species to belong to this genus because of the resemblance to the previously mentioned species.

*Postplatyptilia pusillus* (Philippi, 1864)

*Pterophorus pusillus* Philippi, 1864: 296.

Material.— Type: Probably lost.

Remarks.— After checking the National Museum Collection of Chile in Santiago, Chile, Dr M.D. Elgueta informed me that Philippi's type-specimens are all lost. Zeller (1877) stated: "it is hardly possible to determine what species is involved by the description made." This is however not correct, because the mentioning of: "die Fuehler sind am Grunde blass rosenroth", gives a good characteristic. This characteristic must be recognized when an unfamiliar species is presented. This is why I am of the opinion that this species will be rediscovered if sufficient material becomes available.

For the generic position see *P. paraglyptis*.

*Stockophorus* Gielis, 1993

*Stockophorus* 1993: 40.— Type species: *Platyptilia charitopa* Meyrick, 1908, by original designation.

Description.— Head appressedly scaled, no frontal tuft. Palps one and a half times eye diameter; second segment distally widened; third segment slender and smooth. Abdomen with small, lateral brushes of erect scales.

Forewings cleft from 3/4, with poorly defined costal triangle just before base of cleft, termen of both lobes with a continuous row of black scales. Venation not examined as insufficient material was available.

Hindwings on the dorsum of third lobe with a subapical black-brown scale-tooth. Between scale-tooth and wing base isolated prominent scales. Third lobe with one vein.

Male genitalia.— Genitalia symmetrical. Valva with a poorly developed bird's head-like shape, with an acute top. Sacculus basally wide, in distal half narrow. Tegumen bilobed and indented, distally progressing into two vesicular lobes. Uncus originating

from mid part of the tegumen, just over tegumen length; top forked, laterally projecting. Vinculum arched, wide. Saccus pronounced, thorn-like. Aedeagus stout, curved. Cornutus irregular sclerotized plate, half as long as aedeagus.

Female genitalia.— Unknown.

Ecology.— Unknown.

Distribution.— **Bolivia**: Songo.

*Stockophorus charitopa* (Meyrick, 1908)  
(figs 108, 239)

*Platyptilia charitopa* Meyrick, 1908: 483.

Material.— Lectotype ♂, **Bolivia**, Songo, ix.(19)07, gent CG 5024, (original body, St. Adamczewski) (BMNH).

Diagnosis.— The external characters define the species well.

Redescription.— Male. Wingspan 14 mm. Head appressedly scaled, ferruginous to pale brown scales. Palps one and a half times eye diameter; basal segments white with some ferruginous scales; second segment, ferruginous with white scales, distally widened; third segment slender and smooth with two brown and white rings of scales. Antennae dark brown, with a longitudinal row of white scales, shortly ciliated. Thorax, tegulae and mesothorax ferruginous. Abdomen ferruginous mixed with white and dark brown scales, and with small, lateral brushes of erect scales. Legs pale ferruginous, slightly darkening toward end of segments. Hindlegs with two pairs of spurs of equal length.

Forewings cleft from 3/4, ferruginous to orange-ferruginous. Markings dark brown, consisting of small costal groups of scales alternating with some white scales. A poorly defined costal triangle, just before the base of the cleft. Central parts of first and second lobe darkened, with some scales along the dorsum. In both lobes transverse delicate white lines. Subterminal in both lobes, a dark brown shading of the margin. Fringes white, at the apex and anal angle of both lobes black. At the termen of both lobes, a basal line, interrupted in the centre of the second lobe. Underside ferruginous-brown. A subterminal transverse white line on both lobes.

Hindwing first and second lobes brown, the third lobe more ochreous tinged. Fringes grey-brown. On the dorsum of the third lobe a subapical black-brown scale-tooth. Between the scale-tooth and the wing base are isolated prominent scales. Underside orange-ferruginous. Venous scales orange-ferruginous in a double row. The dorsal row the longer.

Male genitalia.— Genitalia symmetrical. Top of valva with poorly developed shape like a bird's head. Saccus basally wide, in distal half narrow. Tegumen bilobed, distally progressing into two vesicular lobes. Uncus originating from mid-tegumen, just over tegumen length; top forked, laterally projecting. Vinculum arched, wide. Juxta symmetrical. Anellus arms slender. Aedeagus stout, curved. The cornutus is an irregular sclerotized plate, half the length of the aedeagus. Coecum well developed. Ductus ejaculatrix vesicular.

Female genitalia.— Unknown.

Ecology.— The moth flies in September. The hostplant is unknown.

Distribution.— **Bolivia:** Songo.

*Amblyptilia* Hübner, [1825]

*Amblyptilia* Hübner, [1825]: 430.— Type species: *Alucita acanthadactyla* Hübner, [1813]: tab. 5, figs. 23, 24, by subsequent designation by Tutt, 1905a.

*Amblyptilia* [1825]. Incorrect (of multiple original) spelling.

*Amblyptilus* Wallengren, 1862. Emendation.

Redescription.— Head without frontal tuft. Palps protruding, as long as eye diameter, second segment slightly thickened. Forewings with well developed costal triangle. Both forewing lobes with distinct termen.

Forewing veins R1, R2, R3, R4, R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from angle of cell, Cu2 from cell. Third lobe of hindwing with centrally placed scale-tooth.

Hindwing with a single vein in third lobe.

Male genitalia.— Top of valvae shaped like a bird's head. Sacculus not lobed (in *A. punctidactyla* very narrow in central part). Basally the vinculum has a saccus bordered by a brush of hairs in shape of a bristle. Tegumen bilobed. Uncus as long as tegumen, gradually narrowing.

Female genitalia.— The antrum, tube-like, localized laterally in the heavily terminal plate of the lamina ante-vaginalis. A small sclerotized structure is present in the ductus bursae. The lamina post-vaginalis is fused with the sclerotized distal margin of the seventh sternite and laterally progressing into the apophyses anteriores. Signum double, horn-like.

Ecology.— Recorded hostplants include many families, especially: Asteraceae, Caprifoliaceae, Dipsacaceae, Ericaceae, Orobanchaceae, Plantaginaceae, Scrophulariaceae, Lamiaceae, Geraniaceae and Papilionaceae.

Distribution.— Holarctic, Ethiopian, Neotropic and Indo-Australian fauna.

*Amblyptilia scutellaris* (Felder & Rogenhofer, 1875)  
(figs 109, 374)

*Platyptilia scutellaris* Felder & Rogenhofer, 1875: plate 140, fig. 57.

Material.— Holotype ♀: (**Colombia**), Bogota, no date (Novara), gent BM 18451 (BMNH) [examined].

Diagnosis.— The species is characterized by the double costal forewing spot with the spot at the base of the cleft.

Redescription.— Female. Wingspan 18 mm. Head appressedly scaled, ferruginous. Above the eye and between the base of the antennae some white scales. Face conical, small, one third of the eye diameter. Palps mixed ferruginous and white, one and a half times eye diameter; second segment widened by the scaling, longer than the third segment; third segment tipped with white. Thorax and tegulae grey-brown. Mesothorax white. Abdomen dark ferruginous and brown. Hindlegs missing in type-specimen.

Forewings cleft from 3/4, colour ferruginous-grey. Spots dark-brown in shape of

a costal triangle, a transverse band in the centre of the first and second lobe. In both lobes the band is terminally margined by a white subterminal line. Discal spot poorly defined. Fringes, hardly present in the type, grey. On the dorsum a scale-tooth at two thirds and another at 3/4. Underside ferruginous-brown, with white spots at the costa just beyond the base of the cleft and subterminal in both lobes.

Hindwings ferruginous-grey. Third lobe white along the dorsum. Fringes grey-brown. On the dorsum of the third lobe a small scale-tooth at two thirds and between this scale-tooth and the base of the wing scattered black, prominent fringe-scales. Underside ferruginous-brown. Some white scales on the top of the first lobe. Venous scales dark ferruginous-brown, in a double row. The dorsal row small and progressing into the costal row.

Male genitalia.— Unknown.

Female genitalia.— Antrum positioned to the right side, ending in lamina ante-vaginalis; gradually narrowing, three times longer than width at ostium. Ductus bursae slender, with longitudinal sclerotized plate in distal half. Bursa copulatrix vesicular, with a pair of horn-like signa. Vesica seminalis originating at junction between ductus bursae and bursa copulatrix. Lamina ante-vaginalis laterally progressing into the small apophyses anteriores; centrally into a ridge with a double knob. Apophyses posteriores four times diameter of papillae anales.

Ecology.— The collection date is not known. The hostplant is unknown.

Distribution.— **Colombia:** Bogota.

Remarks.- The genitalia showed the type specimen to be a female. The genitalia and the centrally placed scale-tooth on the dorsum of the third hindwing lobe place this species in the genus *Amblyptilia*.

*Amblyptilia landryi* **spec. nov.**  
(figs 110, 375)

Material.— Holotype ♀: **Honduras**, Cerro Monserrat, El Paaiso, 7 km SW Yuscaran, 1700 m, 15.v.1994 (B.D. Gill), gent CG 2734 (CG).

Diagnosis.— The species is characterized by the shape of the female genitalia, distinguishing it from *Amblyptilia scutellaris* Meyrick.

Description.— Female. Wingspan 21 mm. Head appressedly scaled. Vertex and collar dark brown. Between the base of the antennae ochreous. Frons conical, half the eye diameter; dorsally pale brown, ventrally ochreous. Palps protruding, twice eye diameter; dark brown; on the first segment drooping ochreous scales and the short third segment with whitish tip. Thorax and tegulae dark brown, tegulae at rostral end turning pale brown. Mesothorax ochreous-white. Hindlegs ringed pale and dark brown; the dark parts at the end of the segments and at the base of the spur pairs. Medial spurs longer than lateral, the pairs of equal length.

Forewing cleft from two thirds, pale brown. Markings dark brown: dorsal spots at 1/4 and one third, a costal spot at one third, a costal triangular spot just before the base of the cleft, a costal and dorsal dark area before the subterminal line in the first lobe and more pronounced darkening in the same region of the second lobe. The subterminal line with wavy aspect, ochreous-white. Fringes terminally and dorsally pale grey, in the



cleft, dark grey; at the anal angles of both lobes a black dash; terminally with a basal row of black scales, interrupted twice in the second lobe with whitish; with dorsal scale-teeth at one third, two thirds and 4/5, the middle one the biggest. Underside ferruginous-brown, with an ochreous spot terminally from the costal triangle and a white subterminal line as above.

Hindwings grey-brown. Fringes dark grey. On the dorsum of the third lobe a large central triangular scale-tooth and between this scale-tooth and the wing base some pronounced black scales in the fringes. Underside ferruginous-brown, with white scales in the first and third lobe. At the tip of the first lobe a small angled, white spot. Venous scales in a double row, dark brown, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Antrum right lateral positioned; gradually narrowing from ostium towards ductus bursae, twice as long as the width at the ostium. Ostium slightly oblique. Ductus bursae four times the antrum, with a sclerite at 3/4. Ductus seminalis small, at junction with bursa copulatrix. Bursa copulatrix vesicular, with a pair of horn-shaped signa. Lamina post-vaginalis well developed, wide, with the centre deeply indented; laterally progressing into the apophyses anteriores which are as long as the papillae anales. Apophyses posteriores three to four times the length of the papillae anales.

Ecology.— The moth flies in May at an altitude of 1700 m. The hostplant is unknown.

Distribution.— **Honduras**: Cerro Monserrat: Yuscaran.

Etymology.— The species is named after Dr Bernard Landry, to honor his support of my studies of the Pterophoridae of the New World.

*Amblyptilia kosteri* **spec. nov.**  
(figs 111, 240, 376)

Material: Holotype ♂: **Argentina**, Salta, Camino de Cornisa, 1200 m, 12.xi.1995 (Neth. ent. exp. N. Arg., sta 9) (CG). Paratypes: 2 ♂♂, 3 ♀♀, same data, gent CG 2712 (♂), 2707 (♀) (CG). 1 ♀, **Brazil**, Paraná, Banhado, Quatro Barras, 800 m, 6.vi.1970 (V.O. Becker), gent CG 6233 (V.O. Becker nr 9351).

Diagnosis.— The species is characterized by the vague forewing markings and the distinct genitalia in the male and female.

Description.— Male, female. Wingspan 20 mm. Head appressedly scaled, dark brown. Frons dark brown; along the rim of the eye some ochreous scales. Palps protruding, brown, twice the eye diameter. The second segment widened, and extended in a narrow brush along the third segment. Antennae dark brown, pectinate. Thorax and tegulae dark brown. Mesothorax ochreous-white. Abdomen dark brown, dorsally at the caudal margin some pale brown to ochreous scales. Hing legs brown. The spur pairs of unequal length, the inner spurs longer than the outer spurs and the proximal pair longer than the distal pair. Spurs basally and terminally brown, and centrally ochreous-brown.

Forewings cleft from 5/7, brown. The markings dark brown: the entire basal part and costa of the wing; a poorly defined costal triangular spot; and a diffuse dark area at the termen of both lobes. Centrally in the first lobe a longitudinal, wedge-shaped, black-brown, triangle. Fringes black, ochreously tinged at the base of the cleft, twice at the termen of both lobes and along the dorsum. On the dorsum black scale-teeth at half

distance and  $3/4$ , with scattered scales between the scale-teeth. Underside dark brown with a narrow white subterminal line.

Hindwings and fringes dark grey-brown. Along the dorsum of the third lobe scattered black-brown scales and a scale-tooth at two thirds. Underside dark brown, with scattered white scales in the third lobe. Venous scales in a double row, brown, the costal row extended terminally with ferruginous scales and the longer.

Male genitalia.— Valvae symmetrical, with birdhead like structure. Saccus simple, bilobed. Cucullus with a centrally directed, small, double tipped process. Saccus with a single thorn-like margin. Tegumen simple. Uncus narrow, as long as tegumen. Aedeagus arched, with a laterally dentate tip.

Female genitalia.— Ostium smoothly curved. Antrum rectangular, with rounded edges. Ductus bursae slender with a central sclerite. Bursa copulatrix with a pair of horn-like signa. Apophyses anteriores slender, twice as long as the papillae anales. Apophyses posteriores long and slender, four times as long as the papillae anales.

Ecology.— The moth flies in June and November, at an altitude of 800-1200 metres. The hostplant is unknown.

Distribution.— **Argentina**: Salta: Camino de Cornissa. **Brazil**: Paraná: Quatro Barras.

Remarks.— The species shows reduction of the saccus hair-bristle to a single spine.

*Amblyptilia punoica* Gielis, 1996  
(figs 112, 241)

*Amblyptilia punoica* Gielis, 1996: 92.

Material.— Holotype ♂: **Peru**, Dept. Puno, 10 km N Lampa, Cuadrada Metara, 3900 m., 31.iii-3.iv.1987 (O. Karsholt, St. 58) gent CG 4172 (ZMUC).

Diagnosis.— The species is characterized by the grey colour and a black “V” shape rotated to the side at the place of the costal triangle.

Description.— Male. Wingspan 25 mm. Head loosely scaled; centrally grey-brown, laterally pale yellow-white. Frons brown, appressedly scaled. Palps as long as eye-diameter, protruding, loosely scaled brown, speckled yellow-white. Terminal part of third segment white. Antennae grey-white and grey-brown scales (with an indication of being ringed, but not of such quality to be judged); shortly ciliated. Thorax and tegulae grey-brown. Mesothorax cream-white. Abdomen brown-grey mixed with white scales; ventrally grey-brown. Leg white ringed dark-brown. Hindlegs with spur pairs of equal length, the proximal spurs longer than the distal pair.

Forewings cleft from  $4/5$ ; colour grey. Markings black in shape of a “V” with the top pointing toward the base of the cleft; dark spot centrally in both lobes. These last spots terminally margined by a white subterminal line and in the first lobe basally by a white costal spot. On the wing a black and ferruginous diffuse scaling. Fringes grey-brown. Along the dorsum two scale-groups at  $3/4$  and  $5/6$ . Underside brown-grey, with two markings as above.

Hindwings grey. Fringes grey. On the dorsum of the third lobe a dark scaling, a little denser at half distance to two thirds. Underside grey. Venous scales ferruginous, in a double row; the costal row the longer and extending into the second lobe.

Male genitalia.— Valvae symmetrical. The tip of the valvae with a structure in the shape of a bird's head, the tip very delicately narrow. Sacculus entire, reaching as far as the birdhead-like structure of the valva. Cucullus not pronounced. Tegumen bilobed. Uncus as long as tegumen, tip tapering. Vinculum arched with a double spine-like structure, instead of the bristle structures in the other species of the genus. Juxtal arms half the length of the tegumen, rather stout and blunt. Aedeagus arched, stout, without cornutus.

Female genitalia.— Unknown.

Ecology.— The moth flies from end March till the beginning of April. The hostplant is unknown.

Distribution.— **Peru:** Puno: Lampa.

Remarks.— The species resembles *L. marmarodactyla* in colour but differs by its size, markings and genitalia.

### *Lioptilodes* Zimmerman, 1958

*Lioptilodes* Zimmerman, 1958: 399.— Type species: *Pterophorus parvus* Walsingham, 1880, by monotypy and original designation.

*Utuca* auct., nec Walker, 1864.

Redescription.— Head appressedly scaled. Face with small scale-tuft. Palps extended forward, second segment covered with erect scales, approximately one and a half times eye diameter. Forewings cleft from about 3/4; without costal triangle; vein R1 present. Second lobe, in most species of genus, wider than first lobe.

Forewing veins: R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from angle of cell; Cu2 from cell.

Hindwings without scale-tooth at dorsum of third lobe; third lobe with one vein.

Male genitalia.— Valvae symmetrical, oval to elongate. Sacculus and cucullus reaching to tip. Tegumen well developed, large. Uncus stout. Vinculum arched and well connected with saccus and antisaccus, ventrodorsally arched. Saccus often well developed. Aedeagus curved with well developed coecum.

Female genitalia.— Ostium centrally positioned. Antrum gradually progressing into ductus bursae. Ductus bursae occasionally with a sclerite. Pair of horn-like signa in bursa copulatrix. Lamina post-vaginalis well developed, either as a ridge after, or as two blotches beside the antrum; laterally progressing in sclerotized ridge ending in apophyses anteriores.

Ecology.— As hostplant for *L. parvus* (Walsingham, 1880), *Erigeron albidus* is recorded.

Distribution.— Neotropical region and Hawaii Islands.

### *Lioptilodes subantarcticus* Gielis, 1991 (figs 113, 242, 377)

*Lioptilodes subantarcticus* Gielis, 1991: 15.

Material.— Holotype ♂: **Argentina**, Tierra del Fuego, Ushuaia, Lapataia, 20 m., 27.i.1979 (Mision Cientifica Danesa, sta. 34), gent CG 4135 (ZMUC). Paratypes: 4 ♂♂, 1 ♀, same locality, 24.i.1979, 1.ii.1979, 3.ii.1979 (Mis. Ci. Dan., sta 34), gent CG 4137 (♂), 4138 (♀) (ZMUC, CG).

Diagnosis.— The moths are characterized by the presence of the fringe-scaling in the forewings and the genitalia.

Description.— Male, female. Wingspan 19-21 mm. Head appressedly scaled, grey-brown, with a frontal tuft of one and a half times the eye diameter. Underside of tuft brown. Palps twice the eye diameter, brownish. Antennae a little shorter than half the wing length; brown, shortly ciliated. Thorax and tegulae greyish-brown. Abdomen grey-brown. Legs pale grey-brown. The proximal pair of spurs of the hindleg longer than the distal pair.

Forewings cleft from 3/4; grey-brown. Markings brown, consisting of an oblique pair of spots before the base of the cleft. The costal one above the base, the dorsal one just below the cleft. Fringes grey-brown. In the fringes black scale groups, near the anal angle of the first and second lobe, mid terminal and at apex of second lobe. Underside brown.

Hindwings and fringes grey-brown. Underside brown. Venous scales ferruginous, in a double row; these rows are margined with darker and smaller scales costally and dorsally.

Variation.— The colour of the venous scales varies from ferruginous to black-brown.

Male genitalia.— Valvae symmetrical. Sacculus in basal half wide. Cucullus gradually narrowing. At the junction of the anti-sacculus and tegumen a costal spine. Tegumen wide. Uncus rather slender. Vinculum slender. Saccus short, wide angled. Anti-sacculus gradually narrowing. Juxta small. Anellus arms rather stout, ending pointed, half as long as tegumen. Aedeagus slightly curved. Coecum pronounced. Cornutus double, with stoutly shaped thorn-like structures.

Female genitalia.— Antrum tube-like. The distal part of ductus bursae wide and folded. Bursa copulatrix simple with a double horn-like signum. Lamina post-vaginalis with two plates beside the antrum, and progressing laterally into the short apophyses anteriores. Apophyses posteriores three times longer than papillae anales.

Ecology.— The moth flies in January and February. The hostplants are *Gnaphistylis itatiatia* (Dusén) B. Nord, *Senecio juergensi* Mattf., *S. conyzaefolius* Baker, *S. pinnatus* Poir, *S. oleosus* Vell. The hostplant records are obtained from specimens collected and bred by Prof. T.M. Lewinsohn, Campinas, Brazil.

Distribution.— **Argentina:** Tierra del Fuego: Lapataia. **Brazil:** Rio de Janeiro: Agulhas Negras; Santa Catharina: Santa Catharina, Santa Barbara, São Joaquim.

Remarks.— The species is the second collected on the Tierra del Fuego Islands. The description shows some resemblance with the species *L. antarcticus* (Staudinger), but for the obvious double spot before the base of the cleft.

*Lioptilodes cuzcoicus* Gielis, 1996  
(figs 114, 243, 378)

*Lioptilodes cuzcoicus* Gielis, 1996: 86.

Material.— Holotype ♂: **Peru**, Cuzco, Pillahuata, 2600 m., 14-18. viii. 1982 (M. Mattheus & M. Packer), gent CG 5005 (BMNH).

Diagnosis.— The species is characterized by the relatively small second lobe of the forewing.

Description.— Male, female. Wingspan 23 mm. Head appressedly scaled. Palps slender, one and a half times as long as the eye diameter. Antennae dark brown, shortly ciliated, half as long as wing length. Thorax and tegulae cannot be described. Abdomen clothed in mixed dark brown and paler scales. Legs pale brown to dirty white. Spur pairs of hindleg of equal length, rather short.

Forewings grey-brown mixed with isolated scales, cleft from 3/4. First lobe twice as wide as the second lobe. Markings dark brown: two spots near base of cleft, the costal above the base of cleft, the dorsal obliquely placed toward base of wing and dorsally from base of cleft, an indistinct cellular spot and diffuse scaling along costa and dorsum of wing. Fringes grey, darker near apex of first and second lobe. Underside dark brown.

Hindwings dark brown. Fringes grey. Underside grey-brown. Venous scales ferruginous, in a double row. The costal row extended into the second lobe and longer than dorsal row.

Male genitalia.— Valvae symmetrical. Sacculus in basal third gradually widening to a large bulge, covering the junction with the tegumen. The dorsal margin of this bulge dentate. Cucullus rounded. Tegumen bilobed, wide. Uncus stout. Vinculum wide, progressing into a small saccus. The anellus arms basally wide, the distal third slender. Aedeagus curved. Cornutus consisting of four thorn-shaped structures. Coecum pronounced.

Female genitalia.— Ostium centrally positioned. Antrum tube-like, three times longer than wide. Ductus bursa twice the length of the antrum; the basal half wide, with a complex group of sclerites, in shape of roof-like ridges, which are less distinct in the proximal half; proximal half of ductus slender. Bursa copulatrix vesicular, with a pair of small horn-like signa. Lamina ante-vaginalis as a narrow ribbon, with the apophyses anteriores, which are as long as the papillae anales. In the centre of the eighth sternite a double sclerotized plate, extending from the lamina post-vaginalis. Apophyses posteriores slender, four times the papillae anales.

Ecology.— The moth flies in August. The hostplant is unknown.

Distribution.— **Ecuador:** Azuay: PN Cajas. **Peru:** Cuzco: Pillahuata; Lima: Chosica.

Remarks.— The species resembles *Uroloba fuscicostata*, but differs by the narrower second forewing lobe and the dark colour. The species of the *L. prometopa* group tend to have a naked area on the forewing, which is absent in this species.

*Lioptilodes altivolans* **spec. nov.**  
(figs 115, 244)

Material.— Holotype ♂: **Peru**, Ancash, 35 km SE Huaraz, Cerro Cahush, Quabrada Pucavado, 4100 m, 15-18.ii.1987 (O. Karsholt), gent CG 4287 (ZMUC). Paratype ♂: **Peru**, Ancash, 35 km SE Huaraz, Cerro Cahush, Quabrada Pucavado, 4100 m, 15-18.ii.1987 (O. Karsholt), gent CG 4198 (CG).

Description.— Male. Wingspan 18 mm. Head with a large conical protrusion, four times eye diameter, olive-brown and mixed with sparse white scales. Above the eye a white line. Palps protruding, white, slender, three times eye diameter; first segment with drooping scales. Antennae brown-grey, shortly ciliated. Thorax and tegulae olive-brown, sparsely mixed with white scales; centre of thorax blackish. Mesothorax ferruginous. Hindlegs brown-grey, with two pairs of spurs of equal length.

Forewings cleft from 3/4, dark olive-brown, with numerous white scales. The dorsum and the naked area at the base of the cleft are ferruginous. A dark dot well before and below the base of the cleft and a distinct white spot at the costa above the base of the cleft. Fringes grey-brown. Underside grey-brown, gradually pale and whiter towards the tips of the lobes.

Hindwings and fringes grey-brown. Underside pale brown with numerous white scales, especially in the first lobe. Venous scales in a double row, the costal row white and the longer, the dorsal row black.

Male genitalia.— Genitalia symmetrical. Valvae gradually narrowing. Sacculus simple, ending just before the tip of the valva. Cucullus simple. Tegumen, stout. Uncus basally wide, with an acute and narrow tip. Anellus arms short, with a central spine. Saccus heart-shaped, with a delicate small tip. Aedeagus almost straight. Basal part and coecum wide, distal half with blunt tip. Cornuti present as numerous rows of spiculae, from the coecum to the tip.

Female genitalia.— Unknown.

Ecology.— The moth flies in February, at an altitude of 4100 m. The hostplant is unknown.

Distribution.— **Peru**: Ancash: Quebrada Pucavado.

Etymology.— The name reflects the high altitude at which this species occurs.

*Lioptilodes salarius* **spec. nov.**  
(figs 116, 245)

Material.— Holotype ♂: **Argentina**, Jujuy, Salar de Jama, 4200 m, 30.i.1996 (A. Ugarte Peña), gent CG 4932 (CG).

Diagnosis.— The species is characterized by its straw yellow colour, its size, and the genitalia.

Description.— Male. Wingspan 36 mm. Head appressedly scaled, straw yellow, laterally more whitish. Frons with a conical protrusion 3/4 of the eye diameter. Palps protruding, twice the eye diameter, the first and third segments white, the second segment straw yellow. Antennae brown-grey, ciliated. Thorax, tegulae, mesothorax and the first two abdominal segments straw yellow. Hind legs grey, the spur pairs short and of equal length.

Forewings cleft from 5/6, straw yellow. Along the costa a narrow dark brown streak. From the discus to the base of the cleft a naked area. Fringes grey-white, in the cleft and around the anal angle of the second lobe pale grey-brown. Underside pale brown, paler along the costa and in the lobes.

Hindwings shining silvery. Fringes basally straw yellow, the distal half grey. Underside silvery. Venous scales black, in three rows. The costal row the longer, the dorsal row the shorter and the scales irregularly dispersed on the wing.

Male genitalia.— Valvae symmetrical. Sacculus simple, gradually narrowing towards the tip. Cucullus small, near the junction with the tegumen. Tegumen simple. Uncus stout, as long as tegumen. Anellus arms slender, as long as tegumen. Saccus broad, ending in a short, sharp tip. Aedeagus blunt, with poorly developed coecum. Cornutus in shape of numerous rows of small spiculae.

Female genitalia.— Unknown.

Ecology.— The moth flies in January, at an altitude of 4200 metres. The hostplant is unknown.

Distribution.— **Argentina**: Jujuy: Salar de Jama.

Etymology.— The name reflects the halophytic habitat where the species has been collected.

*Lioptilodes topali* Gielis, 1991  
(figs 117, 246, 379)

*Lioptilodes topali* Gielis, 1991: 28.

Material.— Holotype ♂: **Argentina**, Neuquen, Alumine, SE of Lago Alumino, 1100 m., 16.iii.1979 (Mission Científica Danese, sta. 59), gent CG 4118 (ZMUC). Paratypes: 1 ♀, data as holotype (ZMUC); 2 ♂♂, **Argentina**, Neuquen, San Martín de los Andes, Quilquihue, 750 m., 25-26.xi.1981 (Gentili, sta. 32), gent CG 4121 (ZMUC); 1 ♂, 2 ♀♀, **Argentina**, Rio Negro, El Bolson, Pampa Azcona, at light, 17.iii.1961, 3.v.1961 (Topal), gent CG 4114, 5115 (♀) (ZMUC, CG).

Diagnosis.— The species is characterized by its size and the genitalia.

Description.— Male, female. Wingspan 29-32 mm. Head appressedly scaled, grey-white. Frons with small conical protrusion, approximately half the eye diameter. Palps porrect, slightly longer than the eye diameter. Antennae 3/4 of wing length, shortly ciliated. Basal segments ferruginous-white. Thorax and tegulae ochreous-white. Abdomen grey-brown; a small group of black scales in the centre of the dorsal side of the distal margin of the first three segments. Laterally the abdomen shows a grey-brown line, margined with grey-white both dorsally and ventrally. In this grey-brown line the distal parts of segments one to six bear a group of black scales. Legs grey-brown. Hindlegs with two pairs of spurs of equal length.

Forewings cleft from 5/6. First lobe acute. Second lobe with convex termen, three times wider than the first lobe. Colour grey-white. Markings consist of double spot near the base of the cleft; the costal one more terminally placed; between the spots a poorly defined line. Along the costa and dorsum a small margin with irregularly distributed ferruginous scales. Fringes white; grey in the cleft and with some prominent black scales at the anal angle of the second lobe. Underside brown; first lobe ochreous-white.

Hindwings first and second lobes grey-brown, third lobe grey-white becoming darker at the apex. Along dorsum of third lobe some isolated dark scales. Fringes basally grey-white, terminally grey. Underside of first and second lobes brown, third lobe grey-white. Venous scales ferruginous, in a double row. These scales bordered both costally and dorsally by a prominent row of dark brown scales.

Male genitalia.— Valvae symmetrical. Sacculus simple. Tegumen large. Uncus stout. Vinculum enlarged, pointed in the centre. Saccus wide, rather short, pointed. Anti-saccus gradually narrowing toward tegumen. Juxta wide. Anellus arms stout, in the middle of each arm a small medial thorn-shaped process. Aedeagus slightly curved. Coecum pronounced. Vesica with spiculated surface.

Female genitalia.— Antrum twice as long as wide, gradually blending into ductus bursae. Ductus bursae with a narrow, slender, sclerotized plate. Bursa copulatrix vesicular, with a pair of, rather small, horn-like signa. Lamina post-vaginalis centrally



slightly widened and with two blotches beside the antrum; laterally with small apophyses anteriores. Apophyses posteriores two and a half times longer than the simple papillae anales.

Ecology.— The moth flies in March, May and November. The hostplant is unknown.

Distribution.— **Argentina**: Neuquen: Alumine, San Martin de los Andes; Rio Negro: El Bolson.

Remarks.— The species shows a strong resemblance to *L. prometopa* Meyrick, but differs in its larger size and the short frontal scale tuft. In the genitalia of the male there are considerable differences in the saccus, juxta and anellus arms. The slender aedeagus in *L. prometopa* is obvious.

*Lioptilodes arequipa* **spec. nov.**

(figs 118, 247, 380)

Material.— Holotype ♀: **Peru**, Arequipa, 8 km E Arequipa, Rio Andamayo Valley, 2920 m, 7.iv.1987 (O. Karsholt), gent CG 4193 (ZMUC). Paratypes 2 ♂♂: **Chile**, Copiapo, El Maray, 17.i.1996 (A. Ugarte Peña), gent CG 2733, 2732 (CG).

Diagnosis.— The species is characterized by both the male and female genitalia.

Description.— Male, female. Wingspan 21 mm. Head straw-yellow, with a small conical protrusion half the eye diameter in length and with numerous erect scales. Palps straw-yellow, protruding, three times eye diameter. The second palp segment thickened with erect scales. Antennae shortly ciliated, ringed with grey-white and brown. Thorax, tegulae and mesothorax straw-yellow. Hindlegs pale grey-white; two pairs of spurs; the medial spurs longer than the lateral spurs.

Forewings cleft from 3/4, straw-yellow. In the naked area and on the dorsum much paler. Brown spots in the following places: the base of the naked area; well before the base of the cleft; an indistinct spot just above the base of the cleft; at the costa above the base of the cleft and at one third of the length of the costa on the first lobe; and scattered scales along the costa of the wing. Fringes whitish-grey. Underside pale brown, gradually turning pale yellow towards the tips of the lobes.

Hindwings and fringes whitish-grey. Underside of first and second lobes as in forewing; third lobe grey-white. Venous scales ferruginous-orange, in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical. Sacculus bilobed, and extending to just over the tip of the valva. Cucullus simple. Tegumen bilobed, simple. Uncus arched, as long as tegumen. Anellus arms as long as tegumen, rather stout. Saccus basally wide and almost square, with a slender projection as long as the basal part. Aedeagus curved, coecum compact, almost half the length of the aedeagus, the tip with numerous spiculae.

Female genitalia.— Ostium curved. Antrum five times longer than wide, slender, slightly curved. Ductus bursae slender. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis well-sclerotized, with a central arched, hooked shape. Lamina post-vaginalis with a bilobed caudal extension, three times longer than width of ostium. Apophyses anteriores small and curved, half the papillae anales. Apophyses posteriores three times papillae anales.

Ecology.— The moth flies in January and April, at an altitude of 2920 m. The host-plant is unknown.

Distribution.— **Peru**: Arequipa: Rio Andamayo Vally. **Chile**: Copiapo: El Maray.

Etymology.— The species is named after the Peruvian region of its origin.

Remarks.— The specimens from Chile and Peru are externally identical. For this reason the males from Chile and the female from Peru are linked. Further material is needed to confirm this hypothesis.

*Lioptilodes albistriolatus* (Zeller, 1877)  
(figs 119, 248, 381)

*Mimeseoptilus albistriolatus* Zeller, 1877: 469.

*Lioptilus parvus* Walsingham, 1880: 55. **Syn. nov.**

*Stenoptilia insperata* Meyrick, 1921: 422.

*Stenoptilia trigonometra* Meyrick, 1931: 277.

*Stenoptilia partisecca* Meyrick, 1931: 380.

Material.— Holotype of *Mimeseoptilus albistriolatus* Zeller, ♂: **Colombia**, Bogota, gent BM 18192 (BMNH) [examined]. Holotype of *Pterophorus parvus* Walsingham, ♀: **U.S.A.**, California, Mt. Shasta, Siskiyou Co., 2.viii-1.ix.1871 (Walsingham), gent BM 15778 (BMNH) [examined]. Lectotype of *Stenoptilia insperata* Meyrick, ♂: **Peru**, Lima, 500 ft., viii.[19]14 (Parish), gent BM 18450 (BMNH) [examined]. Lectotype of *Stenoptilia trigonometra* Meyrick, ♀: **Paraguay**, Makthlawayan, i.[19]27 (C.S.C.), gent BM 18447 (BMNH) [examined]. Holotype of *Stenoptilia partisecca* Meyrick, ♀: **Argentina**, Mendoza, Mendoza, i, gent BM 4969 (BMNH) [examined].

Diagnosis.— The species is characterized by the pale underside of the first lobe of the forewing, the double spot before the base of the forewing cleft, the spots in the fringes of the termen of both forewing lobes and the genitalia.

Redescription.— Male, female. Wingspan 15-20 mm. Head appressedly scaled; pale brown. Frontal tuft small, half the eye diameter. Above the eye a white line. Palps slightly longer than eye diameter; pale brown, above grey-white. Antennae shortly ciliated, grey-brown. Thorax, tegulae and mesothorax pale brown. Abdomen pale brown. Legs pale brown to grey-white. The hindlegs with two pairs of spurs of equal length.

Forewings cleft from 3/4; pale brown mixed with white scales. Markings brown, consisting of two spots before the base of the cleft straight above each other, and a cellular spot. Next an indistinct dark area along the costa, reaching towards the base of the cleft. The costa above the base of the cleft cream-white. Fringes greyish. In the termen of the second lobe two dark scale groups, one central and the other at the apex. Underside brown, but for the first lobe, which is cream-white. Hindwings brown. Fringes brown-grey. Underside brown. Venous scales orange-ferruginous, in a double row, the costal row a little longer than the dorsal.

Variation.— The intensity of the colour and markings is variable.

Male genitalia.— Valvae symmetrical. Sacculus gradually narrowing towards one third of valva-length. Tegumen not lobed. Uncus stout. Vinculum wide, progressing into a stout, but rather short, pointed saccus. Juxta wide, progressing into a pair of stout and long anellus arms. Aedeagus curved, with a pronounced coecum.

Female genitalia.— Antrum slightly rounded, distally replacing the distal margin of the seventh sternite. Ductus bursae rather short, well developed. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina post-vaginalis club-like extended

distally, poorly sclerotized. Apophyses anteriores absent. Apophyses posteriores one and a half to two and a half times longer than papillae anales.

Ecology.— The moth flies in January, February, March, May, June, August, November and December. Recorded hostplants are all species of Asteraceae: *Erigeron maximus* (D. Don) DC., *E. strigosus* Muhl. ex Willd., *Conyza bonariensis* (L.) Cronquist, *C. primulifolia* (Lam.) Cuatrec (= *C. chilensis* Spreng), *C. canadensis* (L.) Cronquist, *Diplostephium ericoides* (Lam.) Cabrera (= *Conyza erygioides*), *Baccharis salicifolia* (Ruiz & Pv.) Pers. (= *B. glutinosa* Pers.), *B. trinervis* Pers., *B. discolor* Baker, *B. serratula* Pers., *Senecio pinnatus* Poir., *Pluchea* spec., *Minasia* spec., *Noticastrum decumbens* (Baker) Cuatrec., *Symphytotrichum elliotii* (Torr. & Gray) Nesom, *S. subulatus* (Michx.) Nesom, *Solidago odora* Aiton.

Distribution.— **Argentina**: Buenos Aires: Tres Arroyos; Catamarca: Santa Maria; Jujuy: Caimancito; Mendoza: Mendoza; Neuquen: Piedra del Aguila, Alumine, Rodeo Grande, Arroyito; Tucuman: Alto de San Agustin, Tapia, Trancas. **Brazil**: Mato Grosso: Passa Quatro, Ouro Branco, Santana do Riacho, Sete Lagoas, Joaquim Felício, Unaí, Rio Brilhante; Rio Grande del Sul: Gualba; Rio de Janeiro: Maricá; Santa Catarina: Brusque; Sao Paulo: Bertioga, Campos do Jordão, Cruzeiro, Campinas. **Chile**: Aconcagua: Los Andes Curimon; Bio-Bio: Antuco, Las Trancas; Charabuco: Calru; Coquimbo: Combarbala, Coquimbo, Illapel, MN Pichasca; Juan Fernandez Islands; Maule: Pelluhue, RN Radal Seite Tazas; O'Higgins: RN Rio los Cipreses; Santiago: Guayacan, Las Canteras, RN Yerba Loca; Valparaiso: Cabildo, Las Palmas, Putaendo, PN la Campana. **Costa Rica**: Cartago, Turrialba. **Cuba**: Havana, Sierra Rosario. **Ecuador**: Morona-Santiago: Jempeket; Pastaza: Santa Clara; Tungurahua: Ambato. **Guatemala**: Baja Verapaz: San Jeronimo. **Mexico**: Morelos: Cuernavaca. **Paraguay**: Alto Parana: Hernandarias; Boqueron: Filadelfia; Caa-guazu: Tayao, Tres Corrajes; Canindeyu: Maracana; Central: Asuncion, Lambare; Gualra: DCalle Florida, Melgarejo, Zorilla; Paraguari: Sapucay. **Peru**: Ancash: Caras; Arequipa: Atico, Chuquibamba; Cuzco: Laguna Pomachanchi. **Puerto Rico**: Maricao.

Remarks.— The species is separated from allied species by the characteristic double spot before the base of the cleft in the forewing and the fringe spots on the termen of the forewing lobes.

*Lioptilodes rionegroicus* Gielis, 1991  
(figs 120, 249, 382)

*Lioptilodes rionegroicus* Gielis, 1991: 20.

Material.— Holotype ♂: **Argentina**, Rio Negro, San Carlos de Bariloche, Nirihuau, 30.xii.1978 (Mision Cientifica Danesa, Sta, 11), gent CG 4144 (ZMUC). Paratypes: 4 ♂♂, **Argentina**, same locality, 30.xii.1978, 2.i.1979 (Mis. Sci. Dan., sta, 11), gent CG 4130, 4145 (ZMUC, CG); 10 ♂♂, 2 ♀♀, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800-810 m., 13-17.x.1981, 21.x.1981, 22-23.x.1981, 24-25.x.1981, 5.xi.1978, 13.xi.1978, 12-20.xi.1981, 22.xi.1978, 23.xi.1978, 23.xi.1981, 3.xii.1981, 15.i.1979 (Mision Cientifica Danesa, Sta. 7; Nielsen & Karsholt, Sta. 9), gent CG 4142 (♀), (ZMUC, CG); 1 ♂, 1 ♀, **Argentina**, Chubut, El Bolson, Lago Puelo, 220 m., 21.xi.1978 (Mision Cientifica Danesa, sta. 13) (ZMUC); 9 ♂♂, 2 ♀♀, Neuquen, San Martin de los Andes, 640 m., 13.x.1981, 16.x.1981, 17-31.x.1981, 2.xi.1981, 7-15.xi.1981 (Nielsen & Karsholt, Sta. 11) (ZMUC, CG).

Diagnosis.— The species is characterized by the small white costal and terminal spots in the first forewing lobe, the male genitalia and the forked apophyses anteriores in the female genitalia.

Description.— Male, female. Wingspan 18-20 mm. Head appressedly scaled, grey and brown. Frontal tuft absent. Palps one and a half times eye diameter. Third segment short, white; second segment pale brown. Antennae half the wing-length; brown; shortly ciliated. Thorax and tegulae brown, mixed with greyish scales. Abdomen brown. Hindlegs grey-brown. Two pairs of spurs of equal length.

Forewing cleft from 3/4; pale brown. Markings dark brown, consisting of an oblique pair of spots before the base of the cleft, a discal spot and irregular scaling along the costa and less along the dorsum. The costa just beyond the base of the cleft is whitish. A small white mark along the costa of the first lobe before the apex. A small white streak in the termen of the first lobe. Some dark scales on the costa of the second lobe, near the base of the cleft. In the second lobe some longitudinally arranged dark scales. Fringes grey, on the first lobe dark grey. Underside dark brown; the whitish costal marking is also present here.

Hindwings brown. Fringes grey. Underside brown. Venous scales black, in a double row. The costal row is the longer, but is interrupted centrally for a third of its length.

Variation.— The intensity of the forewing markings is variable. The colour may be darker brown, as seen in some specimens from Chubut. The venous scales vary from ferruginous to black.

Male genitalia.— Valvae elongated, symmetrical. Sacculus gradually narrowing. Tegumen wide. Uncus moderate. Vinculum broad, progressing in a pointed saccus of intermediate length. Juxta wide, anellus arms stout. Aedeagus curved, coecum pronounced. Cornuti in the shape of regularly arranged minute spiculae in vesicular part.

Female genitalia.— Antrum pentagonal, progressing into a tubular ductus bursae. Ductus is sharply angled in the distal part. The proximal part is tortuous, and in central part a slender, sclerotized, longitudinal plate. Bursa copulatrix vesicular with a pair of horn-like signa. Lamina post-vaginalis with, centrally in abdomen, two blotches beside the antrum, progressing laterally into the apophyses anteriores, which are forked. Apophyses posteriores three and a half times longer than papillae anales.

Ecology.— The moth flies in August and from October till January. The hostplant is unknown.

Distribution.— **Argentina**: Chubut: El Bolson; Rio Negro: San Carlos de Bariloche; Neuquen: San Martin de los Andes. **Chile**: BioBio: Ralco; Maule: Curanipe, RN Altos del Lircay; O'Higgins: RN Rio los Cipreses, Santa Cruz; Santiago: Portezuelo, RN Yerba Loca. **Peru**: Cuzco: Pillahuata

*Lioptilodes neuquenicus* Gielis, 1991  
(figs 121, 250, 383)

*Lioptilodes neuquenicus* Gielis, 1991: 21.

Material.— Holotype ♂: **Argentina**, Neuquen, Zapala, El Marucho, 870 m., 26.x.1981 (Gentili, sta. 34), gent CG 4140 (ZMUC). Paratypes: 1 ♂, same locality and date (Gentili), gent CG 4139, (ZMUC); 2 ♂♂, 1 ♀, **Argentina**, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800-810 m, 21-22.xi.1981, 4.xii.1978. 16.i.1979 (Nielsen & Karsholt, sta. 9; Mision Cientifica Danesa, sta. 7), gent CG 4141, 4143 (ZMUC, CG); 1 ♂, **Argentina**, Neuquen, San Martin de los Andes, 640 m., 17-31.x.1981 (Nielsen & Karsholt, sta. 11) (ZMUC); 1 ♂, **Argentina**, Neuquen, San Martin de los Andes, Quilquihue, 750 m., 15-24.xi.1981 (Gentili, sta. 32) (ZMUC); 1 ♀, **Argentina**, Chubut, Esquel, S.E. shore of Lago Futalaufquen, 600 m., 22.ii.1979

(Mision Cientifica Danese, sta. 48) (ZMUC); 1 ♂, **Peru**, Puno, 5 km. E. Limbani, 28.iii.1987 (Karsholt, Sta. 56), gent CG 4196 (ZMUC); 2 ♀♀, **Chile**, Alto Vilches, Cord. Talca, i.1989 (Elgueta), gent CG 1986, 1987 (MNHC); 1 ♂, 1 ♀, **Chile**, Llanquihue, Petrohue, 600 m., 1.i.1982 (Davis), gent CG 6063 (♀)(USNM); 1 ♂, Maule, Pelluhue, 7.xii.1953 (Pena), gent CG 6186 (CNC).

Diagnosis.— This is one of the smaller species. The male genitalia show a small thorn-shaped process placed laterally near the top of the valva.

Description.— Male, female. Wingspan 14-16 mm. Head appressedly scaled grey-brown. Frontal tuft indicated by some erect scales. Palps one and a half times longer than eye diameter. Antennae shortly ciliated; 7/10 of forewing length. Thorax brown, the distal margin and tegulae brownish white. Mesothorax brown. Abdomen brown, mixed with brownish-white scales. Legs grey-white. Hindlegs with two spur pairs of equal length.

Forewings cleft from 3/4; grey-brown. Markings dark brown, consisting of a poorly defined costal margin; a spot above and behind the base of the cleft and a spot just before the base of the cleft. Fringes grey-brown; in the second lobe almost all of the basal half is darker, in the first lobe there is a darker area in the cleft and at the apex. Underside brown.

Hindwings grey-brown. Fringes grey-brown. Underside brown. Venous scales black, in a double row. The costal row short, the dorsal row longer.

Variation.— The venous scales vary from ferruginous to black. The intensity of the markings is variable.

Male genitalia.— Valvae symmetrical, elongate. Near top of valva a small lateral thorn-shaped process. Sacculus basally wide, cucullus gradually narrowing, giving the valva a more or less hooked appearance. Tegumen stout and wide. Uncus stout. Vinculum rather wide, progressing into the pointed saccus. The saccus of medium length. Juxta arched, wide. Anellus arms just over half the tegumen length. Aedeagus sharply curved, coecum pronounced. No cornuti.

Female genitalia.— Antrum with a semicircular ending, gradually narrowing toward ductus bursae. Ductus bursae slender. Bursa copulatrix vesicular, with a pair of slender, horn-like signa. Lamina post-vaginalis placed centrally with two blotches beside the antrum, turning laterally into the apophyses anteriores which are of intermediate length. Apophyses posteriores three times longer than papillae anales.

Ecology.— The moth flies in October, November and January. The hostplant is unknown.

Distribution.— **Argentina**: Neuquen: Zapala; Rio Negro: San Carlos de Bariloche; San Martin de los Andes, Quilquihue; Chubut: Esquel. **Chile**: Maule: Pelluhue, Alto Vilches; Llanquihue: Petrohue. **Peru**: Puno: Limbani.

Remarks.— The species resembles *L. subantarctica*, but differs in its size and genitalia. It is separated from *L. rionegroica* by the smaller saccus, and the presence of the small lateral thorn-shaped process near the top of valva.

*Lioptilodes zapalaicus* Gielis, 1991  
(figs 122, 251, 384)

Material.— Holotype ♂: **Argentina**, Neuquen, Zapala, El Marucho, 870 m., 26.x.1981 (Nielsen & Karsholt), gent CG 4134 (ZMUC). Paratypes: 2 ♂♂, 5 ♀♀, same locality and data, gent CG 4136 (♂) (ZMUC); 1 ♂, **Argentina**, Neuquen, Juan de los Andes, Collon Cura, 750 m., 4.x.1981 (Nielsen & Karsholt) (ZMUC); 1 ♀, **Argentina**, Chubut, Esquel, 550 m., 1.i.1982 (Nielsen & Karsholt), gent CG 4123 (ZMUC); 1 ♂, Chile, Santiago, La Obra, 25.x.(19)51 (Ramir), gent CG 1961 (MZUC); 1 ♂, **Chile**, Santiago, Quinta Normal, 16.xii.1988 (Elgueta), gent CG 1985 (MNHC); 1 ♂, **Peru**, Arequipa, 15 km. SW. Atico, sea level, 10.iv.1987 (Karsholt, Sta. 69), gent CG 4196 (ZMUC).

Diagnosis.— The species is characterized by the male and female genitalia.

Description.— Male, female. Wingspan 18-21 mm. Head appressedly scaled, cream-white. Palps two and a half to three and a half times eye diameter, protruding, pale brown-white, above cream-white. Second and third segments of equal length, basal segment shorter. Antennae grey-brown, but in basal third a longitudinal white line, shortly ciliated. Thorax, tegulae, mesothorax and abdomen pale ochreous-brown. Hindlegs grey-white, proximal spur pair of unequal length, distal spur pair of equal length.

Forewings cleft from 3/4; colour pale grey-brown. Markings dark brown as follows: some isolated discal scales; a small costal spot at one third; an oblique pair of spots before the base of the cleft, the dorsal spot more basally positioned than the costal spot; a small costal spot above the base of the cleft, and a central one in the first lobe, both terminally bordered by a cream-white costal margin. Fringes grey. Underside brown-grey, top of first lobe cream-white.

Hindwings brown-grey. Along the costa of the first lobe some dark prominent scales. Fringes brown-grey. Underside brown-grey. Venous scales dark to pale ferruginous, in a double row; the costal row longer than the dorsal row.

Male genitalia.— Valvae symmetrical, gradually narrowing toward top. Sacculus basally wide and gradually narrowing towards half the length of the valva, in the distal half with parallel margins. Tegumen bilobed. Uncus stout, moderate. Vinculum arched. Saccus in the shape of a sharp, triangular thorn. Anellus arms reaching up to 3/4 of the tegumen, slender. Aedeagus arched, slender. Coecum pronounced, caulus rather small. Cornutus with fine spiculations.

Female genitalia.— Antrum funnel-shaped, gradually narrowing. Ductus bursae narrow, rather straight. Bursa copulatrix vesicular, with a pair of horn-like signa. Ductus seminalis entering the bursa beside the ductus bursae. The lamina ante-vaginalis centrally placed with two blotches beside the antrum, laterally progressing into the very small, apophyses anteriores. Apophyses posteriores slender, two and a half times longer than the papillae anales.

Ecology.— The moth flies in October, December, January and April. The hostplant is unknown.

Distribution.— **Argentina**: Chubut: Esquel; Neuquen: Juan de los Andes, Zapala. **Chile**: Santiago: Quinta Normal, El Manzano, La Obra. **Peru**: Arequipa: Atico.

*Lioptilodes aguilaicus* Gielis, 1991  
(figs 123, 252, 385)

*Lioptilodes aguilaicus* Gielis, 1991: 23.

Material.— Holotype ♂: **Argentina**, Neuquen, Piedra del Aguila, 23.xii.1978 (Mision Cientifica Danesa, Sta. 15), gent CG 4124 (ZMUC). Paratypes: 1 ♂, 8 ♀♀, same locality, 18.xii.1978, 19.xii.1978, 23.xii.1978



(Mision Cientifica Danesa, Sta. 15), gent CG 4125 (♀)(ZMUC, CG); 1 ♀, **Argentina**, Neuquen, Juan de los Andes, Catan Lil, 825 m., 27.x.1981 (Gentili, Sta. 33), gent CG 4131 (ZMUC); 1 ♀, **Argentina**, Neuquen, Rio Limay, Arroyito, 22.xii.1978 (Mision Cientifica Danesa, Sta. 12) (ZMUC).

Diagnosis.— The species is characterized by its pale colour and markings.

Description.— Male, female. Wingspan 19-23 mm. Head appressedly scaled, brownish-grey. Frontal tuft very small, just bulging out. Palps brownish-grey, one and a half times the eye diameter, underside whitish. Dorsally the second segment with pronounced, erect scales. Antennae half the wing-length; indistinctly ringed grey-brown and brown-grey; shortly ciliated. Thorax and tegulae brownish-grey. Abdomen grey-brown; with dorsally a small brown line, and at the end of segments two to seven a black-brown spot. Legs brownish-grey.

Forewings cleft from 3/4; brown-grey. The following markings in brown; irregular scaling along the costa towards just beyond the base of the cleft; a costal spot in the middle of the first lobe; a double obliquely placed, discal spot, the costo-basal spot larger than the dorso-distal spot; a spot before the base of the cleft. Fringes brown-grey, the basal half paler. Some dark basal scales in the middle of the terminal fringes of the second lobe, and at the apex. Underside grey-brown.

Hindwings brown-grey. Fringes brown-grey. Underside of first two lobes grey-brown and of the third lobe white-grey. Venous scales in a double row, ferruginous. The costal row longer than the dorsal row.

Variation.— The intensity of the markings is variable; the colour may be brown-grey to brown.

Male genitalia.— Valvae symmetrical. Sacculus gradually reaching toward end of valva. Tegumen bilobed, wide. Uncus stout. Vinculum narrow, progressing into a short pointed saccus. Anti-saccus wide and stout. Juxta slender. Anellus arms stout, two thirds of tegumen-length. Aedeagus curved; coecum moderate.

Female genitalia.— Antrum twice as long as wide. Ostium excavated. Ductus bursae slender, with a small sclerotized plate in the distal half. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina post-vaginalis broad, with centrally placed blotches, laterally ending in the small apophyses anteriores. Apophyses posteriores twice as long as papillae anales.

Ecology.— The moth flies in October and December. The hostplant is unknown.

Distribution.— **Argentina**: Neuquen: Piedra del Aguila, Arroyito, Catan Lil.

Remarks.— The species is separated from the allied *L. zapalaica* by the stout anellus arms, and the excavated ostium bursae of the antrum. The saccus in the present species is more slender than in *L. zapalaica*.

*Lioptilodes fetisi* Gielis, 1991  
(figs 124, 386)

*Lioptilodes fetisi* Gielis, 1991: 24.

Material.— Holotype ♀: **Chile**, S(an)t(ia)go, Purgatoria Cond., 22.xii.(19)50 (Fétis), gent CG 1964 (MZUC).

Diagnosis.— The species is characterized by its cream-white colour.

Description.— Female. Wingspan 21 mm. Head appressedly scaled, with some erect



scales at the frons; cream-white. Palps cream-white, twice the eye diameter. Antennae absent. Thorax, tegulae and abdomen cream-white.

Forewings cleft from 3/4, cream-white. Markings pale brown, consisting of two obliquely placed spots before the base of the cleft and irregular scaling along the costa. Fringes greyish-white. Underside cream-white mixed with pale ferruginous.

Hindwings cream-white mixed with sparse pale ferruginous scales. Fringes grey-white. Underside as above. Venous scales brown to ferruginous, in a double row. The costal row longer than the dorsal row.

Male genitalia.— Unknown.

Female genitalia.— Antrum tube-like, two and a half times longer than wide. The junction with the ductus bursae narrowed. Ductus bursae tube-like, as wide as antrum. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina post-vaginalis in central abdominal part with two blotches beside the antrum. The lamina laterally progresses to the small apophyses anteriores. Apophyses posteriores four times longer than papillae anales.

Ecology.— The moth flies in December. The hostplant is unknown.

Distribution.— **Chile**: Santiago.

*Lioptilodes aolepidodactylus* Gielis, 1991  
(figs 125, 253, 387)

*Lioptilodes aolepidodactylus* Gielis, 1991: 25.

Material.— Holotype ♂: **Argentina**, Rio Negro, San Carlos de Bariloche, Nirihuaú, 9.xii.1978 (Mision Cientifica Danesa, Sta. 11) (ZMUC). Paratypes: 5 ♂♂, 5 ♀♀, same locality, 9-11.xii.1978 (Mision Cientifica Danesa, Sta. 11). gent CG 4119 (♀) and 4120 (♂) (ZMUC, CG); 2 ♂♂, **Argentina**, Neuquen, Zapala, El Marucho, 870 m., 26.x.1981 (Gentili, Sta. 34) (ZMUC); 1 ♂, **Chile**, Valdivia, 20 km. S. Valdivia, Rincon de la Piedra, 130 m., 15.xi.1981 (Nielsen & Karsholt, Sta. 15) (ZMUC).

Diagnosis.— The species is characterized by its ferruginous colour and the naked area in the forewing.

Description.— Male, female. Wingspan 23-25 mm. Head appressedly scaled, ferruginous-ochreous. A conical frontal tuft, slightly longer than the eye diameter. Palps erect; parallel to underside of frontal tuft; a little longer than eye diameter; ochreous. Antennae half as long as forewing; ringed ochreous and ferruginous; shortly ciliated. Thorax and tegulae ferruginous. Abdomen ferruginous. Legs grey-white with isolated patches of more ferruginous scales near the coxae.

Forewings cleft from 5/6. Colour ferruginous, mixed with grey-white scales, increasing toward dorsum. A triangular naked area with the top at the discal spot and the bases near the base of the cleft. In this area grey-white scales and a spot at two thirds of the dorsal margin and a smaller one near the angle of the costal and terminal margins. Fringes greyish-white, near the apex of the first lobe and in the cleft greyish. Underside ochreous to dark brown.

Hindwings brown-grey. Fringes grey. Underside dark brown. Venous scales black; in a double row. The costal row half as long as the dorsal one.

Variation.— The colour varies from ochreous to straw-yellow. The forewing spots are variable in intensity.

Male genitalia.— Valvae symmetrical. Sacculus reaching to 3/4 of valva length. Tegumen wide. Uncus stout, rather short. Vinculum wide, progressing into a slender topped saccus. The saccus is twice as long as its width at the base. Anti-saccus regular. Juxta poorly developed. Anellus arms poorly sclerotized, except for the top. Aedeagus curved, slender. Coecum pronounced (but not so extreme as *L. topali*). No cornutus.

Female genitalia.— Antrum flattened, wide. Ductus bursae long and slender. Bursa copulatrix vesicular, with a pair of rather small, horn-like signa. Lamina post-vaginalis regular, laterally showing small protrusions these being the apophyses anteriores. Apophyses posteriores three times longer than the simple papillae anales.

Ecology.— The moth flies from October to December. The hostplant is unknown.

Distribution.— **Argentina**: Neuquen: El Maruicho; Rio Negro: Niriuhau. **Chile**: Valdivia: Rincon de la Piedra; Valparaiso: Las Palmas.

Remarks.— The species differs from the allied *L. testaceus* by the paler colour and the naked area in the forewing. In the male genitalia the saccus is shorter and wider. The female genitalia show a pronounced antrum. The name reflects the presence of the sparsely scaled spot in the forewings.

*Lioptilodes testaceus* (Blanchard, 1852)  
(figs 126, 254, 388)

*Pterophorus testaceus* Blanchard, 1852: 112.

Material.— Holotype: **Chile**, probably Santiago (MNHN).

Diagnosis.— The species is characterized by its reddish-ferruginous colour and the protruding frontal tuft.

Redescription.— Male, female. Wingspan 20-23 mm. Head appressedly scaled, ferruginous. Vertex paler. A prominent frontal conical brush, three times longer than eye diameter. Palps slender, ferruginous, twice the length of the eye diameter. Thorax and abdomen pale ferruginous. Tegulae pale ochreous. Legs pale ochreous.

Forewings cleft from 4/5. The second lobe three times wider than first lobe. Colour ferruginous with a brown discal spot. Fringes in the second lobe ochreous-white with a ferruginous basal section, and in the first lobe brown. Underside reddish-ferruginous.

Hindwings reddish-ferruginous. Fringes ochreous-white. Underside reddish-ferruginous. Venous scales black in a double row; the costal one longer than the dorsal one.

Variation.— The discal spot is not developed in any specimen.

Male genitalia.— Valvae symmetrical. Sacculus well developed, not interrupted, gradually narrowing towards distal end of valva and stretching around top. Tegumen wide. Uncus short, stout. Vinculum stout. Saccus prolonged, basally cleft. Juxta small. Anellus arms half as long as saccus. Aedeagus curved, slender with a protruding coecum.

Female genitalia.— Antrum gradually narrowing and progressing into the slender ductus bursae. Bursa copulatrix vesicular with a pair of, rather small, horn-like signa. Lamina post-vaginalis progressing in a narrow sclerotized ridge, which is angled at the

margin of the seventh sternite, and here protruding into the apophyses anteriores. Papillae anales simple. Apophyses posteriores three to four times longer than papillae anales.

Ecology.— The moth flies in July, and from October to December. The hostplant is unknown.

Distribution.— **Chile:** Antafogasta: Paposo; Concepcion: Concepcion; Coquimbo: Coquimbo, Los Vilos, PN Fray Jorge; Maule: Los Vilches, Tregualemu; Santiago: La Obra, Tobalaba; Valdivia: Valdivia; Valparaiso: Cabildo.

*Lioptilodes parafuscicostatus* Gielis, 1996  
(figs 127, 255)

*Lioptilodes parafuscicostatus* Gielis, 1996: 85.

Material.— Holotype ♂: no locality, no date. (B. & T. Edwards), *Latilobus* micf. Z(eller), Zell. Coll., Walsingham Collection BMNH, gent CG 5011 (BMNH).

Diagnosis.— The species is characterized by its reddish-brown colour and the genitalia.

Description.— Male. Wingspan 23.5 mm. Head appressedly scaled, red-brown. Frontal tuft as big as eye diameter. Palps as long as eye diameter, red-brown. Antennae brown, only partly present. Thorax and tegulae red-brown. Abdomen brown, with a dorso-lateral grey-white longitudinal line, margined ventrally by a dark red-brown line. Legs proximally red-brown, gradually turning grey-white toward distal parts. Hindlegs with two pairs of short spurs of equal length.

Forewings cleft from 5/6; red-brown mixed with white scales. Markings dark-brown consisting of an oblique pair of spots before the base of the cleft and an indistinct cellular spot. Fringes grey-brown with a darker basal line in the second lobe. Underside brown-grey.

Hindwings grey-brown. Fringes grey-brown. Underside brown. Venous scales black, in a double row. The costal row poorly developed, the dorsal row distinct.

Male genitalia.— Valvae symmetrical, sacculus gradually narrowing, reaching around the top of the valva. Tegumen bilobed, wide. Uncus short, stout. Vinculum wide, cleft and progressing into a large saccus. The basal half of the saccus wide and abruptly narrowing into a slender, pointed distal half. Juxta symmetrical. Anellus arms slender, rather short. Aedeagus curved, gradually narrowing to the top. No cornutus. Coecum moderately developed.

Female genitalia: Unknown.

Ecology.— The collecting data are not known. The hostplant is also not known.

Distribution.— **Ecuador:** Rio Napo. Probably **Peru**.

Remarks.— This characteristic species, resembling *L. fuscicostata*, differs from the latter in the colour of the underside of the forewing, especially at the costal margin. In his description of the abdomen Walsingham does not mention the lateral longitudinal lines, but lateral projecting scales. Both characters are different in the specimen described now. The colour and shape of the wings make this species look like *L. fuscicostata*. This similarity is expressed in the name.

*Lioptilodes prometopa* (Meyrick, 1909)  
(figs 128, 256, 389)

*Utuca prometopa* Meyrick, 1909: 13.

Material.— Lectotype ♂: **Peru**, Carabaya, Aguilani, 9000 ft, dry season, vi.1905 (D.), gent BM 18189 (BMNH).

Diagnosis.— The species is characterized by its size, but to a greater extent by the genitalia.

Redescription.— Male, female. Wingspan 27-30 mm. Head appressedly scaled, with prominent frontal tuft, two and a half times eye diameter, ochreous-ferruginous. Palps a little longer than eye diameter. Antennae half as long as wing length. Thorax and abdomen ochreous-ferruginous to ferruginous-brown. Abdomen with a lateral white line. Hindlegs ferruginous with two short spur pairs of equal length.

Forewing cleft from 5/6, reddish-brown. First lobe acute and very narrow, second lobe four times wider than first. Markings consist of a dark area near apex of both lobes and an obliquely placed pair of dots before the base of the cleft, the terminal dot near the base of the cleft, and the proximal one at the end of the cell. Both spots are on the edge of a wedge shaped area with the top near the discal area and its base near the cleft. Fringes greyish, near the apex of both lobes, browish. Underside brown.

Hindwings brown-grey. Fringes whitish-grey. Underside brown. Venous scales black, in a double row. The costal row short, the dorsal row long.

Male genitalia.— Valvae symmetrical. Sacculus extending toward 3/4 of valva length. Tegumen wide. Uncus stout. Vinculum slender, progressing into a stout and long saccus. Antisaccus straight ending in a knob. Juxta slender. Anellus arms rather short and wide, ending in a small sclerotized plate. Aedeagus curved with a well developed coecum.

Female genitalia.— Antrum gradually narrowing and progressing into the ductus bursae. Ductus bursae long and slender. Bursa copulatrix vesicular, slightly triangular, covered with minute spiculae. Signum double in a short horn-like shape. Lamina post-vaginalis waved, laterally progressing into the lamina ante-vaginalis. The lamina ante-vaginalis originates from two blotches besides the antrum, and laterally progresses into the apophyses anteriores. Apophyses anteriores as long as papillae anales. Apophyses posteriores four times longer than papillae anales.

Ecology.— The moth flies in May, June and December. The hostplant is unknown.

Distribution.— **Peru**: Carabaya: Aguilani, Limbani.

Remarks.— The species resembles the larger *L. topali*, but differs in having a more pronounced wedge-like shape on the forewing. This area is more pronounced in *L. alolepidodactyla*, which also differs in its smaller size and yellowish colour. For the relation to *L. ockendeni* see remarks under that species.

*Lioptilodes doeri* Gielis, 1996  
(figs 129, 257, 390)

*Lioptilodes doeri* Gielis, 1996: 84.

Material.— Holotype ♂: **Brazil**, Petropolis, 1881 (Doer), gent CG 5001 (BMNH). Paratypes: 1 ♀, same locality and data, gent CG 5002 (BMNH); 1 ♂, 1 ♀, **Brazil**, RJ, Pq. nal. Itatiaia, 1700 m., 19.x.1985 (V.O. Becker nr. 66493, CG); 1 ♂, 2 ♀♀, **Brazil**, RJ, Pq. nat. Itatiaia, 2400 m., 18.x.1985 (V.O. Becker), gent CG 6036 ♂, 6037 ♀ (Becker nr. 66320, CG). **Peru**: 1 ♂, 1 ♀, Cuzco, 18.viii.1973, 19.viii.1973 (B.V. Ridout), gent CG 5085♂, 5090♀ (BMNH).

Diagnosis.— The species is characterized by its ferruginous colour, and the presence of black fringe hairs near the base of the second cleft of the hindwing in the male.

Description.— Male, female. Wingspan 22-23 mm. Head ochreous-ferruginous, with porrect scales. A frontal tuft, one and a half times eye diameter. Palps as long as frontal tuft. Second segment of palps a little widened. Antennae half as long as wing length. Thorax and tegulae ochreous-ferruginous. Abdominal first segment dorso-laterally silvery-white, other segments ferruginous. Middle pair of legs whitish, hind pair ferruginous. Spur pairs of hind legs short and of equal length.

Forewing ferruginous, cleft from 4/5. Markings brown; consisting of two obliquely placed spots. The terminal spot before the base of the cleft; the other at a dorso-basally position at the end of the cell. Between the spots some isolated brown scales. Fringes ferruginous. Underside ferruginous-brown.

Hindwings ferruginous. Fringes brown-grey; in the male in the costa of the third lobe, near the base of the cleft, a group of black hairs. Underside ferruginous-brown. Venous scales in a double row. The costal with isolated scales, near base blackish and toward termen gradually turning ferruginous. The dorsal row denser, black, and shorter than the costal row.

Male genitalia.— Valvae symmetrical. Valva with sacculus reaching to 3/4 of its length. Cucullus distally curved outward. Tegumen bilobed, wide. Uncus rather short, stout. Vinculum wide, distally progressing into the long and slender, clubbed saccus. Anti-saccus wide. Juxta symmetrical. Anellus arms rather short, ending in a slender top. Aedeagus curved. No cornutus. Coecum poorly developed.

Female genitalia.— Antrum gradually narrowing and progressing into the slender ductus bursae. Bursa copulatrix vesicular, with a pair of slender, horn-like signa. Lamina post-vaginalis linear, progressing into the apophyses anteriores. Apophyses anteriores as long as papillae anales. Apophyses posteriores four times longer than papillae anales.

Ecology.— The moth flies in August and October. The hostplant is unknown.

Distribution.— **Argentina**: Salta: Campo Quijano. **Brazil**: Rio de Janeiro: Petropolis, PN Itatiaia. **Peru**: Cuzco: Cuzco; Lima: Chosica Zarate, Pueblo Quichas.

Remarks.— See under *L. brasiliicus* Gielis.

*Lioptilodes brasiliicus* Gielis, 1996  
(figs 130, 258, 391)

*Lioptilodes brasiliicus* Gielis, 1996: 83.

Material.— Holotype ♂: **Brazil**, Petropolis, 1881 (Doer), gent CG 5004 (BMNH). Paratypes: 1 ♂, same locality and data, gent CG 5003 (BMNH); 1 ♂, 1 ♀, **Brazil**, RJ, Nova Friburgo, 1000 m., 14.x.1985 (V.O. Becker), gent CG 6040 ♂, 6041 ♀ (Becker nr. 66144, CG).

Diagnosis.— The species is characterized by its long frontal tuft and the pale markings on the underside of the hindwing in the second lobe.

Description.— Male, female. Wingspan 21-22 mm. Head cream-white, with porrect scales. A frontal tuft, three times eye diameter, underside mixed with ferruginous scales. Palps one and a half times eye diameter, cream-white mixed ferruginous. Antennae half as long as wing length. Thorax and tegulae cream-white with little ferruginous shading. Mesothorax brown. Abdomen cream-white mixed ferruginous. Legs dirty white. Hindlegs near spur pairs brown, spur pairs of equal length and short.

Forewings pale ferruginous to ferruginous-white, cleft from 4/5. The following markings brown: one indistinct at the base of the cleft, a spot in the cell, at the end of the cell, and an indistinct costal line. Next a diffuse scaling which is pronounced in the basal half of the second lobe. Fringes cream-white, near apex of first and second lobe turning grey-brown. Underside brown.

Hindwings brown-grey. Fringes pale grey, in second lobe basally brownish. Underside brown, with yellow-white areas between the wing base and the base of the first cleft, and beside this area on the dorsum of the second lobe. Venous scales in a double row, the costal one longer than the dorsal one, localized between the pale markings and extending terminally into the second lobe.

Male genitalia.— Valvae symmetrical. Sacculus gradually narrowing, reaching 3/4 of the valva length. Top of valva with a small club-like process, widened. Tegumen bilobed, wide. Uncus short, stout. Vinculum wide, progressing into a long and slender, pointed saccus. Anti-saccus rather wide. Juxta symmetrical. Anellus arms ending in a hooked, rather stout, top. Aedeagus arched. No cornutus. Coecum poorly developed.

Female genitalia.— Ostium weakly excavated. Antrum narrow and funnel-like. Ductus bursae twice as long as the antrum. Ductus seminalis originating from the tip of the bursa copulatrix. Bursa copulatrix with two small horn-like signa. The signa surrounded by spiculae. Lamina ante-vaginalis well developed. Apophyses anteriores as long as papillae anales. Apophyses posteriores three to four times as long as papillae anales.

Ecology.— The moth flies in October. The hostplant is unknown.

Distribution.— **Argentina:** Jujuy: PN Calilegua, Yala. **Brazil:** Rio de Janeiro: Nova Friburgo, Petropolis.

Remarks.— The species shows some resemblance to *L. doeri*, but differs in its paler colour and the markings on the underside of the hindwing. The dark fringes in *L. doeri* are not present in this species.

*Lioptilodes ockendeni* Gielis, 1996  
(figs 131, 259, 392)

*Lioptilodes ockendeni* Gielis, 1996: 85.

Material.— Holotype ♀: **Peru**, Carabaya, Agualani, 9500 ft., viii.1904 (G. Ockenden), dry season, genitalia CG 5007 (BMNH). Paratype ♀: **Peru**, Carabaya, Agualani, 9000 ft., vi.1905 (G. Ockenden), dry season, genitalia CG 5008 (BMNH).

Diagnosis.— The species is characterized by its considerable size and very long frontal tuft.

Description.— Male, female. Wingspan 34-37 mm. Head appressedly scaled, ferruginous. A large frontal tuft four times eye diameter. Palps porrected, two and a half times as long as eye diameter. Antennae 2/5 of wing length. Thorax, tegulae and abdomen pale ferruginous. Legs pale ferruginous. Hindleg with two pairs of spurs of equal length.

Forewings cleft from 5/6, pale ferruginous. Markings brown, consisting of a spot before the base of cleft, at a distance of the length of the cleft. The second spot dorso-basally placed to the first. Fringes grey-brown. Underside ferruginous.

Hindwings ferruginous. Fringes pale ferruginous-brown. Underside ferruginous. Venous scales black, in a double row. The costal row longer than the dorsal one.

Male genitalia.— Genitalia symmetrical. Valva with gradually narrowing sacculus; a short spine in the basal third of the valva; and a membranous extended tip. Tegumen arched. Uncus stout, almost as long as tegumen. Anellus arms two thirds of tegumen, distal part sclerotized. Juxta simple. Vinculum stout. Saccus long and narrow, four and a half times the width of the vinculum. Aedeagus slender and curved in an S shape. No cornuti. Coecum long and slender.

Female genitalia.— Antrum gradually narrowing and progressing into the long and slender ductus bursae. Bursa copulatrix vesicular, with a triangular shape, covered with minute spiculae. Signum double, in shape of a pair of short horns. Lamina post-vaginalis waved above the antrum, laterally progressing into the lamina ante-vaginalis. Lamina ante-vaginalis originating from two blotches besides the antrum; laterally progressing into the apophyses anteriores, which are twice the diameter of the papillae anales. Apophyses posteriores six times the papillae anales.

Ecology.— The moth flies in March, June and August. The hostplant is unknown.

Distribution.— **Bolivia:** Yungas de la Paz. **Peru:** Carabaya: Aguilani.

Remarks.— The species was found amongst the series of *L. prometopa* from which it differs in its size. The female genitalia are closely related to that species, but differ in the more funnel-like shape of the antrum.

*Lioptilodes yungas* **spec. nov.**  
(figs 132, 260)

Material: Holotype ♂: **Bolivia**, Yungas Coroico, 1900 m, 15.v.1950 (W. Forster), gent CG 4212 (ZSM). Paratypes: 1 ♂, same locality, 17.v.1950 (W. Forster) (CG).

Diagnosis.— The species resembles *L. ockendeni* in the wing pattern, but the wingspan is smaller. In the male genitalia, the tip of the valva is partly membranous in *ockendeni*, and has a sharp tip in the present species.

Description.— Male. Wingspan 24 mm. Head appressedly scaled, pale brown, above the eye almost white. Frons with a conical protrusion, three times eye diameter. Palps twice the eye diameter, pale brown, slender, protruding. Thorax, tegulae and abdomen pale brown. Mesothorax whitish. Hind legs basally pale brown, gradually turning white in the tarsal segments. The spur pairs pale brown-white with a longitudinal narrow brown line on the ventral side. Spurs of unequal length, the medial spurs slightly longer than the lateral spurs.

Forewings cleft from 5/6, ferruginous-brown. A pale streak from the base to the mid-dorsum; in the first lobe; and a naked area from the disc to the base of the cleft, this



area is triangular in shape and widens as it approaches the cleft. Fringes pale grey, in the cleft darker. Underside brown, gradually turning whitish along the costa towards the first lobe and at the naked area.

Hindwings and fringes grey-brown. Underside brown; in the centre of the second lobe a large ochreous-white spot. Venous scales black, in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical. Valva elliptoidal for two thirds of its length, followed by an almost parallel segment, which ends in a sharp tip. At the mid-saccular margin a small process. Tegumen simple, large. Uncus two thirds of the tegumen, moderate. Anellus arms well developed, rather blunt. Saccus three times longer than its width at the base, ending in a sharp tip. Aedeagus circular curved. Coecum well developed. No cornutus.

Female genitalia.— Unknown.

Ecology.— The moth flies in May, at an altitude of 1900 metres. The hostplant is unknown.

Distribution.— **Bolivia**: Yungas Coroico.

Etymology.— The species is named after the region in which it was collected.

*Lioptilodes antarcticus* (O. Staudinger, 1899)  
(figs 133, 261, 393)

*Mimaesoptilus antarcticus* Staudinger, 1899: 114.

Material.— Type ♂ (in litt.): probably lost (ZMHB).

Diagnosis.— The species is characterized by its colour and the opposite spots at the base of the cleft. The male genitalia are characteristic.

Redescription.— Male, female. Wingspan 20-21 mm. Head apressedly scaled, grey. A frontal conical tuft half the size of the eye diameter. Palps correct, twice as long as the eye diameter. Antennae 2/5 of forewing length. Thorax and tegulae grey; distal margins grey-white. Abdomen grey: first segment dorsally grey-white. Legs grey.

Forewings cleft from 5/6. Colour grey. Markings grey-black. The markings consist of a small basal line, a discal point, and two spots at the base of the cleft. These last spots are separate and the dorsal one has an extension, forming a small line, toward the base. Next to these markings, a poorly defined group of black scales on the dorsum, the costa of the first and second lobe and at the costa near the base of the cleft. There are some isolated grey-white scales, predominately on the costa and the dorsum. At the wing base a small grey-white dorsal spot. Fringes grey. Underside dark brown-grey.

Hindwings brown-grey. Fringes grey. Underside brown-grey. Venous scales ferruginous, in a double row. The costal row half as long as the dorsal row.

Male genitalia.— Valvae symmetrical. Sacculus centrally indented; slightly longer than cucullus. Tegumen almost triangular. Uncus slender, long. Vinculum cleft, progressing in a narrow pointed saccus; anti-saccus regular. Juxta small, triangular. Anellus arms slender, long. Aedeagus curved, slender, long. Coecum little pronounced. No cornutus.

Female genitalia.— Antrum club-like enlarged, almost reaching the margin of the eighth sternite, two and a half times longer than wide. Ductus bursae slender, with a

single twist, and a small sclerotized plate in the centre. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina post-vaginalis enlarged into a bilobed end-plate of the seventh sternite, with proximally the small apophyses anteriores. Laterally of the plate of the seventh sternite a smaller lobe, almost half as long as the central plate. The apophyses posteriores three times longer than the papillae anales.

Ecology.— The moth flies in May, October, December and January. The moth was bred from an *Adesmia* sp.: Chile, Huasco, Corrizal Bajo, 27.xi.1987 (JE Barriga) (MZUC).

Distribution.— **Argentina:** Tierra del Fuego; Santa Cruz: Lago Argentina. **Chile:** Aconcagua: Los Andes; Araucania: Lonquimay; Charabuco: Calru; Coquimbo: Canela Baja, Combarbala, Coquimbo, Illapel, Vicuña; Huasco: Corrizal Baja; Maule: RN Altos del Lircay, RN Radal Seite Tazas; Nuble: Volcan Chillan; O'Higgins: RN Rio los Cipreses; Santiago: Portezuelo, RN Yerba Loca, Tobalaba, Buice, Tiltil; Valpariaso: Cabildo, Olmué, Putaendo.

Remarks.— The type of this species was reported lost by Prof. Dr H.-J. Hannemann (pers. comm., 1988). The description by O. Staudinger, who knew the European species of the genus *Stenoptilia* well, was very accurate. By comparing this species with the European species *Stenoptilia pelidnodactyla* Stein, he made it possible to redescribe and illustrate the species.

*Lioptilodes tribonia* (Meyrick, 1921)  
(figs 134, 262, 394)

*Stenoptilia tribonia* Meyrick, 1921: 423.

Material.— Lectotype ♂: **Peru**, Matucana, 7780 ft., vii.(19)14 (P(arish)), gent BM 18441 (BMNH) [examined]. Paralectotypes: 3 ♀♀, 1 without abdomen, same locality and date, gent BM 18442 (BMNH) [examined].

Diagnosis.— The species is characterized by the genitalia.

Redescription.— Male, female. Wingspan 15-16 mm. Head appressedly scaled ferruginous; a small frontal protrusion, half the eye diameter. Palps ferruginous, twice the eye diameter; second segment extended, densely scaled; third segment small. Antennae ringed grey-white and brown, shortly ciliated. Thorax, tegulae, mesothorax and abdomen ferruginous. Hindlegs grey-white: first spur pair of unequal length; second spur pair basally with a ring of brown scales and of equal length.

Forewings cleft from 3/4; colour ferruginous, mixed with ochreous scales. An indistinct discal brown spot, an oblique spot before the base of the cleft and a dark area at the apex of both lobes. On the costa a pale ochreous streak just beyond the base of the cleft. Fringes ferruginous-ochreous. Underside ferruginous with pale costal streak as above. Hindwings ferruginous-grey. Fringes pale ferruginous-white. Underside pale ferruginous. Venous scales orange-ferruginous, in a double row.

Variation.— In some specimens the brown scaling of the spots extends into the outer area of the second lobe and around the base of the cleft.

Male genitalia.— Valvae symmetrical. Basal two thirds trapezoidal then becoming narrower with the top third club-like. Tegumen bilobed; uncus moderate, pointed. Vinculum arched with a slender, pronounced saccus, of one third of the length of the valva. Anti-saccus stout, gradually narrowing. Anellus arms slender, almost as long

as tegumen. Aedeagus arched, slender; with slender sclerotized margin. Coecum pronounced.

Female genitalia.— Antrum weakly sclerotized. In ductus bursae, near antrum, a sclerotized plate ending in a point near antrum. Bursa copulatrix vesicular, with a pair of horn-like signa, which are surrounded by numerous spiculae. Lamina ante-vaginalis pronounced, with two stout apophyses anteriores. Apophyses posteriores slender, three times the diameter of papillae anales.

Ecology.— The moth flies in January and July. The hostplant is unknown.

Distribution.— **Chile:** Valparaiso: Llai Llai; Santiago: Portezuelo. **Peru:** Lima: Lima, Choisica Zárate; Matucana.

*Lioptilodes limbani* Gielis, 1996  
(figs 135, 263, 395)

*Lioptilodes limbani* Gielis, 1996: 84.

Material.— Holotype ♂: **Peru**, Carabaya, Limbani, 9500 ft., dry season, v.(19)04 (G. Ockenden), gent CG 5048 (BMNH). Paratype: 1 ♂, **Peru**, Puno, 15 km E Ayaviri, Laguna Asnacocha, 3940 m, 26-27.iii.1987 (O. Karsholt, sta 54), gent CG 3467 (ZMUC).

Diagnosis.— On external characters this species can hardly be separated from *L. albistriolatus*. However, the male genitalia are characteristic.

Description.— Male, female. Wingspan 25 mm. Head appressedly scaled, pale brown-grey. Palps protruding, pale brown-grey, slender. Antennae shortly ciliated, pale brown-grey mixed with white scales. Thorax and abdomen misshapen and cannot be reliably described. Hindlegs brown-grey, with two pairs of short spurs of equal length.

Forewing cleft from 7/10, colour pale brown-grey, speckled with pale brown scales. An oblique double spot at the base of the cleft; a dark costal line enlarged into a spot at the costa above the base of the cleft. This is followed by an ochreous-white spot and finally brown again as the line reaches the apex. Fringes grey. Underside grey-brown and costal markings as above.

Hindwings brown-grey. Fringes grey. Underside grey-brown. Venous scales in a double row, ferruginous, the costal row shorter than the dorsal row.

Male genitalia.— Valvae symmetrical. Basal half of valva wide, abruptly narrowing into a slender club-like ending. Vinculum arched. Saccus slender and long, as long as the length of the uncus. Tegumen regular, arched. Uncus as long as the height of the tegumen. Anellus arms pronounced, almost as long as the height of the tegumen. Aedeagus strongly curved, with a well developed coecum.

Female genitalia.— Ostium funnel-shaped, laterally extended. Antrum funnel-shaped as an extension of the ostium. Ductus bursae long and slender. Ductus seminalis arising from the junction between the ductus bursae and the bursa copulatrix. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis composed of two semicircular structures: distally ending in a club-like shape; ventrally ending in a bifid shape, one part of the fork being the apophyses anteriores. Lamina post-vaginalis arched around the ostium. Apophyses posteriores two and a half times the papillae anales.

Ecology.— The moth flies in April and May, at altitudes of 3000 to 4000 metres. The hostplant is unknown.

Distribution.— **Bolivia:** Illimani. **Peru:** Puno: Limbani.

*Lioptilodes cocodrilo* **spec. nov.**

(figs 136, 264, 396)

Material.— Holotype ♂: **Ecuador**, Napo, 15 km SE Cosanga, Cocodrilo, 0°38'56"S 77°47'34"W, 1850 m, 30.ix.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4946 (CG). Paratypes: 2 ♂♂, 1 ♀, same locality and date (CG); 6 ♂♂, same locality, 1 x.2002 (C. & F.K. Gielis & V. Pelz) (CG); 5 ♂♂, 1♀, sam locality, 25.x.2002 (C. & F.K. Gielis & V. Pelz) (CG); 10♂♂, 2 ♀♀, same locality, 27.x.2002 (C. & F.K. Gielis & V. Pelz) (CG); 1 ♂, **Ecuador**, Napo, 10 km SSE Cosanga, 0°37'13"S 77°49'29"W, 2180 m, 23.x.2002 (C. & F.K. Gielis & V. Pelz) (CG); 1 ♂, same locality, 26.x.2002 (C. & F.K. Gielis & V. Pelz) (CG); 1 ♂, **Ecuador**, Napo, 12 km SSE Cosanga, 0°37'26"S 77°48'51"W, 2120 m, 24.x.2002 (C. & F.K. Gielis & V. Pelz) (CG); 1 ♀, **Ecuador**, Morona-Santiago, Macas, Preano-Alshi, 5 km SE Alshi, 1700m, 23.ix-4.x.2000 (V. Pelz), gent CG 4535 (CG); 2 ♂♂, 1 ♀, **Ecuador**, Tungurahua, 20 km E Baños, San Francisco, 1°24'39"S 78°14'23"W, 1290 m, 26.ix.2002 (C. & F.K. Gielis & V. Pelz) (CG); 2 ♂♂, same locality, 20.x.2002 (C. & F.K. Gielis & V. Pelz) (CG); 3 ♂♂, same locality, 21.x.2002 (C. & F.K. Gielis & V. Pelz) (CG); 1 ♀, **Ecuador**, Napo, PN Cajas, Laguna Llaviuco, 2°50'38"S 79°8'35"W, 3225 m, 12.x.2002 (C. & F.K. Gielis & V. Pelz) (CG); 1 ♀, **Ecuador**, Azuay, Cajas, 3150 m, 23.xii.1992 (V.O. Becker) (V.O. Becker nr 103251); 5 ♂♂, 1 ♀, **Ecuador**, Zamora-Chinchiipe, 22 km E Loja, PN Podocarpus, San Francisco Ranger Stt, 3°59'15"S 79°5'37"W, 9.x.2002 (C. & F.K. Gielis & V. Pelz) (CG); 2 ♂♂, **Ecuador**, Carchi, Maldonado, 2200 m, 9-11.i.1993 (V.O. Becker) (V.O. Becker nr 105094).

Diagnosis.— The species is characterized by the shape of the saccus in the male genitalia and the whole structure of the female genitalia.

Description.— Male, female. Wingspan 16 mm. Head and collar ferruginous-brown. Head appressedly scaled, collar with long, erect, bifid scales. Palps twice eye diameter, protruding, second segment distally widened, dorsally cream and ventrally ferruginous. Antennae shortly ciliated, with blocks of white and ferruginous-brown colour. Thorax and tegulae ferruginous-brown. Mesothorax ferruginous mixed with numerous white scales. Fore and mid legs white with longitudinally arranged brown scales. Hind legs white, with two spur pairs. The lateral spurs in both pairs longer than the medial spurs and the proximal pair longer than the distal pair.

Forewings cleft from two thirds, ferruginous-brown. Dark brown spots in the discus and around the base of the cleft, and diffuse darker patches in the apical areas of both lobes. A longitudinal white costal streak at one third of first lobe; numerous white scales arranged in small lines in the dorsal area of the wing from the base to the tip of the second lobe, less distinct in the costal area. Fringes dark grey, at the termen of the second lobe with a continues row of basal black scales from the apex to the anal angle. Underside chestnut brown, with a white streak at the costa as above and white from the middle of the costa of the first lobe to the apex.

Hindwings and fringes dark brown-grey. Underside chestnut brown, with scattered white scales in the first and third lobes. Venous scales dark ferruginous, in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical. The basal half with parallel margins, the distal half strongly narrowed, ending in a club-like process. The sacculus gradually narrowing, followed by a narrow, basally directed, slender process. Tegumen simple. Un-

cus as long as tegumen, moderate. Anellus arms well developed, with sclerotized tips. Saccus strong, gradually narrowing, two and a half times longer than the basal width, ending in a hook-like tip. Aedeagus semicircularly curved. Coecum well developed, moderately wide. No cornutus.

Female genitalia.— Ostium small, antrum not well defined. Ductus bursae slender, long. Bursa copulatrix vesicular, with a pair of horn-like signa. Lamina ante-vaginalis slightly excavated, progressing into the margin of the seventh tergite. Lamina post-vaginalis with a large bilobed distal extension. Apophyses anteriores short, half the papillae anales; medially followed by a second short dentate process. Apophyses posteriores long and slender, four times papillae anales.

Ecology.— The moth flies in September, October, December and January, at altitudes of 1280 to 3225 metres. The hostplant is unknown.

Distribution.— **Ecuador:** Carchi: Maldonado; Napo: Cosanga, Cocodrilo; Tungurahue: San Francisco; Morona-Santiago: Macas; Azuay: PN Cajas; Morona-Chinchipe: PN Podocarpus.

Etymology.— The name recalls the Cocodrilo Ranger Station, where the species was present in abundance.

Remarks.— The species resembles *L. tribonia*, which is the same size, but has differences in the genitalia. *Lioptilodes limbani*, is bigger and also has differences in the anatomy.

### *Michaelophorus* Gielis, 1999

*Michaelophorus* Gielis, 1999: 149.— Type species: *Oxyptilus nubilus* Felder & Rogenhofer, 1875, by original designation, as a replacement name for *Shafferia* Gielis, 1993.  
*Shafferia* Gielis, 1993: 36.— Homonym of *Shafferia* Walcott, 1917 (Crustacea).

Description.— Head appressedly scaled; no frontal tuft. Palps slender, upcurved, one and a half times eye diameter. Forewings cleft, in most species, from approximately two thirds; no costal triangular marking; in most species both lobes with a distinct termen. Forewing veins: R1 absent; R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from angle of cell; Cu2 from cell.

Hindwings in most species, along the costa of third lobe a row of prominent black scales, a less intense row on the dorsum. On the dorsum a subapical black scale-tooth. The third lobe has a single vein.

Male genitalia.— Genitalia symmetrical. Valva elongate to oval with a cucular spine which may be large. Tegumen arched. Uncus well developed. Vinculum arched. Saccus poorly developed. Aedeagus conical, curved.

Female genitalia.— Ostium centrally positioned. Antrum narrow, slender and protruding into slender ductus bursae. Ductus bursae without sclerite. Bursa copulatrix vesicular, with in most species, a pair of horn-like signa.

Ecology.— Unknown.

Distribution.— Neotropical region.

Remarks.— The genus contains two groups of species. So far all species are placed in the current genus, but future examination of additional material may show otherwise.

*Michaelophorus nubilus* (Felder & Rogenhofer, 1875)  
(figs 137, 265, 397)

*Oxyptilus nubilus* Felder & Rogenhofer, 1875: plate 140, fig. 53.

*Platyptilia virilis* Meyrick, 1916: 558.

Material.— Holotype of *Oxyptilus nubilus*: ♀, **Colombia**, Bogota (Lindig) (BMNH).

Diagnosis.— The species is characterized by the dark brown colour of the forewing with a faint subterminal line on both lobes, a pale-encircled discal spot and the ventral part of the abdomen white.

Description.— Male, female. Wingspan 12-15 mm. Head appressedly scaled, dark brown. Collar with some erect scales, dark brown. Frons dark brown. Palps twice eye diameter, slender, dark brown with some white scales at the junctions between the first and second, and second and third segments. Antennae dark brown with alternating white scales on the segments. Thorax, tegulae and mesothorax dark brown, ventrally shining white. Abdomen dark brown, ventrally white. Forelegs brown, distally darkening, femur with white longitudinal line. Mid and hindlegs dark brown, interrupted with white. At base of the spur pairs a scale brush, spur pairs of equal length, dark brown, centrally whitish.

Forewings cleft from two thirds, dark brown. Markings whitish, consisting of a faint subterminal line in both lobes, the encircling of discal spot and a small white costal spot above the base of the cleft. Fringes dark brown with a continuous basal line of scales in the termen of both lobes and two darker brushes on the dorsum of the second lobe. Underside dark brown, markings white, as above.

Hindwings dark brown. Fringes dark brown, with scale-teeth at the anal angle of second lobe and apical at the third lobe. Underside dark brown. Venous scales black, in a double row, the costal row extending into the second lobe.

Male genitalia.— Valvae symmetrical, trapezoidal in shape. Top of valva with pronounced setae. A large, curved cucullar spine. Tegumen large and stiff, keeping valvae apart. Uncus as long as tegumen, curved. Saccus small, arched. Vinculum well developed, with two long and heavily sclerotized anellus arms. Aedeagus long, slender and curved.

Female genitalia.— Ostium round, posteriorly positioned in the oval antrum. Ductus bursae long and slender. Bursa copulatrix vesicular. No signum. Apophyses anteriores as long as papillae anales. Apophyses posteriores twice to two and a half times papillae anales.

Ecology.— The moth flies in January, February, and July. The larvae feed on leaves of cocoa, *Theobroma cacao* L. (Malvaceae).

Parasites.— *Actia panamensis* Curran (Diptera, Tachinidae).

Distribution.— **Brazil**: Palmira, Belém. **Colombia**. **Costa Rica**: Limon: Siguerres, Bristol. **Trinidad**: Arima Valley, San Augustina.

*Michaelophorus dentiger* (Meyrick, 1916)  
(figs 138, 266, 398)

*Oxyptilus dentiger* Meyrick, 1916: 557.

Material.— Holotype ♂, **British Guyana**, Georgetown, iv (Parish), prep BM 18855 (BMNH).

Diagnosis.— The species is characterized by the brown-grey colour.

Redescription.— Male, female. Wingspan 13-15 mm. Head brown-grey, appressedly scaled. Collar with some erect scales. Palps grey-brown, speckled white, slender, one and a half times eye diameter. Second segment of palps has no extending hair brush along third segment. Antennae shortly ciliated, ringed black-brown and grey-white. Thorax and tegulae brown-grey. Mesothorax ferruginous-white. Hindlegs black-brown, with two pairs of spurs of equal length. Spurs dark brown, speckled with white scales, a scale brush surrounding both pairs of spurs.

Forewings cleft from 3/5, colour brown-grey. Markings black-brown consisting of a discal spot, a spot at base of cleft, a transverse band centrally in first lobe and an apical dark area in both lobes. A white costal spot a third of the way along the first lobe, another in the middle of the termen in second lobe, and an ochreous subterminal line on both lobes. Fringes grey. On the dorsum scale-teeth at one third, halfway and two thirds, around the anal angle and at the termen near the apex of both lobes. Underside dark brown, with pale markings as above.

Hindwings grey. Fringes grey. On dorsum of third lobe a scale-tooth at 4/5, and some dark, prominent scales at the apex and between the scale-tooth and wing base. Underside grey-brown. Venous scales black, in a single row.

Male genitalia.— Valvae symmetrical, largely rounded, with a curved cucullar spine before the tip. Tegumen simple, arched. Uncus extending from tegumen, poorly differentiated. Saccus rather well developed, with some sclerotized ridges. Vinculum reaching towards tegumen with the anellus arms extending backwards. Aedeagus small, curved.

Female genitalia.— Ostium slightly excavated. Antrum funnel-shaped, rather short. Ductus bursae long, slender. Bursa copulatrix vesicular, centrally covered by minute spiculae, and a pair of signa in a longitudinal moon-shape. Apophyses posteriores three times longer than papillae anales. Apophyses anteriores short, half the length of papillae anales. A lateral vesicular intrusion at the junction between the sixth and seventh sternites.

Ecology.— The moth flies all year round, probably in a series of successive generations. The actual time of appearance is related to the climatological and environmental circumstances. The hostplant is unknown, although it has been collected flying among *Hippomane mancinella*.

Distribution.— **Argentina**: Catamarca: Belen, Andaluca; La Rioja: Andalgala, Vallecito, San Blas; Tucuman: San Javier; Salta: Campo Quijano, Senda, Cafayate; Jujuy: PN Calilegua. **Brazil**: Distrito Federal: Planaltina; Matto Grosso: Amolar, Unai. **British Guyana**: Georgetown. **Cuba**: Guantanamo: Imias. **Curaçao**: Asencion. **Ecuador**: Guayas: La Libertad. **Honduras**: El Zamorano. **Nicaragua**: Leon, Cararo. **Paraguay**: Alto Parana: Itabo; Paraguarí: Sapucay. **Venezuela**: Aragua: Rancho Grande.

Remarks.— The male genitalia show some variation in the shape of the valvae, developing into a lanceolate appearance and a reduced length of the saccular spine.



*Michaelophorus indentatus* (Meyrick, 1930)  
(figs 139, 267, 399)

*Oxyptilus indentatus* Meyrick, 1930: 564.

Material.— Lectotype ♂: **U.S.A.**, New Mexico, Bent, 7000', x.(19)27, gent CG 3587 (BMNH). Paralectotype: ♀, **U.S.A.**, Texas, Fort Davis, 5000', x (BMNH).

Diagnosis.— The species is characterized by the weakly marked grey-brown forewings; the third lobe of the hindwing which has a row of prominent scales along the costa and the subterminal dorsal scale-tooth; the dorsum of the abdomen has mirrored, white zigzag lines.

Description.— Male, female. Wingspan 12 mm. Head dark brown, appressedly scaled. Collar with some erect scales. Palps dark brown, slender, curved upwards, one and a half times eye diameter. Antennae ringed dark brown and white, shortly ciliated. Thorax and tegulae dark brown. Mesothorax white. Abdomen dorsally dark brown, with mirrored zigzag white lines on segments one to four and ventrally with a grey-white colour. Hindlegs white with brown scale brushes around the base of the spur pairs, a brown basal half of the distal tibial segment and distally brown in the tarsal segments; the first tarsal segment basally brown.

Forewings cleft from two thirds, grey-brown. On the wing a faint, sparse ochreous scaling, a faint subterminal line in both lobes and an ochreous spot at one third of the costa of the first lobe. Fringes grey with large black scales at the termen of the first lobe, the second lobe and basally along the anal angle of the second lobe. Fringes in cleft dark brown. Scale-teeth along the dorsum at halfway, two thirds and 3/4. Underside dark brown, with a white costal spot and subterminal lines as above.

Hindwings grey-brown. Fringes brown-grey. Prominent black scales in a row along the costa of the third lobe, less intense along the dorsum. On the dorsum a subapical black scale-tooth. Underside grey-brown. Venous scales ferruginous, in a single row.

Male genitalia.— Valvae symmetrical. Sacculus blister-like and widened. A curved spine at the saccular part of the tip of the valva, as long as cucullar half of wing. Tegumen and uncus much reduced. Vinculum arched, with a T shaped saccus. Anellus arms moderately long and slender. Aedeagus slightly curved, without cornutus.

Female genitalia.— Ostium excavated. Antrum weakly sclerotized, narrow. Ductus bursae slender. Ductus seminalis originating just above the junction between the ductus bursae and the bursa copulatrix. Bursa copulatrix vesicular with two triangular signa. Lamina ante-vaginalis laterally arched. Lamina post-vaginalis centrally with two longitudinal processes. Apophyses anteriores as long as papillae anales. Apophyses posteriores four to five times papillae anales.

Ecology.— The moth flies in April and from September to November. The hostplant is unknown.

Distribution.— **Belize**: Cayo: Chiquibul For Res. **Brazil**: Distrito Federal: Estacao Florestal Cabeça do Veado. **Costa Rica**: Tamarindo Playa. **Mexico**: Baja California del Sur: Cabo Pulmo, La Paz; Jalisco: Est Biol Chamela. **Panama**: La Chorrera.

*Michaelophorus margaritae* **spec. nov.**  
(figs 140, 268, 400)

Material.— Holotype ♂: **Ecuador**, Manabi Prov, 4 km S Punto Lopez, 80 m, 3-5.v.2001 (V. Pelz/), gent CG 4524 (CG). Paratypes: 2 ♀♀, **Ecuador**, Manabi Prov, 4 km S Punto Lopez, 80 m, 3-5.v.2001 (V. Pelz), gent CG 4526 (CG); 1 ♂, 3 ♀♀, **Ecuador**, Manabi Prov, Puerto Rico, 25 m, 1-2.v.2001 (V. Pelz) (CG).

Diagnosis.— The species is characterized by the male and female genitalia.

Description.— Male, female. Wingspan 9-11mm. Head appressedly scaled, brown-black. Between the base of the antennae some white scales. Collar with some erect, long, bifid scales, brown-black. Palps curved upwards, brown-black mixed with numerous white scales. Antennae shortly ciliated, ringed brown-black and white. Thorax and tegulae brown-black. Mesothorax whitish. The first six segments of the abdomen brown-black with a curved white dorso-lateral line; segments seven to nine brown-red; abdomen ventrally white. In the fore and mid legs the coxa and femur are white and the distal segments brownish. In the hind legs the coxa and base femur are whitish, distally tinged with dark brown, at the base of the spurs brown-black scale bristles; with two pairs of spurs, the proximal spur pair, very long and longer than the distal pair, and the lateral spurs shorter than the medial spurs.

Forewings cleft from 4/7, brown-black with purplish gloss; along the costa some white scales, first lobe with a small costal spot at one third and a subterminal line in both lobes. Fringes black, with scale bristles at the following points: the anal region of the first lobe and scattered large scales on the dorsum, the second lobe with two large bristles, at the apex to mid-termen and from mid-termen around the anal area, on the dorsum of the wing at half way and two thirds. Underside black-brown, with white spots as above.

Hindwings and fringes grey-brown. In the fringes of the third lobe on the costa from the middle to the apex with isolated large black scales; and on the dorsum a larger group of black scales near the base, in middle, two small groups at 2/5 and 3/5, and subapical. Underside grey-brown, in first lobe mixed with white scales. Venous scales black, in two rows, the costal row the longer.

Male genitalia.— Genitalia symmetrical. Valva with narrow basal stalk; abruptly widening and toward the tip in distal third gradually narrowing. In the middle of the valva, three quarters of the way along is a long and slender spine, half the length of the valva, and near the base of this spine a small spicula. Tegumen arched, and progressing into the equally long uncus. Vinculum semicircular, with a triangular extension. Aedeagus tapering. No cornutus or coecum.

Female genitalia.— Ostium dish-like. Antrum funnel-shaped, progressing into the slender ductus bursae. Bursa copulatrix vesicular, with a pair of signa. Signa as a small spine in a spiculated plate. Lamina ante-vaginalis ridge-like with two lateral spines on each side (one being the apophyses anteriores), and a central extension covering the antrum and ostium. Lamina post-vaginalis with two longitudinal extensions in the centre of the eighth sternite. Apophyses posteriores slender, three times the papillae anales.

Ecology.— The moth flies in May. The hostplant is unknown.

Distribution.— **Ecuador**: Manabi: Punto Lopez.

Etymology.— The species is named after Margarita Pelz, the wife of the collector. She is a great support in the studies of the Ecuadorian entomological fauna.



Fig. 1. *Ochyrotica fasciata* Walsingham. Dominica, Clark Hall, 11.i.1965 (J.F.G. Clarke), gent CG 3420 (USNM).



Fig. 2. *O. placozona* Meyrick. Lectotype. Peru, Jurimaguas, iii.(19)20 (Parish), gent BM 17994 (BMNH).



Fig. 3. *O. mexicana* Arenberger. Venezuela, Ar, Rancho Grande, 1100 m, 24-31.x.1966 (S.S. & W.D. Duckworth), gent CG 3422 (USNM).



Fig. 4. *O. gielisi* Arenberger. Holotype. Panama, Chiriqui, V. de Chiriqui, 915-2120m, (19)19 (Chapman), gent BM 18626 (BMNH).



Fig. 5. *L. fortunatus* (Meyrick). Holotype. Brazil, Teffe, xiii.(19)19 (Parish), gent BM 18857 (BMNH).



Fig. 6. *L. hipparchus* (Meyrick). Lectotype. Brazil, Para, vi.(19)19 (Parish), gent BM 18476 (BMNH).

Note. Illustrations are reproduced in a variable magnification.



Fig. 7. *L. trinidad* Gielis. Paratype. Trinidad, W(est) I(ndies), Lasaivar, Maracas Valley, 5.ii.1961 (CG).



Fig. 8. *L. tungurahue* **spec. nov.** Holotype. Ecuador, Tungurahue, 20 km E Baños, San Francisco, 1°24'39"S 78°14'23"W, 1290 m, 26.ix.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4927 (CG).



Fig. 9. *L. panamaensis* **spec. nov.** Holotype. Panama, Canal Zone, Barro Colorado Island, 24.iii.1978 (Silberglied, ao), gent CG 4885 (USNM).



Fig. 10. *L. angulatus* **spec. nov.** Paratype. Brazil, Goiás, Alto Paraiso, 1100 m, 4.x.1985 (V.O. Becker) (V.O. Becker nr 64683).



Fig. 11. *L. duchicela* **spec. nov.** Paratype. Ecuador, Carchi, Maldonado, 2200 m, 9-1.i.1993 (V.O. Becker), gent CG 4899 (CG).



Fig. 12. *L. neales* (Walsingham). Holotype. Mexico, Tabasco, Teapa, iii (H.H. Smith) (BMNH).



Fig. 13. *L. sochchoroides* (Fletcher). Holotype. Brazil, Ega, no date (Bates) (BMNH).



Fig. 14. *L. zonites* (Meyrick). Lectotype. British Guyana, Bartica, ii.(19)13 (Parish), gent BM 18470 (BMNH).



Fig. 15. *L. gratus* (Meyrick). Holotype. Peru, Jurimaguas, iii (Parish), gent BM 18858 (BMNH).



Fig. 16. *Sochchora albipunctella* Fletcher. Holotype. (Brazil), Ega, no date (BMNH).



Fig. 17. *S. donatella* Walker. Holotype. (Brazil), Ega, no date (Bates), gent BM 1696 (BMNH).



Fig. 18. *S. dotina* Walsingham. Venezuela, Aragua, Rancho Grande, 1100 m, 8-14.viii.1967 (RW Poole), gent CG 4865 (USNM).





Fig. 19. *Quadriptilia philorectis* (Meyrick). Peru, Carabaya, La Orosa, 950 m, ix.1905 (Ockenden) (BMNH).



Fig. 20. *Q. rectangulodactylus* Gielis. Holotype. Peru, Carabaya, Agualani, 2750 m, vi.1905 (G. Ockenden), dry season, gent CG 5012 (BMNH).



Fig. 21. *Q. obscurodactylus* Gielis. Holotype. Colomb(ia), West Cord., Rio Aguacatal, 2000 m, n.d. (Fassl), gent CG 5069 (BMNH).



Fig. 22. *Melanoptilia arsenica* (Meyrick). Lectotype. Peru, Iquitos; Jurimaguas, iii.1920 (Parish), gent CG 5020 (BMNH).



Fig. 23. *M. nigra* **spec. nov.** Holotype. Ecuador, Pastaza, 11 km N Puyo, La Florida, 1°23'35"S 77°58'38"W, 1090 m, 27.ix.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4928 (CG).



Fig. 24. *M. chalcogastra* (Meyrick). Lectotype. British Guyana, Mallali, iii (Parish), gent BM 18475 (BMNH).



Fig. 25. *M. haemogastra* (Meyrick). Lectotype. Peru, Cocapata, 3660 m, (19)20, gent BM 18851 (BMNH).



Fig. 26. *Platyptilia gentiliae* Gielis. Holotype. Argentina, Neuquen, Junin de Los Andes, Catán, 825 m., 20.x.1981 (Gentili, sta. 33), gent CG 4092 (ZMUC).



Fig. 27. *P. davisi* Gielis. Holotype. Chile, Nuble Prov., Shangri-la, SW side Volcan Chillan, 1600 m., 19-21.i.1979 (Davis & Akerbergs), gent CG 6051 (USNM).



Fig. 28. *P. vilema* B. Landry. Paratype. Ecuador, Galapagos Islands, Isla Isabela, Volcan Darwin, 1000 m, 18.v.1992 (B. Landry) (CG).



Fig. 29. *P. sennopis* Meyrick. Holotype. Brazil, Guandu, Espirito Santo, 1920 (F. Hoffmann) (NMW).



Fig. 30. *P. gravior* Meyrick. Holotype. Costa Rica, Irazu, v (Reimoser) (NMW).





Fig. 31. *P. spicula* **spec. nov.** Holotype. Surinam, Paramaribo, v.1965 (v. Brussel), gent CG 3447 (USNM).



Fig. 32. *P. carduidactylus* (Riley). USA, California, Half Moon Bay, 12.xii.1937 (Lange) (BMNH)



Fig. 33. *P. thyellopa* Meyrick. Lectotype. Colombia, Mt. Tolina, 3800 m, vii.1920 (BMNH).



Fig. 34. *P. anniei* Gielis. Holotype Ecuador, Pichincha, Rd Quito/Chiriboga km 40, 2480 m, 22.iii.1982 (N. Venedictoff), gent CG 3569 (AME).



Fig. 35. *P. onias* Meyrick. Holotype. Peru, Lima, 150 m, viii (Parish) (BMNH).



Fig. 36. *Gillmeria pallidactyla* (Haworth). France, Pyr Orientale, Carol, 1200 m, 1.vii.1976 (Gielis) (CG).



Fig. 37. *Bipunctiphorus nigroapicalis* B. Landry & Gielis. Paratype. Ecuador, Galapagos Archipelago, Santa Cruz, Finca S Devine, 17.iii.1989 (CG).



Fig. 38. *B. pelzi* Gielis. Holotype. Ecuador, Morona-Santiago Prov, Macas, 1000 m, 11-23.xii.1997 (V. Pelz), gent CG 4504 (CG).



Fig. 39. *Anstenoptilia marmarodactyla* (Dyar). USA, Hawaii Islands, Oahu, Waralua, v.1901 (BMNH).



Fig. 40. *A. hugoiella* Gielis. Holotype. Colombia, no date (Nolcken), gent CG 5016 (BMNH).



Fig. 41. *Lantanophaga pusillidactyla* (Walker). Madeira, Funchal, Lido, 1-3.ix.1973 (BMNH).



Fig. 42. *L. minima* (B. Landry & Gielis). Holotype. Ecuador, Galápagos Islands, Isabela, 8.5 km N Pto Villamil, 11.iii.1989 (B. Landry), gent BL 244 (CNC).



Fig. 43. *Stenoptilodes taprobanes* (Felder & Rogenhofer). Spain, Cadiz, San Roque, 29.ix.1983 (Gielis), gent CG 1554 (CG).



Fig. 44. *S. brevipennis* (Zeller). Paraguay, Gualra, Zorilla, 16-20.x.1992 (Drechsel) (CG).



Fig. 45. *S. duckworthi* Gielis. Holotype. Argentina, Catamarca, Rio Portrero near Andalgana, 15. ii.1972 (Duckworth), gent CG 6089 (USNM).



Fig. 46. *S. gilvicolor* (Zeller). Chile, Quillota, 1886 (BMNH).



Fig. 47. *S. agricultura* **spec. nov.** Holotype. Venezuela, Aragua, Rancho Grande, 1100 m, 16-23. x.1966 (S.S. & W.D. Duckworth), gent CG 4868 (USNM).



Fig. 48. *S. stigmatica* (Felder & Rogenhofer). Holotype. Colombia, Bogota, no date, gent BM 18195 (BMNH).



Fig. 49. *S. limaicus* Gielis. Holotype. Peru, Dept. Lima, 12 km SE Chosica Zárate, 2200-2600 m., 23-25.i.1987 (O. Karsholt, St. 3), gent CG 4169 (ZMUC).



Fig. 50. *S. debbiei* Gielis. Holotype. Ecuador, Pichincha, Rd Quito/Chiriboga 34 km, 2750 m, 6.vi.1977 (N. Venedictoff), gent CG 3549 (AME).



Fig. 51. *S. hypsipora* (Meyrick). Holotype. Peru, Huancayo, 3250 m, vii.(19)11 (P), gent BM 18854 (BMNH).



Fig. 52. *S. juanfernandicus* Gielis. Paratype. Chile, Masatierra, Bahia Cumberland, 8.ii.1952 (P.G. Kuschel) (CG).



Fig. 53. *S. sematodactyla* (Berg). Paratype. [Argentina], Buenos Aires, no date; Data; nr. 2291; "*Platyptilia sematodactyla* Berg, ej que acompaña el tipo" (MLPA).



Fig. 54. *S. gielisi* (B. Landry). Holotype. Ecuador, Galapagos Islands, Isla Isabela, Volcan Darwin, 300 m, 20.v.1992 (B. Landry), gent BL 316 (CNC).



Fig. 55. *S. maculatus* **spec. nov.** Holotype. Ecuador, Azuaj, PN Cajas, Laguna Llaviuco, 3225 m, 2°5'38"S 79°8'35"W, 12.x.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4926 (CG).



Fig. 56. *S. umbrigeralis* (Walker). Holotype. Colombia, Bogota, no date (BMNH).



Fig. 57. *S. heppneri* **spec. nov.** Holotype. Venezuela, Aragua, 5 km W Tovar, 1920 m, 24.i.1978 (J.B. Heppner), gent CG 3457 (USNM).



Fig. 58. *S. thrasydoxa* (Meyrick). Holotype. Colombia, Mt. Socorro, 3810 m, vii.1920 (BMNH).



Fig. 59. *S. medius* **spec. nov.** Holotype. Ecuador, Azuay, PN Cajas, Laguna Llaviuco, 2°50'38"S 79°83'5"W, 3225 m, 12.x.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4933 (CG).



Fig. 60. *S. posticus* (Felder & Rogenhofer). Ecuador, Tungurahua, 20 km E Baños, San Francisco, 1200 m, 21.x.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4925 (CG).





Fig. 61. *S. huanacoicus* Gielis. Holotype. Peru, Dept. Huánaco, 25 km NE Huánaco, Cordillera Carpish, Pattytrial, 2600 m., 8-10.ii.1987 (O. Karsholt, st. 15), gent CG 4156 (ZMUC).



Fig. 62. *S. sordipennis* (Zeller). Lectotype. (Colombia), Bogota, no date, gent BM 18852 (BMNH).



Fig. 63. *Paraamblyptilia eutalanta* (Meyrick). Lectotype. Argentina, Rio Negro, Lago Nahuel Huapi (eastern end), 17.x.1926 (Edwards), gent BM 18194 (BMNH).



Fig. 64. *P. ridouti* Gielis. Paratype. Peru, Cuzco, 27.viii.(19)73 (B.V. Ridout), gent CG 5072 (BMNH).



Fig. 65. *Uroloba calycospila* (Meyrick). Holotype. Argentina, Alta Gracia, (19)32 (Bruch), gent BM 18191 (BMNH).



Fig. 66a. *U. fuscicostata* Walsingham. Lectotype. Chile, Valparaiso, no date (Walker) (BMNH).



Fig. 66b. *U. fuscicostata* Walsingham. Underside of fig. 66a.



Fig. 67. *Stenoptilia zophodactylus* (Duponchel). Ecuador, Tungurahua, Ambate, Izamba, Quillan Loma, 2600 m, 8.v.2001 (V. Pelz), gent CG 4540 (CG).



Fig. 68. *S. neblina* Gielis. Paratype. Venezuela, TF Amaz, Cerro de la Neblina, Camp III, 0°56'10"N, 66°3' 53"W, 1820 m, 15-17.ii.1984 (D.R. Davis), gent CG 3408 (CG).



Fig. 69. *S. karsholti* Gielis. Paratype. Peru, Dept. Puno, 15 km E Ayaviri, Laguna Asnacocha, 3940 m, 26-27.iii.1987 (O. Karsholt, sta 54) (CG).



Fig. 70. *S. pallistriga* Barnes & McDunnough. Paraguay, Caaguazu, Tayo, 11.ii.2001 (Drechsel) (CG).



Fig. 71. *S. suprema* Meyrick. Holotype. Colombia, Mt. Tolima, 4635 m, (19)20, gent BM 18461 (BMNH).





Fig. 72. *S. tenuis* (Felder & Rogenhofer). Lectotype of *M. gilvidorsis* Zeller: Bogota, no date, gent BM 18453 (BMNH).



Fig. 73. *Paraplatyptilia fragilis* (Walsingham). Canada, British Colombia, Lillooet, 8-10.vii.1926 (J. McDunnough) (CG).



Fig. 74. *P. azteca* Gielis. Paratype. Mexico, 8 km E Tulancingo, Hgo., 24.vii.1963 (Duckworth & Davis), gent CG 3416 (CG).



Fig. 75. *Postplatyptilia huigraica* B. Landry & Gielis. Paratype. Brazil, D.F., Planaltina, 1000 m., 15.viii.1985 (Becker), gent CG 6030 (Becker).



Fig. 76. *P. talcaica* Gielis. Holotype. (Chile), Alto Vilches, Cord.(illa) Talca, i.1989 (Elgueta), gent CG 1984 (MNHC).



Fig. 77. *P. nebuloarbustum* **spec. nov.** Holotype. Ecuador, Azuay, PN Cajas, Laguna Llaviuco, 3225 m, 79°8'35"W 2°50'38"S, 5.x.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4859 (CG).



Fig. 78. *P. caribica* **spec. nov.** Holotype. Dominica, Clarke Hall, 11.iii.1965 (W.W. Wirth), gent CG 3431 (USNM).



Fig. 79. *P. sandraella* Gielis. Holotype. Bolivia, Yungas de la Paz, 1908 (Seebold), gent CG 5041 (BMNH).



Fig. 80. *P. carchi* **spec. nov.** Holotype. Ecuador, Carchi, 12.5 km N El Angel, 3500 m, 12.i.1985 (N. Venedictoff), gent CG 3559 (AME).



Fig. 81. *P. vorbecki* **spec. nov.** Holotype. Ecuador, Guachayacu, ix-x.1926 (Vorbeck), gent CG 3474 (ZMUC).



Fig. 82. *P. boletus* **spec. nov.** Holotype. Peru, Machu Picchu, 2450 m, 16-18.x.1981 (D.R. Davis), gent CG 3463 (USNM).



Fig. 83. *P. uruguayensis* **spec. nov.** Holotype. Uruguay, Montevideo, Sayago, 28.iii.1974 (M.S. Moratorio), gent CG 3460 (USNM).



Fig. 83a. *P. zongoensis* **spec. nov.** Holotype. Bolivia, La Paz, 3 km N La Paz, Rio Zongo Valley, 2850 m, 8-9.iv.1987 (P. Anctander), gent CG 4173 (ZMUC).



Fig. 84. *P. flinti* Gielis. Holotype. Argentina, B(ueno)s A(ire)s, Rio Santiago, Palo Blanco, Berisso, 19.xii.1979 (Flint), gent CG 6081 (USNM).



Fig. 85. *P. ugartei* **spec. nov.** Holotype. Chile, Copiapo. El Maray, 17.i.1996 (A. Ugarte Peña), gent CG 2723 (CG).



Fig. 86. *P. pluvia* **spec. nov.** Paratype ♂: Ecuador, Azuay, PN Cajas, Laguna Llaviuco, 2°50'38"S 79°8'35"W, 3225 m, 12.x.2002 (C. & F.K. Gielis & V. Pelz) (CG).



Fig. 87. *P. parana* Gielis. Holotype. South Brazil, Parana, Castro, 1898 (Jones), gent BM 18467 (BMNH).



Fig. 88. *P. palmeri* Gielis. Holotype. Mexico, Veracruz, Jalapa, 19E 30'N, 96E 56'W, 14.xii.1989 (WA Palmer), on *Lantana hispida* HBK, gent CG 6315 (CG).



Fig. 89. *P. transversus* **spec. nov.** Holotype. Colombia Oriental, Cundinamarca, Monteredondo, 1420 m, 17.iii.1961 (J. Förster), gent CG 3574 (ZSM).



Fig. 90. *P. fuscicornis* (Zeller). Holotype. Colombia, Bogota, 23.ii, gent BM 15762 (BMNH).



Fig. 91. *P. alexisi* Gielis. Holotype. Chile, Nuble, Alto Tregualemu, ca. 20 km SE Chovellen, 500 m., 1-3.xii.1981 (Davis), gent CG 6087 (USNM).



Fig. 92. *P. nubleica* Gielis. Holotype. Chile, Nuble, near coastal stream 17.5 km. S Curanipe, 50 m., 25.i.1979 (Davis & Akerbergs), gent CG 6057 (USNM).



Fig. 93. *P. akerbergsi* Gielis. Holotype. Chile, Nuble, Alto Tregualemu, ca. 20 km. SE. Chovellen, 500 m., 26-27.i.1979 (Davis & Akerbergs), gent CG 6085 (USNM).



Fig. 94. *P. genisei* (Pastrana). Argentina, Cordoba, Huerta Grande, xii.1958 (H. Forster) (CG).



Fig. 95. *P. biobioica* Gielis. Holotype. Chile, Bio Bio, Est. Huequecura, 25 km. E. Santa Barbara, 24.i.1978 (Flint), gent CG 6083 (USNM).



Fig. 96. *P. triangulocosta* Gielis. Holotype. Peru, Cuzco, 19.viii.(19)73 (B.V. Ridout), gent CG 5070 (BMNH).



Fig. 97. *P. machupicchu* Gielis. Holotype. Peru, Cuzco, 21.viii.(19)73 (B.V. Ridout), gent CG 5068 (BMNH).



Fig. 98. *P. drechseli* **spec. nov.** Holotype. Paraguay, Gualra, Zorilla, 16-20.x.1992 (U Drechsel), prep CG 2475 (CG).



Fig. 99. *P. corticus* **spec. nov.** Holotype. Venezuela, TF Amazon, Cerro de la Neblina Camp, 2050 m, 0°41'49"N 65°58'56"W, 15-22.ii.1984 (T. McCabe), gent CG 4861 (USNM).



Fig. 100. *P. seitetazas* **spec. nov.** Holotype. Chile, Maule, Curico, 60 km SE Molina, RN Radal Seite Tazas, 35°28'S 71°W, 1100 m, 17.i.2001 (C. Gielis & H.W. v.d. Wolf), gent CG 4853 (CG).





Fig. 101. *P. saeva* (Meyrick). Holotype. Peru, Carabaya, Agualani, 2750 m, vi.(19)05 (G. Ockenden), dry season, gent BM 18197 (BMNH).



Fig. 102. *P. camptosphena* (Meyrick). Holotype. Chile, Llai-Llai, 1.i.1927 (Edwards), gent BM 18193 (BMNH).



Fig. 103. *P. celkoi* Gielis. Holotype. Chile, Nuble, Alto Tregualemu, ca. 20 km SE Chovellen, 500 m., 1-3.xii.1981 (Davis), gent CG 6059 (USNM).



Fig. 104. *P. naranja* Gielis. Holotype. Argentina, Neuquen, Lago Lacar, Pucara, 750 m., 26.xii.1978 (Mision Cientifica Danesa, Sta. 9), gent CG 4090 (ZMUC).



Fig. 105. *P. nielseni* (Gielis). Paratype. Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 7.xii.1981 (Nielsen & Karsholt, sta. 9) (CG).



Fig. 106. *P. aestuosa* (Meyrick). Lectotype. Peru, Lima, 150 m, viii.(19)14 (Parish), gent BM 18196 (BMNH).





Fig. 107. *P. paraglyptis* (Meyrick). Holotype. Argentina, Parana, (19)07 (R) (BMNH)



Fig. 108. *Stockophorus charitopa* (Meyrick). Lectotype. Bolivia, Songo, ix.(19)07, gent CG 5024 (BMNH).



Fig. 109. *Amblyptilia scutellaris* (Felder & Rogenhof). Holotype. (Colombia), Bogota, no date (Novara), gent BM 18451 (BMNH).



Fig. 110. *A. landryi* **spec. nov.** Holotype. Honduras, Cerro Monserrat, El Paaiso, 7 km SW Yuscaran, 1700 m, 15.v.1994 (B.D. Gill), gent CG 2734 (CG).



Fig. 111. *A. kosteri* **spec. nov.** Paratype. Argentina, Salta, Camino de Cornisa, 1200 m, 12.xi.1995 (Neth. ent. exp. N. Arg., sta 9) (CG).



Fig. 112. *A. punoica* Gielis. Holotype. Peru, Dept. Puno, 10 km N Lampa, Quabradra Metara, 3900 m., 31.iii-3.iv.1987 (O. Karsholt, St. 58) gent CG 4172 (ZMUC).



Fig. 113. *Lioptilodes subantarcticus* Gielis. Paratype. Argentina, Terra del Fuego, Ushuaia, Lupataia, 20 m, 27.i.1979 (Mision Cientifica Danese) (CG).



Fig. 114. *L. cuzcoicus* Gielis. Holotype. Peru, Cuzco, Pillahuata, 2600 m., 14-18.viii. 1982 (M. Mattheus & M. Packer), gent CG 5005 (BMNH).



Fig. 115. *L. altivolans* **spec. nov.** Paratype. Peru, Ancash, 35 km SE Huaraz, Cerro Cahush, Quabrada Pucavado, 4100 m, 15-18.ii.1987 (O. Karsholt), gent CG 4198 (CG).



Fig. 116. *L. salarius* **spec. nov.** Holotype. Argentina, Jujuy, Salar de Jama, 4200 m, 30.i.1996 (A. Ugarte Peña), gent CG 4932 (CG).



Fig. 117. *L. topali* Gielis. Holotype. Argentina, Neuquen, Alumine, SE of Lago Alumino, 1100 m., 16.iii.1979 (Mision Cientifica Danese, sta. 59), gent CG 4118 (ZMUC).



Fig. 118. *L. arequipa* **spec. nov.** Paratype. Chile, Copiapo, El Maray, 17.i.1996 (A. Ugarte Peña), gent CG 2733 (CG).



Fig. 119. *L. albistriolatus* (Zeller). Holotype. Colombia, Bogota, no date, gent BM 18192 (BMNH).



Fig. 120. *L. rionegroicus* Gielis. Paratype. Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800-810 m., 13-17.x.1981 (Nielsen & Karsholt, Sta. 9) (CG).



Fig. 121. *L. neuquenicus* Gielis. Holotype. Argentina, Neuquen, Zapala, El Marucho, 870 m., 26.x.1981 (Gentili, sta. 34), gent CG 4140 (ZMUC).



Fig. 122. *L. zapalaicus* Gielis. Holotype. Argentina, Neuquen, Zapala, El Marucho, 870 m., 26.x.1981 (Nielsen & Karsholt), gent CG 4134 (ZMUC).



Fig. 123. *L. aguilaicus* Gielis. Paratype. Argentina, Chubut, Esquel, 550 m, 1.i.1982 (Nielsen & Karsholt), gent CG 4123 (ZMUC).



Fig. 124. *L. fetisi* Gielis. Holotype. Chile, S(an)t(ia)go, Purgatoria Cond., 22.xii.(19)50 (Fétis), gent CG 1964 (MZUC).



Fig. 125. *L. alolepidodactylus* Gielis. Paratype. Argentina, Rio Negro, San Carlos de Bariloche, Nirihuau, 9.xii.1978 (Mision Cientifica Danesa, Sta. 11) (CG).



Fig. 126. *L. testaceus* (Blanchard). Chile, Coquimbo, 1.vii-19.x (BMNH).



Fig. 127. *L. parafuscicostata* Gielis. Holotype. No locality, no date. (B. & T. Edwards), gent CG 5011 (BMNH).



Fig. 128. *L. prometopa* (Meyrick). Lectotype. Peru, Carabaya, Aguilani, 2750 m, dry season, vi. 1905 (D), gent BM 18189 (BMNH).



Fig. 129. *L. doeri* Gielis. Holotype. Brazil, Petropolis, 1881 (Doer), gent CG 5001 (BMNH).



Fig. 130. *L. brasiliicus* Gielis. Holotype. Brazil, Petropolis, 1881 (Doer), gent CG 5004 (BMNH).



Fig. 131. *L. ockendeni* Gielis. Holotype. Peru, Carabaya, Agualani, 2800 m, viii.1904 (G. Ockenden), dry season, genitalia CG 5007 (BMNH).



Fig. 132. *L. yungas* **spec. nov.** Paratype. Bolivia, Yungas Coroico, 1900 m, 17.v.1950 (W. Forster), gent CG 4212 (CG).



Fig. 133. *L. antarcticus* (O. Staudinger). Argentina, Santa Cruz, Lago Argentina, Peninsula Magelhanes, 11.i.1979 (Mision Cientifica Danese), gent CG 4122 (ZMUC).



Fig. 134. *L. tribonia* (Meyrick). Lectotype. Peru, Matucana, 2375 m., vii.(19)14 (P(arish)), gent BM 18441 (BMNH).



Fig. 135. *L. limbani* Gielis. Holotype. Peru, Carabaya, Limbani, dry season, 2900 m, v.1904 (Ockenden), gent CG 5048 (BMNH).



Fig. 136. *L. cocodrilo* **spec. nov.** Paratype. Ecuador, Napo, 15 km SE Cosanga, Cocodrilo, 0°38'56"S 77°47'34"W, 1850 m, 30.ix.2002 (C. & F.K. Gielis & V. Pelz) (CG).





Fig. 137. *Michaelophorus nubilus* (Felder & Rogenhofner). Holotype. Colombia, Bogota, no date (Lindig) (BMNH).



Fig. 138. *M. dentiger* (Meyrick). Holotype. British Guyana, Georgetown, iv (Parish), gent BM 18855 (BMNH).



Fig. 139. *M. indentatus* (Meyrick). Argentina, Catamarca, 45 km E. Belen, 900 m, 5.xii.1995 (Neth ent exp N Argentina, sta 22) (CG).



Fig. 140. *M. margaritae* *spec. nov.* Paratype. Ecuador, Manabi Prov, Puerto Rico, 25 m, 1-2.v.2001 (V. Pelz) (CG).



Fig. 141. *M. hodgesi* Gielis. Holotype. Puerto Rico, 7 km S. Ciales, 945 m, 27.v.1969 (W. Plath), gent CG 5206 (CG).



Fig. 142. *M. shafferi* Gielis. Holotype. Brazil, D(istrito) F(ederal), Planaltina, 15°35'S 47°42'W, 20.iv.1982 (V.O. Becker), gent CG 3671 (Becker nr 40047).





Fig. 143. *M. bahiaensis* **spec. nov.** Paratype. Brazil, Bahia, Jequié, 600-750 m, 11-22.xi.1995 (V.O. Becker), gent CG 4916 (CG).



Fig. 144. *Sphenarches anisodactylus* (Walker). Tchad, Bebedjia, 395 m, 2.x.1973 (F.A. Bink), (CG).



Fig. 145. *S. nanellus* (Walker). Type. Brazil, Manaus, xi.(18)19 (BMNH).



Fig. 146. *S. languidus* Felder & Rogenhofer. Type. Colombia, Bogota, no date (Novara) (BMNH).



Fig. 147. *Cnaemidophorus smithi* Gielis. Holotype. Colombia, Minca, 610 m, vi.1899 (H.H. Smith), gent BM 18468 (BMNH).



Fig. 148. *Marasmarcha brevirostris* (Walsingham). Holotype. Mexico, Guerrero, Tepetlapa, 915 m, no date (H.H. Smith) (BMNH).



Fig. 149. *Exelastis phlyctaenias* (Meyrick). Tanzania, Morogoro district & town, Kihonda, 23.v.1992 (L. Aarvik), gent CG 3813 (CG).



Fig. 150. *E. montischristi* (Walsingham). Ecuador, Galapagos Islands, Marchena, 12.iii.1992 (B. Landry) (CG).



Fig. 151. *E. pumilio* (Zeller). Argentina, Salta, Quebrada del Toro, 6 km NW Campo Quijano, 1650 m, 11.i.1996 (Neth ent exp N Argentina, sta 41) (CG).



Fig. 152. *Geina integumentum* **spec. nov.** Holotype. Puerto Rico, Cayey, 450 m, 2.viii.1987 (V.O. Becker), gent CG 3649 (V.O. Becker nr 67270).



Fig. 153. *Capperia browni* **spec. nov.** Holotype. Mexico, Veracruz, 22 rd km W C(iuda)d Mendoza, 2150 m, 13.viii.1987 (Brown & Powell), gent CG 3745 (Powell).



Fig. 154. *Oxyptilus scutifer* Meyrick. Lectotype. Ecuador, Duran, (19)14 (P), gent CG 5054 (BMNH).



Fig. 155. *Buckleria brasilia* **spec. nov.** Paratype. Brazil, Goiás, Alto Paraiso, 1300 m, 30.v.1994 (V.O. Becker), gent CG 4910 (CG).



Fig. 156. *Megalorhipida leucodactylus* (Fabricius). Tchad, Bebedjia, 395 m, 24.vii.1973 (F.A. Bink) (CG).



Fig. 157. *M. pseudodeflectalis* Gielis. Paratype. Argentina, Neuquen, Piedra del Aguila, 15.xi.1978 (Mision. Cientifica Danesa, sta. 15) (CG).



Fig. 158. *M. dulcis* (Walsingham). Holotype. Mexico, Guerrero, Amula, 1830 m, viii.18. (H.H. Smith) (BMNH).



Fig. 159. *M. paraiso* **spec. nov.** Paratype. Brazil, Goiás, Alto Paraiso, 1400 m, 3.x.1985 (V.O. Becker), gent CG 3652 (CG).

*Michaelophorus hodgesi* Gielis, 1999  
(figs 141, 269)

*Michaelophorus hodgesi* Gielis, 1999: 151.

Material.— Holotype: ♂, **Puerto Rico**, 7 km S Ciales, 3.100' (= 945 m), 27.v.1969 (W. Plath), ultraviolet light, gent CG 5206 (CG).

Diagnosis.— The species is characterized by its small size, pale colour and markings, in the genitalia the elongate valvae have prominent single spines.

Description.— Male. Wingspan 10 mm. Head appressedly scaled, collar and frons ochreous-white. Palps one and a half times eye diameter, grey-white, slender. Antennae grey-brown, shortly ciliated. Thorax, tegulae and mesothorax worn. Forelegs grey-white, with a longitudinal pale brown line along the femur. Midlegs and hindlegs similar to forelegs, with two pairs of spurs of equal length; spurs and legs laterally with pale brown longitudinal line.

Forewings cleft from 2/5, whitish. Markings very pale brown, consisting of a dash across basal quarter of both lobes, with some darkening at base of cleft; the dash gradually turns whitish and darkens again in the middle of both lobes, becoming fainter again towards the apices. Fringes greyish with white scales at the following: around apices and small brown streak at 4/5 of dorsum of first lobe and close to apex, at two thirds and halfway along the second lobe. Underside pale ochreous.

Hindwings greyish white. Fringes grey. A brown scale-tooth at 4/5 of third lobe, present in both costal and dorsal fringes. Underside pale ochreous. Venous scales ferruginous orange, in a double row, the costal row extending into second lobe.

Male genitalia.— Valvae symmetrical, slender with a smooth cucullar process at two thirds distance. Some setae and a single, prominent cucullar spine at rounded tip. Tegumen a poorly sclerotized plate, with a ridge on the tip and setae as uncus. Saccus well developed, large. Vinculum narrow, with a single, sclerotized, central anellus ridge. Aedeagus with wide anterior half and narrow, twisted, posterior part.

Female genitalia.— Unknown.

Ecology.— The moth flies in May. The hostplant is unknown.

Distribution.— **Puerto Rico**: Ciales.

Remarks.— The species is closely related to *M. shafferi*, differing in fringe pattern of the forewing and in the male genitalia.

*Michaelophorus shafferi* Gielis, 1999  
(figs 142, 270)

*Michaelophorus shafferi* Gielis, 1999: 155.

Material.— Holotype: ♂, **Brazil**, D(istrito) F(ederal), Planaltina, 15E 35'S 47E 42'W, 20.iv.1982 (V.O. Becker), gent CG 3671 (Becker nr 40047).

Diagnosis.— The species is characterized by its small size, the ochreous-white colour with minimal markings on the wings and the valvae in the male genitalia with prominent terminal spines.

Description.— Male. Wingspan 9 mm. Head appressedly scaled. Collar ochreous-white, with erect scales. Frons silvery-white. Palps twice eye diameter, slender, with a hairbrush extending from second segment along third segment, cream-white. Antennae ringed ochreous and pale brown, shortly ciliated. Thorax, tegulae and mesothorax cream-white. Forelegs and midlegs cream-white, with pale brown longitudinal line along the tibiae. (In the present specimen the hindlegs are missing).

Forewings cleft from 2/5, cream-white. Markings pale brown, consisting of a faint dorsal spot at 1/5; some scales around base of cleft; a small spot at mid dorsum of first lobe and mid costa of second lobe. Fringes grey, with brown patches; two in mid costal area of first lobe, at dorsum near apex and along dorsum of first lobe; three narrow scale brushes along dorsum of second lobe. Underside pale brown, whitish mixed.

Hindwings brown-grey. Fringes grey-brown, with whitish patches subapical on dorsum of all three lobes. A scale-tooth is not significantly developed. Underside pale brown, with some brown scales in first lobe, more whitish in third lobe. Venous scales reddish-ferruginous, in a double row, dorsal row appears to be somewhat extended along dorsum of second lobe.

Male genitalia.— Valvae symmetrical, rather long and narrow, widened at the centre. Both valvae with a cucullar spine before tip. Left valva with two spines at tip, right valva with only one spine. Tegumen arched, narrow, extending into poorly differentiated uncus. Saccus rather wide blister-like. Vinculum a sclerotized central plate. Aedeagus short, curved, with flattened convex side.

Female genitalia.— Unknown.

Ecology.— The moth flies in April. The hostplant is unknown.

Distribution.— **Brazil**: Distrito Federal: Planaltina.

*Michaelophorus bahiaensis* **spec. nov.**  
(figs 143, 401)

Material.— Holotype ♀: **Brazil**, Bahia, Jequié, 600-750 m, 11-22.xi.1995 (V.O. Becker), gent CG 4916 (V.O. Becker nr 105799). Paratype ♀: same locality and date (CG).

Diagnosis.— The species resembles *shafferi*, but differs in the position and intensity of the markings.

Description.— Female. Wingspan 9 mm. Head appressedly scaled, ochreous-white. Palps protruding, slender, ochreous-white; third segment with irregular pale brown ring. Antennae pectinate, longitudinally scaled brown and white. Thorax and tegulae ochreous-white. Mesothorax cream-white. Abdomen ochreous-white with a pale brown dorso-lateral line. Hind legs ochreous-white mixed with pale brown scales, the intensity of these scales increases towards the terminal part of the segments, especially in the tarsal segments. Spur pairs of unequal length, the medial spurs longer than the lateral spurs and the proximal pair longer than the distal pair.

Forewings cleft from halfway, pale ochreous. The following dark brown markings: a small discal spot; a spot at the costal edge of the base of the cleft; and scattered scales along the costa from the base to the base of the cleft. In the first lobe two white transverse lines at one third and two thirds, and a small costal spot at one third of the second lobe. Fringes pale grey. In the fringes dark grey patches at the mid-costa of the first lobe;

at the apex and anal region of the second lobe. Prominent black scales in the fringes in the middle parts of the cleft; at halfway and  $3/4$  of the dorsum. Underside brown, with pale spots as above.

Hindwings and fringes grey-brown, on the third lobe paler. A scale-tooth on the dorsum of the third lobe at  $3/5$  and a small one subterminally. Underside pale brown. Venous scales ferruginous, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium narrow. Antrum as a membranous tube, progressing into the ductus bursae. Bursa copulatrix vesicular. No signum. Lamina ante-vaginalis extended as a trapezoidal plate. Apophyses anteriores absent. Apophyses posteriores slender, twice as long as the papillae anales.

Ecology.— The moth flies in November. The hostplant is unknown.

Distribution.— **Brazil:** Bahia: Jequié.

Etymology.— The moth is named after the region of its occurrence.

### *Sphenarches* Meyrick, 1886

*Sphenarches* Meyrick, 1886: 8.— Type species: *Sphenarches synophrys* Meyrick, 1886, by original designation.

*Sphenarctes* Carus, 1887: 113.— Misspelling.

Redescription.— Head appressedly scaled; no frontal tuft. Palps without hair brush along third segment; slender; more than one and a half times eye diameter.

Forewing without costal triangular marking; the first lobe has no termen but this is present in the second lobe, but for *S. languides*. Forewing veins (after Yano, 1963): R1, R2, R3, R4 and R5 present; R1 stalked with R2; Cu1 and Cu2 present and separate; Cu1 from middle of M3 in second lobe; Cu2 from angle of cell.

Hindwing with scale-tooth (sub)terminal on dorsum of third lobe. Veins: M3 and Cu1a stalked. Frenulum of female double. Third lobe with one vein.

Male genitalia.— Valva symmetrical, spoon shaped. Tegumen simple, pointed. Uncus small, reduced. Vinculum arched, well developed. Aedeagus arched, rather small.

Female genitalia.— The ostium slightly excavated, centrally positioned. Antrum tube-like, narrow. The ductus bursae slender and long, without a sclerite. Bursa copulatrix vesicular, without a signum, but with diffuse spiculae.

Ecology.— The hostplants are *Dolichos lablab* L., *Lagenaria leucantha* Rosby var. *clavata* Makino, and *L. leucantha* var. *gourda* Makino (Yano, 1963).

Distribution.— Pantropical, extending northwards to Japan and southern Canada.

### *Sphenarches anisodactylus* (Walker, 1864) (figs 144, 271, 402)

*Oxyptilus anisodactylus* Walker, 1864: 934.

*Pterophorus diffusalis* Walker, 1864: 945.

*Sphenarches synophrys* Meyrick, 1886: 17.

*Sphenarches chroesus* Strand, 1913: 66.

*Megalorhipida rishwani* Makhan, 1994: 353.



Diagnosis.— The species is best characterized by the genitalia.

Redescription.— Male, female. Wingspan 14-17 mm. Head appressedly scaled; ferruginous-brown. Collar with erect scales. Palps twice eye diameter; protruding. Colour ferruginous; second segment with erect scales; third segment whitish. Antennae with longitudinal rows of brown-grey and white scales; shortly ciliated. Thorax and tegulae ferruginous, distally white. Abdomen pale ferruginous-white, with dark patches dorsally on second and fourth segment and laterally on third segment. Hind legs ringed white and dark-brown. The dark sections at the spur pairs, with a group of prominent scales. Spur pairs of equal length.

Forewings cleft from halfway, colour pale-brown. First lobe acute, second lobe with sinuate termen. Markings brown and white. The brown markings consist of a cellular spot, a discal spot and a small dash before the base of the cleft. A brown area in basal third and centrally in the first lobe, also centrally in the second lobe. A white baso-dorsal spot and white contours around the darker areas in the lobes. Fringes dark-grey and white, matching the wing pattern. A dark dash at the anal angle and apex of the second lobe. In the fringes prominent white and grey-brown scales. Underside ferruginous-brown, with a white central transverse line in the first lobe and a subterminal line in both lobes.

Hindwings brown-grey in the first two lobes, and ochreous-brown in the third. Fringes grey. At the costa of the third lobe a row of black scales and on the dorsum at 4/5 a large scale-tooth. Next, some scales between the base and the scale-tooth and a small apical scale-group. Underside ferruginous-brown in the first two lobes. The third lobe white-ochreous. In first lobe two small white transverse bands. Venous scales ferruginous, in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical, oval. Sacculus and cucullus fused at the top and in shape of a ridge around the valva. Tegumen simple, distally pointed. Uncus stout, hooked out of the tegumen. Vinculum curved, progressing in a weakly sclerotized plate. Anellus arms slender, hooked, half as long as tegumen. Aedeagus curved, slender. No cornutus.

Female genitalia.— Antrum tube-like, proximally excavated. Ductus bursae slender. Bursa copulatrix vesicular, with a signum consisting of spiculae in a concentric structure. Distal margin of seventh sternite distally progressing, and centrally curved. Apophyses anteriores absent. Apophyses posteriores three times longer than papillae anales.

Ecology.— The moth flies in March, April, June and July. The hostplants are *Brillantaisia lamium* (Nees) Benth. (Acanthaceae), *Centratherum punctatum* Cass., *Eupatorium betonicaeforme* (DC.) Baker (Asteraceae), *Cucurbita pepo* L., *Lagenaria siceraria* (Molina) Standl., *Luffa aegyptiaca* Mill. (Cucurbitaceae), *Caperonia castaneifolia* (L.) A. St.-Hill (Euphorbiaceae), *Cajanus cajan* (L.) Millsp., *C. bicolor* DC., *Lablab purpureus* (L.) Sweet, *Mimosa pudica* L., *Phaseolus vulgaris* L. (Fabaceae), *Pelargonium* spec., *Geranium maculatum* L. (Geraniaceae), *Hibiscus mutabilis* L., *Theobroma cacao* L. (Malvaceae), *Thalia geniculata* L. (Marantaceae), *Averrhoa bilimbi* L., *Biophytum sensitivum* (L.) DC. (Oxalidaceae), *Passiflora foetida* L. (Passifloraceae), *Antirrhinum majus* L. (Plantaginaceae), and *Lantana camara* L. (Verbenaceae).

Distribution.— **Bahamas:** Nassau. **Brazil:** Parana: Maringa; Sao Paulo: Ilha do Cardoso; Nova Teutonia. **Cuba:** Sierra Rosario. **Dominica:** Clarke Hall. **Grenada:** Bathasar. **Panama:** Corozal. **Paraguay:** Paraguani: Sapucay. **Virgin Islands:** St. Thomas.

*Sphenarches nanellus* (Walker, 1864)  
(figs 145, 272, 403)

*Oxyptilus nanellus* Walker, 1864: 933.

Diagnosis.— The species is characterized by its small size and the genitalia of male and female.

Redescription.— Male, female. Wingspan 9-11 mm. Head erectly scaled at the vertex, ochreous cream-white. Palps slender, protruding a little over eye diameter. Antennae grey-white, shortly ciliated. Thorax and tegulae ochreous-cream. Abdomen ochreous-white. Hindlegs with two pairs of spurs of equal length, around the base of the spurs a scale group.

Forewings cleft from 2/5, colour cream-white. The basal half of the wing suffused with ochreous, another area of the same colour beyond the base of the cleft in the first lobe. Some dark-grey scales before the base of the cleft and at the costa of the second lobe. Fringes grey-white. Underside cream-white.

Hindwings grey-brown. Fringes grey-white. Third lobe with a ferruginous-brown subterminal scale-tooth extending to the dorsum and costa. Underside cream-white. Venous scales ferruginous-orange, in a double row, the costal row longer and extending into the second lobe.

Male genitalia.— Valvae symmetrical, club-like. In the base a bifid knob-like extension. Tegumen simple, terminally progressing into the short and wide uncus. Anellus arms small, simple. Vinculum arched. Aedeagus tapering towards the tip; in the ductus ejaculatorius a large spine.

Female genitalia.— Ostium and antrum in shape of a funnel, progressing into the slender ductus bursae. Bursa copulatrix vesicular, with a complex spiculation on the distal third and another on the proximal third. Vesica seminalis arising from the tip of the bursa copulatrix. Lamina ante-vaginalis bifid, with a sclerotized extension covering the ostium and antrum. Apophyses anteriores very small. Apophyses posteriores slender and short, one and a half times the papillae anales.

Ecology.— The moth flies in March, May and December. The hostplant is *Eupatorium betonicaeforme*.

Distribution.— **Brazil**: Rio de Janeiro: Marica, Teffe. **Peru**: Iquitos: Iquitos.

*Sphenarches languidus* (Felder & Rogenhofer, 1875)  
(fig. 146)

*Oxyptilus languidus* Felder & Rogenhofer, 1875: plate 140, fig. 47.

Material.— Type (abdomen missing): **Colombia**, Bogota, no date (Novara) (BMNH) [examined].

Descriptive remarks.— The type specimen of this species is in poor condition. It lacks the abdomen and parts of the forewings. No additional material has been found which matches this species.

The status of this species is questionable. Those parts of the holotype that are present, are a good match with the previous species. With the present knowledge it is not possible to separate these two species. For the time being I consider it better to

consider the species as separate. However, in the future I consider it essential to solve the question of identity by means of DNA analysis.

Male genitalia.— Unknown.

Female genitalia.— Unknown.

Ecology.— Unknown.

Distribution.— **Colombia**: Bogota.

### *Cnaemidophorus* Wallengren, 1862

*Cnaemidophorus* Wallengren, 1862: 10.— Type species: *Alucita rhododactyla* Denis & Schiffermüller, 1775, by monotypy.

*Cnemidophorus* Zeller, 1867: 332. Emendation & homonym.

*Eucnemidophorus* Wallengren, 1881: 96.— Unnecessary replacement name for unjustified emendation of *Cnemidophorus* Zeller, 1867.

*Euenemidophorus* Pierce & Metcalfe, 1938: 46. Incorrect spelling.

Redescription.— Head appressedly scaled, without frontal tuft. Palps just over eye diameter, protruding, second segment thickened by prominent scales.

Forewing with well developed costal triangle; both lobes with distinct termen. Forewing veins: R1, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from basal half of M3 in second lobe; Cu2 from cell.

Hindwing with scale-tooth on third lobe terminal; third lobe with one vein.

Male genitalia.— Valvae symmetrical; lanceolate, top rounded, from middle of sacculus a large thorn points towards the vinculum, sacculus not lobed. Saccus minute. Tegumen bilobed. Uncus stout.

Female genitalia.— Centrally positioned antrum of conical shape ending at the distal margin of the seventh sternite. Ductus bursae without sclerotized segment. Lamina ante-vaginalis poorly developed. Singum consisting of double sclerotized plate, covered with minute spiculae.

Ecology.— Hostplants are Rosaceae.

Distribution.— Holarctic, Neotropical and Afrotropical.

### *Cnaemidophorus smithi* Gielis, 1992 (figs 147, 404)

*Cnaemidophorus smithi* Gielis, 1992: 98.

Material.— Holotype ♀: **Colombia**, Minca, 2000 ft, vi.1899 (H.H. Smith), gent slide BM 18468 (BMNH).

Diagnosis.— The species is characterized by its delicate and complex wing pattern, compared to the dull orange and white areas in *rhododactyla*, and the scaletooth on the dorsum of the second lobe of the hindwing.

Description.— Female. Wingspan 18 mm. Head appressedly scaled, pale brown mixed grey-white. Some erect scales at the collar and above the eye. Palps slender, curved slightly upwards, one and one half times eye diameter, brown and white ringed. Antennae grey-brown with grey-white scales, shortly ciliated.

Thorax, tegulae and mesothorax brown. Hind and middle legs with two scale brushes at the base of the spurs, fore legs with a single scale brush; colour ochreous-white

and brown ringed, the spurs are also ringed in the same manner; hind legs with two pairs of long spurs, of equal length.

Forewings cleft from two thirds. The basal area, up to the base of the cleft, mottled white and grey-brown. Before the base of the cleft, a white line at right angles to the dorsum. First lobe ochreous-brown with a white costal triangle beyond the base of the cleft and an incomplete white subterminal line which continues into the second lobe. In both lobes the line has a dark-brown margin on the terminal side. A small dark-brown spot in the centre of the first lobe. Two small white costal spots, and a white spot centrally before the dark brown apex. The second lobe with a dark brown area, the white line forming a basal margin. Fringes grey-white, along the termen basally with an almost complete row of grey-black scales. On the dorsum some prominent scales the same colour as the wing. Underside brown, with pale yellow-white markings as above.

Hindwings in lobes one and two brown, lobe three mixed brown and grey-white. Fringes grey. Around the apex of the first lobe a dark basal fringe line. At the anal angle of lobe two a pronounced black scale-tooth and another small one on the dorsum at 3/4. On the dorsum of lobe three, small scale-teeth at 1/10, halfway and subterminally, and at the costa subterminally, and between this scale-tooth and the base of the lobe isolated prominent scales. Underside brown. Venous scales ferruginous-brown in a double row.

Abdomen grey-brown, except the first segment and the distal margin of segments two and three which are grey-white on the dorsum and segments one to four which are grey-white ventrally.

Male genitalia.— Unknown.

Female genitalia.— Antrum a large funnel with rectangular margins. Ductus bursae stout, rather short and straight. Bursa copulatrix vesicular, signum in the shape of a double plate of minute spiculae. Lamina post-vaginalis with broad forked central part. Apophyses anteriores longer than papillae anales. Apophyses posteriores twice as long as papillae anales.

Ecology.— The moth flies in June. The hostplant is unknown.

Distribution.— **Colombia:** Minca.

Discussion.— The shape of the signum in the female genitalia is similar to that seen in the palaeartic genus *Cnaemidophorus*. The shape of the antrum and lamina post-vaginalis is more like those seen in the genus *Xyroptila* and some species in the genus *Postplatyptilia*. In *Xyroptila* however, the scale-tooth on the third lobe of the hindwing is hardly developed, and this genus is presently only known from the tropics of the old world. In *Postplatyptilia* the scale-tooth is often double.

### Tribus **Exelastini** Gielis, 2000

Exelastini Gielis, 2000: 59.

### *Marasmarcha* Meyrick, 1886

*Marasmarcha* Meyrick, 1886: 11.— Type species: *Alucita phaeodactyla* Hübner, [1813]: pl. 3, figs. 14, 15, by subsequent designation by Tutt, 1906.

Redescription.— Head appressedly scaled, without frontal tuft. Palps slender, protruding, just over eye diameter.

Forewing cleft from 3/4; without costal triangle. Forewing veins: R1 absent; R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from basal half of M3 in second lobe; Cu2 from cell.

Hindwing without a scale-tooth at dorsum of third lobe; third lobe with one vein.

Male genitalia.— Valvae often with asymmetrical saccular processes; lanceolate to trapezoidal. Basal pointed process, origin mid-saccular, very slender, sometimes split into two thick hair-like elongated structures. Tegumen bilobed, rather small. Uncus reduced, broad. Sacculus not lobed. Saccus small. (The genitalia tend to asymmetrical.)

Female genitalia.— Ostium centrally positioned, plate-like in shape, as prolongation of distal margin of lamina ante-vaginalis. Antrum small. Ductus bursae long and slender, without sclerite. Signum obsolete (when present often poorly developed).

Ecology.— Hostplants Papilionaceae (Zeller, 1852; Frey, 1856; Schwarz, 1951).

Distribution.— Palaearctic, Neotropical and Afrotropical.

*Marasmarcha brevirostris* (Walsingham, 1915)  
(figs 148, 273, 405)

*Platyptilia brevirostris* Walsingham, 1915: 438.

Material.— Holotype, abdomen missing (♂): **Mexico**, Guerrero, Tepetlapa, 3000 ft., (H.H. Smith) (BMNH) [examined]. Paratype ♀: **Guatemala**, Vera Paz, Balhue, ii.1880 (G.C. Champion), gent CG 5018 (BMNH) [examined].

Diagnosis.— The species is characterized by the terminal dark area of the forewing lobes.

Redescription.— Male, female. Wingspan 20-25 mm. Head appressedly scaled, ferruginous-white. Palps slender, as long as eye diameter. Antennae grey-white, shortly ciliated. Thorax and tegulae ferruginous-white. Abdomen ferruginous-white, mixed with white scales. Hindlegs whitish, turning brownish near the spurs, giving a ringed appearance. Spur pairs of equal length.

Forewings cleft from 3/4; colour greyish-white. Markings brown, consisting of an irregular scaling on the basal two thirds of the wing and a subterminal spot in the first lobe and a terminal spot in the second lobe. Fringes grey-white; in the cleft mixed with black scales. At the anal angle of the second lobe brown fringes. Underside pale brown-white. At the base of the cleft an indistinct, pale, transverse mark. First lobe ferruginous.

Hindwings white-grey, with ferruginous scaling. Fringes grey. On the dorsum of the third lobe an almost complete row of grey-brown scales, pronounced centrally to a scale-tooth. Underside pale brown-white, mixed with ferruginous. Venous scales orange, in a double row. The costal row is longer, but the scale placement is more scattered.

Male genitalia.— Genitalia symmetrical. Valvae ellipsoidal, with a very long curled spine, which extends far out from the margin of the valva. Tegumen arched. Uncus two thirds of the tegumen, stout. Anellus arms stout, half the tegumen. Saccus broad and wide with a blunt tip. Aedeagus short, with an acute tip, at tip sclerotized ridges. No cornutus or coecum.

Female genitalia.— Antrum tube-like extended from the margin of the seventh sternite to the margin of the eighth sternite. Ductus bursae long and slender, almost straight to the bursa. Bursa copulatrix vesicular. Signum double with a horn-like shape, laterally progressing into a small sclerotized plate. Margin of the seventh sternite distally progressing, to half the length of the eighth sternite; distal margin flat. Lamina ante-vaginalis well developed, laterally progressing into a sclerotized, gradually widening, plate. This plate is margined by a sclerotized ridge which is a part of the apophyses anteriores. Apophyses anteriores less than half as long as papillae anales. Apophyses posteriores two and a half times longer than papillae anales.

Ecology.— The moth flies in February and August. The hostplant is unknown.

Distribution.— **Guatemala:** Vera Paz: Balhue; Volcan Sta Maria. **Mexico:** Guerrero: Tepetlapa; Vera Cruz: Huatusco. **Panama:** Chiriqui.

### *Exelastis* Meyrick, 1908

*Exelastis* Meyrick, 1908: 730.— Type species: *Acptilia atomosa* Walsingham, 1885, by original designation. *Marasmarcha*, auct., not Meyrick, 1886: 11.

*Hepalastis* Gibeaux, 1994: 63.— Type species: *Mimeseoptilus pumilio* Zeller, 1873, by original designation and monotypy.

*Cordivalva* Gibeaux, 1994: 66.— Type species: *Cordivalva luqueti* Gibeaux, 1994, by original designation.

Redescription.— Head appressedly scaled. Frons without conical tuft. Palps slender, just over eye diameter. Forewings cleft from two thirds; without a costal triangle.

Forewing veins: R1 absent; R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from basal half of M3 in second lobe; Cu2 from cell.

Hindwings without scale-tooth at dorsum of the third lobe; third lobe with one vein.

Male genitalia.— In some species the valvae are symmetrical, in others they are asymmetrical. There is a tendency for the symmetrical, vesicular type of valvae to be indented. This indentation may be unequal in the two valvae and, in its extreme form, a left/right asymmetrical spine-like structure develops. Tegumen arched. Uncus reduced. Vinculum small, arched. Saccus bilobed and sometimes extended.

Female genitalia.— Ostium and antrum centrally positioned. Antrum narrow, slender. Ductus bursae slender, rather long. Bursa copulatrix vesicular with pair of sclerotized plate-like signa which may show heavy spiculation. Around the signum sclerotized ridges. Lamina ante-vaginalis generally poorly developed, in some species (*E. crepuscularis* Meyrick) centrally sclerotized. Apophyses anteriores absent. Apophyses posteriores two to three times papillae anales.

Ecology.— Recorded hostplants are Fabaceae.

Distribution.— Pantropical.

### *Exelastis phlyctaenias* (Meyrick, 1911) (figs 149, 274, 406)

*Marasmarcha phlyctaenias* Meyrick, 1911: 106.

Diagnosis.— The species is characterized by the genitalia in the male and female.

Redescription.— Male, female. Wingspan 17-21 mm. Head appressedly scaled,



ochreous-brown. Frons ochreous. Palps protruding, slender, ochreous-brown. Antennae brown, ciliated. Collar and centro-cranial thorax ochreous-brown. Caudo-lateral thorax, mesothorax and tegulae ochreous. Abdomen ochreous in first segments, distally more ochreous-brown. Hindlegs ochreous-grey, with two pairs of spurs; the medial spurs longer than the lateral spurs. The spurs are dorsally brown-grey and ventrally dark grey.

Forewings cleft from 5/8. The colour in the specimens from the Virgin Islands is ochreous, the specimens from the Afrotropical and south asian regions have a greyish tinge. Markings black-brown: a dorsal spot at 1/4; a discal spot; a spot between the base of the cleft and the costa; a faint spot dorsally and just before the base of the cleft; two costal spots in the first lobe; and apical spots on both lobes. Fringes pale grey, with a row of prominent ochreous scales in the dorsal fringes of both lobes; scale-teeth on the dorsum of the wing at halfway, two thirds and subapically on the second lobe. Underside ochreous-brown, with spots at the costa of the first lobe and at the apices as above.

Hindwings and fringes ochreous-grey to grey. On the dorsum of the third lobe scattered scales in the fringe mainly between the base and the middle of the lobe. Underside dark ochreous-brown. Venous scales ferruginous to dark ferruginous, in a double row, the costal row the longer.

Male genitalia.— Right valva with a large, centrally positioned spine. Left valva with a small centrally positioned spine. Tegumen arched, progressing into the blunt and stout uncus. Vinculum arched. Saccus bilobed, as long as wide. Aedeagus short and wide. No cornutus or coecum.

Female genitalia.— Ostium and antrum dish-like, progressing into the ductus bursae. Ductus bursae rather wide and short. Bursa copulatrix vesicular, with a pair of signum plates. Signum spindle-shaped, with the centre part covered with dense and delicate spicules. Lamina ante-vaginalis arched, with a trapezoidal extension, which covers the antrum. Apophyses anteriores absent. Apophyses posteriores slender, two and a half times papillae anales.

Ecology.— The moth flies in October. The hostplant is unknown.

Distribution.— **Virgin Islands:** Guana Island.

*Exelastis montischristi* (Walsingham, 1897)  
(figs 150, 275, 407)

*Pterophorus montischristi* Walsingham, 1897: 59.

*Pterophorus cervinicolor* Barnes & McDunnough, 1913: 185.

Material.— Holotype of *Pterophorus cervinicolor* ♀: U.S.A., Florida, Everglades, 8-15.iv (USNM). Paratype ♂: same locality and data (USNM).

Diagnosis.— The species is characterized by the dark scales on the dorsum of the forewing and third lobe of the hindwing, together with the pointed lobes of the forewing.

Redescription.— Male. Wingspan 16 mm. Head appressedly scaled, greyish straw colour. Some erect scales at the collar and frons. Palps protruding, slender. Antennae faintly ringed grey-brown and grey; shortly ciliated. Thorax and tegulae proximally greyish straw colour, distally changing to cream-white. Hindlegs with two pairs of

spurs; the proximal pair of unequal length, the distal pair shorter and of equal length.

Forewings cleft from two thirds, basally greyish straw colour, distally gradually more greyish. Some darker scales in discal area and along the costa and dorsum. Fringes grey. On the dorsum three small black scale groups. Underside dark grey.

Hindwings; first and second lobes dark grey-brown and third lobe straw grey. Fringes grey. On the dorsum of the third lobe some dark scales (not so well organised as to be called a scale-tooth). Underside of lobes 1 and 2 dark brown-grey and third lobe grey and white mixed. Venous scales dark brown, in a double row. The dorsal row longer than the costal row.

Male genitalia.— Genitalia symmetrical. Valvae lancolate, with a large, stout sacular spine, centrally in the valva. Tegumen simple, but large and wide. Uncus on tip of flattened tegumen. Vinculum arched, and wide. Saccus bilobed. Aedeagus short, rather wide. No cornutus or coecum.

Female genitalia.— Ostium disc-like. Antrum short. Ductus bursae long and rather slender. Ductus seminalis from distal section of ductus bursa. Bursa copulatrix vesicular, with a pair of large signum plates. Signum with spiculated surface. Apophyses anteriores absent. Apophyses posteriores twice the papillae anales.

Ecology.— The moth flies in January, July and August. The hostplant is *Rhynchosia minima* (L.) DC. (Fabaceae).

Distribution.— **Ecuador:** Galapagos Islands: Isabela, Baltra, Floreana, San Cristobal, Santa Cruz. **Grenada:** Balthasar. **Jamaica:** Moneagua. **Martinique.** **Virgin Islands:** Guana Island.

Remarks.— The species resembles *E. pumilio* very much, differing in shape of the forewing lobes and the genitalia.

*Exelastis pumilio* (Zeller, 1873)  
(figs 151, 276, 408)

*Mimeseoptilus pumilio* Zeller, 1873: 324.

*Marasmarcha liophanes* Meyrick, 1886: 19.

*Mimaesoptilus gilvidorsis* Hedemann, 1896: 8 (not Zeller, 1877).

Diagnosis.— The species is characterized by the groups of scales along the dorsum of the forewing.

Redescription.— Male, female. Wingspan 12-15 mm. Head appressedly scaled, brown. Palps slender, a little longer than eye diameter. Antennae markings poorly defined ringed, pale brown and pale ochreous-brown; shortly ciliated. Thorax brown. Tegulae pale-brown. Mesothorax ochreous-white. Abdomen brown. Legs with two pairs of spurs of equal length.

Forewings cleft from two thirds, yellowish red-brown. Markings dark-brown, consisting of a discal spot, an indistinct spot at half the length of the cell. Some darkening along the costa near the apex of the first and second lobe. Fringes grey-brown along the outer margin of the first lobe with a basal line of dark scales in the whitish-tinged fringe. At apex of second lobe and along the dorsum four other scale groups, forming an uninterrupted row towards the base of the wing. Underside reddish-brown.

Hindwings pale reddish-brown. Fringes grey-brown. Underside pale brown. Venous

scales ferruginous to ferruginous-brown, in a double row. The costal row extends far into the second lobe, the dorsal row short.

Male genitalia.— Valvae symmetrical. The base of the valva narrow, excavated. Distally progressing into a vesicular widened sacculus. The cucullus very pronounced and overriding the sacculus. The cucullus in the shape of a fat half moon, heavily thorned and showing large hairs at the basal margin. Tegumen reduced. Uncus pronounced, partly vesicular, ending in a cleaved top. Vinculum narrow, centrally widened and progressing into a poorly developed anti-sacculus. Juxta very narrow at the base, becoming rapidly wider and forming the shape of a cross-bar, with a central excavation for the aedeagus. Aedeagus tubular, simple, without cornuti.

Female genitalia.— Antrum funnel-like, progressing into the straight and long ductus bursae. Bursa copulatrix vesicular, without a signum. Apophyses posteriores two and a half times longer than papillae anales. Apophyses anteriores absent.

Ecology.— The moth flies in March, April and June. The hostplants include *Desmodium incanum* DC., and *Alysicarpus vaginalis* (L.) A. DC. (Fabaceae).

Distribution.— **Argentina:** Tucuman: Alto de S Agustín. **Brazil:** Goias: Alto Paraíso; Mato Grosso: Ste Lagoas, Nova Lima; Santa Catarina: Sao Joaquim; District Federal: Planaltina. **Colombia:** Medellín: La Estrella. **Costa Rica:** Cocos Island: Bahia Wafer, Mirador; Atenas. **Cuba:** Matanzas: Ciénaga Zapata; Santiago: Turguino; Pinar Rio: Vinales, Sierra Rosario; Central Baragua. **Ecuador:** Bolívar: Balzapóncha. **Guadelupe:** Domaine Duclos. **Jamaica:** Robins Bay, Ocho Rios. **Mexico:** Tamaulipas: El Ensino; Veracruz: Huatusco. **Puerto Rico:** Patillas, Guanica. **Surinam:** Paramaribo-Kwatta. **Virgin Islands:** St. Croix; Guana Island: Bristol.

Remarks.— This species has a worldwide tropical distribution.

### Tribus **Oxyptilini** Bigot, Gibeaux, Nel & Picard, 1998

Oxyptilini Bigot, Gibeaux, Nel & Picard, 1998: 294.

#### *Geina* Tutt, 1906

*Geina* Tutt, 1906: 411.— Type species: *Phalaena Alucita didactyla* Linnaeus, 1758, by monotypy.

Redescription.— Head appressedly scaled, without frontal tuft. Palps simple, without a hair-brush on the third segment.

First forewing lobe acute, second lobe terminally sinuate. On both forewing lobes two transverse white lines, no costal triangle. Forewing veins: R1 absent; R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from basal half of M3 in second lobe; Cu2 from cell. Terminal scale-tooth on dorsum of third lobe of hindwing; third lobe with one vein.

Male genitalia.— Valvae symmetrical, simple and gradually narrowing, without attached processes. Tegumen arched. Uncus pronounced. Aedeagus straight, without cornuti. Ductus ejaculatrix with spine-like cornutus.

Female genitalia.— Ostium small, slightly excavate. Ductus bursae slender and long. Bursa copulatrix vesicular, without signum. Lamina ante-vaginalis poorly developed. Apophyses anteriores absent. Apophyses posteriores one and a half times papillae anales.

Ecology.— The hostplants in the Palaearctic region are *Geum rivale* L., *G. urbanum* L., and *Potentilla rupestris* L. (Rosaceae). The North American species are reported to feed on species of *Rubus* and *Vitis* (Rosaceae) on the flowers and leaves.

Distribution.— The distribution of the genus is Holarctic. In the palaearctic area *G. didactyla* L. is recognized. From North America another four species are reported. Now a species is recognized in the Neotropics.

*Geina integumentum* **spec. nov.**  
(figs 152, 409)

Material.— Holotype ♀: **Puerto Rico**, Cayey, 450 m, 2.viii.1987 (V.O. Becker), gent CG 3649 (V.O. Becker nr 67270). Paratype ♀: U.S.A., **Virgin Islands**, St Thomas, 300 m, 25-30.vii.1987 (V.O. Becker), gent CG 4897 (CG).

Diagnosis.— The species is characterized by the female genitalia.

Description.— Female. Wingspan 11-12 mm. Head appressedly scaled, dark brown, above the eye some white scales. Palps one and a half times eye diameter, grey-white; ringed twice, pale brown on the second segment; and twice with dark brown on the third segment. Antennae ciliated, ringed dark brown and ferruginous-white. Collar dark brown, with some erect, bifid scales. Thorax and tegulae dark brown. Mesothorax white. Hind legs pale brown, mixed with white scales; at the base of the spurs and terminally on the tarsal segments dark brown. The spur pairs of unequal length, The medial spur longer than the lateral spur, and the proximal pair longer than the distal pair.

Forewings cleft from two thirds, dark brown. At one third of the lobe a white transverse line and a subterminal white line in both lobes. The tip of the first lobe and to a lesser extent the second lobe, gradually turning ferruginous. Fringes grey-brown; at the termen and into the cleft from the first lobe dark grey, in the centre of the cleft, on both lobes mixed with prominent black scales; around the apex and anal angle of the second lobe dark grey fringes, at the central termen grey-white; on the dorsum basally from the dark grey patch, grey-white; on the dorsum a small scale-tooth at two thirds. Underside dark brown, with an ochreous transverse marking at one third of the first lobe and a distinct subterminal line.

Hindwing and fringes dark brown; in the third lobe mixed with some ochreous-white scales. On the dorsum of the third lobe two small scale-teeth at one third and two thirds, and a large one terminally, which extends onto the costa as well. Underside dark brown. Venous scales ferruginous-orange, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium small and narrow. Antrum gradually progressing into the slender ductus bursae. Bursa copulatrix vesicular, with some minute spicules in the distal half. Lamina ante-vaginalis is shaped into an excavated, rectangular cover, which shields the ostium and distal part of the antrum. Apophyses anteriores absent. Apophyses posteriores two and a half times longer than papillae anales.

Ecology.— The moth flies in July and August. The hostplant is unknown.

Distribution.— **Puerto Rico**: Cayey. **Virgin Islands**: St Thomas.

Etymology.— The name means "cover", which is present over the ostium.

*Capperia* Tutt, 1905

Ent. Rec. J. Var. 17: 470. Type-species: *Oxyptilus britanniodactylus* Gregson, 1869 (= *heterodactyla* Tutt, nec Müller, nec Villers), by original designation.

Redescription.— Head without frontal tuft. Palps without hair-brush along third segment; one and a half times eye diameter. No abdominal hair-brushes.

First forewing lobe acute, second lobe with excavated (not sinuate) terminal margin. Forewing veins: R1 absent, R2, R3, R4 and R5 present; R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from basal half of M3 in second lobe, Cu2 from angle of cell.

On the third lobe of hindwings a (sub)apical scale-tooth; third lobe with one vein.

Male genitalia.— Strongly sclerotized valvae, with extending processes and/or spines. Aedeagus S-shaped, with occasional processes, ridges or plates. Ninth sternum plate sclerotized and extended into bifurcated plate.

Female genitalia.— Ostium centrally placed, in the shape of irregular plate, triangular or shield-like. Ductus bursae slender, without sclerites. Bursa copulatrix without signum. Lamina ante-vaginalis pronounced, often with small central sclerotized plate.

Ecology.— The species belonging to this genus seem to be monophagous on Labiatae.

Distribution.— Holarctic; the **Philippines** and **Mexico**.

*Capperia browni* spec. nov.

(figs 153, 410)

Material.— Holotype ♀: **Mexico**, Veracruz, 22 rd km W C(iuda)d Mendoza, 2150 m, 13.viii.1987 (Brown & Powell), gent CG 3745 (UCB).

Diagnosis.— The species is characterized by the female genitalia.

Description.— Female. Wingspan 12.5 mm. Head appressedly scaled, dark brown. Above the eye a white line. Palps slender, protruding; first and second segment mixed with numerous white scales, third segment dark brown. Antennae ringed dark brown and white, shortly ciliated. Thorax, tegulae and mesothorax dark brown mixed with some ferruginous scales. Hind legs cream-white mixed with some dark brown scales; at the base of the spurs and terminally in the tarsal segments dark brown. Spurs longitudinally coloured dark brown and grey-white. Spur pairs of unequal length, the medial spurs longer than the lateral spurs and the proximal pair shorter than the distal pair.

Forewings cleft from 2/5, dark brown. Markings as two faint ochreous transverse lines at one third and two thirds of the lobes. Fringes brown-grey; at the apex and anal area of the first and second lobe black; black scales scattered in the cleft, at the apex of the second lobe and as dorsal scale-teeth at 2/5 and 3/4. Underside dark brown, paler in the lobes, and with the transverse markings as above.

Hindwings dark brown, the mid section of the third lobe mixed with white. Fringes brown-grey. Third lobe with a subterminal black scale-tooth, wider dorsally than costally, and scattered black scales along the dorsum of the third lobe. Underside of first and second lobes ferruginous with a white transverse marking at two thirds of the first lobe; third lobe as above. Venous scales ferruginous, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium small circular. Antrum narrow, and slender, progressing into the slender ductus bursae. Bursa copulatrix vesicular, with a group of spiculae randomly placed in the top half. Ductus seminalis from top of bursa copulatrix. Lamina ante-vaginalis as an extended plate of the sclerotized rim of the seventh sternite; membranous, with laterally placed, a small half-moon shaped sclerotized ridge with spicules along the top. Lamina post-vaginalis as a half-moon shaped plate, which extends along the top of the membrane as an irregular area of sclerotization. Apophyses anteriores absent. Apophyses posteriores slender, two and a half times papillae anales.

Ecology.— The moth flies in August, at an altitude of 2150 metres. The hostplant is unknown.

Distribution.— **Mexico:** Veracruz: Ciudad Mendoza.

Etymology.— The species is named after the collector Dr John Brown.

Remarks.— The species is an extension of the genus into the Neotropical fauna.

### *Oxyptilus* Zeller, 1841.

*Oxyptilus* Zeller, 1841: 765.— Type species: *Pterophorus pilosellae* Zeller, 1841, by subsequent designation by Tutt, 1905: 35.

Redescription.— Head appressedly scaled; no frontal tuft. Palps upwardly curved, along the third segment an appressed or parallel hair-brush. Abdomen with small hair-brush on the lateral parts of eighth sternite.

Forewings dark to shining brown; first lobe with an acute tip, and second lobe with a sinuate terminal margin. Both lobes with two transverse white lines. Forewing veins: R1, R2, R3, R4 and R5 present; R2 and R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from middle of M3 in second lobe; Cu2 from cell.

Hindwing on dorsum of third lobe an apical, sometimes subapical, black scale-tooth; third lobe with one vein.

Male genitalia.— Valvae symmetrical, bilobed. Terminal lobe of valva of variable size, depending on species. Tegumen bilobed, symmetrical. Aedeagus slightly curved, spiculate near top.

Female genitalia.— Ostium centrally positioned. Antrum funnel-like, small. Ductus bursae long and slender. Bursa copulatrix vesicular, with two small bean-like signa. Apophyses posteriores pronounced. Apophyses anteriores absent.

Ecology.— The hostplants are Compositae.

Distribution.— Mainly Palaearctic with a few species in the Nearctic and Afrotropical regions.

### *Oxyptilus scutifer* Meyrick, 1930 (figs 154, 411)

*Oxyptilus scutifer* Meyrick, 1930: 564.

Material.— Lectotype (designated here) ♀: **Ecuador**, Duran, (19)14 (P), gent CG 5054 (BMNH) [examined].



Diagnosis.— The species is characterized by the dull uniform grey-brown colour of the forewing and the terminal scale-tooth on the third lobe of the hindwing.

Redescription.— Female. Wingspan 11-14 mm. Head appressedly scaled, grey-brown. Frons smooth, grey-brown. Palps grey-brown, slender, the second segment curved, the third segment protruding, twice the eye diameter. Antennae not to be examined in available specimen. Thorax and tegulae grey-brown. Mesothorax cream-white. Abdomen grey-brown, with a faint lateral white line. Hindlegs whitish with brown area at the base of the spurs and the distal parts of the tarsal segments. Spur pairs longitudinally marked white and brown, of equal length and of remarkable length.

Forewings cleft from two thirds, colour grey-brown. Markings a gradual dark area from the base of the cleft into both lobes to the apex. Fringes brown-grey, with a small scale-tooth on the dorsum of the second lobe just beyond the base of the cleft. Underside brown-grey.

Hindwings grey-brown, but the third lobe mixed with grey-white. Fringes grey-brown, with an apical scale-tooth on the dorsum of the third lobe and between this scale-tooth and the wing base some scattered prominent scales. Underside grey-brown. Venous scales in a double row, ferruginous-brown, the dorsal row longer than the costal row.

Male genitalia.— Unknown.

Female genitalia.— Antrum rather narrow. In the distal part of the ductus bursae a single twist; towards the bursa copulatrix gradually widening. Ductus seminalis from the tip of the bursa copulatrix. Bursa copulatrix vesicular, with a pair of thorn-like signa. Lamina ante-vaginalis extended to a central plate, covering the antrum. Apophyses anteriores small. Apophyses posteriores slender, three and a half times papillae anales.

Ecology.— The moth flies in March. The hostplant is unknown.

Distribution.— **Costa Rica:** Guanacasta: Playa Tamarindo. **Ecuador:** Duran.

### *Buckleria* Tutt, 1905

*Buckleria* Tutt, 1905: 37.— Type-species: *Pterophorus paludum* Zeller, 1841, by original designation.

Redescription.— Head without frontal tuft. Palps slender, almost twice eye diameter, without hair brush along third segment. Forewings cleft from halfway, both lobes with an acute apex.

Forewing veins: R1 absent; R2, R3, R4 and R5 present; R2 and R3 stalked with R4; Cu1 and Cu2 present and separate; Cu1 from middle of M3 in second lobe; Cu2 from beyond cell.

On dorsum of third lobe of hindwings some isolated dark scales, not organised into a scale-tooth; third lobe with one vein.

Male genitalia.— Uncus extremely reduced. Valvae slender, with vesicular process originating centrally on valva. Aedeagus slender, slightly curved.

Female genitalia.— Ostium centrally positioned. Antrum tube-like, twice as long as wide. Bursa copulatrix without signum.

Ecology.— Three known species of the genus feed on *Drosera* spp. which grow in bogs and moorlands. Especially in industrialized countries, peat-bogs and moorlands are becoming scarce and these species are becoming increasingly rare.

*Buckleria brasilia* **spec. nov.**  
(figs 155, 277, 412)

Material.— Holotype ♂: **Brazil**, Goiás, Alto Paraiso, 1300 m, 30.v.1994 (V.O. Becker), gent CG 4910 (V.O. Becker nr 92782). Paratypes: 4 ♂♂, 3 ♀♀, same locality and date, gent CG 4915 ♀ (V.O. Becker, CG); 2 ♂♂, **Brazil**, Goiás, Serra do Cipo, 4.v.1994, 6.v.1994 (E. Setz), on *Drosera graminifolia*, gent CG 4911 (V.O. Becker, CG).

Diagnosis.— The species is characterized by the genitalia.

Description.— Male, female. Wingspan 11-12 mm. Head appressedly scaled, pale brown, frons with some erect and protruding scales; above the eye and lateral on the frons a white line. Palps slender, twice the eye diameter, dorsally white, ventrally pale brown. Antennae pectinate, dark brown. Thorax and tegulae pale brown. Mesothorax mixed with white scales. Abdomen pale brown-white, with a mid-dorsal narrow dark brown line and medio-lateral and lateral two pale brown lines. Hind legs dark brown with a longitudinal bright white line. The proximal spur pair longer than the distal pair; shining dark brown.

Forewings cleft from 3/7, pale brown. Markings: a brown dorsal spot at 1/6; some brown scales at the dorsal part of the base of the cleft; sparsely scattered scales along the costa; and dark tips to both lobes. Fringes dark grey; at the anal regions of both lobes interrupted by white groups of fringe hairs; in the cleft prominent black scales in the fringes and on the dorsum of the second lobe small scale-teeth at one third and two thirds. Underside pale brown, with some white scales at two thirds of the first lobe.

Hindwings and fringes grey-brown. The tips of the first and second lobes dark brown. Underside pale brown. Venous scales ferruginous, in a double row, the costal row the longer.

Male genitalia.— Valvae gradually narrowing and becoming asymmetrical at the tips. Sacculus short, with a hooked tip. Cucullus with a basal triangular plate. Tip of valvae bifurcate, the dents in the left valva slightly bigger than in the right valva. At 2/5 of the valva a membraneous blotch. Tegumen simple, without uncus. Saccus spade-like, twice as long as wide. Aedeagus slightly curved. No coecum. Tip of aedeagus with with a group of small spiculae.

Female genitalia.— Ostium with two indentations. Antrum simple, three times longer than wide. Ductus bursae simple, slender, three times longer than antrum. Bursa copulatrix vesicular, with a single sclerotized signum plate, in shape of a rosette. Lamina ante-vaginalis trapezoid, sclerotized, centrally indented. Apophyses anteriores absent. Apophyses posteriores slender, three times longer than papillae anales.

Ecology.— The moth flies in May. The hostplant is *Drosera graminifolia* St. Hill.

Distribution.— **Brazil**: Goiás: Alto Paraiso, Cerri do Cipo.

Etymology.— The name reflects the first country in South America where a representative of this genus has been discovered.

*Megalorhipida* Amsel, 1935.

*Megalorhipida* Amsel, 1935a: 293.— Type species: *Megalorhipida palaestinensis* Amsel, 1935, by monotypy.

*Megalorrhypida* Amsel, 1935a: 293.— Incorrect (of a multiple original) spelling.

Redescription.— Head appressedly scaled; no frontal tuft. Palps rather slender, nearly twice eye diameter.

Forewings cleft from halfway; no costal triangle; apex of both lobes acute, without termen. Forewing veins (after Zimmerman, 1958): R1 absent; R2, R3 and R4 present and separate; R5 absent; Cu1 and Cu2 absent. Hindwing with small, centrally placed scale-tooth at dorsum of third lobe.

Venation of hindwing: Sc, RR and M1 fused, Cu1 to apex of second lobe, Cu2 to half second lobe and An as far as base of first cleft, An to apex of third lobe. Third lobe with one vein.

Male genitalia.— Valvae symmetrical, rounded. Tegumen with swollen uncus clothed in hairs. Vinculum rounded. Aedeagus slightly curved, without cornuti.

Female genitalia.— Bursa copulatrix with a pair of bean-like signa. Ductus bursae narrow, tube-like. Antrum flattened. Margin of seventh sternite excavated. Central segment of eighth sternite posteriorly extended. Apophyses anteriores absent. Apophyses posteriores three to four times as long as papillae anales.

Ecology.— Recorded hostplants are Nyctaginaceae, Amaranthaceae, Fabaceae, Goodeniaceae, Asteraceae, and Verbenaceae.

Distribution.— Pantropical and subtropical.

*Megalorhipida leucodactylus* (Fabricius, 1794)  
(figs 156, 278, 413)

*Pterophorus leucodactylus* Fabricius, 1794: 346.

*Pterophorus defectalis* Walker, 1864: 943.

*Pterophorus congrualis* Walker, 1864: 943.

*Pterophorus oxydactylus* Walker, 1864: 944.

*Aciptilia hawaiiensis* Butler, 1881: 408.

*Trichoptilus ochrodactylus* Fish, 1881: 142.

*Trichoptilus centetes* Meyrick, 1886: 16.

*Trichoptilus compsochares* Meyrick, 1886: 16.

*Trichoptilus adelphodes* Meyrick, 1887: 266.

*Trichoptilus ralumensis* Pagenstecher, 1900: 239.

*Trichoptilus subtilis* Rebel, 1907: 114.

*Trichoptilus derelictus* Meyrick, 1926: 276.

*Megalorhipida palaestinensis* Amsel, 1935: 283.

Material.— Lectotype of *Pterophorus defectalis* Walker: **Sierra Leone**, (Morgan) (BMNH) [examined]. Lectotype of *Pterophorus congrualis* Walker: South **Hindustan**, (Walhouse) (BMNH) [examined]. Lectotype of *Pterophorus oxydactylus* Walker: **Ceylon**, (Nietner) (BMNH) [examined]. Holotype of *Trichoptilus centetes* Meyrick: **Papua New Guinea**, Port Moresby, xi (Mathew) (BMNH) [examined]. Holotype of *Trichoptilus compsochares* Meyrick: **Cape De Verde Islands**, St. Vincent, i (Mathew) (BMNH) [examined]. Lectotype of *Trichoptilus ralumensis* Pagenstecher: **Indonesia**, Ralum, 24.x.1896 (Dahl). Holotype ♂ of *Trichoptilus derelictus* Meyrick (abdomen glued to thorax): **Ecuador**, Galapagos Archipelago, Charles Island, 31.vii.(19)24 (St. George Expedn., Collenette), at light, sea level, gent BM 18448 (BMNH) [examined].

Diagnosis.— Within the genus the species is characterized by the centrally placed scale-tooth on the third lobe of the hindwing. In addition, the genitalia in both male and female are characteristic.

Redescription.— Male, female. Wingspan 14-17 mm. Head appressedly scaled, ferruginous-brown. Palps short compared to eye diameter, yellow-brown. Antennae ringed, shortly ciliated. Collar and thorax yellow-brown. Abdomen brown-yellow, with indistinct longitudinal creamy-white and pale brown lines. Hindlegs with spur pairs of equal length.

Forewings cleft from halfway, yellow-brown. Markings brown. A small discal spot and poorly defined transverse bands on first lobe at base and middle, and a faint dark area near the apex. Fringes yellow-brown, grey-brown at the dark spots and along the costa of the second lobe opposite the dark markings, on dorsum of second lobe dark, mixed with isolated black scales. Underside dark brown, paler along costa and towards the apex of both lobes.

Hindwings brown, fringes dark brown. An indistinct scale-tooth in the middle of the dorsum of the third lobe. Underside of first and second lobes brown, third lobe yellow-brown. Venous scales ferruginous, in a double row, proceeding in a single row.

Variation.— In the specimens from the Caribbean area the venous scales are dark brown. In general the specimens examined from the Americas have a paler colour than those from Africa. The specimens examined from the Galapagos Archipelago and Socorro Island show a general darkening of the colour.

Male genitalia.— Genitalia symmetrical. Valvae trapezoidal. Uncus swollen. Vinculum rounded. Aedeagus small, tube like, without cornuti.

Female genitalia.— Bursa copulatrix with a pair of signa. Ductus bursae narrow, tube-like. Antrum flattened. Margin of seventh sternite excavated. Central segment of eighth sternite posteriorly extended. Apophyses anteriores absent. Apophyses posteriores three to four times longer than papillae anales.

Ecology.— The moth flies from January to July and in October. The hostplants are *Acacia neovernicosa* Isely, *Mimosa tenuiflora* (Willd.) (Fabaceae), *Boerhavia diffusa* L., *B. coccinea* Mill., *B. chinensis* (L.) Asch. & Sch., *B. repens* L., *Commicarpus tuberosus* (Lam.) Standl., *Okenia hypogaea* Schltld. & Cham. (Nyctaginaceae), *Amaranthus* spec. (Amaranthaceae), *Scaevola frutescens* Krause (Goodeniaceae).

Distribution.— **Antigua:** English Harbor. **Argentina:** Salta: Lumbreras, Los Toldos; Tucuman: Cerro San Javier; La Rioja: Cebollar. **Bolivia:** Rio Yacuma. **Brazil:** Distrito Federal: Planaltina. **Colombia:** Atlantico: Quarto Bocas. **Cuba:** Guantanamo: Imias. **Curaçao:** Willemstad. **Ecuador:** Galapagos Archipelago: San Cristobal, Baltra, Isabela, Santiago, Santa Cruz; Manabi: Punto Lopez. **French Guyana:** Nouveau Chantier. **Honduras:** Zamorano, Comayagua. **Mexico:** Baja California del Sur: La Paz; Sinaloa: Villa Union; Nayarit: San Blas; Colima: Socorro Island; Quintana Roo: Isla Mujeres. **Paraguay:** Alto Paraguay: Madrejou; Boqueron: Cruce Loma Plata, Laguna Capitan; Central: Asuncion, Lambare; Gualra: Melgarejo; Misiones: Ayolos; Paraguani: Sapucay. **Peru:** Ica: Pisco. **St. Eustacius.** **Venezuela:** Merida: Tabay; Maracay. **Virgin Islands:** St. Croix; Tortola; Guana Island.

*Megalorhipida pseudodefektalis* Gielis, 1989  
(figs 157, 279, 414)

*Megalorhipida pseudodefektalis* Gielis, 1989a: 107.

Material.— Holotype ♂: **Argentina**, Neuquen, Piedra del Aguila, 18.xii.1978 (Mis. Cient. Danesa, sta. 15), gent CG 4109 (ZMUC). Paratypes: 2 ♂♂, 2 ♀♀, **Argentina**, Neuquen, Piedra del Aguila, 15.xi.1978, 18.xii.1978, 19.xii.1978 (Mis. Cient. Danesa, sta. 15), gent CG 4106, 4107 and wing-venation prep. CG 4113 (ZMUC, CG); 2 ♀♀, **Argentina**, Neuquen, Rio Arroyito, 17.xii.1978 (Mis. Cient. Danesa, Sta. 12), gent CG 4108 (ZMUC); 1 ♂, 1 ♀, **Argentina**, Neuquen, N. of Chos Mahal Barrancas, 850 m., 22.iii.1979 (Mis. Cient. Danesa, Sta. 63) (ZMUC).

Diagnosis.— Within the genus, the species is characterized by the double scale-tooth on the third lobe of the hindwing. In addition, the genital structure of both male and female are characteristic.

Description.— Male, female. Wingspan 15-18 mm. Head pale and grey-brown, apressedly scaled. Palps a little larger than eye diameter, creamy-white. An indistinct ring at end of second segment and a distinct one at the end of the third. Antennae ringed, white and brown, first segment large with brown brush, other segments shortly ciliated. Collar and thorax pale brown. Abdomen with longitudinal creamy-white and pale brown lines. Hindlegs ringed creamy-white and dark brown. Spur pairs of equal length.

Forewing colour and markings as in *M. leucodactyla*. The discal spot and markings in the first lobe more pronounced and distinct. Fringes with more pronounced dark scales along the dorsal margin. Underside in a brown and creamy-white pattern as above.

Hindwings in the first and second lobes brown. The third lobe brown in the costal half brown and creamy-white in the dorsal half. Fringes grey-brown, along the dorsal margin of the third lobe basally white. The scale-teeth on the dorsum of the third lobe consist of two small dark brown groups at two thirds and also subapical. Underside colour in the first and third lobes yellow-brown and in the second lobe brown. The venous scales in the basal wing parts in shape of a double row of dark brown scales; in the apical part of the second lobe as a single row

Wingvenation: As in genus description with the exception of the small branch of RR in the hindwing.

Male genitalia.— Genitalia symmetrical. Valvae lanceolate, with some small thorn-shaped structures in the distal part. Tegumen arched, uncus wide but small. Vinculum blister-like. Aedeagus tube-like, a little arched, without cornuti.

Female genitalia.— Bursa copulatrix simple, with a double signum. The signum formed by numerous grouped thorn-like shapes. Ductus bursae narrow, poorly sclerotized. Antrum bursae short, straight. Apophyses anteriores absent. Apophyses posteriores approximately twice as long as papillae anales.

Ecology.— The moth flies in February, March and December. The hostplants are *Eupatorium betonicaeforme* (DC.) Baker, *Barrosoa betonicaeformis* (DC.) R.M. King & H. Rob., *Senecio oleosus* Vell. (Asteraceae). Breeding results of Prof. Dr T.M. Lewinsohn, Campinas, Brazil.

Distribution.— **Argentina**: Neuquen: Chos Mahal Barrancas, Rio Arroyito, Piedra del Aguila. **Brazil**: Sao Paulo: Ilha do Cardoso; Rio Grande del Sul: Capão da Canoa; Rio de Janeiro: Marica. **Chile**: Coquimbo: Termas de Socos, Illapel, Coquimbo; Maule: RN Radal Seite Tazas. **Paraguay**: Caaguazu: Tayao; Gualra: Calle Florida; Paraguari: Sapucay.

*Megalorhipida dulcis* (Walsingham, 1915)  
(figs 158, 280, 415)

*Trichoptilus dulcis* Walsingham, 1915: 435.

Material.— Holotype ♀ (abdomen missing): **Mexico**, Guerrero, Amula, 6000 ft., viii.18.. (Smith), (BMNH) [examined].

Redescription.— Male, female. Wingspan 11 mm. Head with some erect scales, covered with white scales ending pale brown. Palps slender, protruding, grey-white, one and a half times eye diameter. Antennae indistinctly ringed grey-white and pale brown, shortly ciliated. Thorax as head; tegulae and mesothorax white. Hindlegs white with pale brown rings before base of spurs. The spur pairs of equal length.

Forewings cleft from 2/5, white. An intense brown scaling in the basal half of the wing and three transverse bands on both lobes. Fringes grey. A scale-tooth on the dorsum of the first lobe. Underside marked as above.

Hindwings white, heavily scaled with brown on the first and second lobes. Fringes grey. A small apical group of scales on the third lobe and a scale-tooth at 3/4 of the lobe, pale brown, extending equally wide on both the costa and the dorsum. Underside as above. Venous scales orange-ferruginous in a double row. The costal row short, the dorsal row extending into the second lobe.

Male genitalia.— Valvae symmetrical, simple, with scattered setae. Tegumen simple, arched. Uncus from middle of tegumen, tip not exceeding the tegumen. Anellus arms, short, slender, and poorly sclerotized. Saccus stout, with rather acute tip. Aedeagus tube-like, with a rim of spiculae at the tip and a small sclerotized ridge just below the tip.

Female genitalia.— Ostium rounded. Antrum gradually narrowing, three times as long as wide. Ductus bursae two thirds of antrum length, slender. Bursa copulatrix vesicular, with a single signum in shape of a spiculated plate. Apophyses anteriores absent. Apophyses posteriores rather stout, one and a half times the papillae anales.

Ecology.— The moth flies in November. The hostplants are *Lantana urticifolia* Mill. and *L. glandulissimus* Hayek. Breeding results by Dr W.A. Palmer, Austin, U.S.A.

Distribution.— **Belize**: Cayo: San José Succotz, Chiquibul For Res. **Costa Rica**: Guanacaste: PN Guanacaste. **Mexico**: Guerrero: Amula; Oaxaca: Oaxaca; Quintana Roo: Cancun, Xcaret; Cuernavaca.

*Megalorhipida paraiso* **spec. nov.**  
(figs 159, 416)

Material.— Holotype ♀: **Brazil**, Goiás, Alto Paraiso, 1100 m, 4.x.1985 (V.O. Becker), prep CG 3670 (V.O. Becker nr 64684). Paratypes: 2 ♀♀, **Brazil**, Goiás, Alto Paraiso, 1400 m, 3.x.1985 (V.O. Becker), gent CG 3652, 3897 (V.O. Becker nr 64410, CG); 1 ♀, **Brazil**, Distrito Federal, Planaltina, 1100 m, 22.viii.1996 (V.O. Becker), gent CG 4913 (V.O. Becker nr 114814).

Diagnosis.— The species is characterized by the female genitalia, which bear a single spiculate signum.

Description.— Female. Wingspan 10-11 mm. Head with some erect scales, dark brown. Above the eye some white scales. Palps one and a half times eye diameter,



protruding, dorso-laterally white, ventrally dark brown. Antennae dark brown, pectinate. Thorax and tegulae dark brown, mixed with white scales towards the rear. Mesothorax white. Hind legs dark brown, centrally in the tibial segments between the spur pairs and centrally in the tarsal segments progressively intense white. The spur ventrally brown, dorsally white; the pairs of unequal length, the medial spurs longer than the lateral spurs, and the proximal pair longer than the distal pair.

Forewings cleft from halfway, grey-brown. Markings dark brown: some scales at the discal spot, at the base of the cleft, and a central dark area in the first lobe. Fringes grey; a dark patch at the anal region of the first lobe and around the apex of the second lobe. On the dorsum of the second lobe a subterminal white dash in the fringe, preceded by a dark grey patch. In the cleft and on the dorsum of the second lobe scattered prominent black and white scales. Underside brown, with white transverse lines at one third and two thirds of the first lobe, and at two thirds of the second lobe.

Hindwings and fringes grey-brown. On the third lobe a subterminal scale-tooth occupying both the costa and dorsum, between the base and the scale-tooth black and white scales, numerous on the dorsum and sparse on the costa. Underside brown, on the first lobe sparsely and in the third lobe numerous mixed with white scales. Venous scales ferruginous, in a double row, the costal row the longer.

Male genitalia.— Unknown.

Female genitalia.— Ostium flat. Antrum tube-like three times as long as wide. Ductus bursae slender, twice as long as the antrum. Bursa copulatrix vesicular, with a single signum. Signum a plate with numerous spiculae. Lamina ante-vaginalis a narrow ridge. Apophyses anteriores absent. Apophyses posteriores stout, three times as long as papillae anales.

Ecology.— The moth flies in August and October, at an altitude of 1100-1400 metres. The hostplant is unknown.

Distribution.— **Brazil**: Goiás: Alto Paraiso; Distrito Federal: Planaltina.

Etymology.— The name reflects the locality in which the holotype was collected.

Remarks.— The generic position of this species is not completely clear yet. With the material currently available the present genus appears to be the best position to place it.

*Megalorhipida dubiosa* **spec. nov.**

(fig. 281)

Material.— Holotype ♂: **Brazil**, Distrito Federal, Planaltina, 1000 m, 25.ix.1985 (V.O. Becker), gent CG 3669 (V.O. Becker nr 57894).

Diagnosis.— The species is characterized by the pale costal line from the wing base to the apex of the first lobe.

Description.— Male. Wingspan 10 mm. Head appressedly scaled, grey-brown. Collar with some erect, bifid scales. Palps twice the eye diameter, protruding, grey-brown mixed with sparse brown-white scales. Antennae pectinate, grey-brown. Thorax and tegulae (poorly scaled) grey-brown. Mesothorax whitish. Hind legs, tibia white with brown scales at and just before the base of the spurs; tarsal segments basally white, distally brown.

Forewings cleft from halfway, pale brown. Markings brown: a small discal spot and a transverse spot at the base of the cleft. There are the following pale ochreous-white markings: from the middle of the wing base a streak to the middle of the base of the first lobe which continues along the costa of the first lobe to the apex; a faint streak from the discal spot into the centre of the second lobe; and a small transverse band subterminally in the second lobe. Fringes dark grey; whitish at the base of the cleft; two streaks at the anal region of the second lobe and basally on the dorsum. Underside brown. Ochreous-white markings at one third of the first lobe and as a subterminal spot in both lobes.

Hindwings brown. fringes grey. On the third lobe a subterminal scale-tooth, the same size on the costa as on the dorsum. Underside brown, with a white spot subterminally in the first lobe. The third lobe white. Venous scales ferruginous, in a double row, the costal row the longer.

Male genitalia.— Valvae symmetrical. Valva basally club-like; from the base gradually widening, in the terminal third an acute semicircular shape. Tegumen simple. Uncus in the shape of a sclerotized spot in the tip of the tegumen. Anellus arms simple, and joined to the poorly developed saccus. Aedeagus straight, gradually tapering. No cornutus.

Female genitalia.— Unknown.

Ecology.— The moth flies in September. The hostplant is unknown.

Distribution.— **Brazil:** Distrito Federal: Planaltina.

Etymology.— The name reflects doubt about the validity of this species.

Remarks.— The species is described from a single male, whereas the previous species has been described from females only. There is some resemblance between the two species, in the shape, size, and most of the wing pattern. There are, however, differences in the presence of pale markings on the forewings, the markings on the underside of the wings and the colour pattern of the hind legs. Taking into account the uniform appearance of males and females in this family (only one exception is known from the Palaearctic fauna), the present male is described as a new species. I hope in the future more material becomes available to confirm or deny this classification.

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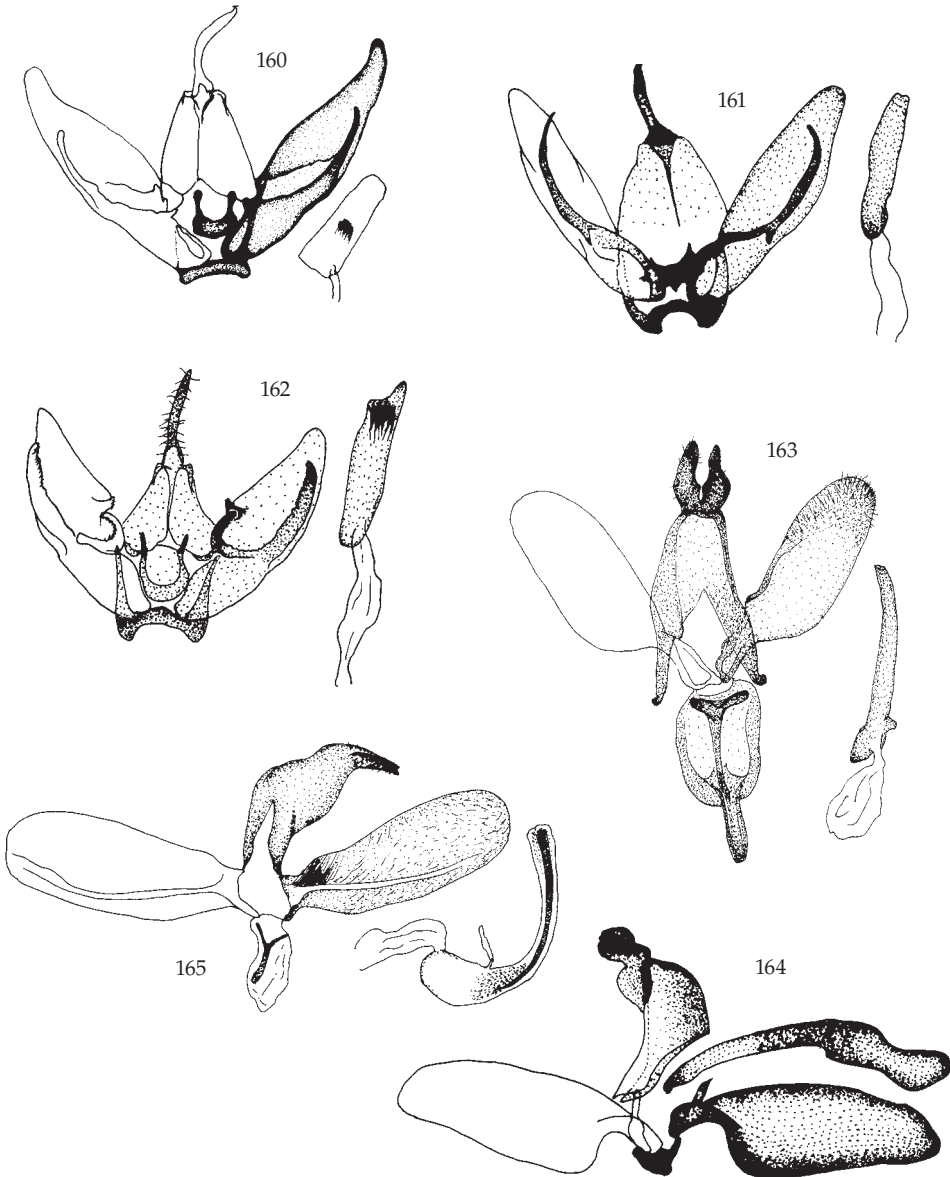


Fig. 160. *Ochyrotica fasciata* Walsingham. Cuba, Sierra del Rosario, Pinar del Rio, Soroa, 400 m, 5-6.ii.1981 (D.R. Davis), gent CG 6005 (USNM).

Fig. 161. *O. placozona* Meyrick. Peru, Jurimaguas, iii.1920 (Parish), gent BM 18619 (BMNH).

Fig. 162. *O. mexicana* Arenberger. Mexico, Mich, Tuxpan, 7-8.vii.1965 (Flint & Ortiz), gent CG 6006 (USNM).

Fig. 163. *L. hipparchus* (Meyrick). Lectotype. Brazil, Para, vi.(19)19 (Parish), gent BM 18476 (BMNH).

Fig. 164. *L. trinidad* Gielis. Paratype. Trinidad, W(est) I(ndies), Lasaivar, Maracas Valley, 5.ii.1961 (CG).

Fig. 165. *L. angulatus* **spec. nov.** Paratype. Brazil, Goias, Alto paraíso, 1100 m, 4.x.1985 (V.O. Becker), gent CG 3651 (VOB).



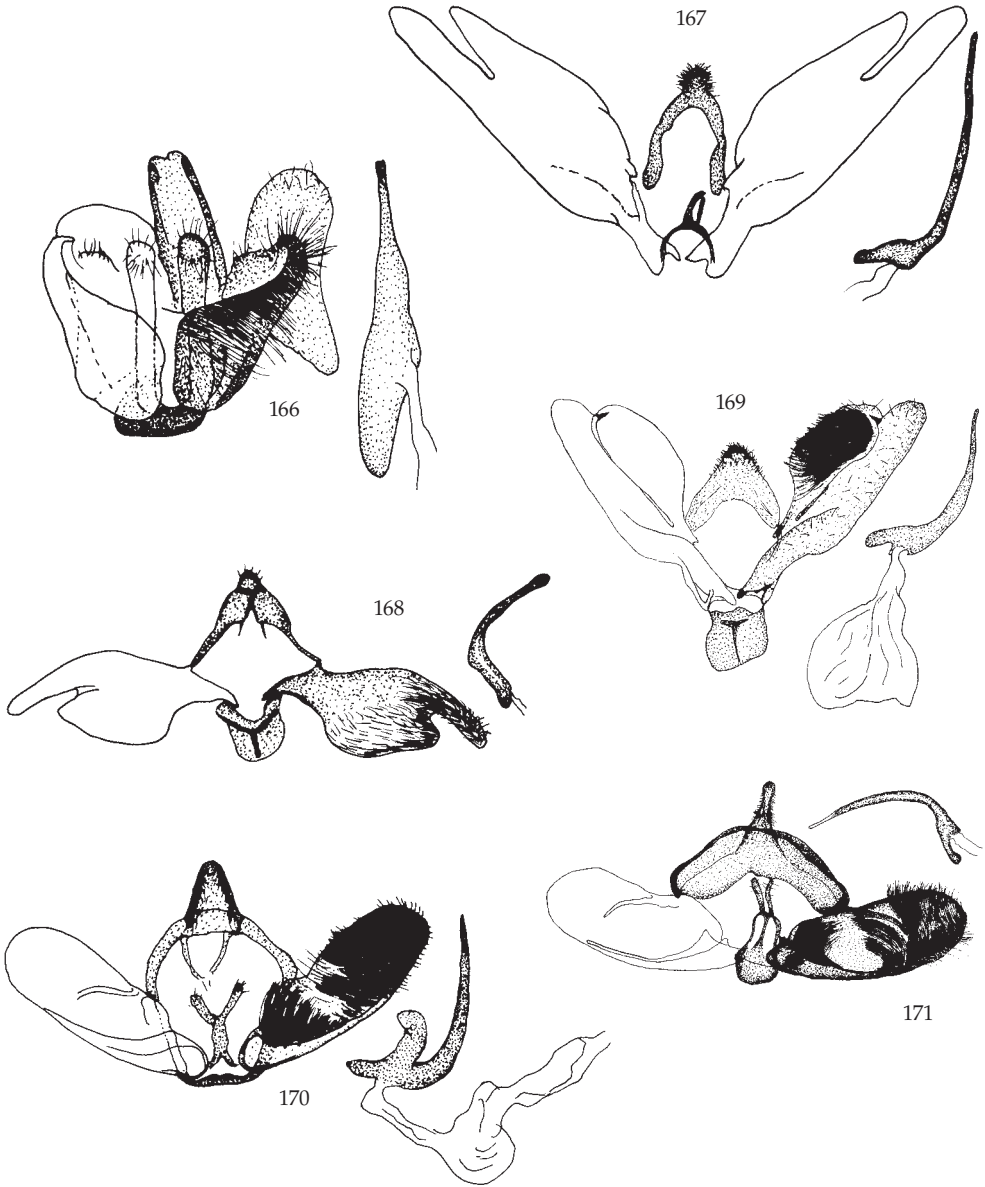


Fig. 166. *L. neales* (Walsingham). Paratype. Mexico, Vera Cruz, Atayoc, iv.18.. (H.H. Smith & Gdm Slvn), gent CG 5059 (BMNH).

Fig. 167. *L. sochchoroides* (Fletcher). Peru, Jurimaguas, iii.1920 (Parish), gent CG 5061 (BMNH).

Fig. 168. *L. zonites* (Meyrick). Lectotype. British Guyana, Bartica, ii.(19)13 (Parish), gent BM 18470 (BMNH).

Fig. 169. *L. gratus* (Meyrick). Holotype. Peru, Jurimaguas, iii (Parish), gent BM 18858 (BMNH).

Fig. 170. *Sochchora albipunctella* Fletcher. Holotype. (Brazil), Ega, no date, gent BM 18859 (BMNH).

Fig. 171. *S. donatella* Walker. Brazil, no date (Lund), gent CG 4081 (ZMUC).

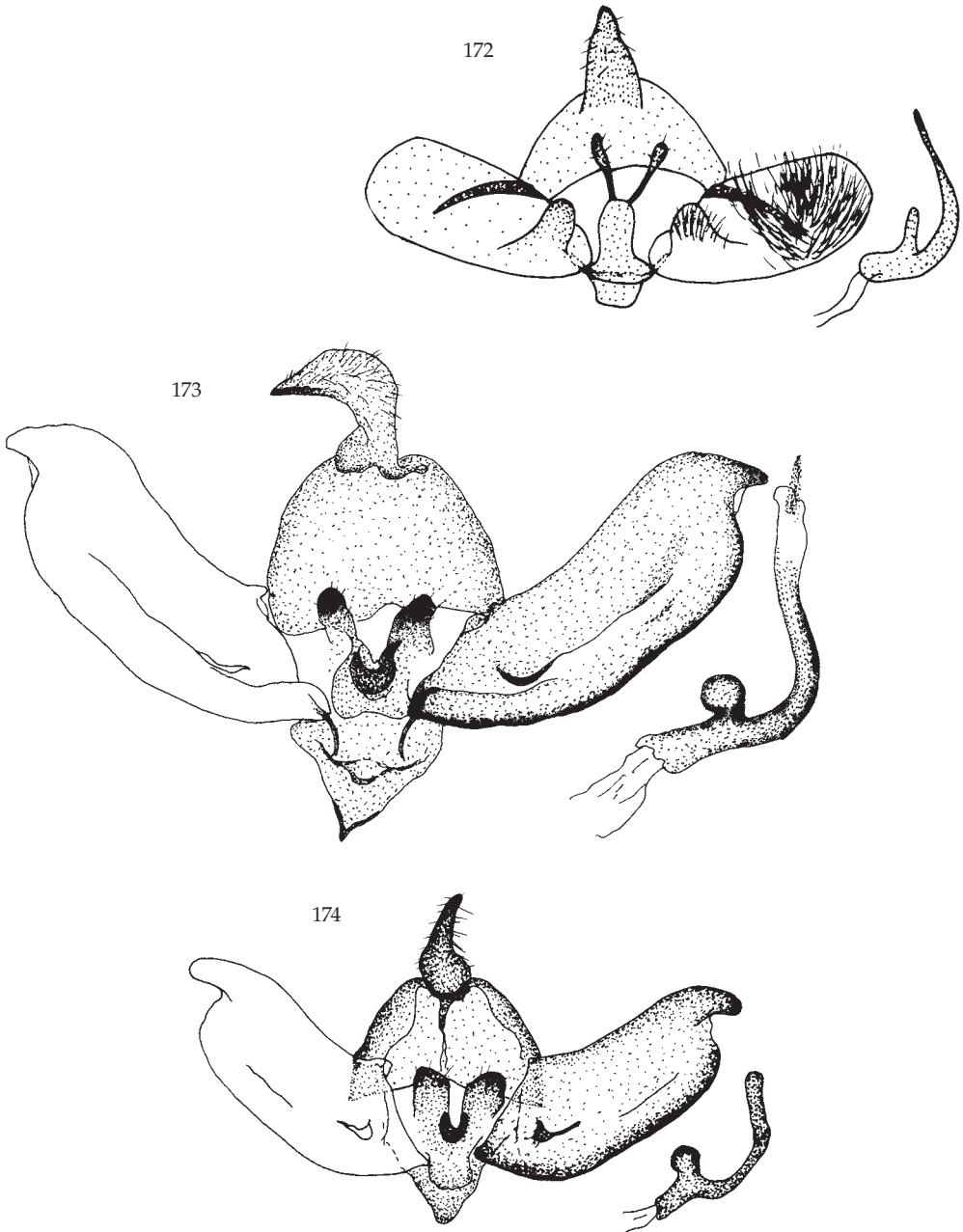


Fig. 172. *S. dotina* Walsingham. Brazil, PA, Capitão Poço, 19-22.xi.1984 (V.O. Becker), gent CG 3371 (VOB).  
Fig. 173. *Quadriptilia philorectis* (Meyrick). Holotype. Peru, Andes, (19)20, gent BM 18853 (BMNH).  
Fig. 174. *Q. obscurodactylus* Gielis. Holotype. Colomb(ia), West Cord., Rio Aguacatal, 2000 m, n.d. (Fassl),  
gent CG 5069 (BMNH).

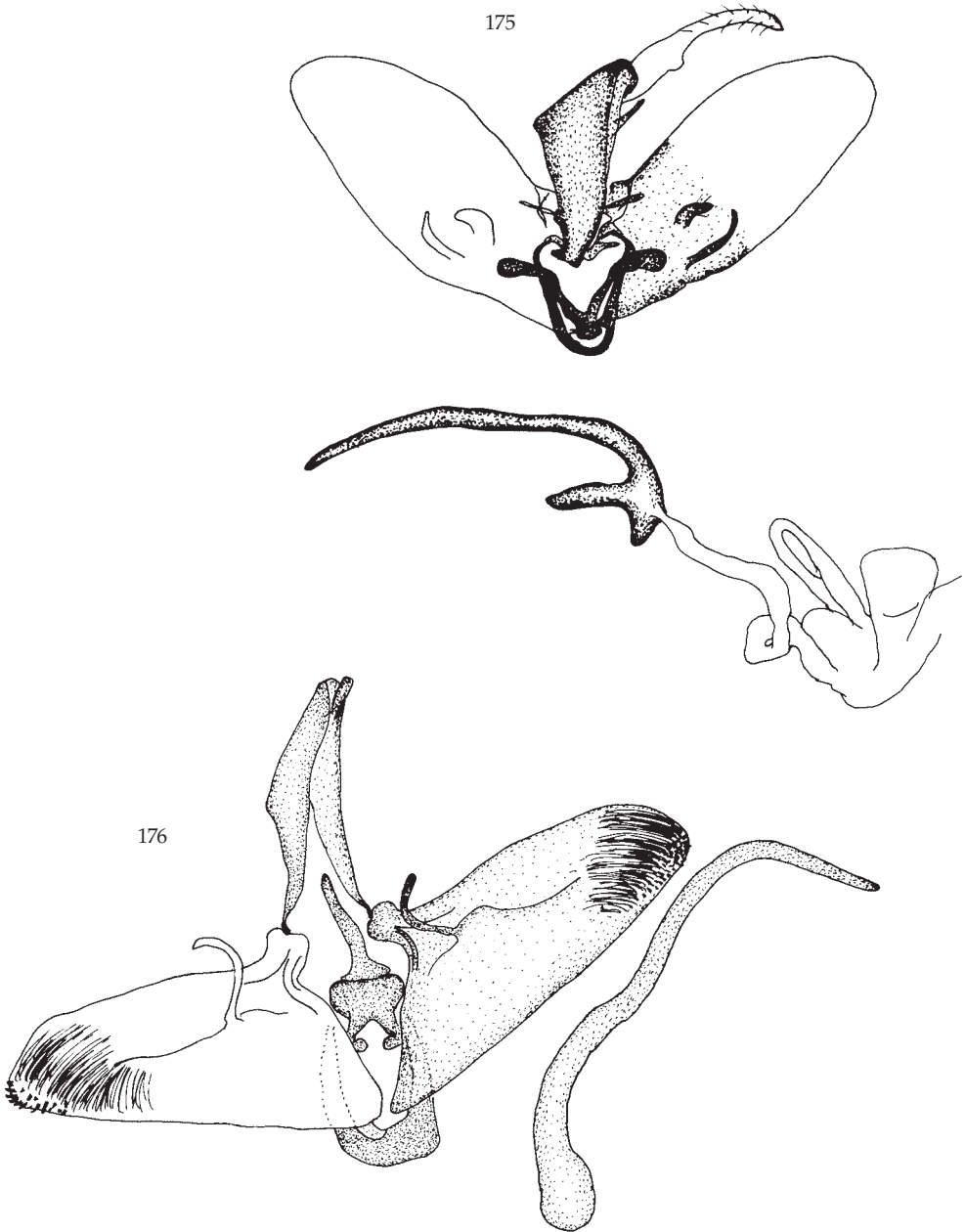


Fig. 175. *Melanoptilia arsenica* (Meyrick). Lectotype. Peru, Iquitos; Jurimaguas, iii.1920 (Parish), gent CG 5020 (BMNH).

Fig. 176. *M. nigra* **spec. nov.** Holotype. Ecuador, Pastaza, 11 km N Puyo, La Florida, 1°23'35"S 77°58'38"W, 1090 m, 27.ix.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4928 (CG).

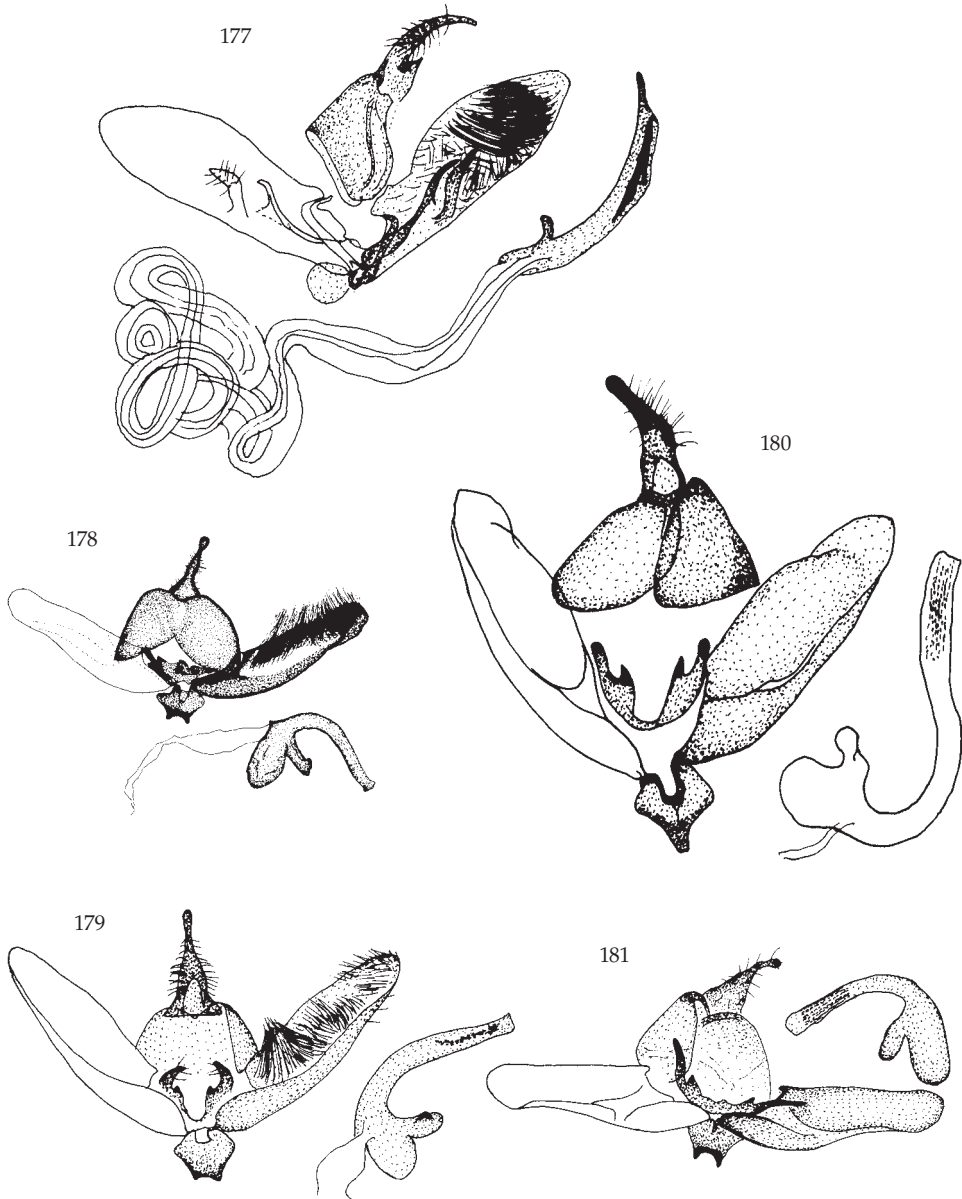


Fig. 177. *M. chalcogastra* (Meyrick). Lectotype. British Guyana, Mallali, iii (Parish), gent BM 18475 (BMNH).

Fig. 178. *Platyptilia gentiliae* Gielis. Holotype. Argentina, Neuquen, Junin de Los Andes, Catán, 825 m., 20.x.1981 (Gentili, sta. 33), gent CG 4092 (ZMUC).

Fig. 179. *P. vilema* B. Landry. After B. Landry, 1993.

Fig. 180. *P. semnopis* Meyrick. Paratype of *Platyptilia jonesi* Gielis. Brazil, Paraná, Curibita, 920 m, 15.xii.1974 (V.O. Becker), gent CG 6231 (VOB).

Fig. 181. *P. gravior* Meyrick. Holotype of *P. juanvinas* Gielis. Costa Rica, Heredia, Braulio Carrillo NP, Estacion Barva, 2500 m, iv.1990 (A. Fernandez), gent CG 3865 (Inbio).

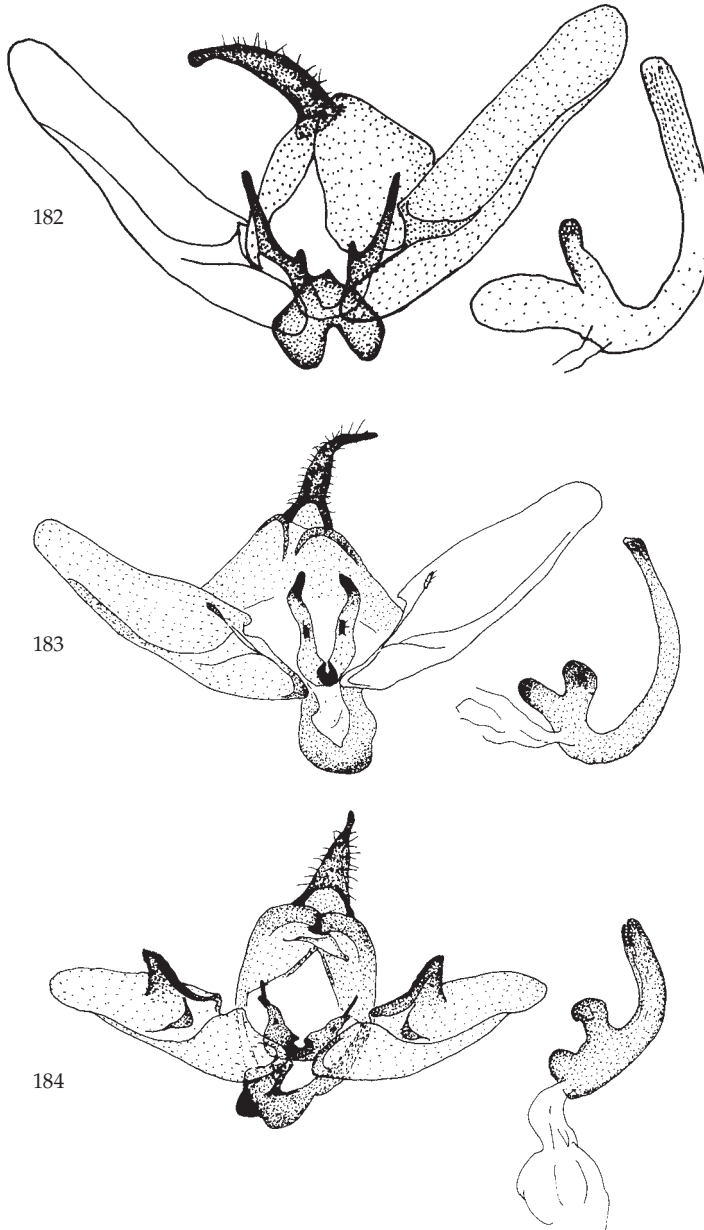


Fig. 182. *P. carduidactylus* (Riley). USA, Arizona, Flag Staff, Fort Valley, no date, gent USNM Pyr 1-1 (USNM).

Fig. 183. *P. thyellopa* Meyrick. Ecuador, Pichincha, San Juan, 3500 m, 18.ii.1982 (N. Venedictoff), gent CG 3570 (AME).

Fig. 184. *P. anniei* Gielis. Holotype Ecuador, Pichincha, Rd Quito/Chiriboga km 40, 2480 m, 22.iii.1982 (N. Venedictoff), gent CG 3569 (AME).

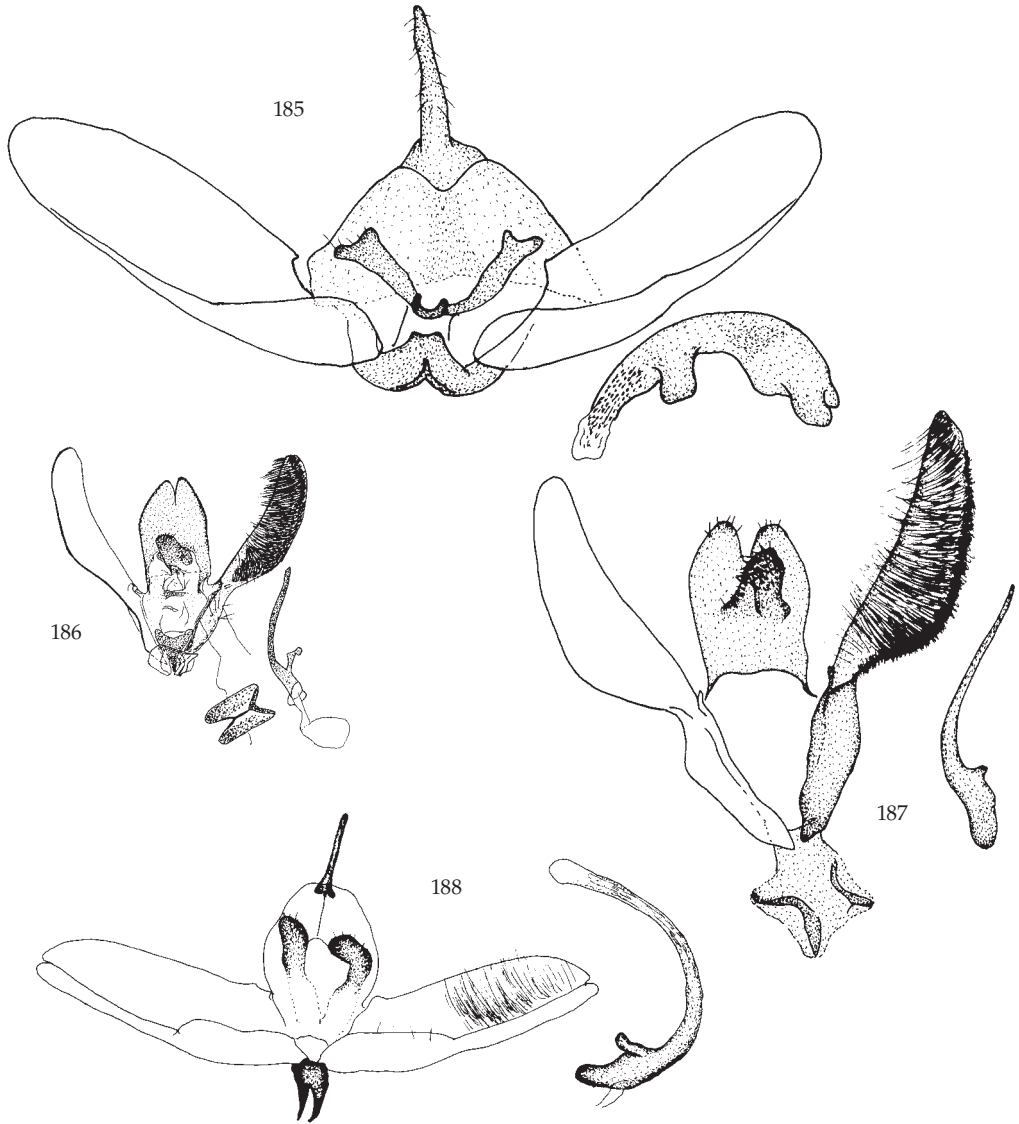


Fig. 185. *Gillmeria pallidactyla* (Haworth). France, La Pla, 26 km E Ax les Thermes, 1000 m, 26.vii.1988 (R.T.A. Schouten), gent CG 1995 (CG).

Fig. 186. *Bipunctiphorus nigroapicalis* B. Landry & Gielis. After Landry & Gielis, 1992.

Fig. 187. *B. pelzi* Gielis. Holotype. Ecuador, Morona-Santiago Prov, Macas, 1000 m, 11-23.xii.1997 (V. Pelz), gent CG 4504 (CG).

Fig. 188. *Anstenoptilia marmarodactyla* (Dyar). Type. USA, New Mexico, no date, gent USNM JFGC 9969 (USNM).



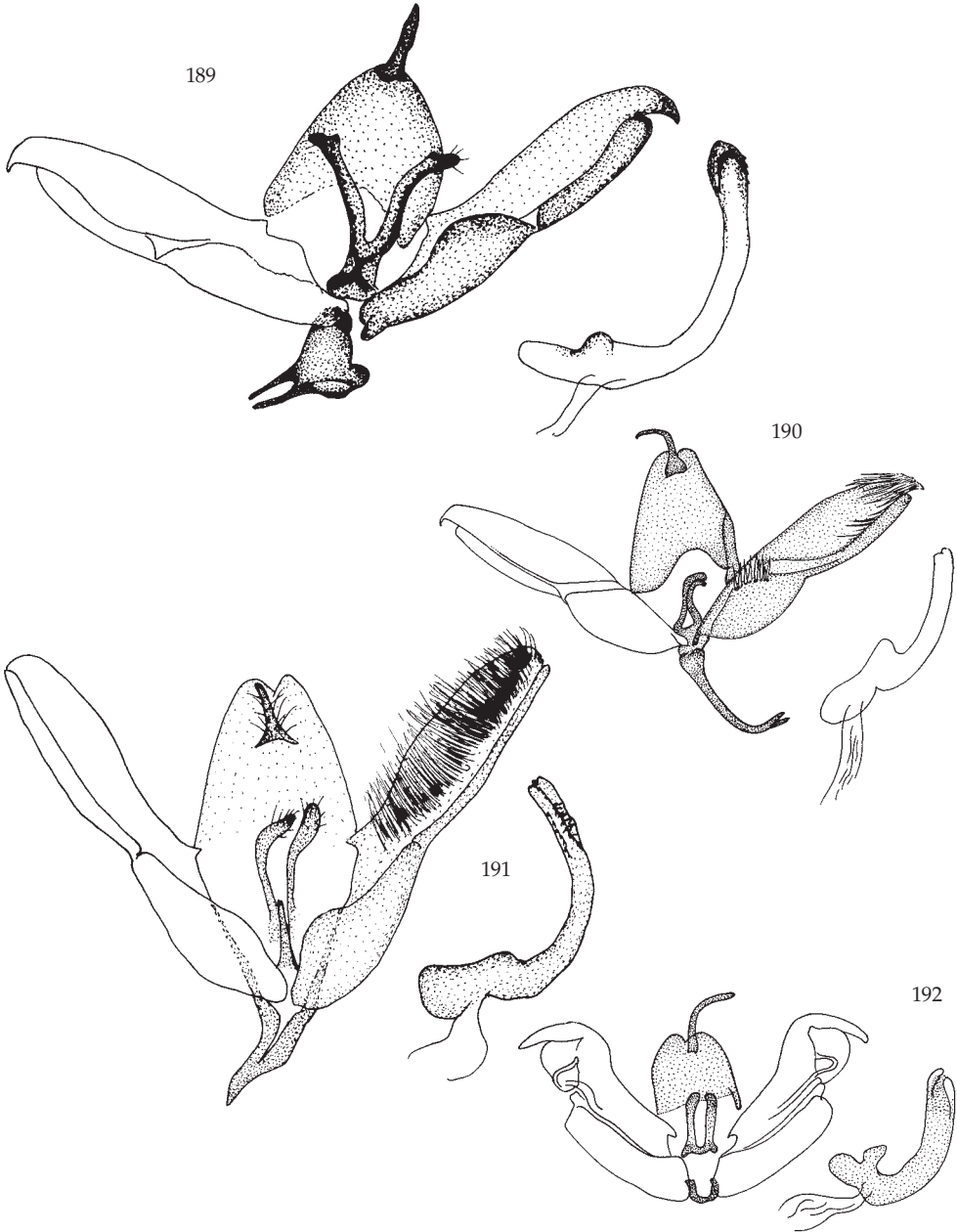


Fig. 189. *A. hugoiella* Gielis. Paratype. Colombia, no date, gent CG 5016 (BMNH).

Fig. 190. *Lantanophaga pusillidactyla* (Walker). Peru, Lima, Miraflores, 30 m, 19-21.i.1987 (O. Karsholt), gent CG 4153 (ZMUC).

Fig. 191. *L. minima* (B. Landry & Gielis). Holotype. Ecuador, Galápagos Islands, Isabela, 8.5 km N Pto Villamil, 11.iii.1989 (B. Landry), gent BL 244 (CNC).

Fig. 192. *Stenoptilodes taprobanes* (Felder & Rogenhofer). Spain, Canary Islands, Puerto da la Cruz, 25.iii-5.iv.1968 (B. van Aartsen), gent CG 1566 (ZMA).

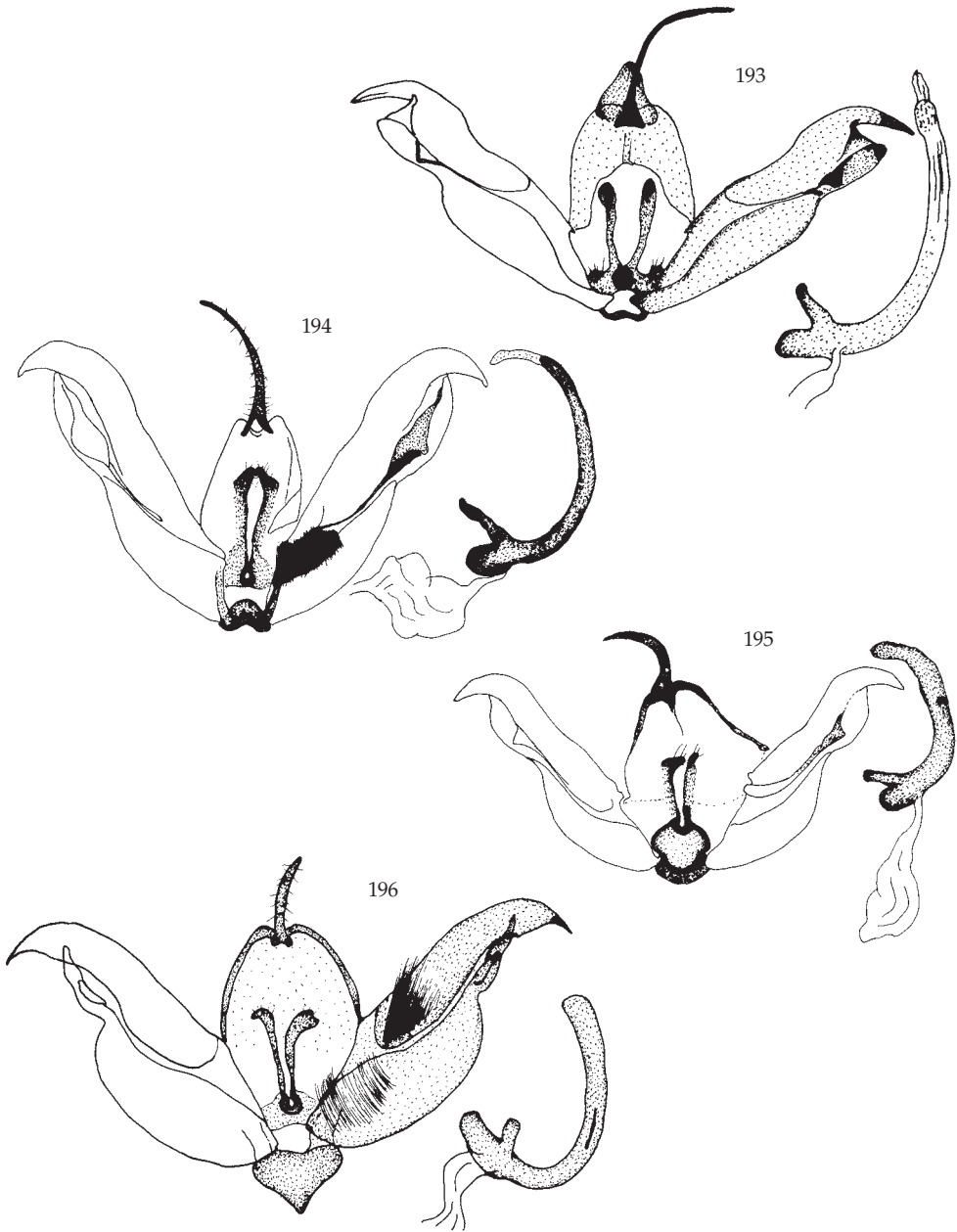


Fig. 193. *S. brevipennis* (Zeller). Cotype of *Platyptilia cremulata* Barnes & McDunnough. USA, Florida, 1-7.v, gent USNM 106,073 (USNM).

Fig. 194. *S. duckworthi* Gielis. Holotype. Argentina, Catamarca, Rio Portrero near Andalgana, 15.ii.1972 (Duckworth), gent CG 6089 (USNM).

Fig. 195. *S. gilvicolor* (Zeller). Chile, Quillota, 1886 (Paulson), gent CG 5025 (BMNH).

Fig. 196. *S. agricultura* **spec. nov.** Holotype. Venezuela, Aragua, Rancho Grande, 1100 m, 16-23.x.1966 (S.S. & W.D. Duckworth), gent CG 4868 (USNM).

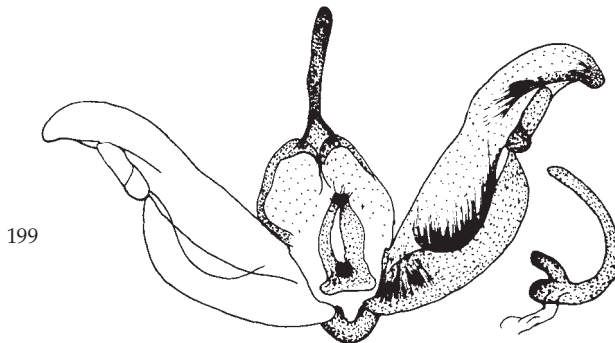
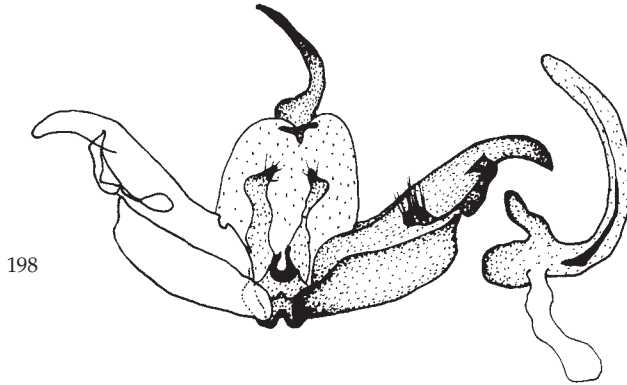


Fig. 197. *S. stigmatica* (Felder & Rogenhofer). Ecuador, Guachayacu, ix-x.1926 (Vorbeck), gent CG 4105 (ZMUC).

Fig. 198. *S. limaicus* Gielis. Holotype. Peru, Dept. Lima, 12 km SE Chosica Zárata, 2200-2600 m., 23-25.i.1987 (O. Karsholt, St. 3), gent CG 4169 (ZMUC).

Fig. 199. *S. debbiei* Gielis. Holotype. Ecuador, Pichincha, Rd Quito/Chiriboga 34 km, 2750 m, 6.vi.1977 (N. Venedictoff), gent CG 3549 (AME).

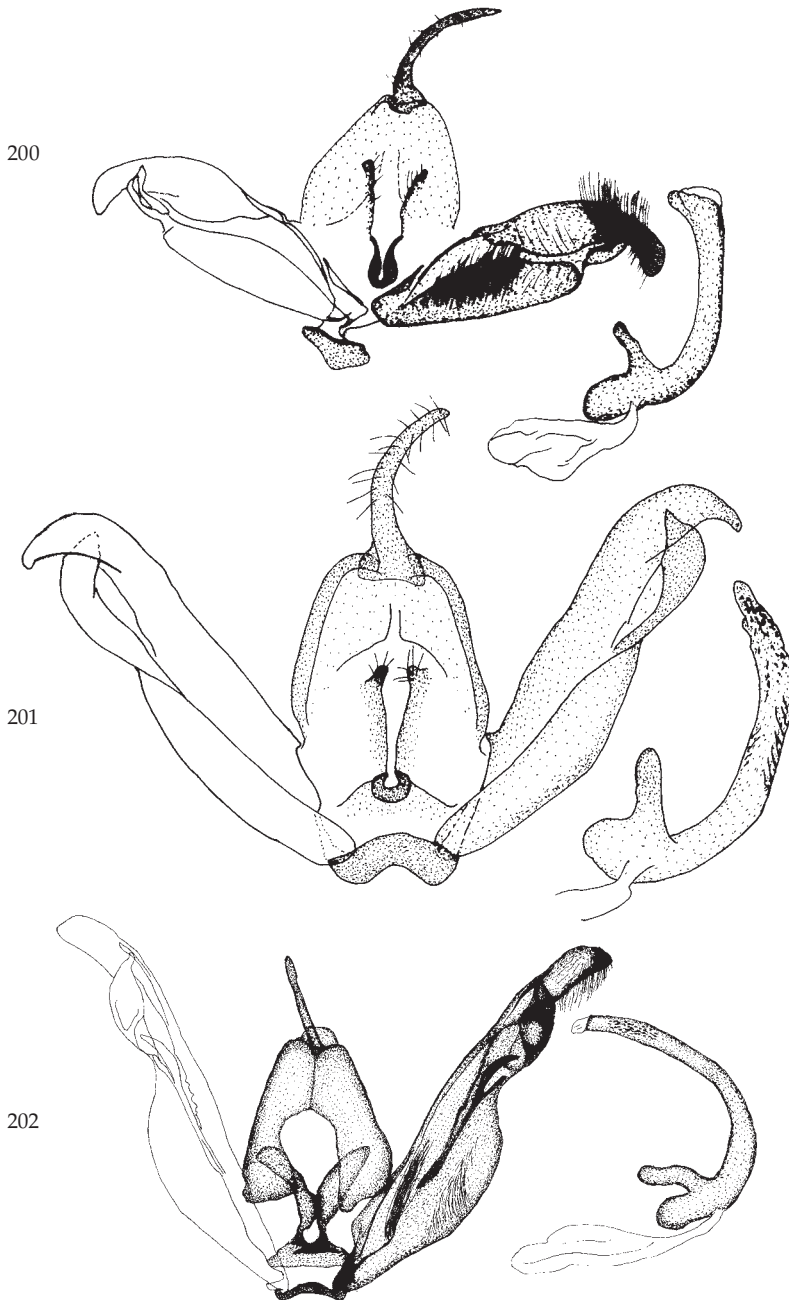


Fig. 200. *S. hypsipora* (Meyrick). Holotype. Peru, Huancayo, 3250 m, vii.(19)11 (P), gent BM 18854 (BMNH).

Fig. 201. *S. juanfernandicus* Gielis. After B. Landry & Gielis, 1992.

Fig. 202. *S. sematodactyla* (Berg). Lectotype of *Platyptilia epidelta* Meyrick. Argentina, Parana, (19)07 (R), gent CG 5008 (BMNH).

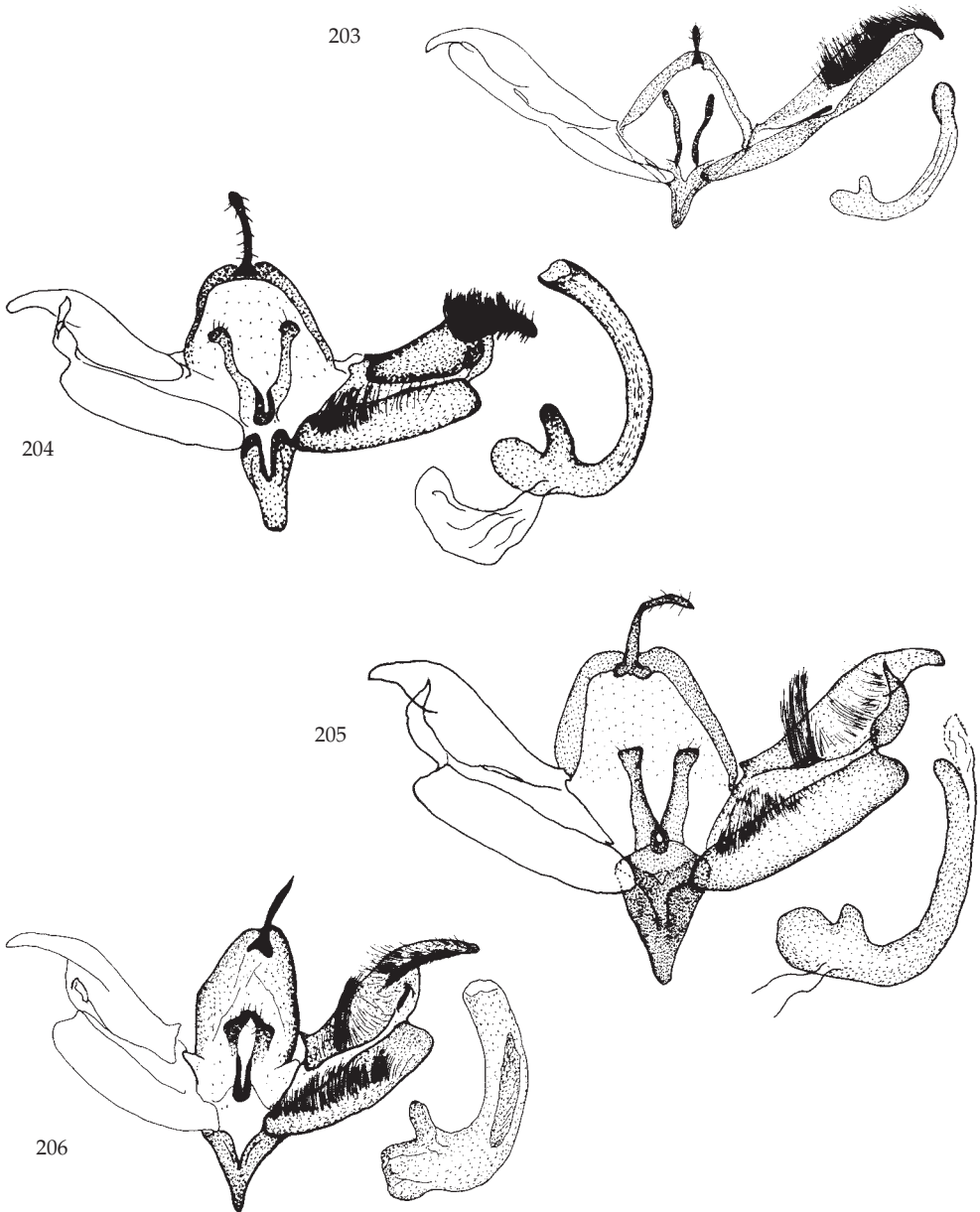


Fig. 203. *S. umbrigeralis* (Walker). Ecuador, Napo, Papallacta/Baeza 10 km, 2700 m, 29.v.1976 (N. Venedictoff), gent CG 3562 (AME).

Fig. 204. *S. thrasydoxa* (Meyrick). Holotype. Colombia, Mt. Socorro, 3810 m, vii.1920 (BMNH).

Fig. 205. *S. medius* **spec. nov.** Holotype. Ecuador, Azuay, PN Cajas, Laguna Llaviuco, 2°50'38"S 79°83'5"W, 3225 m, 12.x.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4933 (CG).

Fig. 206. *S. altiaustralis* **spec. nov.** Holotype. Peru, Apurimac, 12 km N Albancay Cerro, Turonmocco, 3500 m, 17-18.iii.1987 (O. Karsholt), gent CG 4171 (ZMUC).

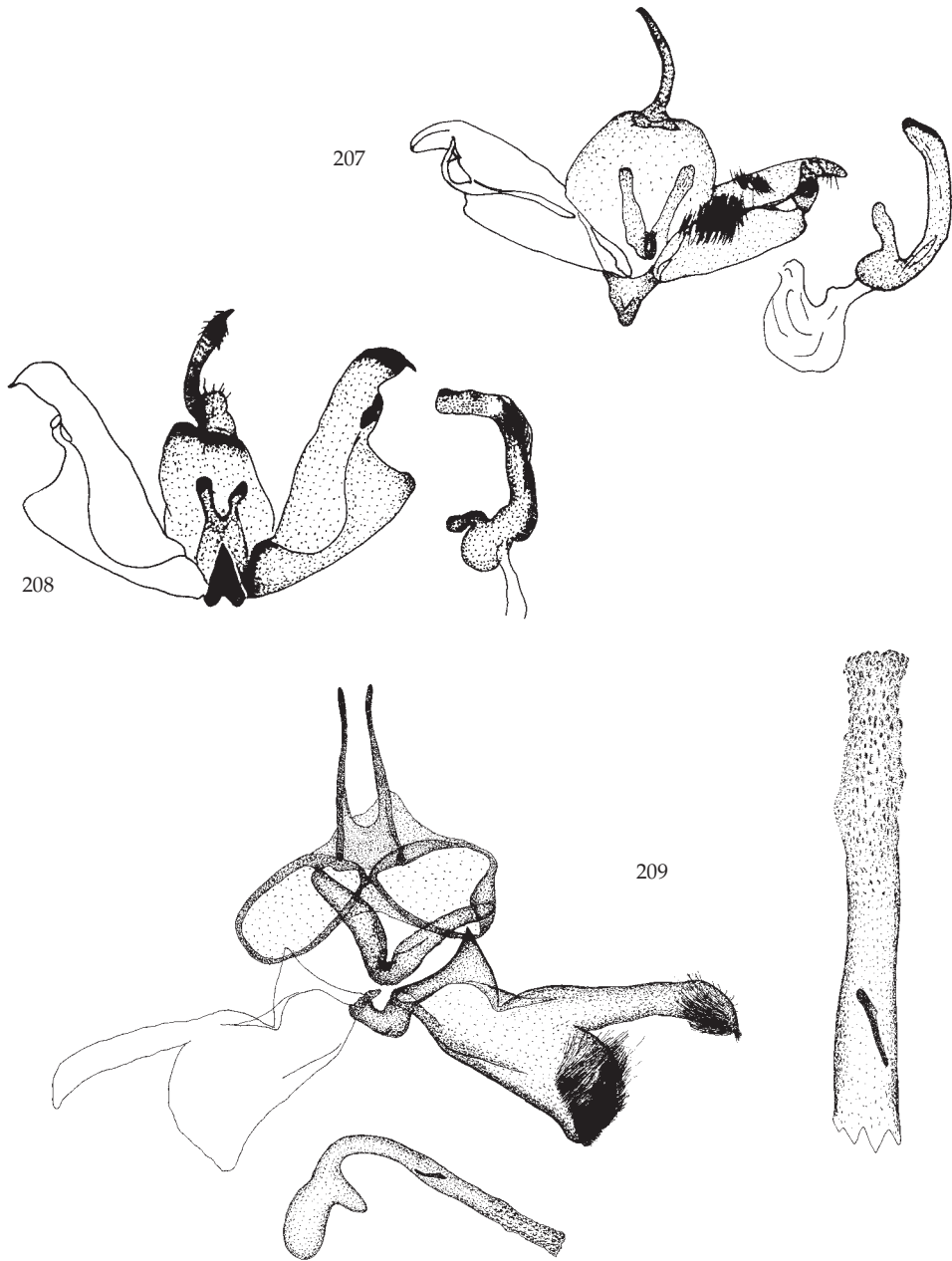


Fig. 207. *S. posticus* (Felder & Rogenhofer). Colombia, Magdalena, Sierra Nevada de Sta Marta, 2800 m, 3.vii-21.ix.1973 (Oxford Exp. Colombia), gent CG 5034 (BMNH).

Fig. 208. *S. huanacoicus* Gielis. Holotype. Peru, Dept. Huánaco, 25 km NE Huánaco, Cordillera Carpi-sh, Pattytrial, 2600 m., 8-10.ii.1987 (O. Karsholt, sta 15), gent CG 4156 (ZMUC).

Fig. 209. *Paraamblyptilia eutalanta* (Meyrick). Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 23.ii.1981 (Nielsen & Karsholt), gent CG 4100 (ZMUC).



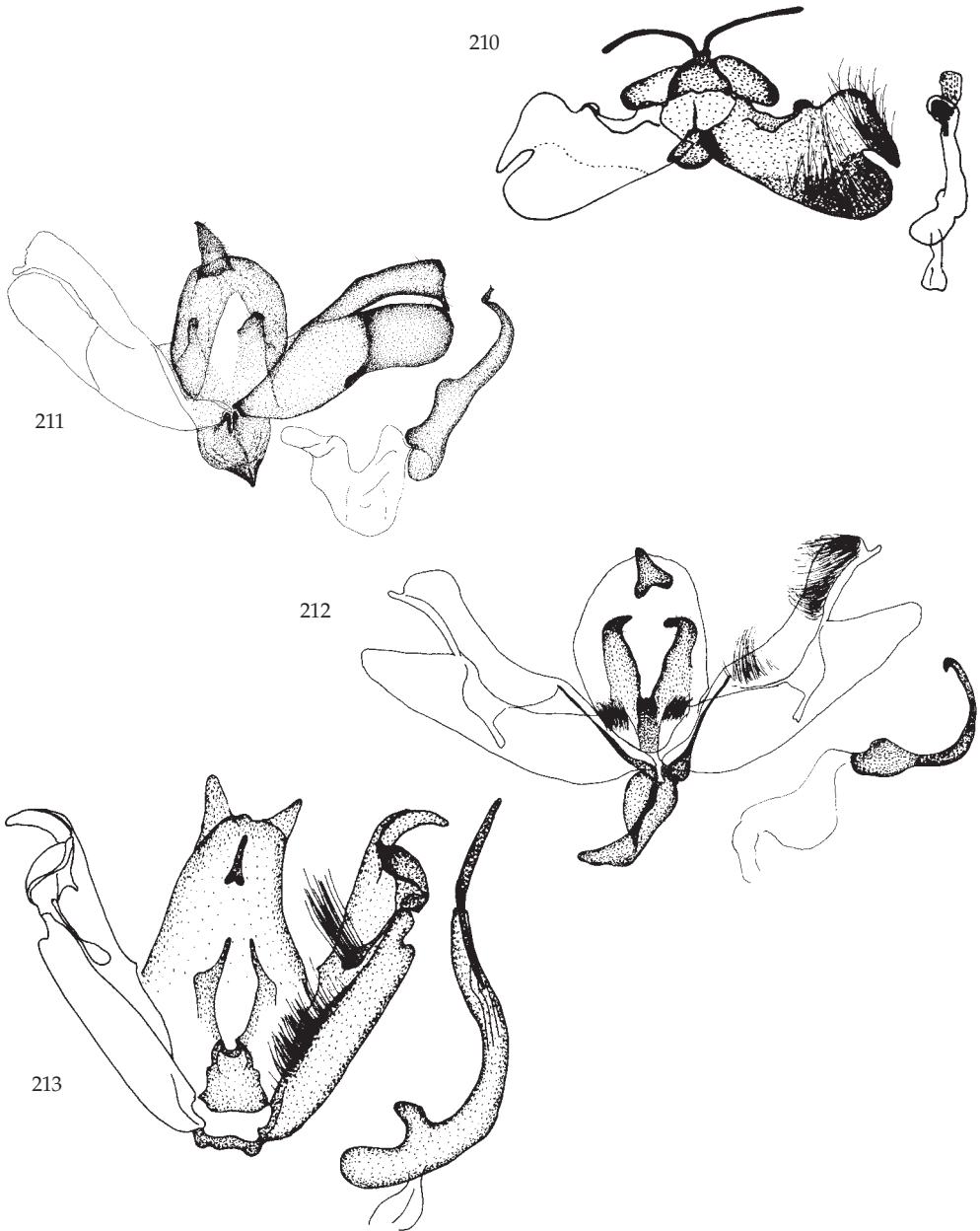


Fig. 210. *P. ridouti* Gielis. Paratype. Peru, Cuzco, 29.vii.(19)73 (B.V. Ridout), gent CG 5072 (BMNH).

Fig. 211. *Uroloba calycospila* (Meyrick). Holotype. Argentina, Alta Gracia, (19)32 (CB), gent BM 18191 (BMNH).

Fig. 212. *U. fuscicostata* Walsingham. Chile, El Portezuelo, 7 km N Santiago, 500 m, 19-20.xi.1981 (Davis), gent CG 6060 (USNM).

Fig. 213. *Stenoptilia zophodactylus* (Duponchel). Ecuador, Tungurahua, Ambato, Izamba, Quillan Loma, 2600 m, 8.v.2001 (V. Pelz), gent CG 4540 (CG).

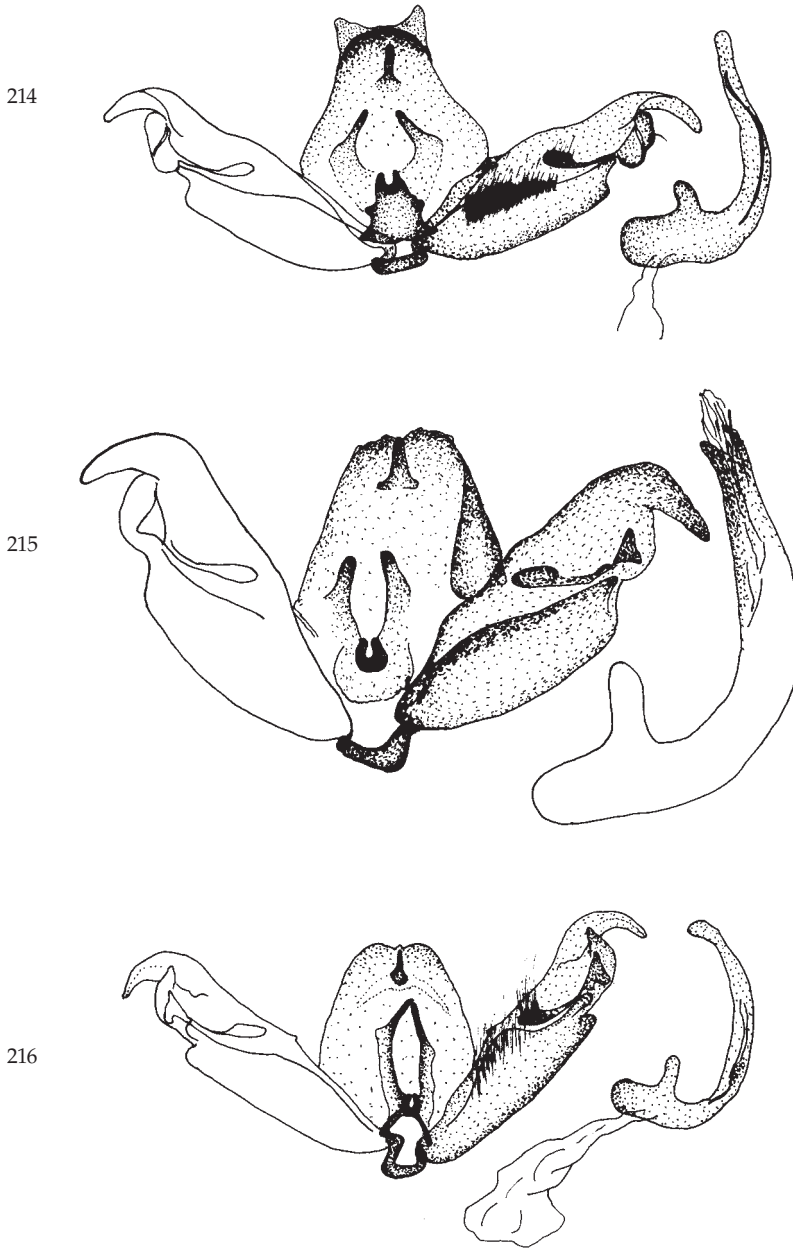


Fig. 214. *S. neblina* Gielis. Holotype. Venezuela, TF Amazon, Cerro de la Neblina Camp, 2050 m, 0°41'49"N 65°58'56 'W, 15-22.ii.1984 (T. McCabe), gent CG 4861 (USNM).

Fig. 215. *S. karsholti* Gielis. Holotype. Peru, Dept Puno, 10 km N Lampa, Quebrada Metara, 3900 m, 31.iii.-3.iv.1987 (O. Karsholt, sta 58), gent CG 4182 (ZMUC).

Fig. 216. *S. pallistriga* Barnes & McDunnough. USA, Florida, Manatee, 2335 Univ Parkway, 3 km E airport, 17.vi.1987 (D.L. Matthews), gent CG 2526 (CG)

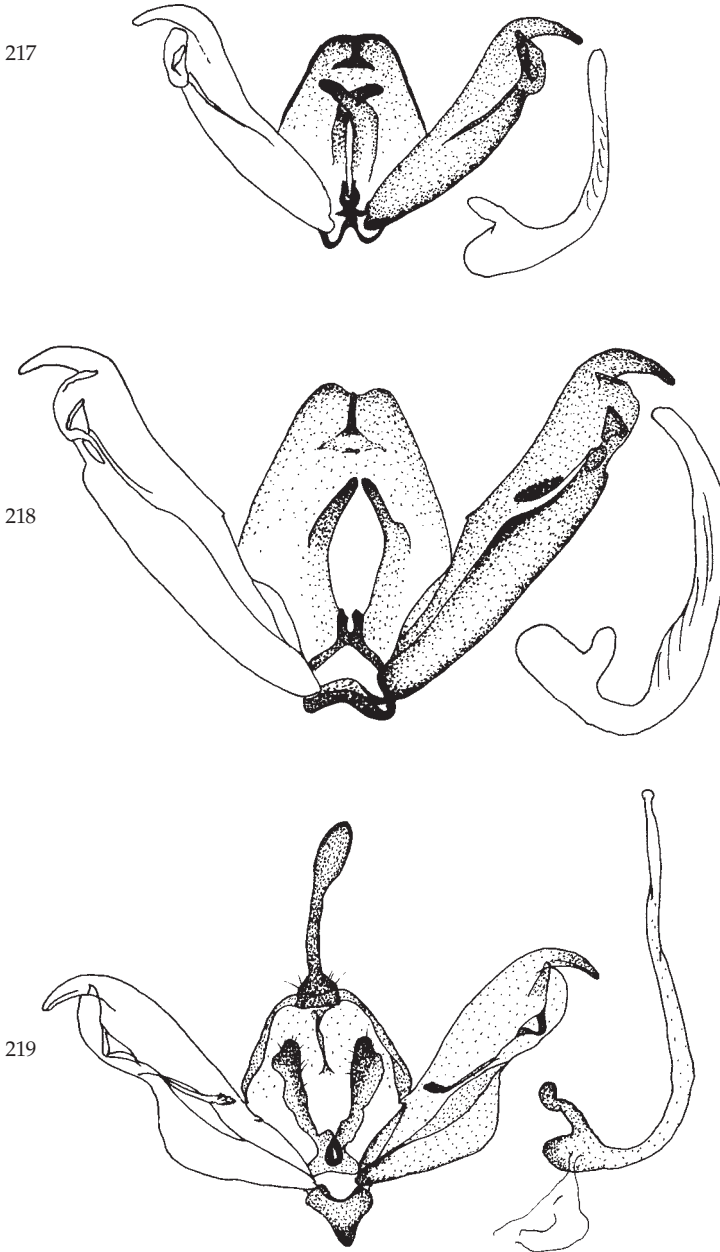


Fig. 217. *S. suprema* Meyrick. Holotype. Colombia, Mt. Tolima, 4635 m, (19)20, gent BM 18461 (BMNH).

Fig. 218. *S. tenuis* (Felder & Rogenhofer). Lectotype of *M. gilvidorsis* Zeller: Bogota, no date, gent BM 18453 (BMNH).

Fig. 219. *Paraplatyptilia fragilis* (Walsingham). USA, Oregon, Wallowe Co, Hell's Canyon, Buckhorns Overlook, 1800 m, 5-6.viii.1992 (H.W. v.d. Wolf), gent CG 6353 (CG).

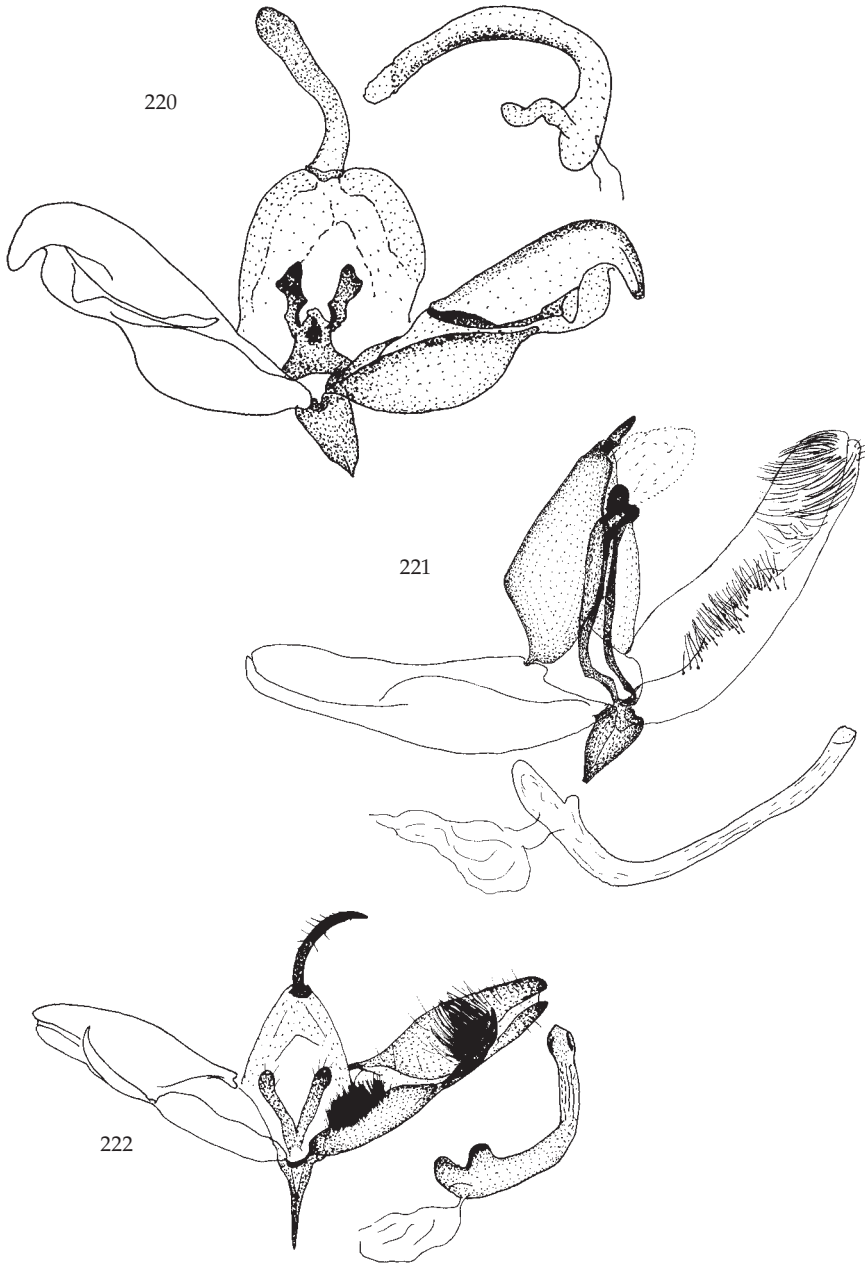


Fig. 220. *P. azteca* Gielis. Holotype. Mexico, Hgo, 8 km E Tulancingo, 24.vii.1963 (Duckworth & Davis), gent CG 3417 (USNM).

Fig. 221. *Postplatyptilia huigraica* B. Landry & Gielis. Holotype. Ecuador, Huigra, 1375 m, vi.1914 (Parish), gent CG 5022 (BMNH).

Fig. 222. *P. carchi* **spec. nov.** Paratype. Venezuela, Merida, Muçay Fish Hatchery, 7 km E Tabay, 2000 m, 10-13.ii.1978 (J.B. Heppner), gent CG 3454 (USNM).

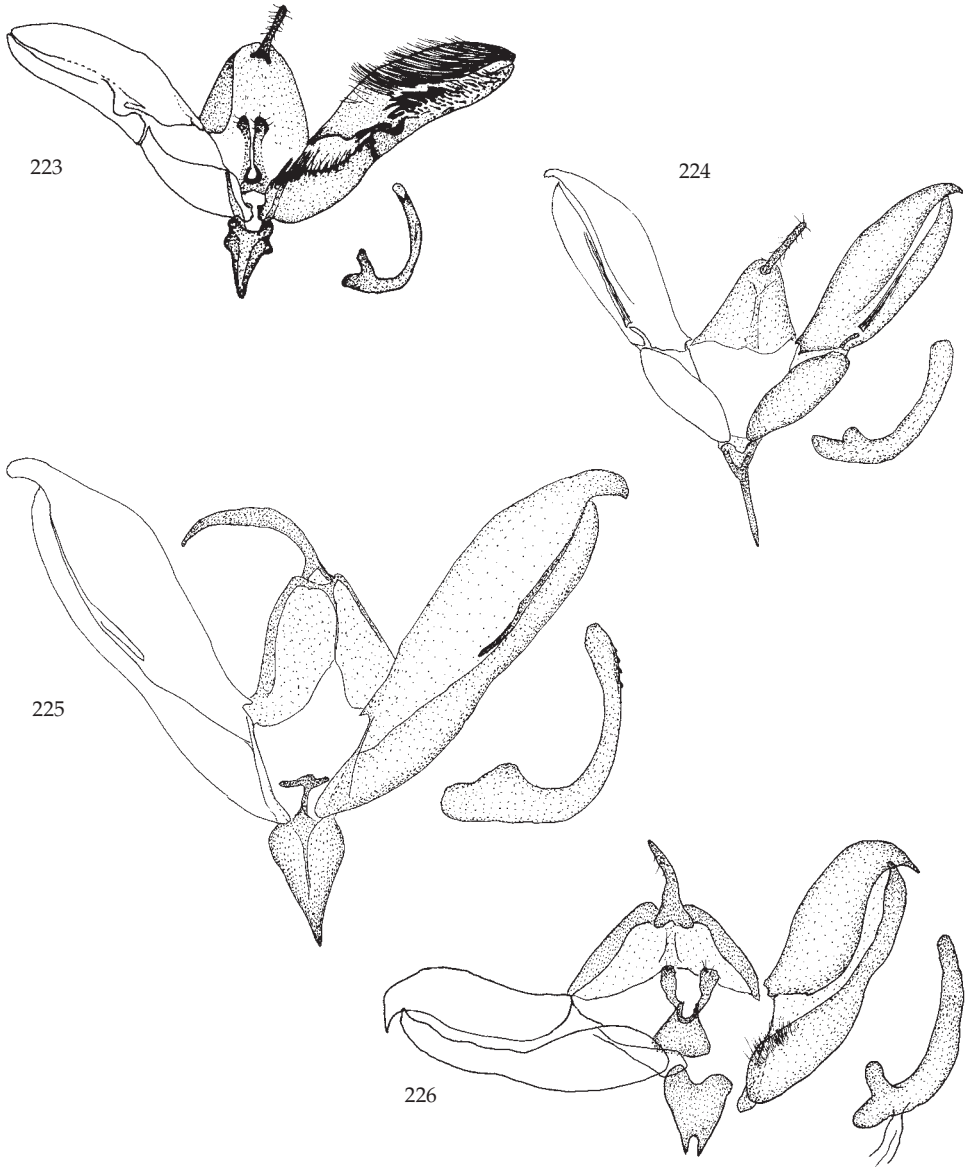


Fig. 223. *P. vorbecki* **spec. nov.** Holotype. Ecuador, Guachayacu, ix-x.1926 (Vorbeck), gent CG 3474 (ZMUC).

Fig. 224. *P. flinti* Gielis. Brazil, Paraná, Rio Negro, 800 m, 25.viii.1970 (V.O. Becker), gent CG 6234 (VOB).

Fig. 225. *P. ugartei* **spec. nov.** Holotype. Chile, Copiapo. El Maray, 17.i.1996 (A. Ugarte Peña), gent CG 2723 (CG).

Fig. 226. *P. pluvia* **spec. nov.** Holotype. Ecuador, Azuay, PNCajas, Laguna Llaviuco, 2°50'38"S 79°8'35"W, 3225 m, 12.x.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4923 (CG).

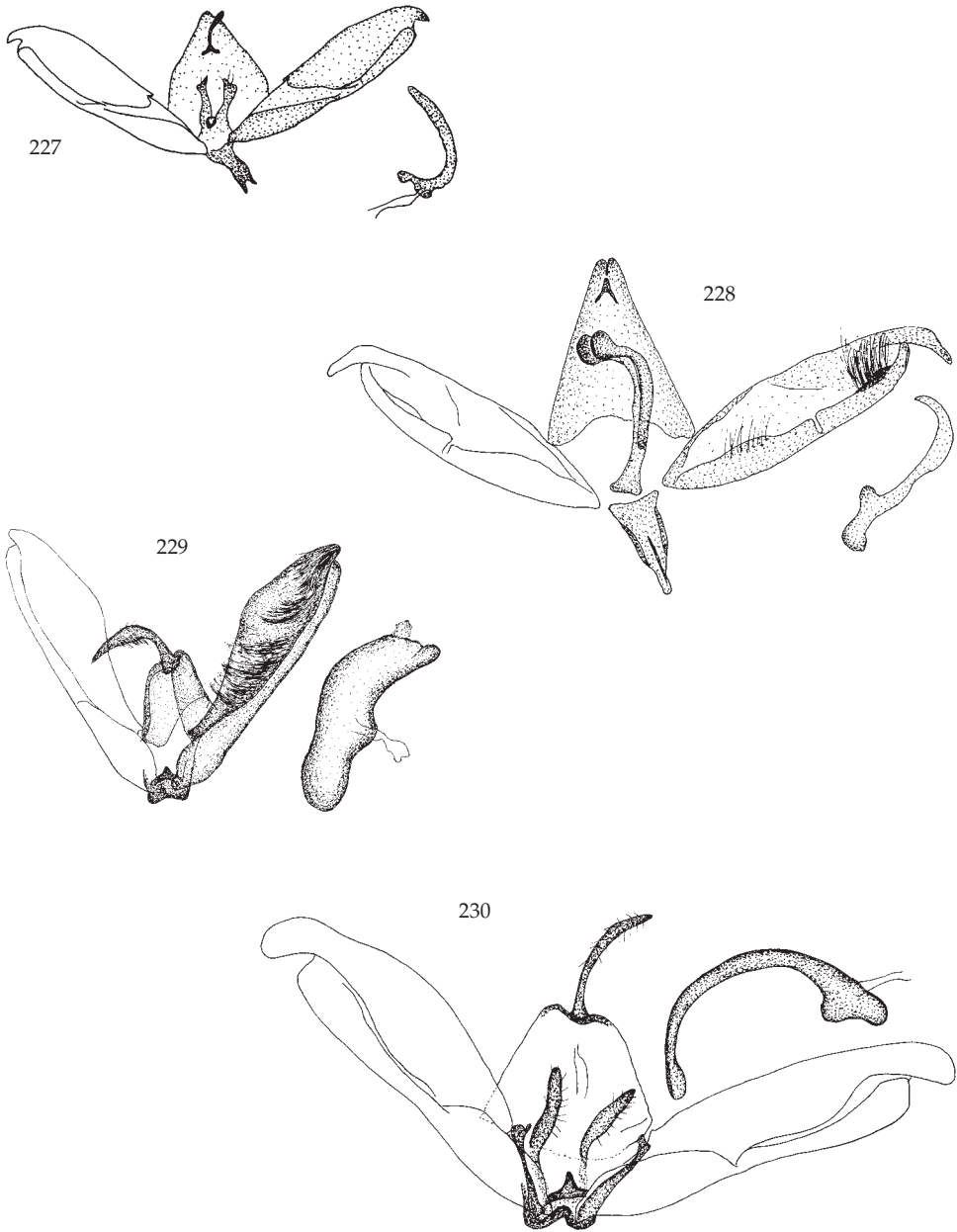


Fig. 227. *P. parana* Gielis. Holotype. South Brazil, Parana, Castro, 1898 (Jones), gent BM 18467 (BMNH).

Fig. 228. *P. transversus* **spec. nov.** Holotype. Colombia Oriental, Cundinamarca, Monteredondo, 1420 m, 17.iii.1961 (J. Förster), gent CG 3574 (ZSM).

Fig. 229. *P. fuscicornis* (Zeller). Holotype. Colombia, Bogota, 23.ii, gent BM 15762 (BMNH).

Fig. 230. *P. alexisi* Gielis. Holotype. Chile, Nuble, Alto Tregualemu, 20 km SE Chovellen, 500 m, 1-3.xii.1981 (Davis), gent CG 6087 (USNM).



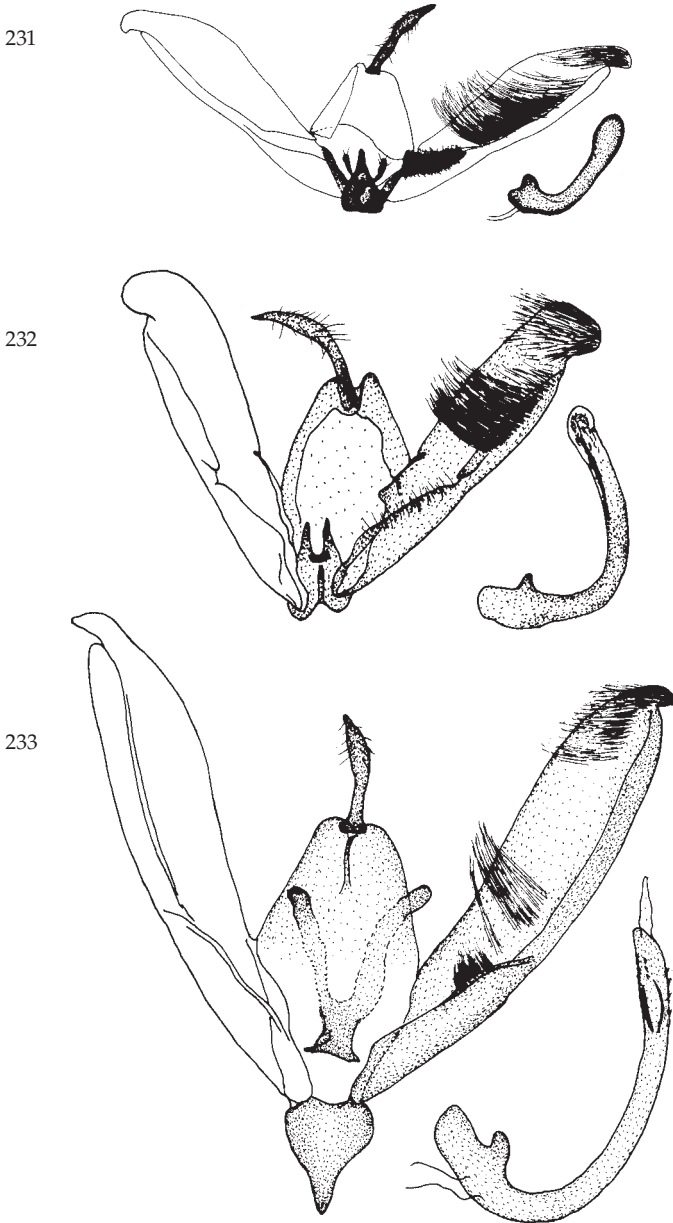


Fig. 231. *P. nubleica* Gielis. Holotype. Chile, Nuble, near coastal stream 17.5 km. S Curanipe, 50 m., 25.i.1979 (Davis & Akerbergs), gent CG 6057 (USNM).

Fig. 232. *P. genisei* (Pastrana). Argentina, Cordoba, Huerta Grande, 1000 m, 15.xii.1958-30.i.1960 (W. Forster), gent CG 3565 (ZSM)

Fig. 233. *P. biobioica* Gielis. Chile, Santiago, RN Yerba Loca, 1850 m, 19.i.2001 (Gielis & v.d. Wolf), gent CG 4851 (CG).

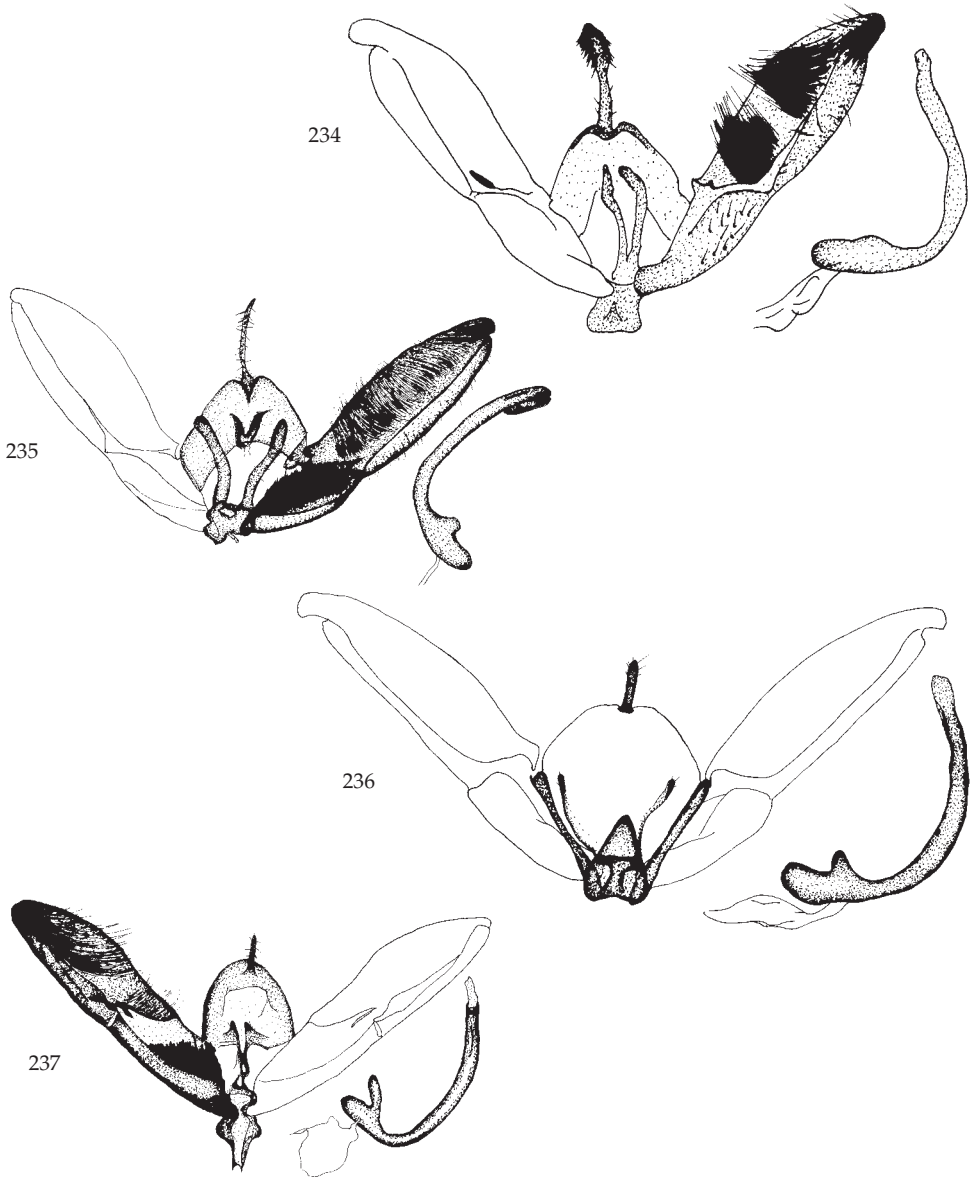


Fig. 234. *P. saeva* (Meyrick). Peru, Carabaya, Oconeagra, 2150 m, vii.1904 (Ockenden), gent CG 5014 (BMNH).

Fig. 235. *P. camptosphenella* (Meyrick). Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 600 m, 4.xii.1981 (Nielsen & Karsholt), gent CG 4087 (ZMUC).

Fig. 236. *P. velkoi* Gielis. Holotype. Chile, Nuble, Alto Tregualemu, ca 20 km SE Chovellen, 500 m, 1-3.xii.1981 (Davis), gent CG 6059 (USNM).

Fig. 237. *P. nielseni* (Gielis). Holotype. Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 27.xii.1981 (Nielsen & Karsholt, sta. 9), gent CG 4096 (ZMUC).

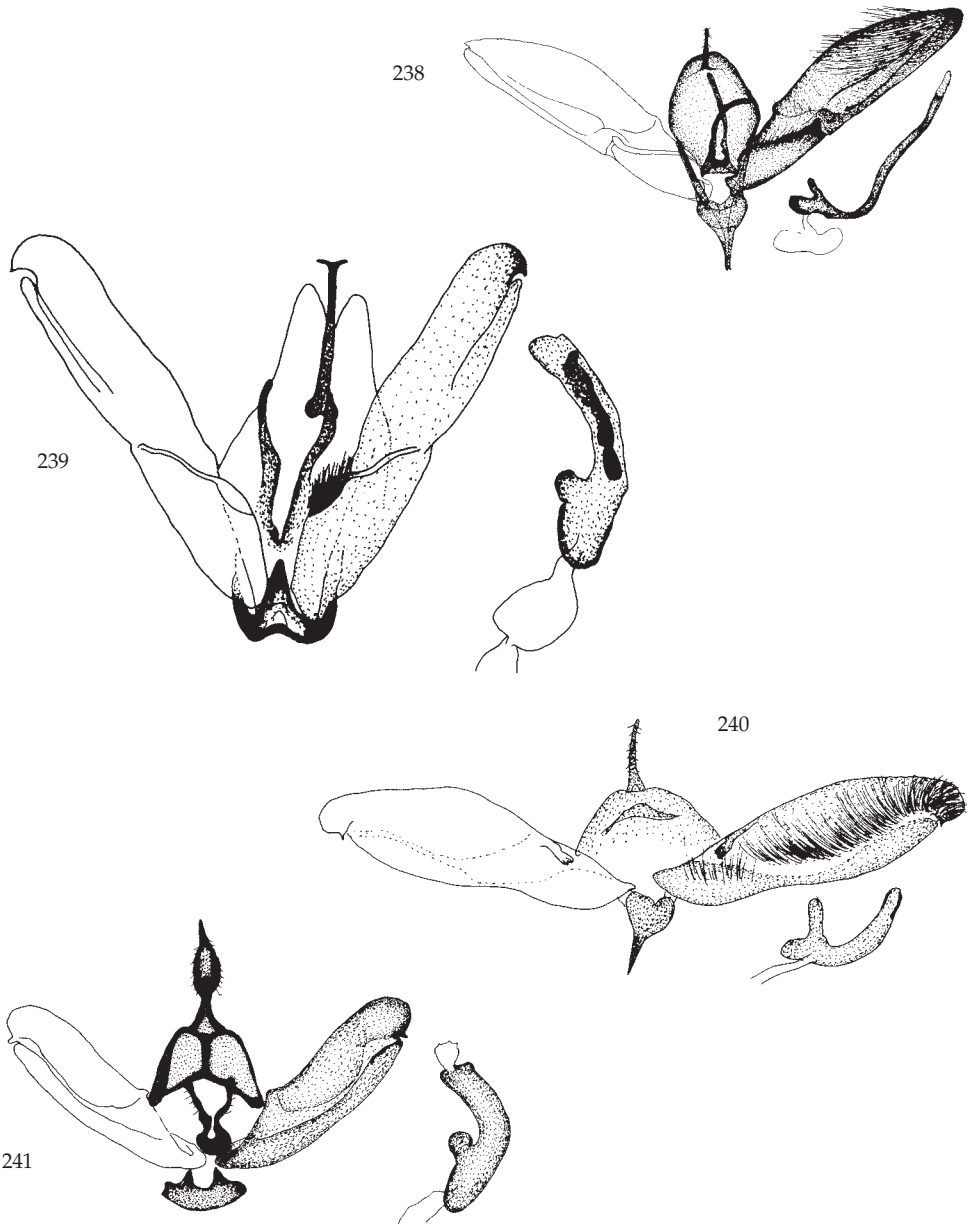


Fig. 238. *P. aestuosa* (Meyrick). Lectotype. Peru, Lima, 150 m, viii.(19)14 (Parish), gent BM 18196 (BMNH).

Fig. 239. *Stockophorus charitopa* (Meyrick). Lectotype. Bolivia, Songo, ix.(19)07, gent CG 5024 (BMNH).

Fig. 240. *A. kosteri* **spec. nov.** Paratype, Argentina, Salta, Camino de Cornisa, 1200 m, 12.xi.1995 (Neth ent exp N Argentina, sta 9), gent CG 2712 (CG).

Fig. 241. *A. punoica* Gielis. Holotype. Peru, Dept. Puno, 10 km N Lampa, Quabradra Metara, 3900 m., 31.iii-3.iv.1987 (O. Karsholt, sta 58) gent CG 4172 (ZMUC).

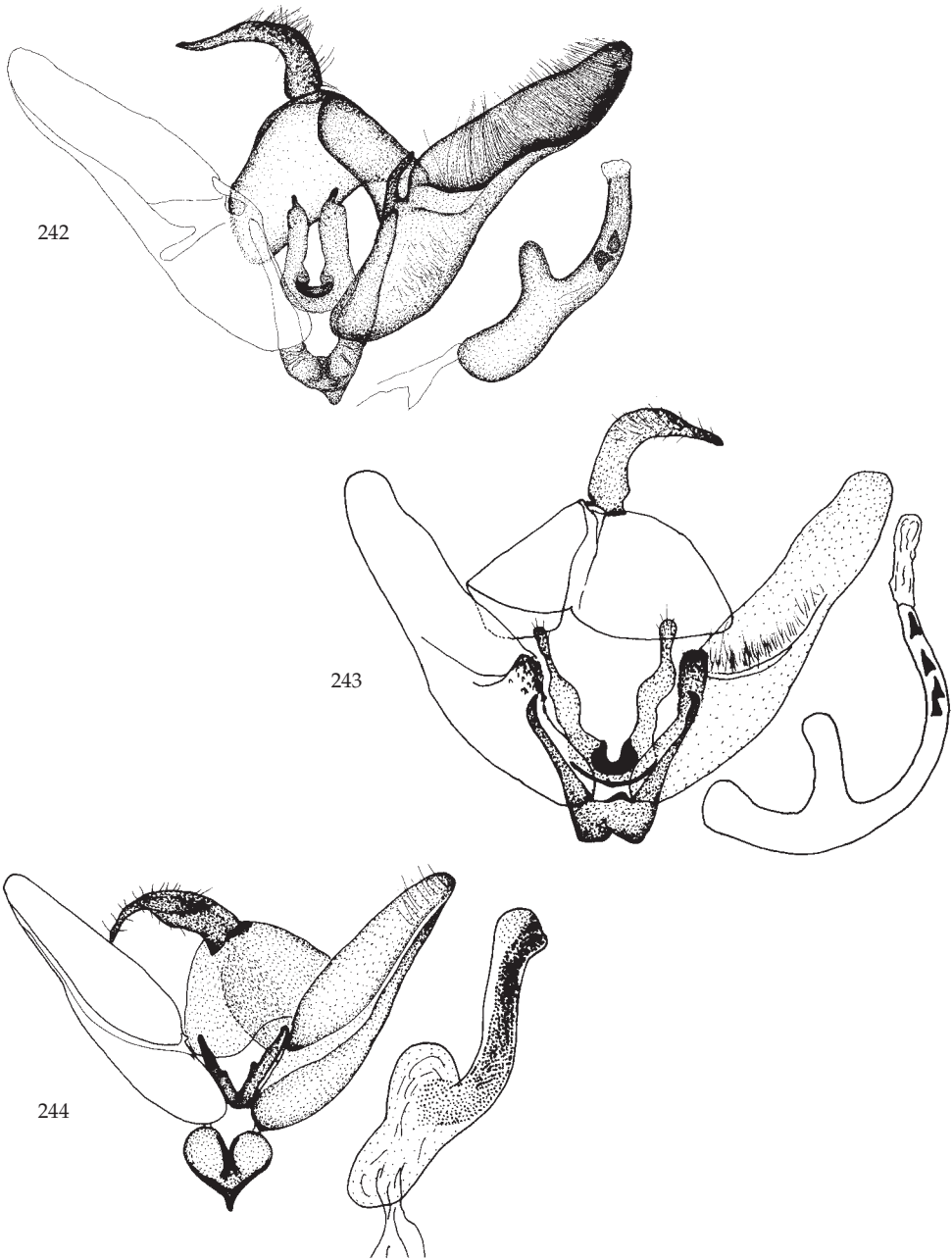


Fig. 242. *Lioptilodes subantarcticus* Gielis. Paratype. Argentina, Tierra del Fuego, Ushuaia, Lapataia, 20 m, 3.ii.1978 (Mission Cientifica Danese, sta 34), gent CG 4135 (ZMUC).

Fig. 243. *L. cuzcoicus* Gielis. Holotype. Peru, Cuzco, Pillahuata, 2600 m., 14-18.viii.1982 (M. Mattheus & M. Packer), gent CG 5005 (BMNH).

Fig. 244. *L. altivolans* **spec. nov.** Paratype. Peru, Ancash, 35 km SE Huarez, Cerro Cahush, Quebrada Pucavado, 4100 m, 15-18.ii.1987 (O. Karsholt), gent CG 4198 (ZMUC).

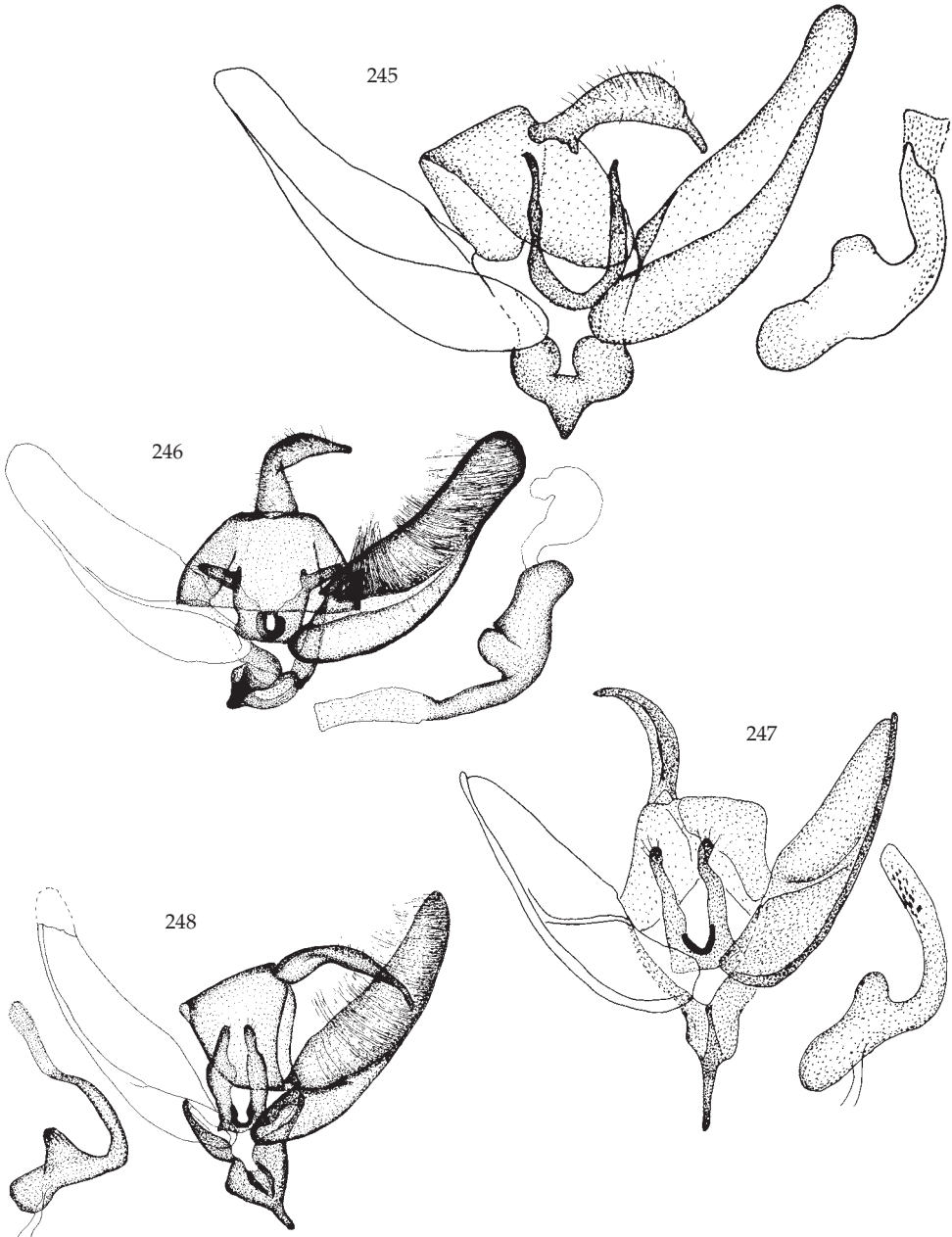


Fig. 245. *L. salarius* **spec. nov.** Holotype. Argentina, Jujuy, Salar de Jama, 4200 m, 30.i.1996 (A. Ugarte Peña), gent CG 4932 (CG).

Fig. 246. *L. topali* Gielis. Holotype. Argentina, Neuquen, Alumine, SE of Lago Alumino, 1100 m., 16.iii.1979 (Mision Cientifica Danese, sta. 59), gent CG 4118 (ZMUC).

Fig. 247. *L. arequipa* **spec. nov.** Paratype. Chile, Copiapo, El Maray, 17.i.1996 (A. Ugarte Peña), gent CG 2733 (CG).

Fig. 248. *L. albistriolatus* (Zeller). Holotype. Colombia, Bogota, no date, gent BM 18192 (BMNH).

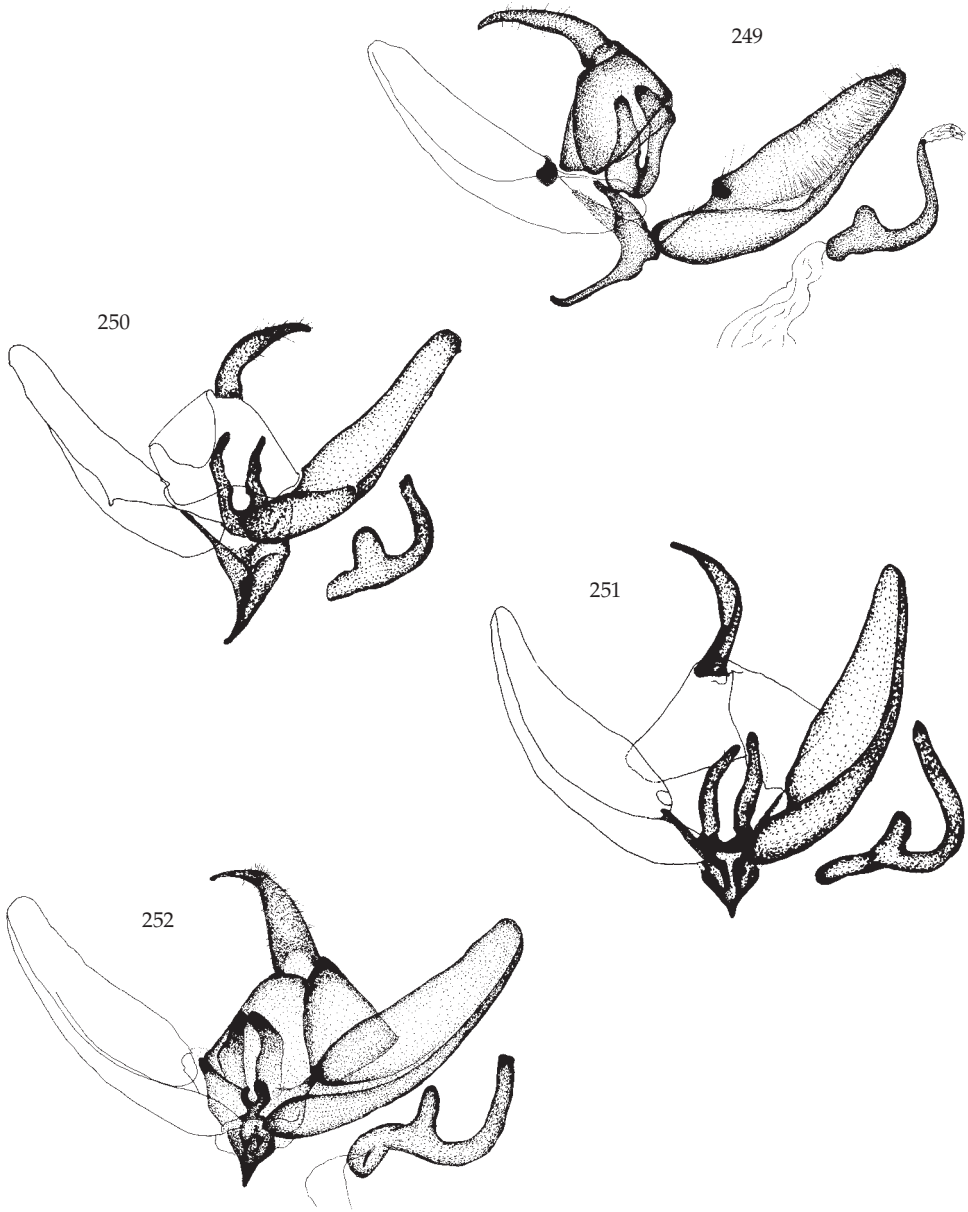


Fig. 249. *L. rionegroicus* Gielis. Holotype. Argentina, Rio Negro, San Carlos de Bariloche, Nirihuau, 30.xii.1978 (Mision Cientifica Danesa, Sta, 11), gent CG 4144 (ZMUC).

Fig. 250. *L. neuquenicus* Gielis. Holotype. Argentina, Neuquen, Zapala, El Marucho, 870 m., 26.x.1981 (Gentili, sta. 34), gent CG 4140 (ZMUC).

Fig. 251. *L. zapalaicus* Gielis. Holotype. Argentina, Neuquen, Zapala, El Marucho, 870 m., 26.x.1981 (Nielsen & Karsholt), gent CG 4134 (ZMUC).

Fig. 252. *L. aguilaicus* Gielis. Holotype. Argentina, Neuquen, Piedra del Aguila, 23.xii.1978 (Mision Cientifica Danesa, Sta. 15), gent CG 4124 (ZMUC).

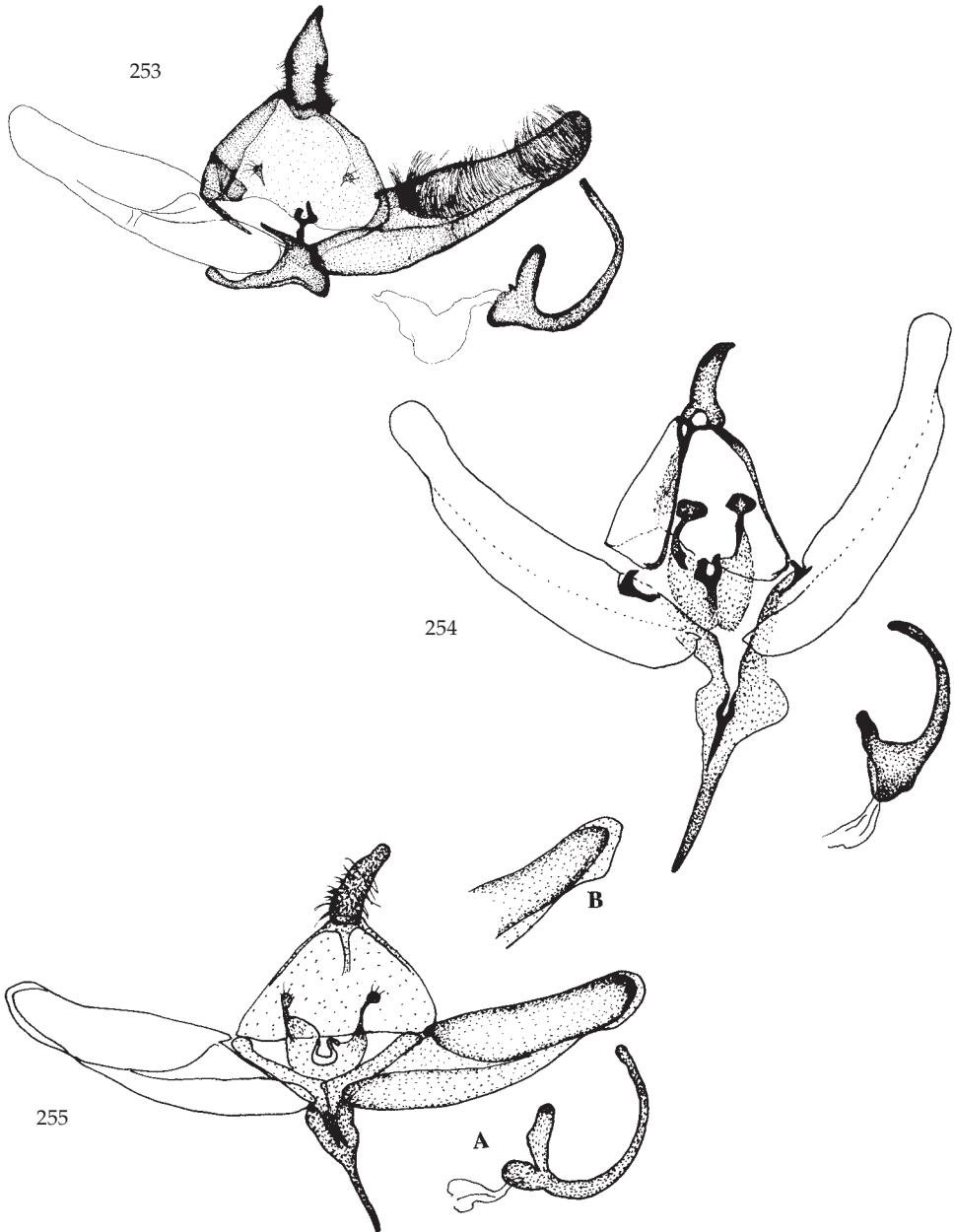


Fig. 253. *L. aolepidodactylus* Gielis. Paratype. Argentina, Rio Negro, San Carlos de Bariloche, Nirihua, 9-11.xii.1978 (Mision Cientifica Danese, sta 11), gent CG 4120 (ZMUC).

Fig. 254. *L. testaceus* (Blanchard). Chile, Tobaraba, 28.xii.(19)48, gent CG 1926 (MZUC).

Fig. 255a. *L. parafuscicostata* Gielis. Holotype. No locality, no date. (B. & T. Edwards), gent CG 5011 (BMNH).

Fig. 255b. *L. parafuscicostata* Gielis. Paratype. (Ecuador), Rio Napo, 1901 (P Rivet), gent CG 1979 (MNHN).



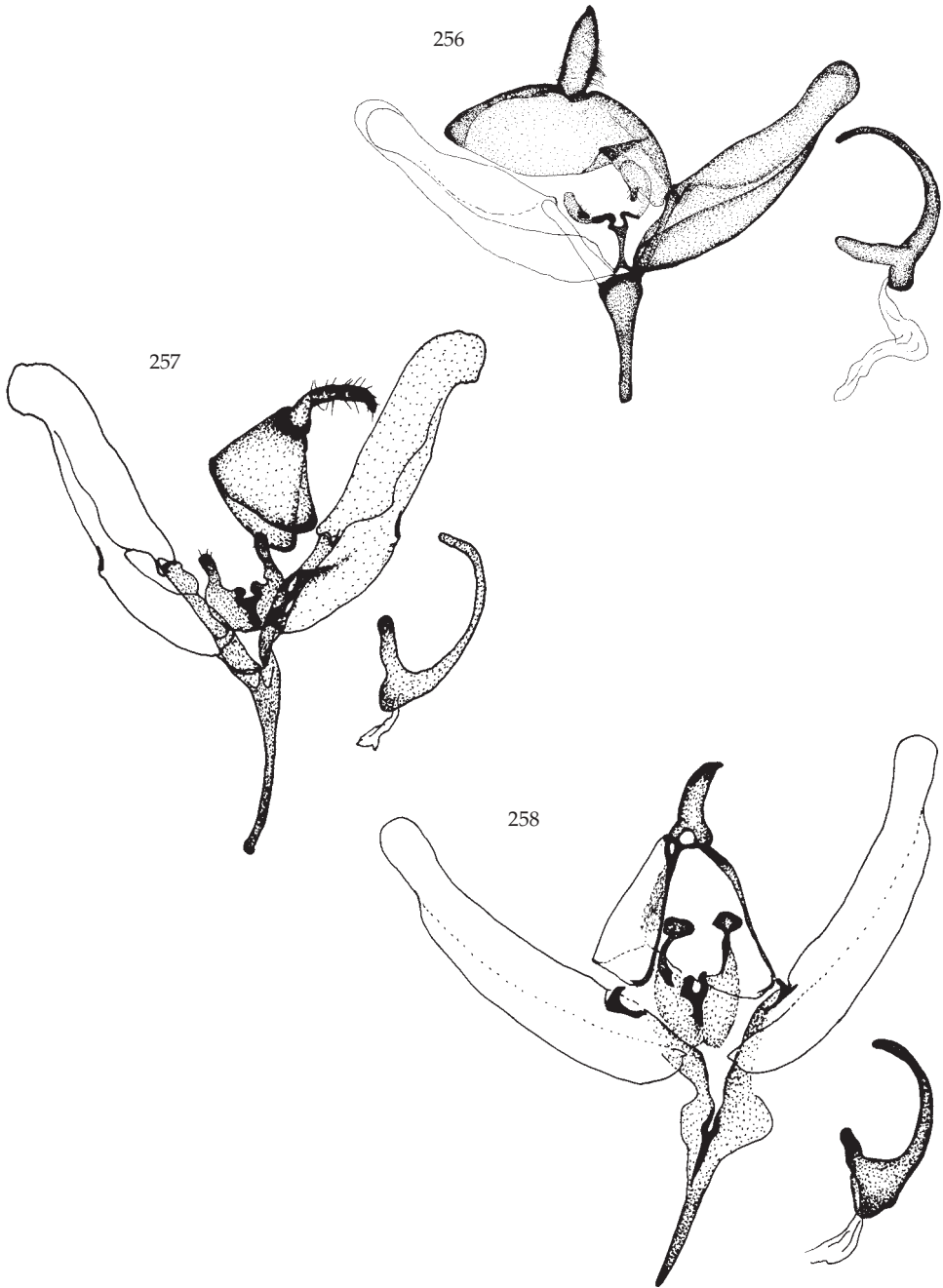


Fig. 256. *L. prometopa* (Meyrick). Lectotype. Peru, Carabaya, Aguilani, 2750 m, dry season, vi.1905 (D), gent BM 18189 (BMNH).

Fig. 257. *L. doeri* Gielis. Holotype. Brazil, Petropolis, 1881 (Doer), gent CG 5001 (BMNH).

Fig. 258. *L. brasiliicus* Gielis. Holotype. Brazil, Petropolis, 1881 (Doer), gent CG 5004 (BMNH).

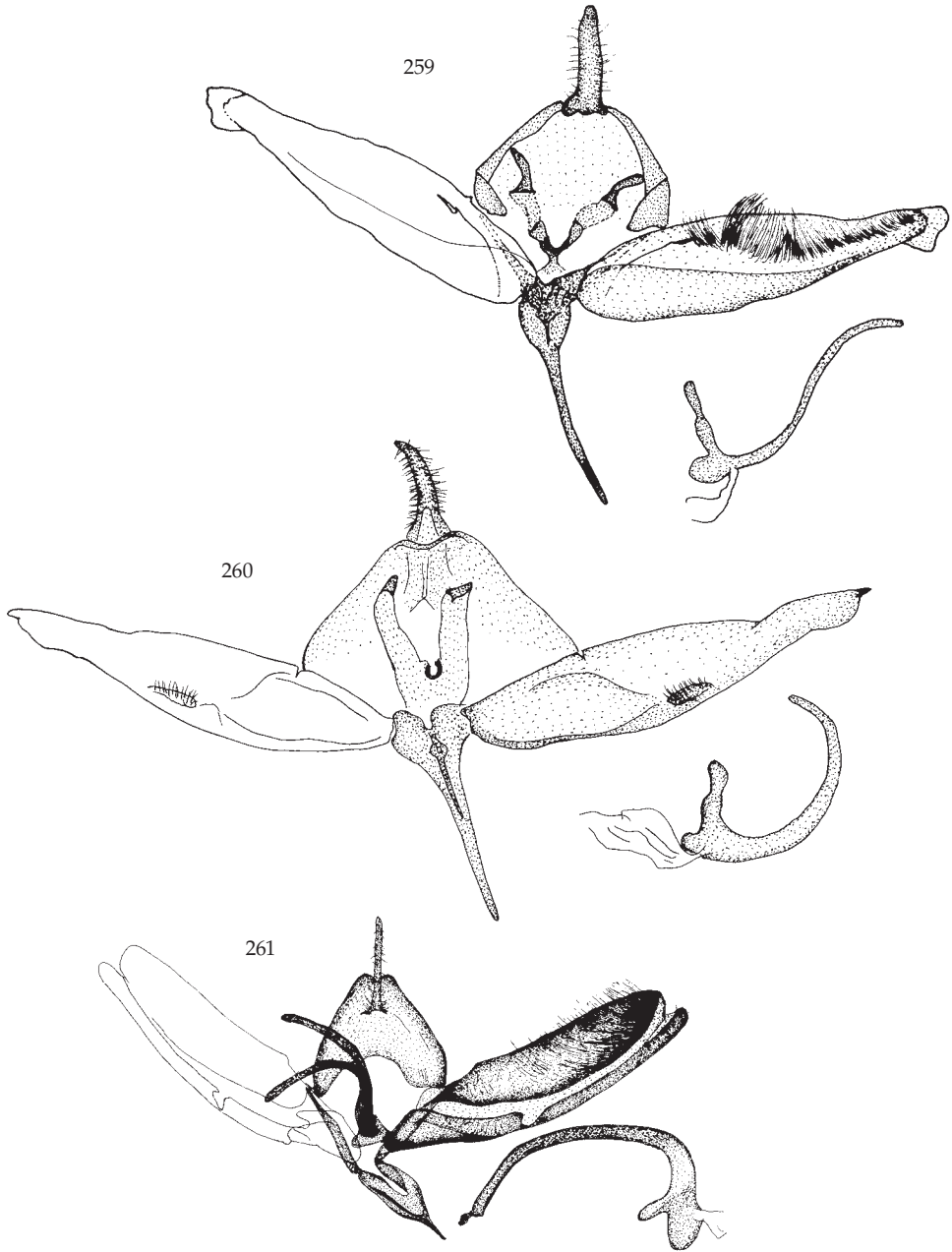


Fig. 259. *L. ockendeni* Gielis. Bolivia, Yungas de la Paz, Zinugvi, 2800 m, 26.iii.1950 (W. Forster), gent CG 4937 (ZSM).

Fig. 260. *L. yungas* **spec. nov.** Holotype. Bolivia, Yungas Coroico, 1900 m, 15.v.1950 (W. Forster), gent CG 4212 (ZSM).

Fig. 261. *L. antarcticus* (O. Staudinger). Argentina, Santa Cruz, Lago Argentina, Peninsula Magelhanes, 11.i.1979 (Mision Cientifica Danese), gent CG 4122 (ZMUC).

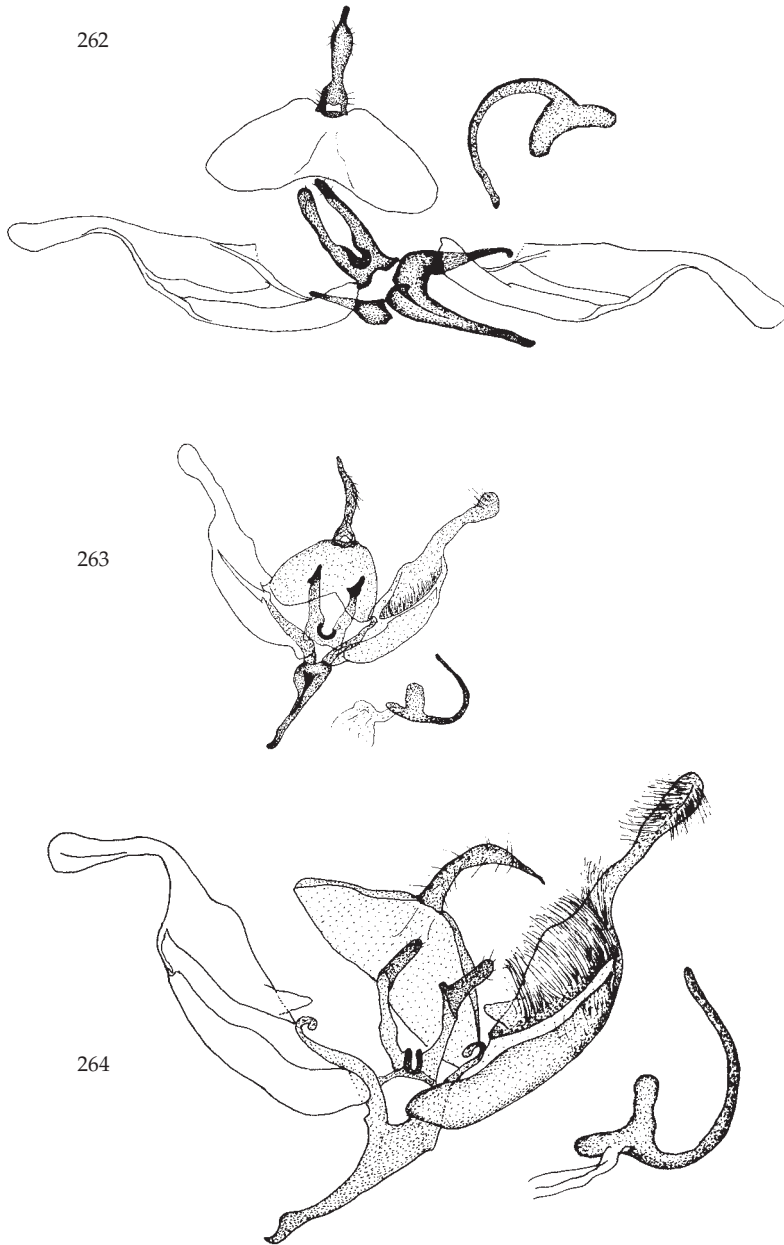
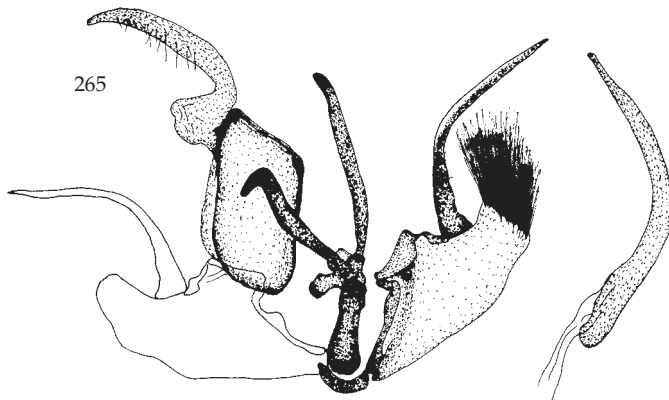


Fig. 262. *L. tribonia* (Meyrick). Lectotype. Peru, Matucana, 2375 m., vii.(19)14 (P(arish)), gent BM 18441 (BMNH).

Fig. 263. *L. limbani* Gielis. Holotype. Peru, Carabaya, Limbani, dry season, 2900 m, v.1904 ( Ockenden), gent CG 5048 (BMNH).

Fig. 264. *L. cocodrilo* **spec. nov.** Holotype. Ecuador, Napo, 15 km SE Cosanga, Cocodrilo, 0°38'56"S 77°47'34"W, 1850 m, 30.ix.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4946 (CG).



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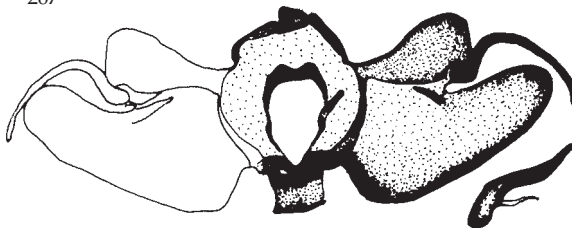


Fig. 265. *Michaelophorus nubilus* (Felder & Rogenhofer). West Indies, Trinidad, St Augustin, ICTA, 30.i.1961, gent CG 6177 (CNC).

Fig. 266. *M. dentiger* (Meyrick). Holotype. British Guyana, Georgetown, iv (Parish), prep BM 18855 (BMNH).

Fig. 267. *M. indentatus* (Meyrick). Mexico, Baja California del Sur, Bahia Falsa nr La Paz, 20.ix.1969 (CL Hogue), gent CG 6226 (LACM).

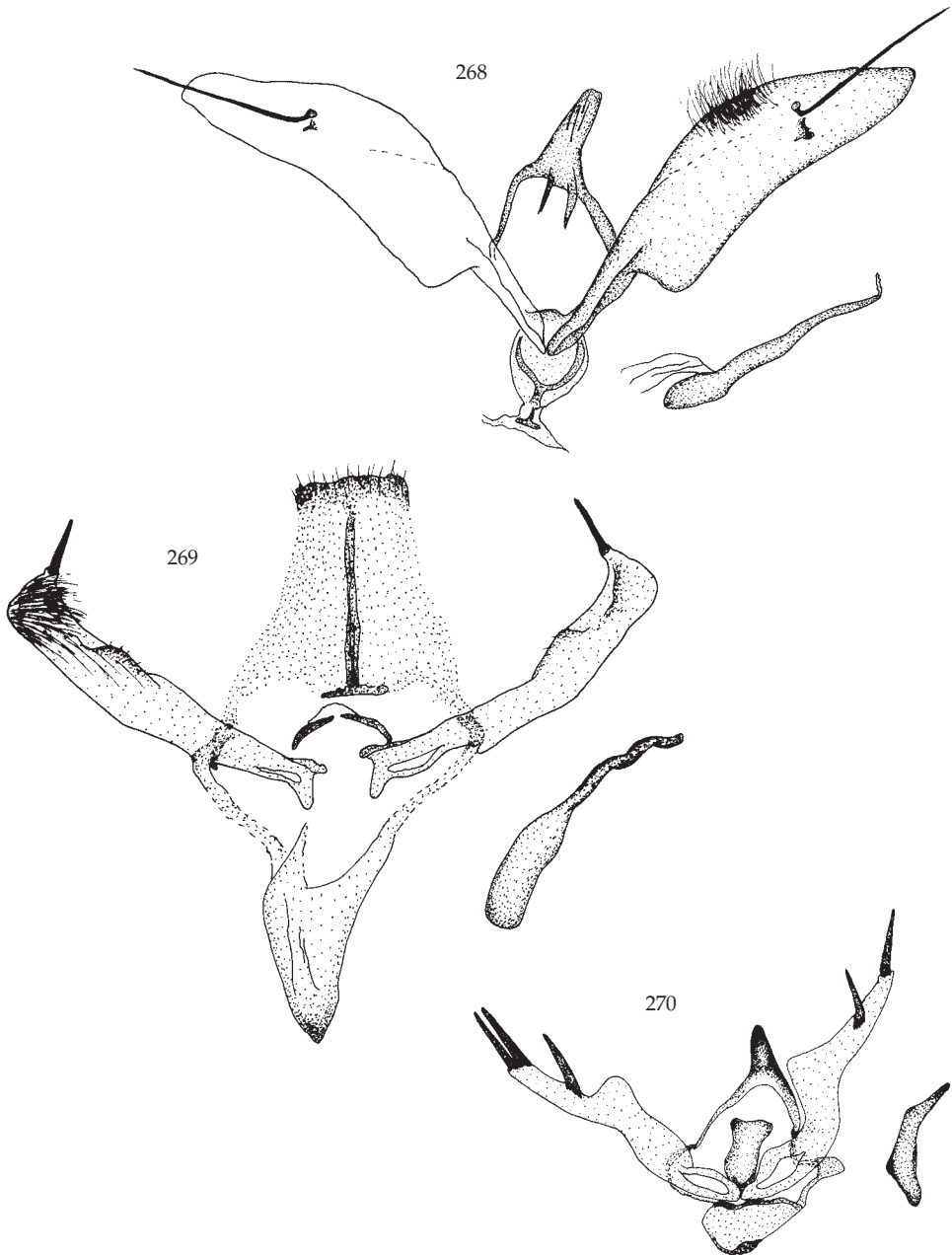


Fig. 268. *M. margaritae* **spec. nov.** Holotype. Ecuador, Manabi Prov, 4 km S Punto Lopez, 80 m, 3-5.v.2001 (V. Pelz/), gent CG 4524 (CG).

Fig. 269. *M. hodgesi* Gielis. Holotype. Puerto Rico, 7 km S Ciales, 945 m, 27.v.1969 (W. Plath), gent CG 5206 (CG).

Fig. 270. *M. shafferi* Gielis. Holotype. Brazil, D(istrito) F(ederal), Planaltina, 15°35'S 47°42'W, 20.iv.1982 (V.O. Becker), gent CG 3671 (Becker nr 40047).

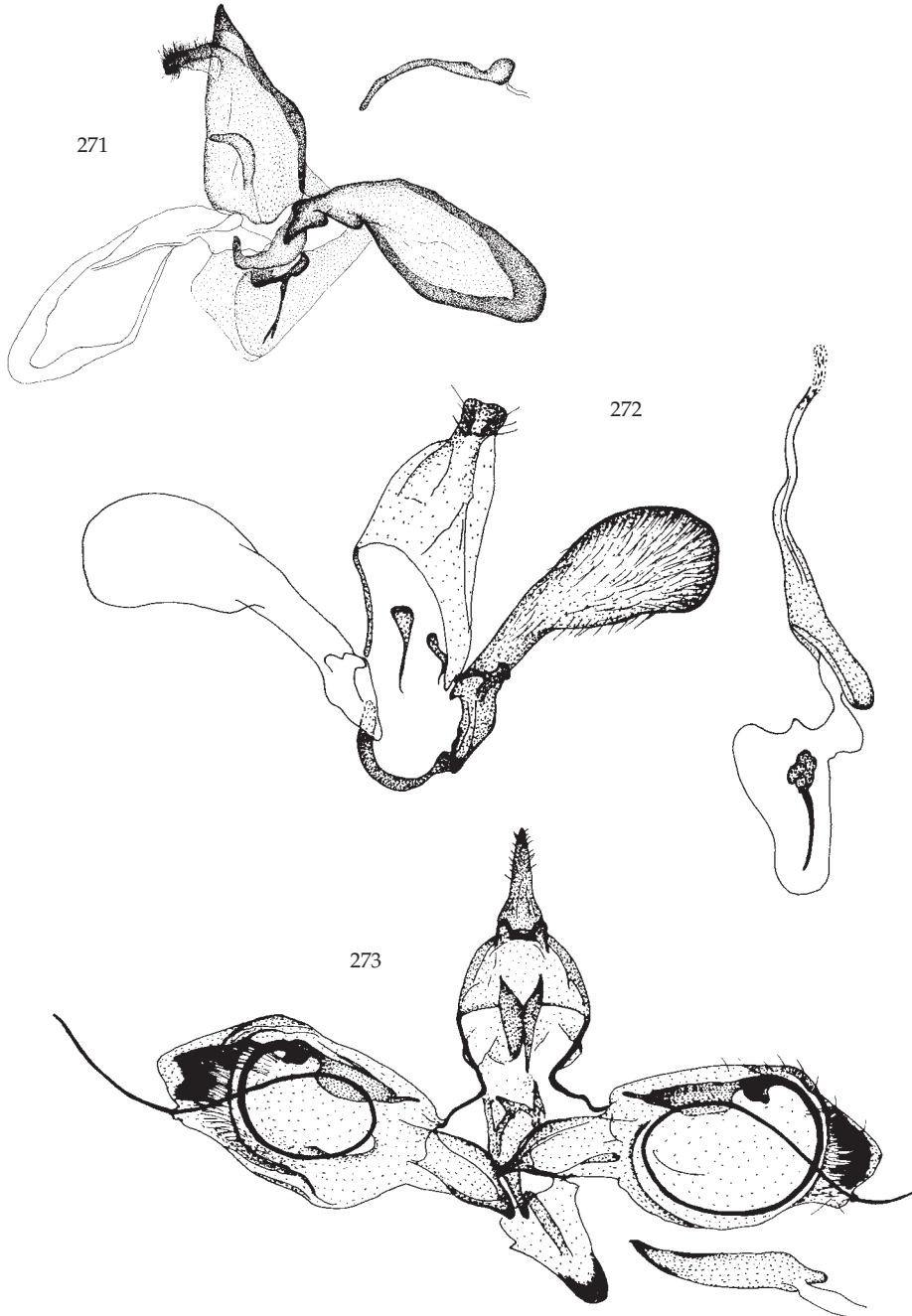


Fig. 271. *Sphenarches anisodactylus* (Walker). Indonesia, Ardjoeno, no date (Herkmeyer), gent CG 3108 (RMNH).

Fig. 272. *S. nanellus* (Walker). Brazil, Manaus, xi.1919 (Parish), gent CG 5060 (BMNH).

Fig. 273. *Marasmarcha breviostris* (Walsingham). Holotype. Mexico, Guerrero, Tepetlapa, 915 m, x (H.H. Smith), gent CG 5053 (BMNM).

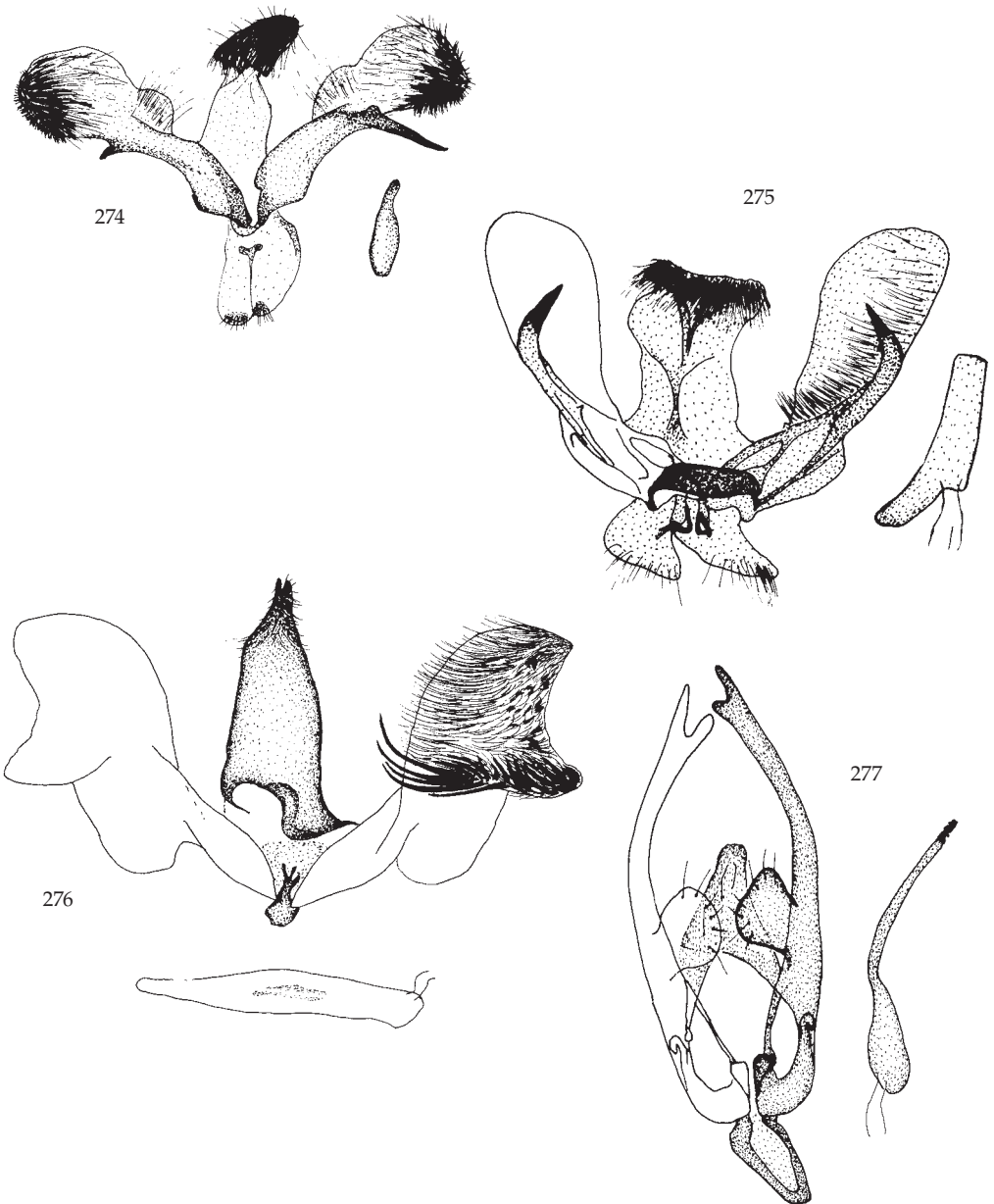


Fig. 274. *Exelastis phlyctaenias* (Meyrick). British Virgin Islands, Guana Island, x.1989 (V.O. Becker), gent CG 3654 (VOB).

Fig. 275. *E. montischristi* (Walsingham). British Virgin Islands, Guana Island, 0-80 m, 9-23.vii.1987 (S. Miller & V.O. Becker), gent CG 6129 (BPBM).

Fig. 276. *E. pumilio* (Zeller). Guadeloupe, Domaine Duclos, INRA, vi.1978 (J. Boudinet), gent CG 1974 (MNHN).

Fig. 277. *Buckleria brasilia* **spec. nov.** Holotype. Brazil, Goiás, Alto Paraiso, 1300 m, 30.v.1994 (V.O. Becker), gent CG 4910 (V.O. Becker nr 92782).



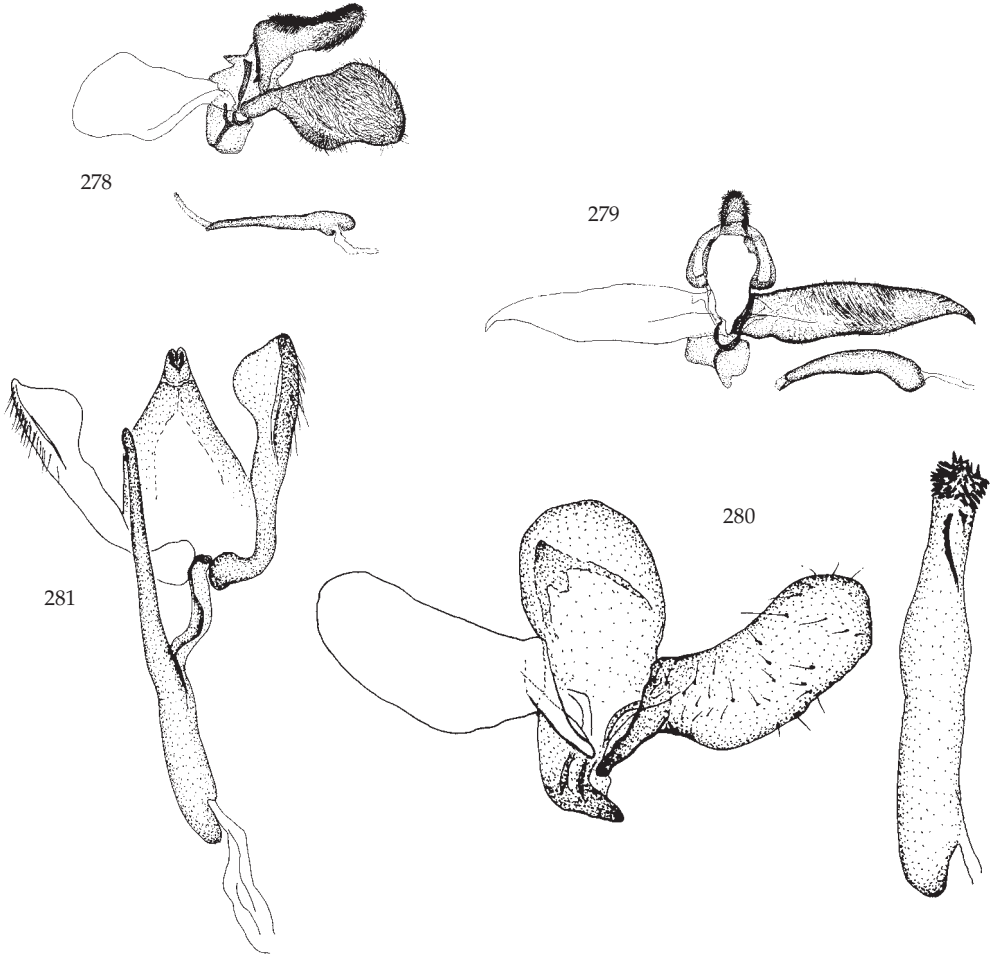


Fig. 278. *Megalorhipida leucodactylus* (Fabricius). Côte d'Ivoire, Bouaflé, 25.viii.1983 (R.T.A. Schouten), gent CG 2168 (CG).

Fig. 279. *M. pseudodeflectalis* Gielis. Holotype. Argentina, Neuquen, Piedra del Aguila, 18.xii.1978 (Mis. Cient. Danesa, sta. 15), gent CG 4109 (ZMUC).

Fig. 280. *M. dulcis* (Walsingham). Mexico, Quintana Roo, Xcurat, on *Lantana urticifolia* Mill, 14.xi.1989 (W.A. Palmer), gent CG 6316 (CG).

Fig. 281. *M. dubiosa* **spec. nov.** Holotype. Brazil, Distrito Federal, Planaltina, 1000 m, 25.ix.1985 (V.O. Becker), gent CG 3669 (VOB).

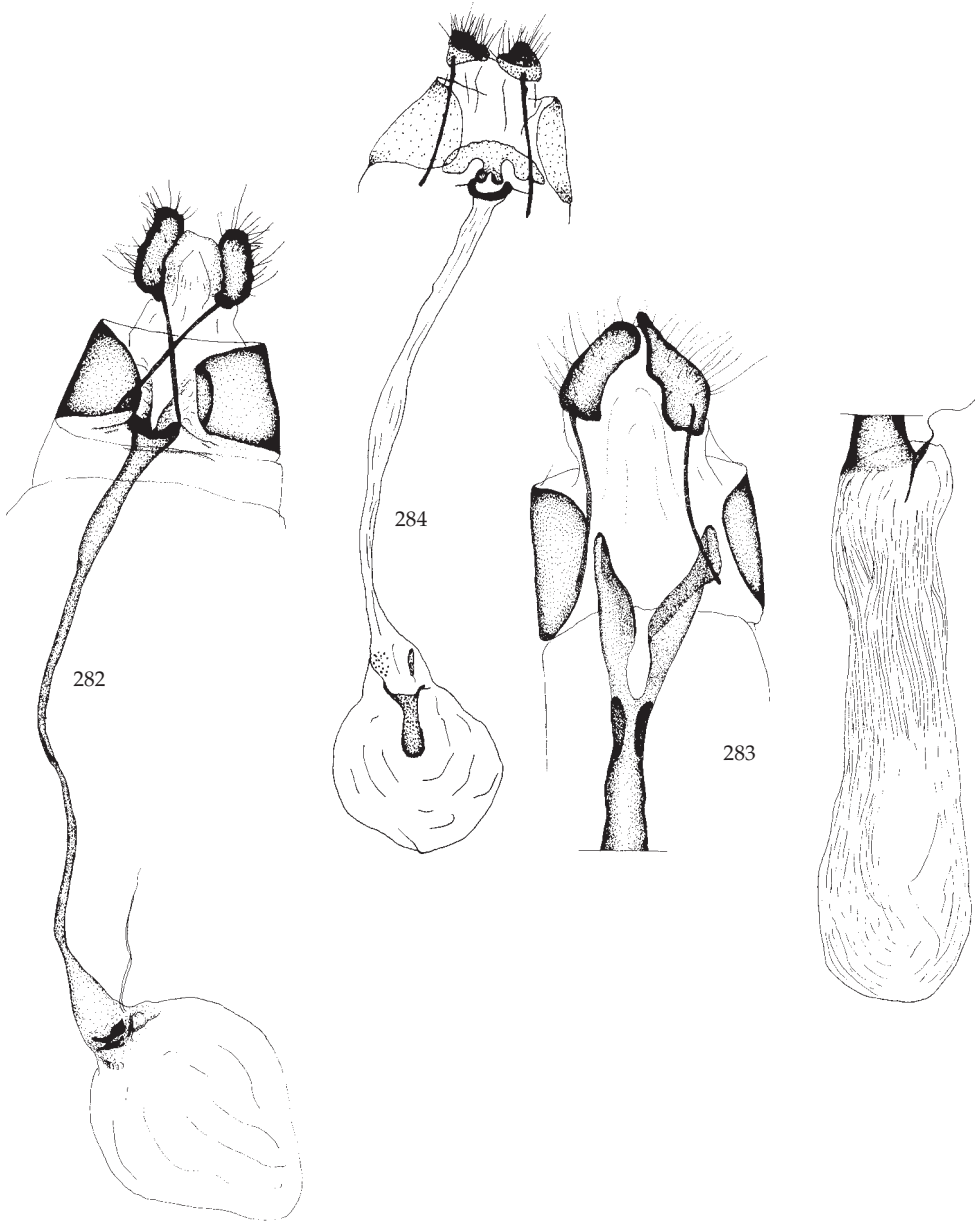


Fig. 282. *Ochyrotica fasciata* Walsingham. Jamaica, Runaway Bay, 30.iii.1905, gent BM 17909 (BMNH).  
Fig. 283. *O. placozone* Meyrick. Lectotype. Peru, Jurimaguas, iii.1920 (Parish), gent BM 17994 (BMNH).  
Fig. 284. *O. mexicana* Arenberger. Guatemala, Volcan Sta Maria, no date, gent CG 6011 (USNM).

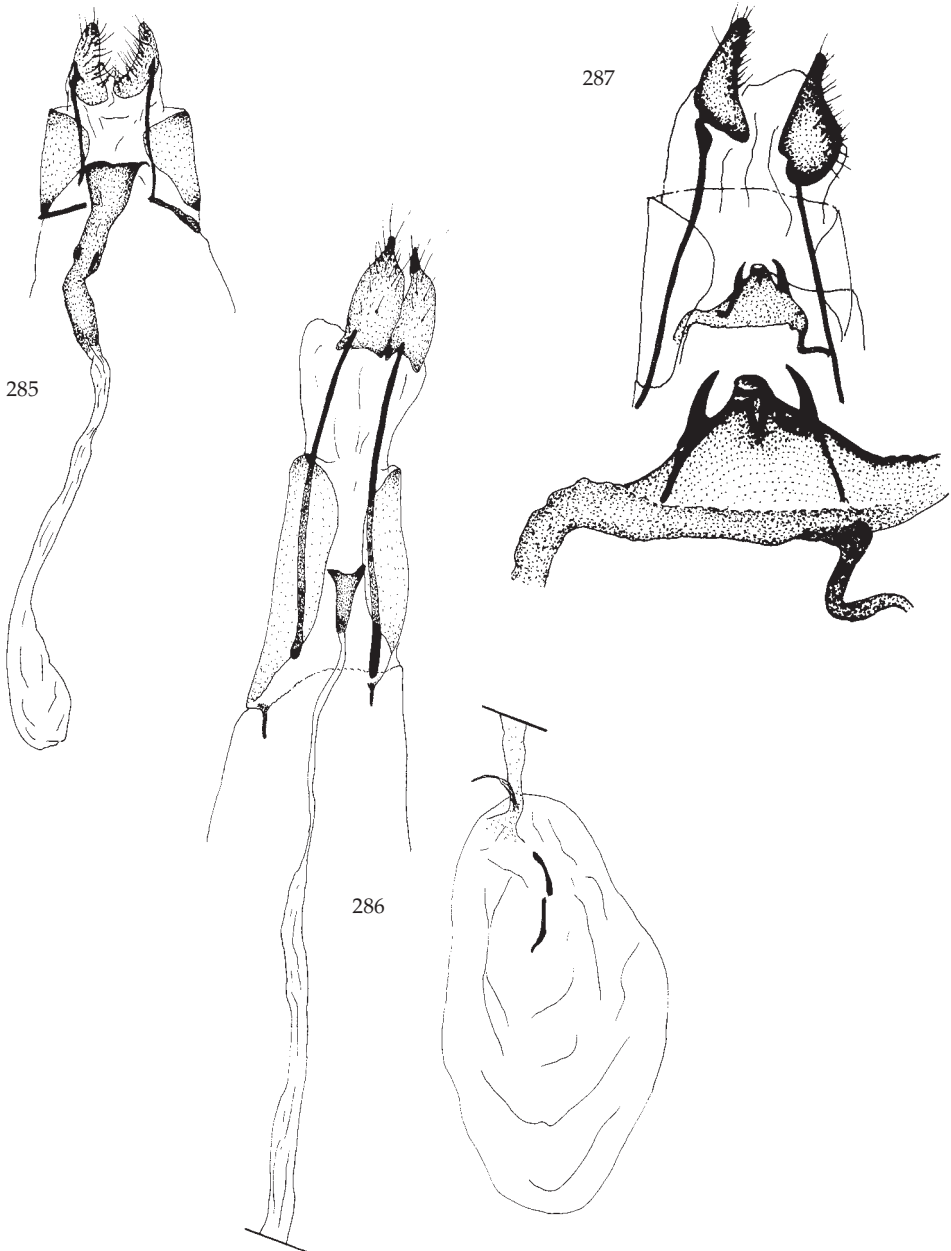
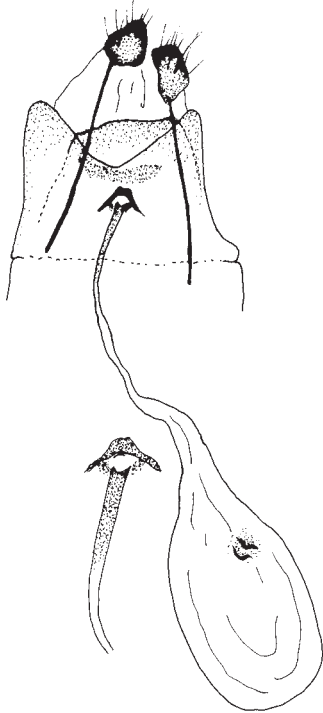


Fig. 285. *O. gielisi* Arenberger. Holotype. Panama, Chiriqui, V. de Chiriqui, 915-2120m, (19)19 (Chapman), gent BM 18626 (BMNH).

Fig. 286. *L. fortunatus* (Meyrick). Holotype. Brazil, Teffe, xii.(19)19 (Parish), gent BM 18857 (BMNH).

Fig. 287. *L. trinidad* Gielis. Paratype. Trinidad, W(est) I(ndies), Lasaiivar, Maracas Valley, 5.ii.1961 (CG).

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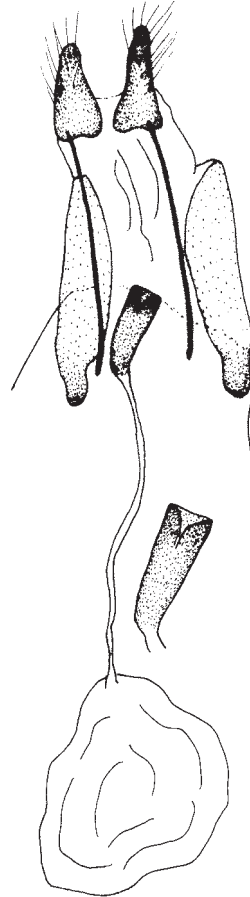


Fig. 288. *L. tungurahue* **spec. nov.** Holotype. Ecuador, Tungurahue, 20 km E Baños, San Francisco, 1°24'39"S 78°14'23"W, 1290 m, 26.ix.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4927 (CG).

Fig. 289. *L. panamaensis* **spec. nov.** Holotype. Panama, Canal Zone, Barro Colorado Island, 24.iii.1978 (Silberglied, ao), gent CG 4885 (USNM).

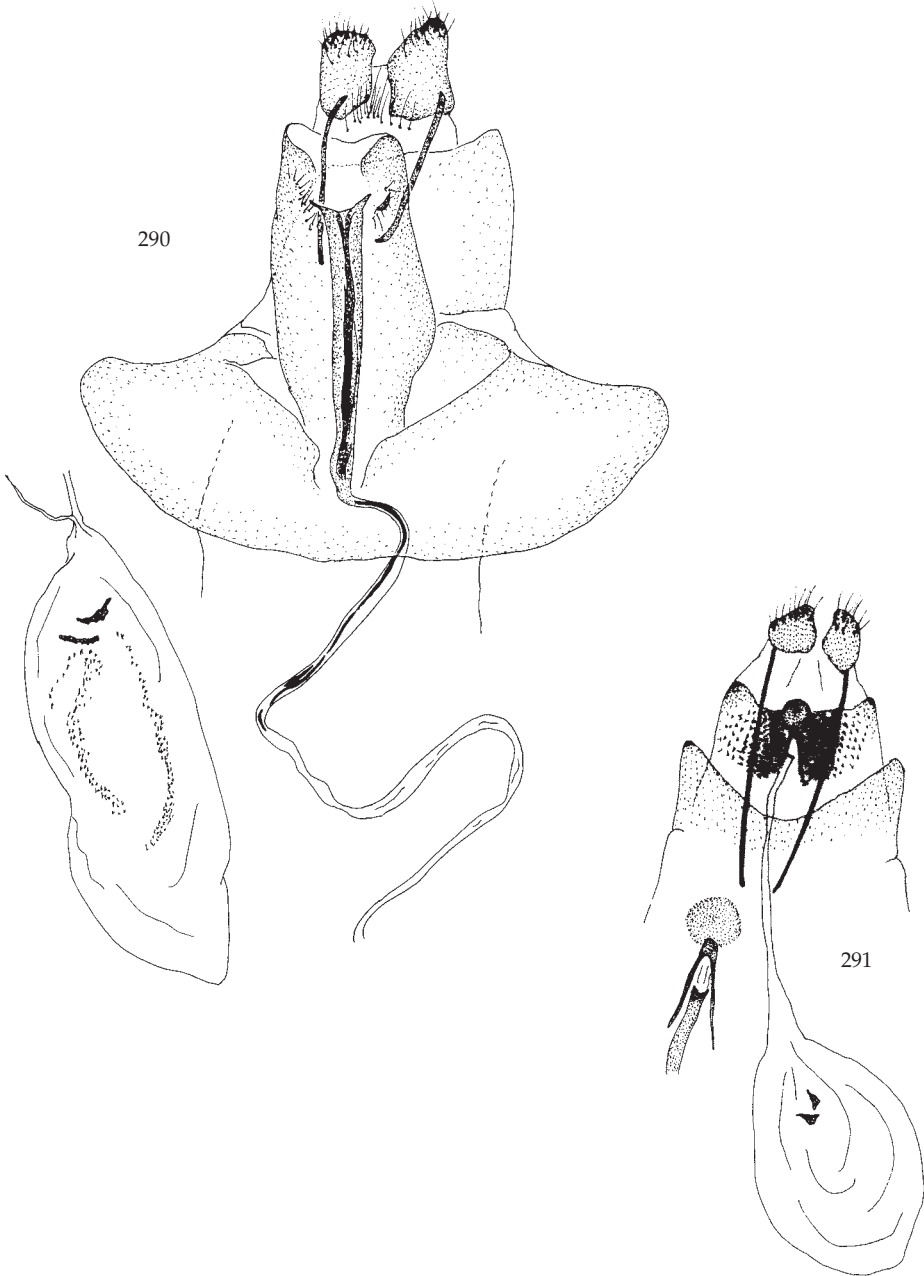


Fig. 290. *L. angulatus* **spec. nov.** Paratype. Brazil, DF, Planaltina, 1000 m, 15.ix.1985 (V.O. Becker), gent CG 6043 (VOB).

Fig. 291. *L. duchicela* **spec. nov.** Paratype. Ecuador, Carchi, Maldonado, 2200 m, 9-1.i.1993 (V.O. Becker), gent CG 4899 (CG).

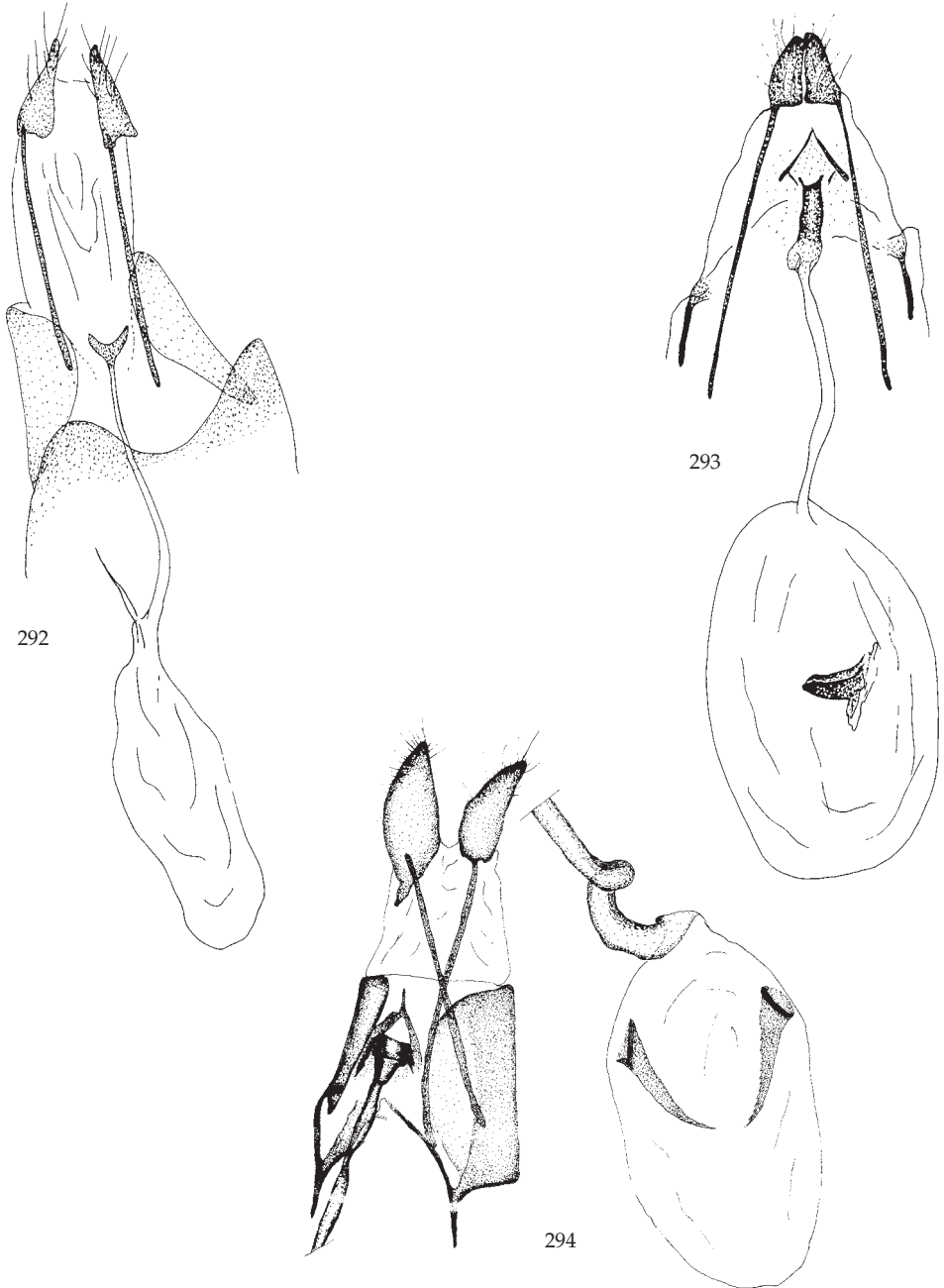


Fig. 292. *L. neales* (Walsingham). Surinam, Paramaribo, Kwatta, ix.2001 (A. Theunissen), gent CG 4650 (CG).

Fig. 293. *Sochchora albipunctella* Fletcher. Brazil, PA Belem, i.1984 (V.O. Becker), gent CG 3372 (VOB).

Fig. 294. *S. donatella* Walker. Holotype. (Brazil), Ega, no date (Bates), gent BM 1696 (BMNH).

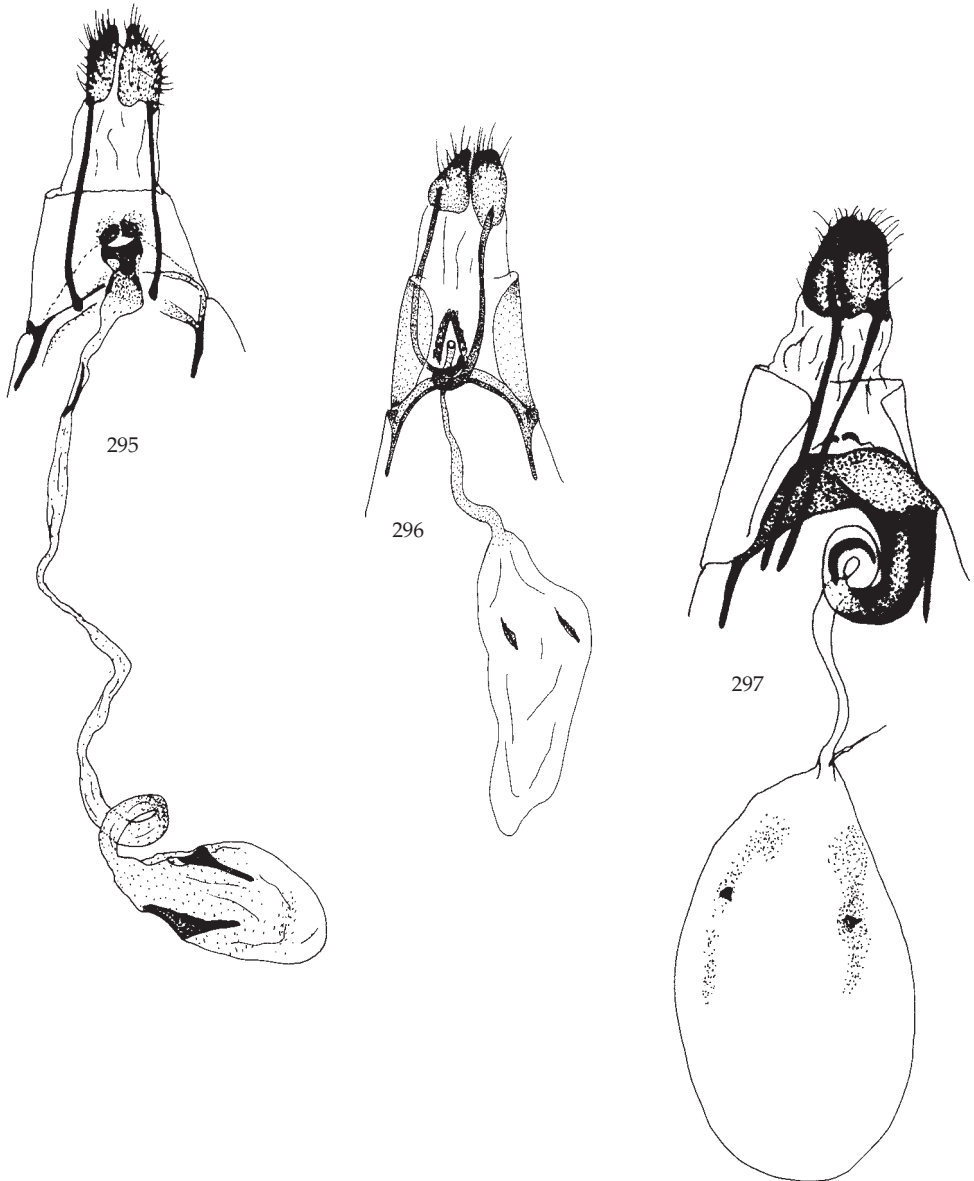


Fig. 295. *S. dotina* Walsingham. Holotype. Panama, Chiriqui, Bugaba, 240-450 m, 1881 (Chapman), gent BM 18860 (BMNH).

Fig. 296. *S. mulinus* **spec. nov.** Holotype. Brazil, Pará, Capitão Poço, 17-22.xi.1984 (V.O. Becker), gent CG 3902 (V.O. Becker nr 53831).

Fig. 297. *Quadriptilia rectangulodactylus* Gielis. Holotype. Peru, Carabaya, Agualani, 2750 m, vi.1905 (G. Ockenden), dry season, gent CG 5012 (BMNH).



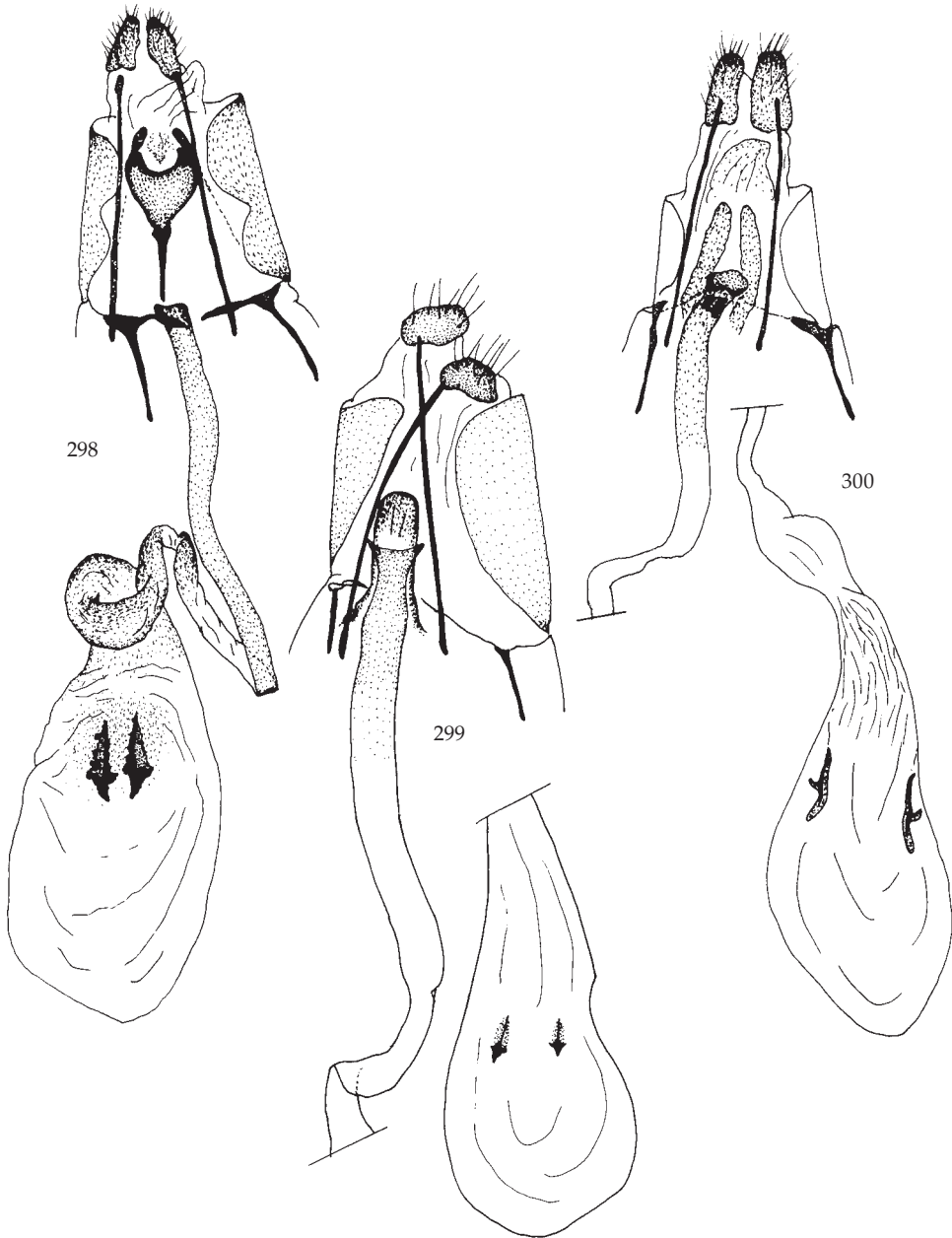


Fig. 298. *Melanoptilia arsenica* (Meyrick). Paratype. Peru, Iquitos, Jurimaguas, iii (Parish), gent BM 18471 (BMNH).

Fig. 299. *M. nigra* **spec. nov.** Holotype. Ecuador, Pastaza, 11 km N Puyo, La Florida, 1°23'35"S 77°58'38"W, 1090 m, 27.ix.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4928 (CG).

Fig. 300. *M. chalcogastra* (Meyrick). Brazil, R Trombetas, ix.1919 (Parish), gent CG 5064 (BMNH).

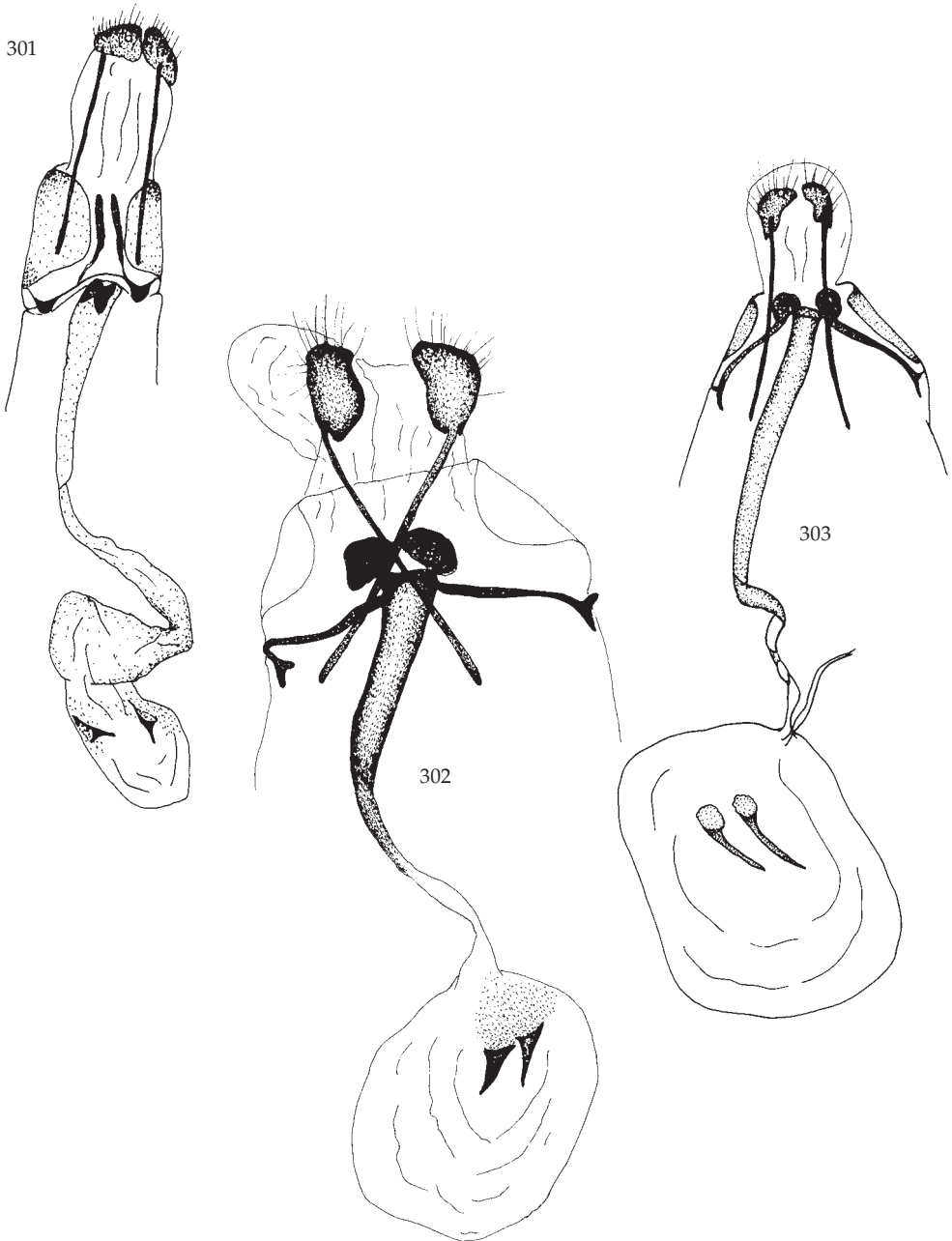


Fig. 301. *M. haemogastra* (Meyrick). Lectotype. Peru, Cocapata, 3660 m, (19)20, gent BM 18851 (BMNH).  
 Fig. 302. *Platyptilia davisi* Gielis. Holotype. Chile, Nuble Prov., Shangri-la, SW. side Volcan Chillan, 1600 m., 19-21.i.1979 (Davis & Akerbergs), gent CG 6051 (USNM).  
 Fig. 303. *P. vilema* B. Landry. After B. Landry, et al. (2004).

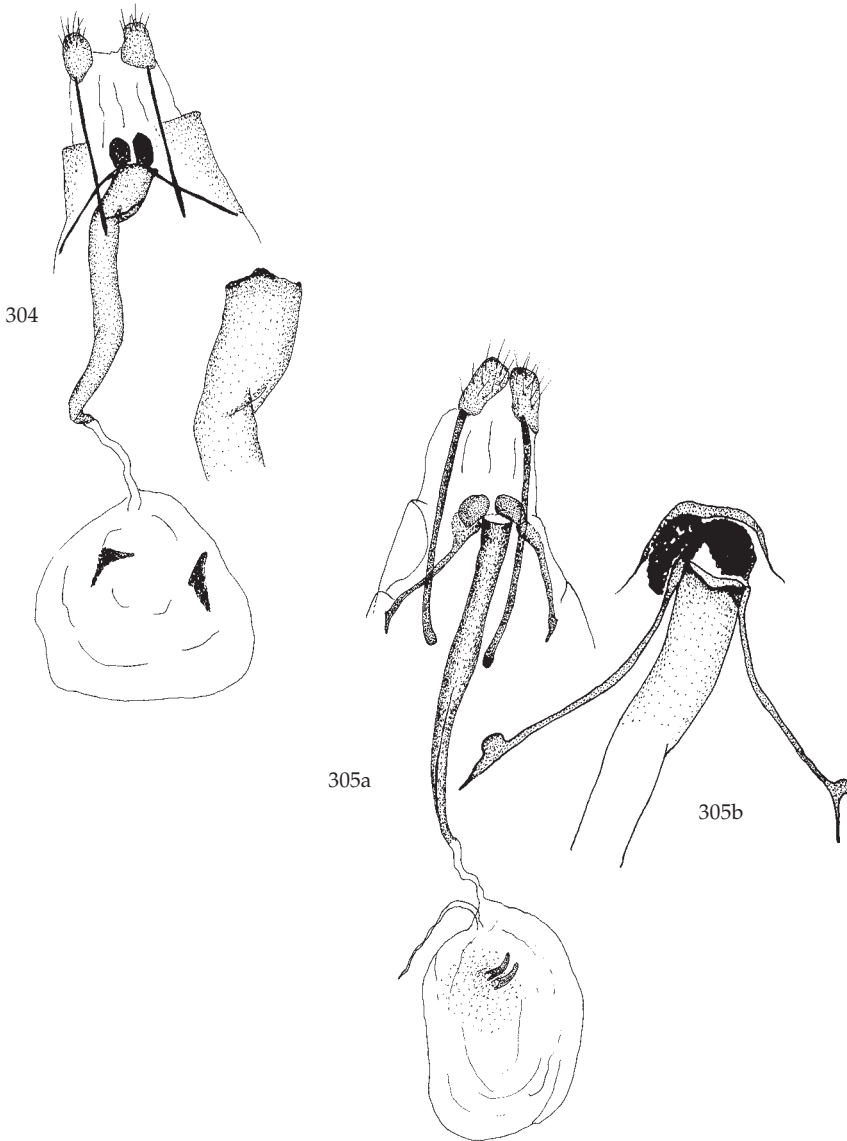


Fig. 304. *P. semnopis* Meyrick. Brazil, Paraná, Bahado, Quatro Barrus, 800 m, 26.i.1970 (V.O. Becker), gent CG 6230 (VOB).

Fig. 305a. *P. gravior* Meyrick. Paratype. Costa Rica, Heredia, Braulio Carrillo NP, Estacion Barva, 2500 m, iv.1990, (A. Fernandez), gent CG 3867 (Inbio).

Fig. 305b. *P. gravior* Meyrick. Detail. Guatemala, Hue, Bulej, 2000 m, 25.viii.2000 (V.O. Becker), gent 4912 (VOB).

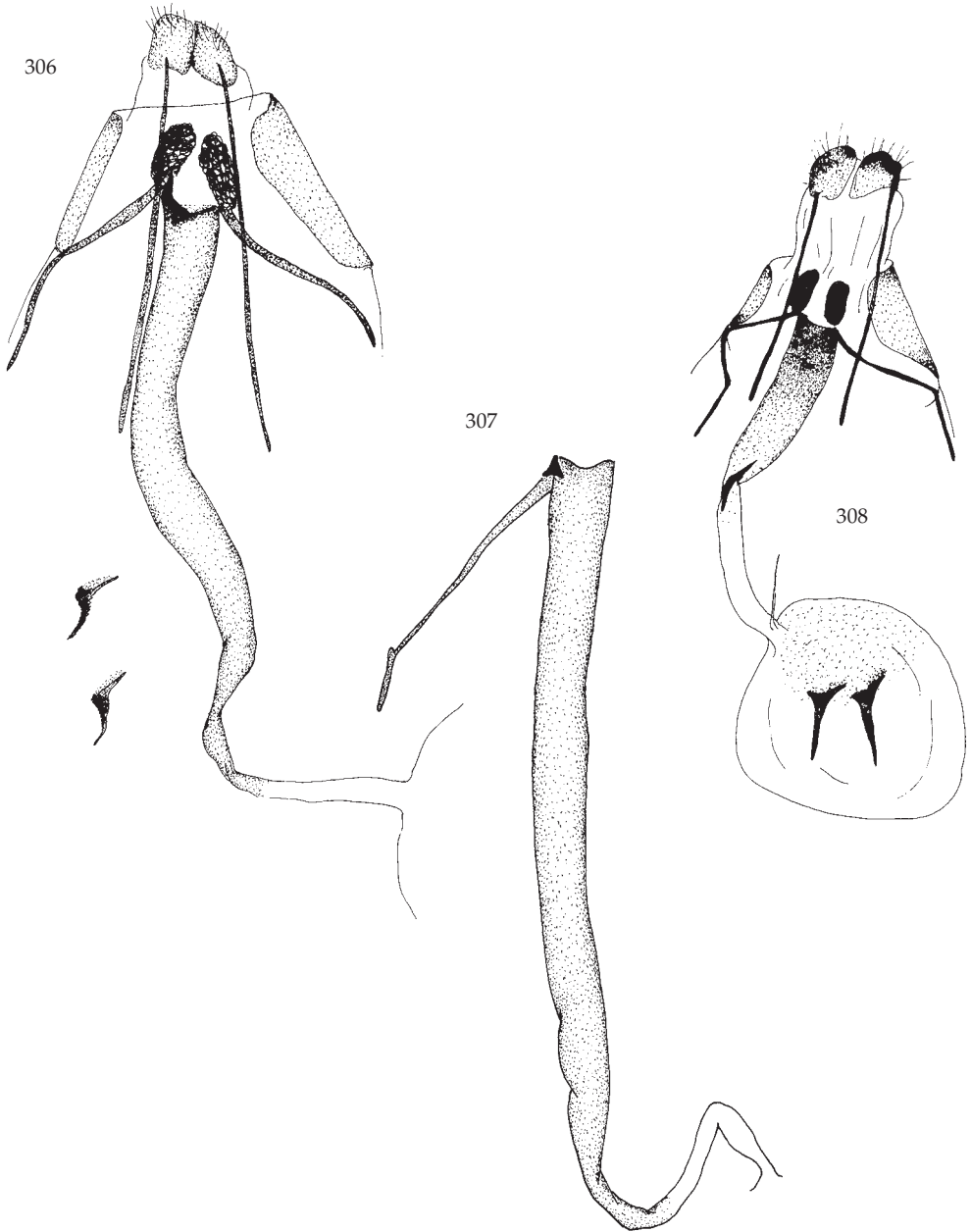


Fig. 306. *P. spicula* **spec. nov.** Holotype. Surinam, Paramaribo, v.1965 (v. Brussel), gent CG 3447 (USNM).

Fig. 307. *P. carduidactylus* (Riley). Mexico, Chi, Teopisca, 9.vii.1966 (Flint & Ortiz), gent CG 4888 (USNM).

Fig. 308. *P. thyellopa* Meyrick. Ecuador, Napo, Rd Cosanga-Mena 6.5 km, 2200 m, 22.xii.1984 (N. Venedictoff), gent CG 3547 (AME).

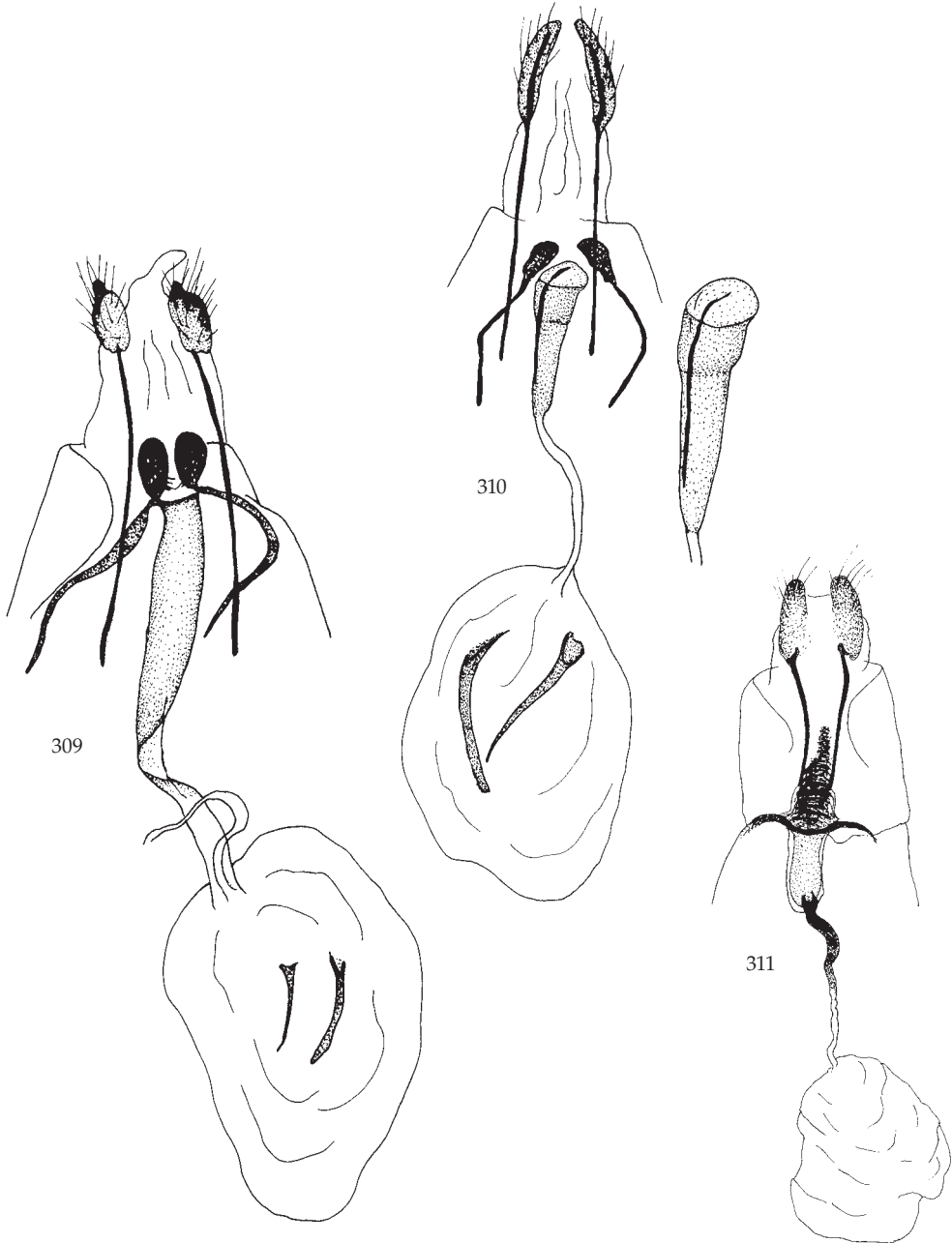


Fig. 309. *P. anniei* Gielis. Paratype. Ecuador, Napo, 6.3 km S Cosanga, 2200 m, 14.iv.1985 (N. Venedictoff), gent CG 4993 (CG).

Fig. 310. *Gillmeria pallidactyla* (Haworth). Japan, Hokkaido, Sizukawa, Tomakumai, 17.vii.1992 (H Kogi), gent CG 2997 (CG).

Fig. 311. *Bipunctiphorus nigroapicalis* B. Landry & Gielis. Paratype. Venezuela, Caracas, El Avila, 28.ix-3.x.1974 (B.V. Rigout), gent CG 5037 (BMNH).

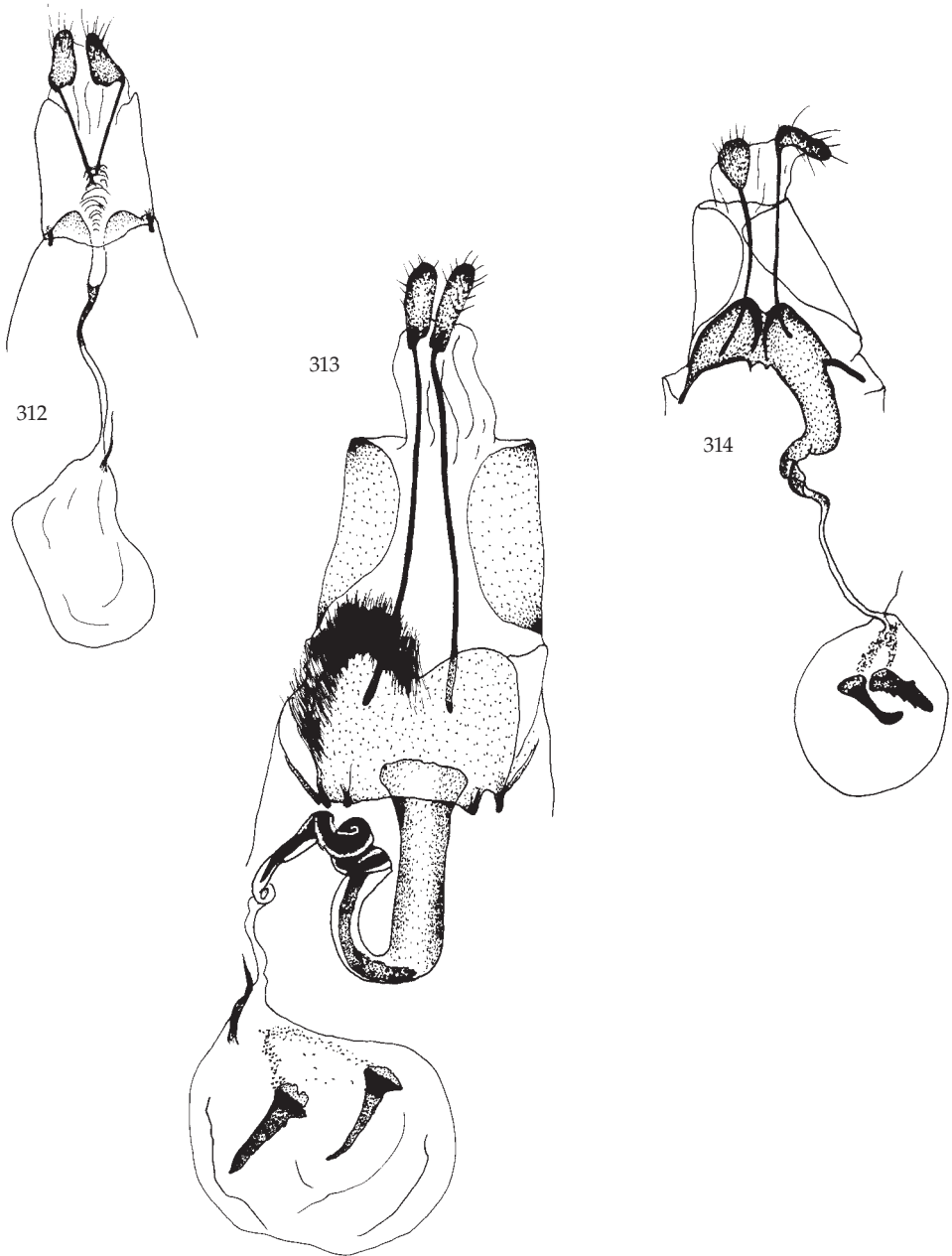


Fig. 312. *B. pelzi* Gielis. Paratype. Ecuador, Morona-Santiago, Macas, 23-24.vi.1999 (V. Pelz), gent CG 4499 (CG).

Fig. 313. *Anstenoptilia marmarodactyla* (Dyar). Paratype. USA, New Mexico, Las Vegas, no date, gent AB Aug 13, 1935 USNM (USNM).

Fig. 314. *A. hugoiella* Gielis. Paratype. Colombia, no date, gent CG 5015 (BMNH).

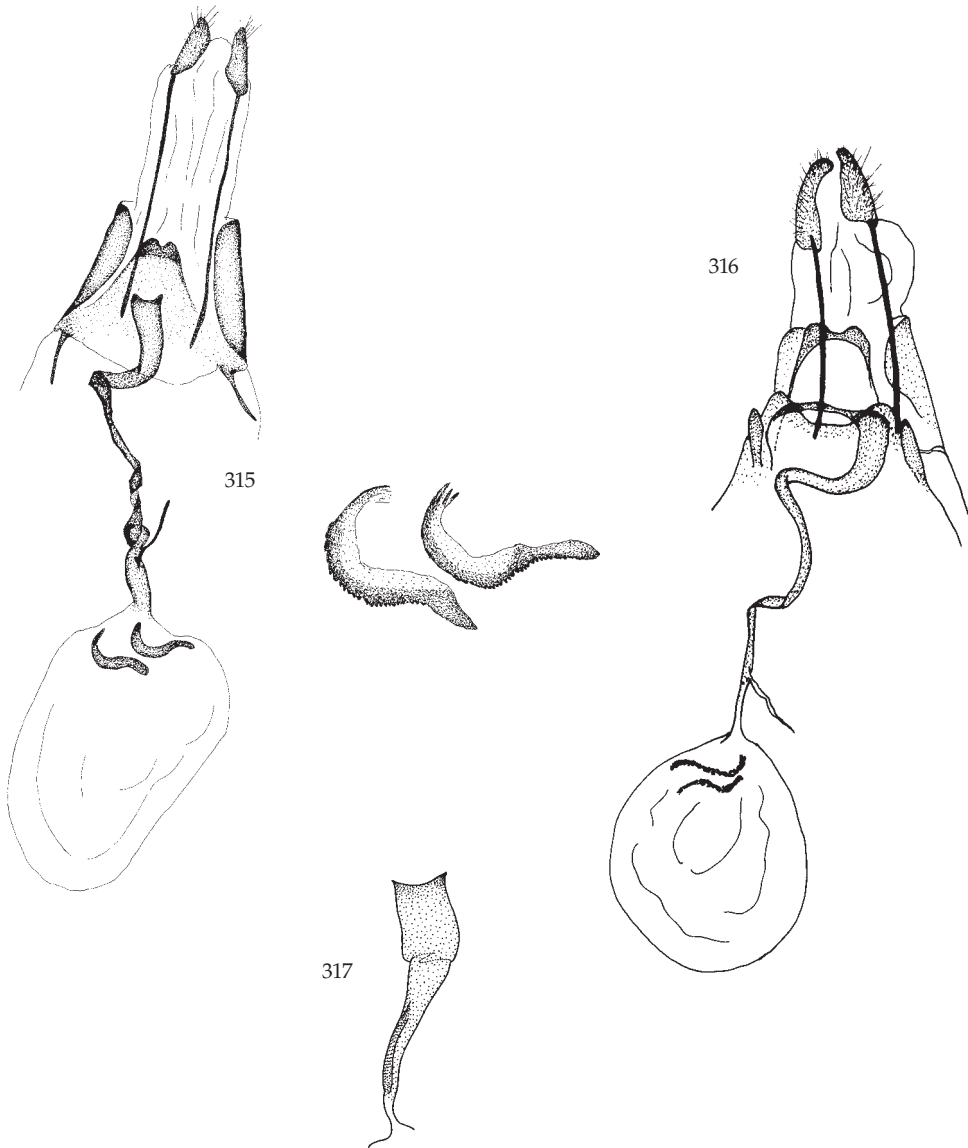


Fig. 315. *Lantanophaga pusillidactyla* (Walker). Spain, Tarragona, L'Hospitalet d'Infante, 20.ix.1997 (G.E. King), gent C Hart 1052 (King).

Fig. 316. *L. minima* (B. Landry & Gielis). After B. Landry & Gielis, 1992.

Fig. 317. *Stenoptilodes taprobanes* (Felder & Rogenhofer). Tchad, Bebedjia, nr Moundou, 400 m, 30.x.1970 (J.H. & M. Lourens), gent CG 2001 (CG).



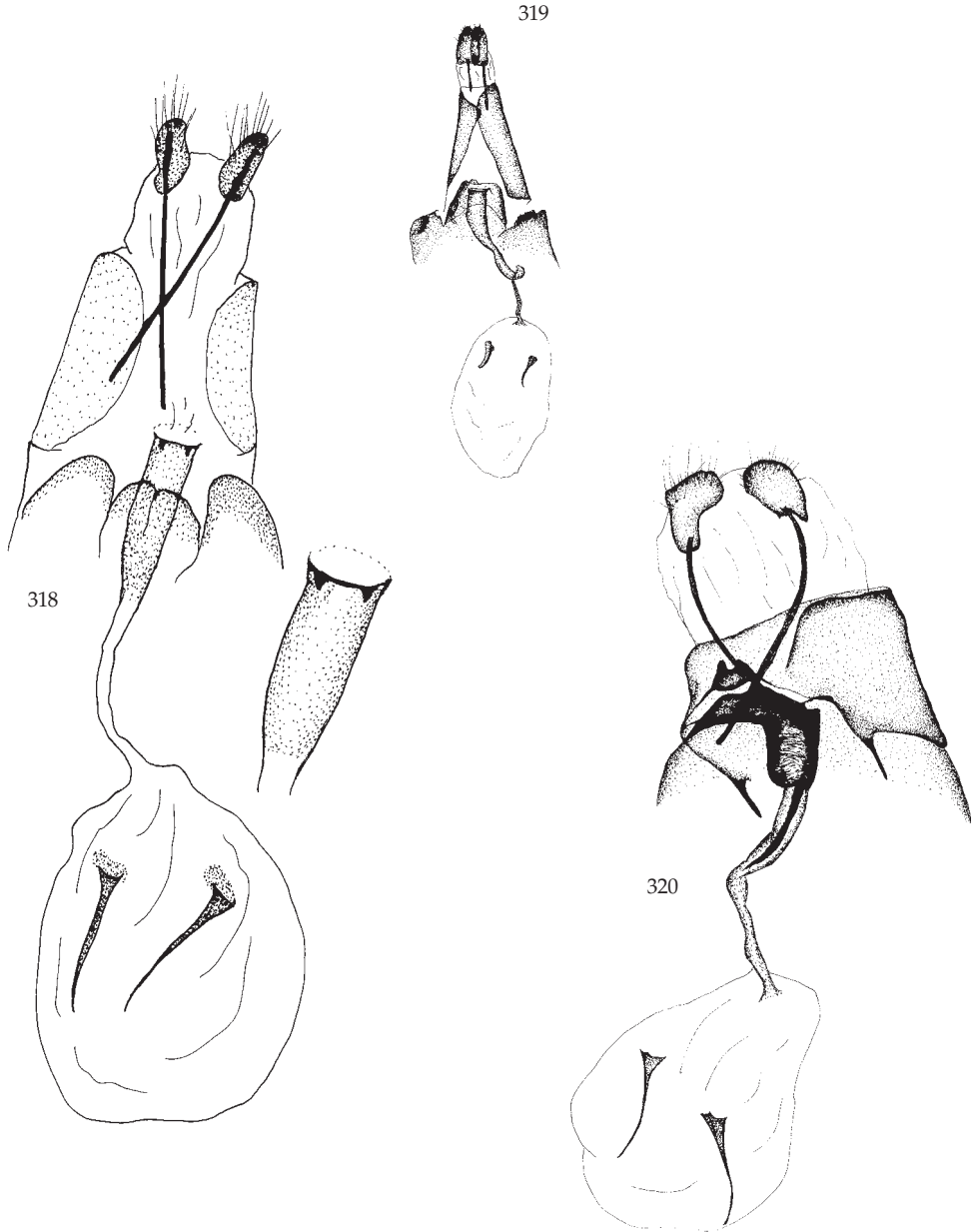


Fig. 318. *S. brevipennis* (Zeller). Argentina, Jujuy, PN Calilegua, Mesada de Colmenas, 21-23.xi.1995 (Neth ent exp N Argentina, sta 15), gent CG 2702 (CG).

Fig. 319. *S. gilvicolor* (Zeller). Holotype. Colombia, Bogota, 22.iii, gent BM 4968 (BMNH).

Fig. 320. *S. stigmatica* (Felder & Rogenhofer). Ecuador, Guachayacu, ix-x.19260 (Vorbeck), gent CG 4104 (ZMUC).

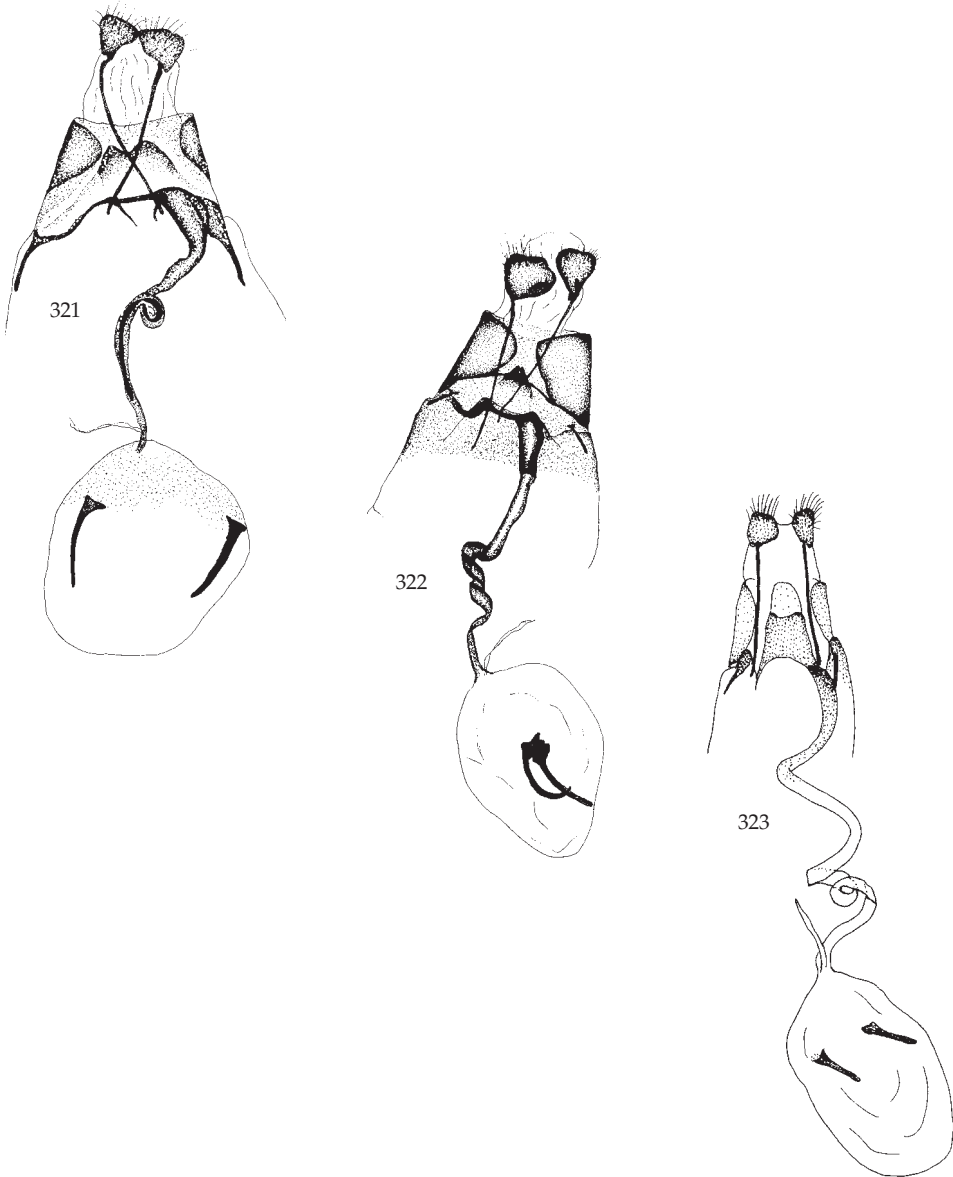


Fig. 321. *S. juanfernandicus* Gielis. Holotype. (Chile), Masatierra, Bahia Cumberland, 20.iii.1951 (Kuschel), gent CG 1983 (MNHC).

Fig. 322. *S. sematodactyla* (Berg). Argentina, Buenos Aires, Ramos Mejia, 5.xii.1961 (Topal), gent CG 4091 (ZMUC).

Fig. 323. *S. gielisi* (B. Landry). Holotype. Ecuador, Galapagos Islands, Isla Isabela, Volcan Darwin, 300 m, 20.v.1992 (B. Landry), gent BL 316 (CNC).

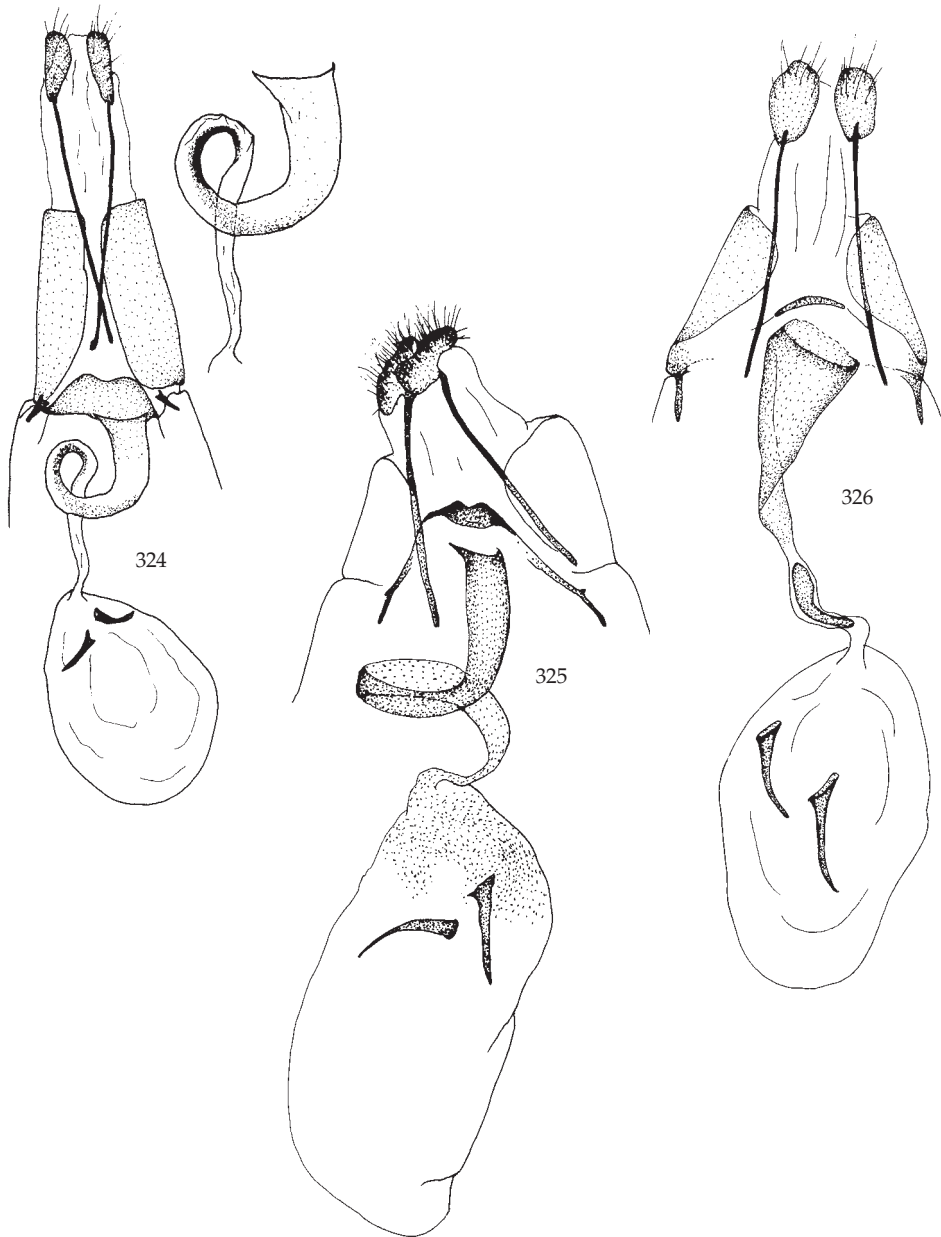


Fig. 324. *S. maculatus* **spec. nov.** Holotype. Ecuador, Azuaj, PN Cajas, Laguna Llaviuco, 3225 m, 2°5'38"S 79°8'35"W, 12.x.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4926 (CG).

Fig. 325. *S. umbrigeralis* (Walker). Peru, carabaya, Oconegre, dry season, 2135 m, vii.1904 (G. Ockenden), gent CG 5050 (BMNH).

Fig. 326. *S. heppneri* **spec. nov.** Holotype. Venezuela, Aragua, 5 km W Tovar, 1920 m, 24.i.1978 (J.B. Heppner), gent CG 3457 (USNM).

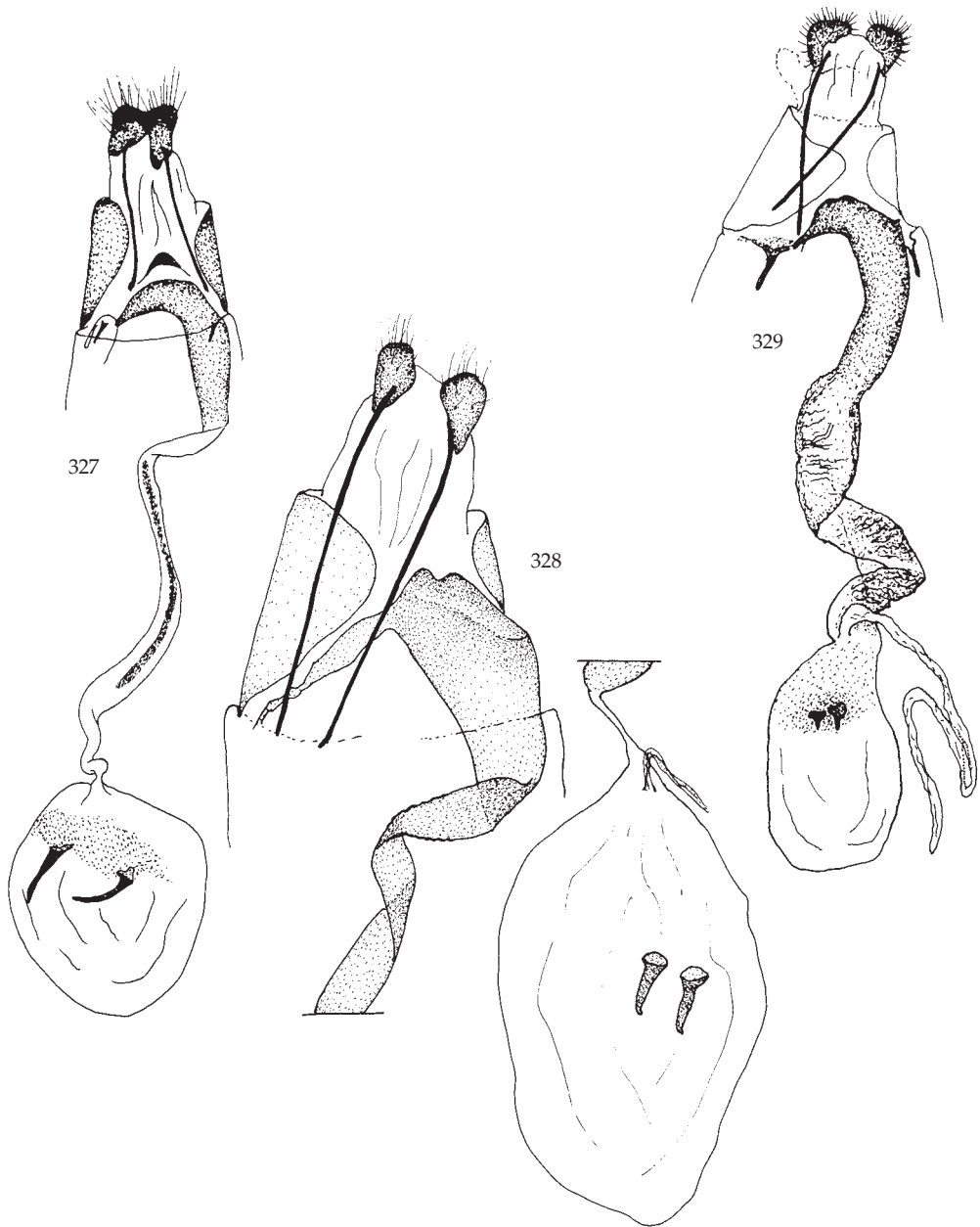


Fig. 327. *S. thrasydoxa* (Meyrick). Colombia, Sierra del Libano, 1830 m, v.1899 (H.H. Smith), gent CG 5043 (BMNM).

Fig. 328. *S. medius* **spec. nov.** Paratype. Ecuador, Sucum, Sta Barbara, 3400 m, 8.i.1993 (V.O. Becker), gent CG 4890 (VOB).

Fig. 329. *S. altiaustralis* **spec. nov.** Paratype. Peru, Cuzco, Pillahuata, 2600 m, 18.viii.1972 (Matthews), gent BM 18480 (BMNH).

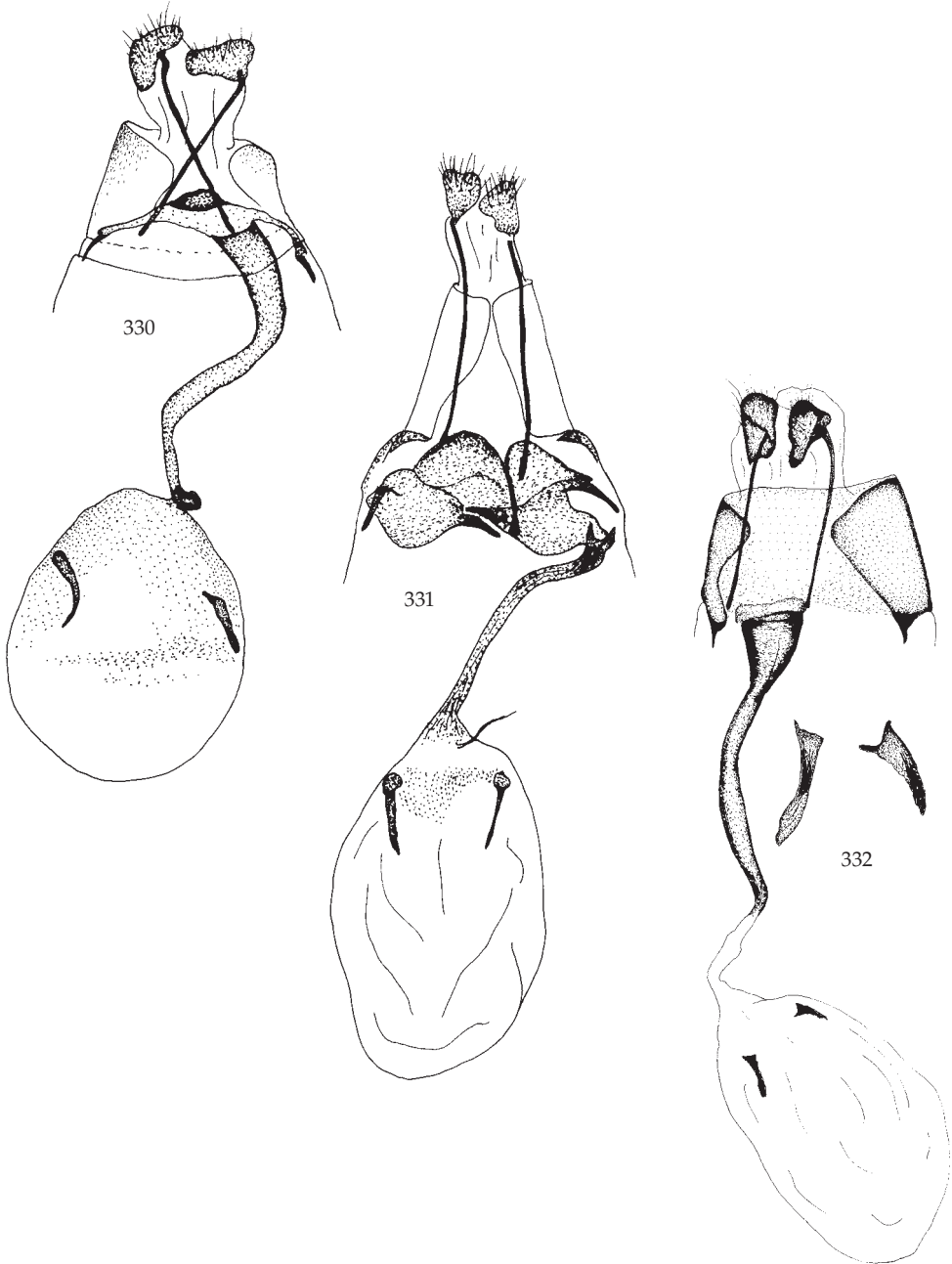


Fig. 330. *S. posticus* (Felder & Rogenhofer). Peru, Carabaya, Aguilani, dry season, 2750 m, ix.1905 (G. Ockenden), gent CG 5013 (BMNH).

Fig. 331. *S. sordipennis* (Zeller). Lectotype. (Colombia), Bogota, no date, gent BM 18852 (BMNH).

Fig. 332. *Paraamblyptilia eutalanta* (Meyrick). Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 810 m, 9.xii.1978 (Mision Cientifica Danese, sta 7), gent CG 4098 (ZMUC).

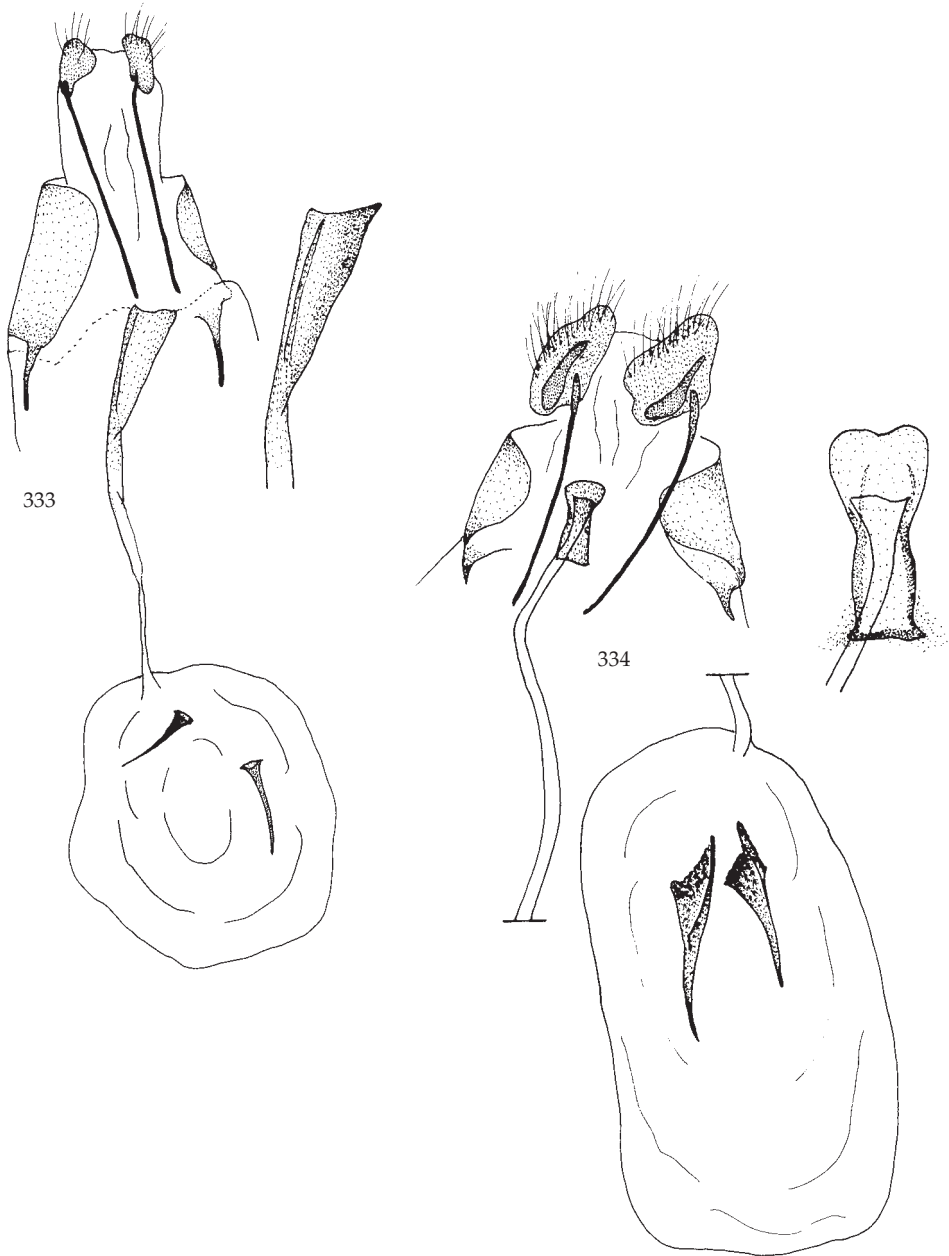


Fig. 333. *P. ridouti* Gielis. Costa Rica, Cartago, Cerra de la Muerte, 3100 m, 17.ix.1999 (V.O. Becker), gent CG 4905 (VOB).

Fig. 334. *Uroloba calycospila* (Meyrick). Argentina, Salta, Quebrada del Toro, 30 km W Salta, 1700 m, 10.i.1996 (Neth ent exp N Argentina, sta 40), gent CG 4809 (CG).

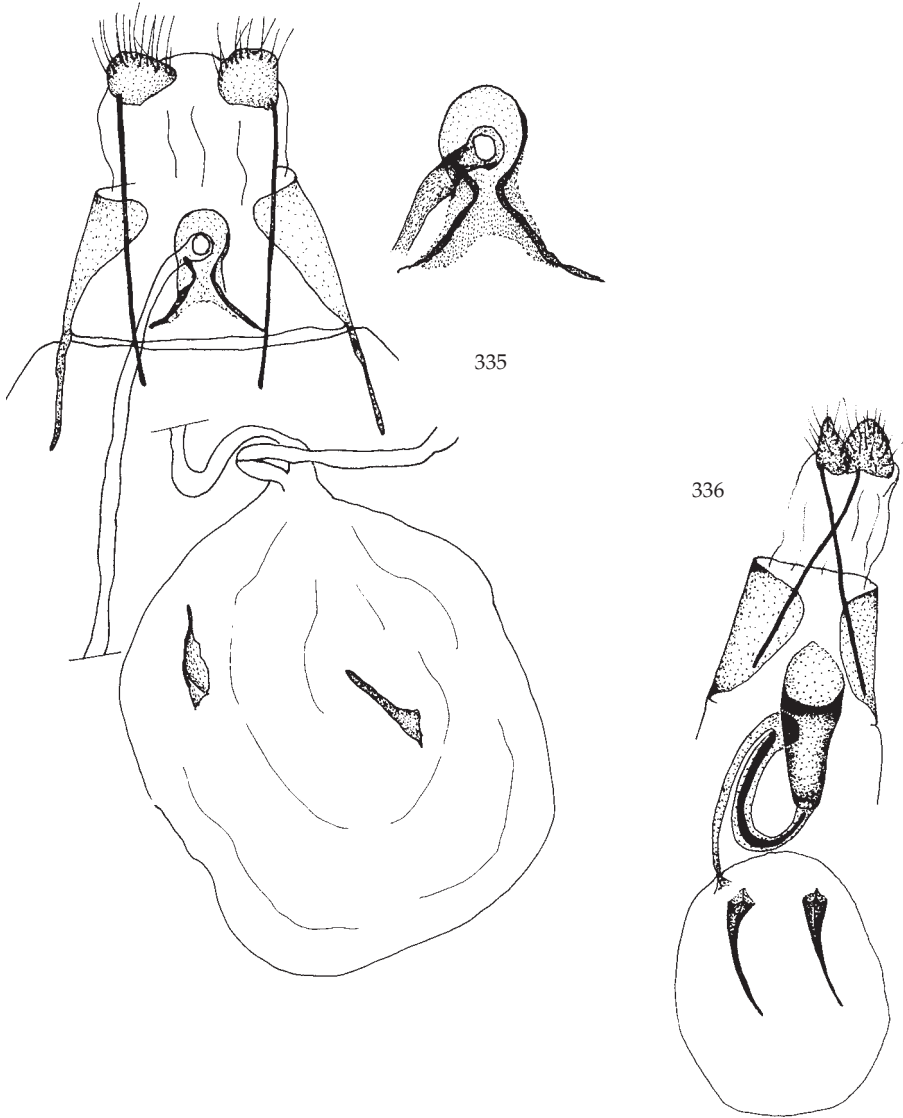


Fig. 335. *U. fuscicostata* Walsingham. Chile, Coquimbo, Choapa, 25 km N Illapel, 11.xi.2000 (CG), gent CG 4810 (CG).

Fig. 336. *Stenoptilia zophodactylus* (Duponchel). Paraguay, Paraguani, Sapucay, 28.i.1992 (U. Drechsel), gent CG 2476 (CG).



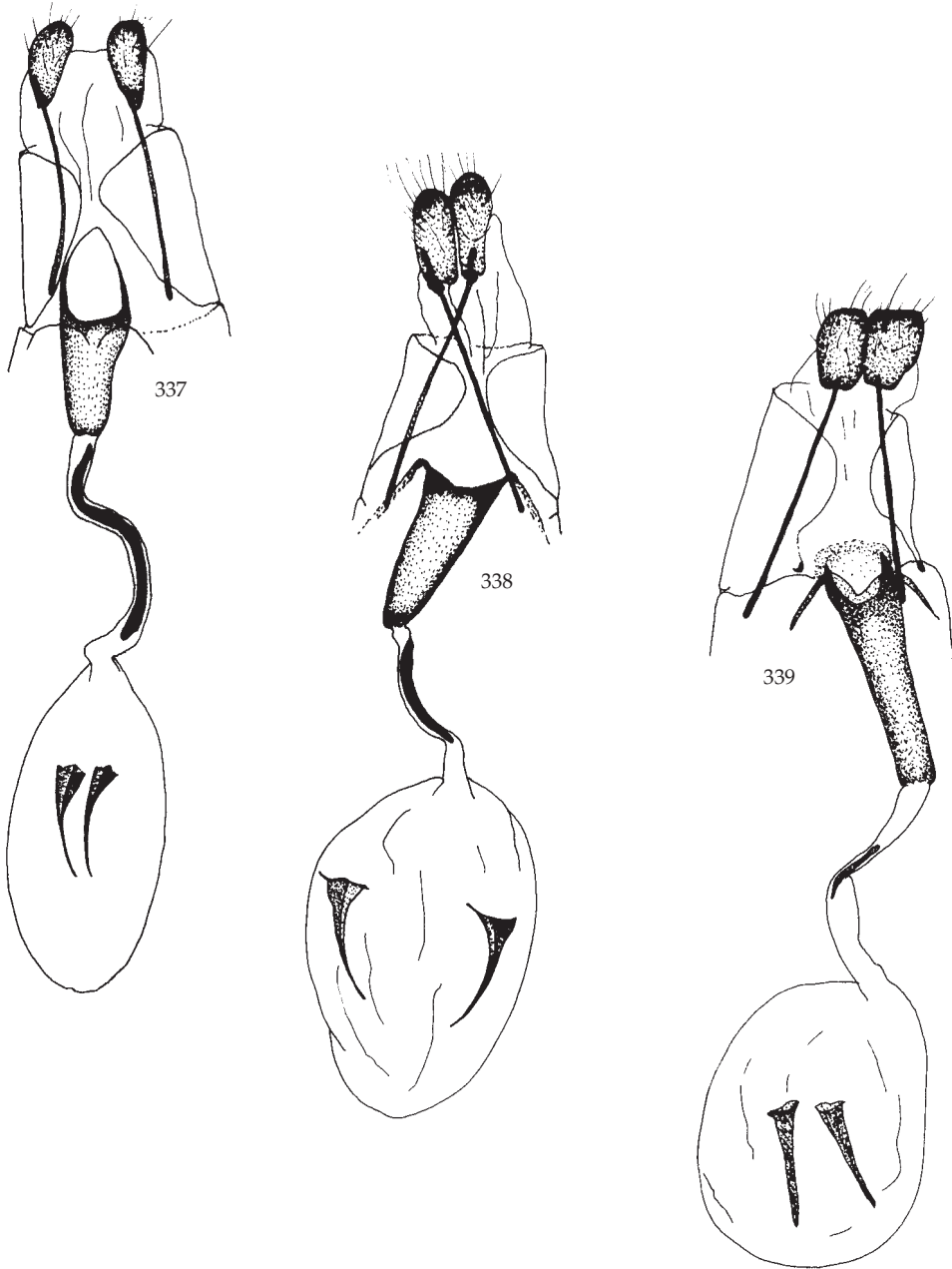


Fig. 337. *S. neblina* Gielis. Paratype. Venezuela, TF Amaz, Cerro de Neblina, 1450 m, 25-28.ii.1985 (P.M. & P.J. Spangler & R.A. Faitoute), gent CG 3415 (USNM).

Fig. 338. *S. pallistriga* Barnes & McDunnough. Dominica, Pont Casse, 6.iv.1965 (D.R. Davis), gent CG 3395 (USNM).

Fig. 339. *S. suprema* Meyrick. Peru, Cuzco, 18.viii.1983 (B.V. Ridout), gent CG 5067 (BMNH).

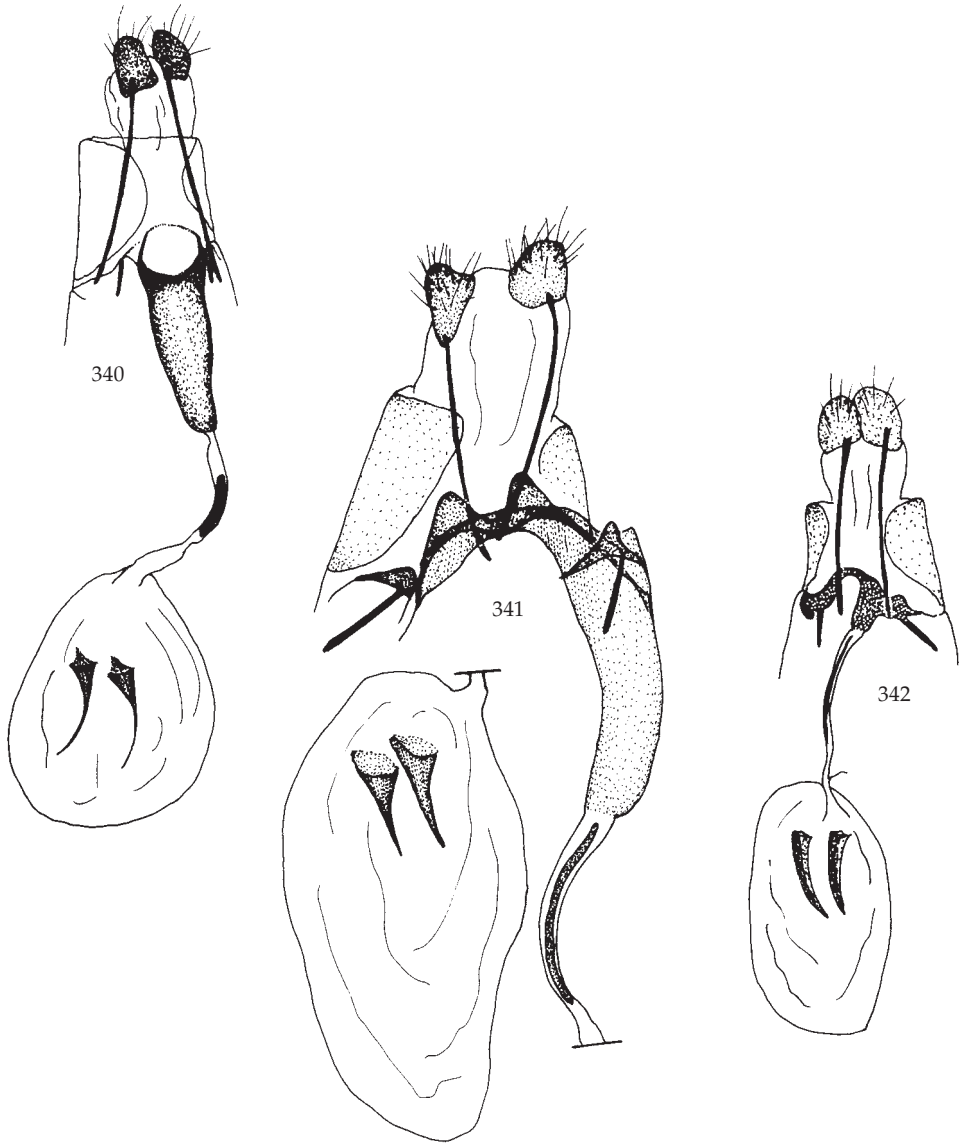


Fig. 340. *S. tenuis* (Felder & Rogenhofer). Paralectotype of *M. gilvidorsis* Zeller. Bogota, no date, gent BM 18452 (BMNH).

Fig. 341. *Paraplatyptilia fragilis* (Walsingham). Canada, Brit Columbia, Lillooet, Lake Seton, 5.vii.1926 (J. McDunnough), gent CG 4994 (CG).

Fig. 342. *P. azteca* Gielis. Paratype. Mexico, Hgo, 8 km E Tulancingo, 2260 m, 24.vii.1963 (Duckworth & Davis), gent CG 3416 (USNM).

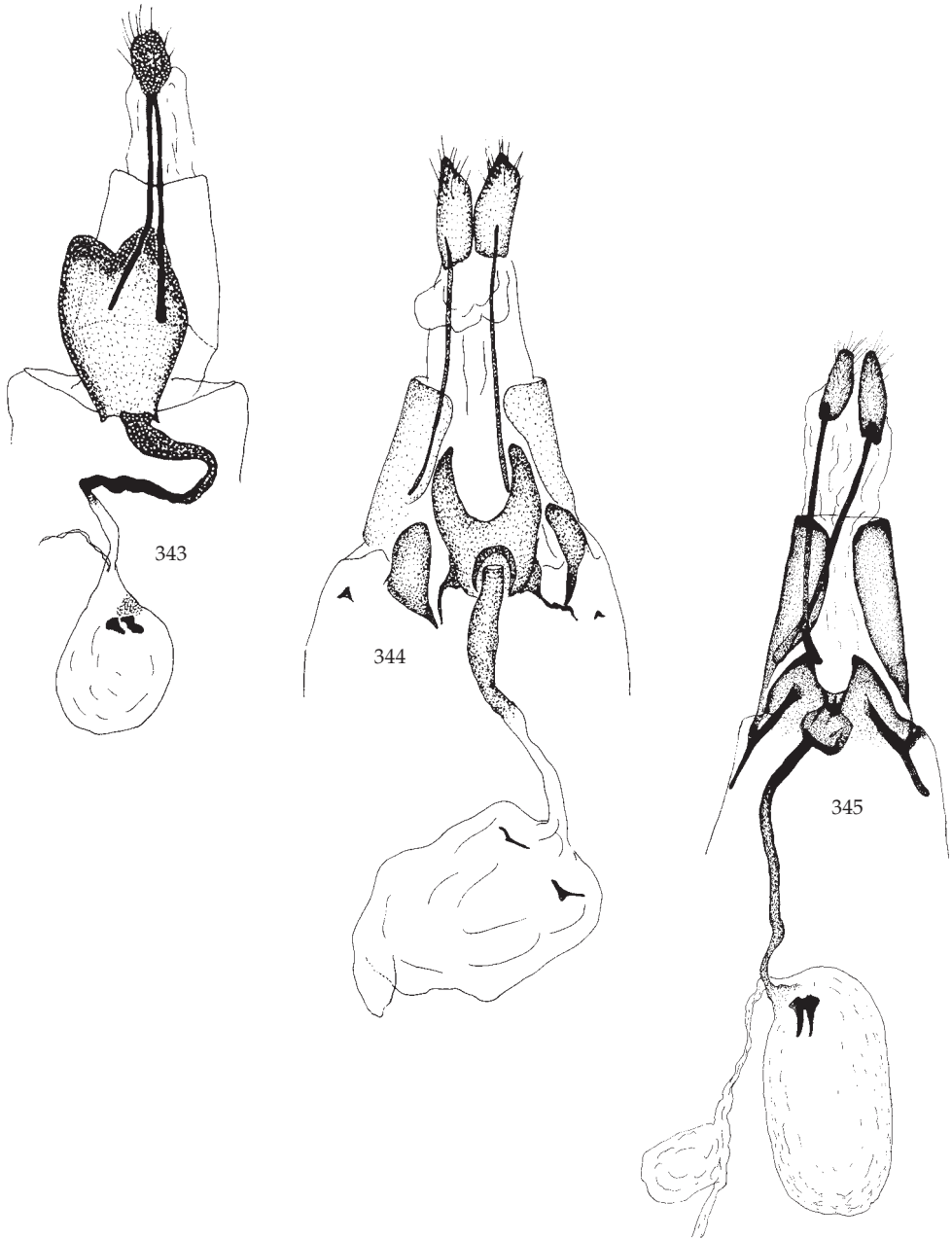


Fig. 343. *Postplatyptilia huigraica* B. Landry & Gielis. Paratype. Ecuador, Huigra, 1375 m, vi.(19)14 (Parish), gent CG 5021 (BMNH).

Fig. 344. *P. antillae* **spec. nov.** Holotype. Cuba, Santiago, Srra Maestra, P Cuba, 1500 m, 31.vii.1990 (V.O. Becker), gent CG 3650 (V.O. Becker nr 73509).

Fig. 345. *P. talcaica* Gielis. Holotype. (Chile), Alto Vilches, Cord.(illa) Talca, i.1989 (Elgueta), gent CG 1984 (MNHC).

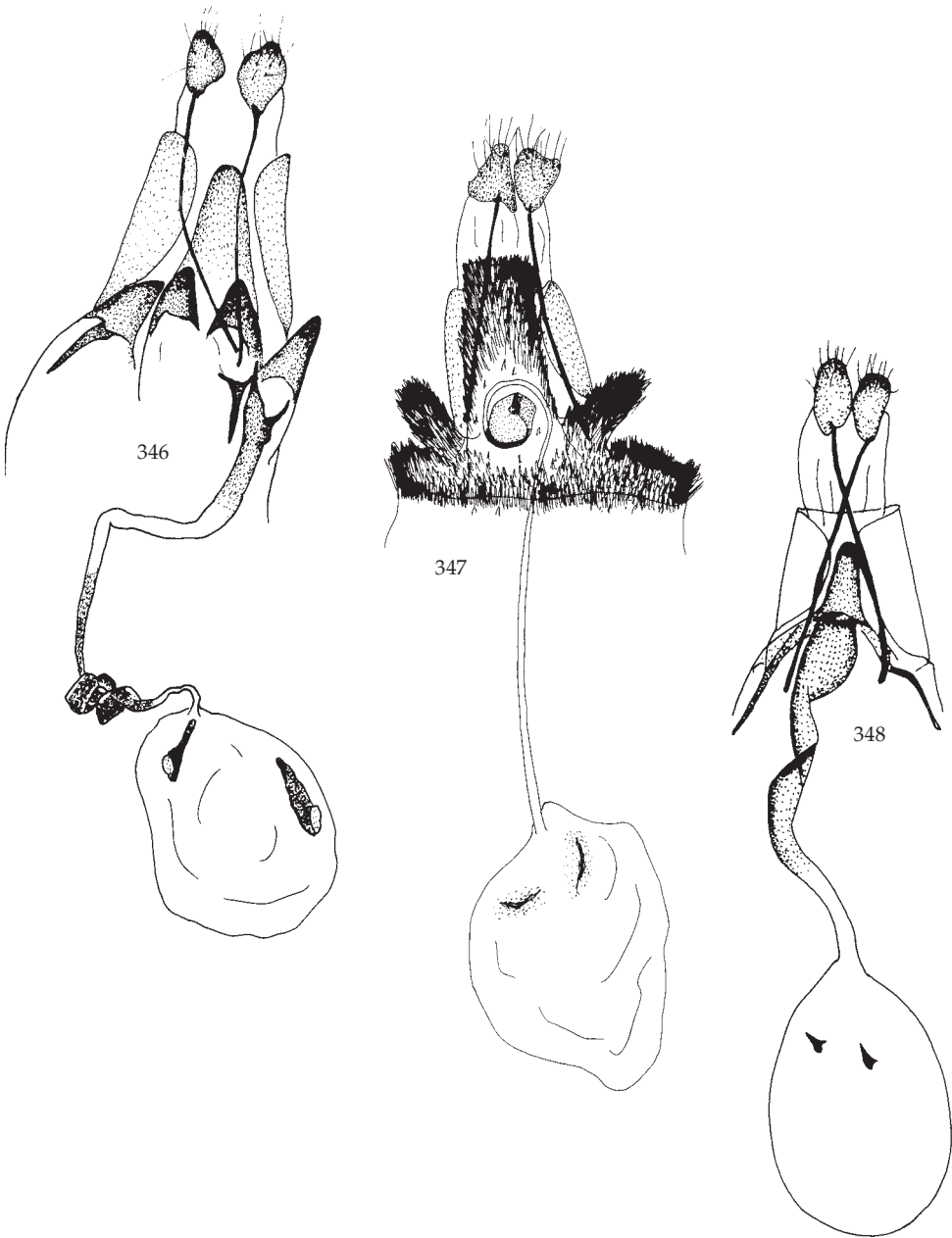


Fig. 346. *P. nebuloarbustum* **spec. nov.** Holotype. Ecuador, Azuay, PN Cajas, Laguna Llaviuco, 3225 m, 79°8'35"W 2°50'38"S, 5.x.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4859 (CG).

Fig. 347. *P. caribica* **spec. nov.** Holotype. Dominica, Clarke Hall, 11.iii.1965 (W.W. Wirth), gent CG 3431 (USNM).

Fig. 348. *P. sandraella* Gielis. Holotype. Bolivia, Yungas de la Paz, 1908 (Seebold), gent CG 5041 (BMNH).

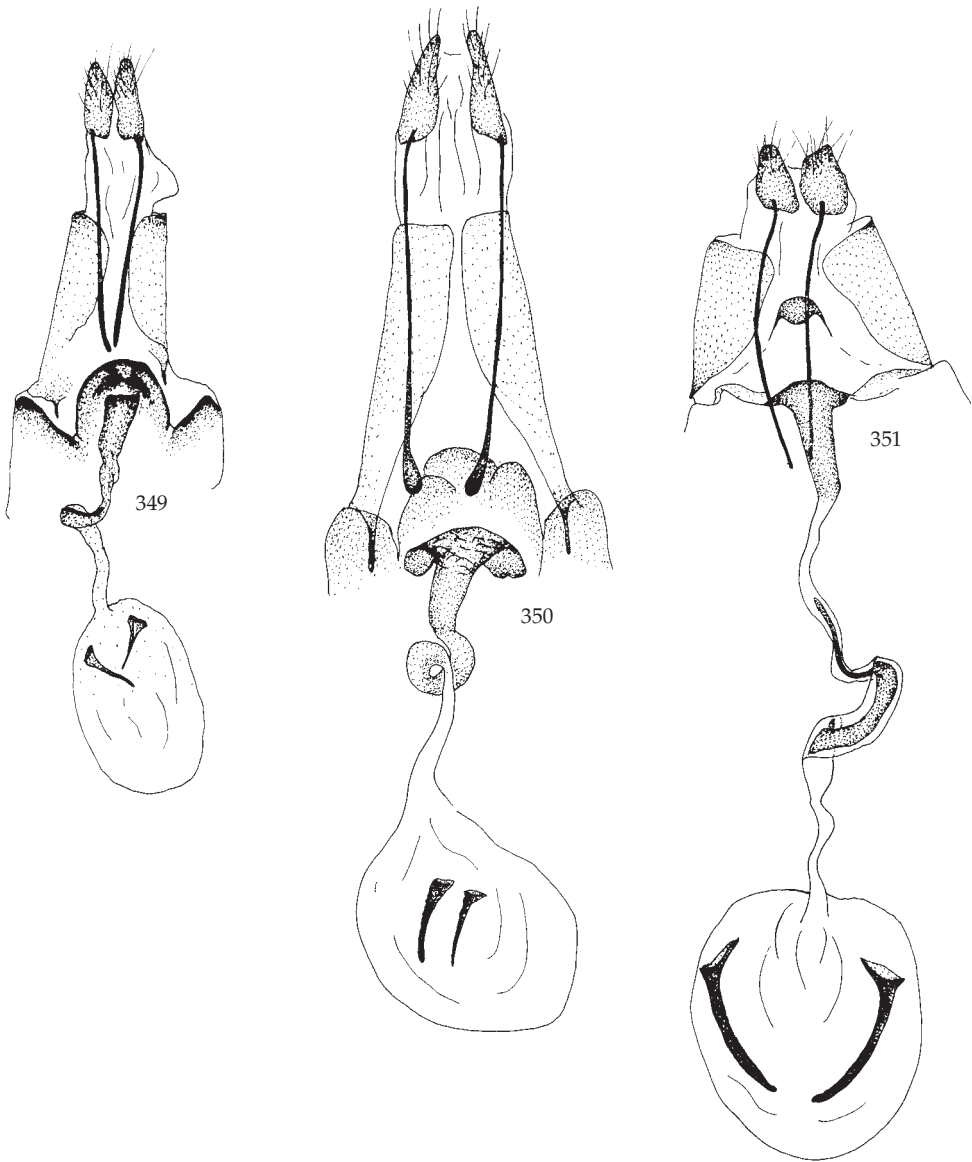


Fig. 349. *P. carchi* **spec. nov.** Holotype. Ecuador, Carchi, 12.5 km N El Angel, 3500 m, 12.i.1985 (N. Venedictoff), gent CG 3559 (AME).

Fig. 350. *P. boletus* **spec. nov.** Holotype. Peru, Machu Picchu, 2450 m, 16-18.x.1981 (D.R. Davis), gent CG 3463 (USNM).

Fig. 351. *P. uruguayensis* **spec. nov.** Holotype. Uruguay, Montevideo, Sayago, 28.iii.1974 (M.S. Moratorio), gent CG 3460 (USNM).

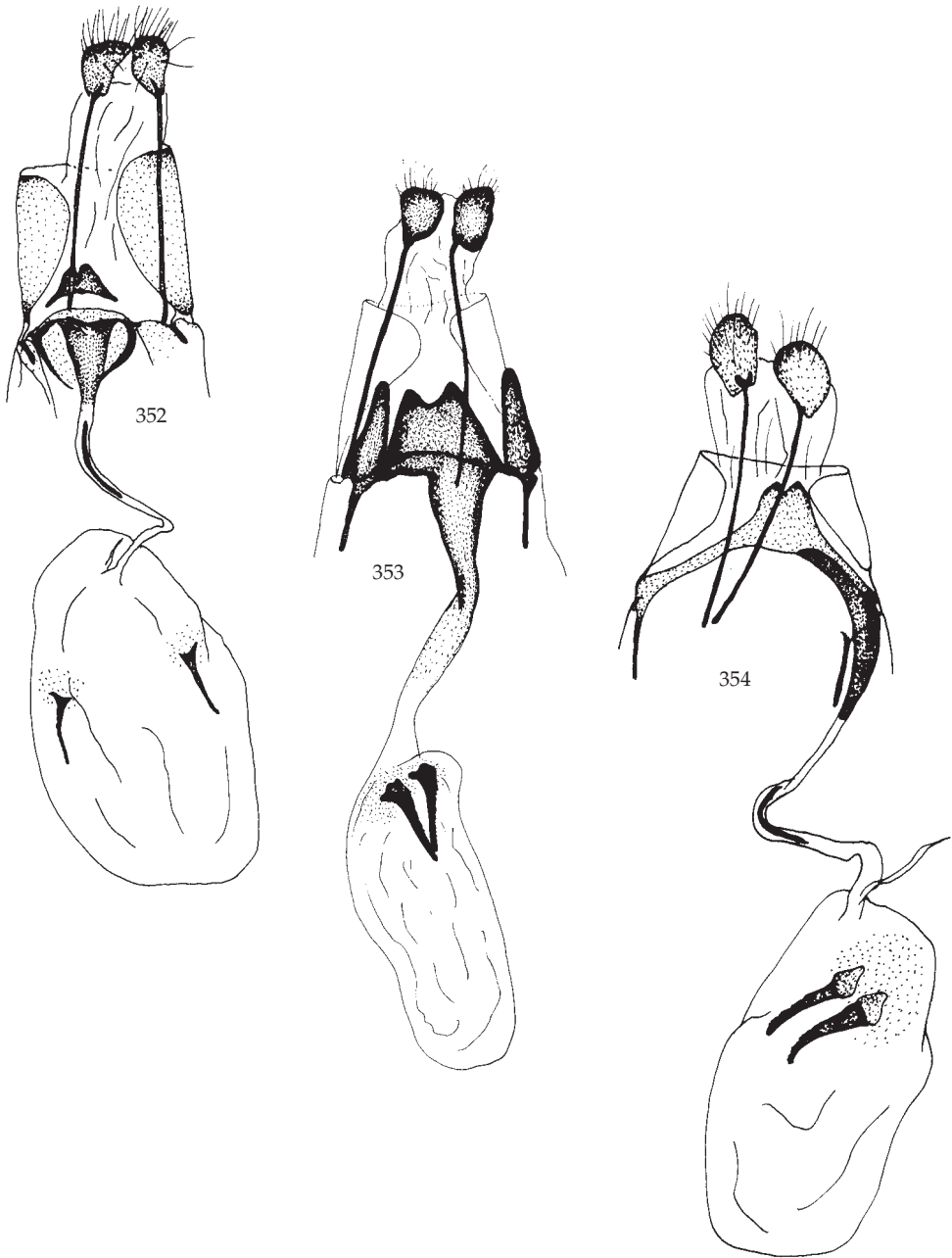


Fig. 352. *P. zongoensis* **spec. nov.** Holotype. Bolivia, La Paz, 30 km N La Paz, Rio Zongo Valley, 2850 m, Hidroelectrica Sta Rosa, 8-9.iv.1987 (P. Anctander), gent CG 4173 (ZMUC).

Fig. 353. *P. flinti* Gielis. Holotype. Argentina, B(ueno)s A(ire)s, Rio Santiago, Palo Blanco, Berisso, 19.xii.1979 (Flint), gent CG 6081 (USNM).

Fig. 354. *P. parana* Gielis. Paratype. S Brazil, Paraná, Castro, 1898 (Jones), gent BM 18467 (BMNH).

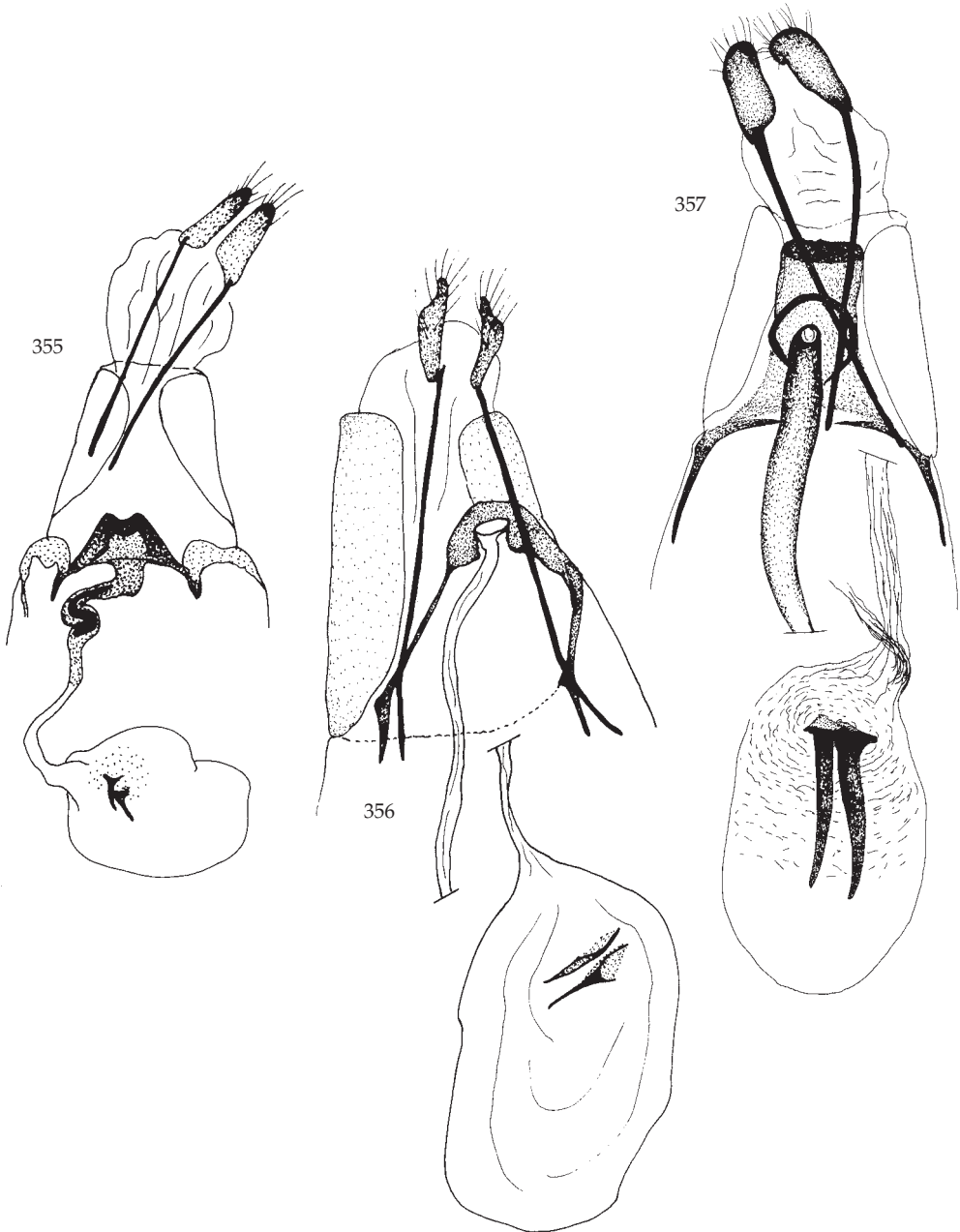


Fig. 355. *P. palmeri* Gielis. Holotype. Mexico, Veracruz, Jalapa, 19°30' N, 96°56' W, 14.xii.1989 (W.A. Palmer), on *Lantana hispida* HBK, gent CG 6315 (CG).

Fig. 356. *P. transversus* **spec. nov.** Paratype. Brazil, Sao Paulo, Ubatuba, Pichinguabe, 0-20 m, 22-24.ix.2001 (V.O. Becker), gent CG 4892 (VOB).

Fig. 357. *P. fuscicornis* (Zeller). Chile, Maule, Forel Corrizalillo, 250 m, 30.i-5.ii.1981 (Davis), gent CG 6096 (USNM).



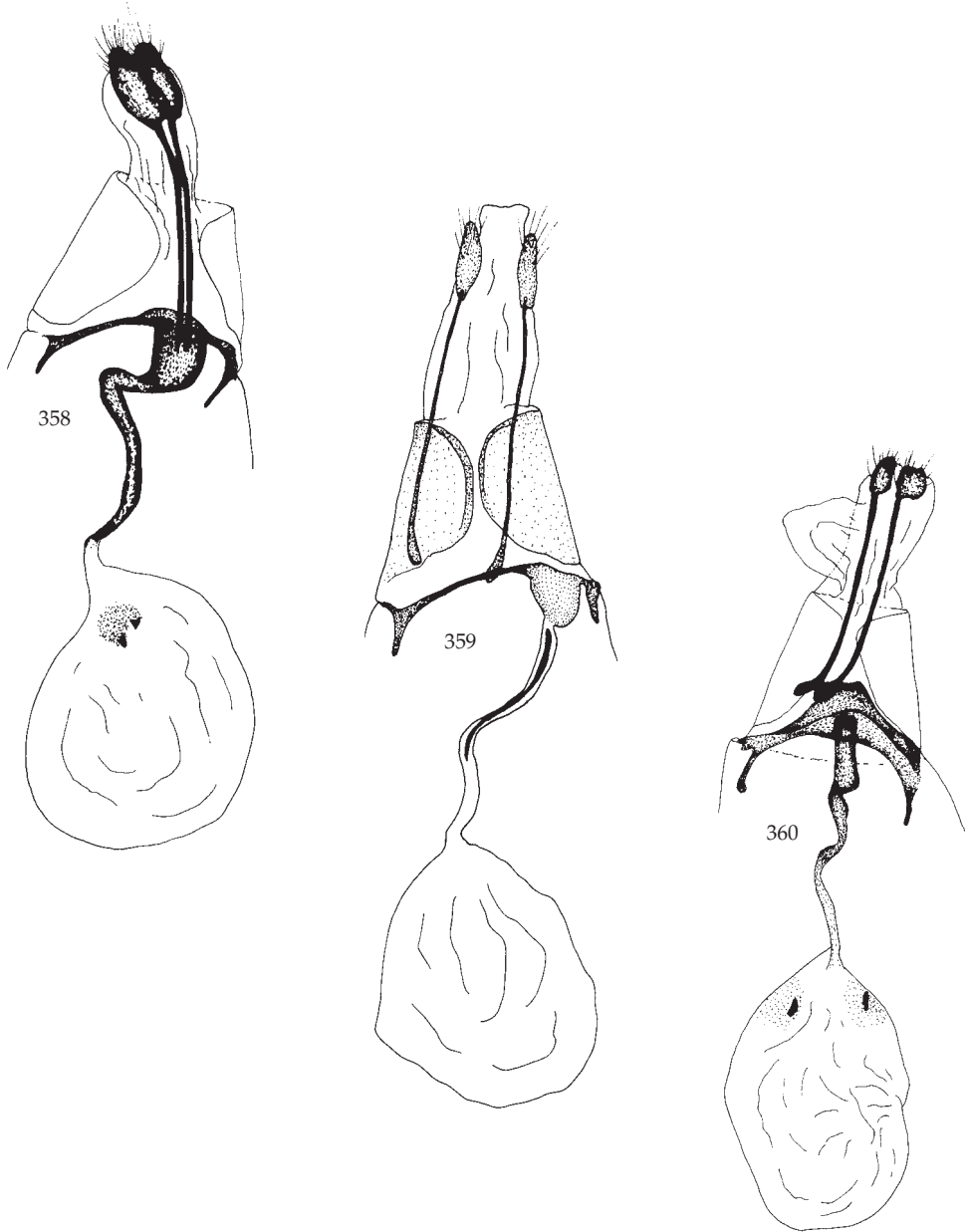


Fig. 358. *P. alexisi* Gielis. Paratype. Chile, Nuble, nr coastal stream 17.5 km S Curanipe, 50 m, 25.i.1978 (Davis & Akerbergs), gent CG 6088 (USNM).

Fig. 359. *P. nubleica* Gielis. Chile, Cauquenes, Tregualemu, 400 m, i.2001 (A. Ugarte Peña), gent CG 4645 (CG).

Fig. 360. *P. akerbergi* Gielis. Holotype. Chile, Nuble, Alto Tregualemu, ca 20 km SE Chovellen, 500 m., 26-27.i.1979 (Davis & Akerbergs), gent CG 6085 (USNM).

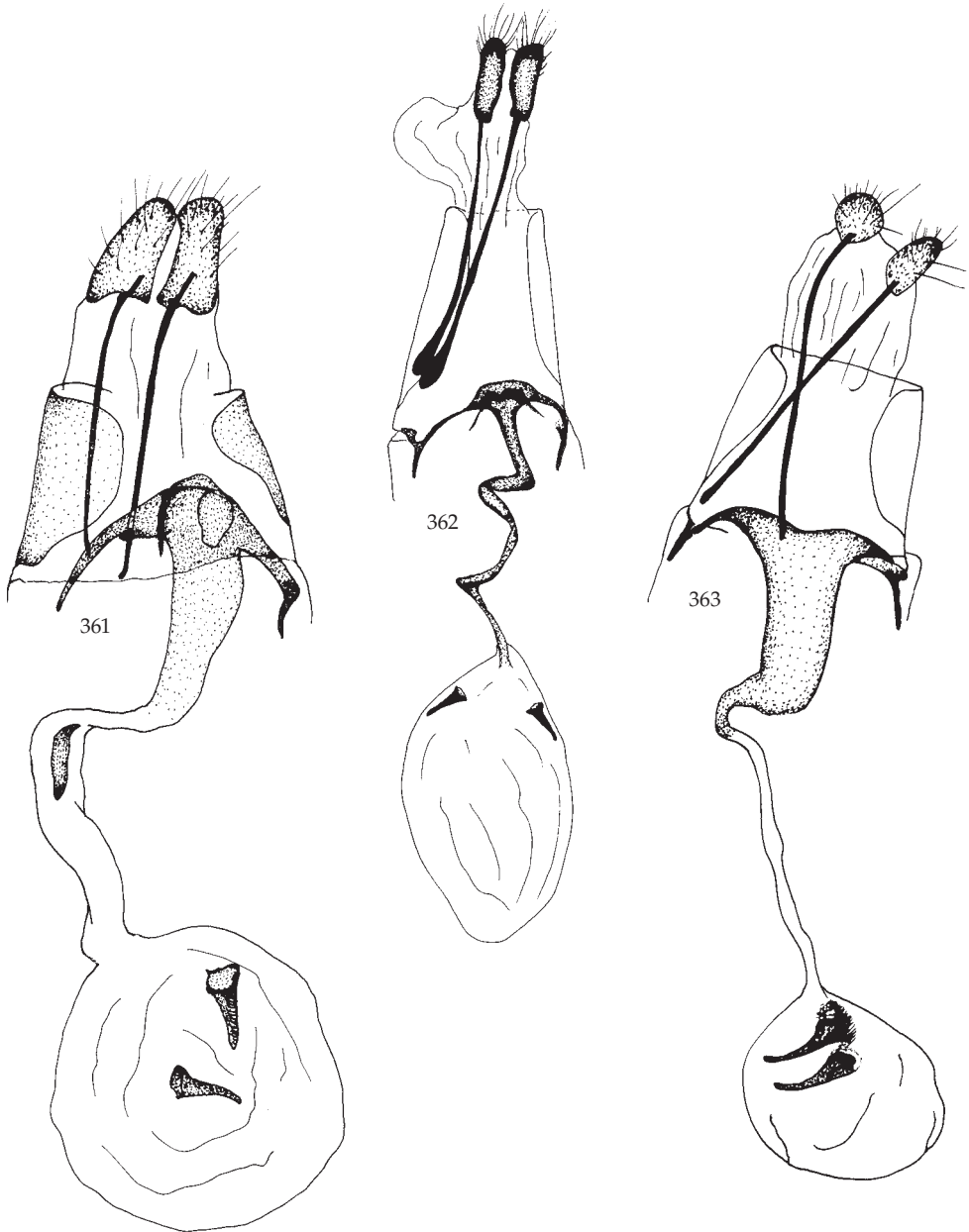


Fig. 361. *P. genisei* (Pastrana). Argentina, Cordoba, Huerta Grande, 1000 m, 15.xii.1958-30.i.1959 (W. Forster), gent CG 3573 (ZSM).

Fig. 362. *P. biobioica* Gielis. Holotype. Chile, Bio Bio, Est. Huequecura, 25 km E Santa Barbara, 24.i.1978 (Flint), gent CG 6083 (USNM).

Fig. 363. *P. triangulocosta* Gielis. Holotype. Peru, Cuzco, 19.viii.(19)73 (B.V. Ridout), gent CG 5070 (BMNH).

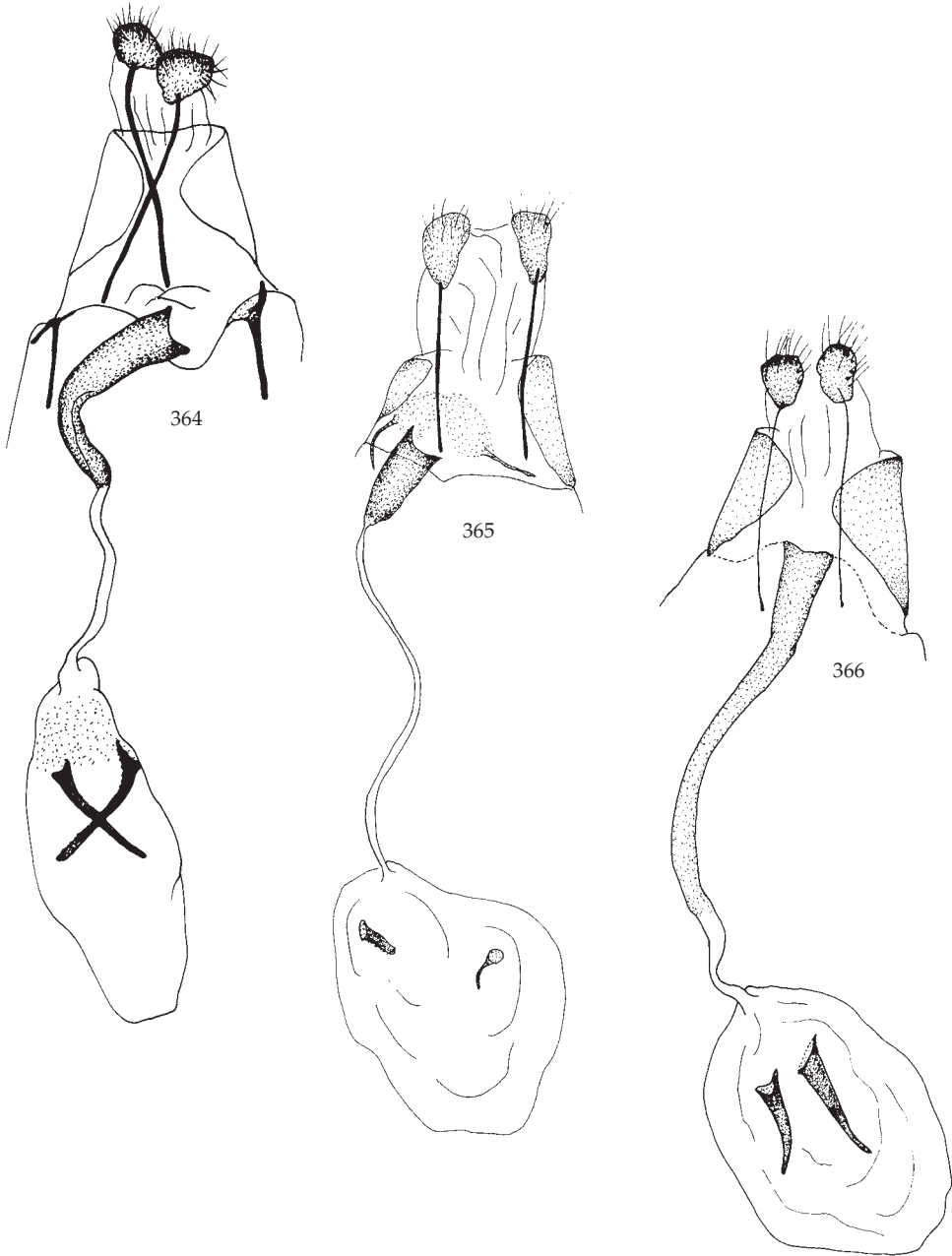


Fig. 364. *P. machupicchu* Gielis. Holotype. Peru, Cuzco, 21.viii.(19)73 (B.V. Ridout), gent CG 5068 (BMNH).

Fig. 365. *P. drechseli* **spec. nov.** Holotype. Paraguay, Gualra, Zorilla, 16-20.x.1992 (U. Drechsel), prep CG 2475 (CG).

Fig. 366. *P. corticus* **spec. nov.** Holotype. Venezuela, TF Amazon, Cerro de la Neblina Camp, 2050 m, 0°41'49"N 65°58'56 'W, 15-22.ii.1984 (T. McCabe), gent CG 4861 (USNM).



Fig. 367. *P. seitetazas* **spec. nov.** Holotype. Chile, Maule, Curico, 60 km SE Molina, RN Radal Seite Tazas, 35°28'S 71°W, 1100 m, 17.i.2001 (C. Gielis & H.W. v.d. Wolf), gent CG 4853 (CG).

Fig. 368. *P. saeva* (Meyrick). Holotype. Peru, Carabaya, Agualani, 2750 m, vi.(19)05 (G. Ockenden), dry season, gent BM 18197 (BMNH).

Fig. 369. *P. camptosphenia* (Meyrick). Argentina, Neuquen, Lago Tromen, Rio Grande, 900 m, 30.xi.1978 (mision Cientifica Danese, sta 18), gent CG 4089 (ZMUC).

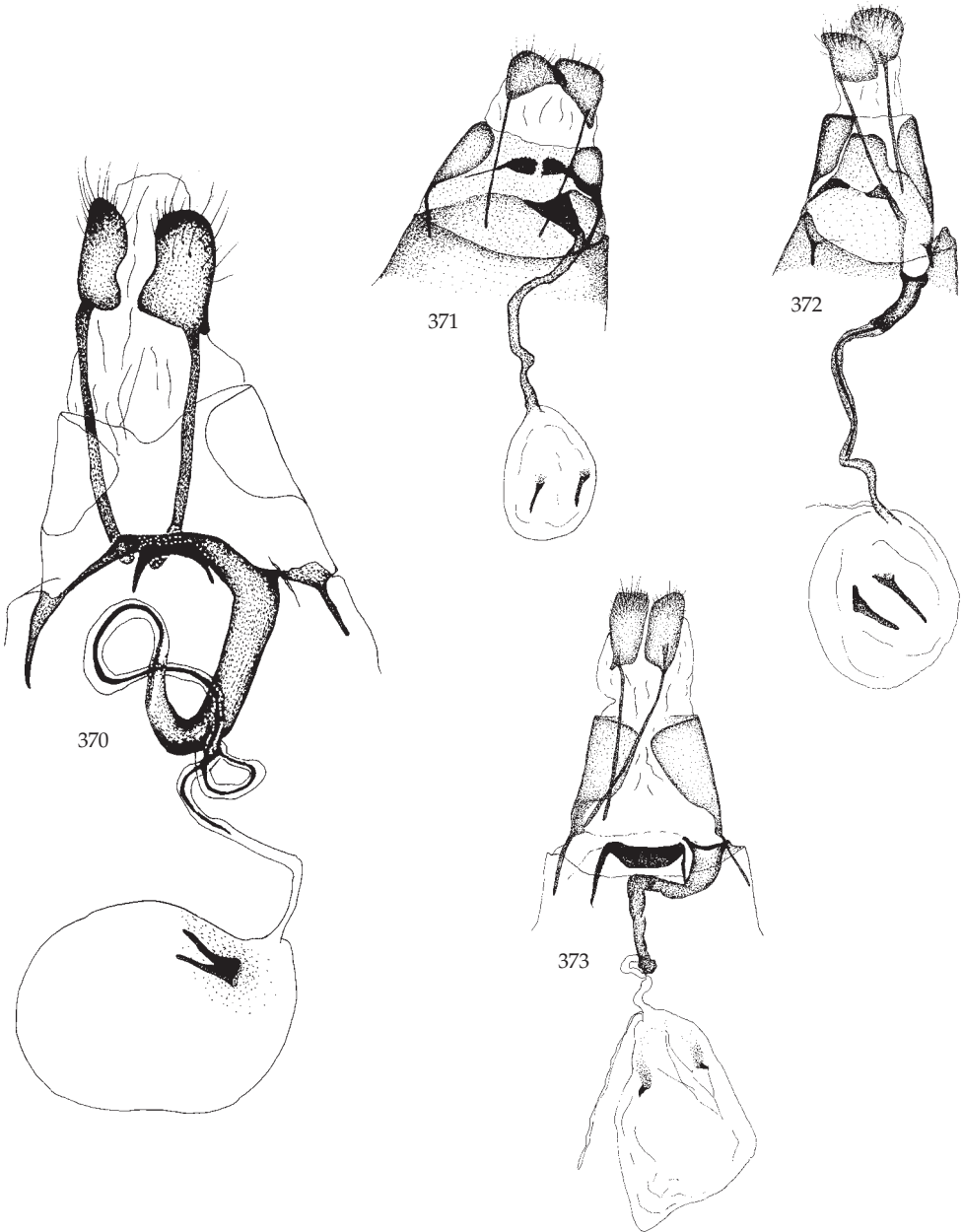


Fig. 370. *P. eelkoi* Gielis. Paratype. Chile, Nuble, Shangri-la, SW side Volcan Chillan, 1600 m, 19-21.i.1979 (Davis & Akerbergs), gent CG 6080 (USNM).

Fig. 371. *P. naranja* Gielis. Holotype. Argentina, Neuquen, Lago Lacar, Pucara, 750 m., 26.xii.1978 (Mision Cientifica Danesa, Sta. 9), gent CG 4090 (ZMUC).

Fig. 372. *P. nielseni* (Gielis). Paratype. Aregentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 7.xii.1981 (Nielsen & Karsholt), gent CG 4094 (ZMUC).

Fig. 373. *P. aestuosa* (Meyrick). Ecuador, Guachayacu, x-xi.1926 (Vorbeck), gent CG 4093 (ZMUC).

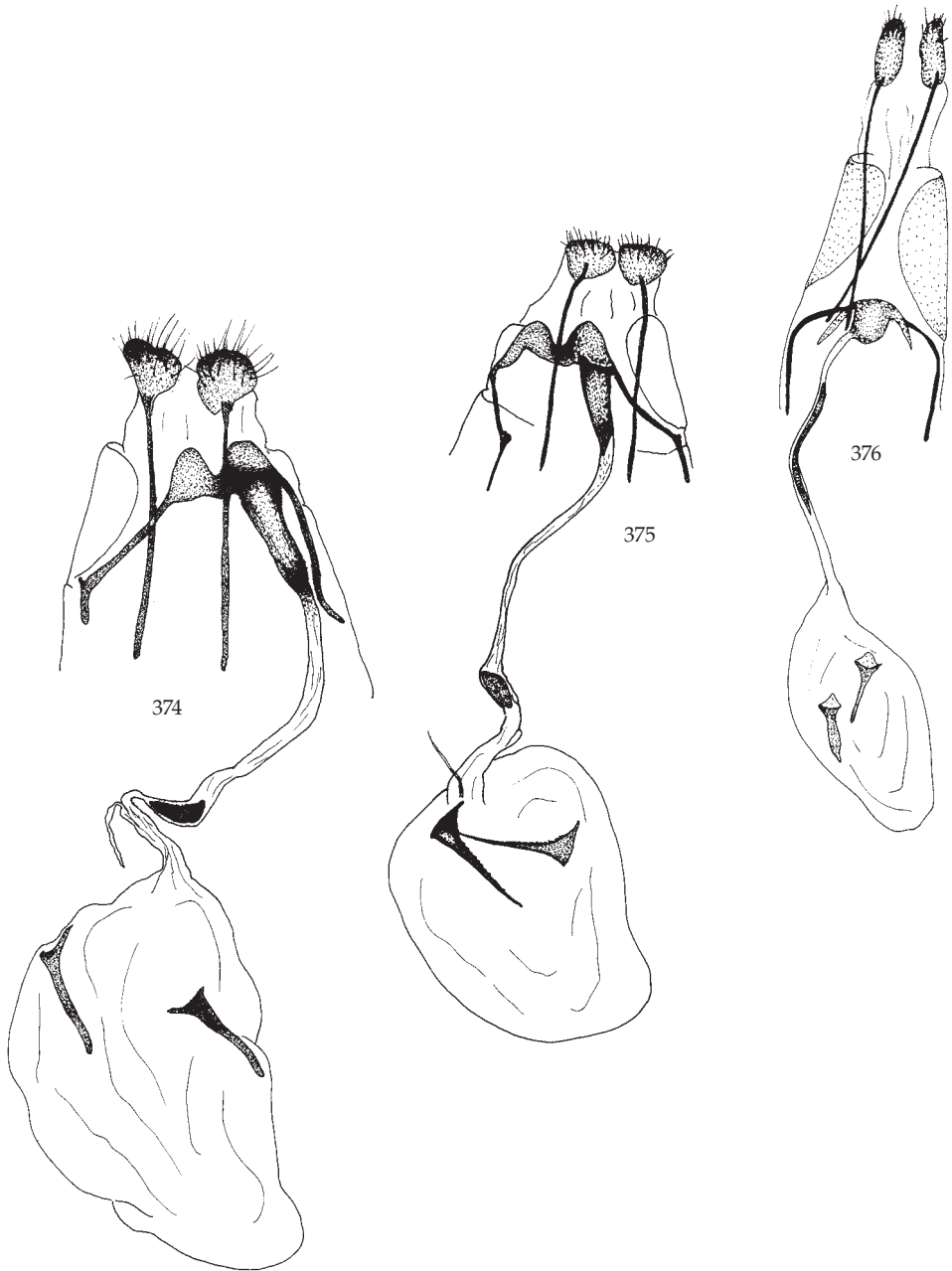


Fig. 374. *Amblyptilia scutellaris* (Felder & Rogenhofer). Holotype. (Colombia), Bogota, no date (Novara), gent BM 18451 (BMNH).

Fig. 375. *A. landryi* **spec. nov.** Holotype. Honduras, Cerro Monserrat, El Paaiso, 7 km SW Yuscaran, 1700 m, 15.v.1994 (B.D. Gill), gent CG 2734 (CG).

Fig. 376. *A. kosteri* **spec. nov.** Paratype, Argentina, Salta, Camino de Cornisa, 1200 m, 12.xi.1995 (Neth ent exp N Argentina, sta 9), gent CG 2707 (CG).



Fig. 377. *Lioptilodes subantarcticus* Gielis. Paratype. Argentina, Tierra del Fuego, Ushuaia, Lapataia, 20 m, 27.i.1979 (Mision Cientifica Danese, sta 34), gent CG 4138 (ZMUC).

Fig. 378. *L. cuzcoicus* Gielis. Ecuador, Azuay, PN Cajas, Laguno Llaviuco, 3225 m, 5.x.2002 (C. & F.K. Gielis & V. Pelz), gent CG 4931 (CG).

Fig. 379. *L. topali* Gielis. Paratype. Argentina, Rio Negro, El Bolson, Pampa Azcona, 18.iii.1961 (Topal), gent CG 4114 (ZMUC).



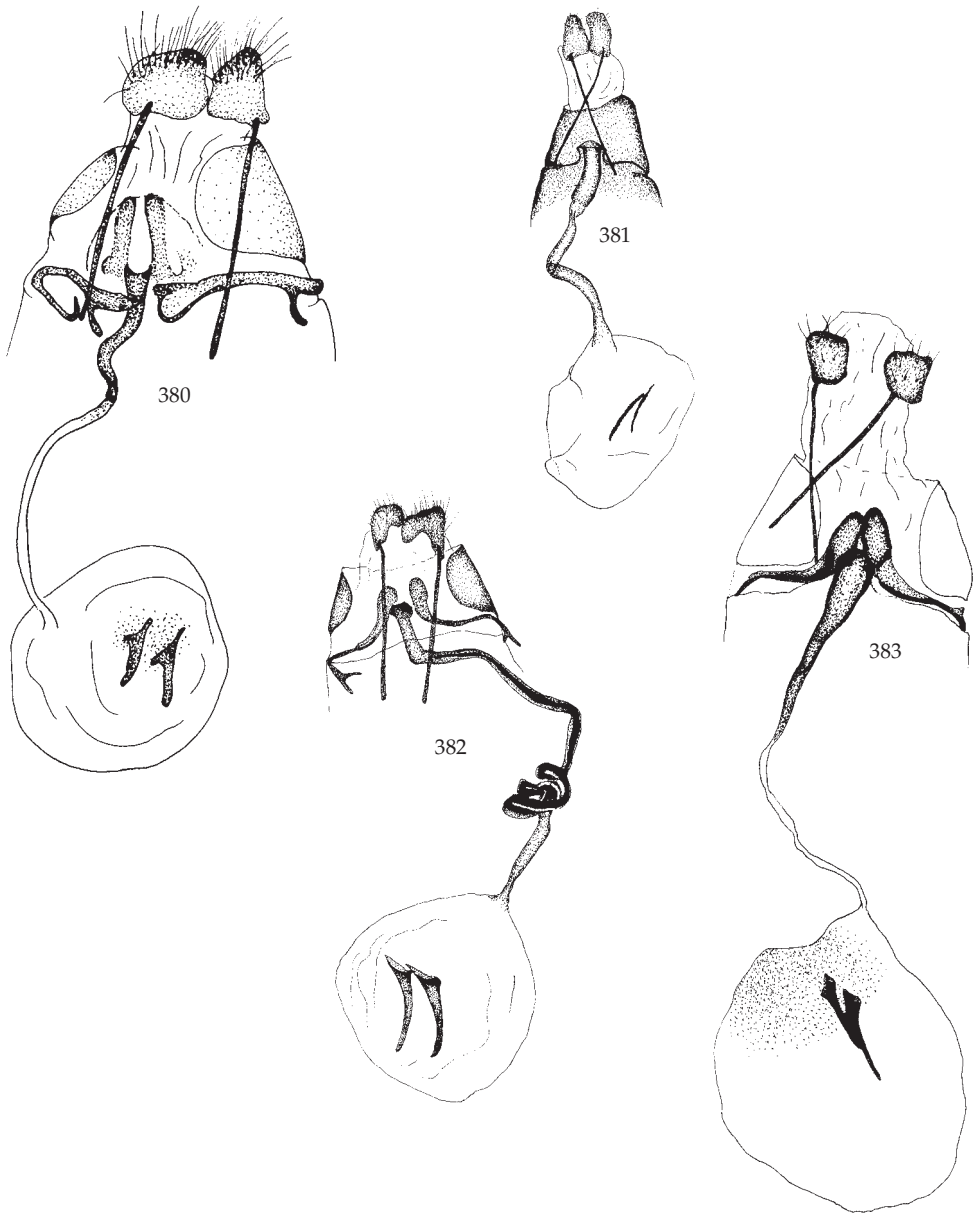


Fig. 380. *L. arequipa* **spec. nov.** Holotype. Peru, Arequipa, 8 km E Arequipa, Rio Andamayo Valley, 2920 m, 7.iv.1987 (O. Karsholt), gent CG 4193 (ZMUC).

Fig. 381. *L. albistriolatus* (Zeller). Holotype of *Stenoptilia partisecca* Meyrick. Argentina, Mendoza, Mendoza, i, gent BM 4969 (BMNH).

Fig. 382. *L. rionegroicus* Gielis. Paratype. Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 12-20.xi.1981 (Nielsen & Karsholt, sta 9), gent CG 4142 (ZMUC).

Fig. 383. *L. neuquenicus* Gielis. Paratype. Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 810 m, 16.i.1979 (Mision Cientifica Danese, sta 7), gent CG 4141 (ZMUC).



Fig. 384. *L. zapalaicus* Gielis. Paratype. Argentina, Chubut, Esquel, 550 m, 1.i.1982 (Nielsen & Karsholt, sta 47), gent CG 4123 (ZMUC).

Fig. 385. *L. aguilaicus* Gielis. Paratype. Argentina, Neuquen, Piedra del Aguila, 19.xii.1978 (Mision Cientifica Danese, sta 15), gent CG 4125 (ZMUC).

Fig. 386. *L. fetisi* Gielis. Holotype. Chile, S(an)t(ia)go, Purgatoria Cond., 22.xii.(19)50 (Fétis), gent CG 1964 (MZUC).

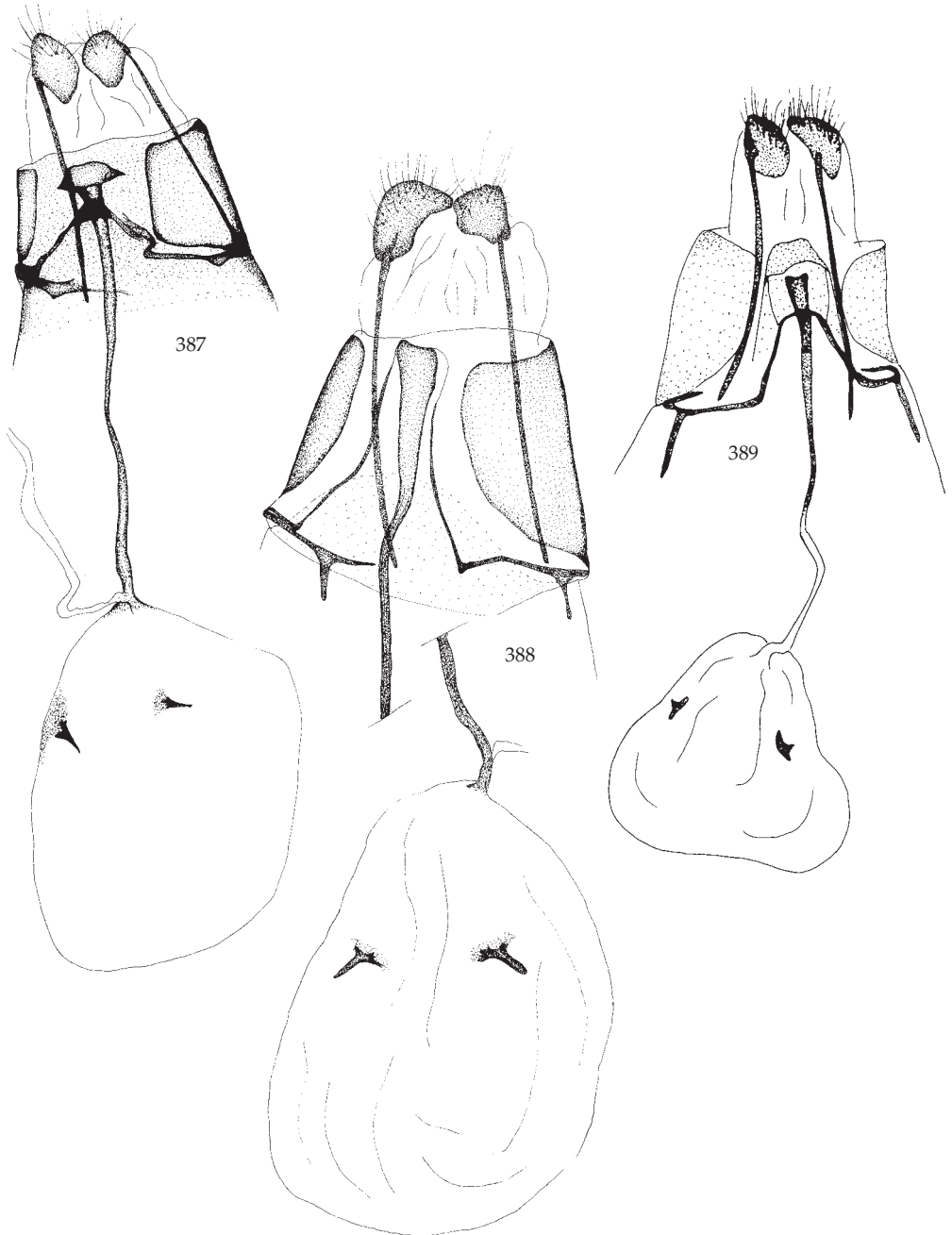


Fig. 387. *L. alolepidodactylus* Gielis. Paratype. Argentina, Rio Negro, San Carlos de Bariloche, Nirihuau, 9.xii.1978 (Mision Cientifica Danese, sta 11), gent CG 4119 (ZMUC).

Fig. 388. *L. testaceus* (Blanchard). Chile, Tobalaba, 9.vii.1948, gent CG 1927 (MZUC).

Fig. 389. *L. prometopa* (Meyrick). Peru, Carabaya, Limbani, 2900 m, v.1904 (G. Ockenden), gent CG 5009 (BMNH).

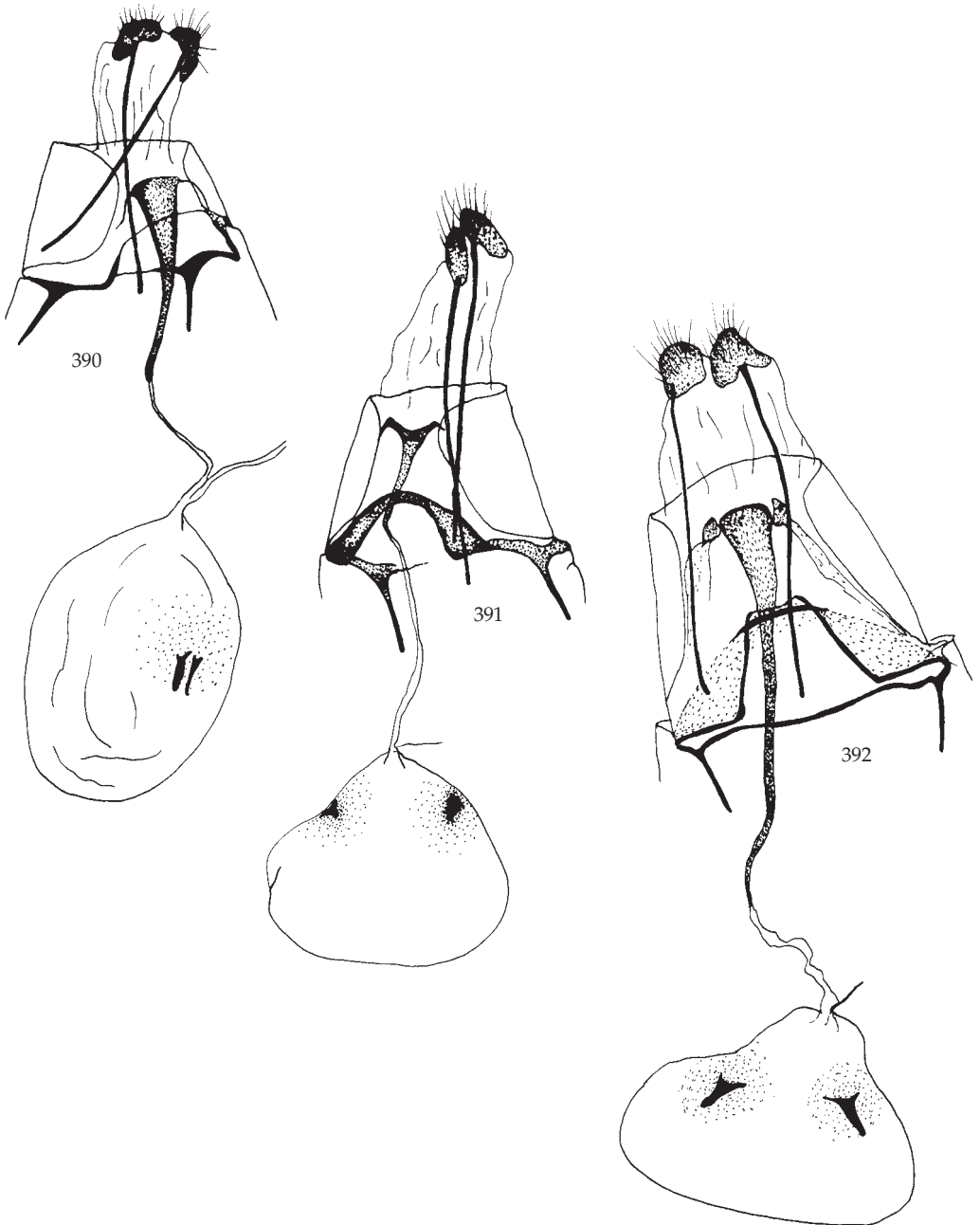


Fig. 390. *L. doeri* Gielis. Paratype. Brazil, Petropolis, 1881 (Doer), gent CG 5003 (BMNH).

Fig. 391. *L. brasiliicus* Gielis. Paratype. Brazil, RJ, Nova Fribourgo, 1000 m, 14.x.1985 (V.O. Becker), gent CG 6041 (VOB).

Fig. 392. *L. ockendeni* Gielis. Holotype. Peru, Carabaya, Agualani, 2900 m, viii.1904 (G. Ockenden), dry season, genitalia CG 5007 (BMNH).

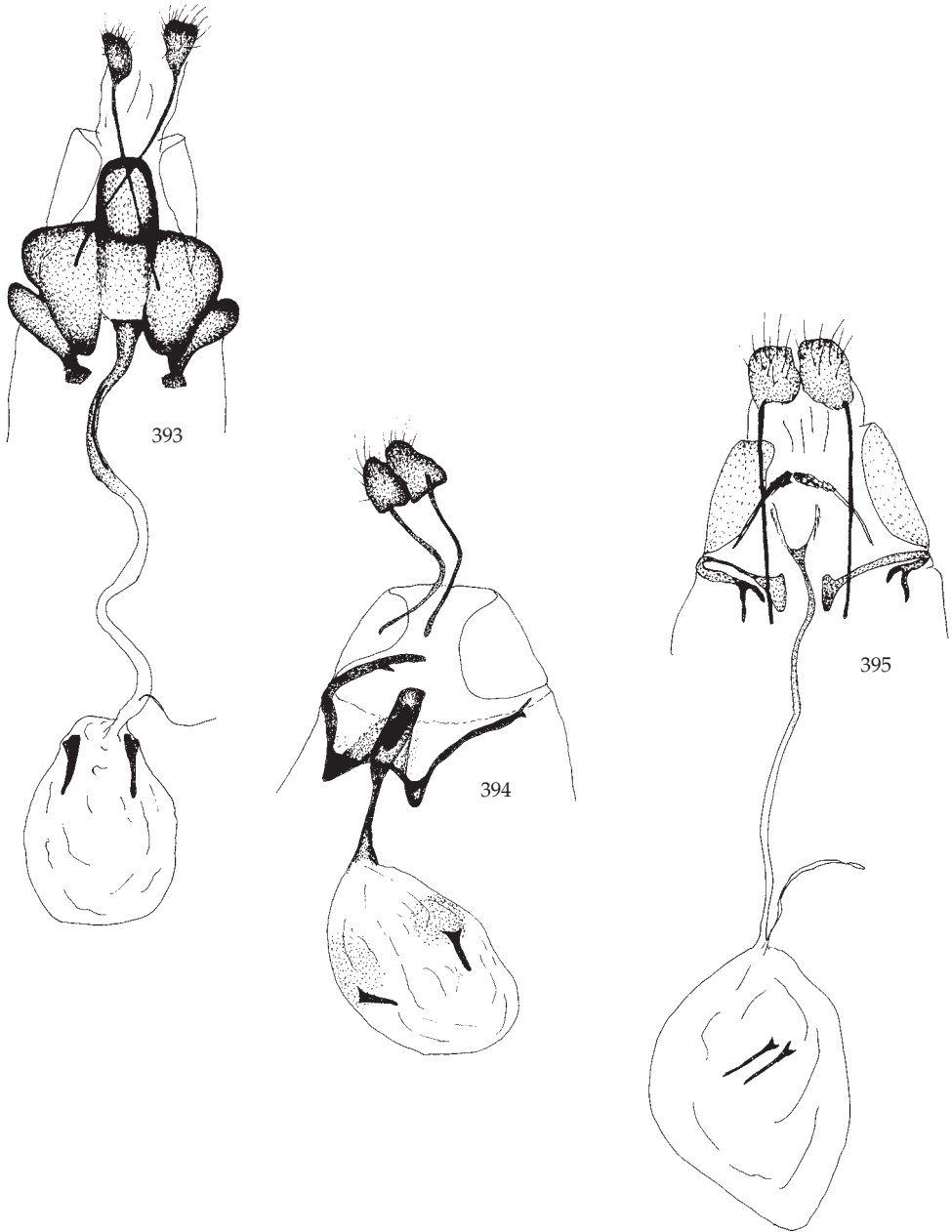


Fig. 393. *L. antarcticus* (O. Staudinger). Chile, Huasco, Corrizal bajo, 27.x.1987 (Barriga), on *Adesmia* spec, gent CG 6100 (MZUC).

Fig. 394. *L. tribonia* (Meyrick). Paralectotype. Peru, Matucana, vii.(19)14 (Parish), gent BM 18442 (BMNH).

Fig. 395. *L. limban* Gielis. Bolivia, Jllimani westslope, 4500-5000 m, 7-11.iv.1950 (W. Forster), gent CG 4213 (ZSM).

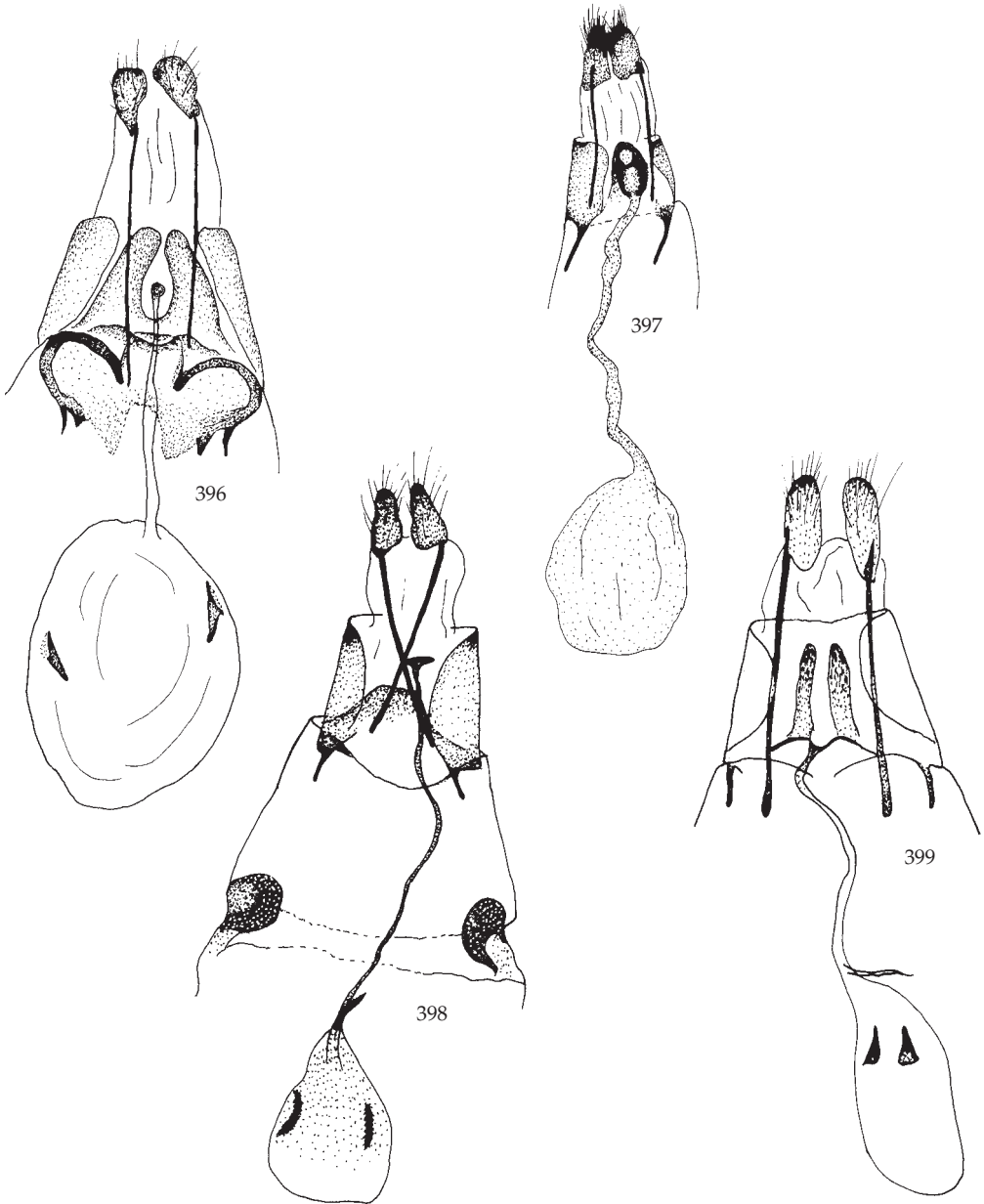


Fig. 396. *L. cocodrilo* **spec. nov.** Paratype. Ecuador, Morona-Santiago, Macas, 5 km SE Alshi, 1700 m, 27.IX-4.x.2000 (V. Pelz), gent CG 4535 (CG).

Fig. 397. *Michaelophorus nubilus* (Felder & Rogenhofer). Holotype. Colombia, Bogota, no date (Lindig) (BMNH).

Fig. 398. *M. dentiger* (Meyrick). Brazil, Matto Grosso, Rio Carcara, E of Amolar, 50 m, 26-28.viii.1978 (B.V. Ridout), gent CG 5036 (BMNH).

Fig. 399. *M. indentatus* (Meyrick). Mexico, Baja California del Sur, Cabo Pulmo, 0 m, 10-11.ix.1984 (Donahue), gent CG 6240 (CG).

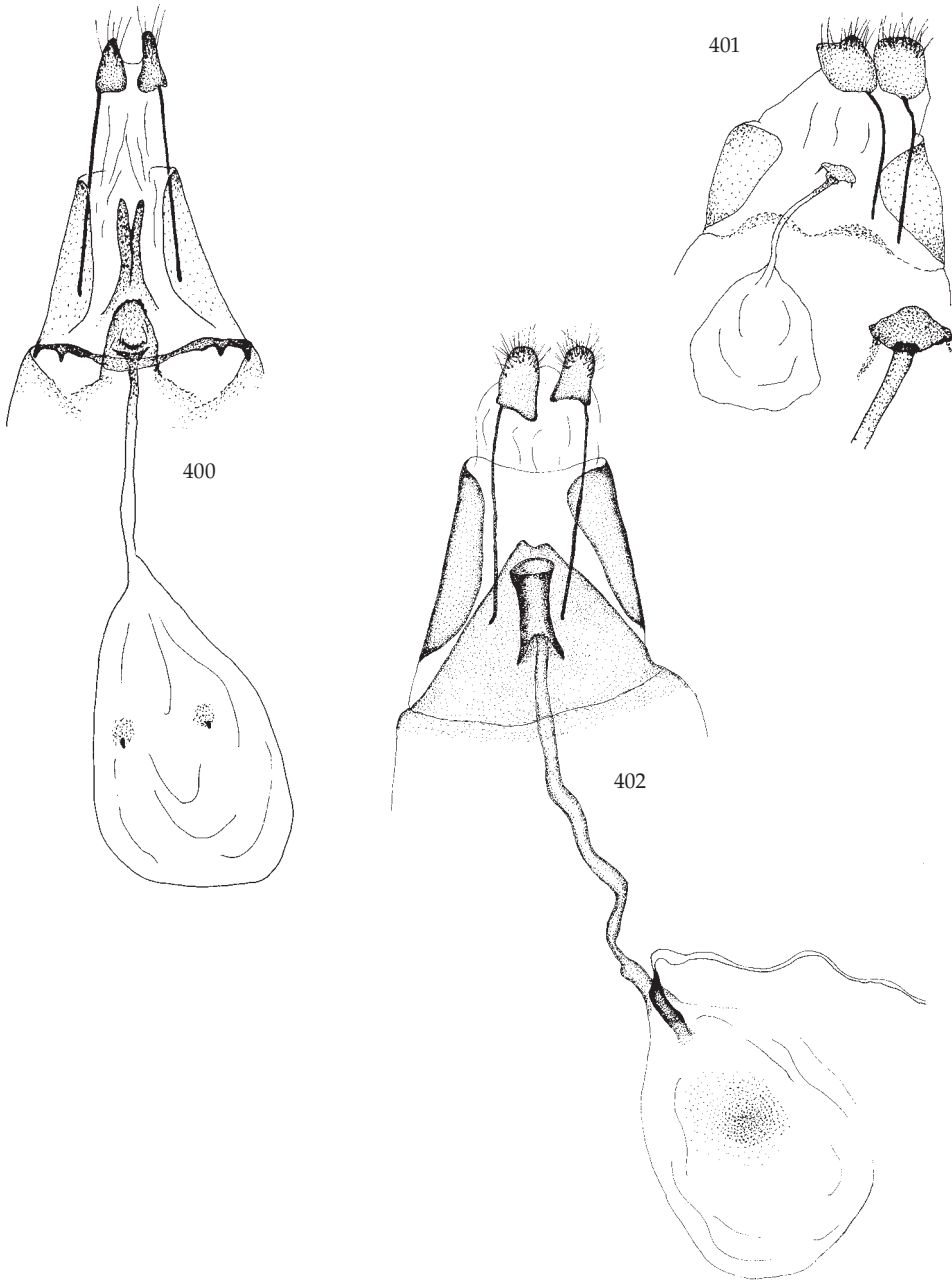


Fig. 400. *M. margaritae* **spec. nov.** Paratype. Ecuador, Manabi, 4 km S Puerto Lopez, 80 m, 3-5.v.2001 (V. Pelz), gent CG 4526 (CG).

Fig. 401. *M. bahiaensis* **spec. nov.** Holotype. Brazil, Bahia, Jequié, 600-750 m, 11-22.xi.1995 (V.O. Becker), gent CG 4916 (VOB).

Fig. 402. *Sphenarches anisodactylus* (Walker). Tanzania, Uzungwe Mts, Mwanihana Forest, above Sanje, 1000 m, 1.viii.1981 (M. Schotze & N. Scharff), gent CG 4052 (ZMUC).



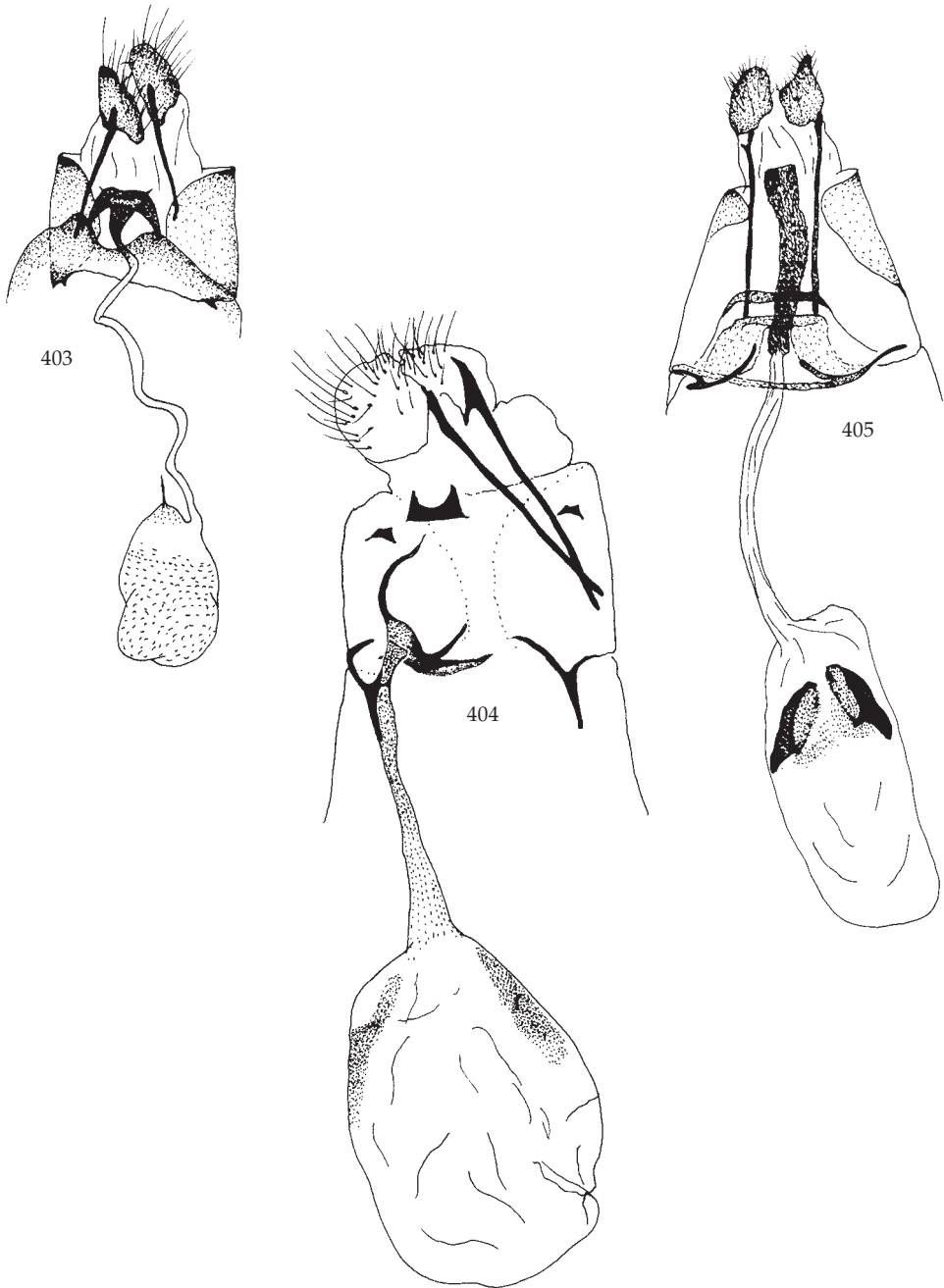


Fig. 403. *S. nanellus* (Walker). Peru, Iquitos, v.1920 (Parish), gent BM 18473 (BMNH).

Fig. 404. *Cnaemidophorus smithi* Gielis. Holotype. Colombia, Minca, 610 m, vi.1899 (H.H. Smith), gent BM 18468 (BMNH).

Fig. 405. *Marasmarcha breviostris* (Walsingham). Mexico, Vera Cruz, Huatusco, 1300 m, 19-23.viii.1981 (V.O. Becker), gent CG 6025 (VOB).

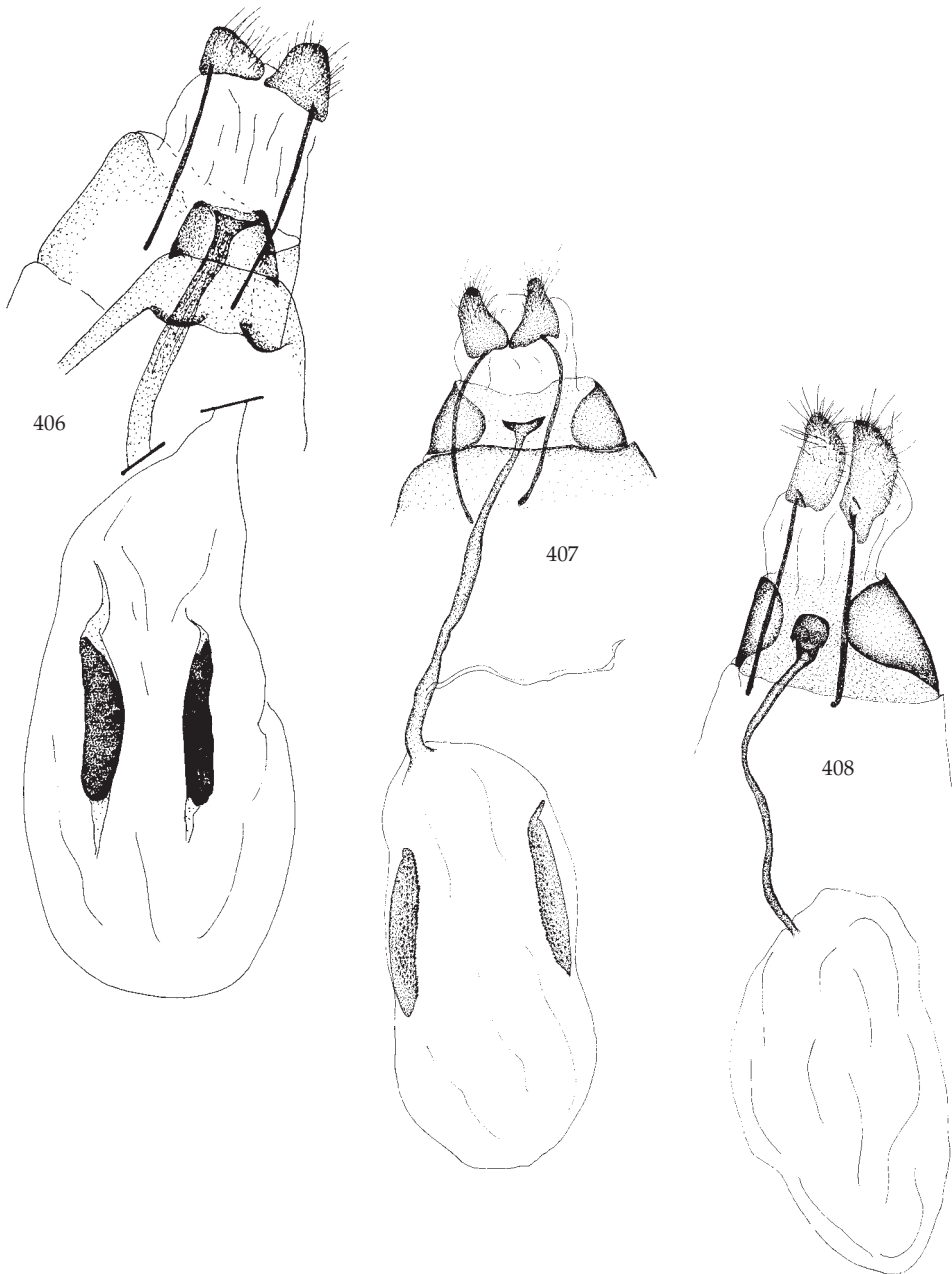


Fig. 406. *Exelastis phlyctaenias* (Meyrick). British Virgin Islands, Guana Island, x.1989 (V.O. Becker), gent CG 3663 (VOB).

Fig. 407. *E. montischristi* (Walsingham). Netherlands Antillas, St Maarten, i.1966, gent CG 1700 (ITZ).

Fig. 408. *E. pumilio* (Zeller). Virgin Islands, St Croix, 22.vii.1980 (H.K. Jensen), gent CG 4078 (ZMUC).

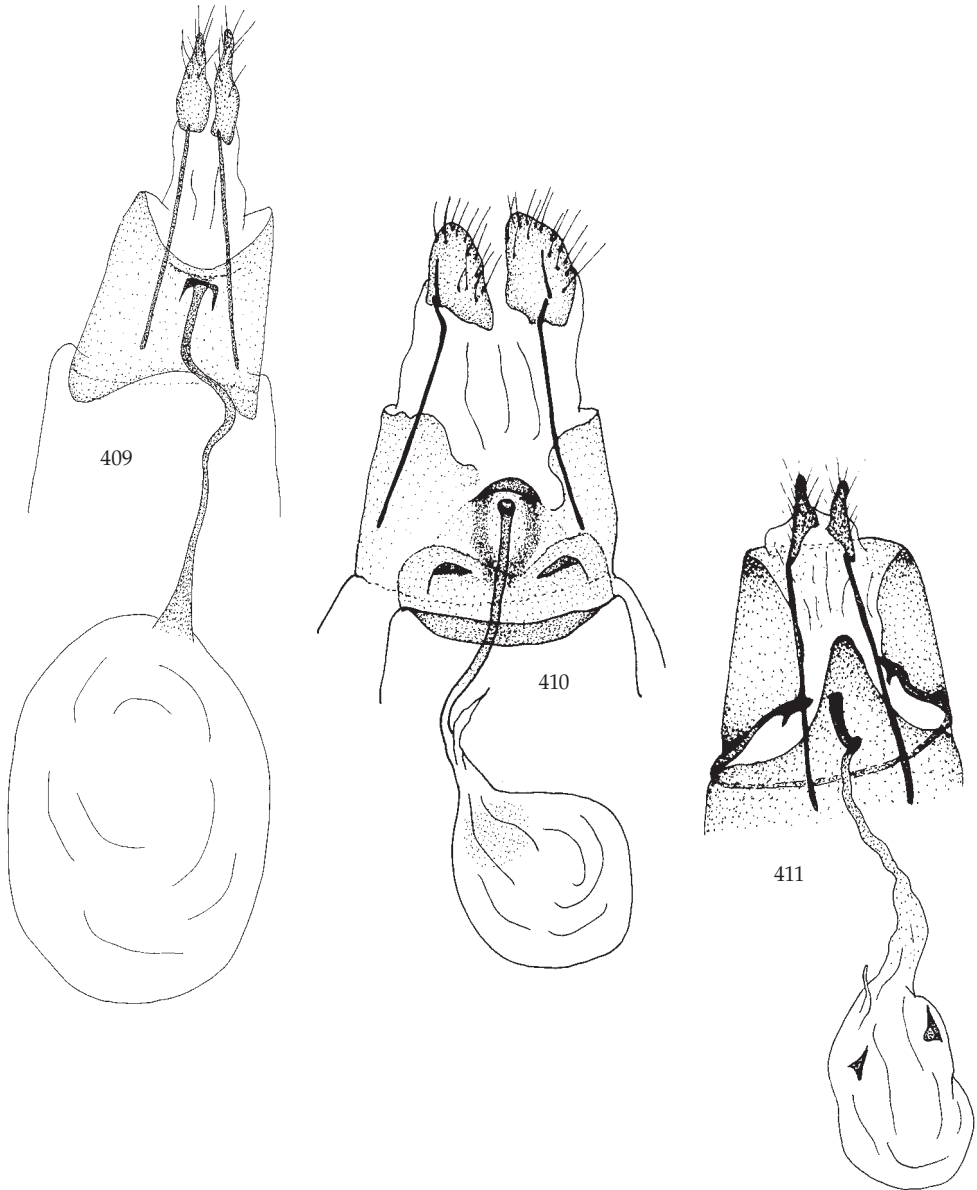


Fig. 409. *Geina integumentum* **spec. nov.** Holotype. Puerto Rico, Cayey, 450 m, 2.viii.1987 (V.O. Becker), gent CG 3649 (V.O. Becker nr 67270).

Fig. 410. *Capperia browni* **spec. nov.** Holotype. Mexico, Veracruz, 22 rd km W C(iuda)d Mendoza, 2150 m, 13.viii.1987 (Brown & Powell), gent CG 3745 (Powell).

Fig. 411. *Oxyptilus scutifer* Meyrick. Lectotype. Ecuador, Duran, (19)14 (P), gent CG 5054 (BMNH).

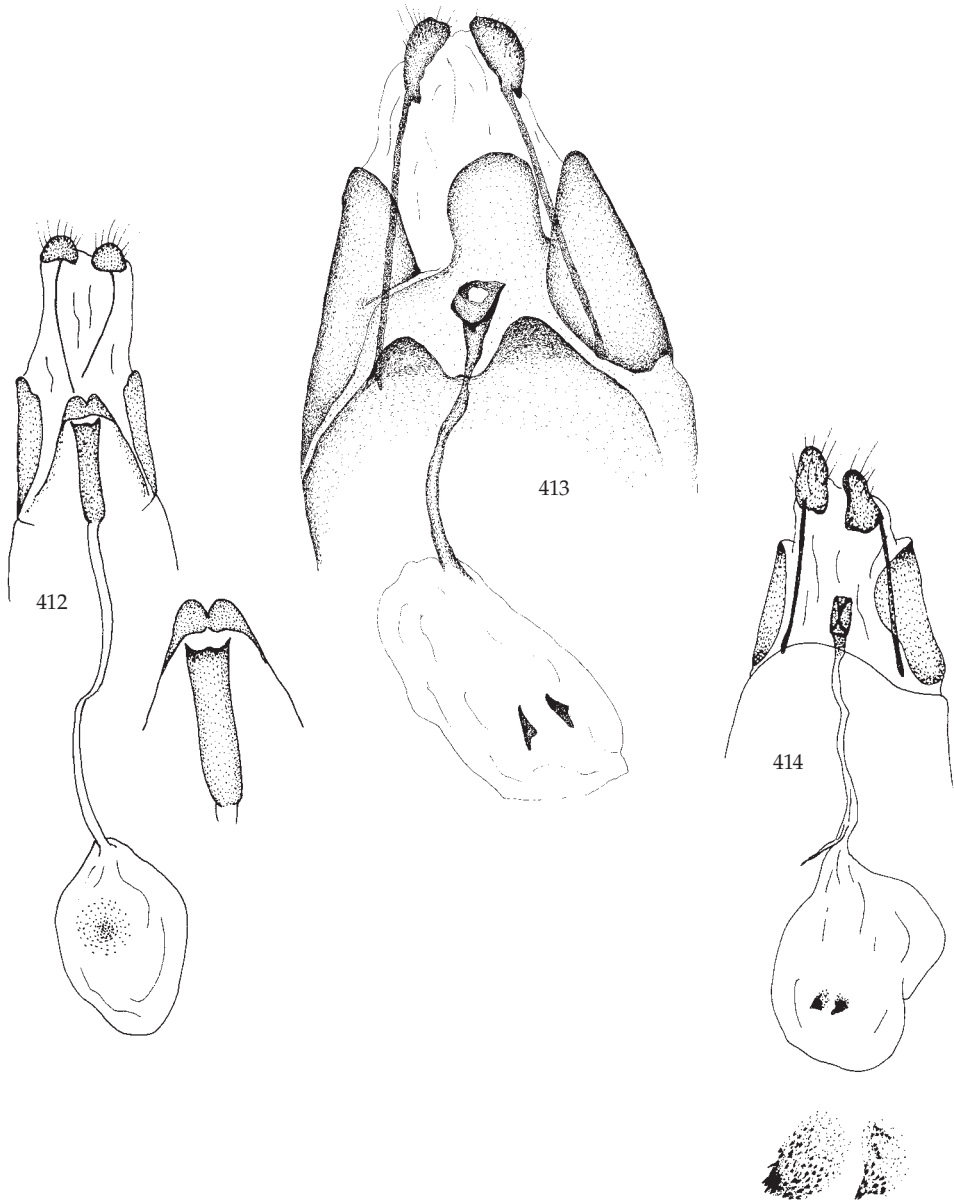


Fig. 412. *Buckleria brasilia* **spec. nov.** Paratype. Brazil, GO, Alto Paraiso, 1300 m, 30.v.1994 (V.O. Becker), gent CG 4915 (VOB).

Fig. 413. *Megalorhipida leucodactylus* (Fabricius). Argentina, Salta, Los Toldos, 17-21.ii.1960 (R. Golbach), gent CG 4112 (ZMUC).

Fig. 414. *M. pseudodeflectalis* Gielis. Paratype. Argentina, Neuquen, Piedra del Aguila, 18.xii.1978 (Mision Cientifica Danese), gent CG 4107 (ZMUC).

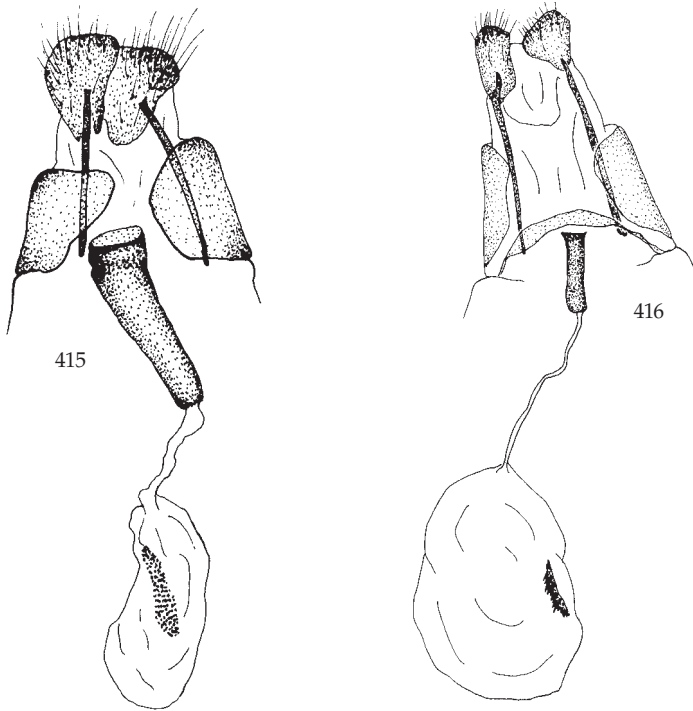


Fig. 415. *M. dulcis* (Walsingham). Mexico, Oaxaca, Oaxaca, on *Lantana urticifolia* Mill, 18.ix.1989 (W.A. Palmer), gent CG 6317 (CG).

Fig. 416. *M. paraiso* **spec. nov.** Holotype. Brazil, Goiás, Alto Paraiso, 1100 m, 4.x.1985 (V.O. Becker), prep CG 3670 (VOB).