

A taxonomic review of the Pterophoridae (Lepidoptera) from Argentina and Chile

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The known species of Pterophoridae occurring in Argentina and Chile are reviewed. Nearly all the available type specimens of species occurring in the area have been examined and five new synonyms have been established. Some primary types are considered to be lost. In this paper three new genera and 29 new species are described. The adults of all species, and the male and female genitalia are illustrated. The distribution is mapped.

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Introduction

The Pterophoridae of the Neotropics have received attention by various authors, but nevertheless, hitherto no comprehensive account dealing with all species of a part of this region has been published.

The taxonomic knowledge of the family is scattered over many small publications, and for many species detailed data on genital characters are missing, making their identification very difficult.

A recent accumulation of newly collected material, in particular from southernmost South America, amongst others by Danish (Zoological Museum, University of Copenhagen) and American (U. S. National Museum, Smithsonian Institution, Washington) expeditions, has made it possible to give a more comprehensive review of the pterophorid fauna of this part of the Neotropics. Future papers will deal with other parts of this region, and a checklist of the whole of the Neotropics (Miller & Gielis, in press) will become available in the near future.

The type specimens of species occurring in the southern part of the Neotropical area are mainly deposited in the BMNH, London. Authors who have worked on the Pterophoridae of this region and deposited their specimens in the BMNH are Meyrick, Fletcher, Walker, Walsingham and Zeller. The types of the species described by them have been examined. Moreover, the types of the species described by Berg and deposited in the National Museum in La Plata, Argentina, have also been examined. The (type)-specimens of the Pterophoridae species described by Blanchard, which should be in the National Museum in Paris, France; by Philippi in the National Museum in Santiago, Chile and O. Staudinger in the Museum of the Humboldt University, Berlin, Germany are all supposed to be lost (personal communication with the correspondents of these museums). The descriptions of two of these lost type specimens are so clear, that the species could be recognized on the basis of the description alone. One description is very clear, but no specimens have yet been found fitting to this description. One species cannot be recognized because of the cryptic description and is listed as an "uncertain species".

A review of the climatological and temperature circumstances and a description of the vegetation are given by Nielsen & Robinson (1983).

Approximately 800 specimens of Pterophoridae from the area have been examined. Although I am well aware that this publication is far from complete, it is to be considered as the best review possible at this moment and can serve as a start for further study in the area.

Introducción

El estudio de los Pterophoridae Neotropicales ha llegado a tal punto, que la composición de la fauna de la zona temperada de Sudamérica ha sido posible de hacer sólo gracias al estudio de algunas colecciones grandes de esta área.

Los especímenes tipos de las especies encontradas en la región austral del área Neotropical se han depositado principalmente en el Museo Británico de Historia Natural (BMNH) en Londres. Los autores que han trabajado en Pterophoridae y que han depositado sus insectos en el BMNH son: Meyrick, Fletcher, Walker, Walsingham y Zeller. Se examinaron los especímenes descritos por estos autores como también los tipos de Berg depositados en el Museo de La Plata, Argentina. Los tipos descritos

por: Blanchard (Museo de Paris, Francia), Philippi (Museo Nacional de Historia Natural, Santiago, Chile), y los tipos de Staudinger (Museo de la Universidad de Humboldt, Berlin, Alemania de Este) se registran como perdidos por los respectivos museos. Para dos de estos tipos perdidos las descripciones son tan claras que las especies pueden ser reconocidas fácilmente sólo con la descripción de cada una de ellas. En todo caso, a pesar de esta claridad, pueden aparecer especímenes que no se ajustan a esta descripción, entonces habrá especies que no podrán ser reconocidas de esta manera y podrían permanecer como "especies inciertas".

El autor ha examinado aproximadamente unos 800 ejemplares de Pterophoridae para el área en estudio con los que en forma provisoria ha compuesto la fauna de la zona temperada de Sudamérica; y aunque sabe que este trabajo será lejos de considerarse completo, estima que representa la mejor revisión que se ha hecho hasta este momento, la principal razón de ello, se debe a que el actual conocimiento sobre esta familia se encuentra esparcido en un gran número de publicaciones pequeñas, y no hay un trabajo -como el presente- que reúna en forma de monografía el área faunística considerada por lo que podría utilizarse como trabajo previo para futuros estudios en la región.

Material and methods

The present study forms part of a project to study the entire Pterophoridae fauna of the Neotropical region. For this reason the data mentioned under "Material" may contain a listing of specimens from other parts of the Neotropical and even the Nearctic region as well. The distribution maps show the distribution for as far as the author has verified the species involved and contain data derived from the labels at the insect pins. Data from literature are not included in the mapping.

The insects have been macrophotographed with a variable magnification, and illustrated at an almost uniform size.

Genitalia slides have been prepared according to the standard procedure in the British Museum, London. After cleaning the structures and staining with Clorazole Black, the genitalia were embedded in Euparal. All genitalia slides were microphotographed: the photographs served (as a basis) for the preparation of line-drawings of the genitalia and the wing-venation.

Abbreviations

The following abbreviations are used for museums and institutions where the material examined is deposited:

BMNH	British Museum (Natural History), London, U.K.
BPBM	Bishop Museum, Honolulu, Hawaii, USA.
CG	Collection C. Gielis, Lexmond, The Netherlands.
CNC	Canadian National Collection, Ottawa, Canada.
LACM	Los Angeles County Museum, Los Angeles, California, USA.
MACN	Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", Buenos Aires, Argentina.
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 Universität, Berlin, Germany.

- MZUC Museo de Zoología de la Universidad de Concepción, Concepción, Chile.
 RMNH Nationaal Natuurhistorisch Museum (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands).
 USNM U.S. National Museum of Natural History, Smithsonian Institution, Washington D.C., USA.
 ZMUC Zoological Museum, University of Copenhagen, Denmark.

Checklist of Pterophoridae from Argentina and Chile

Superfamily PTEROPHOROIDEA Kuznetsov & Stekolnikov, 1979

Family Pterophoridae Zeller, 1841

Subfamily Platyptiliinae Tutt, 1907

Genus *Megalorhipida* Amsel, 1935

Syn.: *Megalorhipida* Amsel, 1935, misspelling.

defectalis (Walker, 1864) (*Pterophorus*)

syn.: *congrualis* (Walker, 1864) (*Pterophorus*)

oxydactylus (Walker, 1864) (*Pterophorus*)

hawaiiensis (Butler, 1881) (*Acipitilia*)

ochrodactylus (Fish, 1881) (*Trichoptilus*)

centetes (Meyrick, 1886) (*Trichoptilus*)

compsochondes (Meyrick, 1886) (*Trichoptilus*)

ralumensis (Pagenstecher, 1900) (*Trichoptilus*)

derelictus (Meyrick, 1926) (*Trichoptilus*) **syn. nov.**

palaestinensis Amsel, 1935

pseudodefectalis Gielis, 1989

Genus *Lioptilodes* Zimmerman, 1958

subantarcticus **spec. nov.**

parvus (Walsingham, 1880) (*Lioptilus*) **comb. nov.**

syn.: *insperata* (Meyrick, 1921) (*Stenoptilia*) **syn. nov.**

trigonometra (Meyrick, 1931) (*Stenoptilia*) **syn. nov.**

partiseca (Meyrick, 1931) (*Stenoptilia*) **syn. nov.**

zapalaicus **spec. nov.**

rionegroicus **spec. nov.**

neuquenicus **spec. nov.**

aguilaicus **spec. nov.**

fetisi **spec. nov.**

alolepidodactylus **spec. nov.**

testaceus (Blanchard, 1852) (*Pterophorus*) **comb. nov.**

topali **spec. nov.**

tribonius (Meyrick, 1921) (*Stenoptilia*) **comb. nov.**

antarcticus (O. Staudinger, 1899) (*Mimaesoptilus*) **comb. nov.**

Genus *Lantanophaga* Zimmerman, 1958

nielsenii **spec. nov.**

aestuosa (Meyrick, 1916) (*Platyptilia*) **comb. nov.**

Genus *Platyptilia* Huebner, [1825]

- Syn.: *Platyptilus* Zeller, 1841
Gillmeria Tutt, 1905
Fredericina Tutt, 1905
gentiliae **spec. nov.**
davisi **spec. nov.**
- Genus *Postplatyptilia* **gen. nov.**
camptosphenia (Meyrick, 1931) (*Platyptilia*) **comb. nov.**
eelkoi **spec. nov.**
naranja **spec. nov.**
fuscicornis (Zeller, 1877) (*Platyptilia*) **comb. nov.**
nubleica **spec. nov.**
alexisi **spec. nov.**
akerbergi **spec. nov.**
biobioica **spec. nov.**
talcaica **spec. nov.**
flinti **spec. nov.**
paraglyptis (Meyrick, 1907) (*Platyptilia*) **comb. nov.**
pusilla (Philippi, 1864) (*Pterophorus*) **comb. nov.**
genisei (Pastrana, 1989) (*Stenoptilia*) **comb. nov.**
- Genus *Stenoptilodes* Zimmerman, 1958
sematodactylus (Berg, 1885) (*Platyptilia*) **comb. nov.**
syn.: *epidelta* (Meyrick, 1907) (*Platyptilia*) **syn. nov.**
juanfernandicus **spec. nov.**
gilvicolor (Zeller, 1877) (*Platyptilia*) **comb. nov.**
duckworthi **spec. nov.**
- Genus *Paraamblyptilia* **gen. nov.**
eutalanta (Meyrick, 1931) (*Platyptilia*) **comb. nov.**
- Genus *Uroloba* Walsingham, 1891 **stat. nov.**
fuscicostata Walsingham, 1891
calycospila (Meyrick, 1932) (*Utuca*) **comb. nov.**
- Subfamily Pterophorinae [Zeller, 1841]
- Genus *Patagonophorus* **gen. nov.**
murinus **spec. nov.**
- Genus *Pselnophorus* Wallengren, 1881
Syn.: *Gypsochaes* Meyrick, 1890
Crasimetis Meyrick, 1890
alternarius (Zeller, 1874) (*Aciptilia*)
- Genus *Adaina* Tutt, 1905
everdinae **spec. nov.**
- Genus *Oidaematophorus* Wallengren, 1862
Syn.: *Leioptilus* Wallengren, 1862, homonym.
Utuca Walker, 1864 **syn. nov.**
Oedaematophorus Zeller, 1867, emendation.
Lioptilus Zeller, 1867
Hellinsia Tutt, 1905
Ovendina Tutt, 1905

siskaellus spec. nov.
betsiae spec. nov.
pelodactylus Berg, 1885
mauleicus spec. nov.
hololeucos (Zeller, 1874) (*Leioptilus*)
mallecoicus spec. nov.
coquimboicus spec. nov.
angulofuscus spec. nov.
grandaevus (Meyrick, 1931) (*Pterophorus*)
glaphyrotus (Meyrick, 1907) (*Pterophorus*)
cinerarius (Philippi, 1864) (*Pterophorus*)

Keys and descriptions

Key to the genera of Pterophoridae in southern South America

1. Third lobe of hindwing with 1 vein 2
- Third lobe of hindwing with 2 veins 9
2. Uncus simple 3
- Uncus double (fig. 76) *Paraamblyptilia* Gielis
3. Saccus well developed 4
- Saccus not or weakly developed (fig. 50) *Megalorhipida* Amsel
4. Saccus simple 5
- Saccus bilobed or tending to be so 7
5. Dorsally at base of valve a pronounced anti-saccus (fig. 61)
 *Lioptilodes* Zimmerman
- Dorsally at base of valve a weak anti-saccus 6
6. Saccus not enlarged (fig. 65) *Platyptilia* Huebner
- Saccus enlarged blister-like (fig. 74) *Uroloba* Walsingham
7. Saccus forked (fig. 63) *Lantonophaga* Zimmerman
- Saccus simple 8
8. Distal saccus segment complex (fig. 71) *Stenoptilodes* Zimmerman
- Distal saccus segment simple (fig. 66) *Postplatyptilia* Gielis
9. Forewing R1 present 11
- Forewing R1 absent 10
10. Forewing R4 and R5 separate *Pselnophorus* Wallengren
- Forewing R4 and R5 fused *Pterophorus* Schaeffer
11. Forewing R2 and R3 absent (fig. 37B) *Patagonophorus* Gielis
- Forewing R2 and R3 present 12
12. Tibiae with erect scale-brushes around base of spur pairs; hind tibiae occasionally with these brushes *Oidaematophorus* Wallengren
- Tibiae without scale brushes around base of spur pairs 13
13. Proximal spur pair of hindleg of equal length *Adaina* Tutt
- Inner spur of proximal spur pair of hindleg 2 × the length of outer spur
 *Emmelina* Tutt

Genus **Megalorhipida** Amsel, 1935

Megalorhipida Amsel, 1935: 283. Type species (by monotypy and original designation): *Megalorhipida palaestinensis* Amsel, 1935: 283.

Diagnosis.— Wing venation: Forewing: SC to costa, R1 short, R2 and R3 fused, R4 and R5 fused to apex of first lobe. M and CU fused to apex of second lobe, AN to half the wing-length and AX short. Hindwings: SC, RR and M1 fused, CU1 to apex of second lobe, CU2 to half the second lobe and AN as far as base of first cleft, AN to apex of third lobe.

Key to the species

1. Third lobe of hindwing with one scale-tooth *M. defectalis* (Walker)
- Third lobe of hindwing with two scale-teeth *M. pseudodefectalis* Gielis

Key based on male genitalia

1. Valve trapezoid (fig. 50) *M. defectalis* (Walker)
- Valve lanceolate (fig. 51) *M. pseudodefectalis* Gielis

Key based on female genitalia

1. Signum: a pair of small horns (fig. 88) *M. defectalis* (Walker)
- Signum: two groups of spiculae (fig. 89) *M. pseudodefectalis* Gielis

***Megalorhipida defectalis* (Walker, 1864)**
(figs. 1, 50, 88, 130)

Pterophorus defectalis Walker, 1864: 943.

Trichoptilus defectalis; Fletcher, 1910: 398; 1920: 621.

Buckleria defectalis; Fletcher, 1910: 398; 1920: 6.

Megalorhipida defectalis; Adamczewski, 1951: 382; Fletcher & Nye, 1984: 88 (misspelling).

Megalorhipida defectalis; Gielis, 1989b: 393-394.

Pterophorus congrualis Walker, 1864: 943-944.

Trichoptilus congrualis; Fletcher, 1926: 622.

Pterophorus oxydactylus Walker, 1864: 944.

Trichoptilus oxydactyla; Walsingham; 1907: 471; Perkins, 1913: clxii; Fletcher, 1926: 623.

Acipitilia hawaiiensis Butler, 1881: 408.

Trichoptilus hawaiiensis; Meyrick, 1888: 239.

Trichoptilus ochrodactylus Fish, 1881: 142.

Trichoptilus centetes Meyrick, 1886: 16.

Trichoptilus compsochares Meyrick, 1886: 16.

Trichoptilus ralumensis Pagenstecher, 1900: 239.

Trichoptilus derelictus Meyrick, 1926: 276.

Megalorhipida palaestinensis Amsel, 1935: 283.

Material.— Lectotype of *Pterophorus defectalis* Walker: Sierra Leone, (Morgan) (BMNH). Lectotype of *Pterophorus congrualis* Walker: South Hindostan, (Walhouse) (BMNH). Lectotype of *Pterophorus oxydactylus* Walker: Ceylon, (Nietner) (BMNH). Holotype of *Tri-choptilus centetes* Meyrick: New Guinea, Port Moresby, xi (Mathew) (BMNH). Holotype of *Trihoptilus compsochares* Meyrick: Cape 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): Galapagos Archipelago, Charles Island, 31.vii.(19)24 (St. George Expedn., Collenette), at light, sea level, genitalia BM 18448 (BMNH). **Argentina:** La Rioja— 1 ♂, 25 km N of Cebollar, 1.iv.1979, (Mision Cientifica Danesa, Sta. 71) (ZMUC); Salta— 3 ♂♂, 2 ♀♀, Los Toldos, 17-21.ii.1960, (Golbach) (ZMUC). **French Guyana:** 1 ♂, Nouveau Chantier, v, genitalia CG 1980 (MNHN). **Galapagos Islands:** 2 ♀♀, San Cristobal, Puerto Baquirizo Moreno (Wreck Bay), v.1975 (BMNH). **Mexico:** Isla Mujeres— 1 ♀, Quintana Roo, 31.vii.1989 (van der Wolf)(CG); Colima— 4 ♂♂, 4 ♀♀, Socorro Island, Revillagegido Is., 5.vi.(19)77 (Hogue, Evans, Sta. 1) (LACM). **Peru:** Ica— 1 ♂, near Pisco, sea level, 28.ii-1.iii.1987 (Karsholt), genitalia CG 4178 (ZMUC). **Venezuela:** Maracay, 1 ♀, no date (Litt.: Amsel, 1956). **Virgin Islands:** 3 ♂♂, 2 ♀♀, St. Croix, 4.v.(18)94, 22.iii.1980, (no collector, Jensen) (ZMUC). Incomplete data: 1 ♂, Brasil (Lund) (ZMUC).

Diagnosis.— 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 and female (fig. 1). Wingspan 14-17 mm. Head appressedly scaled, ferruginous brown. Palpi short compared to diameter of eye, 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.

Forewing's cleft from $1/2$, yellow-brown. Markings brown. A small discal spot and ill-defined transverse bands on first lobe at base and middle, and a faint darkening near the apex. Fringes yellow-brown, grey-brown at the dark spots and along the costa of the second lobe opposite the dark markings. At dorsum of second lobe dark,



Fig. 1, *Megalorhipida defectalis* (Walker). Mexico, Quintana Roo, Isla Mujeres, 31.vii.1989 (van der Wolf), coll. CG.

with scattered isolated black scales. Underside dark brown, paler along costa and toward 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 lobe brown; third lobe yellow-brown. Androconial scales ferruginous, in a double row, merging in a single row.

Variation.— In the specimens from the Caribbean area the androconial scales are dark brown. In general the specimens from the Americas have a paler colour than those from Africa. The specimens from the Galapagos Archipelago and Socorro Island show a general darkening of the colour.

Male genitalia (fig. 50).— Valvae symmetrical, trapezoid. Uncus swollen. Vinculum rounded. Aedeagus small, tube like, without cornuti.

Female genitalia (fig. 88).— 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 3-4 × as long as papillae anales.

Ecology.— Collected in February and April. For other countries, other data are recorded. The hostplant is *Boerhavia repens*; the larvae feed on the unripe seeds (Fletcher, 1909).

Distribution.— Argentina: Salta, La Rioja; Brasil: no locality given; Galapagos Archipelago; French Guyana; Mexico: Isla Mujeres, Socorro Island; Peru: Ica; Venezuela: Maracay; Virgin Islands: St. Croix. Distribution for *S. America* mapped in fig. 130. Further known from the Palaetotropics.

***Megalorhipida pseudodefektalis* Gielis, 1989**
(figs. 2, 51, 89, 131)

Megalorhipida pseudodefektalis, Gielis 1989a: 107-117 (misspelling).

Megalorhipida pseudodefektalis; Gielis, 1989b: 393-394.

Material.— Holotype, ♂: Argentina, Neuquen, Piedra del Aguila, 18.xii.1978 (Mis. Cient. Danesa, sta. 15), genitalia 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), genitalia CG 4106, 4107 and wing-venation prep. CG 4113 (ZMUC, CG); 2 ♀♀, Argentina, Neuquen, Rio Arroyito, 17.xii.1978 (Mis. Cient. Danesa, Sta. 12), genitalia CG 4108 (ZMUC); 1 ♂, 1 ♀, Argentina, Neuquen, N. of Chos Mahal Barrancas, 850 m, 22.iii.1979 (Mis. Cient. Danesa, Sta. 63) (ZMUC).

Diagnosis.— The species is characterized by the double scale tooth at the third lobe of the hindwing. Besides, the genital structure in both male and female are characteristic.

Description.— Male and female (fig. 2). Wingspan 15-18 mm. Head pale and grey-brown, appressedly scaled. Palpi a little larger than diameter of eye, creamy white. An indistinct ring at end of second segment and a distinct one at end of third segment. 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.

Forewings. Colour and markings as in *M. defektalis* (Walker). Discal spot and

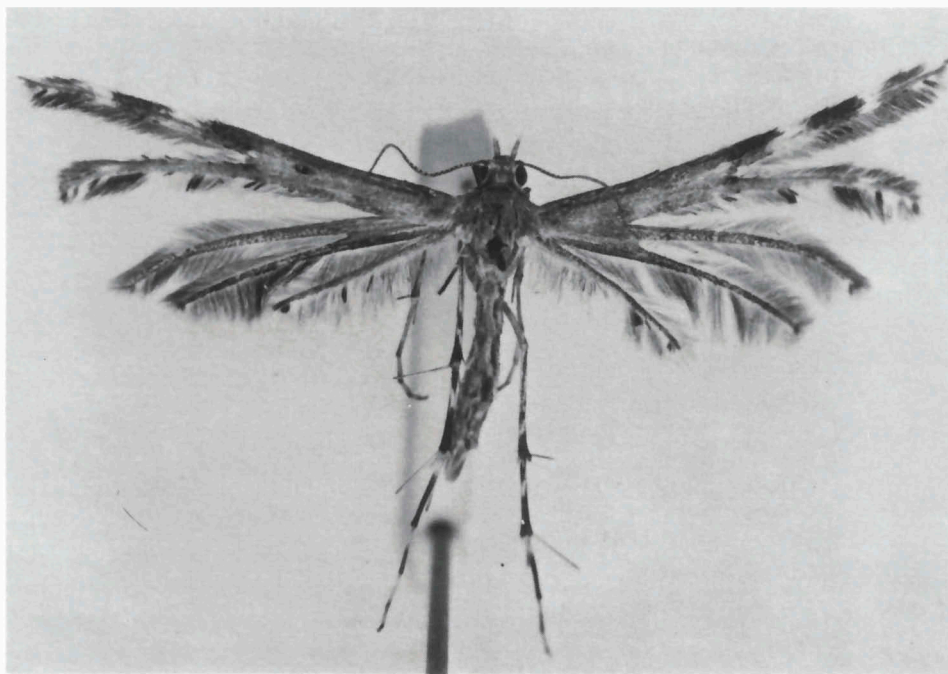


Fig. 2, *Megalorhipida pseudodefectalis* Gielis. Holotype, Argentina, Neuquen, Piedra del Aguila, 18.xii.1978 (Mis. Sci. Dan., Sta. 15), genitalia CG 4109, coll. ZMUC.

markings of first lobe more (pronounced and) distinct. Fringes with more pronounced dark scales along dorsal margin. Underside in a brown and creamy white pattern as above.

Hindwings in first and second lobe brown. Costal half of third lobe brown, dorsal half creamy white. Fringes grey-brown, along dorsal margin of third lobe basally white. Scale teeth at dorsum of third lobe consist of two small dark brown groups at $\frac{2}{3}$ and subapical. Underside first and third lobe yellow-brown and in the second lobe brown. The androconial scale structure consists of a double row of dark brown scales, continuing in a single row in the apical part of the second lobe.

Wing-venation.— As in genus description with the exception of the small branch of RR in hindwing.

Variation.— In the limited material available no significant variation has been noticed.

Male genitalia (fig. 51).— Valvae symmetrical lanceolated, with some small spines in the distal part. Tegumen arched, uncus wide but small. Vinculum blister-like. Aedeagus tube-like, a little arched, without cornuti.

Female genitalia (fig. 89).— Bursa copulatrix simple, with a double signum. The signum formed by numerous grouped spines. Ductus bursae narrow, little sclerotized. Antrum bursae short, straight. Apophyses anteriores absent. Apophyses posteriores approximately 2 × as long as papillae anales.

Ecology.— Collected in December. Biology unknown.

Distribution.— Argentina: Neuquen. Distribution mapped in fig. 131.

Genus *Lioptilodes* Zimmerman, 1958

Lioptilodes Zimmerman, 1958: 399. Type species (by monotypy and original designation): *Lioptilodes parvus* Walsingham, 1880: 55.

Utuca auct., nec Walsingham, 1892.

Diagnosis.— The genus is characterized by the presence of a well-developed anti-saccus of the male genitalia.

Redescription.— Head appressedly scaled. Face with scale-tuft. Palpae extended forward, second segment covered with erect scales.

Forewings cleft from about $\frac{3}{4}$. The second lobe wider than first lobe, in most species of the genus.

Hindwings with one vein in third lobe.

Male genitalia.— Valvae symmetrical. Uncus stout. Tegumen well-developed, large. Saccus well-developed, often enlarged. Vinculum tightly connected with saccus and anti-saccus, ventro-dorsally arched. Aedeagus curved with well-developed coecum.

Female genitalia.— Antrum gradually passing into ductus bursae. In bursa copulatrix a pair of horn-like signa. Lamina post-vaginalis well-developed, either as a ridge after, or as two blotches beside antrum; laterally passing into a sclerotized ridge ending in apophyses anteriores.

Remarks.— The species discussed below were previously considered as belonging to *Utuca* Walsingham. A critical reexamination of the type species, *U. ochracealis* Walker, 1864, however, has shown that *Utuca* Walsingham is a junior synonym of *Oidaematophorus* Wallengren. Since the remaining species, previously in *Utuca*, form a monophyletic group, completely different from *Oidaematophorus* and belonging to another subfamily, the present genus, with *L. parvus* Walsingham as the type species, appeared to be valid of the genus *Lioptilodes*. Zimmerman omitted to give a diagnosis of the genitalia. The eye-striking feature is the heavily sclerotized continuation of the vinculum at the dorsal part of the base of the valve. This structure is strongly developed and keeps the valvae in position together with the saccus at the ventral side, and is named "anti-saccus" in this publication.

Key to the species

1. Large species: wingspan over 28 mm *L. topali* spec. nov.
- Smaller species 2
2. Colour cream-white *L. fetisi* spec. nov.
- Darker coloured species 3
3. Colour reddish to pale ferruginous 4
- Colour pale grey-white to dark grey 5
4. Colour reddish ferruginous; termen of second forewing lobe with delicate fringe line (fig. 11) *L. testaceus* (Blanchard)
- Colour pale ferruginous; termen of second forewing lobe without fringe line (fig. 10) *L. alolepidodactylus* spec. nov.
5. Termen of second forewing lobe with fringe spots or line 6
- Termen of second forewing lobe without fringe spots 11

6. Termen of second forewing lobe with a basal fringe line (fig. 6) *L. rionegroicus* spec. nov.
- Termen of second forewing lobe with isolated spots 7
7. At costa of first forewing lobe a white spot 8
- At costa of first forewing lobe some white scales (fig. 3) *L. subantarcticus* spec. nov.
8. Centrally in first forewing lobe a dark longitudinal spot (fig. 14) *L. antarcticus* (O. Staudinger)
- Centrally in first forewing lobe sparse isolated dark scales 9
9. Before the base of the cleft in the forewing a double spot (fig. 4) *L. parvus* (Walsingham)
- Before the base of the cleft in the forewing one spot 10
10. Costal from the base of the cleft in the forewing a small spot (fig. 7) *L. neuquenicus* spec. nov.
- Without a spot costal from the base of the cleft (fig. 8) *L. aguilaicus* spec. nov.
11. Fringes of forewing termen dark grey (fig. 13) *L. tribonius* (Meyrick)
- Fringes of forewing termen pale grey (fig. 5) *L. zapalaicus* spec. nov.

Key based on male genitalia

(The male of *L. fetisi* is unknown).

1. Saccus short, as long as wide 2
- Saccus long, as long as twice its width, or longer 6
2. Cucullus with hook; aedeagus with two cornuti (fig. 52) *L. subantarcticus* spec. nov.
- Cucullus simple; no cornuti 3
3. Coecum of aedeagus pronounced (fig. 60) *L. topali* spec. nov.
- Coecum not pronounced 4
4. Anellus arms slender (fig. 54) *L. zapalaicus* spec. nov.
- Anellus arms stout 5
5. Sacculus gradually narrowing toward top (fig. 57) *L. aguilaicus* spec. nov.
- Sacculus less gradually narrowing toward top (fig. 53) .. *L. parvus* (Walsingham)
6. Valve ending club-like (fig. 61) *L. tribonius* (Meyrick)
- Valve ending pointed or rounded 7
7. Near top of valve a lateral spine (fig. 56) *L. neuquenicus* spec. nov.
- No spine near top of valve 8
8. Uncus short and slender (fig. 62) *L. antarcticus* (O. Staudinger)
- Uncus stout 9
9. Uncus long; anellus arms stout (fig. 55) *L. rionegroicus* spec. nov.
- Uncus moderately long, anellus arms weakly-developed 10
10. Saccus 2 × as long as wide; top rounded (fig. 58) *L. arolepidodactylus* spec. nov.
- Saccus 2.5 × as long as wide; top sharp (fig. 59) *L. testaceus* (Blanchard)

Key based on female genitalia

1. Antrum wide and folded (fig. 90) *L. subantarcticus* spec. nov.

- Antrum not folded 2
- 2. Lamina ante-vaginalis with "blotches" beside the antrum 3
- Lamina ante-vaginalis a sclerotized ridge 8
- 3. Ductus bursae twisted (fig. 93) *L. rionegroicus* spec. nov.
- Ductus bursae straight 4
- 4. Antrum wide, as long as ductus bursae (fig. 99) *L. topali* spec. nov.
- Antrum shorter than ductus bursae 5
- 5. Ostium excavated (fig. 95) *L. aguilais* spec. nov.
- Ostium ending flat 6
- 6. Antrum with parallel margins (fig. 96) *L. fetisi* spec. nov.
- Antrum funnel-shaped 7
- 7. Antrum gradually narrowing (fig. 94) *L. neuquenicus* spec. nov.
- Antrum narrowing sharply, followed by a small parallel segment (fig. 92)
..... *L. zapalaicus* spec. nov.
- 8. Lamina ante-vaginalis forming a sclerotized plate 9
- Lamina ante-vaginalis forming a sclerotized ridge 10
- 9. Lamina ante-vaginalis in shape of a large central plate, laterally margined by
two blotches (fig. 101) *L. antarcticus* (O. Staudinger)
- Lamina ante-vaginalis as a small central sclerotized plate above the ostium (fig.
91) *L. parvus* (Walsingham)
- 10. In ductus bursae a sclerotized plate (fig. 100) *L. tribonius* (Meyrick)
- Ductus bursae without a sclerotized plate 11
- 11. Apophyses anteriores well-developed (fig. 98) *L. testaceus* (Blanchard)
- Apophyses anteriores very small (fig. 97) *L. arolepidodactylus* spec. nov.

***Lioptilodes subantarcticus* spec. nov.**

(figs. 3, 52, 90, 132)

Material.— Holotype, ♂: Argentina, Tierra del Fuego, Ushuaia, Lapataia, 20 m, 27.i.1979 (Mision Cientifica Danesa, Sta. 34), genitalia CG 4135 (ZMUC). Paratypes: 4 ♂♂, 1 ♀, same locality, 24.i.1979, 1.ii.1979, 3.ii.1979 (Mision Cientifica Danesa, Sta. 34), genitalia CG 4137 (♂), 4138 (♀) (ZMUC, CG).

Diagnosis.— The moths are characterized by the presence of the fringe-scaling in the forewings and the genital structures.

Description.— Male and female (fig. 3). Wingspan 19-21 mm. Head appressedly scaled, grey-brown, with frontal tuft of $1.5 \times$ diameter of eye. Underside of tuft brown. Palpae $2 \times$ diameter of eye, 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. Proximal pair of spurs of the hindlegs longer than distal pair.

Forewing's cleft from $3/4$; grey brown. Markings brown, consisting of an oblique pair of spots before the base of the cleft. Costal one above the base; dorsal one just below the cleft. Fringes grey-brown. In the fringes black scale groups, near anal angle of first and second lobe and mid-terminal, and at apex of second lobe. Underside brown.

Hindwings and fringes grey-brown. Underside brown. Androconial scales ferruginous, in a double row, and margined with darker and smaller scales costally and dorsally.

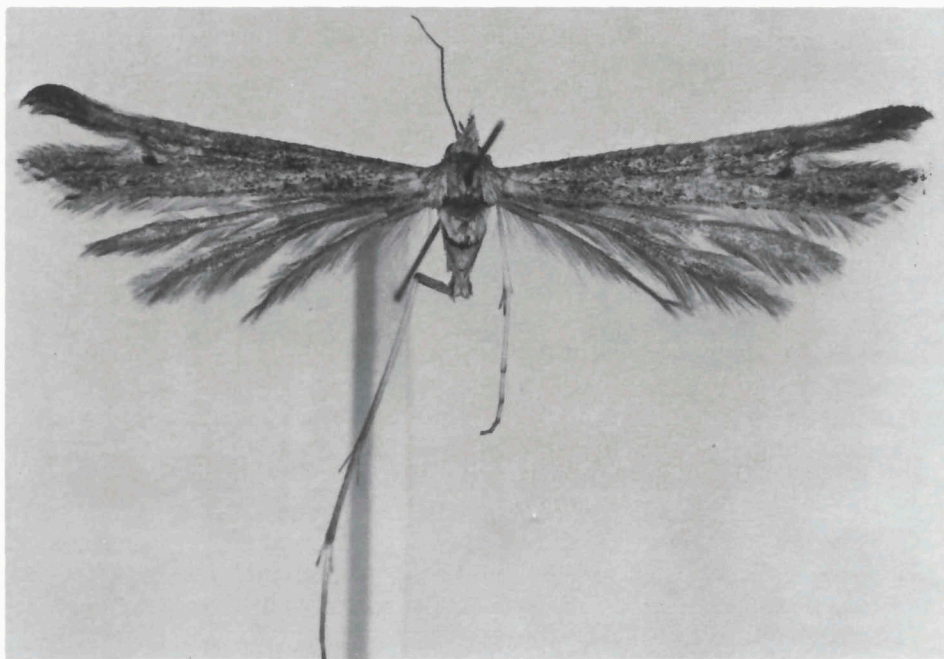


Fig. 3, *Lioptilodes subantarcticus* spec. nov. Holotype, Argentina, Tierra del Fuego, Ushuaia, Lapataica, 20 m, 27.i.1979 (Mis. Sci. Dan., Sta. 34), genitalia CG 4138, coll. ZMUC.

Variation.— The colour of the androconial scales varies from ferruginous to black-brown (in the specimens).

Male genitalia (fig. 52).— Valvae symmetrical. Sacculus in basal half wide. Cucullus gradually narrowing. At junction of anti-saccus and tegumen a costal spine. Tegumen wide. Uncus rather slender. Vinculum slender. Saccus short, wide-angled. Anti-saccus 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 spines.

Female genitalia (fig. 90).— Antrum tube-like. Distal part of ductus bursae wide and folded. Bursa copulatrix simple with a double, horn-like signum. Lamina postvaginalis with two plates beside antrum, and passing laterally into short apophyses anteriores. Apophyses posteriores three times as long as papillae anales.

Ecology.— Collected in January and February. Biology is unknown.

Distribution.— Argentina: Tierra del Fuego. Distribution mapped in fig. 132.

Remarks.— The species is the second collected on the Tierra del Fuego Islands.

Etymology.— It is named "*subantarcticus*" because it resembles to *L. antarcticus* (Staudinger), but for the obvious double spot before the base of the cleft.

***Lioptilodes parvus* (Walsingham, 1880)**
(figs. 4, 53, 91, 133)

Pterophorus parvus Walsingham, 1880: 55; Meyrick, 1913.

Lioptilodes parvus; Zimmerman, 1958: 399.

Stenoptilia insperata Meyrick, 1921: 422. **Syn. nov.**

Stenoptilia trigonometra Meyrick, 1931: 277. **Syn. nov.**

Stenoptilia partisecca Meyrick, 1931: 380; Clarke, 1965: 68-70. **Syn. nov.**

Material.— Holotype of *Pterophorus parvus* Walsingham, ♀: U.S.A., California, Mt. Shasta, Siskiyou Co., 2.viii-1.ix.1871 (Walsingham), genitalia BM 15778 (BMNH). Lectotype of *Stenoptilia inspersa* Meyrick, ♂ (designated here): Peru, Lima, 500 ft., viii.[19]14 (Parish), genitalia BM 18450 (BMNH). Lectotype of *Stenoptilia trigonometra* Meyrick, ♀ (designated here): Paraguay, Makthlawayan, i.[19]27 (C.S.C.), genitalia BM 18447 (BMNH). Holotype of *Stenoptilia partisecca* Meyrick, ♀: Argentina, Mendoza, Mendoza, i, genitalia BM 4969 (BMNH).

Argentina: Neuquen— 2 ♂♂, 1 ♀, Rio Limay, Arroyito, 22.xii.1978 (Mision Cientifica Danesa, Sta. 12) (ZMUC); 1 ♂, 1 ♀, Lago Tromen, Rodeo Grande, 900 m, 12.iii.1979 (Mision Cientifica Danesa, Sta. 18) (ZMUC); 2 ♂♂, 3 ♀♀, Piedra del Aguila, 18.xi.1978, 18.xii.1978, 19.xii.1978, 23.xii.1978 (Mision Cientifica Danesa, St. 15) (ZMUC, CG); 1 ♀, Alumine, 1200 m, 14.iii.1979 (Mision Cientifica Danesa, Sta. 57) (ZMUC). Buenos Aires— 1 ♀, Tres Arroyos, Copetonas, 100 m, 12.i.1982 (Nielsen & Karsholt, Sta. 2) (ZMUC). **Brasil:** Santa Catarina— 1 ♂, Brusque, 6.ix.1970 (Becker), gent. CG 6039, coll. Becker nr. 12285. Mato Grosso— 2 ♂♂, 3 ♀♀, Rio Brilhante, 600 m, 25.i.1971, 23-27.i.1971 (Becker), coll. Becker nr. 13918, 35133; 1 ♂, 1 ♀, Sete Lagoas, 720 m, 28.ii.1969, 13.iii.1969 (Becker), genitalia CG 6023 ♂, 6024 ♀, coll. Becker, nr. 9328, 9334. **Chile:** Santiago— 1 ♀, Guayacan, 25.i.1951 (Peña), genitalia CG 6048 (CNC). Maule— 1 ♂, Pelluhue, 2.xii.1953 (Peña) (CNC). **Peru:** Ancash— 1 ♀, 15 km N Caras, Rio Salta Valley, ca. 2000 m, 19-21.ii.1987 (Karsholt, Sta. 25) (ZMUC).

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 at the termen of both forewing lobes and its genitalia structure.

Redescription.— Male and female (fig. 4). Wingspan 15-20 mm. Head appressedly scaled; pale brown. Frontal tuft small, half diameter of eye. Above the eye a white line.

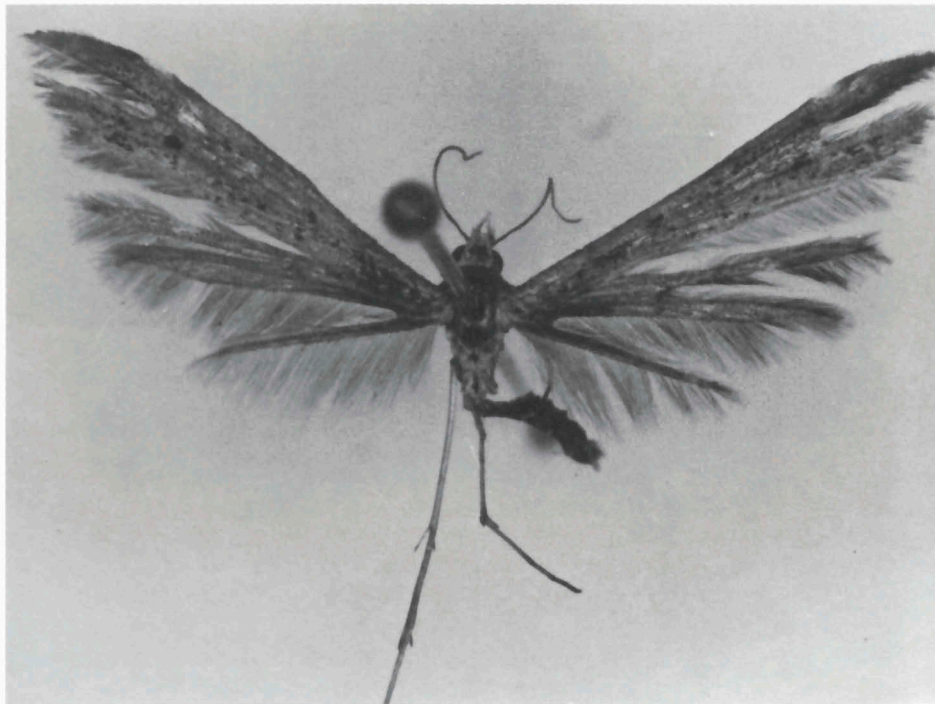


Fig. 4, *Lioptilodes parvus* (Walsingham). Chile, Llanquihue, Petrohue, 600 m, 1.i.1882 (Davis), coll. USNM.

Palpae slightly longer than diameter of eye, 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. Hindlegs with two pairs of spurs of equal length.

Forewing's cleft from $\frac{3}{4}$, pale brown with white scales. Markings brown, consisting of two spots anterior of base of cleft straight above each other, and a cellular spot. Next an indistinct dark scaling along the costa, reaching towards the base of the cleft. The costa above the base of the cleft cream-white. Fringes greyish. Termen of second lobe with two dark scale groups, centrally and at apex. Underside brown, except for the first lobe, which is cream-white. Hindwings brown. Fringes brown-grey. Underside brown. Androconial 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 (fig. 53).— Valvae symmetrical. Saccus gradually narrowing towards $\frac{1}{3}$ of length of valva. Tegumen not lobated. Uncus stout. Vinculum wide, passing into a stout, but rather short, pointed saccus. Juxta wide, passing into a pair of stout and long anellus arms. Aedeagus curved, with a pronounced coecum.

Female genitalia (fig. 91).— Antrum slightly rounded, distally replacing distal margin of 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, little sclerotized. Apophyses anteriores absent. Apophyses posteriores 1.5–2.5 × as long as papillae anales.

Ecology.— Collected in South America from November till March. In North America in August. The biology of the species was described by Bourquin (1937) under the name *Stenoptilia insperata* Meyrick. The foodplants are *Racheospila gerularia* Huebner and *Baccharis salicifolia* (Pers.).

Distribution.— Argentina: Mendoza, Buenos Aires, Neuquen; Brasil: Mato Grosso; Chile: Juan Fernandez Islands, Santiago; Peru: Ancash; Hawaii Islands; U.S.A.: California, Arizona. Distribution for S. America mapped in fig. 133.

Remarks.— The species differs from allied species by the characteristic double spot before the base of the cleft in the forewing and the fringe spots at the termen of the forewing lobes.

***Lioptilodes zapalaicus* spec. nov.**

(figs. 5, 54, 92, 134)

Material.— Holotype, ♂: Argentina, Neuquen, Zapala, El Marucho, 870 m, 26.x.1981 (Nielsen & Karsholt), genitalia CG 4134 (ZMUC). Paratypes: 2 ♂♂, 5 ♀♀, same locality and data, genitalia 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), genitalia CG 4123 (ZMUC); 1 ♂, Chile, Santiago, La Obra, 25.x.(19)51 (Ramir), genitalia CG 1961 (MZUC); 1 ♂, Chile, Santiago, Quinta Normal, 16.xii.1988 (Elgueta), genitalia CG 1985 (MNHC); 1 ♂, Peru, Arequipa, 15 km SW. Atico, sea level, 10.iv.1987 (Karsholt, Sta. 69), genitalia CG 4196 (ZMUC).

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

Description.— Male and female (fig. 5). Wingspan 18–21 mm. Head appressedly scaled, cream-white. Palpae 2.5–3.5 × diameter of eye, protruding, pale brown-white,

above cream-white. Second and third segment of equal length; basal segment shorter. Antennae grey-brown, but in basal $\frac{1}{3}$ 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.

Forewing's cleft from $\frac{3}{4}$; colour pale grey-brown. Markings dark brown; some isolated scales in distal area; a small costal spot at $\frac{1}{3}$; 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, pronounced scales. Fringes and underside brown-grey. Androconial scales dark to pale ferruginous, in a double row, the costal row longer than the dorsal row.

Male genitalia (fig. 54).— Valvae symmetrical, gradually narrowing toward top. Saccus basally wide and gradually narrowing towards half of the valve's length, in the distal half with parallel margins. Tegumen bilobated. Uncus stout, moderate. Vinculum arched. Saccus shaped as a sharp triangular spine. Anellus arms reaching up to $\frac{3}{4}$ of tegumen, slender. Aedeagus arched, slender. Coecum pronounced, caulus rather small. Cornutus consisting of five spicules.

Female genitalia (fig. 92).— 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 close to the ductus bursae. The lamina ante-vaginalis centrally with two blotches beside the antrum, laterally passing into the very small apophyses anteriores. Apophyses posteriores slender, $2.5 \times$ as long as the papillae anales.

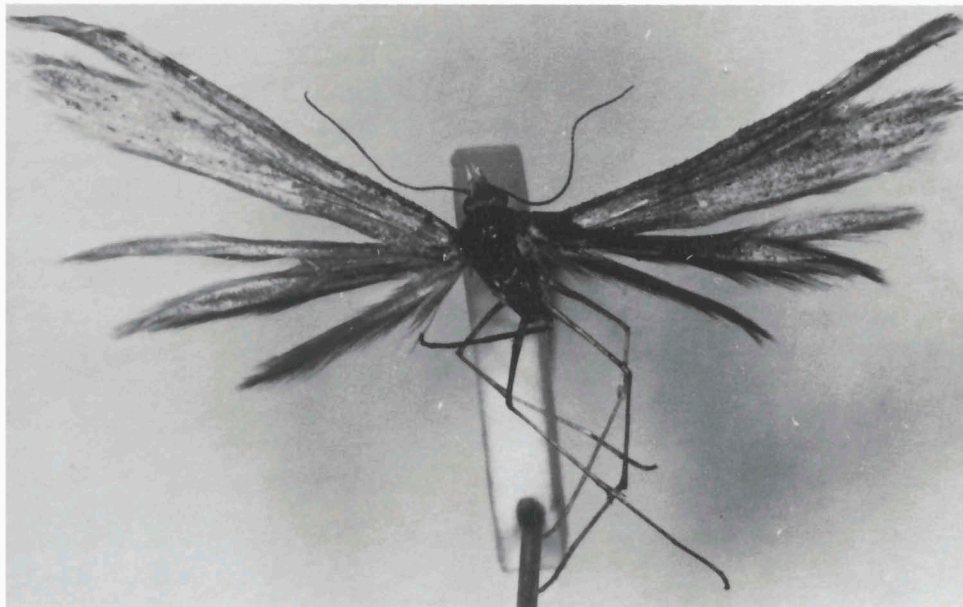


Fig. 5, *Lioptilodes zapalaicus* spec. nov. Holotype, Argentina, Neuquen, Zapala, El Marucho, 870 m, 26.x.1981 (Gentili, Sta. 34), genitalia CG 4134, coll. ZMUC.

Ecology.— Collected in October, December, January and April; the last date in the mountains of Peru. Biology unknown.

Distribution.— Argentina: Chubut, Neuquen; Chile: Santiago; Peru: Arequipa. Distribution mapped in fig. 134.

Remarks.— See *L. aguilaicus*.

Etymology.— Named after the type-locality.

***Lioptilodes rionegroicus* spec. nov.**

(fig. 6, 55, 93, 135)

Material.— Holotype, ♂: Argentina, Rio Negro, San Carlos de Bariloche, Nirihauu, 30.xii.1978 (Mision Cientifica Danesa, Sta. 11), genitalia CG 4144 (ZMUC). Paratypes: 4 ♂♂, Argentina, same locality, 30.xii.1978, 2.i.1979 (Mision Cientifica Danese, Sta. 11), genitalia 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), genitalia 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 spot in the first forewing lobe, the male genitalia and the forked apophyses anteriores in the female genitalia.

Description.— Male and female (fig. 6). Wingspan 18-20 mm. Head appressedly scaled, grey and brown. Frontal tuft absent. Palpae $1.5 \times$ diameter of eye. Third segment short, white; second segment pale brown. Antennae half the wing-length; brown; shortly ciliated. Thorax and tegulae brown with scattered greyish scales. Abdomen brown. Hindlegs grey-brown. Two pairs of spurs of equal length.

Forewing cleft from $\frac{3}{4}$; pale brown. Markings dark brown, consisting of an oblique pair of spots before base of cleft, a discal spot and irregular scaling along costa and less so along dorsum. Costa just beyond base of cleft whitish. A small white section along costa of first lobe before apex. A small white streak in the termen of first lobe. Some dark scales at costa of second lobe, near base of cleft. Second lobe with some longitudinally arranged dark scales. Fringes grey, at the first lobe dark grey. Underside dark brown; the whitish costal marking is also present here.

Hindwings brown. Fringes grey. Underside brown. Androconial scales black, in a double row. The costal row is the longer; it is interrupted halfway for $\frac{1}{3}$ of its length.

Variation.— The intensity of the forewing markings is variable. The colour may be darker brown, as in some specimens from Chubut. The androconial scales vary from ferruginous to black.

Male genitalia (fig. 55).— Valvae elongated, symmetrical. Sacculus gradually narrowing. Tegumen wide. Uncus moderate. Vinculum broad, passing into a pointed saccus of intermediate length. Juxta wide; anellus arms stout. Aedeagus curved; coecum pronounced. Cornuti consisting of regularly arranged minute spiculae in vesicular part.

Female genitalia (fig. 93).— Antrum pentangular, passing into a tubular ductus bursae. Ductus shows a sharp angulation in distal part. The proximal part tortuous,



Fig. 6, *Lioptilodes rionegroicus* spec. nov. Holotype, Argentina, Rio Negro, San Carlos de Bariloche, Nirihuau, 30.xii.1978 (Mis. Sci. Dan., Sta. 11), genitalia CG 4144, coll. ZMUC.

in central part a sclerotized slender, longitudinal plate. Bursa copulatrix vesicular with a pair of horn-like signa. Lamina post-vaginalis with, centrally in abdomen, two blotches beside the antrum, passing laterally into the apophyses anteriores, which are forked. Apophyses posteriores $3.5 \times$ as long as papillae anales.

Ecology.— Collected from October till January. Biology unknown.

Distribution.— Argentina: Chubut, Rio Negro, Neuquen. Distribution mapped in fig. 135.

Remarks.— The species resembles *L. albistriolatus* (Zeller) but is smaller with more slenderly built wings.

Etymology.— Named after the type locality.

***Lioptilodes neuquenicus* spec. nov.**
(figs. 7, 56, 94, 136)

Material.— Holotype, ♂: Argentina, Neuquen, Zapala, El Marucho, 870 m, 26.x.1981 (Gentili, Sta. 34), genitalia CG 4140 (ZMUC). Paratypes: 1 ♂, same locality and date (Gentili), genitalia 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), genitalia 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), genitalia CG 4196 (ZMUC); 2 ♀♀, Chile, Alto Vilches, Cord.

Talca, i.1989 (Elgueta), genitalia CG 1986, 1987 (MNHC); 1 ♂, 1 ♀, Chile, Llanquihue, Petrohue, 600 m, 1.i.1982 (Davis), genitalia CG 6063 (♀) (USNM).

Diagnosis.— The species belongs to the smaller ones. The male genitalia show a small spine laterally placed near the top of the valve.

Description.— Male and female (fig. 7). Wingspan 14-16 mm. Head appressedly scaled grey-brown. Frontal tuft indicated by some erect scales. Palpae $1.5 \times$ as long as diameter of eye. Antennae, $\frac{7}{10}$ of forewing length, shortly ciliated. Thorax brown, the distal margin and tegulae brownish white. Mesothorax brown. Abdomen brown, with scattered brownish-white scales. Legs grey-white. Hindlegs with two spur pairs of equal length.

Forewing's cleft from $\frac{3}{4}$; grey brown. Markings dark brown, consisting of an ill-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 an almost complete darker basal half; in the first lobe some darkening in the cleft and at the apex. Underside brown.

Hindwings and fringes grey-brown. Underside brown. Androconial scales black, in a double row, the costal row short, the dorsal row longer.

Variation.— The androconial scales vary from ferruginous to black. The intensity of the markings is variable.

Male genitalia (fig. 56).— Valvae symmetrical, elongate. Near top of valve a small lateral spine. Sacculus basally wide, cucullus gradually narrowing, giving the valve a more or less hooked appearance. Tegumen stout and wide. Uncus stout. Vinculum rather wide, passing into the pointed saccus of medium length. Juxta arched, wide. Anellus arms just over half the tegumenlength. Aedeagus sharply curved, coecum pronounced. No cornuti.

Female genitalia (fig. 94).— Antrum with a semicircular ending, gradually narrowing towards ductus bursae. Ductus bursae slender. Bursa copulatrix vesicular, with a pair of slender, horn-like signa. Lamina post-vaginalis, centrally with two blotches besides the antrum, turning laterally into the moderately long apophyses anteriores. Apophyses posteriores $3 \times$ as long as papillae anales.

Ecology.— Collected in October-November and January. Biology unknown.

Distribution.— Argentina: Neuquen, Rio Negro, Chubut. Chile: Maule, Llanqui-



Fig. 7, *Lioptilodes neuquenicus* spec. nov. Holotype, Argentina, Neuquen, Zapala, El Marucho, 870 m, 26.x.1981 (Gentili, Sta. 34), genitalia CG 4140, coll. ZMUC.

hue. Distribution mapped in fig. 136.

Remarks.— The species resembles *L. subantarctica*, differing by its size and genital structure. It differs from *L. rionegroica* by the smaller saccus, and the presence of the small lateral spine near the top of valve.

Etymology.— Named after the type locality.

***Lioptilodes aguilaicus* spec. nov.**
(figs. 8, 57, 95, 137)

Material.— Holotype, ♂: Argentina, Neuquen, Piedra del Aguila, 23.xii.1978 (Mision Cientifica Danesa, Sta. 15), genitalia CG 4124 (ZMUC). Paratypes: 1 ♂, 8 ♀♀, same locality, 18.xii.1978, 19.xii.1978, 23.xii.1978 (Mision Cientifica Danesa, Sta. 15), genitalia CG 4125 (♀) (ZMUC, CG); 1 ♀, Argentina, Neuquen, Juan de los Andes, Catan Lil, 825 m, 27.x.1981 (Gentili, Sta. 33), genitalia 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 and female (fig. 8). Wingspan 19-23 mm. Head appressedly scaled, brownish-grey. Frontal tuft very small, just bulging out. Palpae brownish-grey, 1.5 × as long as diameter of eye, underside whitish. Second segment dorsally 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; dorsally with a small, brown line, and at the end of segments 2 to 7 a black-brown spot. Legs brownish-grey.

Forewing's cleft from $\frac{3}{4}$; brown-grey. Markings brown consisting of irregular scaling along costa towards just beyond base of cleft; a costal spot in middle of 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

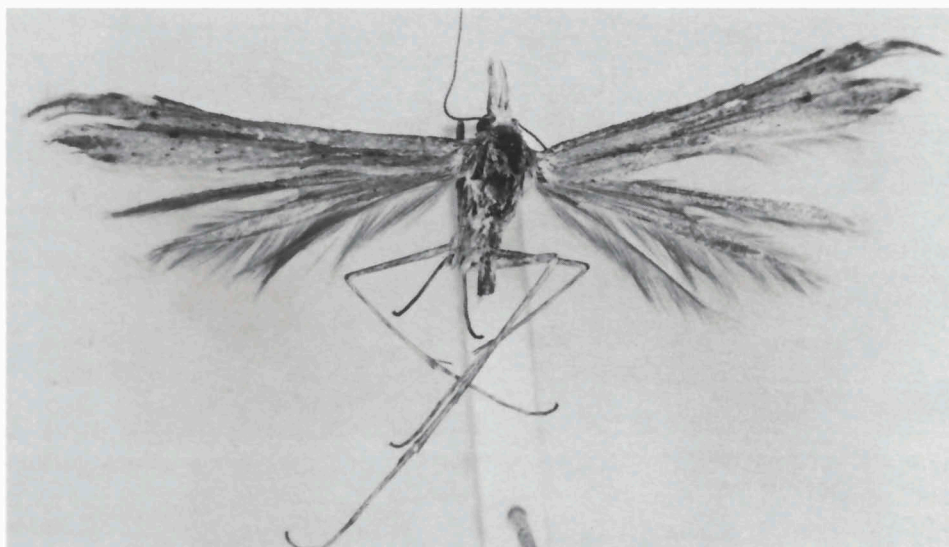


Fig. 8, *Lioptilodes aguilaicus* spec. nov. Paratype, Argentina, Chubut, Esquel, 500 m, 1.i.1981 (Nielsen & Karsholt, Sta. 47), genitalia CG 4123, coll. ZMUC.

paler. In the terminal fringes of the second lobe, in the middle and at the apex, some dark basal scales. Underside grey-brown.

Hindwings and fringes brown-grey. Underside of lobe 1 and 2 grey-brown and of the third lobe white-grey. Androconial 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 (fig. 57).— Valvae symmetrical. Saccus gradually narrowing towards end of valve. Tegumen bilobate, wide. Uncus stout. Vinculum narrow, progressing into a short pointed saccus. Anti-saccus wide and stout. Juxta slender. Anellus arms stout, $\frac{2}{3}$ of tegumenlength. Aedeagus curved; coecum moderate.

Female genitalia (fig. 95).— Antrum $2 \times$ as long as wide. Ostium excavated. Ductus bursae slender, with a small sclerotized plate in 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 $2 \times$ as long as papillae anales.

Ecology.— Collected in October and December. Biology unknown.

Distribution.— Argentina: Neuquen. Distribution mapped in fig. 137.

Remarks.— The species differs from the allied *L. zapalaicus* by the stout anellus arms, the excavated ostium bursae of the antrum, and the more slender saccus.

Etymology.— Named after the locality of the holotype.

***Lioptilodes fetisi* spec. nov.**

(figs. 9, 96, 138)

Material.— Holotype, ♀: Chile, S(an)t(ia)go, Purgatoria Cond., 22.xii.(19)50 (Fétis), genitalia CG 1964 (MZUC).

Diagnosis.— The species is characterized by its cream-white colour.

Description.— Female (fig. 9). Wingspan 21 mm. Head appressedly scaled, with some erected scales at frons; cream-white. Palpae cream-white, $2 \times$ diameter of eye. Antennae absent. Thorax, tegulae and abdomen cream-white.

Forewing's cleft from $\frac{3}{4}$, cream-white. Markings pale brown, consisting of two obliquely placed spots before the base of the cleft and an irregular scaling along the costa. Fringes greyish-white. Underside cream-white, mixed pale ferruginous.

Hindwings cream-white with scattered sparse pale ferruginous scales. Fringes grey-white. Underside as above. Androconial scales brown to ferruginous, in a double row. The costal row longer than the dorsal row.

Male genitalia.— Unknown.

Female genitalia (fig. 96).— Antrum tube-like, $2.5 \times$ as long as wide. Junction with ductus bursae diabolically 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 antrum. The lamina laterally progresses into the small apophyses anteriores. Apophyses posteriores $4 \times$ as long as papillae anales.

Ecology.— The single specimen was collected in December. Biology unknown.

Distribution.— Chile: Santiago. Distribution mapped in fig. 138.



Fig. 9, *Lioptilodes fetisi* spec. nov. Holotype, Chile, Santiago, Purgatoria Cond., 22.xii.1950, Fétis, genitalia CG 1964, coll. MZUC.

Remarks.— The species resembles *O. hololeucos* Zeller, but the venation in the third lobe of the hindwing is different. In *O. hololeucos* small black dots on the apex of the hindwing lobes are present.

Etymology.— The species is named after the collector Mr O. Fétis.

***Lioptilodes alolepidodactylus* spec. nov.**
(figs. 10, 58, 97, 139)

Material.— Holotype, ♂: Argentina, Rio Negro, San Carlos de Bariloche, Nirihuau, 9.xii.1978 (Mision Cientifica Danesa, Sta. 11), (ZMUC). Paratypes: 5 ♂♂, 5 ♀♀, same locality, 9-11.xii.1978 (Mision Cientifica Danesa, Sta. 11). genitalia 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” field in the forewing.

Description.— Male and female (fig. 10). Wingspan 23-25 mm. Head appressedly scaled, ferruginous ochreous. A conical frontal tuft slightly longer than diameter of eye. Palpae erected, parallel to underside of frontal tuft, a little longer than diameter of eye, ochreous. Antennae half as long as forewing, ringed ochreous and ferruginous, shortly ciliated. Thorax and tegulae ferruginous. Abdomen ferruginous. Legs grey-white with isolated, ferruginous scales, more numerous near coxae.

Forewing's cleft from $\frac{5}{6}$; colour ferruginous, with scattered grey-white scales increasing in number toward dorsum. A triangular “naked field” with the top at the discal spot and the basis near base of cleft. In this field grey-white scales and a spot at $\frac{2}{3}$ of the dorsal margin and a smaller one near the angle of costal and terminal

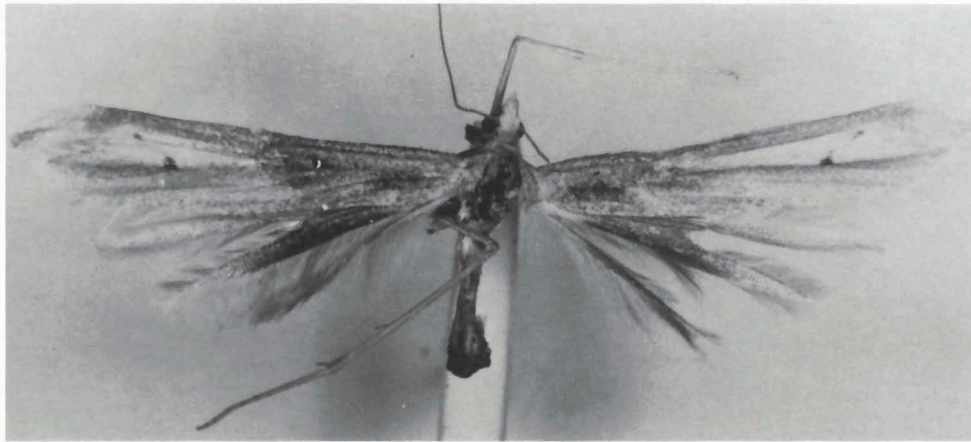


Fig. 10, *Lioptilodes alolepidodactylus* spec. nov. Holotype, Argentina, Rio Negro, San Carlos de Bariloche, Nirihuau, 9.xii.1978 (Mis. Sci. Dan., Sta. 11), coll. ZMUC.

margin. 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. Androconial 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 vary in intensity.

Male genitalia (fig. 58).— Valvae symmetrical. Saccus reaching to $\frac{3}{4}$ of valve length. Tegumen wide. Uncus stout, rather short. Vinculum wide, passing into a slender topped saccus. Saccus is $2 \times$ as long as wide at its basis. Anti-saccus regular. Juxta weakly-developed. Anellus arms little sclerotized, except for their tops. Aedeagus curved, slender. Coecum pronounced (but not extremely as in *L. topali*). No cornutus.

Female genitalia (fig. 97).— Antrum flattened, wide. Ductus bursae long and slender. Bursa copulatrix vesicular, with a pair of horn-like, rather small signa. Lamina post-vaginalis regular, laterally showing small protrusions, representing the apophyses anteriores. Apophyses posteriores $3 \times$ as long as the simple papillae anales.

Ecology.— Collected from October till December. Biology unknown.

Distribution.— Argentina: Neuquen, Rio Negro; Chile: Valdivia. Distribution mapped in fig. 139.

Remarks.— The species differs from the allied *L. testacea* by the paler colour and the naked field in the forewing. In the male genitalia the saccus is shorter and wider. The female genitalia show a pronounced antrum.

Etymology.— The name reflects the presence of the sparsely scaled spot in the forewings.

***Lioptilodes testaceus* (Blanchard, 1852) comb. nov.**
(figs. 11, 59, 98, 140)

Pterophorus testacea Blanchard, 1852: 112.

Utuca testacea; Meyrick, 1931: 31.

Material.— Holotype: Chile, probably Santiago (MNHN), [probably lost]. Chile: Santiago - 1 ♂, 2 ♀♀, Tobalaba, 9.vii.1948, 25.x.1951, 28.xii.1946 (Ramir), genitalia CG 1926, 1927 (MZUC, CG); 1 ♀, La Obra, 25.x.(19)51 (Ramir) (MZUC). Concepcion— 1 ♂, Concepcion, 29.iii.1974 (Benoit) (MZUC). Coquimbo— 4 ♀♀, Fray Jorge Nat. Pk., ca. 70 km W. Ovalle, 6-9.xi.1981 (Davis) (USNM); 1 ♀, Nague, 11 km N. Los Vilos, 20 m, 4-5.xi.1981 (Davis) (USNM).

Diagnosis.— The species is characterized by its reddish ferruginous colour and the protruding frontal tuft.

Redescription.— Male and female (fig. 11). Wingspan 20-23 mm. Head appressedly scaled, ferruginous. Vertex paler coloured. A prominent frontal conical brush, 3 × as long as eye diameter. Palpae slender, ferruginous, 2 × as long as diameter of eye. Thorax and abdomen pale ferruginous. Tegulae pale ochreous. Legs pale ochreous.

Forewing's cleft from $\frac{4}{5}$. Second lobe 3 × as wide as first lobe. Colour ferruginous. A brown discal spot. Fringes in second lobe ochreous-white with a ferruginous basal section, and brown in the first lobe. Underside reddish ferruginous.

Hindwings reddish ferruginous. Fringes ochreous white. Underside reddish ferruginous. Androconial scales black, in a double row, the costal one longer than the dorsal one.

Variation.— The discal spot is not developed in any of the specimens.

Male genitalia (fig. 59).— Valvae symmetrical. Saccus well-developed, not interrupted, gradually narrowing towards distal end of valve and passing 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 (fig. 98).— 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 into a narrow sclerotized ridge, which is angulated at the margin of the seventh sternite, and here passing into the apophyses anteriores. Papillae anales simple. Apophyses posteriores three to four

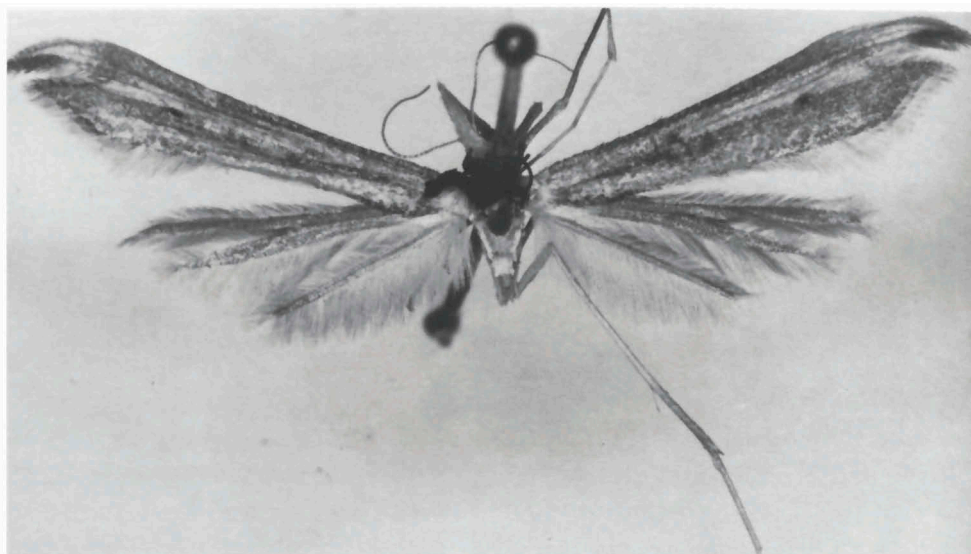


Fig. 11, *Lioptilodes testaceus* (Blanchard). Chile, Tobalaba, 9.vii.1927, genitalia CG 1927, coll. MZUC.

times as long as papillae anales.

Ecology.— Collected in July, and from October till December. Biology unknown.

Distribution.— Chile: Coquimbo, Santiago, Tobalaba. Distribution mapped in fig. 140.

Remarks.— The colour illustration accompanying the original description, and the illustration of the frontal tuft of the head characterize this species very well. The type could not be traced in the Paris Museum. Because of its good description and the presence of the material, mentioned above, originating from the supposed type locality, it is justified to present a redescription of the species.

***Lioptilodes topali* spec. nov.**
(figs. 12, 60, 99, 141)

Material.— Holotype, ♂: Argentina, Neuquen, Alumine, SE of Lago Alumino, 1100 m, 16.iii.1979 (Mision Cientifica Danese, Sta. 59), genitalia CG 4118 (ZMUC). Paratypes: 1 ♀, data as holotype (ZMUC); 2 ♂♂, Argentina, Neuquen, San Martin de los Andes, Quilquihue, 750 m, 25-26.xi.1981 (Gentili, Sta. 32), genitalia CG 4121 (ZMUC); 1 ♂, 2 ♀♀, Argentina, Rio Negro, El Bolson, Pampa Azcona, at light, 17.iii.1961, 3.v. 1961 (Topal), genitalia CG 4114, 5115 (♀) (ZMUC, CG).

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

Description.— Male and female (fig. 12). Wingspan 29-32 mm. Head appressedly scaled, grey-white. Frons with small conical protrusion, approximately half the eye diameter. Palpae porrect, slightly longer than diameter of eye. Antennae $\frac{3}{4}$ of wing length, shortly ciliated. Basal segments ferruginous white. Thorax and tegulae ochreous white. Abdomen grey-brown; a small group of black scales centrally at the distal margin of tergal segments 1, 2 and 3. Laterally the abdomen shows a grey-brown line, margined grey-white dorsally and ventrally. A group of black scales in the grey-brown line at the distal end of the segments 1 to 6. Legs grey-brown. Hindlegs with two pairs of spurs of equal length.

Forewing's cleft from $\frac{5}{6}$. First lobe acute. Second lobe with convex termen, $3 \times$ as wide as first lobe. Colour grey-white. Markings consisting of double spot near base of cleft; costal one more terminally placed; between the spots an ill-defined line. Along costa and dorsum a small margin with irregularly distributed ferruginous scales. Fringes white; grey in the cleft and some pronounced black scales at the anal angle of the second lobe. Underside brown; first lobe ochreous white.

Hindwings of first and second lobe grey-brown; third lobe grey-white, darkening at apex. Along dorsum of third lobe some isolated dark scales. Fringes basally grey-white, terminally grey. Underside of first and second lobe brown, third lobe grey-white. Androconial scales ferruginous, in a double row, and margined costally and dorsally by a pronounced row of dark brown scales.

Variation.— The intensity of the brown forewing scaling is variable.

Male genitalia (fig. 60).— Valvae symmetrical. Saccus simple. Tegumen large. Uncus stout. Vinculum enlarged, centrally pointed. 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 spine. Aedeagus slightly curved. Coecum pronounced. Vesica with spiculated surface.

Female genitalia (fig. 99).— Antrum $2 \times$ as long as wide, gradually passing into



Fig. 12, *Lioptilodes topali* spec. nov. Paratype, Argentina, Rio Negro, El Bolson, Pampa Azcona, 5.v.1961 (Topal), coll. ZMUC.

ductus bursae. Ductus bursae with 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 $2.5 \times$ as long as the simple papillae anales.

Ecology.— Collected in March, May and November. Biology unknown.

Distribution.— Argentina: Neuquen, Rio Negro. Distribution mapped in fig. 141.

Remarks.— The species strongly resembles *L. prometopa* Meyrick, but differs in its bigger size and the short frontal scale tuft. In the genitalia of the male there is considerable difference in the saccus, juxta and anellus arms. The slender aedeagus in *L. prometopa* is obvious.

Etymology.— The species is named after Mr Gy. Topal, to express my appreciation for the results of his valuable collecting in Patagonia.

***Lioptilodes tribonius* (Meyrick, 1921) comb. nov.**
(figs. 13, 61, 100, 142)

Stenoptilia tribonia Meyrick, 1921: 423.

Material.— Lectotype, ♂ (designated here): Peru, Matucana, 7780 ft., vii.(19)14 (P(arish)), genitalia BM 18441 (BMNH). Paralectotypes (designated here): 3 ♀♀, 1 without abdomen, same locality and date, genitalia BM 18442 (BMNH). 2 ♂♂, Peru, Lima, 12 km SE Choisica Zárate, 2200-2600 m, 23-25.i.1987 (Karsholt, Sta. 3), genitalia CG 4190, 4194 (ZMUC, CG).

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

Redescription.— Male and female (fig. 13). Wingspan 15-16 mm. Head appressedly scaled, ferruginous; a small frontal protrusion, $0.5 \times$ the eye diameter. Palpae

ferruginous, $2 \times$ diameter of eye; 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.

Forewing's cleft from $\frac{3}{4}$; colour ferruginous with scattered ochreous scales. An indistinct brown discal spot, an oblique spot before the base of the cleft and darkening at the apex of both lobes. At 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. Androconial scales orange-ferruginous, in a double row.

Variation.— The brown scaling of the spots is in some specimens extended into the outer field of the second lobe and around the base of the cleft.

Male genitalia (fig. 61).— Valvae symmetrical. Basal $\frac{2}{3}$ trapezoid and narrowing at $\frac{2}{3}$; the top $\frac{1}{3}$ club-like. Tegumen bilobated; uncus of moderate size, pointed. Vinculum arched with a slender, pronounced saccus, of $\frac{1}{3}$ of the valve's length. Anti-saccus stout, gradually narrowing. Anellus arms slender, almost as long as tegumen. Aedeagus arched, slender, with slender sclerotized margin. Coecum pronounced.

Female genitalia (fig. 100).— 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 diameter of papillae analis.

Ecology.— Collected in January and July. Biology unknown.

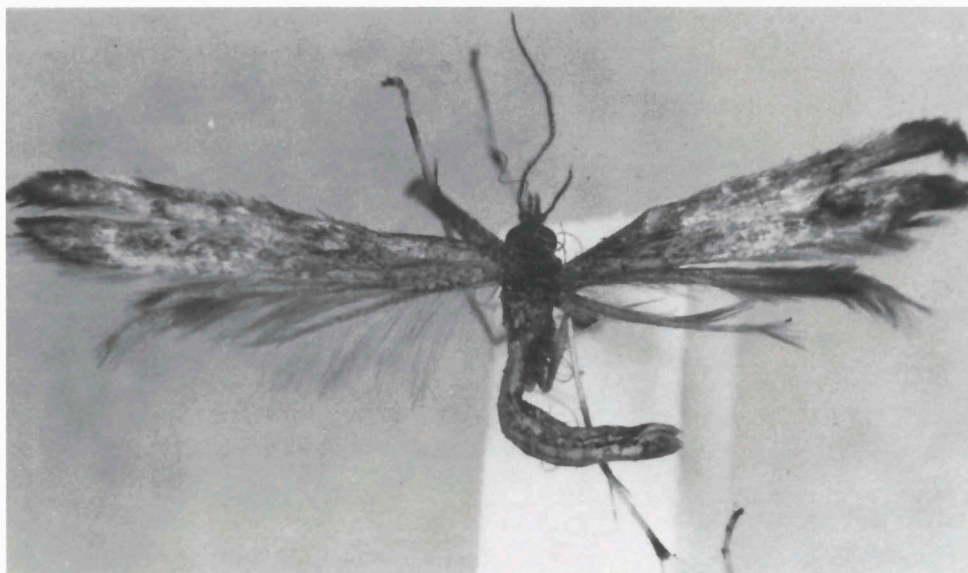


Fig. 13, *Lioptilodes tribonius* (Meyrick). Lectotype, Peru, Matucana, 7780 ft., vii.(19)14 (Parish), genitalia BM 18441, coll. BMNH.

Distribution.— Chile: Llai Llai; Peru: Lima, Matucana. Distribution mapped in fig. 142.

Remarks.— This species seems to be restricted to altitudes above 2200 meters. The mentioning of the species by Meyrick (1931) from Llai Llai, Chile needs confirmation.

***Lioptilodes antarcticus* (Staudinger, 1899) comb. nov.**
(figs. 14, 62, 101, 143)

Mimaesoptilus antarcticus Staudinger, 1899: 114; Enderlein, 1912: 92.

Stenoptilia antarctica; Meyrick, 1913: 29.

Material.— Type, ♂ (in litt.): probably lost (ZMHB). **Argentina:** Santa Cruz— 1 ♂, Lago Argentina, Peninsula Magellanes, 11.i.1979 (Mision Cientifica Danesa, sta. 28), genitalia CG 4122 (ZMUC). **Chile:** Nuble— 3 ♂♂, 6 ♀♀, Shangri-la, SW. side Volcan Chillan, 1600 m, 19-21.i.1979 (Davis & Akerbergs), genitalia CG 6070 (USNM); Santiago— 1 ♀, El Portezuelo, Colina, 23.v.(19)81 (Peña), genitalia CG 6071 (USNM); 1 ♂, 1 ♀, Tobalaba, 29.x.1949, 1.i.1948, genitalia CG 1962 (♀) (MZUC); 1 ♂, Santiago, 12.xi.1950 (MZUC); 1 ♂, Buice, 7.iii.1943 (MZUC); Huasco— 1 ♀, Corral bajo, 27.xi.1987 (Barriga), genitalia CG 6100, ex *Adesmia* spec. (MZUC).

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 and female (fig. 14). Wingspan 20-21 mm. Head appressedly scaled, grey. A frontal conical tuft, 0.5 × of diameter of eye. Palpae porrect, 2 × as long as diameter of eye. Antennae 0.4 × of forewing length. Thorax and tegulae grey; distal margins grey-white. Abdomen grey; first segment dorsally grey-white. Legs grey.

Forewing's cleft from $\frac{5}{6}$; colour grey. Markings grey-black, consisting of a small basal line, a discal point, and two spots at the base of the cleft which are separate. The dorsal spot has an extension, forming a small line, towards the base. Next to these markings ill-defined black scale groups at the dorsum, the costa of the first and second lobe and at the costa near the base of the cleft. There are isolated grey-white scales, with predominance at 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. Androconial scales ferruginous, in a double row, the costal row half as long as the dorsal row.

Variation.— Not observed in the limited material.

Male genitalia (fig. 62).— Valvae symmetrical. Saccus centrally indented; slightly longer than cucullus. Tegumen almost triangular. Uncus slender, long. Vinculum cleft, passing into 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 (fig. 101).— Antrum club-like enlarged, almost reaching the margin of the eighth sternite, 2.5 × as long as wide. Ductus bursae slender, twisted once. In centre a small sclerotized plate. 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 3 × as long as the papillae anales.



Fig. 14, *Lioptilodes antarcticus* (Staudinger). Chile, Tobalaba, 29.x.1949, coll. MZUC.

Ecology.— Collected in May, October, December and January. The moth was bred from *Adesmia* spec.

Distribution.— Argentina: Tierra del Fuego, Santa Cruz. Chile: Nuble, Santiago. Distribution mapped in fig. 143.

Remarks.— The type of this species was reported lost by Prof. Dr H.-J. Hanne-
mann (in litt., 1988). The description by O. Staudinger, who knew the European species of *Stenoptilia* well, is very accurate. By his comparing the species with the European *Stenoptilia pelidnodactyla* Stein, he made it possible to redescribe and illustrate the species.

Genus *Lantanophaga* Zimmerman, 1958

Lantanophaga Zimmerman, 1958: 400. Type species (by original designation): *Oxyptilus pusillidactylus* Walker, 1864: 933.

Redescription.— Forewings with costal triangle. Forewing vein R1 present. A dorsal, subterminally placed scale-tooth on third lobe of hindwing.

Male genitalia.— Valvae symmetrical, top shaped like a bird-head. Sacculus bilobed. Vinculum with long and slender, forked saccus. Tegumen simple. Uncus slender.

Female genitalia.— As in the genus *Platyptilia*, but in the ductus bursae a sclerotized segment. Signum double, horn-like or SS-like.

Key to the species

1. Subterminal field in first forewing lobe orange *L. nielseni* Gielis
- Subterminal field in first forewing lobe grey-brown *L. aestuosa* (Meyrick)

Key based on male genitalia

1. Anellus arms stout and short *L. nielseni* Gielis
- Anellus arms long and slender *L. aestuosa* (Meyrick)

Key based on female genitalia

1. Lamina ante-vaginalis reaching beyond the ostium *L. nielseni* Gielis
- Lamina ante-vaginalis laterally passing into the ostium *L. aestuosa* (Meyrick)

***Lantanophaga nielseni* spec. nov.**

(figs. 15, 63, 102, 144)

Material.— Holotype, ♂: Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 27.xii.1981 (Nielsen & Karsholt, Sta. 9), genitalia 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), genitalia 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 field in the first lobe of the forewing, and its genital structure.

Description.— Male and female (fig. 15). Wingspan 16-18 mm. Head appressedly scaled, dark brown. Palpae porrect, with pronounced second segment, dark brown; on 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 segment 1 and 2 ochreous. Underside with isolated white scales. Legs grey-brown; spurs of hind tibiae of equal length, grey-brown and dark tipped.

Forewing's cleft from $\frac{3}{4}$, dark brown; colour towards termen gradually darkening, up to the transverse grey-yellow line beyond the middle of the cleft, present in both forewing lobes. In first lobe, the terminal field between the transverse line and the termen ferruginous-brown; in the second lobe more with scattered dark brown scales. Terminal fringes grey, with basal line of black scales. This line continues along the dorsal margin to a little before the transverse line. An indistinct scale tooth half way the dorsal margin and between this scale tooth and the wing base isolated dark scales in the fringes. Underside dark brown, with 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. Androconial scales ferruginous, in a double row from base of cleft between second and third lobe, to $\frac{3}{4}$ of the second lobe. The costal row interrupted in the upper $\frac{3}{4}$.

Variation.— The intensity of the colour is variable and may be very dark.

Male genitalia (fig. 63).— Valvae symmetrical. Sacculus interrupted in middle. Basal saccular half wide, densely haired. Cucullus slightly longer than sacculus. Tegumen arched. Uncus slender, rather short. Vinculum broad, passing into a basally swollen saccus; saccus narrowing distally and ending bidentated. Anellus arms half as long as tegumen, ending in a small triangular, haired plate. Aedeagus slender and curved. Cornutus weakly-developed.

Female genitalia (fig. 102).— Antrum bursae $2 \times$ as long as wide, laterally ending; margin of the seventh sternite curved and more distally placed than end of the antrum. Ductus bursae slender, containing a long sclerotized ridge over two-third of its length. Bursa copulatrix with a double horn-like signum. Apophyses posteriores $2 \times$ as long as papillae anales. Apophyses anteriores short, well-developed.

Ecology.— Collected from December till February. Biology unknown.

Distribution.— Argentina: Chubut, Rio Negro. Distribution mapped in fig. 144.

Remarks.— The species differs from *L. aestuosa* by the orange tip of the first lobe of the forewing, the short and stout anellus arms, the stout saccus in the male genitalia and the different shape of the lamina ante-vaginalis in the female genitalia.

Etymology.— Named after one of the collectors, Mr E. Nielsen.

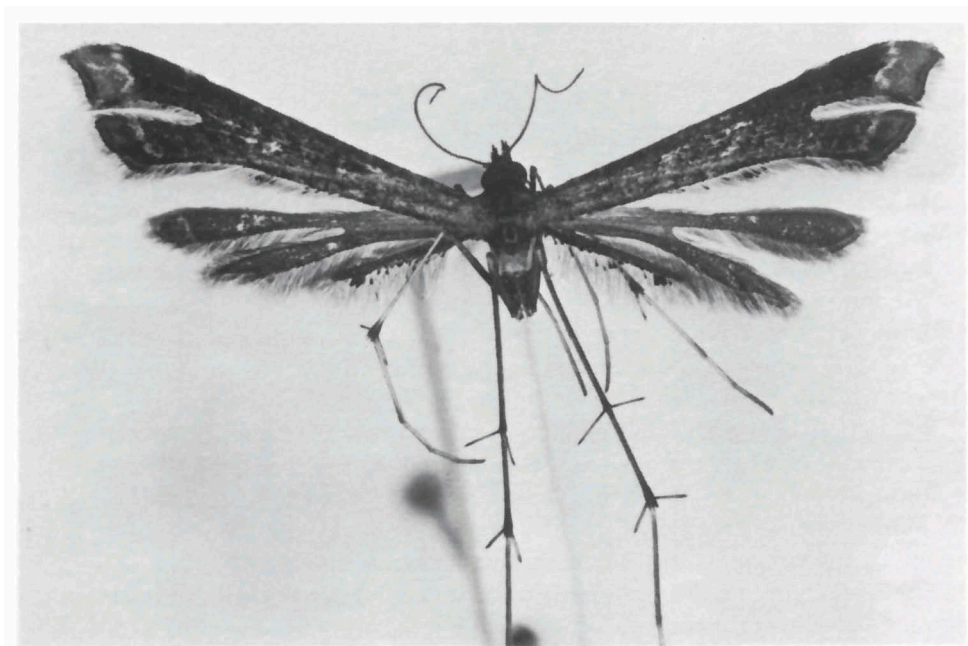


Fig. 15, *Lantanophaga nielseni* spec. nov. Holotype, Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 27.xii.1981 (Nielsen & Karsholt, Sta. 9), genitalia CG 4096, coll. ZMUC.

***Lantanophaga aestuosa* (Meyrick, 1916) comb. nov.**
(figs. 16, 64, 103, 145)

Platyptilia aestuosa Meyrick, 1916: 558.

Material.— Lectotype, ♂ (designated here): Peru, Lima, 500 ft., viii.(19)14 (Parish), genitalia BM 18196 (BMNH). Paralectotypes (designated here): 2 ♂♂, 5 ♀♀, 2 without abdomen, same locality and date (BMNH). Chile: Nuble 1 ♂, Piedra de la Iglesia, 8 km N. Cobquecura, 5 m, 25.i.1979 (Davis & Akerbergs), genitalia CG 6086 (USNM). Ecuador: 1 ♀, Guachayacu, ix-x.1926 (Vorbeck), genitalia CG 4093 (ZMUC).

Diagnosis.— The species is characterized by its dark colour and the white sub-terminal line in the forewings. The genitalia are characteristic.

Redescription.— Male and female (fig. 16). Wingspan 17-21 mm. Head appressedly scaled, grey-brown. Palpae protruded, grey-brown, 2 × diameter of eye. Antennae ringed dark-brown and white. Thorax grey-brown. Abdomen dark grey-brown, laterally with scattered grey-brown scales. First segment on upperside cream-white. Legs grey-brown; spurs of hindlegs cream-white, distally brown.

Forewing's cleft from $\frac{4}{5}$, 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 field 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, in both lobes a transverse yellow-white line.

Hindwing grey-brown. Third lobe with scattered prominent dark-brown scales.

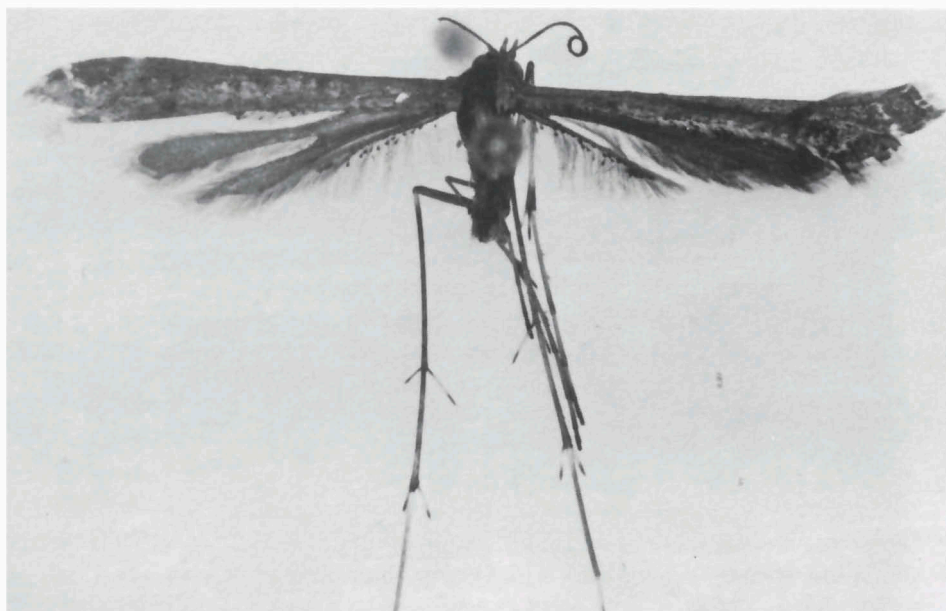


Fig. 16, *Lantanophaga aestuosa* (Meyrick). Chile, Nuble, Piedra de la Iglesia, 8 km N. Cobquecura, 5 m, 24.i.1979 (Davis & Akerbergs), genitalia CG 6086, coll. USNM.

Fringes grey. Along the dorsum of the third lobe a subterminal scale tooth, and between this scale tooth and the wingbase isolated dark scales. Underside grey-brown. Androconial scales dark ferruginous brown, in a double row, the costal row longer than the dorsal one.

Variation.— Not noticeable in the limited material available.

Male genitalia (fig. 64).— Valvae symmetrical, lanceolate. The sacculus is divided in a wider basal $\frac{1}{3}$ and a narrower distal $\frac{2}{3}$. Tegumen not lobated, with a short, slender uncus. Vinculum wide, passing into a gradually narrowing, double-tipped saccus. Antisaccus slender. Aedeagus slender, little curved; coecum small. No cornuti.

Female genitalia (fig. 103).— Antrum funnel-like, laterally ending at the margin of the seventh sternite. Ductus bursae curved towards centre of abdomen, rather slender, twisted once. Bursa copulatrix vesicular, with a pair of very small, horn-like signa, which pass into a sclerotized field which is arched. Lamina ante-vaginalis well-developed; lamina post-vaginalis not so. Apophyses posteriores $2 \times$ as long as papillae analis. The proximal margin of the eighth sternite with two slender apophyses anteriores, which are almost as long as papillae anales.

Ecology.— Collected from August till October. Biology unknown.

Distribution.— Chile: Nuble; Ecuador: Guachayacu; Peru: Lima. Distribution mapped in fig. 145.

Remarks.— See *L. nielsenii*.

Genus *Platyptilia* Huebner, 1825

Platyptilia Huebner, [1825]: 429. Type species (designated by Tutt, 1905): *Alucita gonodactyla* Denis & Schiffermueller, 1775: 429.

Redescription.— Forewings, in most species, with a well-developed costal triangle. Forewing vein R1 present. Third lobe of hindwing with a centrally placed scale-tooth.

Male genitalia.— Valvae symmetrical, lanceolate; top rounded. Sacculus not lobated. Uncus of moderate size, rather slender. Saccus in shape of a pentangular sclerotized plate.

Female genitalia.— Antrum of a tubular sclerotized segment of variable length, ending centrally at the distal margin of the seventh sternite. Ductus bursae without a sclerotized segment. Lamina ante-vaginalis with two blotches beside the ostium or distal antrum, laterally passing into the apophyses anteriores. Signum double, horn-like.

Key to the species

1. Forewing with costal triangle, or indication of this *P. davisi* spec. nov.
- Forewing with only some dark scales before the base of the cleft
..... *P. gentiliae* spec. nov.

Remark.— Of *P. gentiliae* only the male, and of *P. davisi* only the female is known, so that no keys based on genitalia can be provided.

***Platyptilia gentiliae* spec. nov.**
(figs. 17, 65, 146)

Material.— Holotype, ♂: Argentina, Neuquen, Junin de Los Andes, Catán, 825 m, 20.x.1981 (Gentili, Sta. 33), genitalia CG 4092 (ZMUC). Paratype ♂: Chile, Nuble, Shangri-la, SW. side Volcan Chillan, 1600 m, 19-21.i.1979 (Davis & Akerbergs), genitalia CG 6053 (USNM).

Diagnosis.— The species is characterized by its greyish brown colour and the almost absent markings.

Description.— Male (fig. 17). Wingspan 17 mm. Head appressedly scaled, grey-brown. Palpae protruding, rather slender, grey. Antennae dark brown, shortly ciliated. Thorax and abdomen grey-brown; abdomen laterally ochreous brown in segments 1-3. Legs ferruginous brown. Proximal pair of spurs in hindlegs of unequal length, the lateral $\frac{2}{3}$ of the inner, distal pair equal.

Forewing's cleft from $\frac{3}{4}$, grey-brown, gradually changing to ochreous brown terminally. A vague impression of the triangular spot before the base of the cleft, near the base of the cleft with a small longitudinal dark line, some dark scales along the costa and an weakly-defined spot at the costa in the middle of the first lobe. Between this spot and the termen an almost white field, extending into the subterminal area of the second lobe. Fringes grey, with dark scales at both anal angles of the lobes. Along the dorsal margin two scale teeth: at $\frac{2}{3}$ and $\frac{3}{4}$. Underside grey-brown; first lobe ochreous and subterminal fields 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 an ill-defined scale

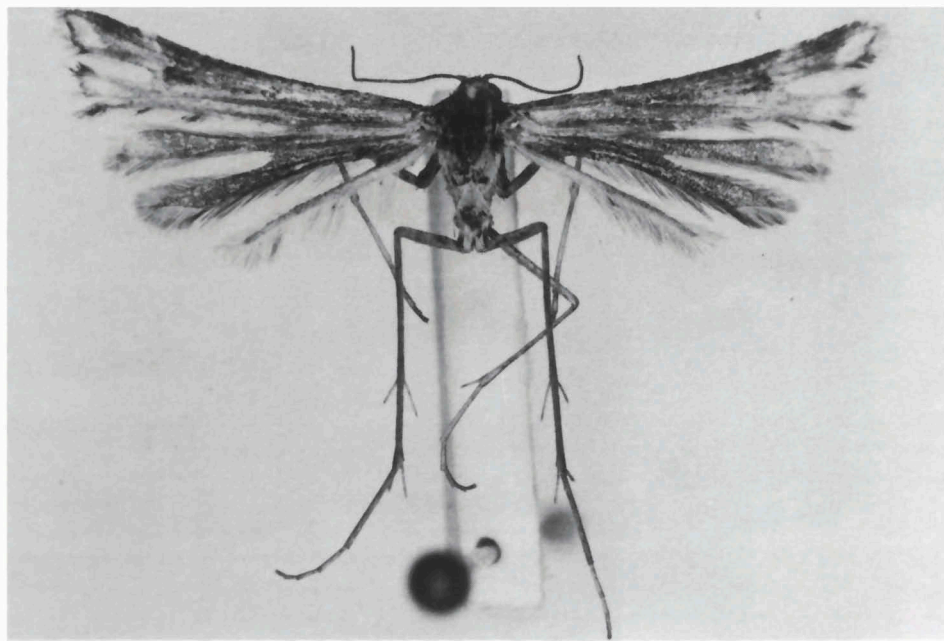


Fig. 17, *Platyptilia gentiliae* spec. nov. Holotype, Argentina, Neuquen, Junin de los Andes, Catan, 825 m, 20.x.1981 (Gentili, Sta. 33), genitalia CG 4092, coll. ZMUC.

tooth at $1\frac{1}{2}$. Underside grey-brown. Androconial scales black, in two rows between clefts of lobes, the costal row shorter than the dorsal one.

Male genitalia (fig. 65).— Symmetrical, gradually narrowing. Saccus undivided. Tegumen bilobated. Uncus stout. Vinculum normal, saccus little pronounced, bidentated. Anellus arms half as long as tegumen; the basal half rather wide, divided into a slender longer segment and a short spine. Aedeagus curved.

Female genitalia.— Unknown.

Ecology.— Collected in October and January. Biology unknown.

Distribution.— Argentina: Neuquen; Chile: Nuble. Distribution mapped in fig. 146.

Remarks.— The species resembles the Palaearctic *P. tesseradactyla* Zeller, but differs by the line before the base of the cleft, longitudinal in *P. gentiliae* and transverse in *P. tesseradactyla*. The Nearctic *P. albicans* Fish is more distinctly marked.

Etymology.— The new species is named after Mrs M.O. Gentili.

Platyptilia davisi spec. nov.

(figs. 18, 104, 147)

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, genitalia 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 (fig. 18). Wing length 22 mm. Head appressedly scaled, pale ochreous-grey. Frons with small conical protrusion, almost as long as diameter of eye. Palpae grey-white, length $1.5 \times$ diameter of eye. Third segment as long as second segment, and more brownish. Antennae $0.5 \times$ the wing length, ringed grey-white and grey-brown; shortly ciliated. Thorax and tegulae pale ochreous grey. Mesothorax and legs grey-white. Hindlegs with two pairs of spurs, the proximal pair longer than the distal pair.

Forewing's cleft from $\frac{4}{5}$, white-grey. Along the costa dark brown scales, from the base towards the costal triangle, in a gradually widening row. A faint transverse marking centrally in first and second lobe. Before apex of first lobe, at the costa, two small dark brown dashes. Fringes grey. First lobe with a row of dark brown scales at the base of the fringes, near the apex narrow but gradually widening towards the anal angle. Second lobe with a small group of black fringe hairs near the apex, along the outer margin brown scales in weakly-defined groups. At the dorsum of the wing dark brown scale-teeth at $\frac{3}{4}$ and $\frac{4}{5}$. Underside dark brown. The first lobe gradually turning paler; a subterminal grey-white dash in both lobes.

Hindwings brown-grey; third lobe grey-white. Fringes grey. At dorsum of third lobe a central scale-tooth, between the base and this scale-tooth isolated brown scales. Underside as above, with a small dash subterminally in the first lobe, as an extension of those seen on the forewing. Androconial scales dark brown, in a double row, the costal row longer, but halfway interrupted.

Variation.— The markings on the forewings is variable in the intensity of the two

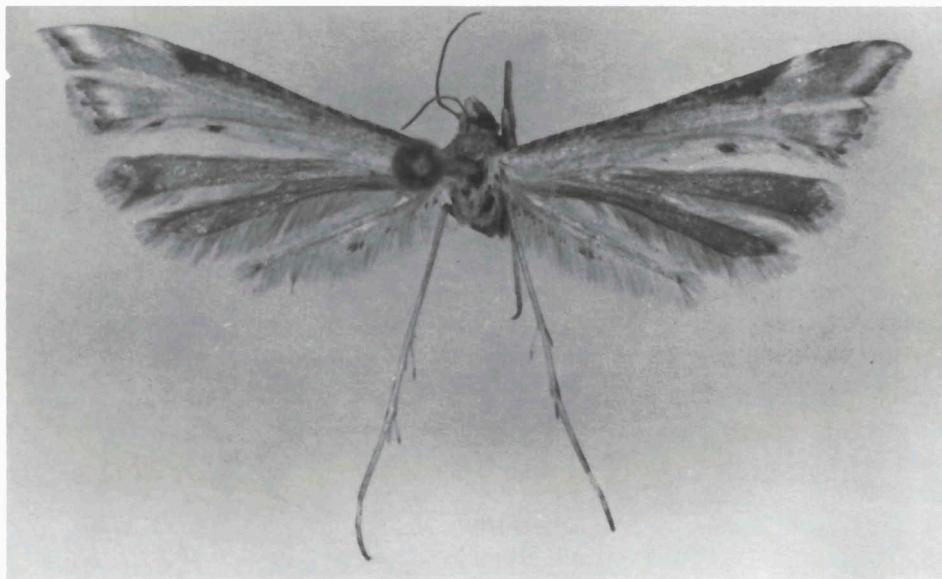


Fig. 18, *Platyptilia davisi* spec. nov. Holotype, Chile, Nuble, Shangri-la, SW side volcan Chillan, 1600 m, 19-21.i.1979 (Davis & Akerbergs), genitalia CG 6051, coll. USNM.

known specimens.

Male genitalia.— Unknown

Female genitalia (fig. 104).— Antrum gradually narrowing towards bursa copulatrix; 5 × as long as 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 a field of small spiculae. Lamina ante-vaginalis centrally with two blotches beside the antrum, laterally passing into the very short apophyses anteriores. Apophyses posteriores 3 × as long as papillae anales.

Ecology.— Collected in January. Biology unknown.

Distribution.— Chile: Nuble. Distribution mapped in fig. 147.

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

Etymology.— This new species is named after Mr D.R. Davis.

Genus *Postplatyptilia* nov.

Type species: *Platyptilia camptosphenia* Meyrick, 1931: 379.

Diagnosis.— The genus shows the constant character in the male genital structure of a valve overriding the sacculus. This differentiates from *Platyptilia* Huebner, where the valve-top and the end of the sacculus fuse. In the genera complex of *Stenoptilia* Huebner, *Stenoptilodes* Zimmerman, *Paraplatyptilia* Bigot & Picard and *Lantanophaga* Zimmerman the sacculus is bilobated, combined with a complex shape of the terminal half of the sacculus. The genus *Amblyptilia* Huebner differs in the

shape of the saccus, and the top of the valve, which always has more or less the shape of a bird-head.

Description.— On the forewing generally a costal triangle. At the dorsum of the hindwing a scale-tooth, sometimes very indistinct, located from $\frac{2}{3}$ to subapical.

Male genitalia.— Valvae symmetrical, longer than sacculus. Sacculus bilobated or not so. Distal part of lobes of bilobated sacculus simple. Tegumen bilobated. Uncus variable. Saccus pronouncedly spine-like.

Female genitalia.— Antrum ending at the sometimes very pronouncedly well-developed lamina ante-vaginalis, which laterally passes into the apophyses anteriores. Bursa copulatrix with a pair of horn-like signa, which may be small.

Remarks.— Pastrana (1989) described *Stenoptilia genisei* from Cordoba, Argentina. I have not examined this species, but the illustration of the male genitalia shows it to belong in the present genus. The female genitalia are poorly illustrated and do not add information on the generic position.

Key to the species

1. Basal segment of antennae rosa-red *P. pusilla* (Philippi)
- Basal segment of antennae grey or brown 2
2. Costa of first forewing lobe with four spots *P. paraglyptis* (Meyrick)
- Costa of first forewing lobe with fewer than four spots 3
3. Forewings brownish ochreous to pale ferruginous 4
- Forewings grey-brown to grey 5
4. Costal triangle well-developed *P. camptosphenia* (Meyrick)
- Costal triangle weakly-developed *P. naranja* spec. nov.
5. Forewing without a subterminal line *P. nubleica* spec. nov.
- Forewing with a subterminal transverse line 6
6. A spot in centre of discal cell *P. talcaica* spec. nov.
- Without a spot in centre of discal cell 7
7. Costa of first forewing lobe with large spot 8
- Costa of first forewing lobe without large spot 9
8. Terminal margin of costal triangle on forewing angulate *P. eelkoi* spec. nov.
- Terminal margin of costal triangle straight *P. biobioica* spec. nov.
9. In first forewing lobe a black-brown spine-like spot, base at subterminal line, and pointing towards wing base 10
- First forewing lobe without such a spot 11
10. Subterminal forewing line and costal triangle weakly-developed *P. fuscicornis* (Zeller)
- Subterminal forewing line well-developed, and costal triangle moderately *P. flinti* spec. nov.
11. Subterminal line straight, weakly-developed; costal triangle before base of cleft .. *P. alexisi* spec. nov.
- Subterminal line waved, well-developed; costal triangle weakly-developed and not before base of cleft *P. akerbergi* spec. nov.

Key based on male genitalia

Unknown are the male genitalia of *P. naranja* spec. nov., *P. biobioica* spec. nov., *P. akerbergi* spec. nov., *P. talcaica* spec. nov., *P. flinti* spec. nov., *P. paraglyptis* (Meyrick) and *P. pusilla* (Philippi).

1. Cucullus distinctly longer than sacculus 2
- Cucullus about as long as sacculus 3
2. Aedeagus slender (fig. 66) *P. camptosphena* (Meyrick)
- Aedeagus stout and wide (fig. 68) *P. fuscicornis* (Zeller)
3. Uncus short (fig. 67) *P. eelkoi* spec. nov.
- Uncus long 4
4. Aedeagus long; saccus as a short spine (fig. 70) *P. alexisi* spec. nov.
- Aedeagus rather short; saccus as a gradually narrowing spine (fig. 69).....
- *P. nubleica* spec. nov.

Key based on female genitalia

Unknown are the female genitalia of *P. nubleica* spec. nov., *P. paraglyptis* (Meyrick) and *P. pusilla* (Philippi).

1. Ductus bursae with numerous twists 2
- Ductus bursae with one or no twists 3
2. Central sclerotized plate beside ostium narrow and laterally extended (fig. 106) ..
- *P. eelkoi* spec. nov.
- Central plate wide and centrally positioned (fig. 105)
- *P. camptosphena* (Meyrick)
3. Lamina post-vaginalis centrally forming two blotches posterior to the ostium (fig. 107)..... *P. naranja* spec. nov.-
- Lamina post-vaginalis not developed as such 4
4. Lamina ante-vaginalis (semi)-circular or around ostium (fig. 108)
- *P. fuscicornis* (Zeller)
- Lamina ante-vaginalis not (semi)-circular 5
5. Lamina ante-vaginalis almost straight along ostium 6
- Lamina ante-vaginalis curved posteriorly 7
6. Antrum almost rectangular (fig. 109) *P. alexisi* spec. nov.
- Antrum more than 2 × as long as wide (fig. 111) *P. biobioica* spec. nov.
7. Lamina ante-vaginalis laterally with pronounced posteriorly pointed, processes (fig. 113) *P. flinti* spec. nov.
- Lamina ante-vaginalis without such processes 8
8. Lamina ante-vaginalis centrally deeply excavated (fig. 112) *P. talcaica* spec. nov.
- Lamina ante-vaginalis almost flat-topped (fig. 110) *P. akerbergi* spec. nov.

***Platypatylia camptosphena* (Meyrick, 1931) comb. nov.**

(figs. 19, 66, 105, 148)

Platypatylia camptosphena Meyrick, 1931: 379.

Material.— Holotype, ♂: Chile, Llai-Llai, 1.i.1927 (Edwards), genitalia BM 18193 (BMNH). **Argentina:**

Material.— Holotype, ♂: Chile, Llai-Llai, 1.i.1927 (Edwards), genitalia BM 18193 (BMNH). **Argentina:** Chubut— 1 ♂, Tecka, Corcovado, 750 m, 17.ii.1979 (Mision Cientifica Danesa, Sta. 47) (ZMUC). Rio Negro— 19 ♂♂, 18 ♀♀, San Carlos de Bariloche, Colonia Suiza, 800-810 m, 5.xi.1978, 13.xi.1978, 24.xi.1981, 2.xii.1981, 3.xii.1981, 4.xii.1981, 7.xii.1978, 7.xii.1981, 8.xii.1981, 9.xii.1978, 10.xii.1978, 11.xii.1978, 12.xii.1978, 20.xii.1981, 24.xii.1978, 24.xii.1981, 31.xii.1978, 1.i.1979 (Mision Cientifica Danesa, Sta. 7; Nielsen & Karsholt, Sta. 9) (ZMUC); 1 ♂, San Carlos de Bariloche, Nirihuau, 11.xii.1978 (Mision Cientifica Danesa, Sta. 11) (ZMUC); 1 ♂, 1 ♀, El Bolson, Pampa Azcona (lampa), 13.iv.1961 (Topál) (ZMUC); 1 ♂, Bariloche and Environs, i.1966 (Hemmingsen) (ZMUC); 1 ♀, Bariloche, Le Querencia, 10.xii.1965 (Hemmingsen) (ZMUC); 1 ♂, 2 ♀♀, Lago Nahuel Huapi, Puerto Blest, 770 m, 7.xii.1978, 17.xii.1978, 5.i.1979 (Mision Cientifica Danesa, Sta. 8) (ZMUC). Neuquen— 1 ♀, Pucura, Patagonia, 8-20.xii.1952 (Schachovsko) (ZMUC); 1 ♂, Lago Lacar, 5 km E. of Hua-Hum, 25.xi.1981 (Nielsen & Karsholt, sta. 17) (ZMUC); 1 ♀, Lago Lacar, Pucará, 650 m, 28-29.xi.1981 (Nielsen & Karsholt, Sta. 41) (ZMUC); 2 ♂♂, 1 ♀, Lago Tromen, Rodeo Grande, 900 m, 30.xi.1978, 12.iii.1979 (Mision Cientifica Danesa, Sta. 18) (ZMUC); 1 ♂, San Martin de los Andes, Cerro Chapelco, 1400-1600 m, 27.xi.1981 (Nielsen & Karsholt, Sta. 36) (ZMUC); 1 ♀, San Martin de los Andes, Quilquihue, 750 m, 25-26.xi.1981 (Gentili) (ZMUC); 3 ♂♂, 4 ♀♀, San Martin de los Andes, 640 m, 1950, 17-31.x.1981, 26.xi.1981 (Nielsen & Karsholt, Sta. 11; Shachovskoj) (ZMUC). **Chile:** Osorno— 1 ♀, Parque Nacional Puyehue, Anticura, 350 m, 19.xi.1981 (Nielsen & Karsholt, Sta. 13) (ZMUC). Maule— 1 ♂, Rio Teno, ca. 40 km E. Curico, 800 m, 25-27.xi.1981 (Davis) (USNM). Nuble— 2 ♂♂, 1 ♀, Shangri-la, SW. side Volcan Chillan, 1600 m, 19-21.i.1979 (Davis & Akerbergs) (USNM); 2 ♂♂, 1 without abdomen, Alto Tregualemu, ca. 20 km SE Chovellen, 500 m, 1-3.xii.1981, 26-27.i.1981 (Davis & Akerbergs; Davis) (USNM). Santiago— 1 ♂, Portezuelo, 7 km N. Santiago, 22-25.x.1981 (Davis) (USNM); 1 ♂, Santiago, 14.x.1952 (Orellana) (MNH). Temuco— 1 ♀, Fundo la Selva, 48 km NW. Nueva Imperial, 700 m, 9-11.xii.1981 (Davis) (USNM).

Diagnosis.— The species is characterized by its colour and its well-developed, angulated costal triangle.

Redescription.— Male and female (fig. 19). Wingspan 15-22 mm. Head appressedly scaled, orange-brown. Palpae 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.

Forewing's cleft from $\frac{3}{4}$, brown-ochreous, markings dark brown. Along costa a dark line, and at $\frac{1}{3}$ a spot. Before the base of the cleft a costal triangular marking, of which the basal margin is straight and the terminal margin is angulated. 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 wing part. In the terminal fringes an almost complete basal line. Fringes grey-brown. At the dorsal margin two groups of dark scales: at $\frac{1}{2}$ and at the base of the cleft, respectively. Underside dark brown. The pale markings are pronounced and the first lobe 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 $\frac{3}{4}$. Underside dark brown. Androconial scales ferruginous, in a double row, at base of cleft between second and third lobe in three rows.

Variation.— The colour varies from pale yellow-brown to chestnut brown. There is some variation in the colour of the dark scales forming the costal triangular spot, but this spot is always distinct.

Male genitalia (fig. 66).— Valvae symmetrical. Sacculus in basal $\frac{1}{3}$ wider than in distal $\frac{2}{3}$; slightly shorter than apex of cucullus. Tegumen bilobated. Uncus slender,

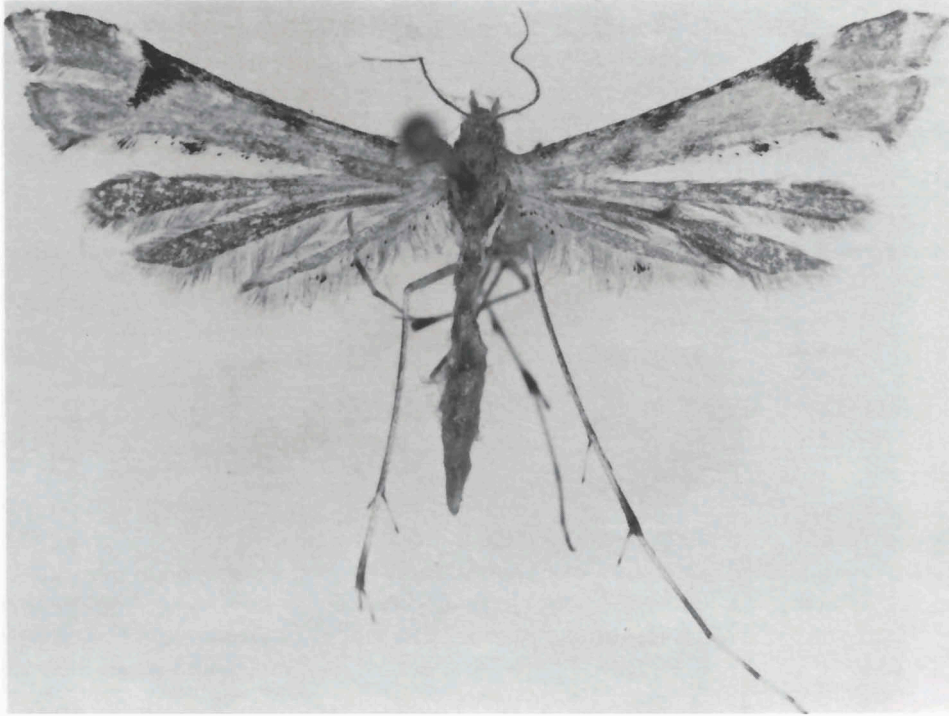


Fig. 19, *Postplatyptilia camptosphenia* (Meyrick). Chile, Santiago, 14.x.1952 (Orellana), coll. MNHC.

long. Anellus arms slender, half as long as tegumen. Vinculum band-like. Saccus weakly-developed. Aedeagus slightly curved, terminally widened.

Female genitalia (fig. 105).— Antrum $3 \times$ as long as wide, little sclerotized. The ostium bursae laterally localized in the curved and sclerotized margin of the seventh sternite. Ductus bursa twisted, slender, with a long, almost linear, sclerotized plate in $\frac{9}{10}$ of its length. Bursae copulatrix simple, with a double horn-like signum. Papillae anales shaped. Apophyses posteriores $3 \times$ as long as papillae anales. Apophyses anteriores short.

Ecology.— Appears from November till February. Biology unknown.

Distribution.— Argentina: Chubut, Rio Negro, Neuquen; Chile: Maule, Nuble, Osorno, Santiago, Concepcion. Distribution mapped in fig. 148.

***Postplatyptilia eelkoi* spec. nov.**

(figs. 20, 67, 106, 149)

Material.— Holotype, ♂: Chile, Nuble, Alto Tregualemu, ca. 20 km SE Chovellen, 500 m, 1-3.xii.1981 (Davis), genitalia CG 6059 (USNM). Paratype ♀: Chile, Nuble, Shangri-la, SW side Volcan Chillan, 1600 m, 19-21.i.1979 (Davis & Akerbergs), genitalia CG 6080 (USNM).

Diagnosis.— The species is characterized by the pale field in the first lobe of the

forewing and in particular by the female genitalia.

Description.— Male and female (fig. 20). Wingspan 16-18 mm. Head appressedly scaled, some erect scales near collar and between the bases of the antennae; colour dark brown. A small frontal tuft, half diameter of eye. Palpae $1.5 \times$ diameter of eye, 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.

Forewing's cleft from $\frac{3}{4}$; colour grey-brown; dorsum orange-brown. 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 costa and reaching the dorsum of the first lobe. Termen sinuate. Fringes white, with on termen of both lobes an uninterrupted row of black basal scales. At dorsum of wing scale teeth at $\frac{2}{3}$ and $\frac{3}{4}$, and regular scaling between the base of the wing and the scale tooth at $\frac{2}{3}$. 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 at the dorsum of the third lobe a black scale tooth at $\frac{4}{5}$, and between this scale tooth and the base of the wing

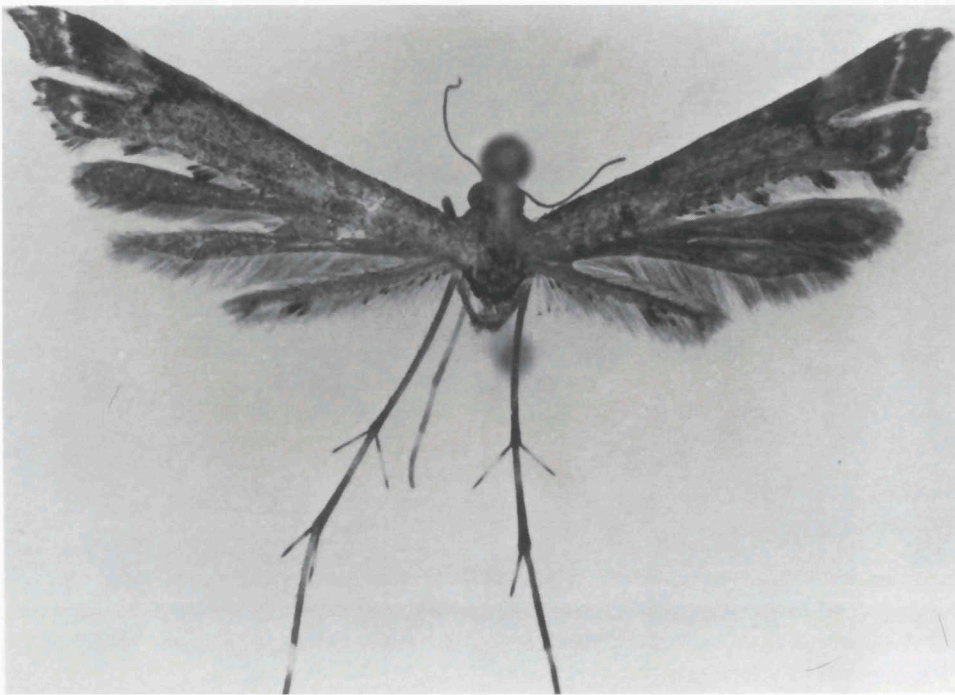


Fig. 20, *Postplatyptilia eelkoi* spec. nov. Paratype, Chile, Nuble, Shangri-la, SW side volcan Chillan, 1600 m, 19-21.i.1979 (Davis & Akerbergs), genitalia CG 6080, coll. USNM.

an irregular row of black scales. Underside dark brown, with scattered white scales in the first and third lobe. Androconial scales ferruginous-brown, in a double row, fusing into a single row at $\frac{1}{3}$ of the length.

Male genitalia (fig. 67).— Valvae symmetrical, ending in a small hook, resembling a bird-head. Sacculus bilobated, basal $\frac{1}{3}$ wide, terminal $\frac{2}{3}$ narrow. Tegumen lobated. Uncus small, slender. Vinculum arched. Saccus stout, rather short. Aedeagus curved. Coecum small. No cornutus.

Female genitalia (fig. 106).— Antrum laterally placed in the pronounced lamina post-vaginalis. Antrum $4 \times$ as long as 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, $2 \times$ the length of the papillae anales.

Ecology.— Collected in December and January. Biology unknown.

Distribution.— Chile: Nuble. Distribution mapped in fig. 149.

Remarks.— The species is closely related to *P. camptosphenia* in the female genital structure. These differ by the wider and flatter lamina ante-vaginalis in *P. eelkoi*.

Etymology.— This species is named after my son Eelko.

***Postplatyptilia naranja* spec. nov.**

(figs. 21, 107, 150)

Material.— Holotype, ♀: Argentina, Neuquen, Lago Lacar, Pucara, 750 m, 26.xii.1978 (Mision Cientifica Danesa, Sta. 9), genitalia 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 unicoloured orange-brown appearance. The incomplete costal triangular spot and the weakly-developed scale-tooth on the third lobe of the hindwing characterize this species very well.

Description.— ♀ (fig. 21). Wingspan 17-19 mm. Head appressedly scaled, ferruginous. Palpae slender, porrect; third segment short. Antennae ringed white and orange-brown, shortly ciliated. Thorax and abdomen ferruginous. Hind-legs ringed grey-white and ferruginous with brownish parts proximal of the pair of spurs. Spurs of equal length, grey-white, dark tipped. Forewing's cleft from $\frac{4}{5}$, ferruginous, with dark brown markings, consisting of a weakly-defined cellular spot, a transverse spot before, and free from, the base of the cleft, of approximately $\frac{1}{3}$ of the wing-width. Indistinct dark scaling at the costa, gradually increasing up to the base of the cleft. Terminal margin of the scaling merging with the terminal margin of the spot at the base of the cleft and bordered by a yellow-brown segment in the first lobe. Fringes grey; basal half dark grey. On the dorsal margin a scale tooth at $\frac{1}{2}$ and $\frac{3}{4}$. Underside ferruginous, paler towards termen.

Hindwings brown; third lobe ferruginous. Fringes grey. In the dorsal fringes of the third lobe grey scales from base of the wing to $\frac{1}{2}$. Underside ferruginous. Between bases of clefts in second lobe two rows of androconial scales, the costal row small, the dorsal extending further terminally.

Variation.— Not noticeable.

Male genitalia.— Unknown.

Female genitalia (fig. 107).— Antrum conical; ostium bursae as wide as the



Fig. 21, *Postplatyptilia naranja* spec. nov. Holotype, Argentina, Neuquen, Lago Lacar, Pucara, 750 m, 26.xii.1978 (Mis. Sci. Dan., Sta. 9), genitalia CG 4090, coll. ZMUC.

length of the antrum. Ductus bursae slender. Bursa copulatrix simple, with two signa in a horn-shape. Margin of eighth sternite bilobated, distally dentate. Apophyses posteriores 2 × the length of the papillae anales. Apophyses anteriores as long as papillae anales.

Ecology.— Collected end December and beginning of January. Biology unknown.

Distribution.— Argentina: Rio Negro, Neuquen. Distribution mapped in fig. 150.

Remarks.— The species is tentatively placed in *Postplatyptilia*. The shape of the antrum differs from that in *Platyptilia*. The central part of the lamina post-vaginalis is developed in the form of blotches, posterior to the antrum. These structures support the present generic grouping.

Etymology.— Named after the Spanish word for "orange", because of its colour.

***Postplatyptilia fuscicornis* (Zeller, 1877) comb. nov.**

(figs. 22, 68, 108, 151)

Platyptilia fuscicornis Zeller, 1877: 460-462.

Material.— Holotype, ♂: Colombia, Bogota, 23.ii, genitalia BM 15762 (BMNH). Chile: Concepcion— 2 ♀♀, 2 without abdomen, Concepcion, vi.1978 (O'Herrens), genitalia CG 6105, 6106, (MZUC, CG). Maule— 3 ♀♀, Forel Corrizalillo, 250 m, 30.i-5.ii.1981 (Peña), genitalia CG 6082, 6095 and 6096 (USNM). Nuble— 1 ♂, Piedra de la Iglesia, 8 km N. Cobquecura, 5 m, 24.i.1979 (Davis & Akerbergs), genitalia CG 6084 (USNM).

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

Redescription.— Male and female (fig. 22). Wingspan 15-17 mm. Head appressedly scaled, brown-grey. Collar with some erect scales and above eye some white

scales. A small frontal tuft, half diameter of eye. Palpae grey-brown, prominent, $2 \times$ diameter of eye. 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.

Forewing's cleft from $\frac{3}{4}$; colour grey-brown, markings dark brown. A great number of small dark scale groups at costa between base and the costal triangle and a small costal spot at $\frac{1}{3}$ of the costa; a trapezoid costal in the first lobe, the costal triangle and two dorsal spots at $\frac{1}{4}$ and $\frac{1}{3}$. A subterminal white line in both lobes. Fringes grey, with a basal dark line of brown scales at the outer margin, twice interrupted by white near the apex of the first lobe and twice at equal intervals at the second lobe. Pronounced dark scales at the anal angles of both lobes. At 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 at the outer margin of the first and second lobe, gradually becoming faint at the dorsum of these lobes. A small apical scale-tooth at the third lobe; a scale-tooth at $\frac{4}{5}$ of the dorsum and isolated scales between the scale-tooth and the wingbase. Underside chocolate-brown with some white scales in the first lobe. Androconial scales orange-ferruginous, in a double row, the dorsal row longer than the costal row.

Variation.— Not noticeable.

Male genitalia (fig. 68).— Valvae symmetrical. Sacculus in basal $\frac{1}{3}$ gradually narrowing and distal $\frac{2}{3}$ of equal width. Cucullus longer than sacculus. Tegumen bilobated. Uncus moderate. Vinculum narrow. Saccus pointed, weakly-developed. Aedeagus stout, wide. No cornutus.

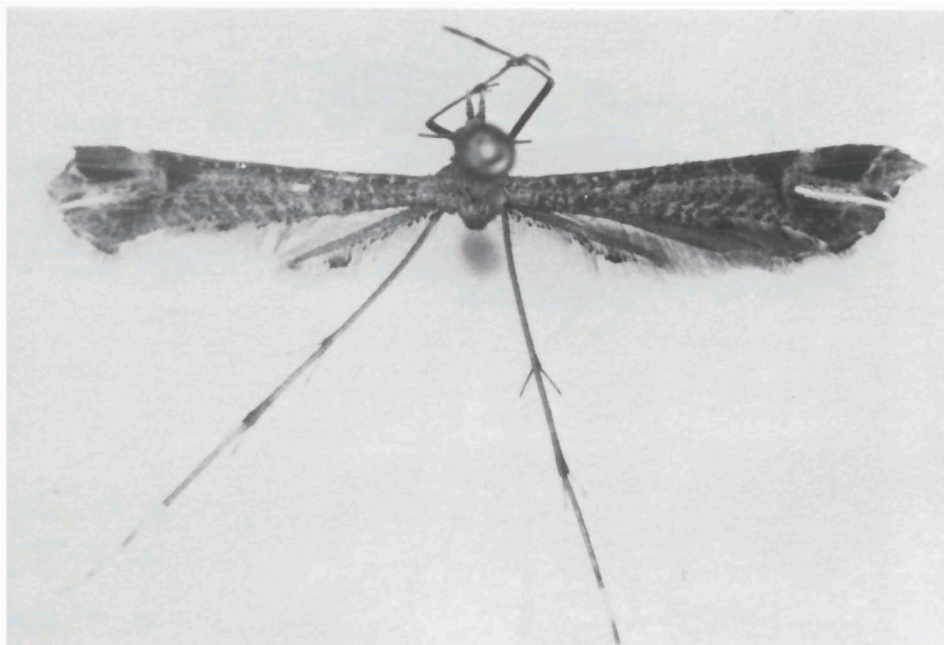


Fig. 22, *Postplatyptilia fuscicornis* (Zeller). Chile, Maule, Forel Corizalillo, 250 m, 30.i-5.ii.1981 (Peña), genitalia CG 6082, coll. USNM.

Female genitalia (fig. 108).— Antrum tube-like, four times longer than wide. Ductus bursae little 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.— Collected in January and February. Biology unknown.

Distribution.— Chile: Concepcion, Nuble, Maule; Colombia: Bogota. Distribution mapped in fig. 151.

Remarks.— The species shows a tendency to the development of a second scale-tooth on the dorsum of the third lobe.

***Postplatyptilia nubleica* spec. nov.**
(figs. 23, 69, 152)

Material.— Holotype, ♂; Chile, Nuble, near costal stream 17.5 km S Curanipe, 50 m, 25.i.1979 (Davis & Akerbergs), genitalia CG 6057 (USNM).

Diagnosis.— The species is characterized by the absence of markings on the forewing and by the presence of three small costal spots.

Description.— ♂ (fig. 23). Wingspan 18 mm. Head appressedly scaled, brown-grey; some erect scales at the collar. Frons with small bulge. Palpae 1.5 × the 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

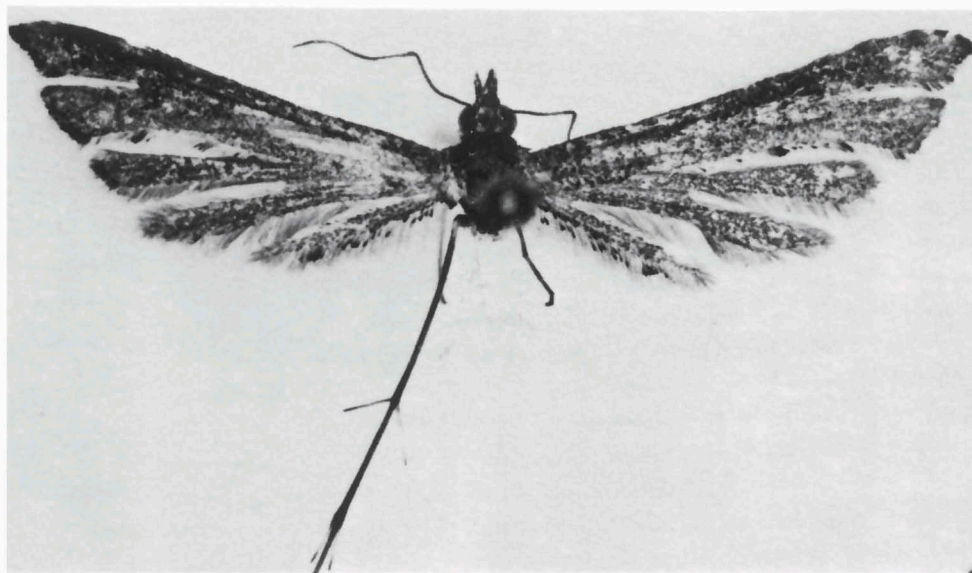


Fig. 23, *Postplatyptilia nubleica* spec. nov. Holotype, Chile, Nuble, near coastal stream 17.5 km S Curanipe, 50 m, 25.i.1979 (Davis & Akerbergs), genitalia CG 6057, coll. USNM.

equal length, grey-white with a dark ring near tip.

Forewing's cleft from $\frac{4}{5}$, colour brown-grey. At the costa at the base of the cleft and central in the first lobe small yellow-white spots. Fringes grey; at termen of both lobes a continuous dark row of basal scales. At dorsum two small scale-teeth at $\frac{3}{4}$ and $\frac{4}{5}$. Underside brown-grey with costal spots as above.

Hindwings brown-grey. Fringes grey. At dorsum of third lobe a black scale-tooth at $\frac{3}{4}$ and between this scale-tooth and the wingbase isolated dark scales. Underside grey-brown. Androconial scales dark brown, in a double row, the costal row longer than the dorsal row.

Male genitalia (fig. 69).— Valve top resembling a bird-head. Sacculus bilobated, the basal half widened, the distal half with parallel margins. Tegumen bilobated. Uncus long, of moderate width. Vinculum curved. Saccus extended, pointed. Aedeagus rather short, stout, top widened. Coecum weakly-developed. No cornuti.

Female genitalia.— Unknown.

Ecology.— The single specimen was collected in January. Biology unknown.

Distribution.— Chile: Nuble. Distribution mapped in fig. 152.

Remarks.— See *P. alexisi*.

Etymology.— Named after the type locality.

***Postplatyptilia alexisi* spec. nov.**

(figs. 24, 70, 109, 153)

Material.— Holotype, ♂: Chile, Nuble, Alto Tregualemu, ca. 20 km SE Chovellen, 500 m, 1-3.xii.1981 (Davis), genitalia CG 6087 (USNM). Paratypes: 9 ♂♂, 2 ♀♀, same locality, 1-3.xii. 1981, 26-27.i.1979, 27-28.i.1981 (Davis & Akerbergs; Davis; Peña), genitalia 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), genitalia CG 6088 (USNM).

Diagnosis.— The species is characterized by the faint markings and subterminal line.

Description.— Male and female (fig. 24). Wingspan 15-18 mm. Head appressedly scaled, grey-brown; some erect scales at collar. Frons rounded. Palpae $1.5 \times$ diameter of eye, brown-grey. Second segment pronounced; third segment small. Antennae grey and brown, shortly ciliated. Thorax and tegulae brown-grey. Mesothorax white. Abdomen 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.

Forewing's cleft from $\frac{4}{5}$, colour dark brown. Markings blackish; a costal triangle before the base of the cleft and an incomplete transverse band in both 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. Dorsum with a small scale-tooth at $\frac{4}{5}$, and between this scale-tooth and base of wing a row of pronounced, black scales. Underside dark brown, terminally with scattered grey; a white subterminal white line in both lobes.

Hindwings dark grey-brown. Fringes grey, with a dark basal margin at the termen of all three lobes. A pronounced scale-tooth at $\frac{3}{4}$ of dorsum of third lobe, and between this scale-tooth and base of wing numerous black scales. Underside brown-

grey. Androconial ferruginous scales in a double row, the costal row longer than the dorsal row.

Variation.— The markings vary slightly in intensity, and so does the grey-white scaling on the forewings.

Male genitalia (fig. 70).— Valvae symmetrical, with top resembling a birdhead. Sacculus bilobated, basal half swollen, distal half swollen in terminal part. Tegumen vesicular. Uncus long, slender. Vinculum arched. Saccus short, pointed. Aedeagus curved. Coecum little developed. No cornutus.

Female genitalia (fig. 109).— 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. Lamina ante-vaginalis laterally passing into the short apophyse anteriores. The lamina post-vaginalis with small central excavation. Apophyses posteriores three times as long as papillae anales.

Ecology.— The moths were collected in December and January. Biology unknown.

Distribution.— Chile: Nuble. Distribution mapped in fig. 153.

Remarks.— The species resembles *P. nubleica*, but differs from *P. nubleica* by the presence of the subterminal line in the forewings, from *P. flinti* and *P. biobioica* by the female genitalia.

Etymology.— Named after the late Dr Alexis Diakonoff and my son Alexis.

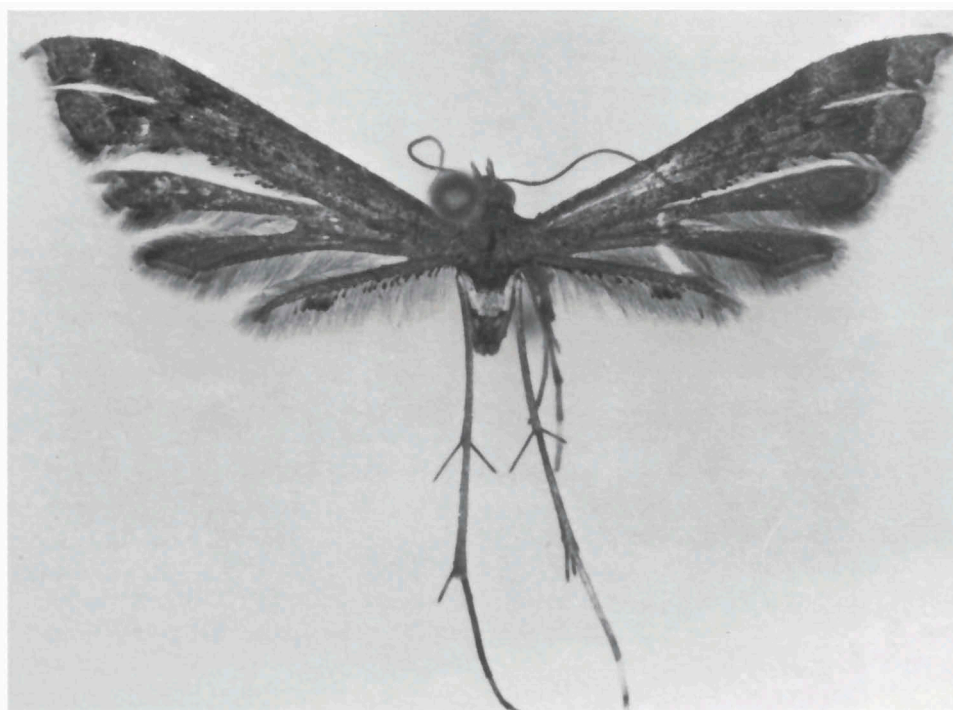


Fig. 24, *Postplatyptilia alexisi* spec. nov. Holotype, Chile, Nuble, Alto Tregualemu, 20 km SE Chovellen, 500 m, 1-3.xii.1981 (Davis), genitalia CG 6987, coll. USNM.

***Postplatyptilia akerbergi* spec. nov.**
(figs. 25, 110, 154)

Material.— Holotype, ♀: Chile, Nuble, Alto Tregualemu, ca. 20 km SE. Chovellen, 500 m, 26-27.i.1979 (Davis & Akerbergs), genitalia CG 6085 (USNM).

Diagnosis.— The species is characterized by the female genital structure and the ferruginous tinge on the forewing.

Description.— Female (fig. 25). Wingspan 19 mm. Head appressedly scaled, dark brown with scattered yellow-brown scales. At collar some erect scales. Palpae $2 \times$ diameter of eye, 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.

Forewing's cleft from $\frac{3}{4}$; colour dark brown with a ferruginous tinge. At the costa some cream-white scales. Markings: 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 passing 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 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.

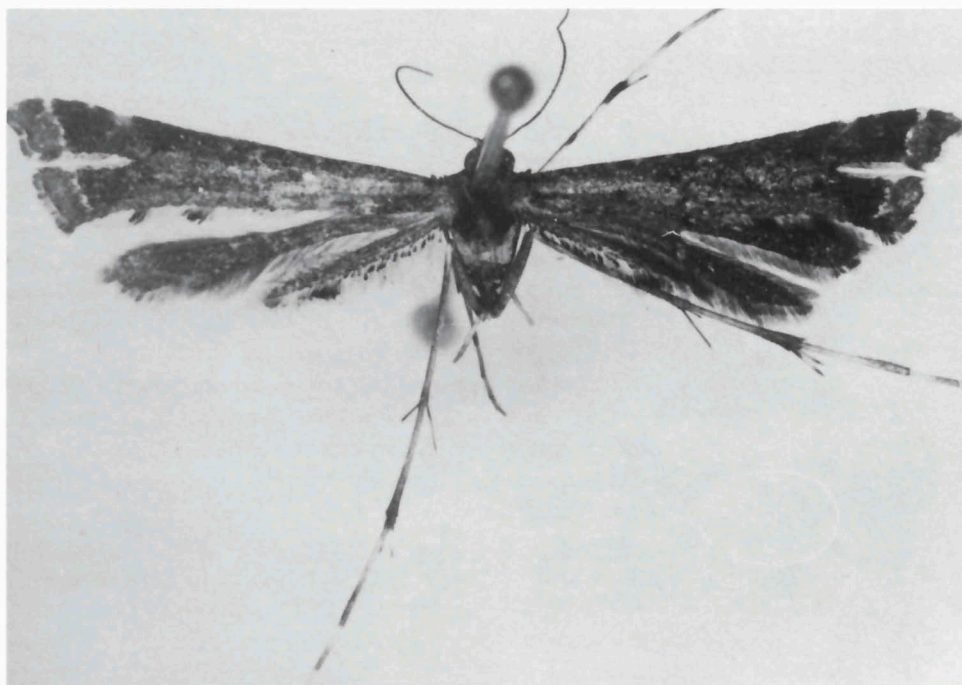


Fig. 25, *Postplatyptilia akerbergi* spec. nov. Holotype, Chile, Nuble, Alto Tregualemu, 20 km SE Chovellen, 500 m, 26-27.i.1979 (Davis & Akerbergs), genitalia CG 6085, coll. USNM.

Hindwings grey-brown with a ferruginous tinge. Fringes grey. At dorsum of third lobe a black scale-tooth at $\frac{3}{4}$, and between this scale-tooth and the wing base an irregular row of scales. Underside dark ferruginous-brown, in the first lobe with scattered numerous white scales. Androconial scales dark ferruginous, in a double row, fusing at $\frac{1}{4}$.

Male genitalia.— Unknown.

Female genitalia (fig. 110).— Antrum centrally ending in the lamina ante-vaginalis, $3 \times$ as long as wide. Ductus bursae slender, $2 \times$ 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 $4.5 \times$ as long as papillae anales, ending club-like.

Ecology.— The single specimen was collected in January. Biology unknown.

Distribution.— Chile: Nuble. Distribution mapped in fig. 154.

Remarks.— The species is closely related to *P. alexisi*, but differs in the forewing colour and the narrower and longer shape of the antrum.

Etymology.— Named after one of the collectors of the holotype, Mr B. Akerbergs.

***Postplatyptilia biobioica* spec. nov.**

(figs. 26, 111, 155)

Material.— Holotype, ♀: Chile, Bio Bio, Est. Huequecura, 25 km E. Santa Barbara, 24.i.1978 (Flint), genitalia CG 6083 (USNM).

Diagnosis.— The species is characterized by the double costal triangle and the single scale-tooth at the dorsum of the third hindwing lobe.

Description.— Female (fig. 26). Wingspan 19 mm. Head appressedly scaled. Vertex dark brown mixed with scattered ferruginous scales. Frons with protrusion, $0.5 \times$ diameter of eye, pale ferruginous. Palpae $2 \times$ diameter of eye, ferruginous. First and second segment heavily scaled; third segment small, ferruginous, tipped 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 at dorsum of forewing. Mesothorax white. Hindlegs grey; tarsi proximally grey-white and distally greyish; two pairs of spurs of equal length.

Forewing's cleft from $\frac{3}{4}$; colour dark ferruginous brown. On the forewing a mixture of numerous white scales. Markings dark-brown, consisting of a 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 progresses into the second lobe. Between both costal triangles a small white costal spot, dorsally passing 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 $\frac{2}{3}$ of dorsum. Underside dark brown with a subterminal white line and costal spot as above.

Hindwings ferruginous brown. Fringes grey. A small scale-tooth at $\frac{4}{5}$ of dorsum of third lobe. Underside grey-brown with white scales.

Male genitalia.— Unknown.

Female genitalia (fig. 111).— Ostium part of antrum low, trapezoid, laterally pro-

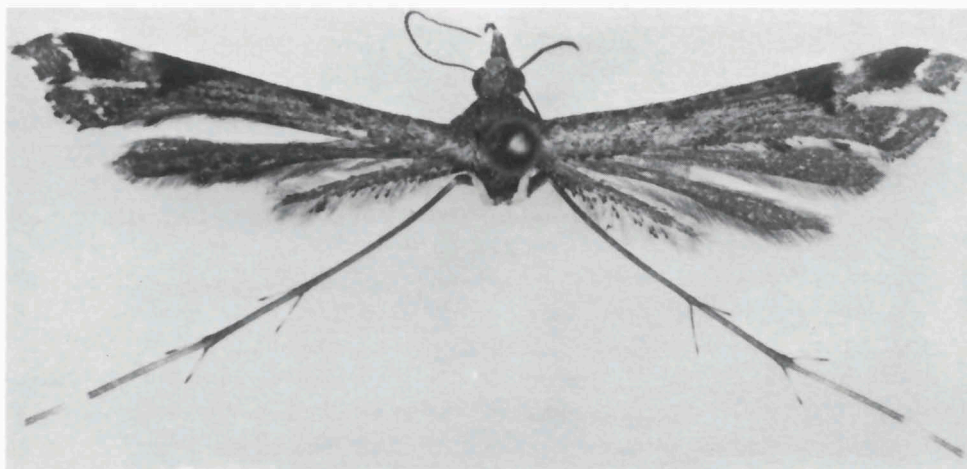


Fig. 26, *Postplatypylia biobioica* spec. nov. Holotype, Chile, Bio Bio, Est. Huequecura, 25 km E Santa Barbara, 24.i.1978 (Flint), genitalia CG 6083, coll. USNM.

gressing into the lamina ante-vaginalis and the small apophyses anteriores: below a narrow tube, 3 × as long as wide. Lamina post-vaginalis centrally with small excavation. Ductus bursae with a double twist, slender. Bursa copulatrix vesicular with a pair of, rather small, horn-like signa. Apophyses posteriores long, 4 × as long as papillae anales, ending in a club.

Ecology.— The single specimen was collected in January. Biology unknown.

Distribution.— Chile: Bio Bio. Distribution mapped in fig. 155.

Remarks.— See *P. alexisi*.

Etymology.— Named after the type locality.

***Postplatypylia talcaica* spec. nov.**

(figs. 27, 112, 156)

Material.— Holotype, ♀: (Chile), Alto Vilches, Cord.(illa) Talca, i.1989 (Elgueta), genitalia CG 1984 (MNHC).

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

Description.— Female (fig. 27). 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, passing into the lateral side of the frontal conus. Palpae grey-brown, 2 × diameter of eye; 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.

Forewing's cleft from $\frac{3}{4}$; colour grey-brown and markings dark brown. The markings consist of an indistinct dorsal spot at $\frac{1}{4}$, a costal triangle just before the base of the cleft with a hooked shape, a dark section centrally in the first lobe, some dark scales in the centre of the second lobe and some isolated dark scales along the

costal margin. The costal triangle is margined basally by an weakly-defined spot 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. First lobe with three dark, rather narrow groups of fringe hairs and a dark group of fringe hairs at the anal angle; second lobe with three wide groups, narrowly interrupted. Underside brown, with yellow-white markings as above.

Hindwings grey-brown. Fringes grey. At dorsum of third lobe dark scales toward $\frac{2}{3}$ of the length. (A scale-tooth is missing, because of the state of the insect). Underside grey-brown. Androconial scales in a double row. The costal row is longer and composed of three groups of scales extending into the second lobe.

Male genitalia.— Unknown.

Female genitalia (fig. 112).— 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 passing into the stout apophyses anteriores, which are as long as the papillae anales. Apophyses posteriores 3 × as long as papillae anales, ending in a widened, club-like, shape.

Ecology.— The single specimen was collected in January. Biology unknown.

Distribution.— Chile: Talca. Distribution mapped in fig. 156.

Remarks.— The species resembles in external characters *Paraamblyptilia eutalanta* Meyrick (see page 69) but has a different colour in the first lobe of the forewing. Also

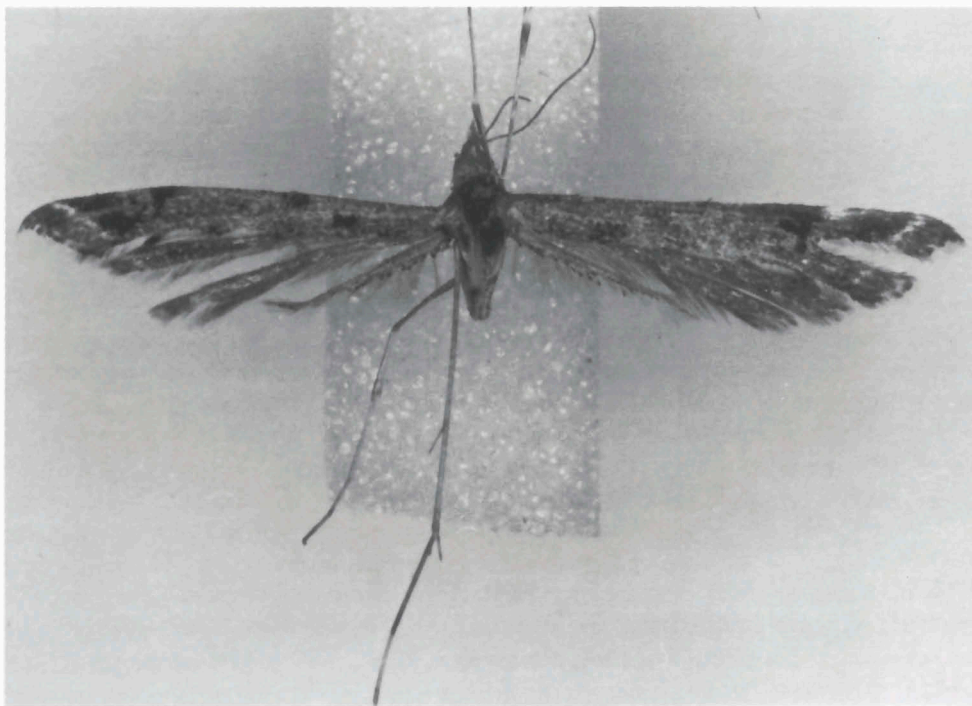


Fig. 27. *Postplatyptilia talcaica* spec. nov.. Holotype. Chile, Alto Vilches, Cord. Talca, i.1989 (Elgueta), genitalia CG 1984, coll. MNHC.

the genital structure however is completely different, requiring placement in *Postplatyptilia*.

Etymology.— Named after the type locality.

***Postplatyptilia flinti* spec. nov.**
(figs. 28, 113, 157)

Material.— Holotype, ♀: Argentina, B(ueno)s A(ire)s, Rio Santiago, Palo Blanco, Berisso, 19.xii.1979 (Flint), genitalia 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.— Female (fig. 28). Wingspan 15 mm. Head appressedly scaled, dark ferruginous-brown. Some erect scales at collar. Frons rounded. Palpae $1.5 \times$ diameter of eye, ferruginous-brown mixed with 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 orange-brown mixed dorsum of forewings. Mesothorax white. Hindlegs grey-brown; at base of spurs some pronounced scales; spur pairs of equal length. Tarsi pale-greyish, distally darker ringed.

Forewing's cleft from $\frac{4}{5}$; colour ferruginous-brown. Markings dark brown: a small discal spot, a costal triangle just before base of 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 an weakly-defined ochreous white spot with a more or less costal position. Fringes grey, in termen of both lobes a continuous row of basal, ferruginous scales. At the wing dorsum two scale-teeth at $\frac{3}{4}$ and $\frac{4}{5}$ respectively. Under-side 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 at the terminal part of all three lobes. At dorsum of third lobe a black scale-tooth at $\frac{5}{6}$ and some apical scales. Between the scale-tooth and the wing base isolated dark scales. Under-side grey-brown, with scattered isolated white scales, which in the first lobe form a continuation of the subterminal line of the forewing. Androconial scales orange-ferruginous, basally as a double row, fusing at $\frac{1}{5}$ and passing into a single row.

Male genitalia.— Unknown.

Female genitalia (fig. 113).— Antrum large, funnel-shaped, ending excentric at 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. Lamina ante-vaginalis laterally progressing into the stout apophyses anteriores, which are as long as the papillae anales. Apophyses posteriores slender, $4 \times$ as long as papillae anales.

Ecology.— The single specimen was collected in December. Biology unknown.

Distribution.— Argentina: Buenos Aires. Distribution mapped in fig. 157.

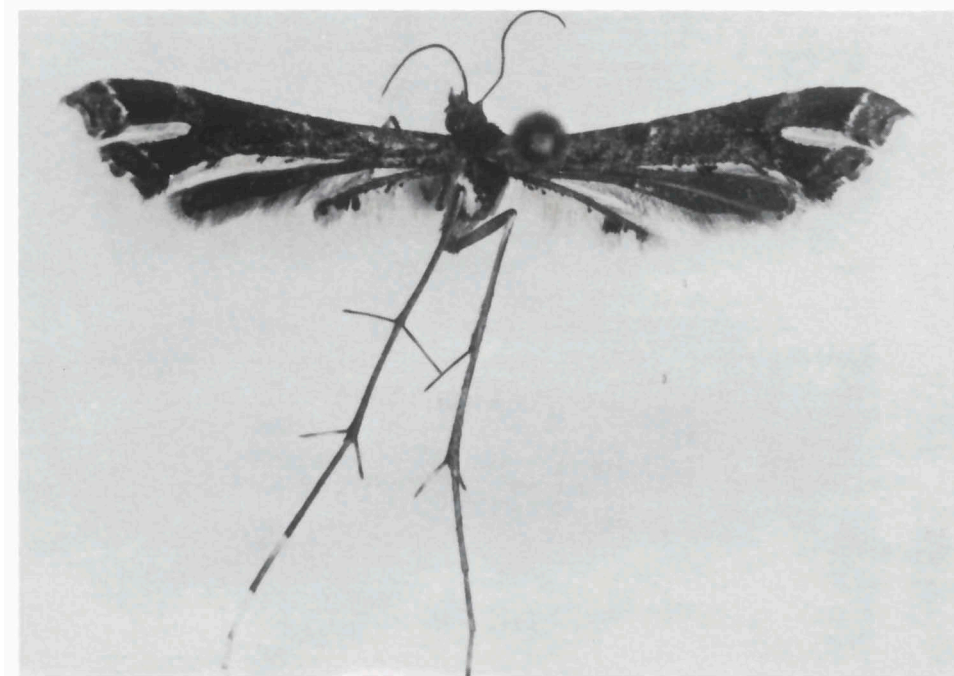


Fig. 28, *Postplatyptilia flinti* spec. nov. Holotype, Argentina, Buenos Aires, Rio Santiago, Palo Blanco Berisso, 19.xii.1979 (Flint), genitalia CG 6081, coll. USNM.

Remarks.— See *P. alexisi*.

Etymology.— Named after the collector of the holotype, Dr C.M. Flint.

***Postplatyptilia paraglyptis* (Meyrick, 1907) comb. nov.**
(figs. 29, 158)

Platyptilia paraglyptis Meyrick, 1907: 484.

Material.— Holotype (without abdomen): Argentina, Parana, (1907 (R.) (BMNH).

Diagnosis.— The species is characterized by the four small costal spots on the first forewing lobe.

Redescription.— Male (fig. 29). Wingspan 14 mm. Head appressedly scaled, ferruginous brown. Palpae $1.5 \times$ diameter of eye, 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.

Forewing's cleft from $\frac{3}{4}$, ferruginous. Markings brown, consisting of a costal spot at $\frac{1}{3}$, the costal triangle and four costal spots on the first lobe. A small dorsal spot at $\frac{1}{4}$; apex of both lobes darkened. A pale subterminal line, originating between the third and fourth costal spot in first lobe and progressing into second lobe. Fringes grey-brown; a basal brown scaled margin on the outer margin of the wing,

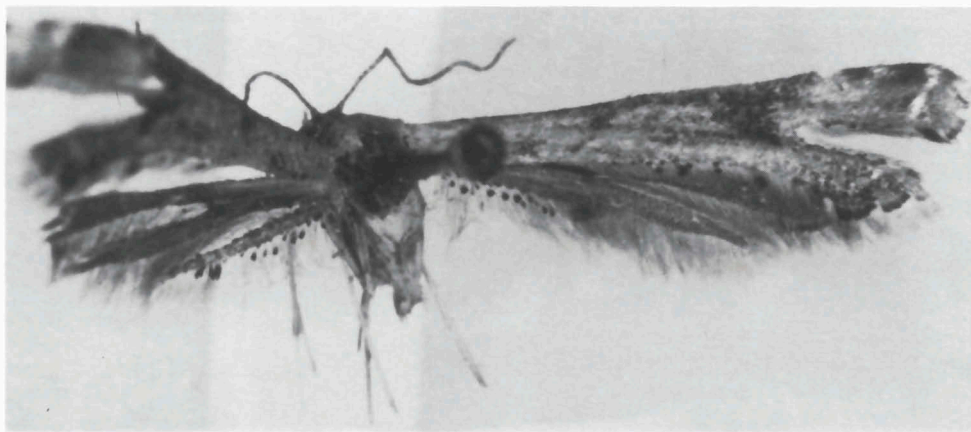


Fig. 29, *Postplatyptilia paraglyptis* (Meyrick). Holotype. Argentina, Parana, 1907 (R.), coll. BMNH.

not interrupted in first lobe, but $2 \times$ in second lobe; anal angles of both lobes brown fringed. Some scales at dorsum on the fringes. Underside brown with a pale subterminal line in both lobes.

Hindwings brown. Fringes grey-brown. Dorsum of the third lobe with a subapical dark brown scale-tooth in the fringes, and between the scale-tooth and the wing base isolated pronounced scales. Underside in first and second lobe ferruginous, in third lobe dark brown. Androconial scales orange-ferruginous, in a double row, the costal row longer than the dorsal row.

Ecology.— No data available.

Distribution.— Argentina: Parana. Distribution mapped in fig. 158.

Remarks.— The forewing markings differentiate this species from all related species. The generic position of the species is very difficult to determine. I tentatively consider the species to belong to this new genus because of its resemblance to the previously mentioned species.

***Postplatyptilia pusilla* (Philippi, 1864) comb. nov.**

Pterophorus pusillus Philippi, 1864: 296.

Platyptilia pusillus; Zeller, 1877: 469.

Material.— Type series probably lost.

Remarks.— After checking the National Museum Collection of Chile in Santiago, Chile, Mr M. D. Elgueta informed me that the type specimens of Philippi are all lost. Zeller (1877) stated: "it is hardly possible to determine what species is involved by the description made". This however, is not correct, because the mentioning of: "die Fuehler sind am Grunde blass rosenroth", gives a good clue. This character should be checked when an unfamiliar species is presented. It seems likely that this species will be rediscovered if sufficient material becomes available. For the generic position see *P. paraglyptis*.

Postplatyptilia genisei (Pastrana, 1989) comb. nov.

Stenoptilia genisei Pastrana, 1989: 253-255.

Material.— Holotype, ♂: Argentina, Cordoba, Capilla del Monte, 1985 (Genise) (MACN). Paratypes: 9 ♂♂, 10 ♀♀, same data as holotype (not yet examined).

Remarks.— See genus description.

Genus Stenoptilodes Zimmerman, 1958

Stenoptilodes Zimmerman, 1958: 407. Type species (by original designation): *Platyptilus littoralis* Butler, 1882: 44.

Redescription.— Forewing with well-developed costal triangle. Forewing vein R1 present. At the dorsum of the third hindwing lobe a (sub)terminally placed scale-tooth.

Male genitalia.— Valvae symmetrical, with a top resembling a bird-head. Saccus bilobed, distal segment small and complex. Saccus not or weakly-developed. Uncus slender.

Female genitalia.— Antrum ending centrally or paracentrally. Ductus bursae with sclerotized plate, and one or more twists. Bursa copulatrix with a pair of horn-like signa. Apophyses anteriores short.

Key to the species

1. Costal spot in first forewing lobe basally extending to base of cleft *S. duckworthi* spec. nov.
- Costal spot in first forewing lobe not extending to base of cleft 2
2. Dorsal margin of costal spot in first lobe of forewing not extending to cleft *S. sematodactylus* (Berg)
- Dorsal margin extending to cleft 3
3. Subterminal white line in first forewing lobe straight and rather wide *S. juanfernandicus* spec. nov.
- Subterminal line slightly waved and narrow *S. gilvicolor* (Zeller)

Key based on the male genitalia

The male genitalia of *S. juanfernandicus* are unknown.

1. Valvae distally half as wide as basally (fig. 71)..... *S. sematodactylus* (Berg)
- Valvae distally wider than half the basal width 2
2. Uncus moderately long; anellus arms extending to middle of tegumen (fig. 72).... *S. gilvicolor* (Zeller)
- Uncus slender and long; anellus arms extending up to $\frac{2}{3}$ of tegumen (fig. 73) *S. duckworthi* spec. nov.

Key based on the female genitalia

The female genitalia of *S. duckworthi* are unknown.

1. Ductus bursae with double twist (fig. 114) *S. sematodactylus* (Berg)
- Ductus bursae with one twist 2
2. Ostium ending laterally in lamina ante-vaginalis (fig. 115)
..... *S. juanfernandicus* spec. nov.
- Ostium ending centrally in lamina ante-vaginalis (fig. 116) .. *S. gilvicolor* (Zeller)

***Stenoptilodes sematodactylus* (Berg, 1885) comb. nov.**
(figs. 30, 71, 114, 159)

Platyptilia sematodactyla Berg, 1885: 283.

Platyptilia epidelta Meyrick, 1907 (1908): 486.

Material.— Lectotype ♂ of *Platyptilia sematodactyla* Berg (designated here): [Argentina], Banda Oriental, no date, genitalia CG 1998; Typus; Nr. 2291; "*Platyptilia sematodactyla* Berg, 1885" (MLPA). Paralectotypes of *Platyptilia sematodactyla* Berg (designated here) (without abdomen): 2 specimens, [Argentina], Buenos Aires, no date; Typus; nr. 2291; "*Platyptilia sematodactyla* Berg, ej que acompanaha el tipo" (MLPA). Lectotype ♂ of *Platyptilia epidelta* Meyrick (designated here): Argentina, Parana, (19)07 (R.), genitalia BM 5008 (BMNH). Paralectotypes of *Platyptilia epidelta* Meyrick (designated here): 2 ♂♂, 5 ♀♀, 2 without abdomen, Argentina, Parana, (19)07 (R.) (BMNH) syn. nov. **Argentina:** 1 ♀, Buenos Aires, Ramos Mejia, 5.xii.1961 (Topál) (ZMUC). 3 ♂, 1 ♀, La Plata, 12.xii.(19)72, iii.(19)76, 1.iv.977, 5.v.1982 (Argemi, Lagransa) (MLPA).

Diagnosis.— The species is very well defined by the presence of two costal triangles, the second located in the centre of the first fore-wing lobe. The double scale-tooth on the dorsum of the third hindwing lobe is also characteristic for the species.

Redescription.— Male and female (fig. 30). Wingspan 18-22 mm. Head appressedly scaled, ferruginous brown. Frons with small conical protrusion. Palpae protruded, 1.5 × eye diameter, grey-brown. Second segment stout; third segment short. Antennae indistinct; grey-brown and dark brown ringed, shortly ciliated. Thorax, abdomen and legs ferruginous brown.

Forewing's cleft from $\frac{3}{4}$, ferruginous brown, with dark brown markings. The markings consist of a dark scaling along the costa, an weakly-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 margined by oblique ferruginous ochreous lines, the sub-terminal parallel to the termen continues indistinctly in the second lobe. Fringes grey, basal black scales (pattern cannot be examined due to state of insect). Dorsal margin with scale-teeth at $\frac{1}{2}$ and $\frac{3}{4}$. 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 $\frac{4}{5}$ and terminal. Between the wing base and the scale-tooth isolated pronounced scales in the fringes. Underside ferruginous-brown; third lobe dark brown. Androconial scales orange-brown, in a double row, the costal row interrupted.

Variation.— In the limited material available not noticeable.

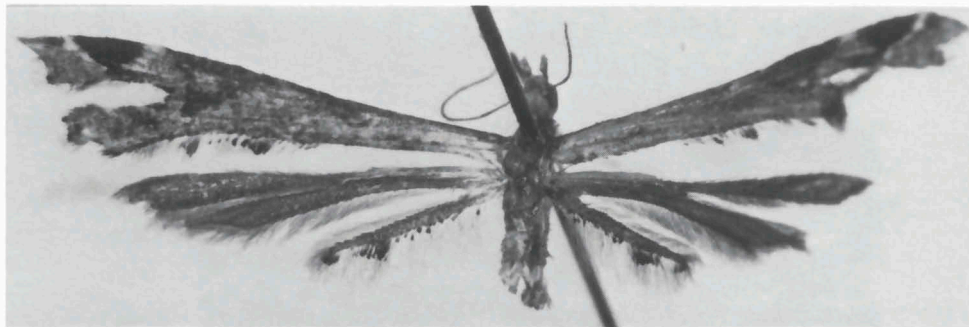


Fig. 30, *Stenoptilodes sematodactylus* (Berg). Argentina, Buenos Aires, Ramos Mejia, 5.xii.1961 (Topal), coll. ZMUC.

Male genitalia (fig. 71).— Valvae symmetrical; apex resembling a bird-head. Sacculus bilobated; distal part swollen and half as long as basal part. Tegumen bilobated. Uncus slender, long. Anellus arms centrally widened, 0.5 as long as the tegumen. Vinculum rather narrow, extended between the valvae. Aedeagus curved, with a group of small cornuti near its top.

Female genitalia (fig. 114).— Antrum $1.5 \times$ as long as wide. Ostium bursae laterally positioned in the slightly curved and narrow sclerotized end of the seventh sternite. Ductus bursae slender, in distal half a spiral section, with two twist. Bursa copulatrix simple, with a double horn-like, rather long, signum. Papillae anales normal. Apophyses posteriores approximately $2.5 \times$ as long as papillae 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 specimens with dates on the label were on the wing in December. Biology unknown.

Distribution.— Argentina: Buenos Aires, Parana. Distribution mapped in fig. 159.

Remarks.— The species resembles *S. gilvicolor*, *S. duckworthi* and *S. juanfernandicus*. The latter and the first species differ by its yellowish colour, the sharper-edged top of the valvae and the square-built lamina ante-vaginalis. The species differ from *S. duckworthi* by the wide valvae and long uncus in the male genitalia, and from *S. juanfernandicus* by its yellowish colour and the shape of the lamina ante-vaginalis and ductus bursae.

***Stenoptilodes juanfernandicus* spec. nov.**
(figs. 31, 115, 160)

Platyptilia epidelta; J.F.G. Clarke, 1958: 70-71 (misidentification).

Material.— Holotype, ♀: Chile, Juan Fernandez Islands, Masatierra, Bahia Cumberland, 20.iii.1951 (Kuschel), genitalia CG 1983 (MNHC). Paratype, ♀: same locality, 4.iii.1951 (Kuschel) (MNHC).

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

Description.— Female (fig. 31). Wingspan 17-18 mm. Head appressedly scaled, ferruginous brown. Palpae ochreous brown, $2 \times$ diameter of eye, curved upward. Third segment pale yellow-white. Antennae brown with indistinct indications of grey-brown rings, shortly ciliated. Thorax dark brown. Abdominal segments 1, 3 and 5 dorsally yellow-brown and segments 2, 4, 6 and 7 dark brown, laterally dark brown with some pale scales. Legs brown; tarsal segments whitish, distally dark-brown. Hindlegs with two pairs of spurs of equal length.

Forewing's cleft from $\frac{3}{5}$; colour straw-yellow to ferruginous yellow. Markings as in *Stenoptilodes sematodactylus* Berg. Underside brown, with yellow-white markings consisting of a costal spot above the base of the cleft and a subterminal transverse, incomplete line on both lobes.

Hindwings greyish-brown. Fringes grey. On dorsal margin of third lobe a black scale-tooth at $\frac{2}{3}$, between wingbase and scale-tooth isolated, dark, pronounced scales. Underside brown. In top of first segment a continuation of the pale sub-terminal line of forewing. Third lobe grey-brown. Androconial scales ferruginous orange, in a double row, the costal row longer and passing into the second lobe.

Male genitalia.— Unknown.

Female genitalia (fig. 115).— Antrum laterally ending at margin of the seventh sternite, $1.5 \times$ as long as wide. Ductus bursae in distal half little sclerotized, centrally making 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

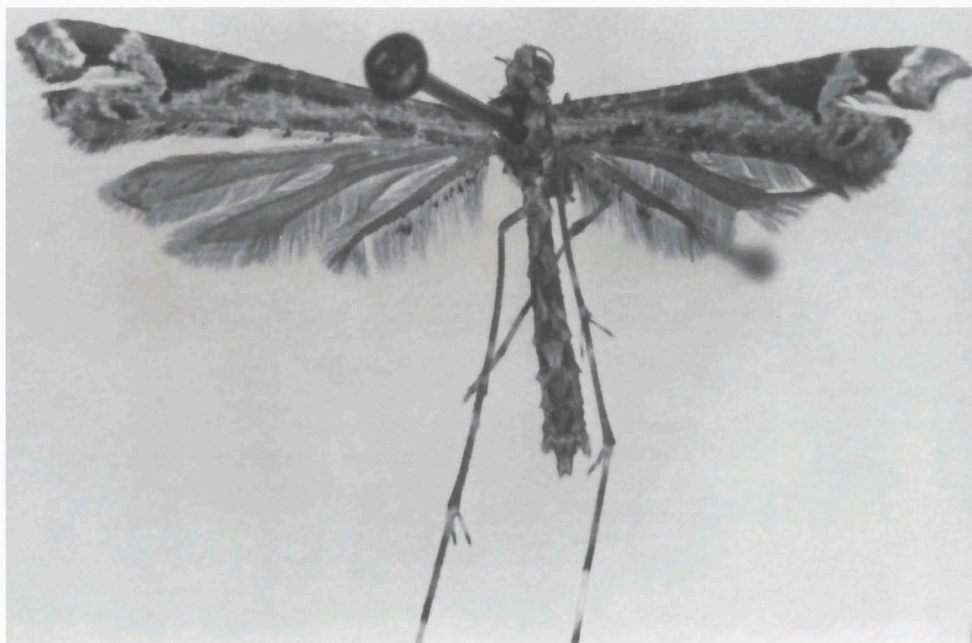


Fig. 31, *Stenoptilodes juanfernandicus* spec.nov. Paratype, Chile, Masatierra, Bahia Cumberland, 4.iii.1951, (Kuschel), coll. MNHC.

as long as the papillae anales. Apophyses posteriores slender, 4-5 × as long as the small papillae anales.

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

Ecology.— The moths were collected from December till March. Biology unknown.

Distribution.— Chile: Juan Fernandez Islands. Distribution mapped in fig. 160.

Remarks.— The species resembles *S. sematodactylus* in wing pattern, but differs by its more yellow colour. The female genitalia differ from those of *S. sematodactylus* and *S. gilvicolor*.

Etymology.— Named after the Juan Fernandez Islands where the types were collected.

***Stenoptilodes gilvicolor* (Zeller, 1877) comb. nov.**
(figs. 32, 72, 116, 161)

Platyptilia gilvicolor Zeller, 1877: 462-464.

Material.— Holotype, ♀: Colombia, Bogota, 22.iii, genitalia BM 4968 (BMNH). 2 ♂♂, Chile, Quillota, 1886 (Paulson), genitalia CG 5025 (BMNH).

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

Redescription.— Male and female (fig. 32). Wingspan 17-18 mm. Head appressedly scaled, ochreous brown. A small frontal, conical tuft. Palpae 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 diameter of eye. Antennae incompletely ringed with grey-white and brown scales, shortly ciliated. Thorax, tegulae, mesothorax and abdomen ochreous brown mixed dark brown. Hindlegs dark brown with proximal parts of the segments cream-white; two pairs of spurs of equal length.

Forewing's cleft from $\frac{3}{4}$; colour 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 at the dorsum. The triangular spots margined by a small white line. Indistinct spots at dorsum of wing at $\frac{1}{4}$ and $\frac{1}{3}$, and a small spot in basal half of second lobe. There is a mixture of white scales in the ochreous brown parts. Fringes grey-white. Along the dorsum small groups of dark scales. Fringes dark grey at 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 1 and 2, and grey-white in the third lobe. At dorsum of third lobe a black scale-tooth at $\frac{2}{3}$ between this scale-tooth and the wing base isolated pronounced dark scales. Underside ferruginous-brown. Androconial scales black-brown, in a double row, the dorsal row extending far into the second lobe.

Variation.— Not noticeable in the limited material.

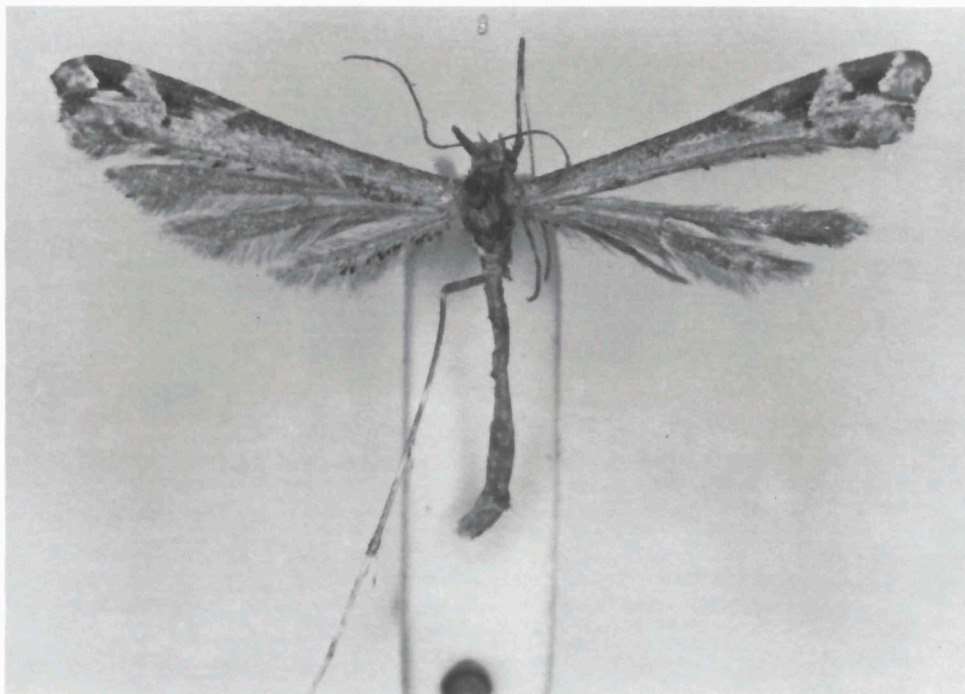


Fig. 32, *Stenoptilodes gilvicolor* (Zeller). Chile, Quillote, 1886 (Paulson), coll. BMNH.

Male genitalia (fig. 72).— Valvae symmetrical with bilobated sacculus and a top resembling a bird-head. Tegumen bilobated, moderately wide. Uncus slender. Vinculum arched. Juxta symmetrical. Anellus arms rather stout, 0.5 tegumen length, hooked at the top. Aedeagus arched. Cornutus small, surrounded by small sclerotized ridges in a concentric, wavy pattern. Coecum moderate.

Female genitalia (fig. 116).— Antrum rectangular, passing into a gradually narrowing ductus bursae. In middle of ductus bursae a single twist. Bursa copulatrix vesicular, with a pair of horn-like signa. Along the antrum a lamina postvaginalis laterally progressing into the proximally localized distal margin of the seventh sternite. Apophyses anteriores absent. Apophyses posteriores as long as papillae anales.

Ecology.— The moths were collected in March. Biology unknown.

Distribution.— Chile: Quillota; Colombia: Bogota. Distribution mapped in fig. 161.

Remarks.— See *S. sematodactylus*.

***Stenoptilodes duckworthi* spec. nov.**
(figs. 33, 73, 162)

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

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

valve, with the sharp top and the long and slender uncus are diagnostic.

Description.— Male (fig. 33). Wingspan 19 mm. Head appressedly scaled, mixed ochreous and brown; some erect scales at the collar. Frons with a small conical protrusion, less than $0.5 \times$ diameter of eye. Palpae ferruginous brown, with erect scales and a gradual widening of the second segment. Segments 2 and 3 equally long; third segment cream white with 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.

Forewing's cleft from $\frac{3}{4}$; colour ochreous brown. (The specimen is in a bad state, and worn. The colour is weakly-defined; markings are recognizable). Markings darker brown: a costal spot in the centre of the costa reaching obliquely toward dorsum beneath base of 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 margining the costal triangle; the terminal field in first lobe cream-white. Fringes not to be judged. Underside pale brown, with a cream-white terminal field as above, and a pale irregular field between the (above placed) costal triangles at the base of the cleft and in the first lobe.

Hindwings grey-brown. Fringes grey.

Male genitalia (fig. 73).— Valvae symmetrical, rather wide; top resembling a bird-head, sharp. Sacculus bilobated. Tegumen slender, bilobated. Uncus slender, long. Vinculum arched. Anellus arms moderate, up to $\frac{3}{4}$ th of tegumen. Aedeagus arched, slender. Coecum rounded, caulus slender.

Female genitalia.— Unknown.

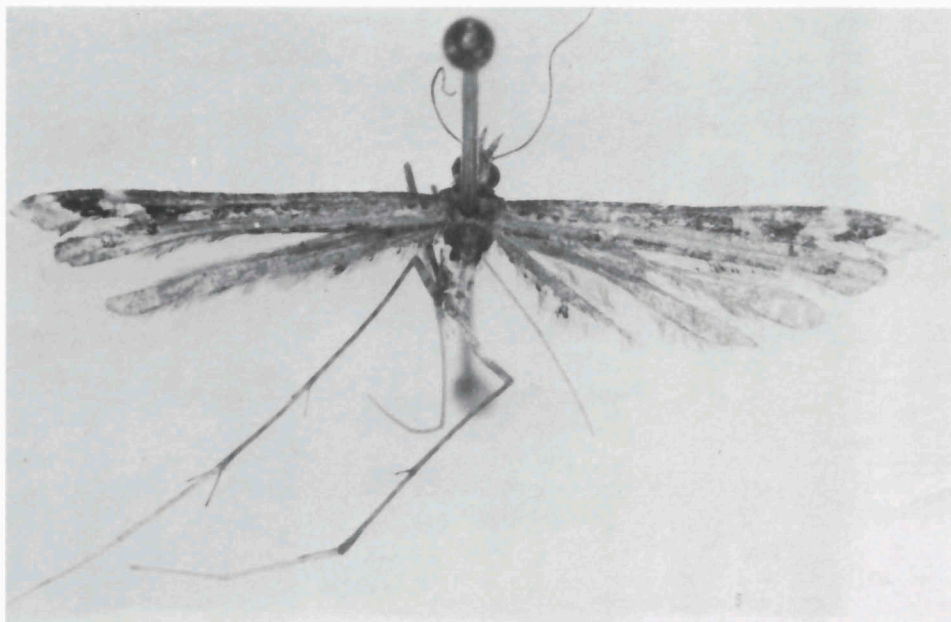


Fig. 33, *Stenoptilodes duckworthi* spec. nov. Holotype, Argentina, Catamarca, Rio Portrero near Andal-gana, 15.ii.1972 (Duckworth), genitalia CG 6089, coll. USNM.

Ecology.— The moth was collected in February. Biology unknown.

Distribution.— Argentina: Catamarca. Distribution mapped in fig. 162.

Remarks.— See *S. sematodactylus*.

Etymology.— Named after its collector, Mr W.D. Duckworth.

Genus *Uroloba* Walsingham, 1891, stat. rev.

Uroloba Walsingham, 1891: 262. Type species, by original designation and monotypy: *Uroloba fuscicostata* Walsingham, 1891.

Redescription.— Forewings with a cleft located at the extreme costa; first lobe approximately one fifth of the forewing width. Palpae long, 2-4 × diameter of eye.

Male genitalia.— See type species.

Female genitalia.— Unknown.

Remarks.— The genus has a very well defined shape of the forewing. This character was omitted by Meyrick when he synonymized it with *Utuca* (which is now recognized as a synonym of *Oidaematophorus* Wallengren). After examination of the male genitalia of both species belonging to this genus, the validity of Walsingham's description became evident, as these species both show an extreme development of the distal half of the sacculus. The character is a line of development between the genus *Postplatyptilia* Gielis and the generic group *Stenoptilia*.

Key to the species

1. Forewing with a white costal spot *U. calycospila* (Meyrick)
- Forewing without a costal spot *U. fuscicostata* Walsingham

Key to the male genitalia

1. Saccular protrusion rounded, uncus sharp (fig. 75) *U. calycospila* (Meyrick)
- Saccular protrusion pointed, uncus stout (fig. 74) *U. fuscicostata* Walsingham

Uroloba fuscicostata Walsingham, 1891 (figs. 34A, 34B, 74, 163)

Uroloba fuscicostata Walsingham, 1891: 262.

Utuca fuscicostata Meyrick 1913: 31.

Material.— Lectotype, ♂ (designated here) (abdomen lost): Chile, Valparaiso, no date (Walker) (BMNH). Paralectotype ♂ (designated here) (abdomen lost): same data (BMNH). Chile: Santiago— 4 ♂♂, Porteruelo, 7 km N. Santiago, 500 m, 19-20, 22-25.x.1981 (Davis), genitalia CG 6060 and 6061 (USNM).

Diagnosis.— The species is characterized by the narrow and short first lobe of the forewing, and the costal black scaling at the underside of fore- and hindwing.

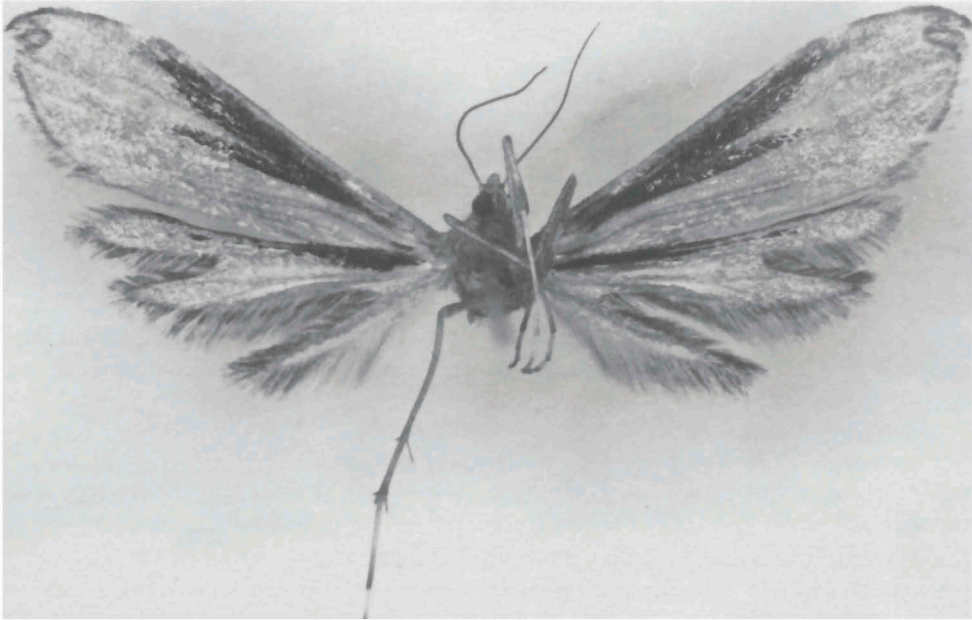


Fig. 34A, *Uroloba fuscicostata* Walsingham. Chile, Santiago, Porteruelo, 7 km. N Santiago, 500 m, 22-25.x.1981 (Davis), genitalia CG 6060, coll. USNM.

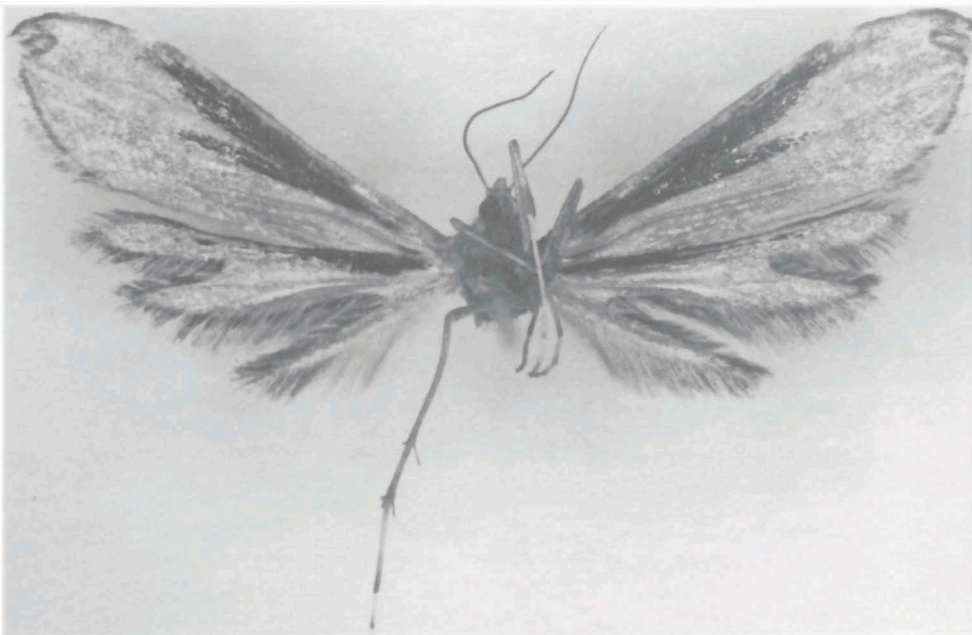


Fig. 34B, *Uroloba fuscicostata* Walsingham. Underside. Data as fig. 34A.

Redescription.— Male (fig. 34A). Winglength 21-24 mm. Head appressedly scaled; frons with protruding scales. Colour fuscous brown, frons mixed whitish. Palpae slender, as long as diameter of eye, fuscous brown; some erect scales on second segment. Antennae ringed grey-brown and grey-white, shortly ciliated. Thorax, tegulae, mesothorax and abdomen fuscous brown. Legs fuscous brown, with on hind-legs two pairs of short spurs.

Forewing's cleft from $\frac{9}{10}$; first lobe very narrow, fuscous brown, 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 $\frac{4}{5}$. Fringes grey, basal half dark grey-brown. Underside (fig. 34B) grey-brown, terminally paling. Along the costa, from the base towards the pale costal spot a black scaling, reaching to half the wing's width. Towards termen the scaling shows an indication of a fork.

Hindwings pale brown-grey. Fringes grey-brown, at dorsum of third lobe ochreous grey. Underside grey-brown, third lobe mixed ferruginous and cream-white. Along costa of first lobe a black scaling as along costa of forewing. Androconial scales black, in a double row, the costal row the longer, but centrally interrupted, the dorsal row short.

Variation.— The density of the black scaling along the underside of the costa of fore- and hindwing varies.

Male genitalia (fig. 74).— Valvae symmetrical. Saccus bilobed, ending pointed, longer than valve. Valvae ending in a shape resembling a bird-head. Tegumen bilobed. Uncus short and stout. Vinculum progressing into a pronounced stout saccus. Juxta with two stout and pronounced anellus arms, of $\frac{2}{3}$ of tegumen length. Aedeagus arched, slender. Coecum pronounced. Vesica with numerous small cornuti.

Female genitalia.— Unknown.

Ecology.— The specimens were collected in October. Biology unknown.

Distribution.— Chile: Valparaiso, Santiago. Distribution mapped in fig. 163.

Remarks.— The species has a genital structure resembling the *Amblyptilia* group, but lacks a scale-tooth on the hindwing.

***Uroloba calycospila* (Meyrick, 1932) comb. nov.**
(figs. 35, 75, 164)

Utua calycospila Meyrick, 1932: 336.

Material.— Holotype, ♂: Argentina, Alta Gracia, (19)32 (Bruch), genitalia BM 18191 (BMNH). Argentina: Catamarca—1 ♂, Rio Portrero nr. Andalgalá, 15.ii.1972 (Duckworth), genitalia CG 6078 (USNM).

Diagnosis.— The species is characterized by its very narrow first lobe in the forewing and the nearby presence of a grey-white costal spot.

Redescription.— Male (fig. 35). Wingspan 19-20 mm. Head appressedly scaled, grey-brown, and white. A prominent frontal protrusion, above ochreous white and below ferruginous-white, $1.5 \times$ diameter of eye. Palpae slender, ochreous brown, as long as diameter of eye, basal segment mixed white. Antennae shortly ciliated, grey-brown. Thorax grey-brown. Mesothorax and tegulae grey-brown mixed ferruginous. Abdomen grey-brown. Legs ochreous brown. Hindlegs with two spur pairs of equal length.

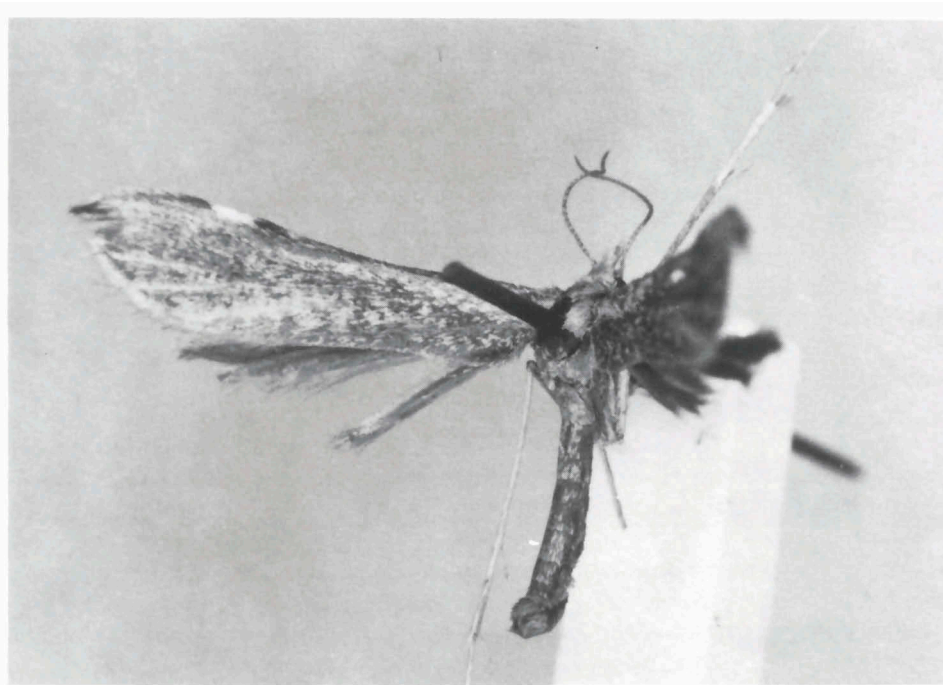


Fig. 35, *Uroloba calycospila* (Meyrick). Holotype, Argentina, Alta Gracia, (19)32 (Bruch), genitalia BM 18191, coll. BMNH.

Forewing's cleft from $\frac{9}{10}$; first lobe very narrow, dark brown with scattered white scales. A costal spot at $\frac{4}{5}$ of the winglength, grey-white, margined dark. Apex of first lobe darkened. Radical veins indicated by weakly-defined row of white scales. Fringes brown-grey. Underside grey-brown.

Hindwings, fringes and underside grey-brown. Androconial scales orange-ferruginous, in a double row.

Male genitalia (fig. 75).— Valvae symmetrical, ending in a shape resembling a bird-head. Sacculus blisterlike, 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.— Unknown.

Ecology.— The specimen from Rio Portrero was collected in February. Biology unknown.

Distribution.— Argentina: Alta Gracia, Catamarca. Distribution mapped in fig. 164.

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.

Genus *Paraamblyptilia* nov.

Type species: *Platyptilia eutalanta* Meyrick, 1931.

Description.— Forewings with costal triangle. Scale-teeth at dorsum of forewing. No scale-tooth at the dorsum of the third hindwing lobe.

Male genitalia.— See type species.

Female genitalia.— See type species.

Remarks.— The genus is a derived group belonging to the lineage in which the top of the valvae resembles a bird-head. In this case the sacculus is widened but simple, and the uncus is cleft. In *Uroloba* the uncus is simple but the sacculus is vesicularly enlarged.

***Paraamblyptilia eutalanta* (Meyrick, 1931) comb. nov.**
(figs. 36, 76, 117, 165)

Platyptilia eutalanta Meyrick, 1931: 379-380.

Material.— Lectotype, ♀ (here designated): Argentina, Rio Negro, Lago Nahuel Huapi (eastern end), 17.x.1926 (Edwards), genitalia BM 18194 (BMNH). Argentina: Rio Negro— 3 ♂♂, 2 ♀♀, San Carlos de Bariloche, Colonia Suiza, 800-810 m, 13.xi.1978, 22.xi.1978, 3.xii.1981, 4.xii.1981, 9.xii.1978 (Mision Cientifica Danesa, Sta. 7; Nielsen & Karsholt, Sta. 9) (ZMUC, CG); 2 ♀♀, Lago Nahuel Huapi, Puerto Blest, 770 m, 22.xii.1978, 2.iii.1979 (Mision Cientifica Danesa, Sta. 8) (ZMUC). 1 ♂, 1 ♀, La Plata, 5.ii.(19)81, 10.v.1978 (Argemi) (MLPA). Chile: Santiago— 1 ♀, El Alfalfal, 29.ii.1968 (Flint & Peña), genitalia CG 6079 (USNM).

Diagnosis.— The species is characterized by its weakly-developed double costal triangle. The male genitalia are characteristic.

Redescription.— Male and female (fig. 36). Wingspan 15-16 mm. Head appressedly scaled, grey-brown. Palpae grey-brown, protruding, $2 \times$ 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.

Forewing's cleft from $\frac{3}{4}$, dark grey-brown, markings dark brown, consisting of weakly-defined dorsal spots at $\frac{1}{3}$ and $\frac{1}{2}$ and a costal triangular spot at the base of the cleft. Middle segment of both forewing lobes dark brown scaled; this dark scaling in the first lobe proximally margined by a pale area toward the costal triangle; distally a well-defined transverse line, grey-white, almost rectangular 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 $\frac{1}{3}$, $\frac{1}{2}$ and $\frac{3}{4}$. Underside dark brown; a pale transverse line in both lobes.

Hindwings brown-grey. Fringes grey; dorsal fringes of the third lobe without prominent scales. Underside grey. Androconial scales ferruginous, in three incomplete rows.

Variation.— Not noticeable in the limited number of specimens.

Male genitalia (fig. 76).— Valvae symmetrical. Sacculus dilated into a large blotch. Cucullus slender, ending in a shape resembling a bird-head. Tegumen bilobed. Uncus forked, long and slender. Vinculum narrow. Anellus arms as long as tegumen. Aedeagus basally curved. Cornutus small, with a pronounced group spic-

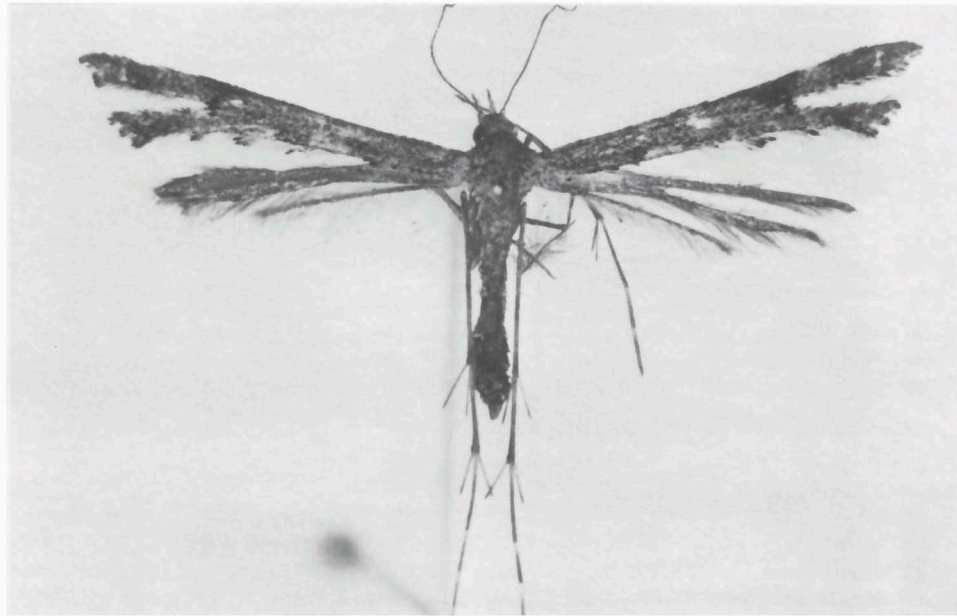


Fig. 36, *Paraamblyptilia eutalanta* (Meyrick). Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 4.xii.1981 (Nielsen & Karsholt, Sta. 9), coll. ZMUC.

ulated cornuti.

Female genitalia (fig. 117).— Antrum conical, $1.5 \times$ as long as 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 $2.5 \times$ as long as papillae anales. Apophyses anteriores short.

Ecology.— The specimens were collected in November and December. Biology unknown.

Distribution.— Argentina: Rio Negro. Chile: Santiago. Distribution mapped in fig. 165.

Remarks.— The cornutus shows some variation in size.

Genus **Patagonophorus** nov.
(fig. 37A)

Type species: *Patagonophorus murinus* spec. nov.

Description.— Head and palpal segments appressedly scaled; palpal segments short, as long as diameter of eye.

Forewing (fig. 37A) cleft from $\frac{7}{10}$; both lobes without terminal margin; second lobe extremely narrow. R1 short, before base of cleft. R2 and R3 absent. R4 and R5 fused. AN1, weakly-developed.

Hindwing cleft very deep. SC and R separate. CU2 separated from M3 in between the bases of both clefts.

Male genitalia.— See type species.

Female genitalia.— See type species.

Remarks.— This genus has more derived characters than those found in the Nearctic genus *Singularia* Arenberger, although less derived than those in the genera group *Pterophorus*. For differences with allied genera see keys in the first part of this paper.

***Patagonophorus murinus* spec. nov.**
(figs. 37B, 77, 118, 166)

Material.— Holotype, ♂: Argentina, Rio Negro, San Carlos de Bariloche, Nirihua, 30.xii.1978 (Mision Cientifica Danesa, Sta. 11), genitalia CG 4116, wing venation CG 4132 (ZMUC). Paratypes: 1 ♂, 2 ♀♀, Argentina, Neuquen, San Martin de los Andes, Quilquihue, 750 m, 15-26.xi.1981 (Gentili), genitalia CG 4117 (ZMUC); 6 ♂♂, Argentina, Rio Negro, Norquingo, at light, 21.i-18.ii.1961 (Topal) (ZMUC, CG).

Diagnosis.— This species is recognized by its slender shape, grey-brown colour, and its very narrow second lobe of the forewing. In the male genitalia the asymmetrical saccular processes and in the female genitalia the antrum are characteristic.

Description.— Male and female (fig. 37B). Wingspan 15-18.5 mm. Head appressedly scaled brown-grey. Antennae $0.5 \times$ as long as wing length, ringed pale and dark grey-brown. Palpae as long as diameter of eye, brown-grey, appressedly scaled. Thorax brown-grey. Abdomen pale grey-brown, with dorsally a small, dark brown longitudinal line and laterally a dark brown pronounced line. Hindlegs with two pairs of spurs of equal length.

Forewing's cleft from $7/_{10}$, brown-grey with scattered white scales. At $1/4$ of dorsum an indistinct brown spot. Dorsal margin of both lobes with a row of dark brown scales, in first lobe alternated with white scales. Fringes grey, white before apex along the costa of first lobe. Underside dark brown.

Hindwings grey-brown. Fringes brown-grey. Underside grey-brown. Androconial scales black, in a single row. In the basal half of the row these scales have a costal projection and are densely arranged; in the outer half of the row the scales have a dorsal projection and are arranged more separately.

Variation.— In the type series not noticeable.

Male genitalia (fig. 77).— The valvae are symmetrical in structure, but the basally localised saccular processes are asymmetrical; in the left valvae a semicircular process and in the right valva two slightly curved ones. Distal half of sacculus symmetrical. Vinculum semicircular and wide. Tegumen bilobated. Uncus stout. Juxta asymmetrical, rather slender. Aedeagus slightly curved, conical.

Female genitalia (fig. 118).— Antrum consisting of an almost rectangular, sclerotized plate, with the ostium before the middle. Ductus bursae slender, almost straight. Bursa copulatrix simple, with two longitudinally, weakly-sclerotized, asymmetrical signa. Ductus seminalis originating beside ductus bursae. Papillae anales well-developed. Apophyses posteriores $2.5 \times$ as long as papillae anales. Apophyses anteriores absent.

Ecology.— The species has been collected from half November till half February. Biology unknown.

Distribution.— Argentina: Rio Negro, Neuquen. Distribution mapped in fig. 166.

Etymology.— The species has been named *murinus* for its mouse-grey colour.

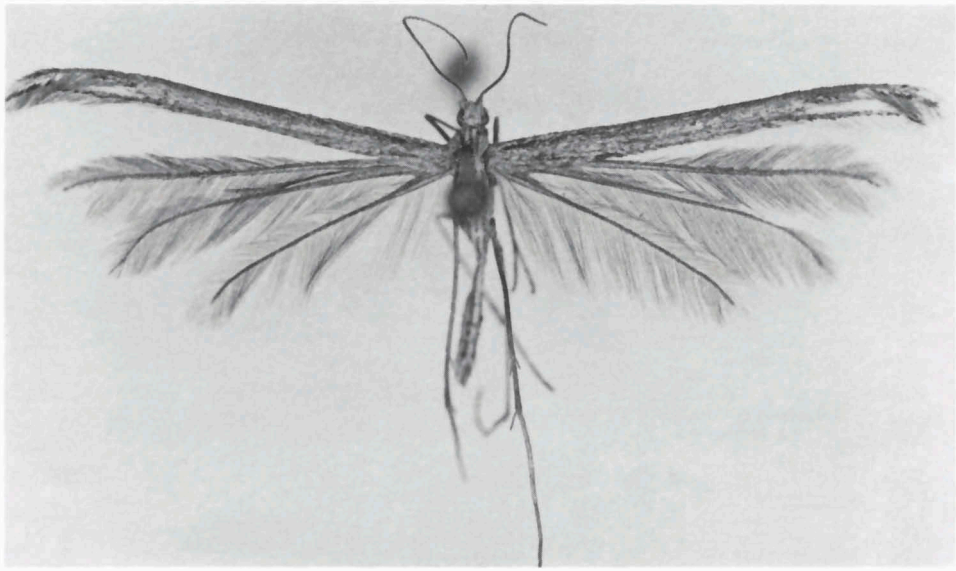


Fig. 37A, *Patagonophorus murinus* spec. nov. Holotype. Argentina, Rio Negro, San Carlos de Bariloche, Nirihuau, 30.xii.1978 (Mis. Sci. Dan., Sta. 11), preparation CG 4132, coll. ZMUC, genitalia CG 4116.

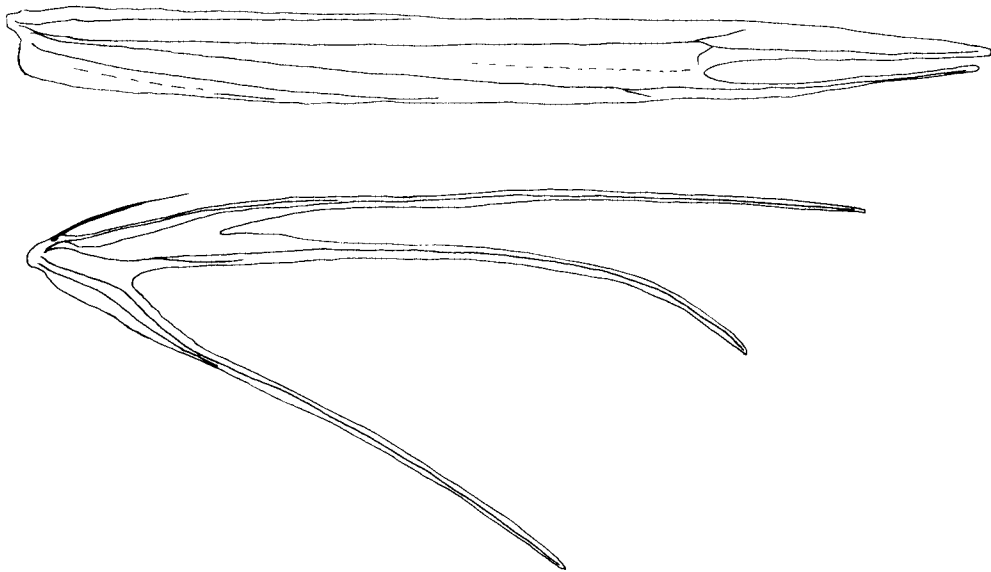


Fig. 37B, *Patagonophorus murinus* spec. nov. Holotype. Wing venation, data as fig. 37A.

Genus *Pselnophorus* Wallengren, 1881

Pselnophorus Wallengren, 1881: 96. Type species (by original designation): *Alucita brachydactyla* Kollar, 1832: 100.

Redescription.— Palpae curved upwards, slender. Antennae densely ciliated. Hindlegs with scale-brushes around base of spurs. Lateral spurs shorter than medial spurs. Forewings without anal angles in the lobes. Veins: R1 absent; R2 separate; R3-5 stalked; M3, CU1 and CU2 stalked. Hindwing veins: M3 absent.

Male genitalia.— Valvae asymmetrical; sacculus with pronounced spines or spines.

Female genitalia.— Antrum and ductus bursae simple. Bursa copulatrix vesicular; signum absent or weakly-developed.

Remarks.— The genus is closely related to the *Pterophorus* group of genera and the *Oidaematophorus* group, differing mainly in the wing venation.

Pselnophorus alternarius (Zeller, 1874)

(figs. 38, 78, 119, 167)

Acipitilia alternaria Zeller, 1874: 447.

Acipitilia alternarius; Bourquin, 1949: 415-417.

Pselnophorus alternarius; Meyrick, 1908: 14; 1913: 20.

Material.— Holotype, ♂: Chile, Valparaíso, xi (Mathew), (BMNH). Paratype ♀: data as holotype, (BMNH).

Argentina: Santa Cruz— 5 ♂♂, 3 ♀♀, Lago Argentino, El Calafate, 200 m, 10.i.1979, 12.i.1979 (Misión Científica Danesa, Sta. 29) (ZMUC); 1 ♂, Río Gallegos, 15.i.1979 (Misión Científica Danesa, Sta. 31) (ZMUC); 1 ♀, Fitz Roy, Río Deseado, 11.ii.1979 (Misión Científica Danesa, Sta. 26) (ZMUC). Chubut—1 ♂, Leleque, Colonia Lepa, 7.i.1979 (Misión Científica Danesa, Sta. 21) (ZMUC); 1 ♀, Tecka, 750 m, 7.i.1979 (Misión Científica Danesa, Sta. 22) (ZMUC); 1 ♀, Esquel, 550 m, 1.i.1982 (Nielsen & Karsholt, sta. 47) (ZMUC). Río Negro— 2 ♂♂, 1 ♀, El Bolson, at light, 13.ii.1961, 27.iii.1961, (Topál) (ZMUC); 1 ♀, Norquín, 17.ii.1961, (lampa) (Topál) (ZMUC); 11 ♂♂, 3 ♀♀, San Carlos de Bariloche, Nirihuau, 770 m, 9.xii.1978, 30.xii.1978, 2.i.1979, 18-19.x.1981, 25-26.x.1981, 28-30.x.1981 (Misión Científica Danesa, Sta. 11; Nielsen & Karsholt, Sta. 29) (ZMUC). Neuquén— 14 ♂♂, 5 ♀♀, Río Limay, Arroyito, 16.xi.1978, 17.xi.1978, 17.xii.1978, 22.xii.1978 (Misión Científica Danesa, Sta. 12) (ZMUC); 2 ♂♂, San Martín de los Andes, 640 m, 21-27.ix.1981, 17-31.x.1981 (Nielsen & Karsholt, Sta. 11) (ZMUC); 2 ♂♂, San Martín de los Andes, Quilquihue, 750 m, 15-24.xi.1981 (Gentili, Sta. 32) (ZMUC); 1 ♂, 4 ♀♀, Pte. Blanco, Chapelco, San Martín de los Andes, 25.ii.1978 (Flint) (USNM); 7 ♂♂, Piedra del Aguila, 15.xi.1978, 18.xii.1978, 19.xii.1978, 23.xii.1978 (Misión Científica Danesa, Sta. 15) (ZMUC); 1 ♂, Zapala, El Marucho, 870 m, 26.x.1981 (Gentili, Sta. 34) (ZMUC); 1 ♂, Lago Lacar, 5 km E. of Hua-Hum, 640 m, 16.x.1981 (Nielsen & Karsholt, Sta. 17) (ZMUC); 3 ♂♂, San Carlos de Bariloche, Confluencia, 690 m, 17.x.1981, 15-24.xi.1981 (Gentili, Sta. 31) (ZMUC); 3 ♂♂, 1 ♀, Junín de los Andes, Catán Lil, 825 m, 27.x.1981 (Gentili, Sta. 33) (ZMUC); 1 ♂, Junín de los Andes, Collón Curá, 750 m, 28.ix.1981 (Nielsen & Karsholt, Sta. 10) (ZMUC). Buenos Aires— 3 ♂♂, 2 ♀♀, Ramos Mejía, 4.xii.1961, 5.xii.1961 (Topál) (ZMUC); 5 ♀♀, Ao. Carnaval, Villa Elisa, 25-30.xi.1979, 23.xii.1979 (Flint) (USNM); 2 ♀♀, Ao. Dulce, Rt. 180, 15 km N. Rojas, 13-14.xii.1979 (Flint) (USNM); 1 ♂, 1 without abdomen, Río Salado, Rt. 3, S. San Miguel del Monte, 6.xii.1979, 7.xii.1979 (Flint) (USNM); 2 ♂♂, 4 ♀♀, Ao. Vitel, N. Chascomus, 27-28.xi.1979 (Flint), genitalia CG 6054 (♂) (USNM); 2 ♀♀, La Plata, 21.xi.1968, 1.xii.1975 (Argemí) (MLPA). **Chile:** 1 ♂, 1 ♀, Valparaíso, no date, (MZUC); 1 ♀, Chillán, 1.xii.1961 (Trampa) (MNHC). Santiago — 9 ♂♂, 22 ♀♀, El Portezuelo, 7 km N. Santiago, 500 m, 22-25.x.1981, 19-20.xi.1981 (Davis) (USNM); 3 ♂♂, 3 ♀♀, Río Colorado, ca 40 km SE. Santiago, 1100 m, 29-31.x.1981 (Davis) (USNM); 1 ♂, El Alfalfal, 29.ii.1968

(Flint & Peña) (USNM); 6 ♂♂, 7 ♀♀, nr. Pta. Yeso, ca 70 km SE. Santiago, 1250 m, 27-28.x.1981 (Davis) (USNM); 1 without abdomen, Guayacan, x.1952 (Peña) (CNC). Coquimbo— 1 ♂, Nague, 11 km N. Los Vilos, 20 m, 4-5.xi.1981 (Davis) (USNM); Atacama— 3 ♀♀, 3 km S. Freirina, 13-14.xi.1981 (Davis) (USNM); Aconcagua— 1 ♀, Los Molles, ca 10 km S. Pichidangué, 25 m, 15-17.xi.1981 (Davis) (USNM); Bio Bio— 1 ♂, Salto de Laja, 32 km N. Las Angelas, 200 m, 4.xii.1981 (Davis) (USNM); 1 ♀, Est. Huequecura, 25 km E. Sta. Barbara, 24.i.1978 (Flint) (USNM); 1 ♂, Chillan, 1.xii.1961 (Trampa) (MNHC). Concepcion— 1 ♂, ca. 20 km S. Coelemu, 50 m, 28.i.1979 (Davis & Akerbergs) (USNM); Curico— 1 ♀, El Coigo, 1.iii.1978 (Flint & Peña) (USNM); Nuble— 1 ♀, Piedra de la Iglesia, 8 km N. Cobquecura, 5 m, 24.i.1979 (Davis & Akerbergs) (USNM). Osorno — 1 ♀, Rio Rahue, 20.x.1969 (Flint & Barria) (USNM). Antofagasta— 2 ♀♀, Paposo, luz, 8-10.x.1983 (Elgueta) (MNHC). Huasco— 2 ♀♀, Quadra Honda, Corrizal bajo, 30.xi.1987 (Barriga) (MZUC). Ecuador: 1 ♂, Guachayacu, ix-x.1926 (Vorbeck), genitalia CG 4073 (ZMUC).

Diagnosis.— *P. alternarius* is a distinct South American plume moth, recognized by its characteristic fringe pattern in the forewing.

Redescription.— Male and female (fig. 38). Wingspan 13-21 mm. Head appressedly scaled, pale grey and brown-grey. Palpae short, curved along face. Second segment roughly scaled; third segment relatively small. Antennae pale grey to pale brown-grey, shortly ciliated. Thorax pale brown-grey. Abdomen pale brown-grey, with three, longitudinal brown lines on upper side. First segment brownish. Underside unicoloured pale brown-grey.

Forewing cleft from $1/2$, pale grey; indistinct pale brown-grey scaling with increasing intensity toward base of cleft. Dark brown spots at dorsum at $1/3$ and $1/2$, and at costa above base of cleft. End of the cell with indistinct group of dark brown scales. Dark brown and white scales along dorsal margin of first lobe. The fringes along costal margin of first lobe alternately dark brown and pale grey, with the dark parts above the base of the cleft, in the middle and near the apex. Dorsal fringes of first lobe grey-brown. Costal fringes of second lobe with two alternating dark brown and grey-white parts; the anal part dark. Along the dorsal margin dark and light fringes in a pattern reverse to that in the costal margin; anal part small, dark. Underside dark brown, with distinct fringe pattern as above.

Hindwing in basal half brown-grey, towards termen gradually more brown. Fringes in all lobes near base grey, towards termen brown. Underside brown-grey. Androconial scales black, in a single row, passing into the second lobe from the base of the cleft between lobes 1 and 2, up to halfway the second lobe.

Variation.— The intensity of the brown scaling on the forewing may be high. The weakly-defined cellular spot sometimes pronounced.

Male genitalia (fig. 78).— Valvae symmetrical, trapezoid. Sacculus small, passing into a dorsal process as long as sacculus. Tegumen bilobed, triangular. Uncus slender, of moderate size. Vinculum curved, narrow. Juxta moderate. Aedeagus hooked in basal $1/3$. No cornutus. No coecum.

Female genitalia (fig. 119).— Antrum funnel-like, passing into a slender and almost straight ductus bursae. Bursa copulatrix vesicular; signum simple, in shape of an extended brace. Apophyses posteriores $2.5 \times$ as long as papillae anales. Apophyses anteriores absent.

Ecology.— The moths were collected from October till February. Host plant: *Echium plantagineum* Linnaeus (Boraginaceae). Life history: The larvae feed on shoots and flowers. The life cycle lasts approximately 60 days (surroundings of Buenos Aires, Argentina). All stages can be found on the host plant: eggs, larvae of different

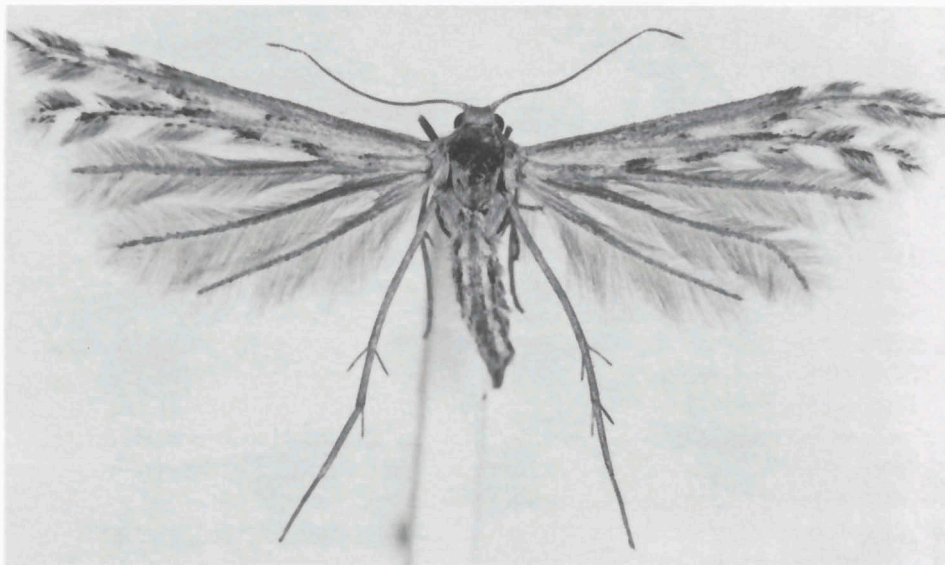


Fig. 38, *Pselnophorus alternarius* (Zeller). Argentina, Rio Negro, San Carlos de Bariloche, Nirihuau, 770 m, 30.xii.1978 (Mis. Sci. Dan., Sta. 11), coll. ZMUC.

maturity, pupae and resting moths (Bourquin, 1949).

Distribution.— Argentina: Chubut, Neuquen, Rio Negro, Santa Cruz, Buenos Aires; Chile: Aconcague, Atacama, Bio Bio, Concepcion, Coquimbo, Curico, Nuble, Osorno, Valparaiso, Santiago; Ecuador: Guachayacu. Distribution mapped in fig. 167.

Remarks.— The species is relatively closely related to *Pterophorus leptochorda* Meyrick, differing in the markings, female genital structure and wing-venation.

Genus *Adaina* Tutt, 1905

Adaina Tutt, 1905: 37. Type species (by original designation): *Alucita microdactyla* Huebner, [1813]: plate 5, figs. 26, 27.

Redescription.— Forewing lobes without anal angles. Wingvenation: R1 separate; R2+3 and R4 stalked, with the base at apical angle of discal cell; R5 separate.

Male genitalia.— Valvae asymmetrical; sacculus of right valve with a small spine or ridge, and sacculus of left valve with a pronounced spine or spine.

Female genitalia.— Antrum laterally positioned. Ductus seminalis pronounced; bursa copulatrix vesicular.

Remarks.— The genus is closely related to the *Oidaematophorus*, *Pselnophorus* and *Pterophorus* groups of genera, differing by the wing venation.

Adaina everdinae spec. nov. (figs. 39, 79, 168)

Material.— Holotype, ♂: Argentina, Salta, Rosaria de la Frontera, Los Banos, 6.iv.1979 (Mision Cientifica Danesa, Sta. 72), genitalia CG 4176 (ZMUC).

Diagnosis.— The species is characterized by the saccular spine in the left valve.

Description.— Male (fig. 39). Wingspan 13 mm. Head appressedly scaled, olive-brown, between base of antennae grey-white. Palpae protruding, as long as diameter of eye, grey-white. Second and third segment equally long; second segment terminally with a faint, pale brown ring. Antennae dorsally white, ventrally brown; shortly ciliated. Thorax and tegulae yellowish-white; thorax terminally faint brown. Hind-legs grey-white; proximal spur pair of unequal length, distal spur pair of equal length.

Forewing cleft from $1\frac{1}{2}$, grey-white. Markings brown: an oblique spot at base of cleft, a costal spot on the first lobe beyond base of cleft, two sub-apical spots at the dorsum of both lobes, and isolated brown scales in the basal winghalf. Fringes grey, darker near the spot on the wing. Underside grey-brown, with a dark costal streak from base to half the wing length and a costal spot beyond base of cleft.

Hindwings pale grey-brown. Fringes and underside grey-brown. Androconial scales dark brown, in a double row, the costal row longer than the dorsal row.

Male genitalia (fig. 79).— Valvae asymmetrical. Right valve lanceolate, with an weakly-pronounced sacculus. Left valve rounded. Sacculus basally oval shaped, progressing into a large, slender spine, curved dorsally and reaching to the top of the valve. Tegumen bilobated. Uncus of moderate size, slender. Vinculum arched. Juxta with two cauli of unequal length. Aedeagus slightly curved, with a small sclerotized central ridge.

Female genitalia.— Unknown.

Ecology.— The single specimen was collected in April. Biology unknown.

Distribution.— Argentina: Salta. Distribution mapped in fig. 168.

Remarks.— The genital structure the species closely resembles that of *A. thomae*, but it differs in the oval basal part of the sacculus and the more slender and evenly curved saccular spine.

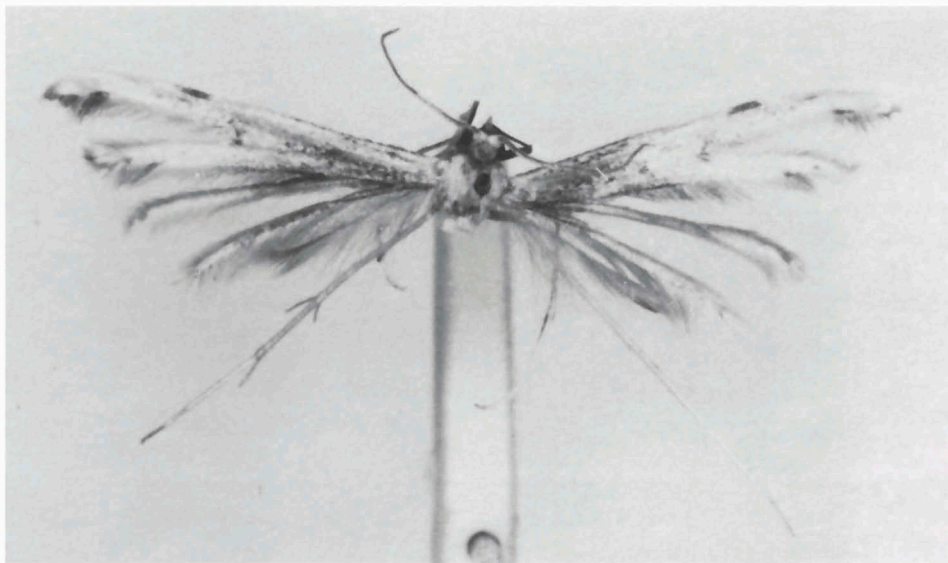


Fig. 39, *Adaina everdinae* spec. nov. Holotype, Argentina, Salta, Rosaria de la Frontera, Los Banos, 6.iv.1979 (Mis. Sci. Dan., Sta. 72), coll. ZMUC.

Etymology.— Named after Mrs Betsie Everdina van de Sant.

Genus *Oidaematophorus* Wallengren, 1862

Oidaematophorus Wallengren, 1862: 19. Type species (by original designation): *Alucita lithodactyla* Treitschke, 1833: 245.

Redescription.— Forewing cleft from $2/3$, the first forewing lobe without an anal angle. Forewing veins: R1 from the costa of the discal cell, R2+3, R4 and R5 separate near the apical corner of the discal cell. Middle legs with a scale brush around base of spur pairs, which may be weakly-developed.

Male genitalia.— Valvae asymmetrical. Sacculus in right valve occasionally with a small spine or spine, in left valve with a pronounced spine.

Female genitalia.— Antrum mostly laterally placed. Bursa copulatrix vesicular, often well-developed, seldom with a signum. Vesica seminalis mostly well-developed.

Remarks.— In Palaearctic literature (e.g. Hannemann, 1977; Buszko, 1979) it is often stated that the genus *Leioptilus* Wallengren, now *Hellinsia* Tutt, is distinct from the present genus. It is mentioned that the venation in the forewings is different, and what is more important, that the scale-brushes around the base of the spur pairs on the middle legs are absent. These criteria, however, are not as absolute as suggested. The scale-brushes are present in all species now recognized in the West Palaearctic region, although admittedly sometimes weakly-developed. This means that this character is insufficient to be used. The venation is in general not significantly different either. This is why I follow the synonymy made by Barnes & Lindsey (1921) and accepted by American authors since.

An additional synonym is found in examining the type species of the genus *Utuca*: *U. ochracealis* Walker, 1864. The genitalia and the wing-venation are within the definition of the present genus.

Key to the species

1. Palpae silvery white *O. cinerarius* (Philippi)
- Palpae not silvery white 2
2. Colour white to grey-white 3
- Colour grey-brown, ochreous to dark brown 6
3. Markings faint, ochreous 4
- Markings brown or black 5
4. Colour silvery-white without shading *O. hololeucos* (Zeller)
- Colour white with ochreous shine *O. mauleicus* spec. nov.
5. A black spot at base of forewing cleft *O. betsiae* spec. nov.
- A brown spot at anal angle of first lobe of forewing . *O. angulofuscus* spec. nov.
6. Before base of forewing cleft an oblique, but straight line *O. siskaellus* spec. nov.
- Line before base of cleft angulated, or only a spot 7
7. At base of the cleft an oblique, angulated line or a spot combined with a costal spot terminally placed 8

- At the base of cleft a single spot without a terminally placed costal spot, or no spot 10
- 8. Before base of forewing cleft an oblique line *O. mallecoicus* spec. nov.
- Before base of cleft two obliquely placed spots 9
- 9. Spots at base of cleft sharply defined *O. coquimboicus* spec. nov.
- Spots at base of cleft not sharply defined *O. pelodactylus* (Berg)
- 10. Forewing lobes with spots at costal and dorsal margin *O. grandaevus* (Meyrick)
- Without such spots at margins *O. glaphyrotus* (Meyrick)

Key based on the male genitalia

The male genitalia of *O. pelodactylus*, *O. coquimboicus* and *O. cinerarius* are unknown.

- 1. Left valve with stout, semicircular saccular spine 2
- Saccular spine otherwise 3
- 2. Uncus short, juxta $\frac{2}{3}$ rd of left valve's length (fig. 80) *O. siskaellus* spec. nov.
- Uncus moderate long, juxta $\frac{1}{3}$ rd of left valve's length (fig. 81) *O. betsiae* spec. nov.
- 3. Right sacculus with well-developed spine, almost as long as width of valve (fig. 84) *O. mallecoicus* spec. nov.
- Right sacculus without such a spine 4
- 4. Right valve centrally with brush of pronounced hairs (fig. 87) *O. glaphyrotus* (Meyrick)
- Right valve without such a brush 5
- 5. Right valve with saccular spine of almost half the valve's width (fig. 83) *O. hololeucos* (Zeller)
- Right valve with smaller saccular spine 6
- 6. Saccular spine in left valve approximately half the valve's length (fig. 82) *O. mauleicus* spec. nov.
- Saccular spine in left valve shorter 7
- 7. Saccular spine in left valve approximately $\frac{1}{4}$ th of valve length; juxta pronounced (fig. 85) *O. angulofuscus* spec. nov.
- Saccular spine in left valve approximately $\frac{1}{6}$ th or even smaller than valve length; juxta slender (fig. 86) *O. grandaevus* (Meyrick)

Key based on the female genitalia

The female genitalia of *O. cinerarius* are unknown.

- 1. Apophyses anteriores absent 2
- Apophyses anteriores present 3
- 2. Antrum funnel-like (fig. 121) *O. betsiae* spec. nov.
- Antrum club-like, proximally narrowing (fig. 128) *O. grandaevus* (Meyrick)
- 3. Apophyses anteriores as wide as ductus bursae 4
- Apophyses anteriores not as wide as ductus bursae 8

4. Apophyses anteriores curved 5
- Apophyses anteriores straight 6
5. Apophyses anteriores as long as wide (fig. 126) *O. coquimboicus* spec. nov.
- Apophyses anteriores longer than wide (fig. 124) *O. hololeucos* (Zeller)
6. Ductus seminalis originating near antrum 7
- Ductus seminalis originating near bursa copulatrix (fig. 125) *O. mallecoicus* spec. nov.
7. Ostium flattened; antrum narrower and rectangular. Ductus bursae centrally originating in proximal antrum part (fig. 123) *O. mauleicus* spec. nov.
- Ostium rounded; antrum as long as wide. Ductus bursae originating laterally in proximal antrum part (fig. 129) *O. glaphyrotus* (Meyrick)
8. Antrum laterally positioned; ductus bursae and bursa copulatrix small (fig. 120) .
..... *O. siskaellus* spec. nov.
- Antrum centrally positioned 9
9. Bursa copulatrix spiculated (fig. 127) *O. angulofuscus* spec. nov.
- Bursa copulatrix smooth (fig. 122) *O. pelodactylus* (Berg)

***Oidaematophorus siskaellus* spec. nov.**

(figs. 40, 80, 120, 169)

Material.— Holotype, ♂: Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 29-30.xii.1981 (Nielsen & Karsholt, Sta. 9), genitalia CG 4126 (ZMUC). Paratypes: 2 ♂♂, 2 ♀♀: same locality, 1.i.1979, 4.i.1979, 6.i.1979, 5-7.i.1982 (Mision Cientifica Danesa, Sta. 7; Nielsen & Karsholt, Sta. 9), genitalia CG 4127 (ZMUC, CG); 1 ♂, Chile, Malleco, nr. Los Gringos Camp, Nahuelbuta Nat. Park, 1300 m, 6-11.i.1981 (Davis) (USNM); 3 ♂♂, Chile, Nuble, Alto Tregualemu, ca. 20 km SE. Chovellen, 500 m, 1-3.xii.1981 (Davis) (USNM); 2 ♂♂, 1 ♀, Chile, Santiago, nr. Pta. Yeso, ca. 70 km SE. Santiago, 1250 m, 27-28.x.1981 (Davis), genitalia CG 6055 (USNM).

Diagnosis.— The species is characterized by its heavy and unique markings.

Description.— Male and female (fig. 40). Wingspan 21-23 mm. Head appressedly scaled. Face dark brown; frons brown-grey. Collar with erected, dark brown scales. Palpae short, slender, slightly larger than diameter of eye. Antennae $\frac{2}{3}$ of wing length. First segment grey-white; other segments indistinctly ringed grey-white and grey-brown; all segments shortly ciliated. Thorax brown-grey. Abdomen grey-brown. Legs grey-brown, tarsi white. Spur pairs of equal length. Around base of distal spur pair some grey-brown scales.

Forewing colour pale brown, markings dark brown, an indistinct costal streak and discal spot, a blotch above the base of the cleft passing at base into a small dark transverse streak not reaching dorsum, costal streaks in the two lobes, and a dorsal streak in the first lobe. Basal half of costal streak of second lobe extending as a faint developed transverse band into the basal half of the second lobe. Next a diffuse white scaling, condensing into a small streak parallel to the costal streak, and at the costa between the costal streak, the blotch and the costal streak in the first lobe; between the transverse band at the base of the cleft and the transverse band in the bases of the second lobe; and terminally around the costal streak in the second lobe. Fringes grey-brown, with a dark basal line in the dorsum of the first and costal and dorsal in the second lobe. Underside grey-brown. Dark markings, margined white,



Fig. 40, *Oidaematophorus siskaellus* spec. nov. Paratype, Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 5-7.i.1982 (Nielsen & Karsholt, Sta. 9), coll. CG.

above and at base of cleft, and small dots at costa of first lobe. A spot, not margined, at anal angle of first and second lobe and one at apex of second lobe.

Hindwings, fringes and underside grey-brown. Androconial scales black, in a dense row between bases of clefts and extending into isolated scales. A second row of isolated scales parallel to the first, more at dorsum of second lobe.

Variation.— The intensity of the dark and white scaling is variable.

Male genitalia (fig. 80).— Valvae asymmetrical; the left valve with a slender spine, originating from junction-structure with tegumen, half as long as valve. Right valve with a rather stout saccular arm, and a small ampulla pointing toward base of valve. Left valve rounded, the right one more elongated. Tegumen bilobated. Uncus short. Juxta stout. Vinculum arched, slender. Aedeagus slender, curved.

Female genitalia (fig. 120).— Left lateral ending of antrum simple. Ductus bursae short, weakly-developed, gradually passing into bursa copulatrix; no signum. End-gut well-developed, resembling a large bursa. Papillae anales large; apophyses posteriores $1.5 \times$ the as long as papillae anales. eighth sternite plate-like, with small apophyses anteriores.

Ecology.— The specimens were collected in late October and from December till early in January. Biology unknown.

Distribution.— Argentina: Rio Negro; Chile: Malleco, Nuble, Santiago. Distribution mapped in fig. 169.

Remarks.— The related species *O. betsiei* has less pronounced markings and the genitalia are more slenderly built.

Etymology.— The species is named after my wife Siska who has patiently borne my work on these insects for numerous evenings and weekends.

***Oidaematophorus betsiae* spec. nov.**
(figs. 41, 81, 121, 170)

Material.— Holotype, ♂: Chile, Curico, Buchen, 20 km E. Potrero Grande, 1300 m, 11.i.1955 (Peña), genitalia CG 6045 (CNC). Paratype ♀: Chile, Santiago, Guayacan, 1100 m, x.1952 (Peña), genitalia CG 6046 (CG).

Diagnosis.— The species is characterized by the silvery white colour and the round spot at the base of the cleft.

Description.— Male and female (fig. 41). Wingspan 21 mm. Head ferruginous white, with some pronounced scales. Palpae grey-white, as long as diameter of eye. Second palp-segment as long as third. Antennae ferruginous white, shortly ciliated. Thorax and mesothorax pale ferruginous; tegulae silvery white. Legs grey-white.

Forewing's cleft from $\frac{2}{3}$, white. A dark brown rounded spot at base of cleft. At costa a ferruginous dash above base of cleft and at costa centrally at first lobe. Some ferruginous scales along costa and some grouped at $\frac{1}{3}$ of dorsum. Fringes grey-white. Underside grey-white, paler near apical region. Spot at base of cleft is also present here.

Hindwings silvery grey-white. Fringes grey-white. A faint grey spot at the base of the cleft between the first and second lobe. Underside grey-white. The spot at the base of the first cleft is indicated here. Androconial scales black, in a double row, the costal row longer than the dorsal row.

Variation.— The specimens show some variability in the intensity of the ferruginous scales on the forewing.

Male genitalia (fig. 81).— Valvae asymmetrical. Right valve elongate, sacculus with small spine. Left valve rounded, sacculus with large, stout spine, arched, half the valve's length. Tegumen bilobated. Uncus slender, moderate. Vinculum curved. Juxta asymmetrical, short. Aedeagus short, tube-like.

Female genitalia (fig. 121).— Antrum funnel-shaped, passing into the short ductus bursae. Bursa copulatrix vesicular. Ductus seminalis rather short, as wide as ductus bur-

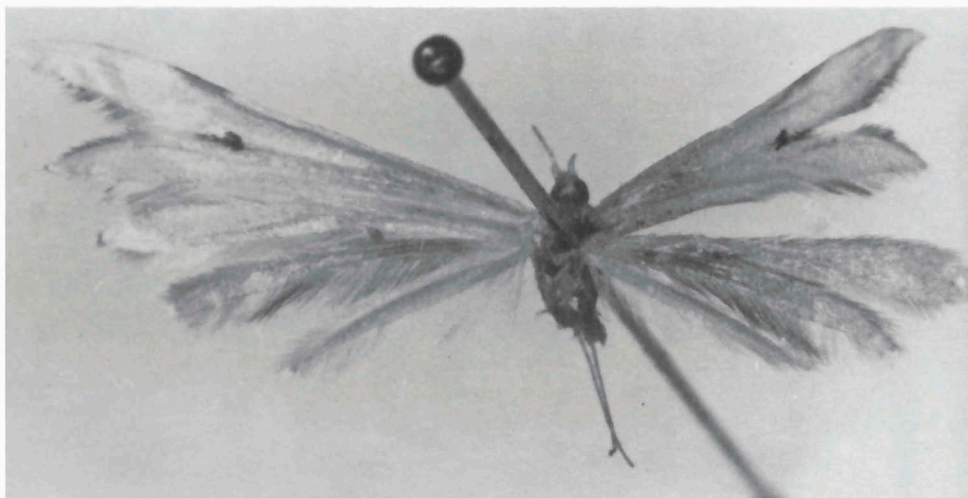


Fig. 41, *Oidaematophorus betsiae* spec. nov. Holotype, Chile, Curico, Buchen 20 km E Potrero Grande, 1300 m, 11.i.1955 (Peña), genitalia CG 6045, coll. CNC.

sae. Apophyses posteriores $1.5 \times$ as long as papillae anales. Apophyses anteriores absent.

Ecology.— The specimens were collected in October and January. Biology unknown.

Distribution.— Chile: Santiago. Distribution mapped in fig. 170.

Remarks.— The species is closely related to *O. siskaellus* Gielis, but differs in the colour and shape of the markings. The male genitalia show a different uncus and saccular left spine. The female genitalia differ by place and shape of antrum and vesicular bursa copulatrix.

Etymology.— Named after Mrs Betsie Everdina van de Sant.

***Oidaematophorus pelodactylus* (Berg, 1885)**
(figs. 42, 122, 171)

Oedematophorus pelodactylus Berg, 1885: 284

Material.— Lectotype (designated here) (without abdomen): [Argentina], Buenos Aires, no date; Typus; nr. 2290; "*Oedematophorus pelodactylus*, 1885, Berg". (MLPA). Paralectotypes (designated here) (all without abdomen): 1 specimen, [Argentina], Banda Oriental, no date; Typus; nr. 2290; "*Oedematophorus pelodactylus* Berg, ej que acompahana el tipo". 1 specimen: [Argentina], Buenos Aires, no date; Typus; nr. 2290; "*Oedematophorus pelodactylus* Berg, ej que acompahana el tipo" (MLPA). Argentina: Tigre— 1 without abdomen, Tigre, iii.1938 (BMNH). Buenos Aires— 1 ♀, 1.iii.1906 (Wilkinson), genitalia BM 18463 (BMNH).

Diagnosis.— The species is characterized by the rather narrow wingshape and the spotted pattern.

Redescription.— Male and female (fig. 42). Wingspan 21–24 mm. Head appressedly scaled, ochreous brown. Collar with some erected scales. Palpae short and slender, as long as diameter of eye, pale brown with scattered isolated dark brown scales. Antennae faintly ringed pale brown and pale grey-brown, shortly ciliated. Thorax and tegulae ochreous brown. Abdomen not present in the specimens examined. Hindlegs ochreous white, ringed brown before the spur pairs.

Forewing's cleft from $\frac{3}{5}$, ochreous brown. Markings dark brown, consisting of a dorsal spot at $\frac{1}{4}$, a spot before the base of the cleft and a costal spot in the first lobe, just beyond base of cleft. Next dark scaling along costa and at apex of second lobe; at $\frac{2}{3}$ of first lobe a small costal and dorsal spot and a small spot at anal angle of second lobe. Fringes ochreous brown, but grey at dorsal spot of first lobe and around apex of second lobe. Underside dark brown with yellow-white scales bordering the dark spots at the costa as above and in the apices.

Hindwings grey-brown. Fringes grey. Underside brown. Androconial scales orange-brown, in a double row, the costal row the longer, extending into the second lobe.

Variation.— The colour varies from ochreous brown to pale brown.

Male genitalia.— Unknown.

Female genitalia (fig. 122).— Antrum centrally placed, $2 \times$ as long as wide. Ductus bursae slender. Bursa copulatrix very small, vesicular. Apophyses anteriores small. Apophyses posteriores as long as the large papillae anales.

Ecology.— The only dated specimen was collected in March. The larvae live soli-

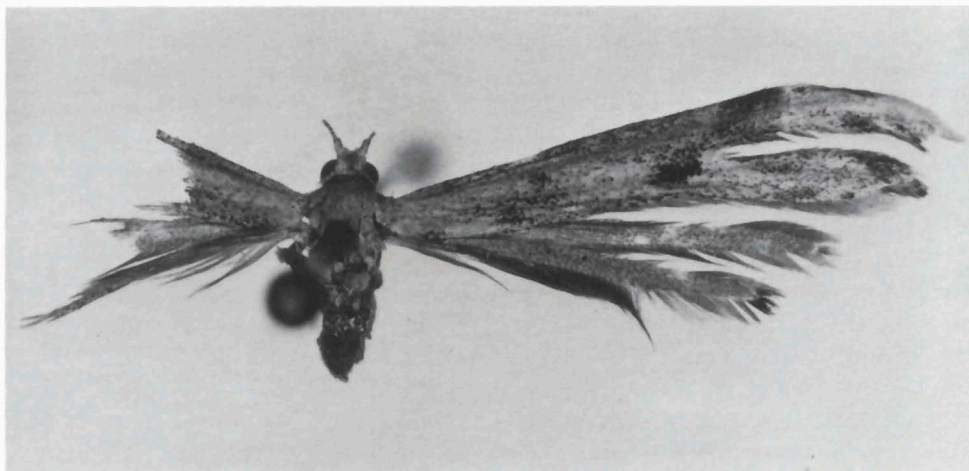


Fig. 42, *Oidaematophorus pelodactylus* (Berg). Lectotype, (Argentina), Buenos Aires, no date; "Typus"; nr. 2290; "*Oedaematophorus pelodactylus* Berg, 1885". Coll. MLPA.

tarily on *Solanum bonariensis* Linnaeus (*Solanaceae*). Berg mentions this hostplant in his original description; one of the type specimens holds a pupal skin at the collection-pin, but a hostplant is not mentioned on the specimen-label. Bourquin (1940) describes the larval stages, and mentions the same hostplant.

Distribution.— Argentina: Buenos Aires, Banda Oriental, Tigre. Uruguay. Distribution mapped on fig. 171.

Remarks.— The species is recognizable by colour and wing pattern. The number of specimens in the collections of the BMNH and the MPLA is low. Of the specimens examined, only two females had their abdomen. These two specimens have been used to illustrate the genital structure of the species.

***Oidaematophorus mauleicus* spec. nov.**
(figs. 43, 82, 123, 172)

Material.— Holotype, ♂: Chile, Maule Prov., Rio Teno, ca. 40 km E. Curico, 800 m, 25-27.xi.1981 (Davis) (USNM). Paratypes: 1 ♂: same data, genitalia CG 6056; 1 ♂, 1 ♀: Chile, Santiago Prov., Pilay, Rio Peuco, ca 45 km S. Santiago, 800 m, 23-24.xi.1981 (Davis) (USNM); 1 ♂: Chile, Santiago Prov., nr. Pta. Yeso, ca. 70 km S. Santiago, 1250 m, 27-28.x.1981 (Davis) (USNM); 2 ♂♂, 3 ♀♀: Chile, El Portezuelo, 7 km N. Santiago, 500 m, 22-25.x.1981 (Davis), genitalia CG 6090 (USNM).

Diagnosis.— The species is characterized by the silvery-white colour, with scattered numerous ochreous-tinged scales.

Description.— Male and female (fig. 43). Wingspan 15-18 mm. Head appressedly scaled. Collar and face ochreous, between base of antennae silvery-white. Palpae 1.5 × as long as diameter of eye, slender, silvery white with scattered ochreous scales. Antennae with grey-brown and white scales, shortly ciliated. Thorax, tegulae and mesothorax cream-white. Abdomen white with a faint ochreous dorsal line. Legs silvery white. Hindlegs with two pairs of spurs, the inner spurs longer than outer ones.

Forewing's cleft from $\frac{2}{3}$, colour white with ochreous markings and gloss. Markings as an oblique dot before the base of the cleft, progressing in a faint dash in both first lobe and discus towards base of wing. Along basal costa and dorsum a faint ochreous gloss. A small black dot at apex of second lobe, mid-dorsal at first and second lobe and central at costa of first lobe. Fringes white, blackish near anal angle and apex of second lobe and mid-costal of first lobe. Underside yellow-white, with scattered numerous brown scales from base toward cleft. Apical parts more yellowish. Dark spots at costa dorsum and apex of both lobes well-defined.

Hindwings whitish-grey. Fringes and underside grey-white. At apex of lobes small black dots. Androconial scales ferruginous, in a double row, the dorsal row short, the costal row passing into the second lobe.

Variation.— The pigmentation of the ochreous mixed scales and the small black dots is variable.

Male genitalia (fig. 82).— Valvae asymmetrical. Right valve elongated, with small saccular spine at $\frac{1}{7}$ of valve width. Left valve lanceolate with large saccular spine of half the valve length. Tegumen bilobated. Uncus slender, of moderate size. Vinculum arched. Juxta asymmetrical. Aedeagus tube-like, with a weakly-pronounced coecum.

Female genitalia (fig. 123).— Antrum flattened towards top, $1.5 \times$ as long as wide. Ductus bursae very narrow and short. Bursa copulatrix vesicular; no signum. Ductus seminalis slender, longer than bursa copulatrix. Apophyses posteriores $3 \times$ as long as papillae analis. Apophyses anteriores pronounced, as long as antrum. Lamina ante-vaginalis arched.

Ecology.— The specimens were collected in October and November. Biology unknown.

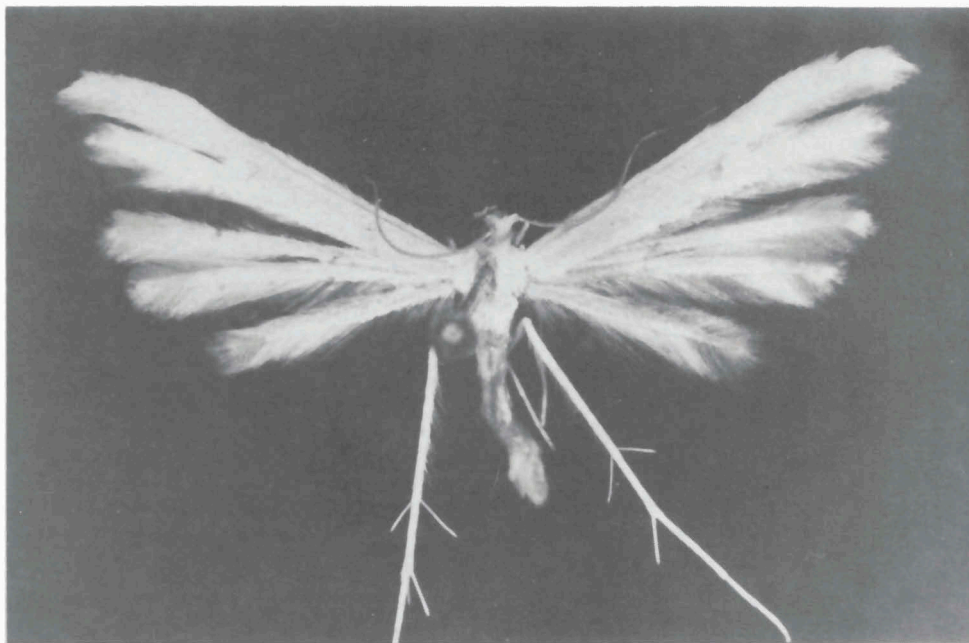


Fig. 43, *Oidaematophorus mauleicus* spec. nov. Holotype, Chile, Maule, Rio Teno, 300 m, 25-27.xi.1981 (Davis), coll. USNM.

Distribution.— Chile: Santiago, Maule. Distribution mapped in fig. 172.

Remarks.— See *O. hololeucos* Zeller.

Etymology.— Named after the Maule Province (Chile) where the holotype has been collected.

***Oidaematophorus hololeucos* (Zeller, 1874), comb. nov.**

(figs. 44, 83, 124, 173)

Leioptilus hololeucos Zeller, 1874: 445.

Oidaematophorus hololeucos; Miller & Gielis, in press.

Material.— Holotype, ♂: Chile, Valparaíso, xi, genitalia BM 18168 (BMNH). Chile: Nuble— 6 ♂♂, Alto Tregualemu, ca. 20 km SE. Chovellen, 500 m, 1-3.xii.1981 (Davis), genitalia CG 6091 (USNM); 2 ♂♂, 5 ♀♀, Cobquecura, 14.xii.1953 (Peña), genitalia CG 6049 (♂) (CNC). Coquimbo— 1 ♀, Nague, 11 km N. Los Vilos, 20 m, 4-5.xi.1981 (Davis) (USNM). Valparaíso— 1 ♀, 1 without abdomen, Vilar del Mar, El Salto, 7.ii.1983 (Prado), genitalia CG 1982 (MNHC).

Diagnosis.— The species is characterized by the silvery white colour and the presence of the sparse ochreous white markings.

Redescription.— Male and female (fig. 44). Wingspan 15-19 mm. Head appressedly scaled, silvery white. Collar ochreous white. Frons and scales around base of antennae ochreous white. Palpae curved upwards, $1.5 \times$ diameter of eye; second segment as long as third segment, with erect scales. Antennae indistinctly ringed grey-white and grey-brown, shortly ciliated. Thorax, tegulae and mesothorax silvery white with ochreous gloss. Abdomen whitish yellow, with a narrow, dorsal ferruginous line. Legs cream-white. Hindlegs with two pairs of spurs; proximal pair with longer inner spur; distal pair of equal length.

Forewing's cleft from $\frac{2}{3}$, colour silvery white, with scattered sparse scales with an ochreous gloss. Before base of cleft an oblique ochreous dot. At costa of first lobe beyond base of cleft an indistinct ochreous brown dot. At dorsum of first lobe at $\frac{1}{2}$ and $\frac{3}{4}$, and at dorsum of second lobe at $\frac{3}{4}$ and near apex ochreous black dots. Centrally in second lobe a small longitudinal ochreous brown spot. Fringes silvery-white, distally greyish. A grey ochreous dash near anal angle of second lobe. Underside silvery white, with scattered isolated grey-white scales.

Hindwings and fringes silvery white. At the top of all lobes a small ochreous dot. Underside silvery white, with scattered isolated grey-white scales. Androconial scales ferruginous in a double row, the costal row pronounced, the dorsal row weakly-developed.

Male genitalia (fig. 83).— Right valve lanceolate; sacculus hooked at half the valve's length, top of hook $\frac{1}{3}$ of valve width. Left valve rounded, with a rather stout, straight saccular spine, measuring approximately $\frac{2}{3}$ of the valve length. Tegumen bilobated. Uncus of moderate size. Vinculum arched. Juxta symmetrical. Aedeagus slightly curved, pointed towards top.

Female genitalia (fig. 124).— Antrum flattened, passing into small narrow ductus bursae, $1.5 \times$ as long as wide. Ductus bursae short. Bursa copulatrix vesicular, with some spiculae. Ductus seminalis slender, $2 \times$ as long as bursa, originating from half way the ductus length. Apophyses posteriores $2 \times$ the length of the papillae anales.

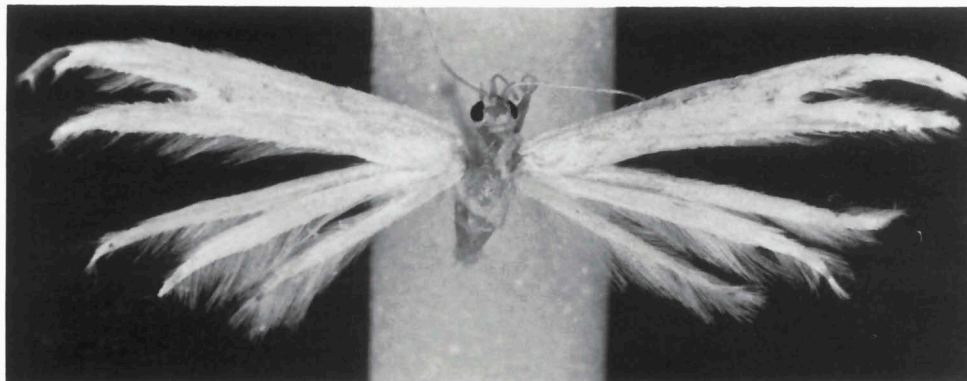


Fig. 44, *Oidaematophorus hololeucos* (Zeller). Chile, V. del Mar, El Salto, 7.xi.1983 (Prado), genitalia CG 1981, coll. MNHC.

Apophyses anteriores $\frac{2}{3}$ of apophyses posteriores, but stout and curved laterally. Lamina ante-vaginales arched, covering the centre.

Variation.— The density of the ochreous white glossy scales on both wings is variable.

Ecology.— The moths were collected from the end of October till the beginning of December, and in February. The hostplant is unknown, but adults were flying around wild sage (*Salvia spec.*) (Zeller, 1874).

Distribution.— Chile: Valparaiso, El Salto, Santiago, Coquimbo, Nuble. Distribution mapped in fig. 173.

Remarks.— The species is easily confused with *Lioptilodes fetisi*, which, however, belongs to another subfamily. *O. mauleicus* is very closely related to the species, but differs in the ochreous suffused colour, by the smaller saccular process in the left valve of the male genitalia, and by the simple apophyses anteriores in the female genitalia.

Oidaematophorus mallecoicus spec. nov.

(figs. 45, 84, 125, 174)

Material.— Holotype, ♂: Chile, Linares, Puente Malcho nr. Longavi River, 600 m, 13-15.i.1979 (Davis & Akerbergs), genitalia CG 6066 (USNM). Paratypes: 1 ♂, 1 ♀, Chile, Nuble, nr. coastal stream 17.5 km S. Curanipe, 50 m, 25.i.1979 (Davis & Akerbergs), genitalia CG 6069 (♂), 6067 (♀) (USNM); 1 ♀, Chile, Nuble, Piedra de la Iglesia, 8 km N. Cobquicura, 5 m, 24.i.1979 (Davis & Akerbergs) (USNM); 1 ♂, Chile, Santiago, nr. Pta. Yeso, ca 70 km SE. Santiago, 1250 m, 27-28.x.1981 (Davis) (USNM); 1 ♀: Chile, Malleco, Angol, Los Alpes, 650 m, 17.iii.1979 (Mis. Cient. Danesa, Sta. 60), genitalia CG 4167 (ZMUC).

Diagnosis.— The species is characterized by the female genital structures of the apophyses posteriores and anteriores.

Description.— Male and female (fig. 45). Wingspan 19-21 mm. Head appressedly scaled; collar and face ferruginous, between bases of antennae grey-white. Palpae 1.5 × diameter of eye, protruding, white, second segment laterally with some brown scales, second and third segments of equal length; basal segment pronouncedly

white; grey-white, shortly ciliated. Thorax, tegulae and mesothorax brown-grey. Hindlegs brownish grey, with two pairs of unequal spurs, the inner ones longer than the outer ones.

Forewing's cleft from $\frac{2}{3}$, brown grey, speckled with isolated brown scales. Before base of cleft an indistinct, oblique, brown spot. The outer field in both lobes with a faint ferruginous tinge. At costa of first lobe, above base of cleft, a faint spot, and centrally a well-defined spot; near apex some dark scales and at anal angle a spot. Second lobe with faint spots at apex, in middle of outer margin and at anal angle. Fringes pale grey, darker around the apex of both lobes. Underside grey-brown.

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

Variation.— The ferruginous tinge in the outer field of the forewing is some times weakly-developed, giving the specimen a more evenly grey-brown appearance.

Male genitalia (fig. 84).— Valvae lanceolate. Sacculus in right valve with thorn at $\frac{1}{4}$ and spine at $\frac{1}{3}$. Sacculus in the left valve with spine of $\frac{1}{4}$ of the valve length, originating at $\frac{1}{4}$. base of spine wide; it gradually narrows toward the top; centrally it is hooked, and before the angle a lateral vesicular widening is present. Tegumen bilobated. Uncus slender, moderate in size. Vinculum arched. Juxta pronounced, at top arms asymmetrical. Aedeagus almost tube-like, with very small cornuti in vesica.

Female genitalia (fig. 125).— Antrum as a small ridge in folded lamina ante-vaginalis. Ductus bursae slender, $1.5 \times$ as long as bursa diameter. The ductus seminales originates above bursa. Bursa copulatrix vesicular, covered with minute spines. Apophyses posteriores as long as papillae analis. Apophyses anteriores pronounced and stout.

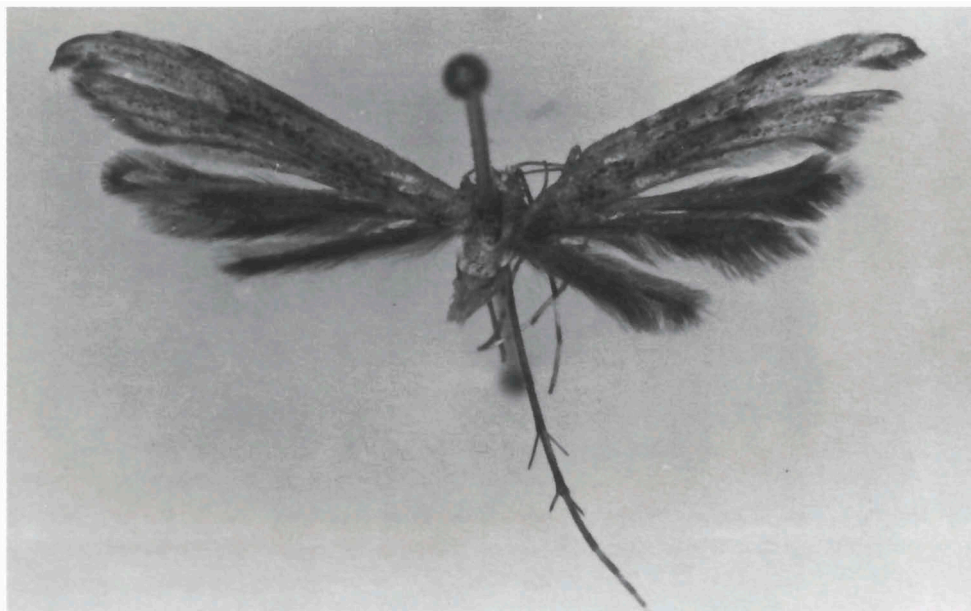


Fig. 45, *Oidaematophorus mallecoicus* spec. nov. Paratype, Chile, Nuble, near coastal stream 17.5 km S Curanipa, 50 m, 25.i.1979 (Davis & Akerbergs), genitalia CG 6067, coll. USNM.

Ecology.— The specimens were collected in October, January and March. Biology unknown.

Distribution.— Chile: Malleco, Nuble, Santiago. Distribution mapped in fig. 174.

Remarks.— The species is related to *O. hololeucos* Zeller by the pronounced structure of the apophyses anteriores, but differs in the shape of this structure.

Etymology.— Named after one of the provinces of Chile (Malleco) where part of the type-series has been collected.

***Oidaematophorus coquimboicus* spec. nov.**
(figs. 46, 126, 175)

Material.— Holotype, ♀; Chile, Coquimbo, Nague, 11 km N. Los Vilos, 20 m, 4-5.xi.1981 (Davis), genitalia CG 6065 (USNM).

Diagnosis.— The species is characterized by the peculiar shape of the apophyses anteriores.

Description.— Female (fig. 46). Wingspan 19 mm. Head (almost bald, worn) with pale brown scales at collar and face. Segments between bases of antennae white. Palpae slightly longer than diameter of eye, grey-white, distally progressively scaled grey-brown. Second segment as long as third. Antennae grey-white, shortly ciliated. Thorax and tegulae pale brown, proximally paler. Mesothorax cream-white. Legs grey-brown. Hindlegs with two spur pairs of equal length.

Forewing's cleft from $2/3$, colour brown-grey. Scattered dark brown scaling, con-

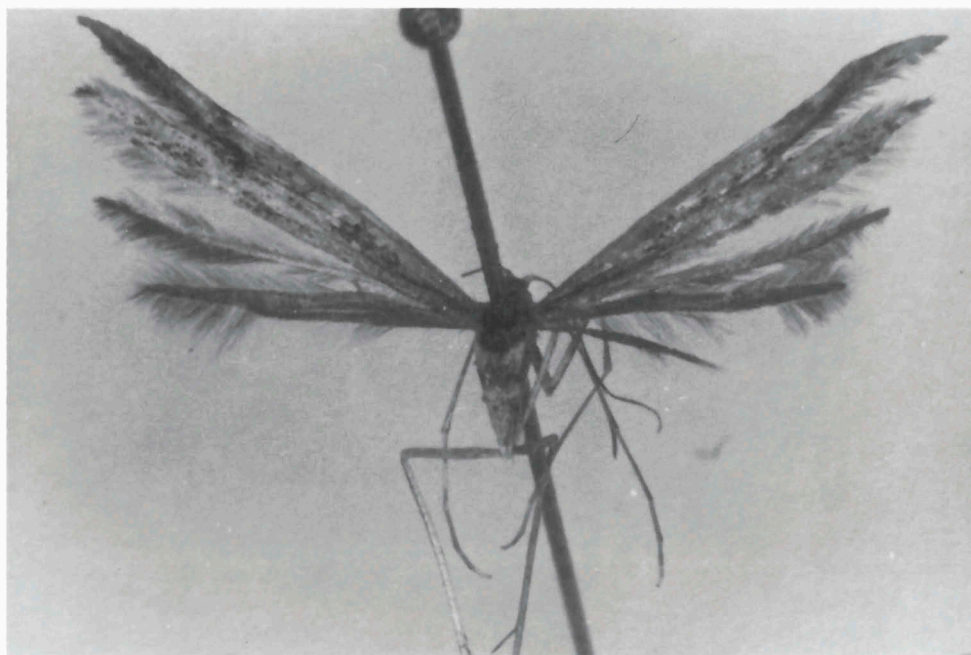


Fig. 46, *Oidaematophorus coquimboicus* spec. nov. Holotype, Chile, Coquimbo, Nague, 11 km N Los Vilos, 20 m, 4-5.xi.1981 (Davis), genitalia CG 6065, coll. USNM.

densed in a discal spot, a spot just before base of cleft and a costal spot above base of cleft. This last spot bordered pale brown-grey. Some condensed scaling in both lobes without spot formation. Fringes grey-white. Underside grey-brown, with an indication of the costal spot and the one before the base of the cleft.

Hindwings grey. Fringes grey-white. Underside pale grey-brown. Androconial scales black, in a double row, the costal row longer than the dorsal row.

Male genitalia.— Unknown.

Female genitalia (fig. 126).— Antrum $1.5 \times$ as long as wide. Top flattened. Ductus bursae gradually passing into bursa copulatrix. No signum. Ductus seminalis very long, ending vesicular. Apophyses posteriores $3-4 \times$ diameter of papillae anales. Apophyses anteriores short, stout, in shape of a large spine.

Ecology.— The single female was collected in November. Biology unknown.

Distribution.— Chile: Coquimbo. Distribution mapped in fig. 175.

Remarks.— The species is related to *O. hololeucos* Zeller and *O. mallecoicus* Gielis, but differs by the shape of the pronounced apophyses anteriores.

Etymology.— Named after the province of Chile, Coquimbo, where the holotype has been collected.

***Oidaematophorus angulofuscus* spec. nov.**

(figs. 47, 85, 127, 176)

Material.— Holotype, ♂: Argentina, Salta, Rosario de la Frontera, Los Banos, 9.iv.1979 (Mis. Cient. Danesa, Sta. 72), genitalia CG 4103 (ZMUC). Paratype ♀: Paraguay, Asuncion, 15-30.vi.1905 (Babarczy), genitalia CG 4102 (CG).

Diagnosis.— The species is characterized by the pronounced spot at the anal angle of the first forewing lobe.

Description.— Male and female (fig. 47). Wingspan 16-17 mm. Head appressedly scaled, with some erect scales on the collar. Collar and face pale brown, between bases of antennae cream-white. Palpae a little over diameter of eye; ferruginous white. Second segment as long as third. Antennae ferruginous grey, shortly ciliated. Thorax, tegulae and mesothorax ferruginous white. Legs grey-white. Hindlegs with first spur pair of unequal length and second spur pair of equal length.

Forewing's cleft from $\frac{2}{3}$, cream-white. A faint, oblique spot anterior of base of cleft, a costal dash above base of cleft and a distinct spot at anal angle of first lobe; some dark scales near the apex of second lobe. Fringes grey-white. Underside pale grey-white, paling in the outer fields.

Hindwings, fringes and underside entirely grey-white. Androconial scales black, in a double row, the costal row longer than the dorsal row.

Variation.— Wings of the female are less well marked than those of the male.

Male genitalia (fig. 85).— Valvae asymmetrical. Right valve slender, sacculus with a small spine at $\frac{1}{3}$ of valve length. Left valve elongate, with slight lateral bulging of the top; sacculus with small curved spine. Tegumen bilobated. Uncus rather short, slender. Vinculum arched, slender. Juxta stout, cauli asymmetrical. Aedeagus slender, with small vesicular widening at top.

Female genitalia (fig. 127).— Antrum funnel-shaped, gradually passing into

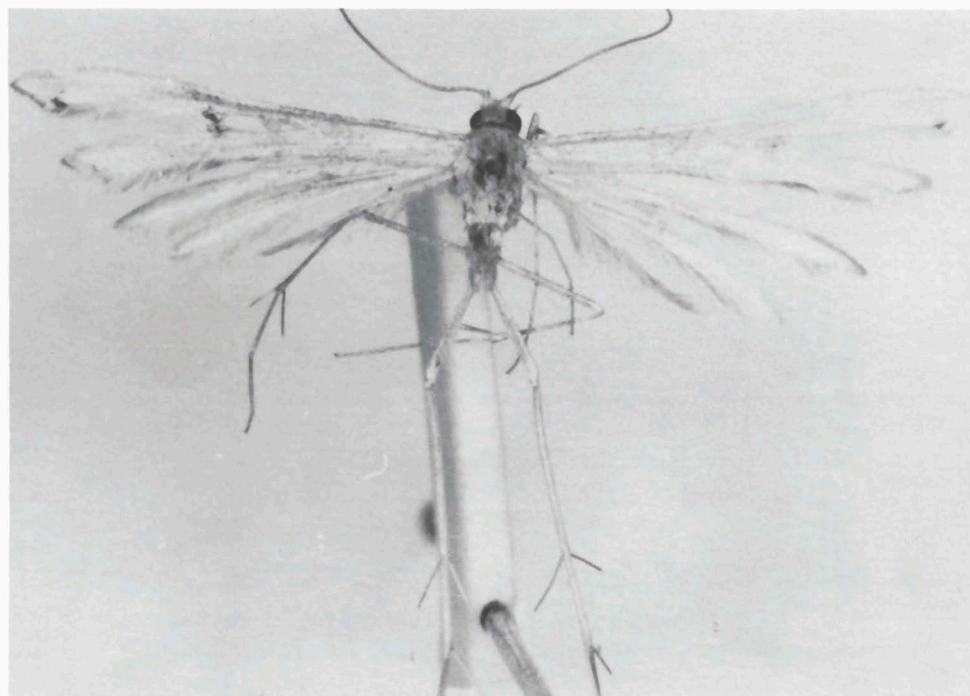


Fig. 47, *Oidaematophorus angulofuscus* spec. nov. Holotype, Argentina, Salta, Rosario de la Frontera, Los Banos, 9.iv.1979 (Mis. Sci. Dan., Sta. 72), genitalia CG 4103, coll. ZMUC.

rather short ductus bursae. Bursa copulatrix vesicular, with numerous, minute speculae in top end, near junction with ductus bursae. Ductus seminalis stout. Apophyses posteriores $2.5 \times$ as long as papillae anales. Apophyses anteriores short.

Ecology.— The specimens were collected in April. Biology unknown.

Distribution.— Argentina: Salta. Paraguay: Asuncion. Distribution mapped in fig. 176.

Etymology.— Name indicating coloration of the anal angle of the first lobe of the forewing.

***Oidaematophorus grandaevus* (Meyrick, 1931)**

(figs. 48, 86, 128, 177)

Pterophorus grandaevus Meyrick, 1931: 380.

Material.— Holotype, σ : S.Chile, Llanquihue prov., Peulla, 12-13.xii.1926 (Edwards), genitalia BM 18446 (BMNH).

Argentina: Tierra del Fuego— 16 $\sigma\sigma$, 22 ♀♀ , Ushuaia, Lapataia, 20 m, 27.i.1979, 29.i.1979, 30.i.1979, 30-31.i.1979, 1.ii.1979, 2.ii.1979, 4.ii.1979 (Mision Cientifica Danesa, Sta. 34) (ZMUC, CG); 3 ♀♀ , Estacion Haberton, 25.i.1979 (Mision Cientifica Danesa, Sta. 39), genitalia CG 4166 (ZMUC); 2 $\sigma\sigma$, Lago Fagnano, Kalken, 100 m, 18.i.1979, 22.i.1979 (Mision Cientifica Danesa, Sta. 33) (ZMUC). Santa Cruz— 2 $\sigma\sigma$, Lago Argentino, Peninsula Magellanes, 11.i.1979 (Mision Cientifica Danesa, Sta. 28) (ZMUC). Neuquen— 3 $\sigma\sigma$, 2 ♀♀ , San Martin de los Andes, Quilquihue, 750 m, 15-24.xi.1981, 25-26.xi.1981 (Gentili, Sta. 32) (ZMUC); 1 σ , San Martin de los Andes, 640 m, 7-15.xi.1981 (Nielsen & Karsholt, Sta. 11)

(ZMUC). Rio Negro— 2 ♂♂, San Carlos de Bariloche, Colonia Suiza, 800 m, 5-7.i.1982 (Nielsen & Karsholt, Sta. 9) (ZMUC); 1 ♀, San Carlos de Bariloche, Nirihuau, 30.xii.1978 (Mision Cientifica Danesa, Sta. 11) (ZMUC); 1 ♀, El Bolson, Arroyo Negro, lampa, 28.ii.1961 (Topal) (ZMUC). Buenos Aires— 1 ♀, Oriente, Zubiaurre, 27.x-3.xi.1978 (Mision Cientifica Danesa, Sta. 4) (ZMUC); 1 ♂, Villa Elisa, 25-30.xi.1979 (Flint) (USNM). Catamarca— 1 ♂, Rio Portrero, near Andalgala, 25.ii.1972 (Duckworth) (USNM). Chile: Valdivia— 1 ♂, 1 ♀, 20 km S. Valdivia, Rincon de la Piedra, 180 m, 15.xi.1981 (Nielsen & Karsholt, Sta. 15) (ZMUC). Magellanes— 1 ♂, Punta Arenas, Puerto del Hambre, 500 m, 8.ii.1979 (Mision Cientifica Danesa, Sta. 41) (ZMUC). Santiago— 1 ♂, 2 ♀♀, Pta. Yeso, ca 70 km SE. Santiago, 1000 m, 27-28.x.1981 (Davis), genitalia CG 6062 (♀) (USNM); 1 ♀, Guayacan, i.1951 (MZUC). Concepcion— 1 ♂, 1 ♀, Concepcion, 29.iii.1974, iv.1979 (Benoit) (MZUC). Chiloe Id.— 1 ♀, Puntra, ca. 30 air km S. Ancud, 50 m, 21-22.xii.1981 (Davis), genitalia CG 6092 (USNM). Malleco— 1 ♂, Nahuelbuta Nat. Park, Cabreria, 1200 m, 4.ii.1979 (Davis & Akerbergs) (USNM). Maule— 1 ♀, Forel Carrizalillo, 250 m, 30.i-5.ii.1981 (Peña) (USNM). Bio Bio— 1 ♀, Est. Huequecura, 25 km E. Santa Barbara, 24.i.1978 (Flint) (USNM). Curico— 2 ♂♂, El Coigo, 1.iii.1968 (Flint & Peña) (USNM). Nuble— 1 ♂, Las Trancas, 2.iii.1968 (Flint & Peña) (USNM); 1 ♂, 1 ♀, 1 without abdomen, Rio Pinto, E. of Chillan, 24.x.1969 (Flint & Peña) (USNM).

Diagnosis.— The species is characterized by the pale field at the dorsum of the first forewing lobe.

Redescription.— Male and female (fig. 48). Wingspan 17-22 mm. Head appressedly scaled. Collar and face olive-brown; between bases of antennae white. Palpae as long as diameter of eye, grey-brown. Second and third segments of equal length. Antennae faintly ringed grey-brown and ochreous brown, shortly ciliated. Thorax, tegulae and mesothorax pale straw-yellow, the proximal half paler than the distal half. Abdomen pale straw-yellow. Legs grey-white. Hindlegs with two pairs of spurs of unequal length.

Forewing's cleft from $\frac{3}{5}$, colour pale brown, with scattered dark-brown scales; these scales more prominent along costa and in discal cell. Dorsum of first lobe and costa of second lobe whitish. A small black spot just anterior of base of cleft, at $\frac{2}{3}$ of dorsum of first lobe and at apex, at middle of outer margin and at anal angle of second lobe. Fringes grey. Underside brown. Costa of wing and dorsum of first lobe paler.

Hindwings grey-brown; fringes grey; underside grey-brown. Androconial scales black, in a double row; the costal row longer than the dorsal row.

Variation.— The colour of the species varies from straw-yellow to pale brown. The density of the dark brown scales on the forewing varies from some isolated scales to a dense scaling.

Male genitalia (fig. 86).— Valvae asymmetrical. The right valve elongate, slightly widened centrally; sacculus with a smooth widening at $\frac{1}{3}$ of valve length, followed by a flattened spine. Left valve of a more rounded shape; sacculus with two vesicular protrusions, followed distally by a short, almost dorsally placed spine. Tegumen bilobated. Uncus moderate in size, slender. Vinculum arched. Juxta asymmetrical, almost spade-like. Aedeagus centrally angulated, gradually narrowing towards top.

Female genitalia (fig. 128).— Antrum rather wide, $1.5 \times$ as long as wide. Ductus bursae short. Bursa copulatrix longitudinal, vesicular. Near the junction to the ductus a number of small ridges and folds. A signum of two fields of spiculae. Ductus seminalis $1.5 \times$ as long as bursae copulatrix, vesicular ending. Apophyses posteriores $2 \times$ the length of the papillae anales. Apophyses anteriores absent.

Ecology.— The specimens were collected from October till January. Biology unknown.

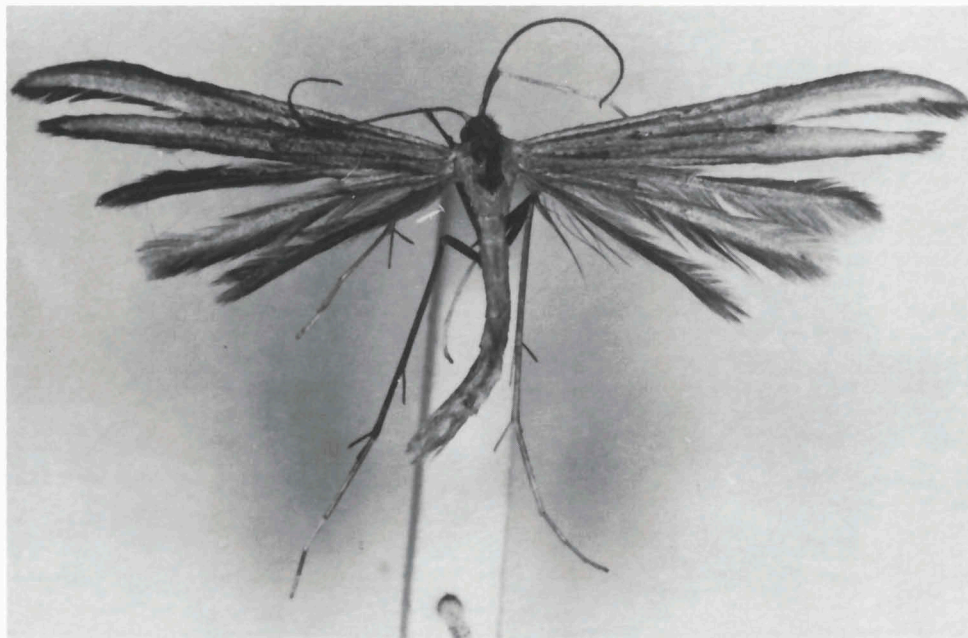


Fig. 48, *Oidaematophorus grandaevus* (Meyrick). Argentina, Tierra del Fuego, Ushuaia, Lapataia, 20 m, 30-31.i.1979 (Mis. Sci. Dan., Sta. 34), coll. CG.

Distribution.— Argentina: Tierra del Fuego, Santa Cruz; Chile: Llanquihue. Distribution mapped in fig. 177.

Remarks.— This species has a wide distribution in the southern part of the South American continent. It is distinguished from related species by the pale field in the first lobe of the forewing. In the northern part of the area of distribution the species are smaller and less distinctly marked.

***Oidaematophorus glaphyrotus* (Meyrick, 1907)**
(figs. 49, 87, 129, 178)

Pterophorus glaphyrotus Meyrick, 1907: 497.

Material.— Lectotype ♂: Brasil, Sao Paulo, (19)07 (R.), genitalia BM 18445 (BMNH). Paralectotypes: 1 ♀, 1 spec. without abdomen, same locality and data, (BMNH).

Argentina: Salta— 1 ♀, Metan, i.1966 (Vezenyi), genitalia CG 4129 (ZMUC). **Brazil:** Matto Grosso— 1 ♀, Sete Lagoas, 720 m, 13.iii.1972, 20.v.1974 (Becker), genitalia CG 6093, (Becker nr. 9331, 9332); 1 ♂, Nova Lima, 850 m, 8.x.1985 (Becker) (Becker nr. 63182). Distrito Federal— 1 ♂, Planaltina, 1000 m, 26.ii.1977 (Becker) (Becker nr. 19779). Santa Catarina— 1 ♂, Brusque, 11-28.xii.1969 (Becker) (Becker nr. 9341). Goias— 1 ♂, Goias, 500 m, 13-15.x.1984 (Becker), genitalia CG 6038 (Becker nr. 52890); 1 ♂, Nova Teutonia, 300-500 m, 1.iv.1954 (Plaumann) (CNC). **Peru:** Huanaco— 1 ♂, Rio Huallaga, Cucharas, 500 m, vii.1954 (Woytkowski), genitalia CG 6050 (CNC).

Diagnosis.— The species is characterized by the uniform straw-brown colour and the obvious saccular spine in the left valve.

Redescription.— Male and female (fig. 49). Wingspan 17-22 mm. Head appressedly scaled; collar with erect scales. Collar and face pale brown, between the bases of the antennae straw-brown. Palpae slender, as long as diameter of eye, protruding, straw-brown. Third segment very short. Antennae straw-brown, shortly ciliated. Thorax, tegulae, mesothorax and abdomen straw-yellow. Hindlegs yellow-white with proximal pair of spurs of unequal length and distal pair of spurs of equal length.

Forewing's cleft from $\frac{3}{5}$, straw-brown, with some isolated scales in first and second lobe, and discally. Fringes grey-brown. Underside pale brown.

Hindwings, fringes and underside grey-brown. Androconial scales in two rows. The costal row ferruginous, longer than the dorsal, dark brown row. Distal row dark brown.

Variation.— The brown scaling on the forewing is variable in density.

Male genitalia (fig. 87).— Valvae asymmetrical. Right valve elongate, with a hair brush mid-valvular at sacculus. Left valve lanceolate with a saccular spine in shape of a small plate, passing into a spine with a lateral, hooked continuation. Tegumen bilobated. Uncus slender. Vinculum arched. Juxta pronounced with two cauli of equal length. Aedeagus tube-like, slightly curved.

Female genitalia (fig. 129).— Antrum cup-like, as long as wide. Ductus bursae short, as long as antrum, and divided into the elongated vesicular bursa copulatrix. Ductus seminalis slender, almost $2 \times$ as long as bursa copulatrix and ending vesicular. No signum. Apophyses anteriores absent. Apophyses posteriores $2 \times$ as long as papillae anales.

Ecology.— The specimens were collected in February, March, May, October and December. Biology unknown.

Distribution.— Argentina: Salta; Brazil: Matto Grosso, Distrito Federal, Goias, Santa Catarina, Sao Paulo; Peru: Huanaco. Distribution mapped in fig. 178.

Remarks.— The species has its southern most distribution in the tropical parts of northern Argentina.

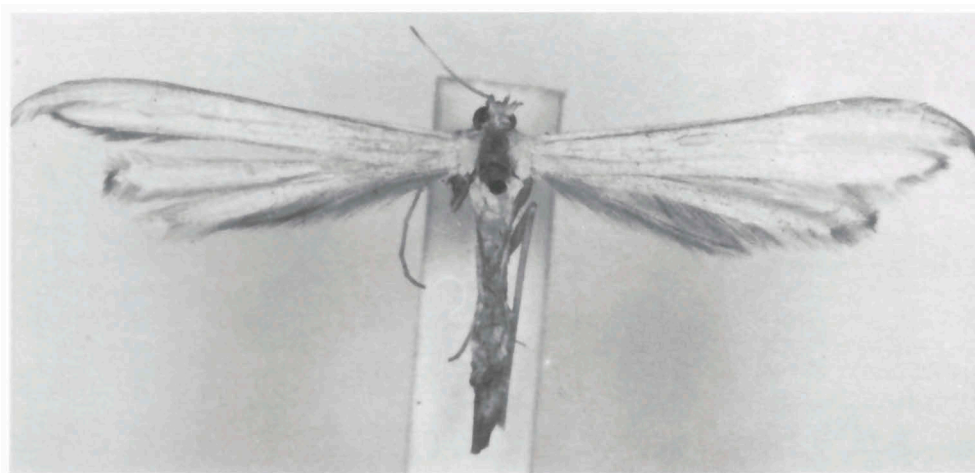


Fig. 49, *Oidaematophorus glaphyrotus* (Meyrick). Paralectotype, Brasil, Sao Paulo, (19)07 (R.), coll. BMNH.

***Oidaematophorus cinerarius* (Philippi, 1864) comb. nov.**

Pterophorus cinerarius Philippi, 1864: 296.

Oidaematophorus cinerarius; Miller & Gielis, in press.

Material.— Type: probably lost.

Original description.— “Pt. pallide cinereus; alis anticis apice furcatis punctisque nigris sparsis marmoratis; posticis trifidis, vix pallidioribus; abdomine supra in parte posteriore linea ornato. -Longit. corp. 3 1/2 lin., extens. alarum 10 1/2 lin.

Prope Santiago occurit.

Der Koerper ist hellgrau und mit weissen, silberglaenzenden Schueppchen bedeckt; die Fuehler sind hellgrau, die Taster silberweiss, die Beine weisslich. Die Vorderfluegel sind an der Spitze zweispaltig und oben graulich weiss, mit kleinen schwaerzlichen Puenktchen namentlich gegen den Vorderrand hin zwischen den Nerven marmoriert; auf den Hinterfluegeln sind die Puenktchen weit kleiner und nur mit der Loupe zu unterschieden. Die Unterseite ist einfarbig hellgrau”.

Remarks.— The description of the species given above, is, on careful reading, rather cryptic. One can deduce from the details on the spotting, that it belongs to the genus *Oidaematophorus*. However, within this genus differences between the species are often so delicate that it is impossible to determine what species is actually meant. The only clue in the description is the mention of silvery scales on the abdomen and the silvery palpa.

The type specimen was recorded lost by Mr M.D. Elgueta. (See *P. pusillus*).

Resumen

Faunula Pterophoridae provisional de Argentina y Chile (Lepidoptera). Se entrega en forma provisoria la composición faunistica de Pterophoridae de Chile y Argentina. Se examinan los especimenes tipos existentes para el área estudiada y se establecen los nuevos sinónimos. Algunos tipos se señalan como perdidos. Del material examinado se describen 3 géneros nuevos y 29 especies nuevos. Se entrega un mapa con la distribución de los adultos y las figuras de las genitalias de los machos y de las hembras.

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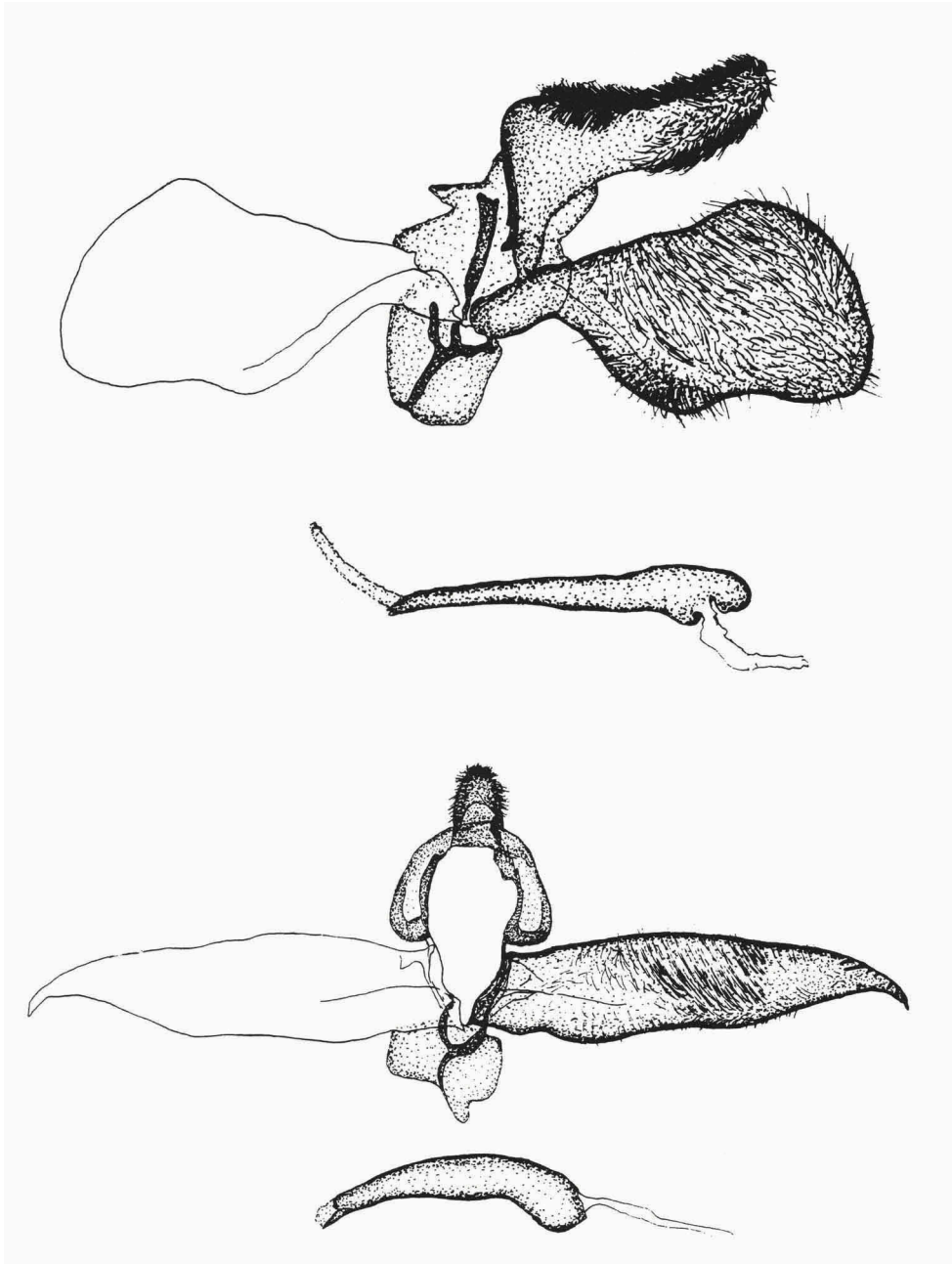


Fig. 50 (upper), *Megalorhipida defectalis* (Walker). Virgin Islands, St. Croix, 22.11.1980 (Jensen), genitalia CG 4080, coll. ZMUC. Fig. 51 (lower), *M. pseudodeflectalis* Gielis. Holotype, Argentina, Neuquen, Piedra del Aguila, 18.xii.1978 (Mis. Sci. Dan., Sta. 15), genitalia CG 4109, coll. ZMUC.

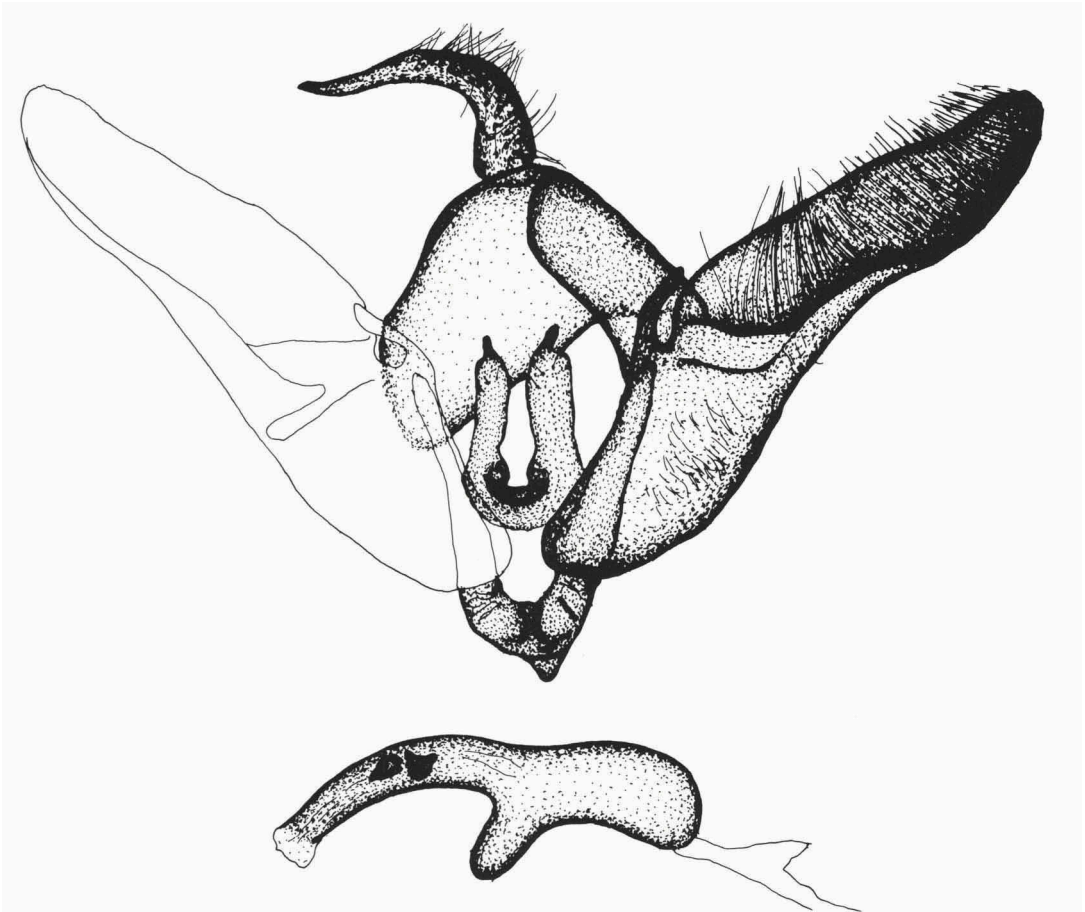


Fig. 52, *Lioptilodes subantarcticus* spec. nov. Paratype, Argentina, Tierra del Fuego, Ushuaia, Lapataia, 20 m, 3.ii.1978 (Mis. Sci. Dan., Sta. 34), genitalia CG 4135, coll. ZMUC.

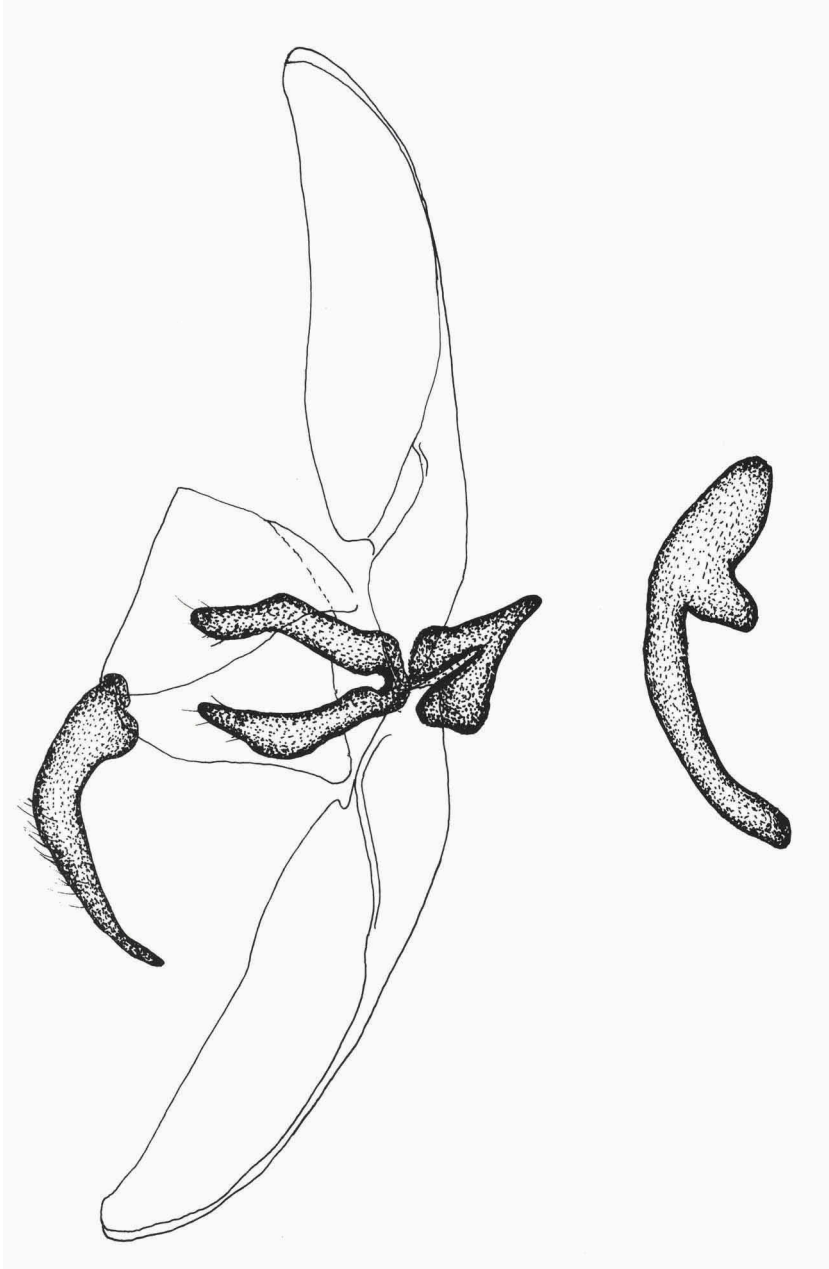


Fig. 53. *Liophtilodes parvus* (Walsingham). Brazil, M.G., Sete Lagoas, 720 m, 13.iii.1979 (Becker), genitalia CG 6023, coll. Becker nr. 9334.

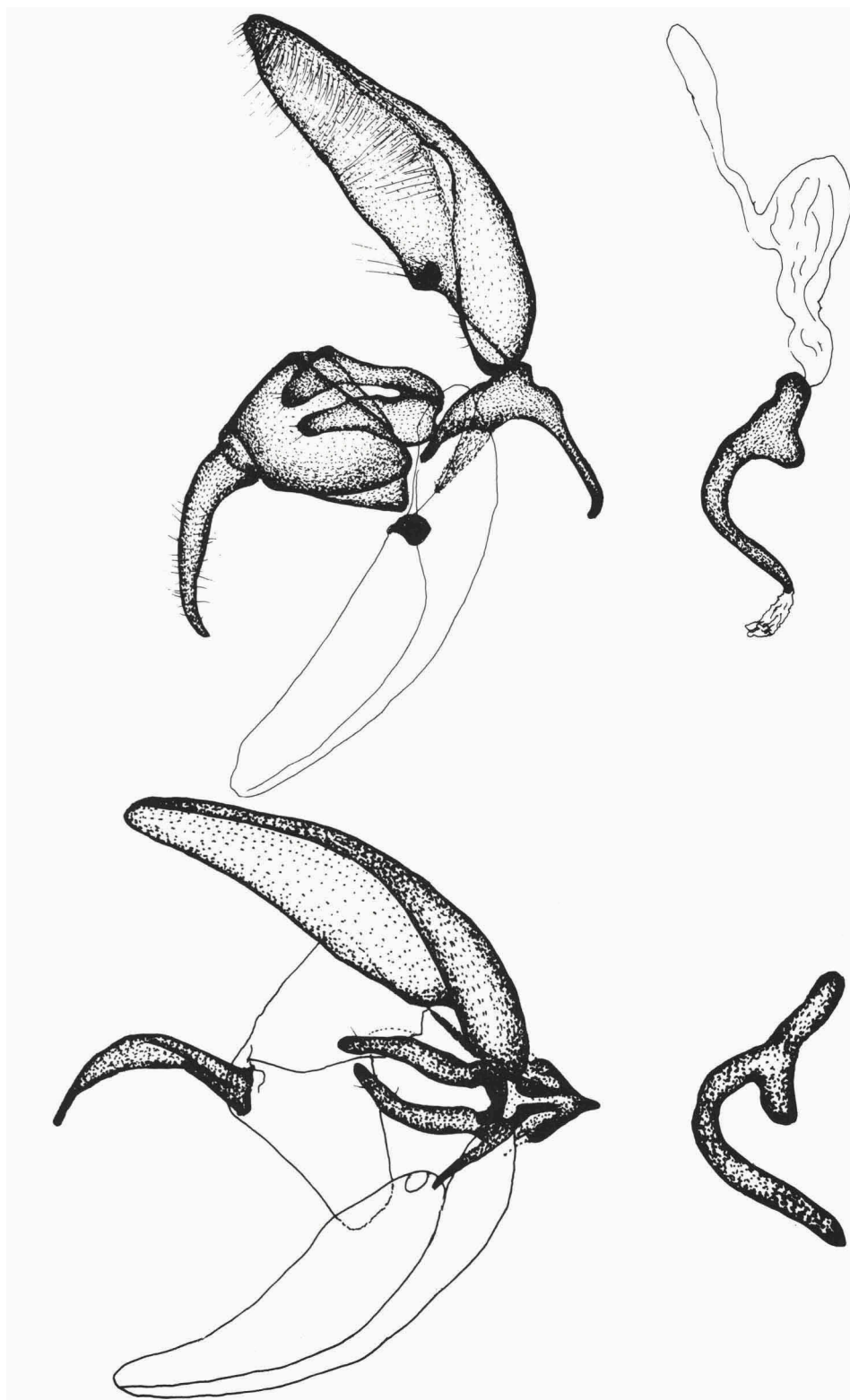


Fig. 54 (left). *Lioptilodes zapalaticus* spec. nov. Holotype, Argentina, Neuquen, Zapala, El Marucho, 870 m, 26.x.1981 (Nielsen & Karsholt), genitalia CG 4134, coll. ZMUC. Fig. 55 (right). *L. rionegroicus* spec. nov. Holotype, Argentina, Rio Negro, San Carlos de Bariloche, Ninhua, 30.xii.1978 (Mis. Sci. Dan., Sta. 11), genitalia CG 4144, coll. ZMUC.

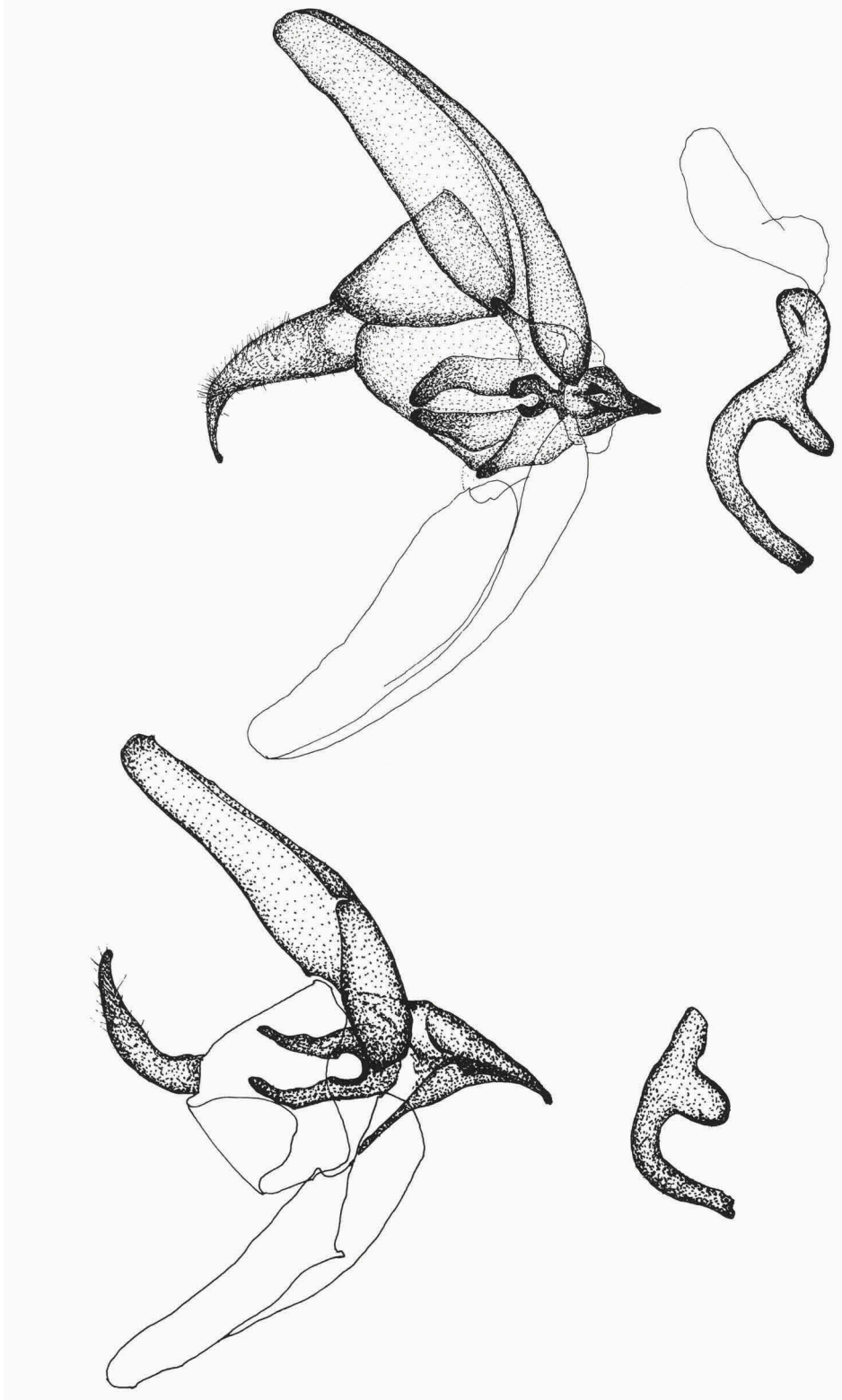


Fig. 56 (left). *Liophtilodes neuquenicus* spec. nov. Holotype, Argentina, Neuquen, Zapala, El Marucho, 870 m, 26.x.1981 (Nielsen & Karsholt), genitalia CG 4140, coll. ZMUC. Fig. 57 (right). *L. aguilaicus* spec. nov. Holotype, Argentina, Neuquen, Piedra del Aguila, 23.xii.1978 (Mis. Sci. Dan., Sta. 15), genitalia CG 4124, coll. ZMUC.

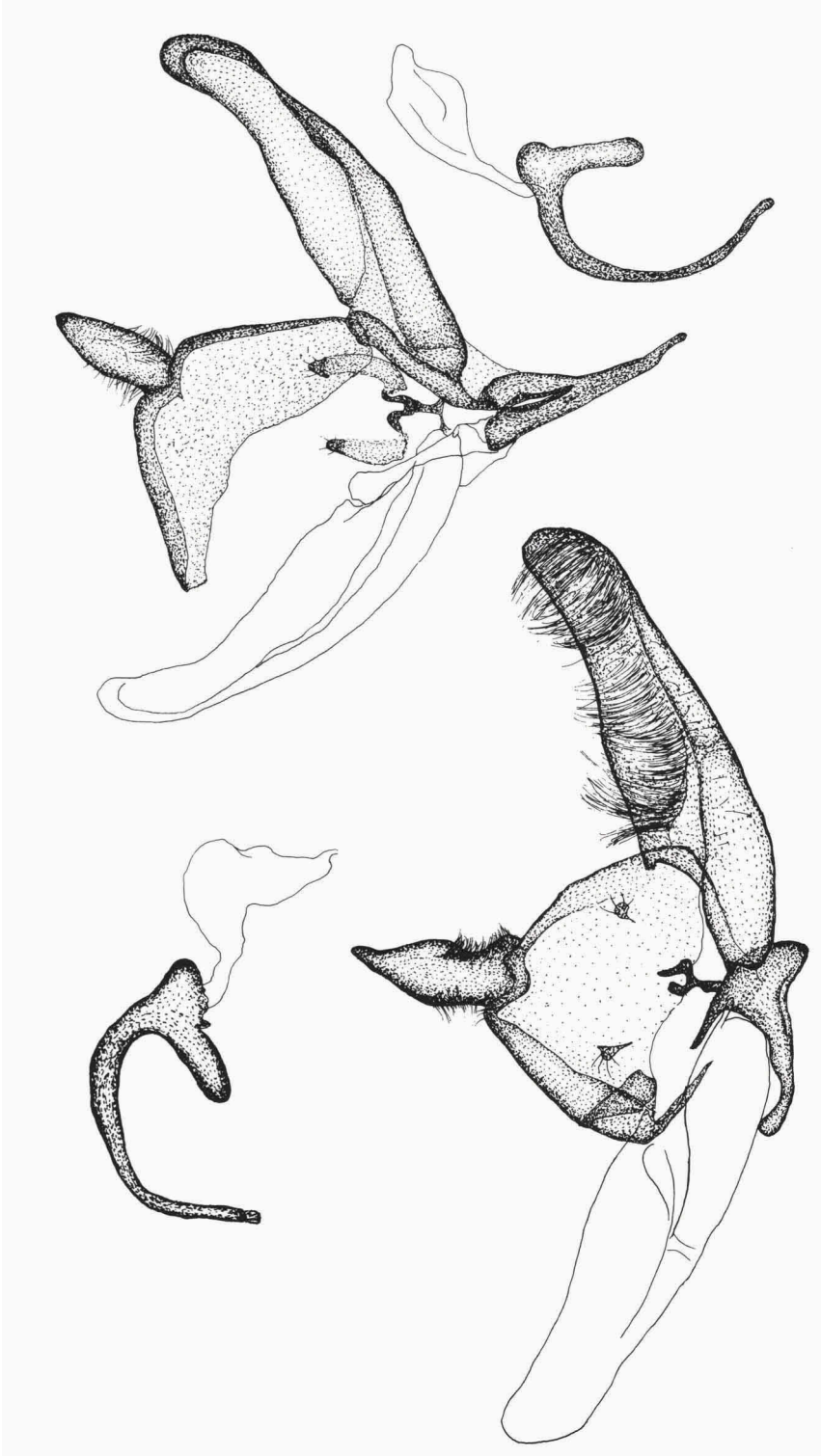


Fig. 58 (left). *Lioptiloides alolepidodactylus* spec. nov. Paratype, Argentina, Rio Negro, San Carlos de Bariloche, Niriñuan, 9-11.xii.1978 (Mis. Sci. Dan., Sta. 11), genitalia CG 4120, coll. ZMUC. Fig. 59 (right). *L. testaceus* (Blanchard). Chile, Tobalaba, 28.xii.(19)48, genitalia CG 1926, coll. ZMUC.

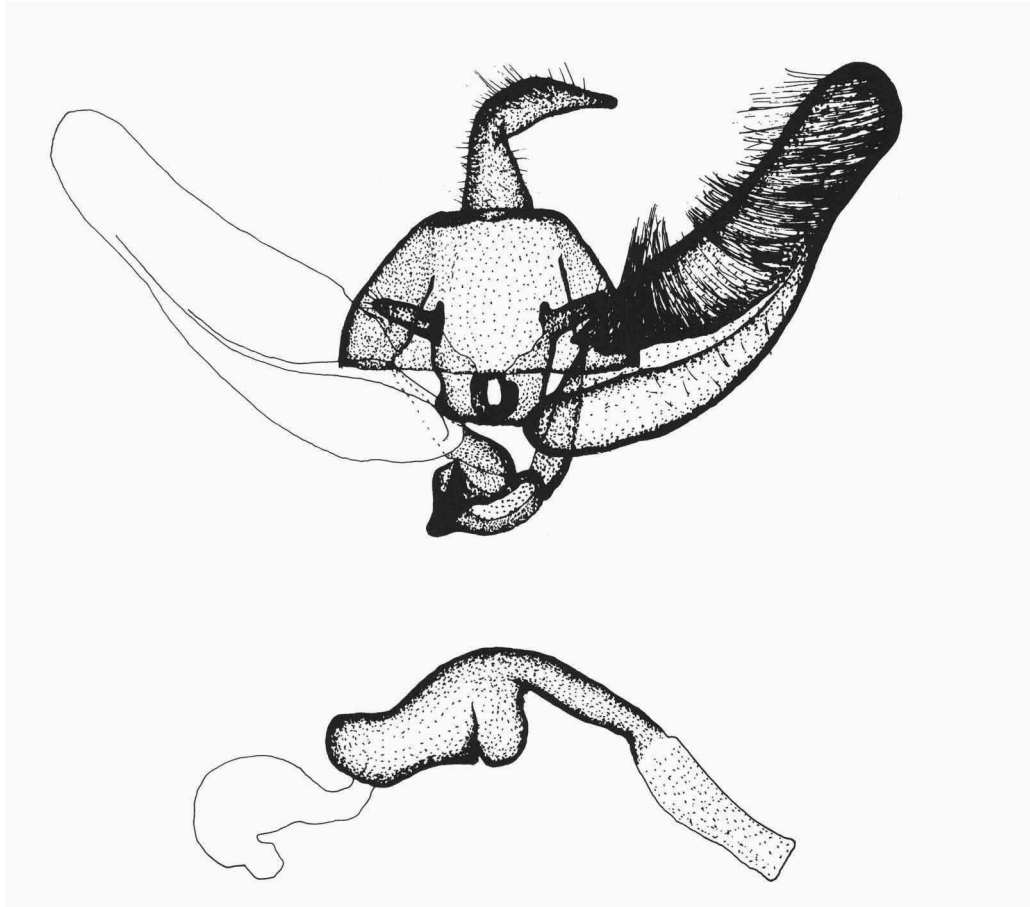


Fig. 60, *Lioptilodes topali* spec. nov. Holotype, Argentina, Neuquen, Alumine, SE of Lago Alumino, 1100 m, 16.iii.1979 (Mis. Sci. Dan., Sta. 59), genitalia CG 4118, coll. ZMUC.

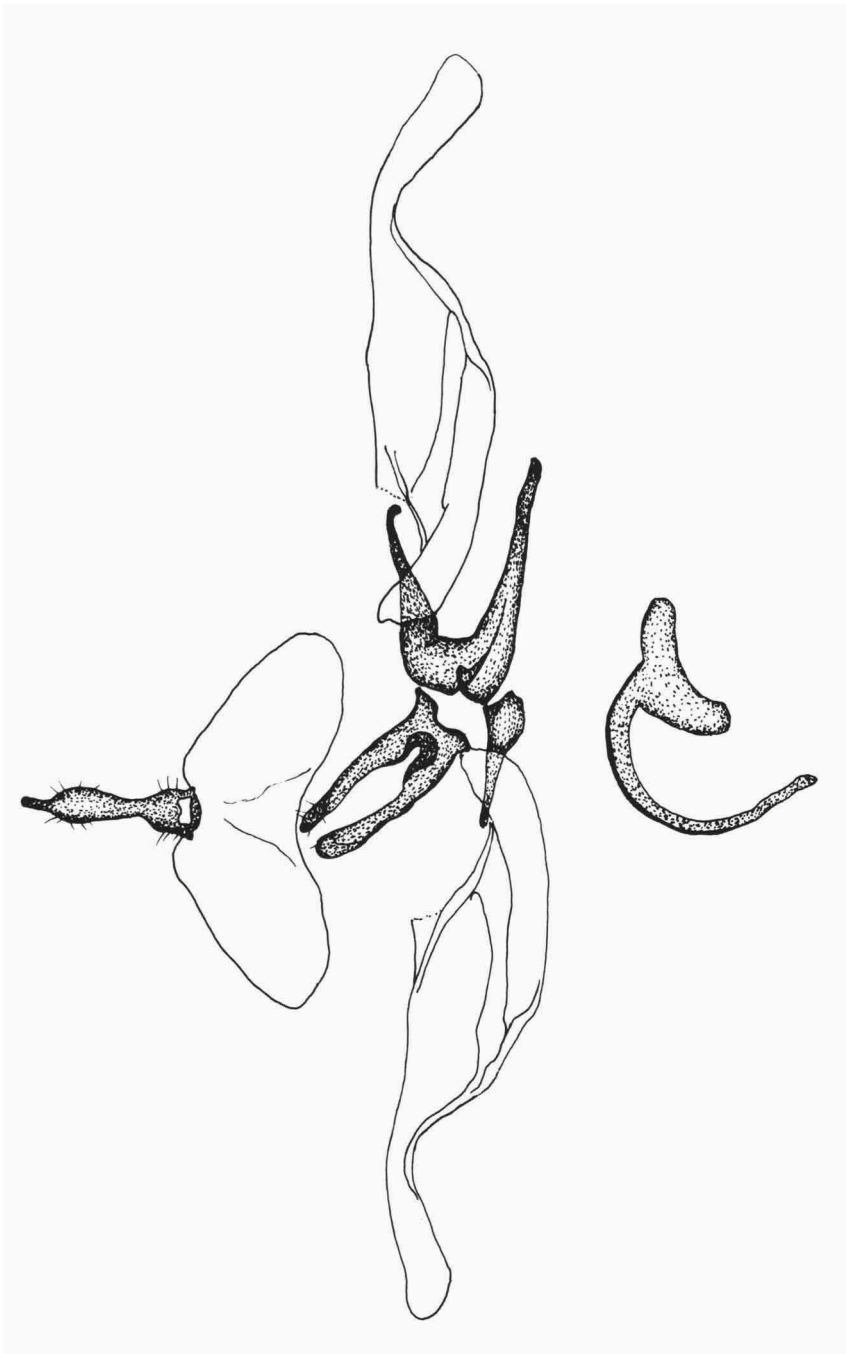


Fig. 61. *Liophilodes tribonius* (Meyrick). Lectotype, Peru, Matucana, vii.(19)14 (Parish), genitalia BM 18441, coll. BMNH.

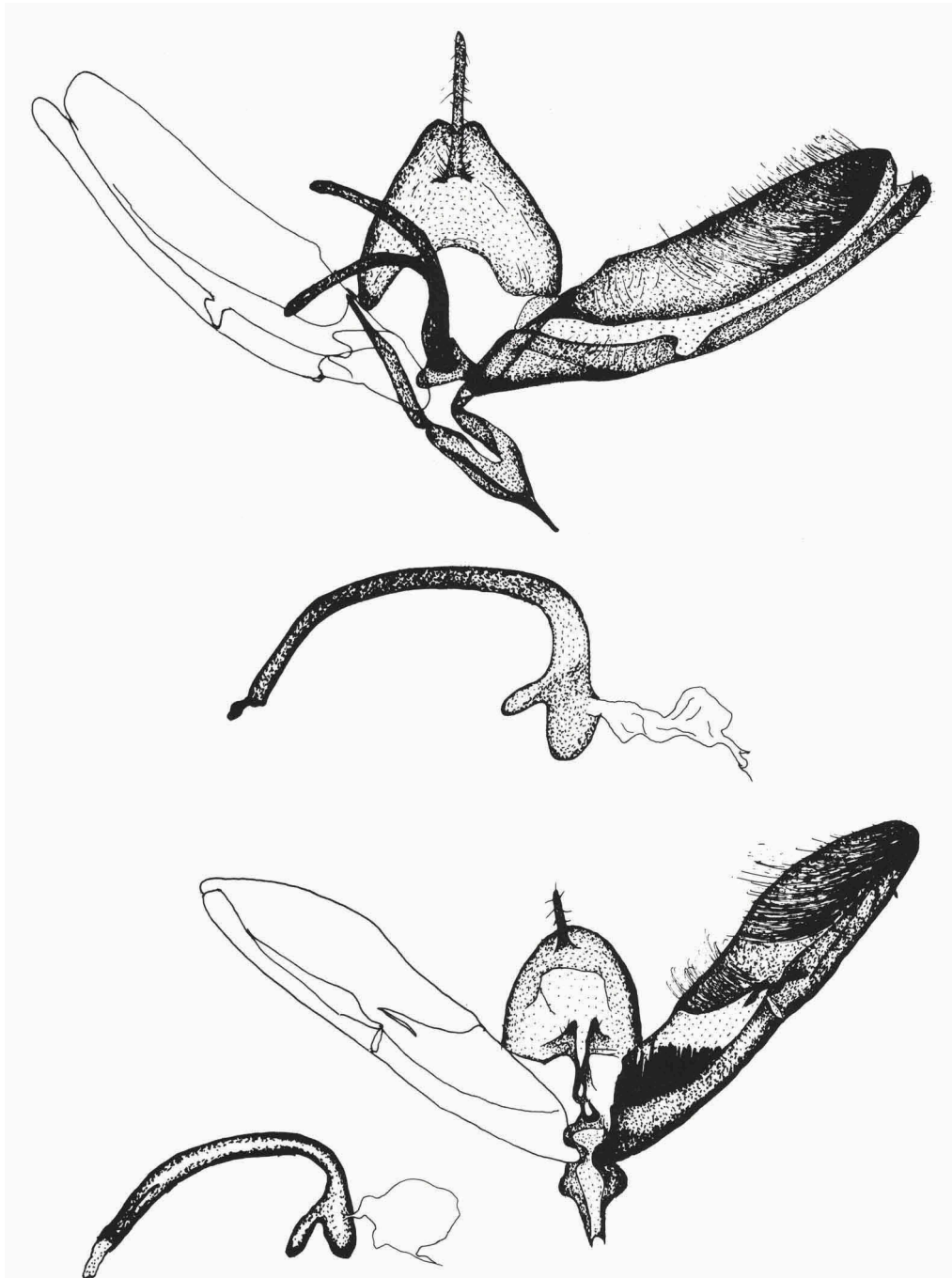


Fig. 62 (upper), *Lioptilodes antarcticus* (Staudinger). Argentina, Santa Cruz, Lago Argentino, Peninsula Magellanes, 11.i.1979 (Mis. Sci. Dan., Sta. 28), genitalia CG 4122, coll. ZMUC. Fig. 63 (lower), *Lantanophaga nielseni* spec. nov., Holotype, Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 27.xii.1981 (Nielsen & Karsholt, Sta. 9), genitalia CG 4096, coll. ZMUC.

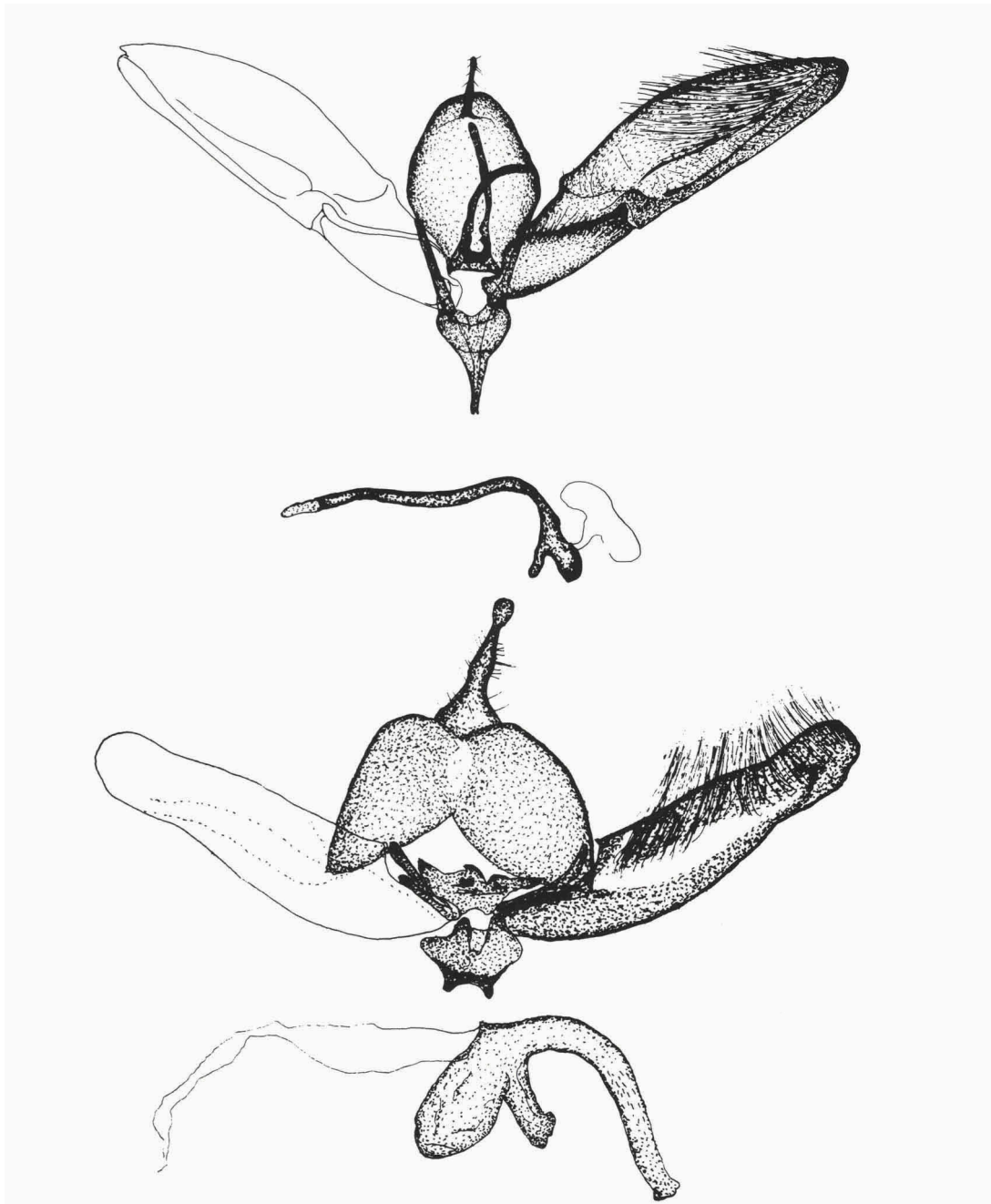


Fig. 64 (upper), *Lantanophaga aestuosa* (Meyrick). Lectotype, Peru, Lima, 500 ft., viii.(19)14 (Parish), genitalia BM 18196, coll. BMNH. Fig. 65 (lower), *Platyptilia gentiliae* spec. nov. Holotype, Argentina, Neuquen, Junin de los Andes, Catan, 825 m, 20.x.1981 (Nielsen & Karsholt, Sta. 33), genitalia CG 4092, coll. ZMUC.

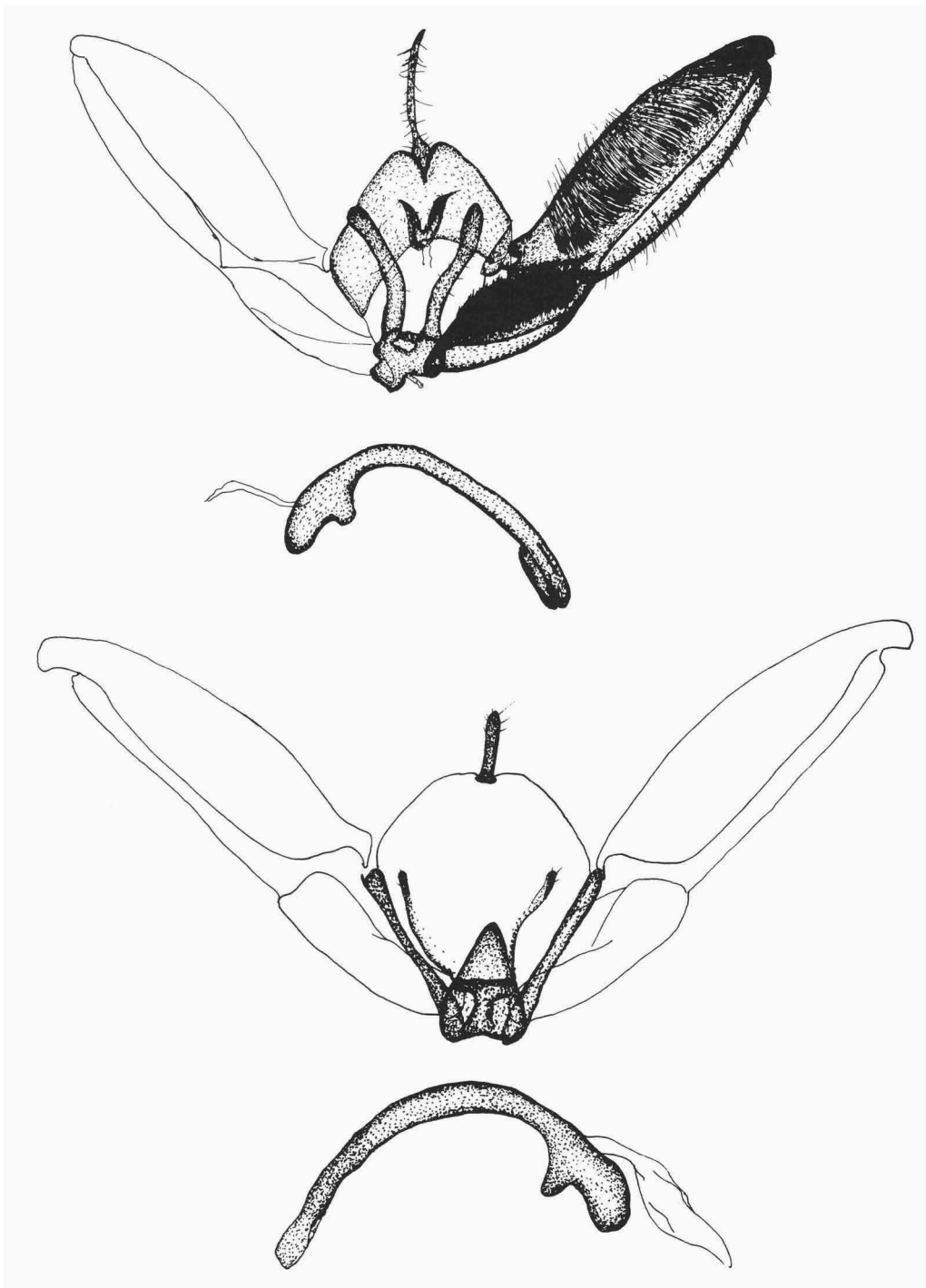


Fig. 66 (upper), *Postplatyptilia camptosphenia* (Meyrick). Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 4.xii.1981 (Nielsen & Karsholt, Sta. 9), genitalia CG 4087, coll. ZMUC. Fig. 67 (lower), *P. eelkoi* spec. nov. Holotype, Chile, Nuble, Alto Tregualemu, 20 km SE Chovellen, 500 m, 1-3.xii.1981 (Davis), genitalia CG 6059, coll. USNM.

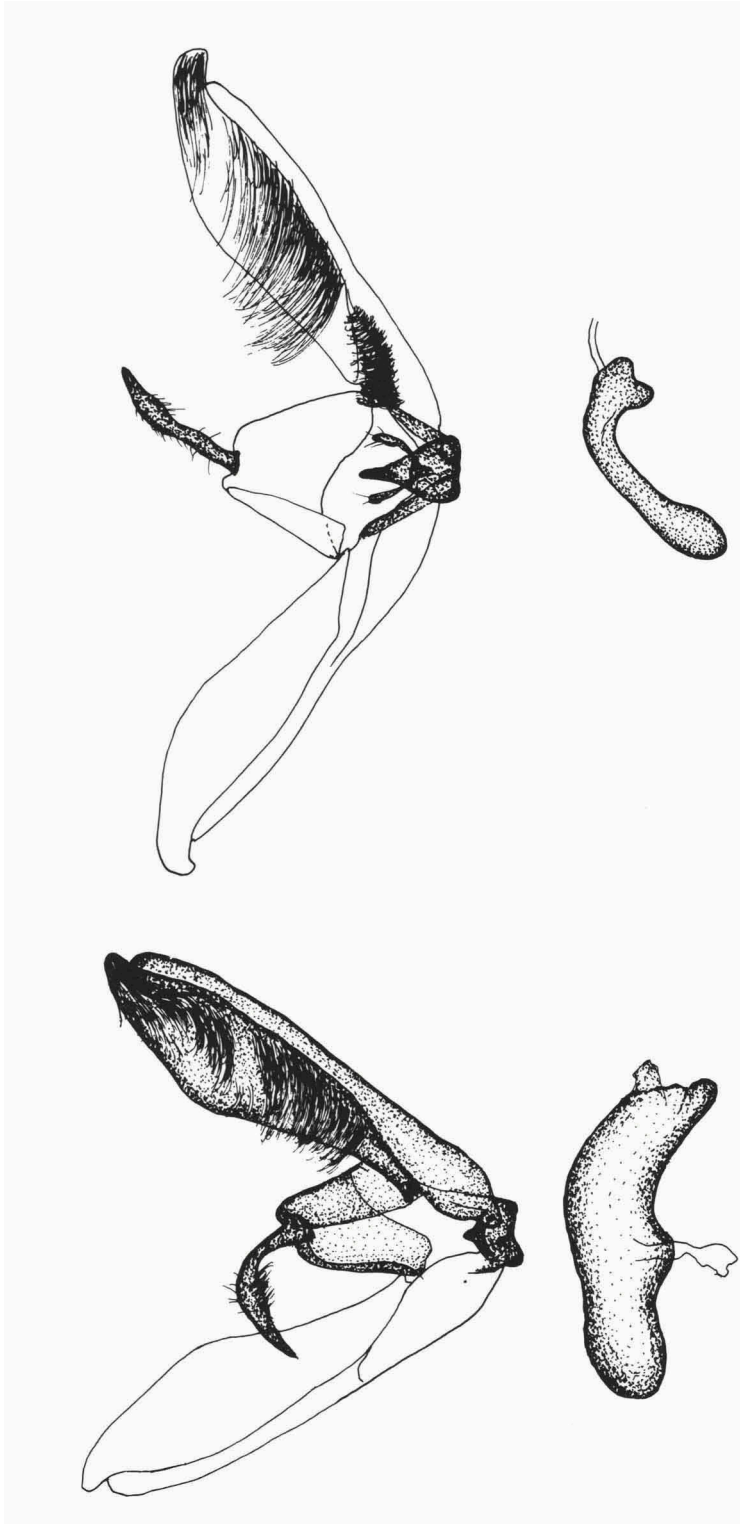


Fig. 68 (left), *Postplatypilia fuscicornis* (Zeller). Holotype, Colombia, Bogota, 23.ii, genitalia BM 15762, coll. BMNH. Fig. 69 (right), *P. nublica* spec. nov. Holotype, Chile, Nuble, near coastal stream, 17.5 km S Curanipe, 50 m, 25.1.1979 (Davis & Akerbergs), genitalia CG 6057, coll. USNM.

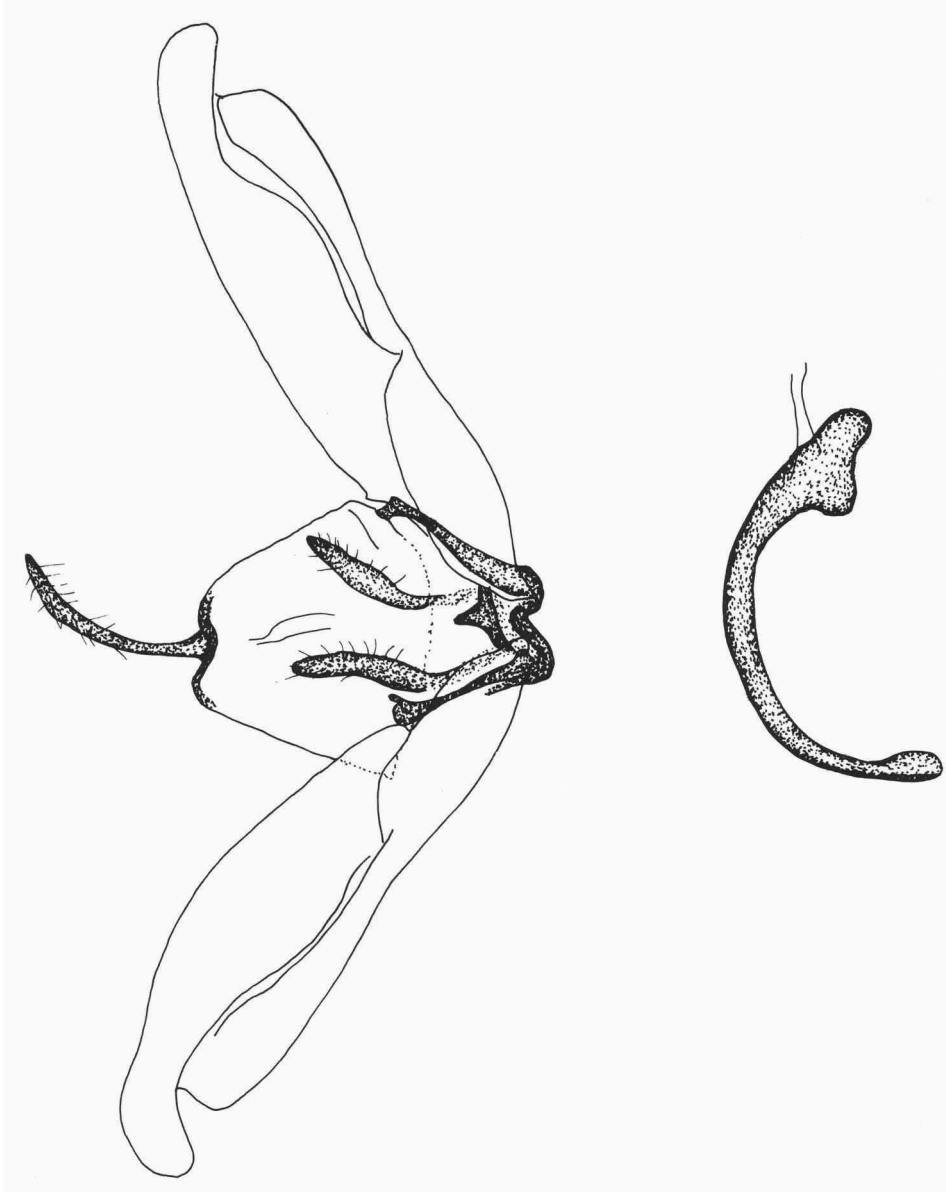


Fig. 70. *Postplatyptilia alexisi* spec. nov. Holotype. Chile, Nuble, Alto Tregualemu, 20 km SE Chovellen, 500 m, 1-3.xii.1981 (Davis), genitalia CG 6087, coll. USNM.

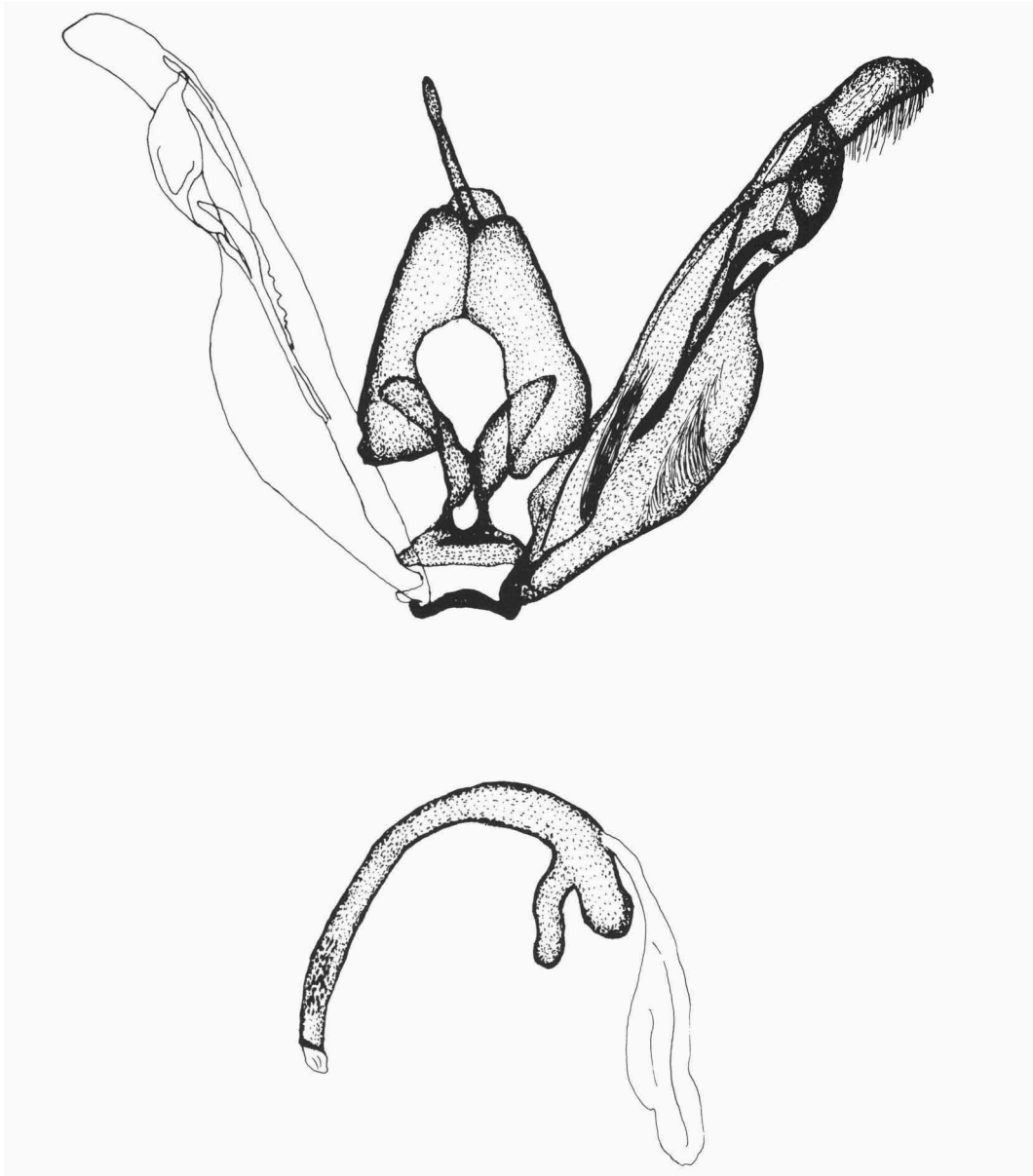


Fig. 71, *Stenoptilodes sematodactylus* (Berg). Lectotype of *Platyptilia epidelta* Meyrick. Argentina, Parana, (19)07 (R.), genitalia BM 5008, coll. BMNH.

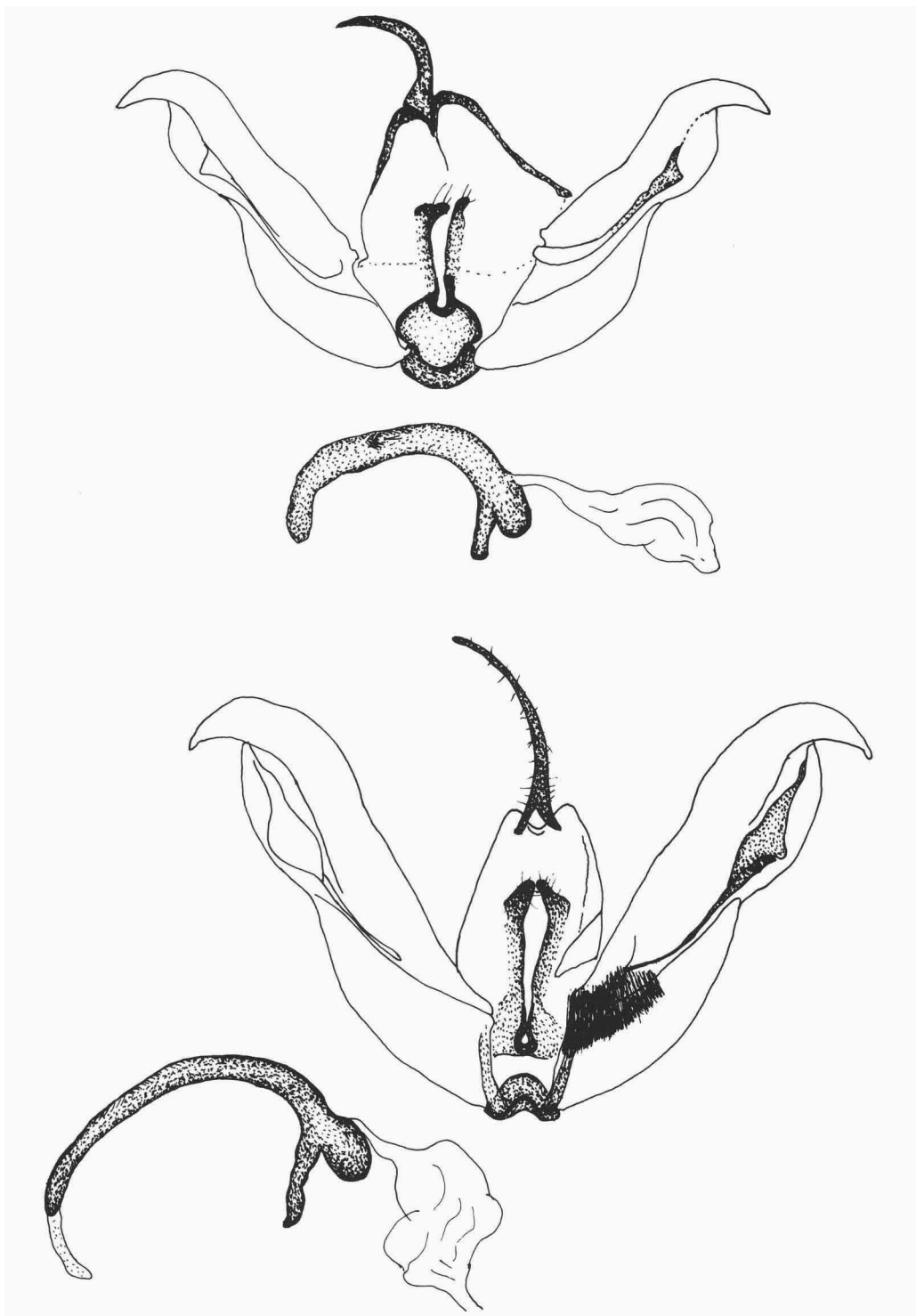


Fig. 72 (upper), *Stenoptilodes gilvicolor* (Zeller). Chile, Quillota, 1886 (Paulson), genitalia CG 5025, coll. BMNH. Fig. 73 (lower), *S. duckworthi* spec. nov. Holotype, Argentina, Catamarca, Rio Portrero near Andalgana, 15.ii.1972 (Duckworth), genitalia CG 6089, coll. USNM.

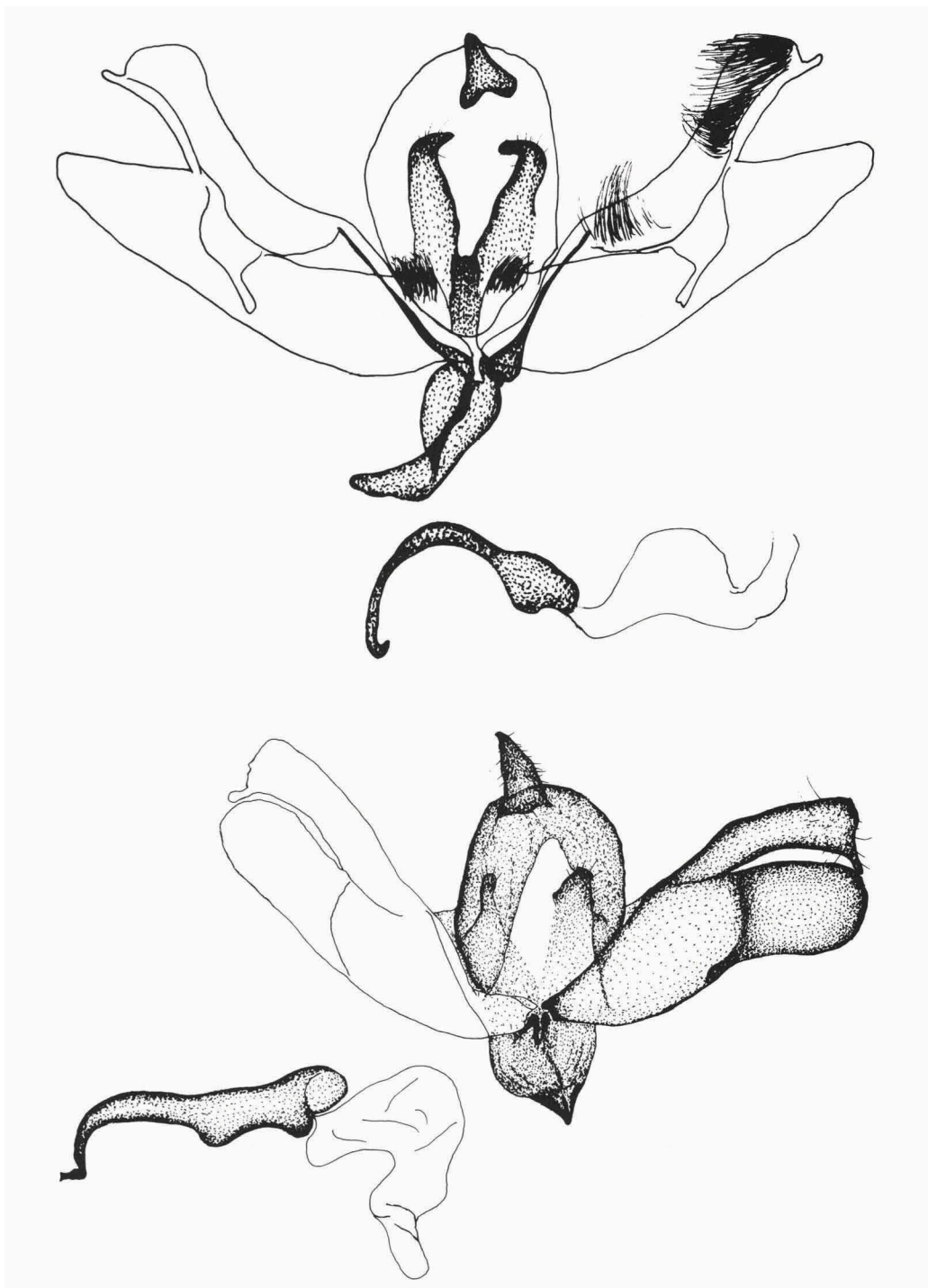


Fig. 74 (upper), *Uroloba fuscicostata* Walsingham. Chile, El Portezuelo, 7 km N Santiago, 500 m, 19-20.xi.1981 (Davis), genitalia CG 6060, coll. USNM. Fig. 75 (lower), *U. calycospila* (Meyrick). Holotype, Argentina, Alta Gracia, (19)32 (C.B.), genitalia BM 18191, coll. BMNH.

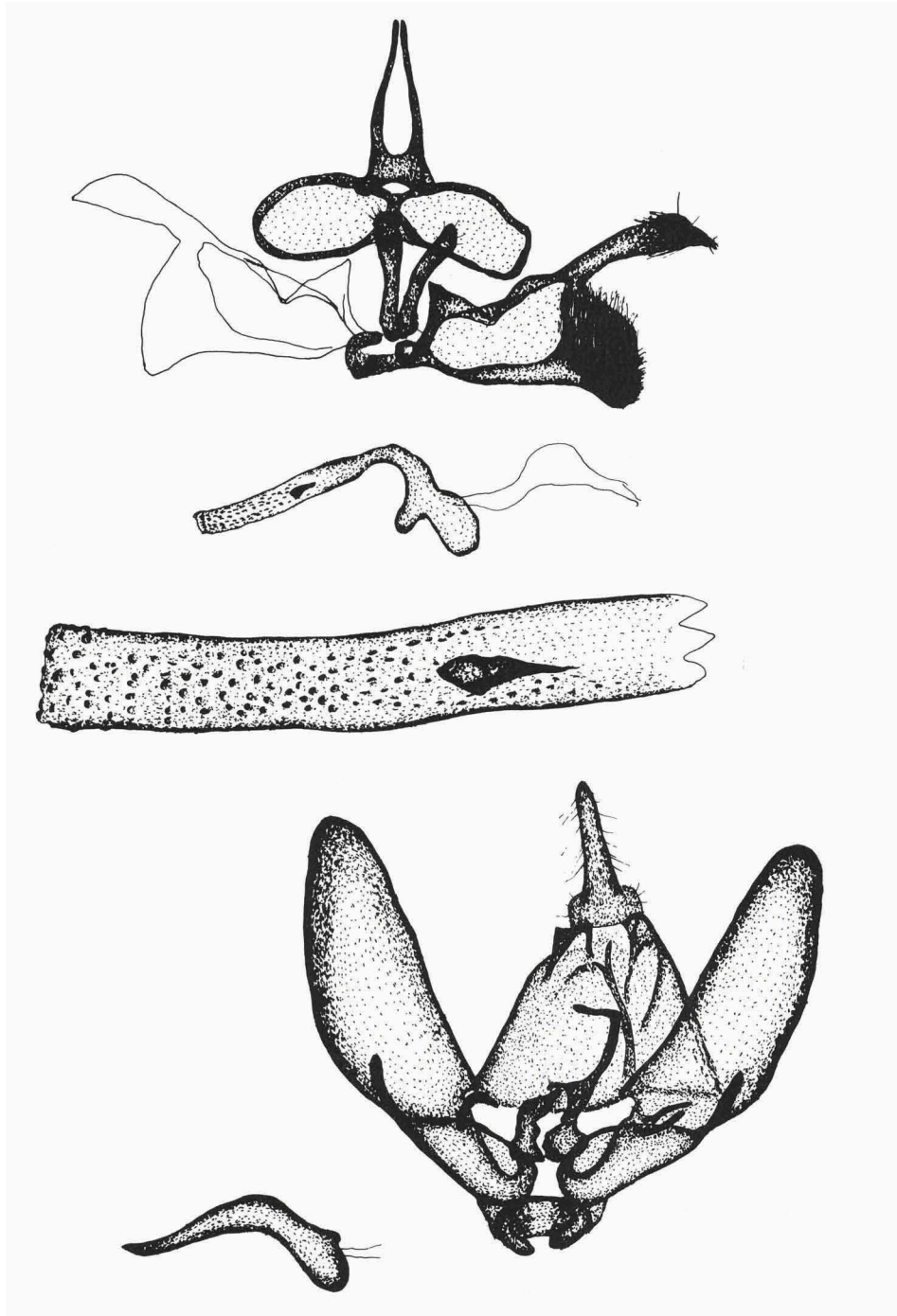


Fig. 76 (upper), *Paraamblyptilia eutalanta* (Meyrick). Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 9.xii.1981 (Nielsen & Karsholt, Sta. 9), genitalia CG 4099, coll. ZMUC. Fig. 77 (lower), *Patagonophorus murinus* spec. nov. Holotype, Argentina, Rio Negro, San Carlos de Bariloche, Nirihuau, 30.xii.1978 (Mis. Sci. Dan., Sta. 11), genitalia CG 4116, coll. ZMUC.

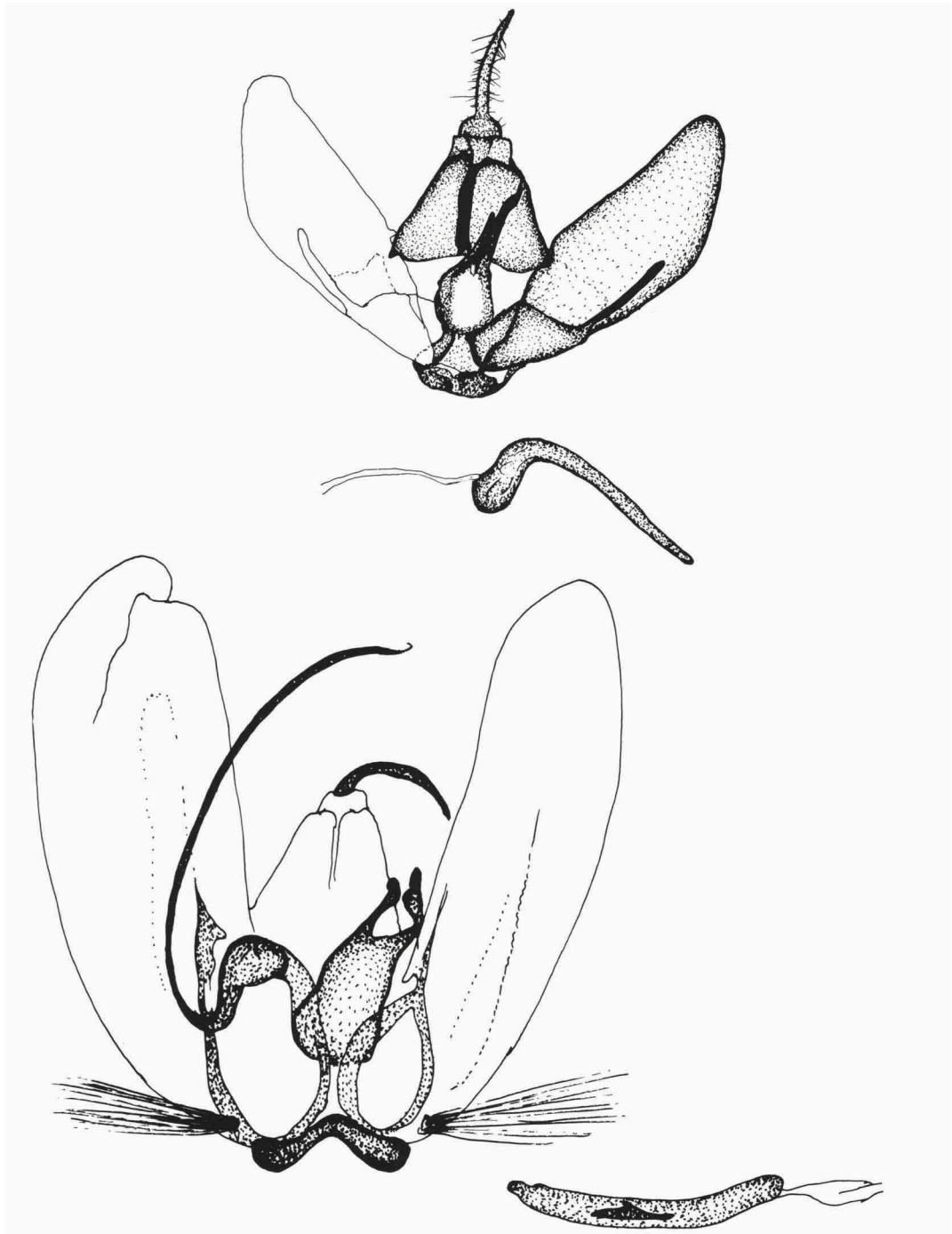


Fig. 78 (upper), *Pselnophorus alternarius* (Zeller). Argentina, Buenos Aires, Ramos Mejia, 5.xii.1961 (Topal), genitalia CG 4084, coll. ZMUC. Fig. 79 (lower), *Adaina everdinae* spec. nov. Holotype, Argentina, Salta, Rosario de la Frontera, Los Banos, 6.iv. 1979 (Mis. Sci. Dan., Sta. 72), genitalia CG 4176, coll. ZMUC.

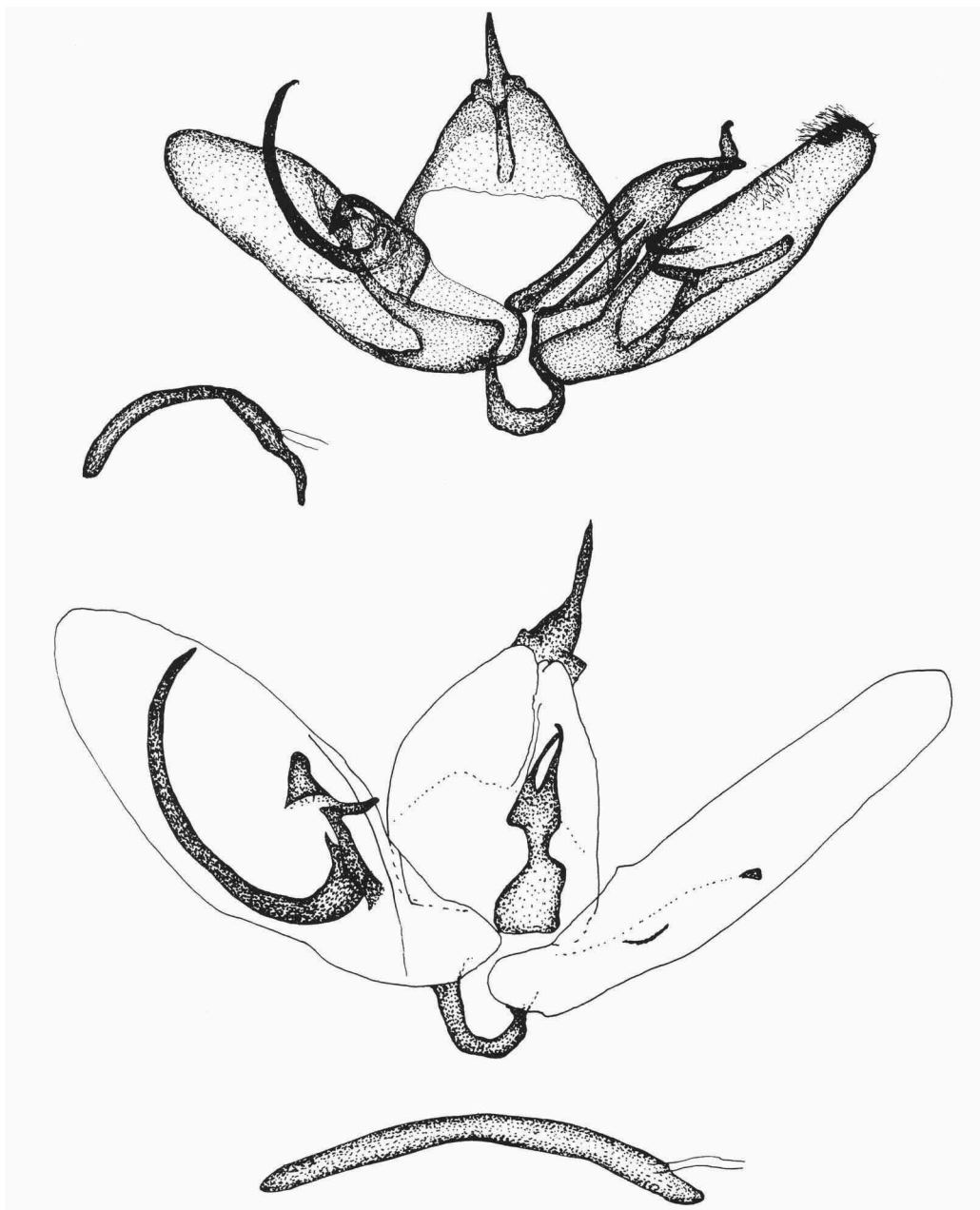


Fig. 80 (upper), *Oidaematophorus siskaellus* spec. nov. Holotype, Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 29-30.xii.1981 (Nielsen & Karsholt), genitalia CG 4126, coll. ZMUC. Fig. 81 (lower), *O. betsiae* spec. nov. Holotype, Chile, Curico, Buchen 20 km E Protrero Grande, 1300 m, 11.i.1955 (Peña), genitalia CG 6045, coll. CNC.

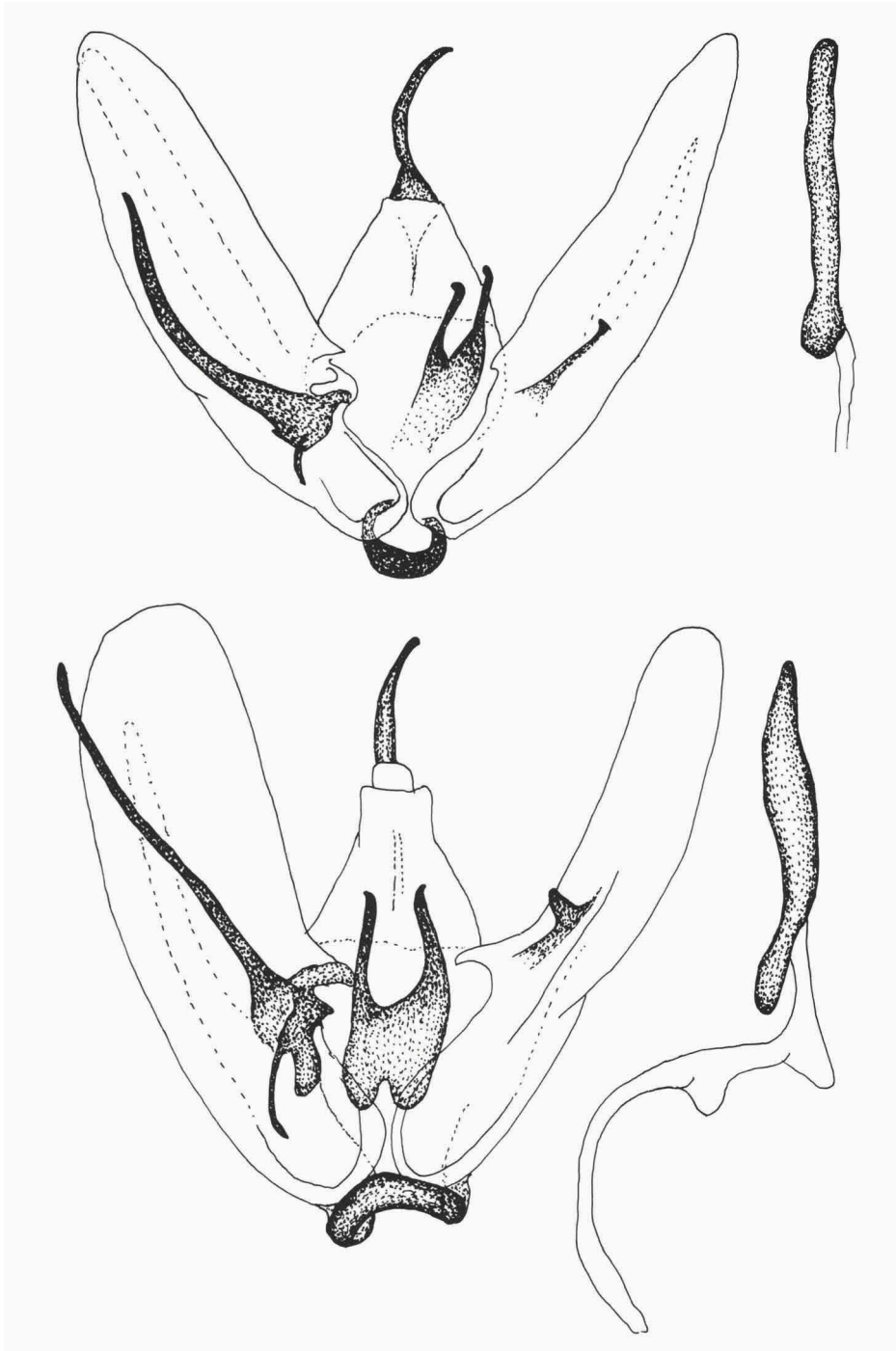


Fig. 82 (upper), *Oidaematophorus mauleicus* spec. nov. Holotype, Chile, Maule, Rio Teno, 40 km E Curico, 800 m, 25-27.xi.1981 (Davis), genitalia CG 6056, coll. USNM. Fig. 83 (lower), *O. hololeucos* (Zeller). Holotype, Chile, Valparaiso, xi, genitalia BM 18168, coll. BMNH.

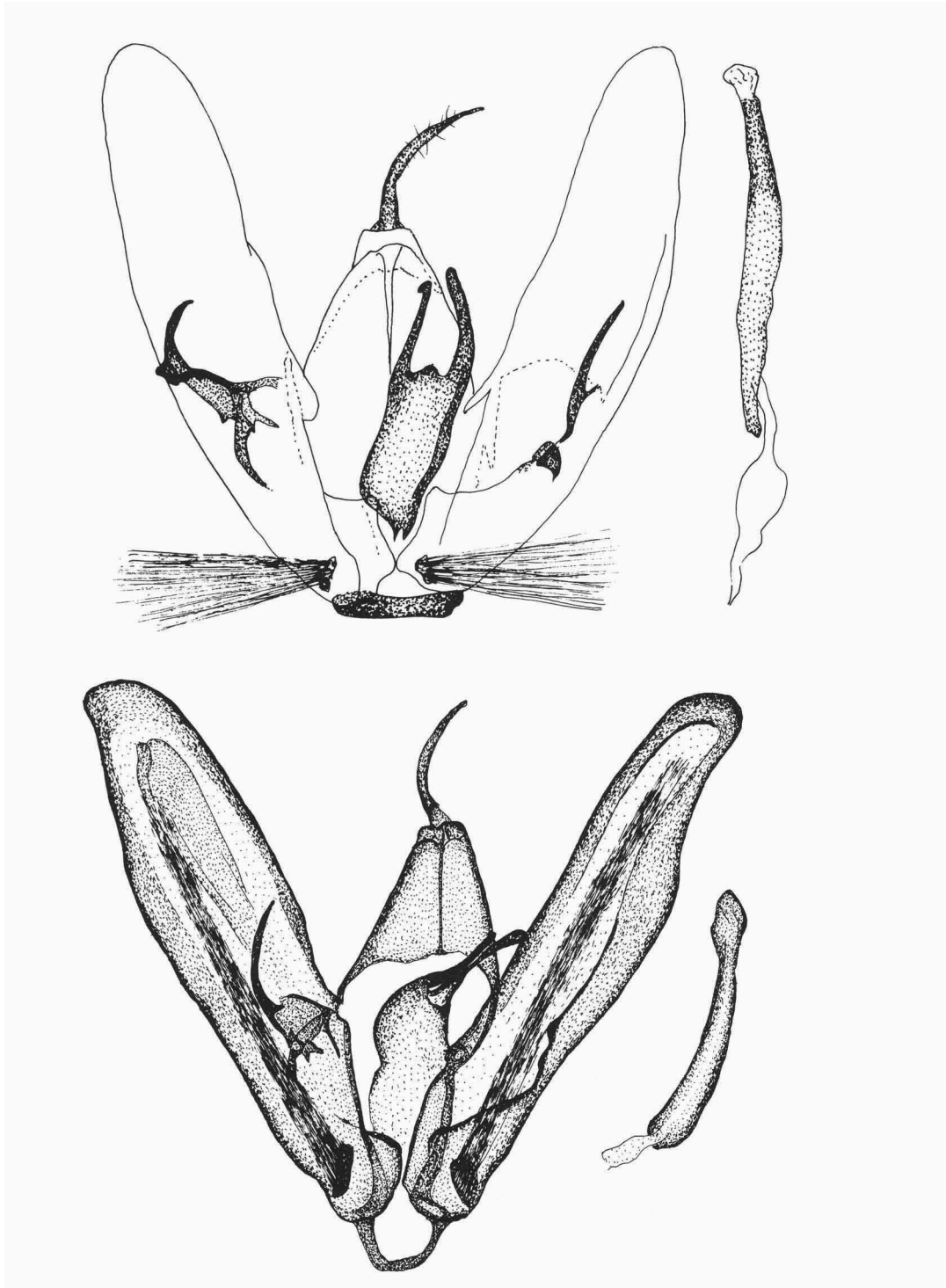


Fig. 84 (upper), *Oidamatophorus malleoicus* spec. nov. Holotype, Chile, Linares, Puente Malcho near Longavi River, 600 m, 13-15.i.1979 (Davis & Akerbergs), genitalia CG 6066, coll. USNM. Fig. 85 (lower), *O. angulofuscus* spec. nov. Holotype, Argentina, Salta, Rosaria de la Frontera, Los Banos, 9.iv.1979 (Mis. Sci. Dan., Sta. 72), genitalia CG 4103, coll. ZMUC.

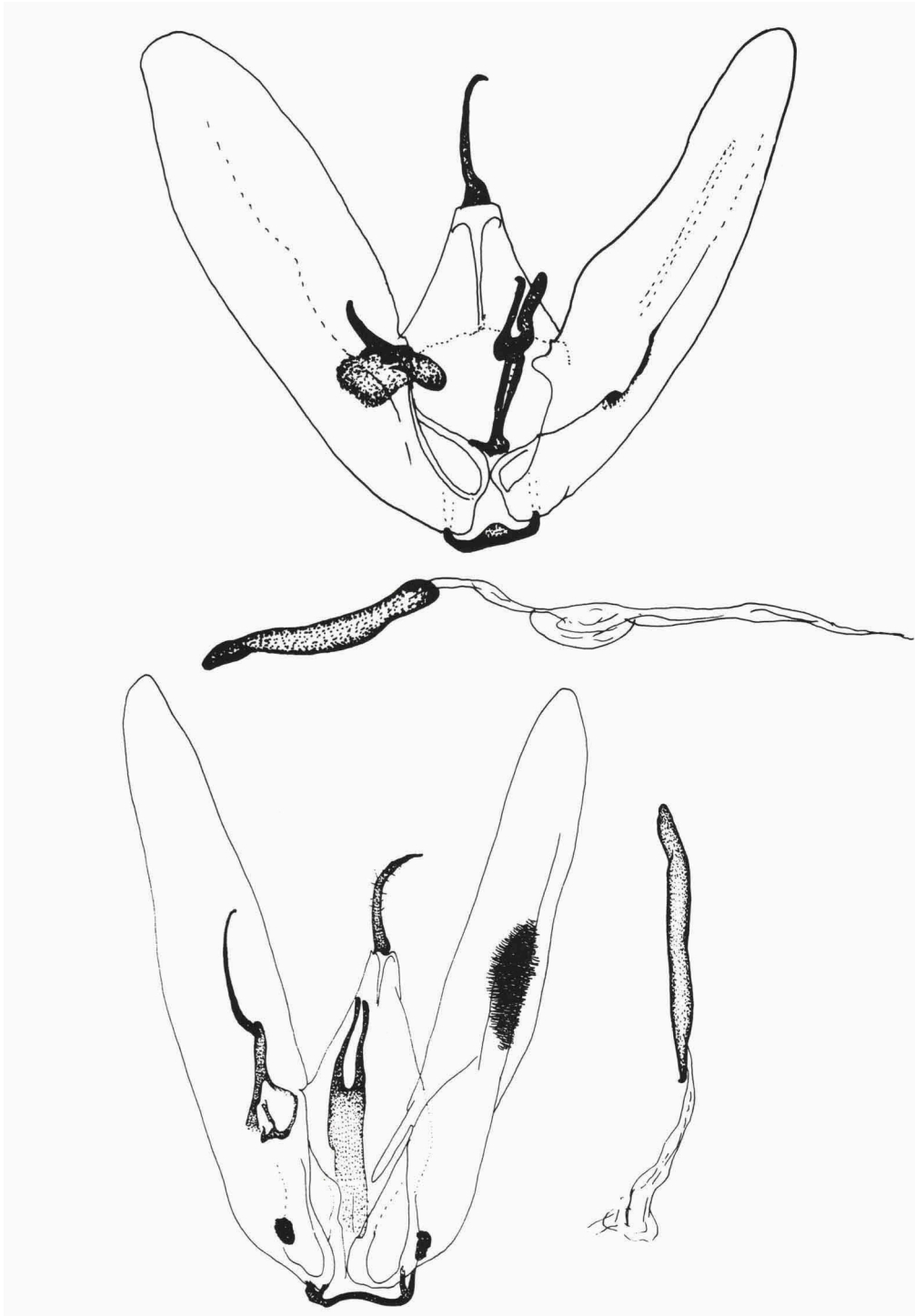


Fig. 86 (upper), *Oidaematophorus grandaevus* (Meyrick). Holotype, Chile, Llanquihue, Puella, 12-13.xii.1926 (Edwards), genitalia BM 18446, coll. BMNH. Fig. 87 (lower), *O. glaphyrotus* (Meyrick). Lectotype, Brazil, São Paulo, (19)07 (R.), genitalia BM 18445, coll. BMNH.

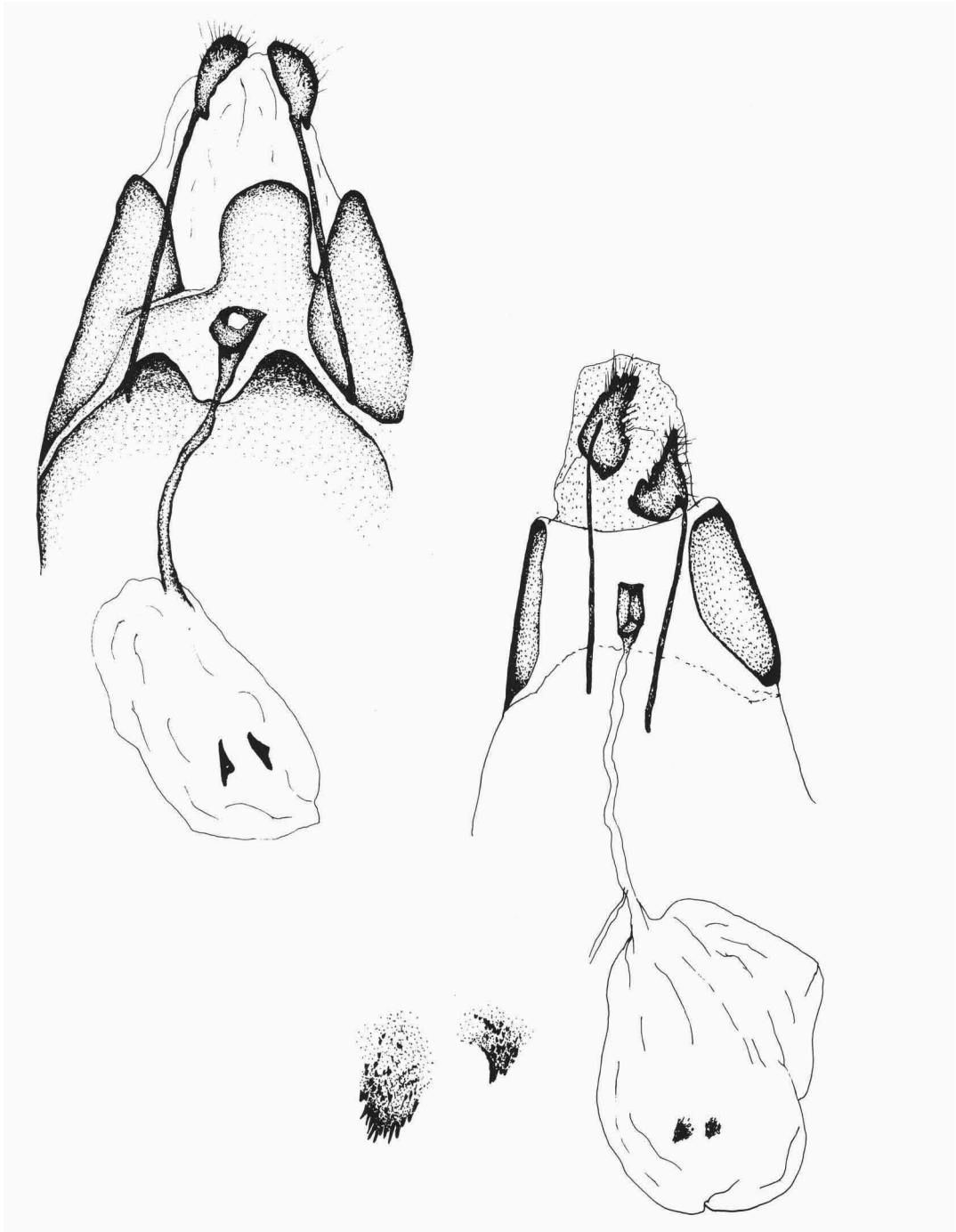


Fig. 88 (left), *Megalorhipida defectalis* (Walker). Argentina Salta, Los Toldos, 17-21.ii.1960 (Golbach), genitalia CG 4112, coll. ZMUC. Fig. 89 (right). *M. pseudodefectalis* spec. nov. Paratype, Argentina, Neuquen, Piedra del Aguila, 19.xii.1978 (Mis. Sci. Dan., Sta. 15, genitalia CG 4107, coll. ZMUC.

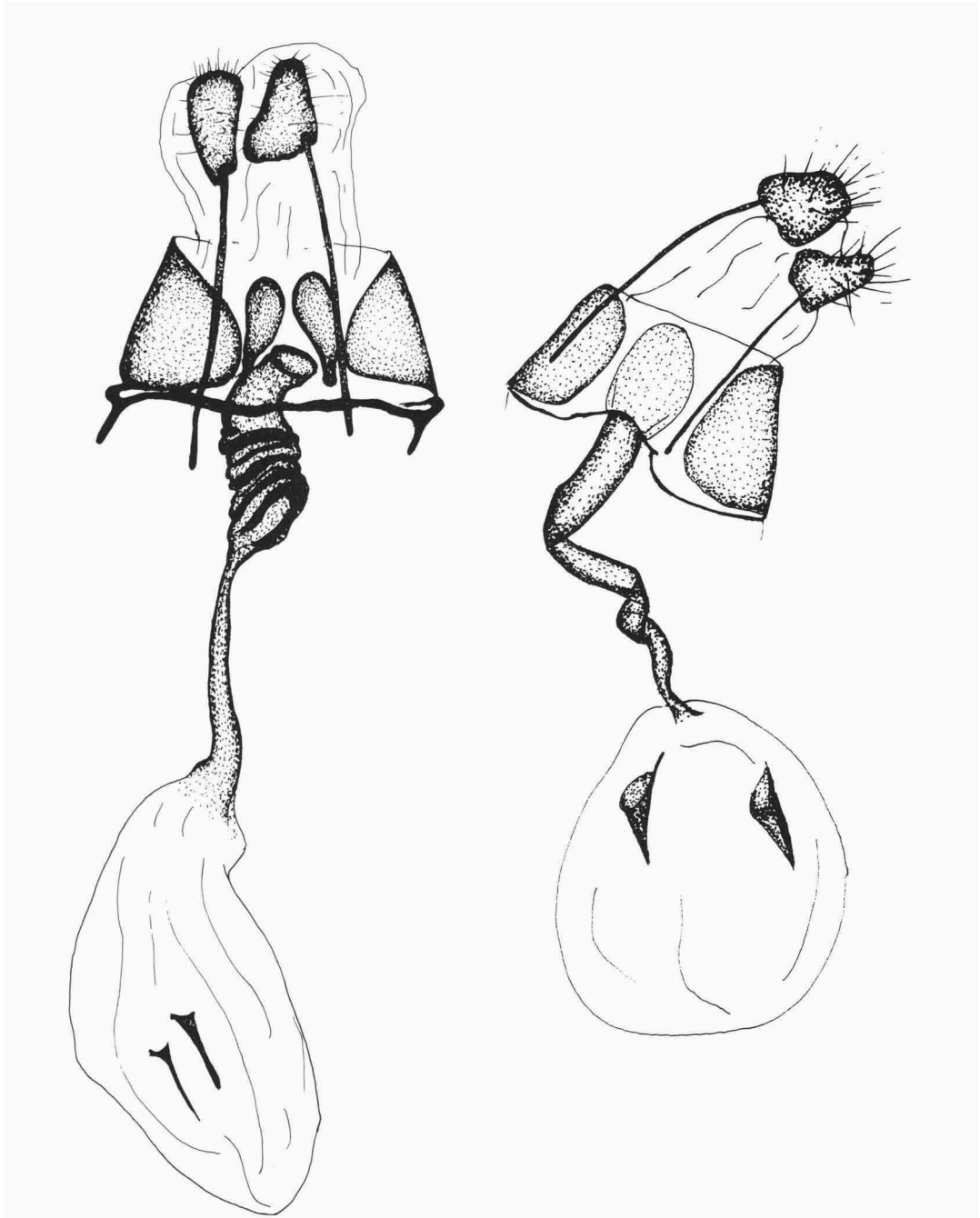


Fig. 90 (left) *Lioptilodes subantarcticus* spec. nov. Paratype, Argentina, Tierra del Fuego, Ushuaia, Lapataia, 20 m, 27.i.1979 (Mis. Sci. Dan., Sta. 34), genitalia CG 4138, coll. ZMUC. Fig. 91 (right). *L. parvus* (Walsingham). Holotype, U.S.A., California, Mt. Shasta, Siskiyou Co., 2.viii-1.ix.1871 (Walsingham), genitalia BM 15778, coll. BMNH.

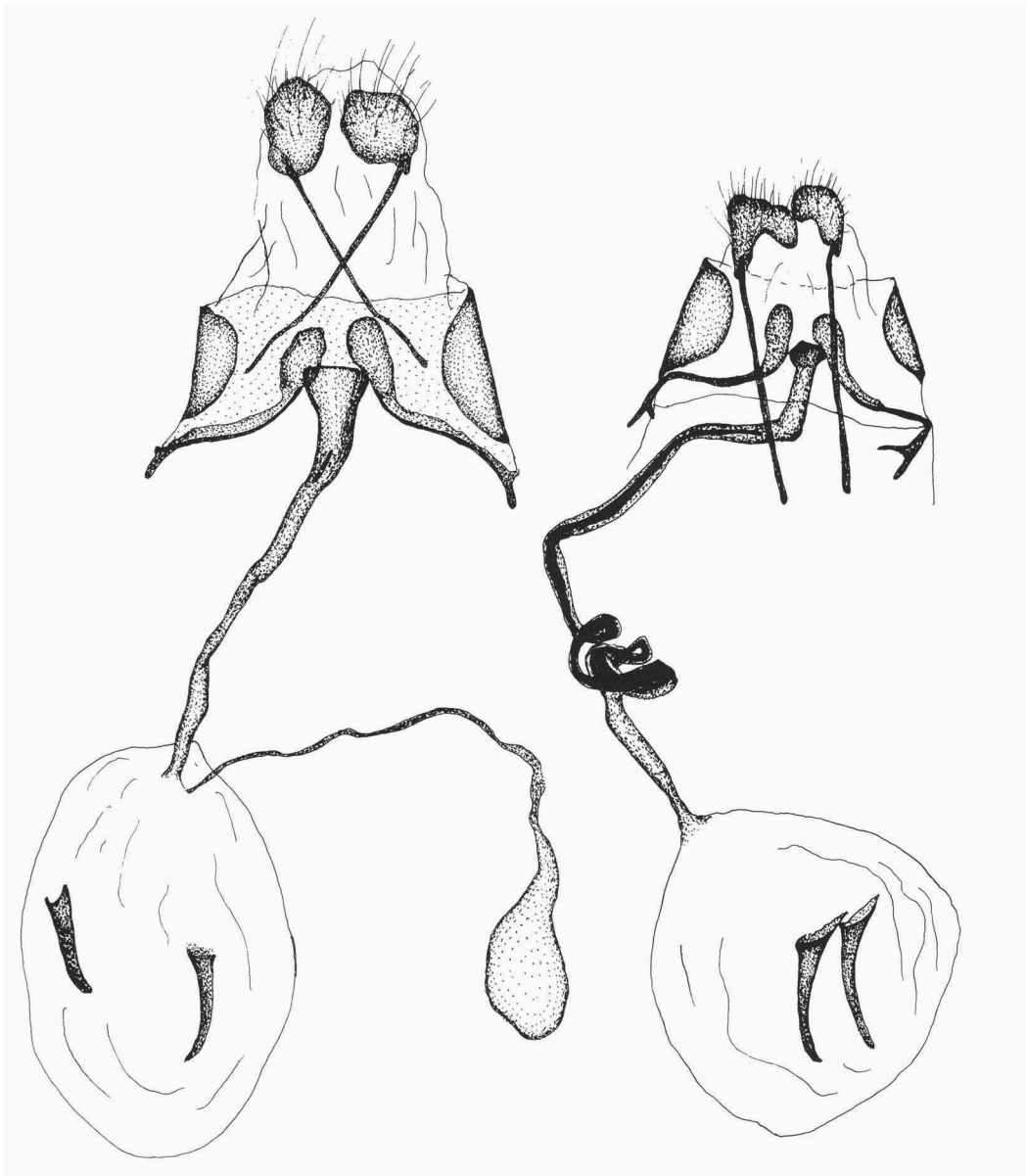


Fig. 92 (left). *Lioptilodes zapalaicus* spec. nov. Paratype, Argentina, Chubut, Esquel, 550 m, 1.i.1982 (Nielsen & Karsholt, Sta. 47), genitalia CG 4123, coll. ZMUC. Fig. 93 (right). *L. rionegroicus* spec. nov. Paratype, Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 12-20.xi.1981 (Nielsen & Karsholt, Sta. 9), genitalia CG 4142, coll. ZMUC.

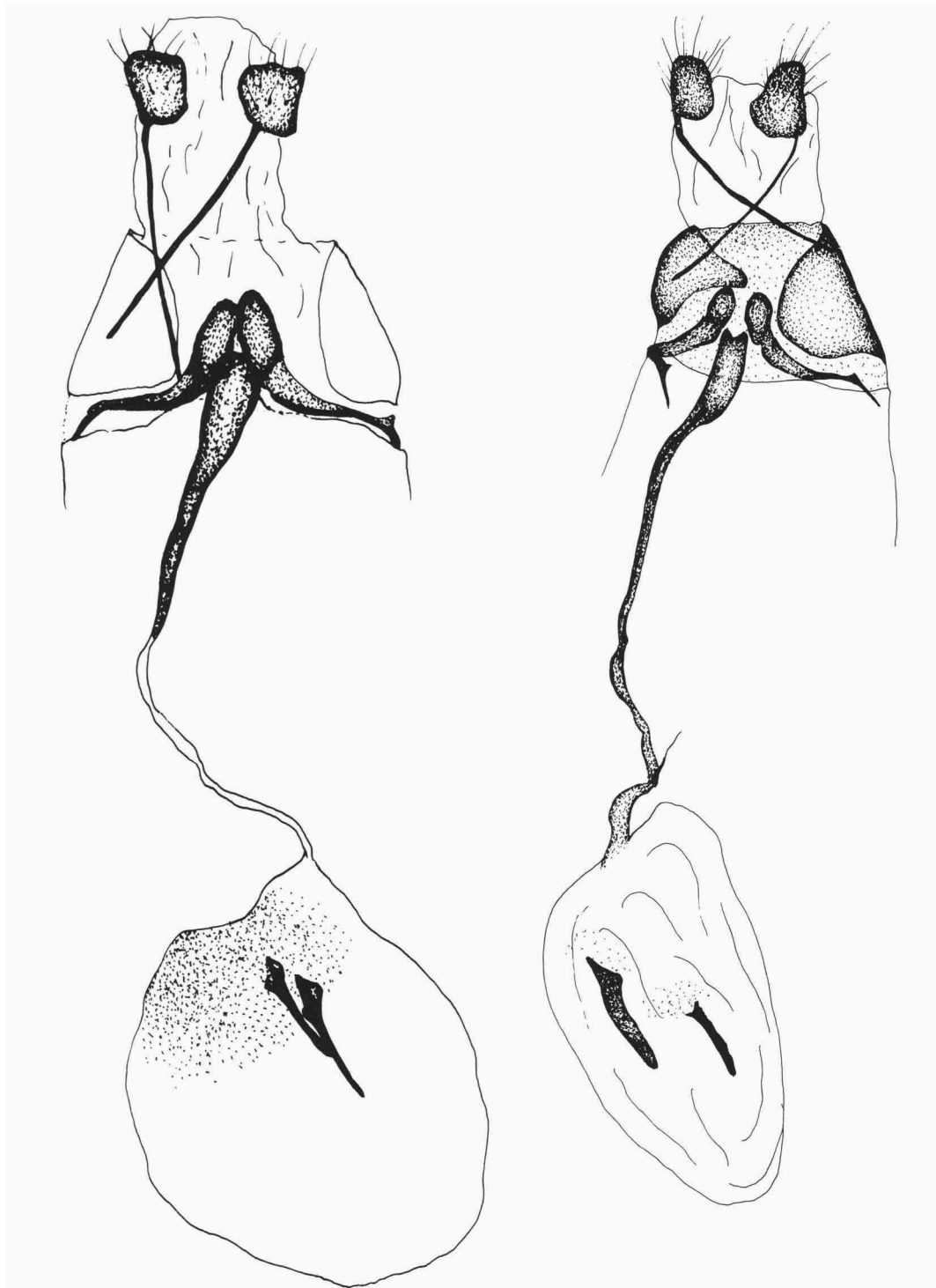


Fig. 94 (left), *Lioptilodes neuquenicus* spec. nov. Paratype, Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 810 m, 16.i.1979 (Mis. Sci. Dan., Sta. 7), genitalia CG 4141, coll. ZMUC. Fig. 95 (right), *L. aguilaicus* spec. nov. Paratype, Argentina, Neuquen, Piedra del Aguila, 19.xii.1978 (Mis. Sci. Dan., Sta. 15), genitalia CG 4125, coll. ZMUC.

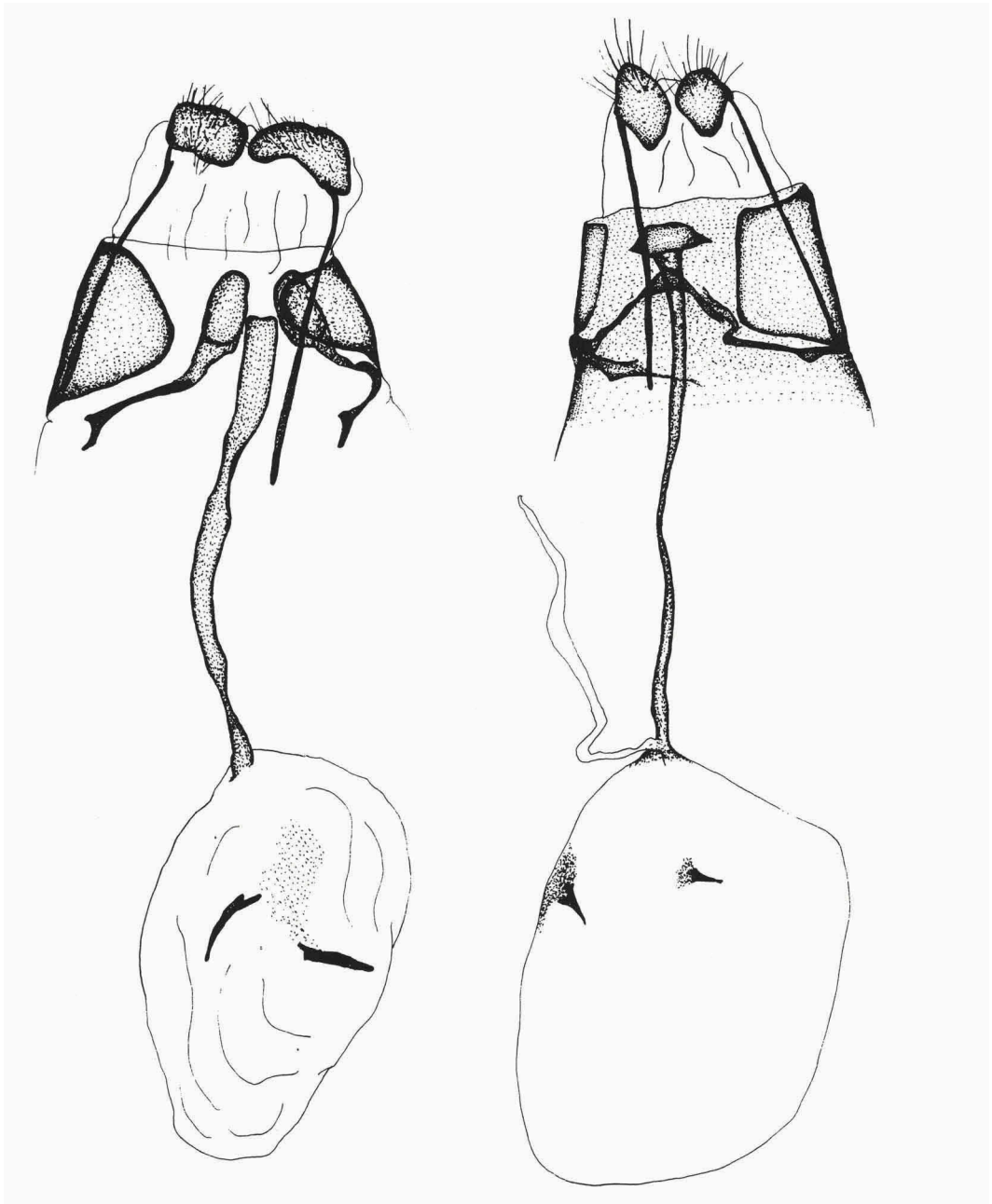


Fig. 96 (left), *Lioptilodes fetisi* spec. nov. Holotype, Chile, Santiago, Cond. Purgatoria, 22.xii.(19)50 (Fetis), genitalia CG 1964, coll. MZUC. Fig. 97 (right), *L. alolepidodactylus* spec. nov. Paratype, Argentina, Rio Negro, San Carlos de Bariloche, Nirihuau, 9.xii.1978 (Mis. Sci. Dan., Sta. 11), genitalia CG 4119, coll. ZMUC.

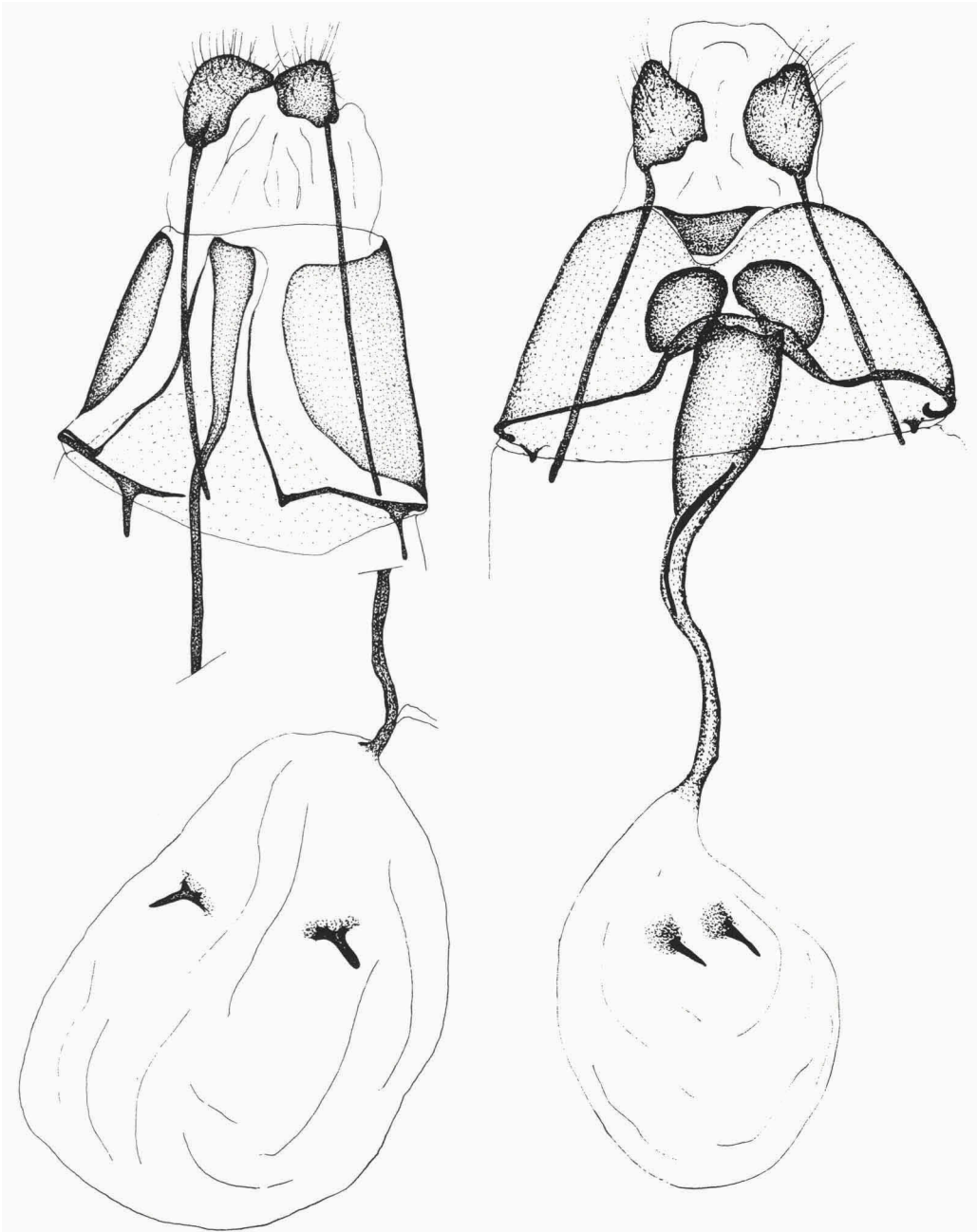


Fig. 98 (left), *Liopitilodes testaceus* (Blanchard). Chile, Tobalaba, 9.vii.1948, genitalia CG 1948, coll. MZUC. Fig. 99 (right), *L. topali* spec. nov. Paratype, Argentina, Rio Negro, El Bolson, Pampa Azcona, lampa, 18.iii.1961 (Topal), genitalia CG 4114, coll. ZMUC.

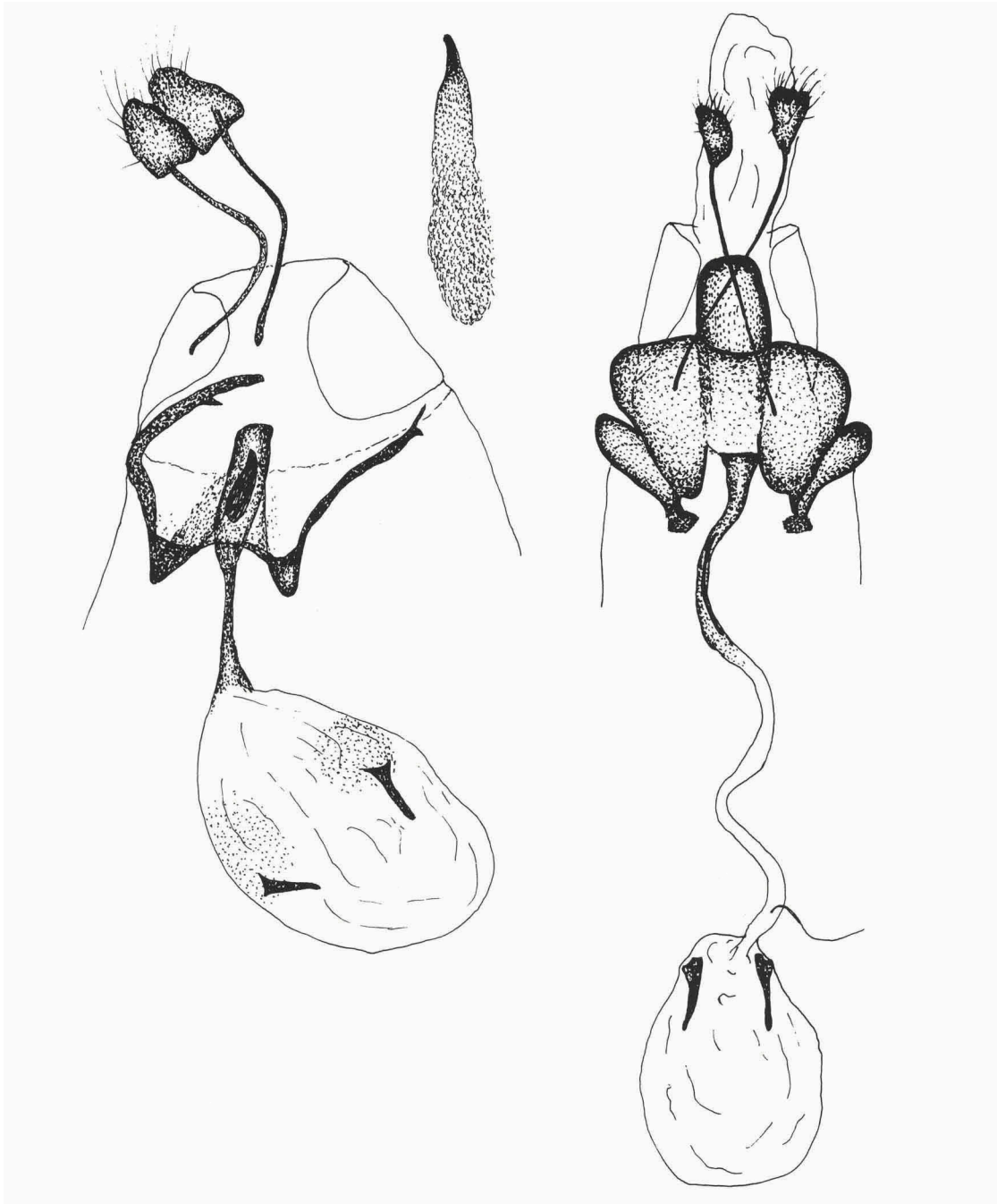


Fig. 100 (left), *Lioptilodes tribonius* (Meyrick). Paralectotype, Peru, Matucana, vii.(19)14 (Parish), genitalia BM 18442, coll. BMNH. Fig. 101 (right). *L. antarcticus* (Staudinger). Chile, Huasco, Corrizal bajo, 27.xi.1987 (Barriga), e.l. *Adesmia* spec., genitalia CG 6100, coll. MZUC.

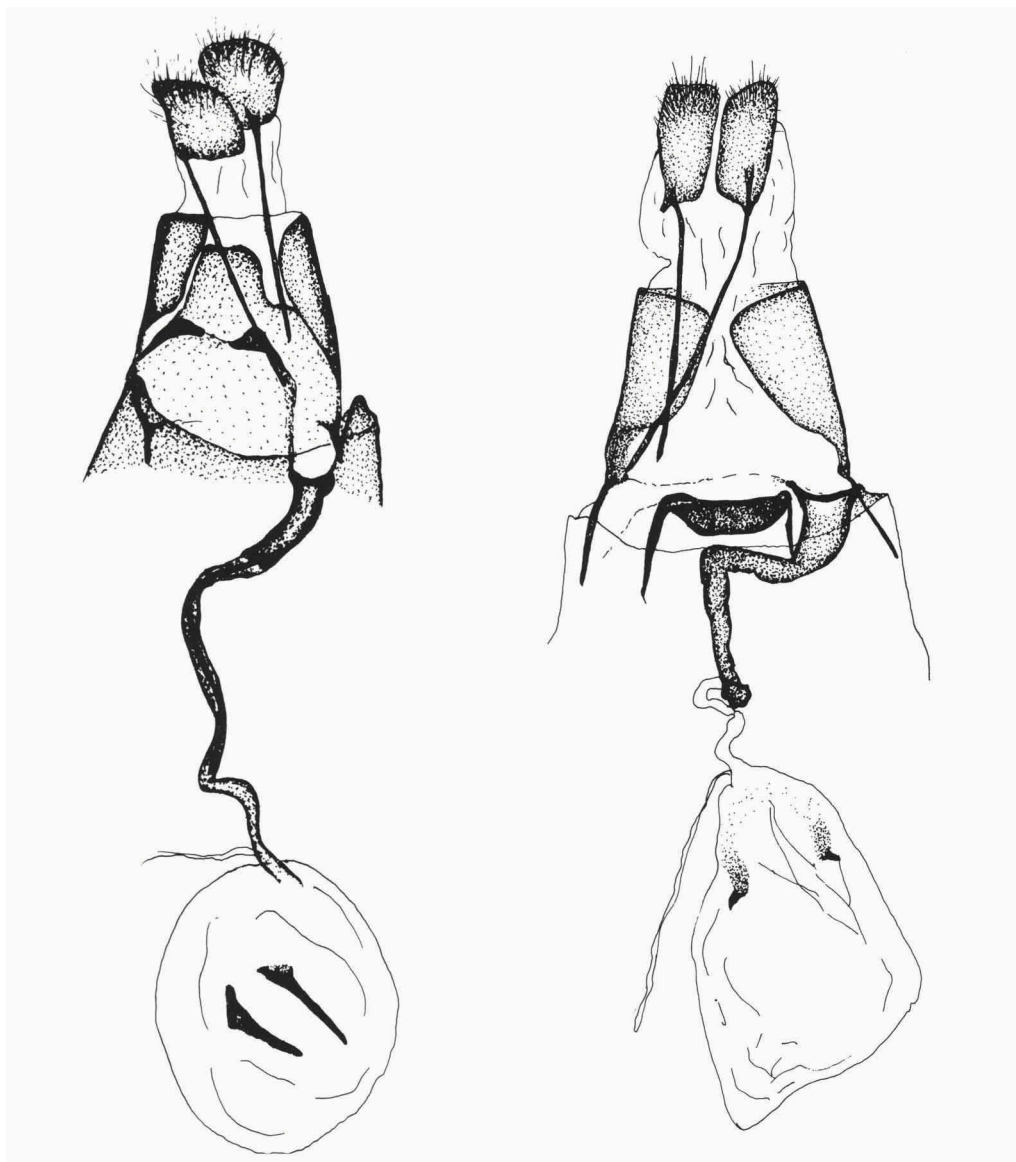


Fig. 102 (left), *Lantanophaga nielseni* spec. nov. Paratype, Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 800 m, 7.xii.1981 (Nielsen & Karsholt), genitalia CG 4094, coll. ZMUC. Fig. 103 (right), *L. aestuosa* (Meyrick). Ecuador, Guachayacu, x-xi.1926 (Vorbeck), genitalia CG 4093, coll. ZMUC.

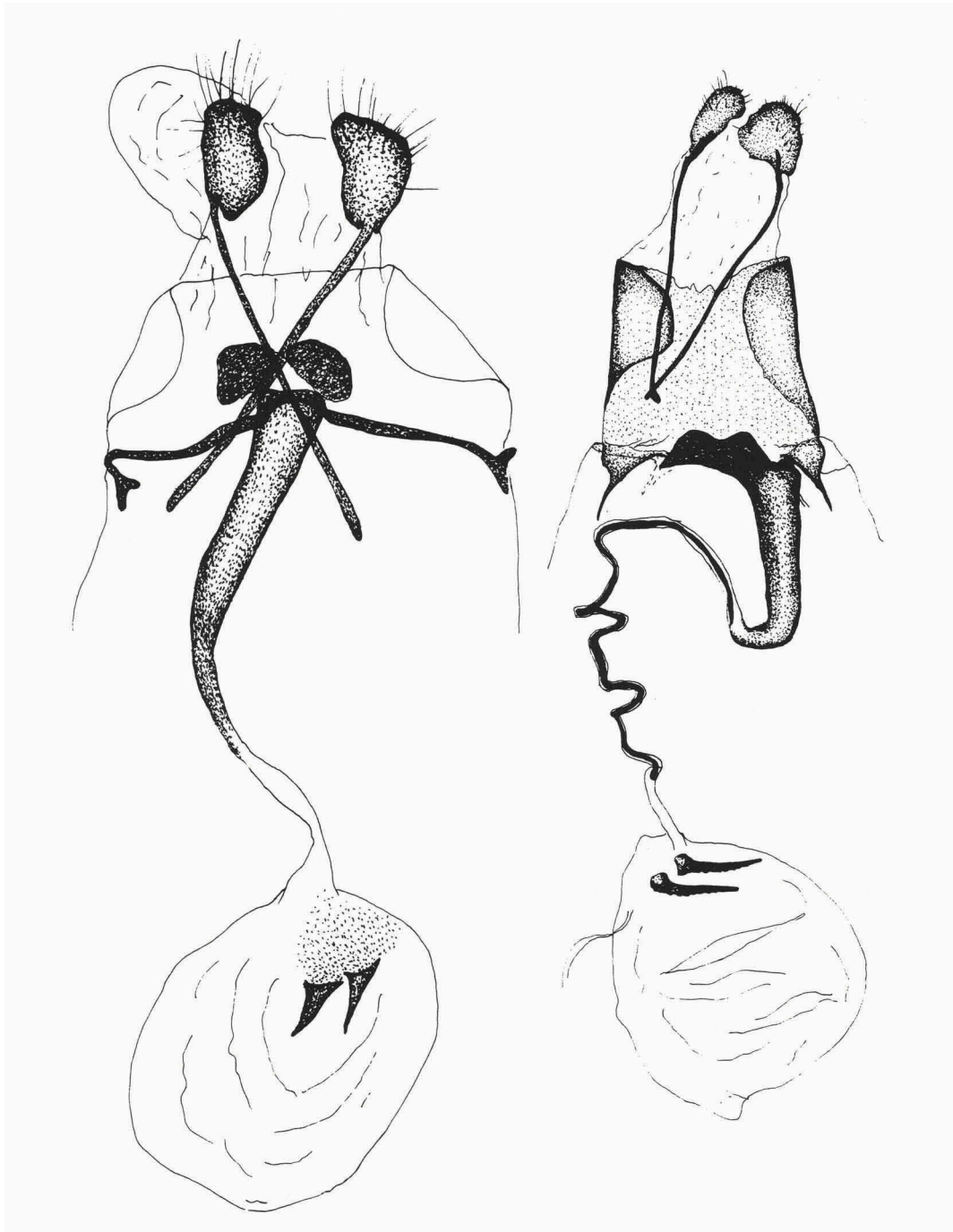


Fig. 104 (left), *Platyptilia davisi* spec. nov. Holotype, Chile, Nuble, Sangri-la, SW side volcan Chillan, 1600 m, 19-21.i.1978 (Davis & Akerbergs), genitalia CG 6051, coll. USNM. Fig. 105 (right), *Postplatyptilia camptosphena* (Meyrick). Argentina, Neuquen, Lago Tromen, Rio Grande, 900 m, 30.xi.1978 (Mis. Sci. Dan., Sta. 18), genitalia CG 4089, coll. ZMUC.

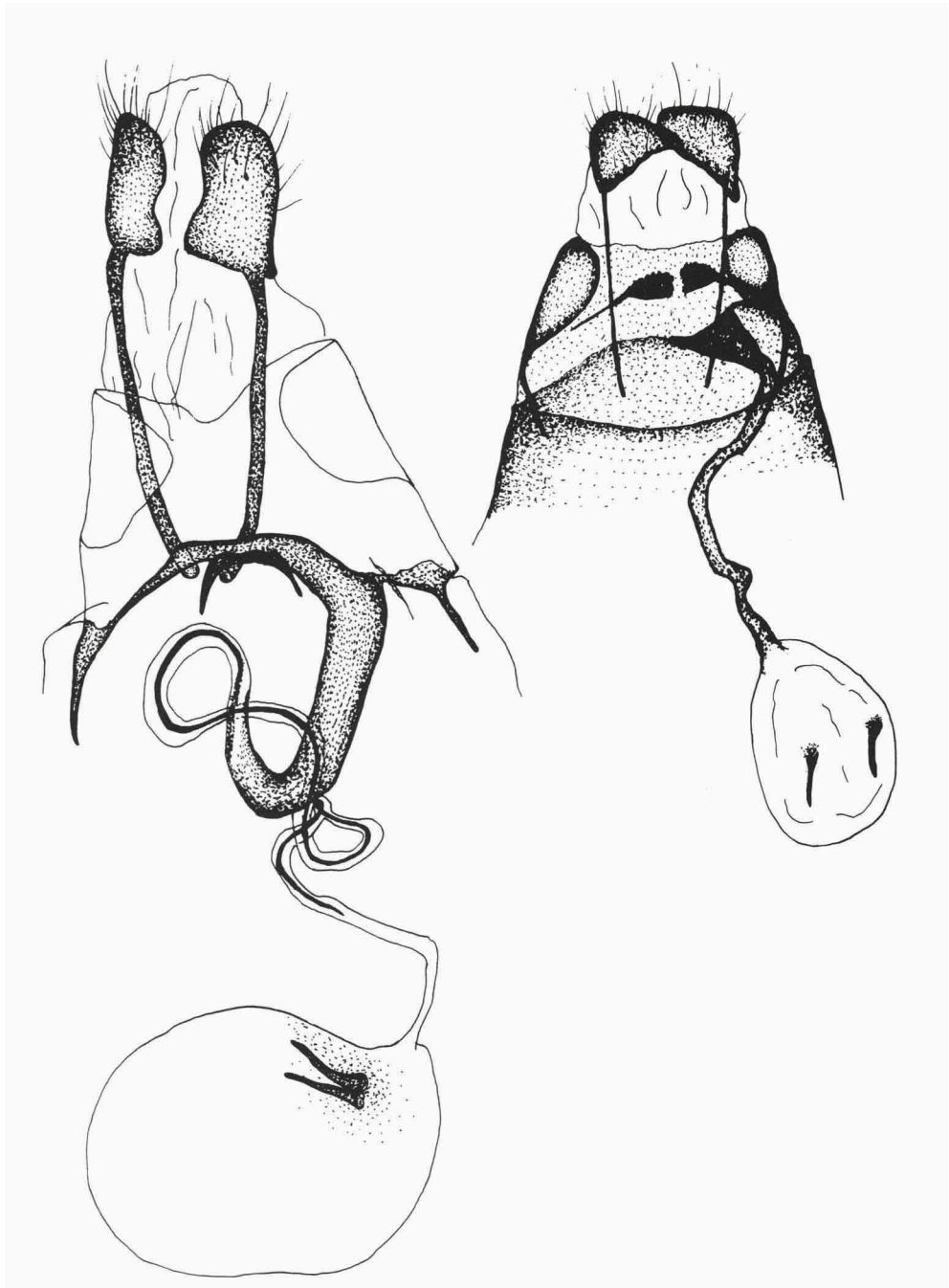


Fig. 106 (left), *Postplatyptilia eelkoi* spec. nov. Paratype, Chile, Nuble, Shangri-la, SW side volcan Chillan, 1600 m, 19-21.i.1979 (Davis & Akerbergs), genitalia CG 6080, coll. USNM. Fig. 107 (right), *Postplatyptilia naranja* spec. nov. Holotype, Argentina, Neuquen, Lago Lacar, Pucara, 750 m, 26.xii.1978 (Mis. Sci. Dan., Sta. 9), genitalia CG 4090, coll. ZMUC.

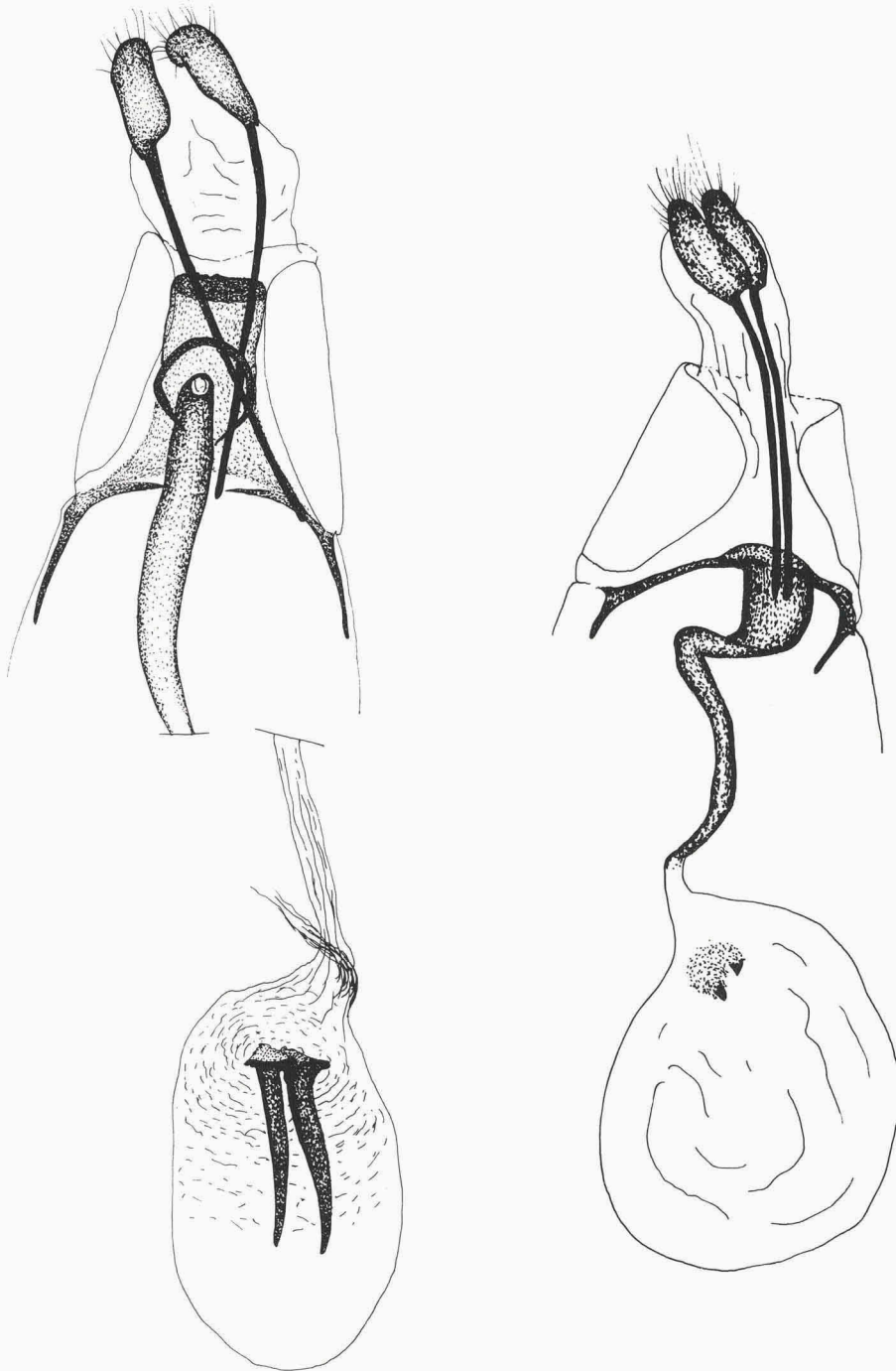


Fig. 108 (left), *Postplatyptilia fuscicornis* (Zeller). Chile, Maule, Forel Corrizalillo, 250 m, 30.i-5.ii.1981 (Davis), genitalia CG 6096, coll. USNM. Fig. 109 (right), *P. alexisi* spec. nov. Paratype, Chile, Nuble, near coastal stream, 17.5 km S Curanipe, 50 m, 25.i.1978 (Davis & Akerbergs), genitalia CG 6088, coll. USNM.

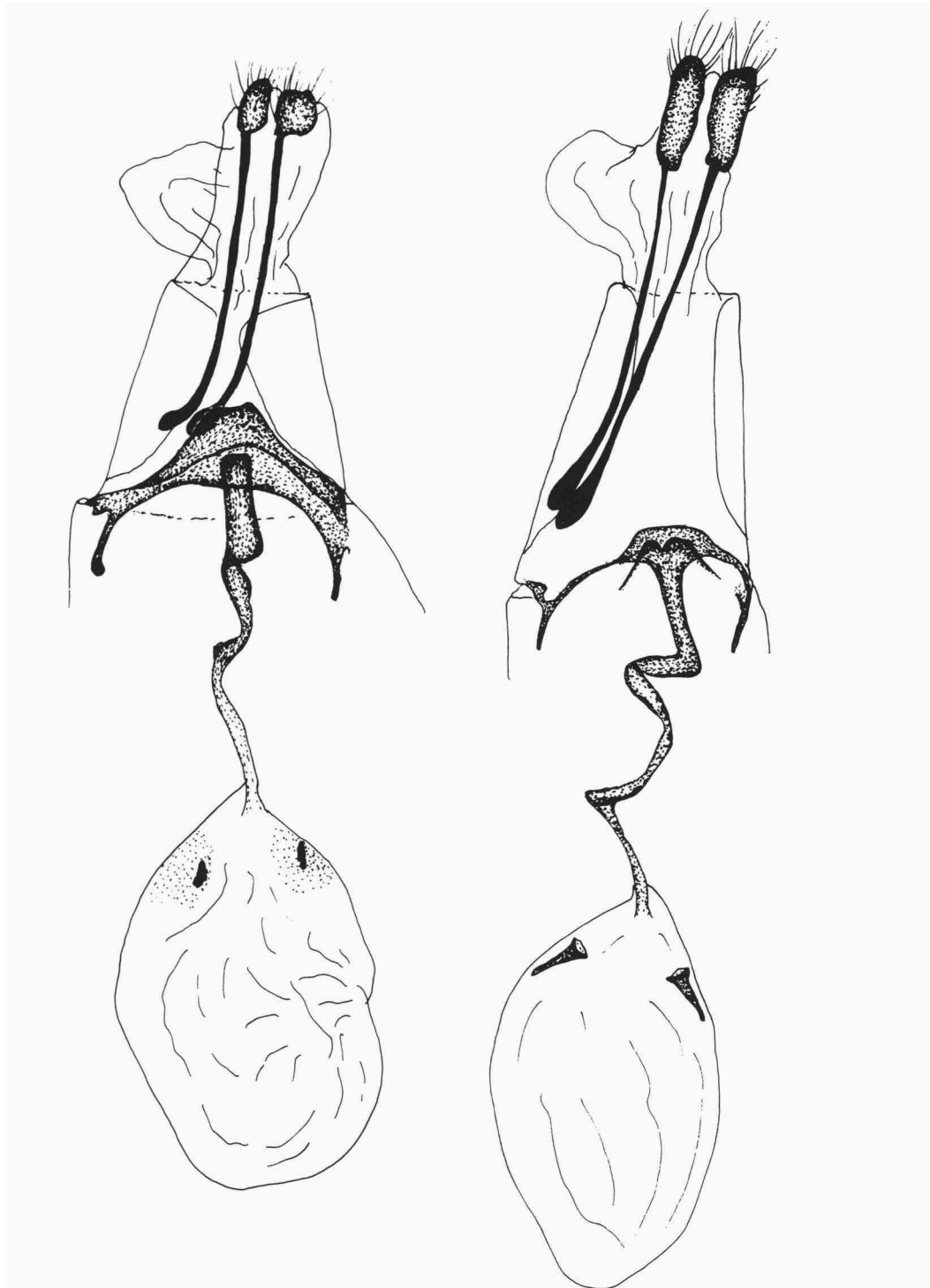


Fig. 110 (left), *Postplatyptilia akbergi* spec. nov. Holotype, Chile, Nuble, Alto Tregualemu, 20 km SE Chovellen, 500 m, 26-27.i.1979 (Davis & Akerbergs), genitalia CG 6085, coll. USNM. Fig. 111 (right), *P. biobioica* spec. nov. Holotype, Chile, Bio Bio, Est. Huequecura, 25 km E Sta. Barbara, 24.i.1978 (Flint), genitalia CG 6083, coll. USNM.

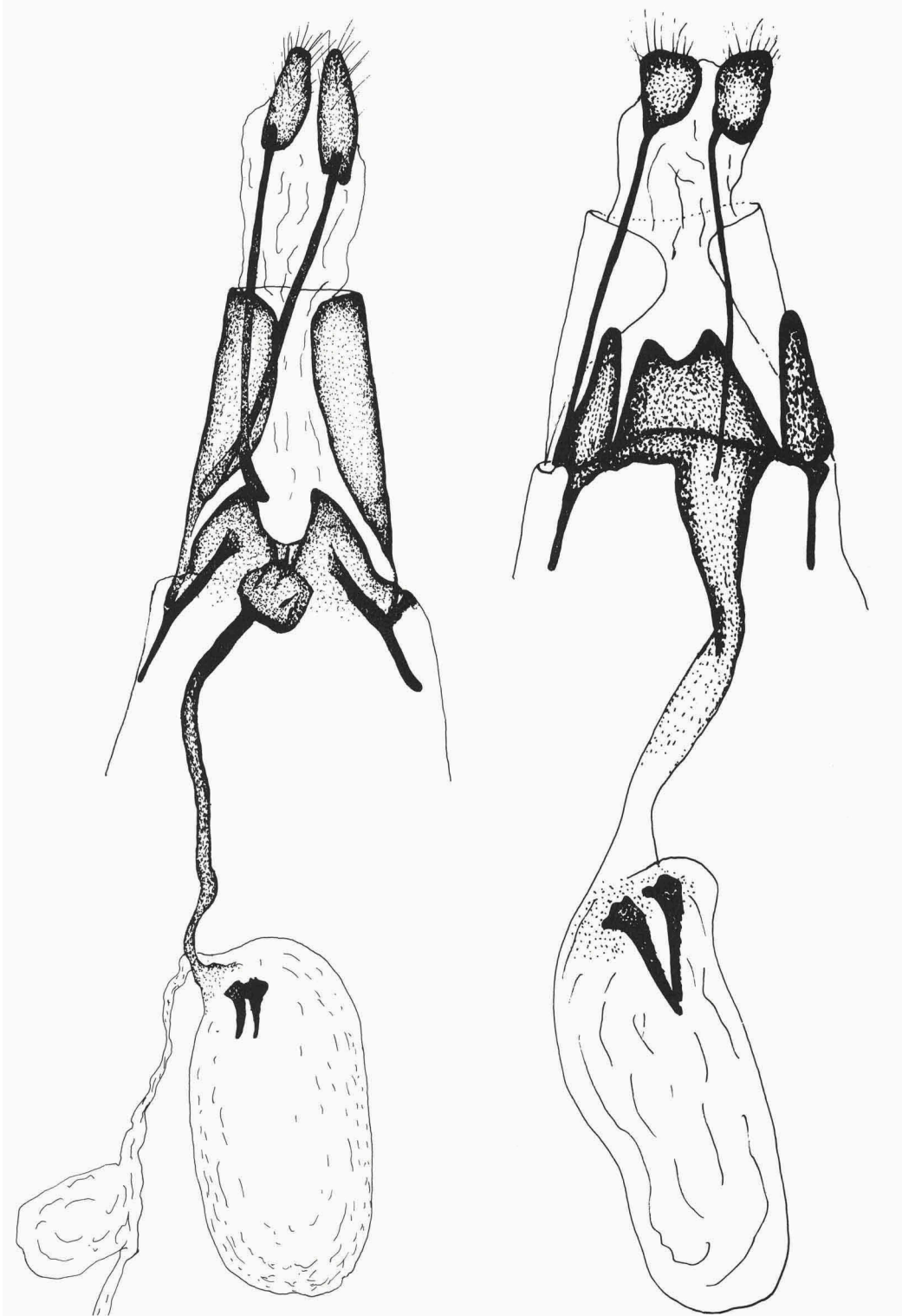


Fig. 112 (left), *Postplatyptilia talcaica* spec. nov. Holotype, Chile, Alto Vilches, Cord. Talca, i.1989 (Elgueta), genitalia CG 1984, coll. MNHC. Fig. 113 (right), *P. flinti* spec. nov. Holotype, Argentina, Buenos Aires, Rio Santiago, Palo Blanco, Berisso, 19.xii.1979 (Flint), genitalia CG 6081, coll. USNM.

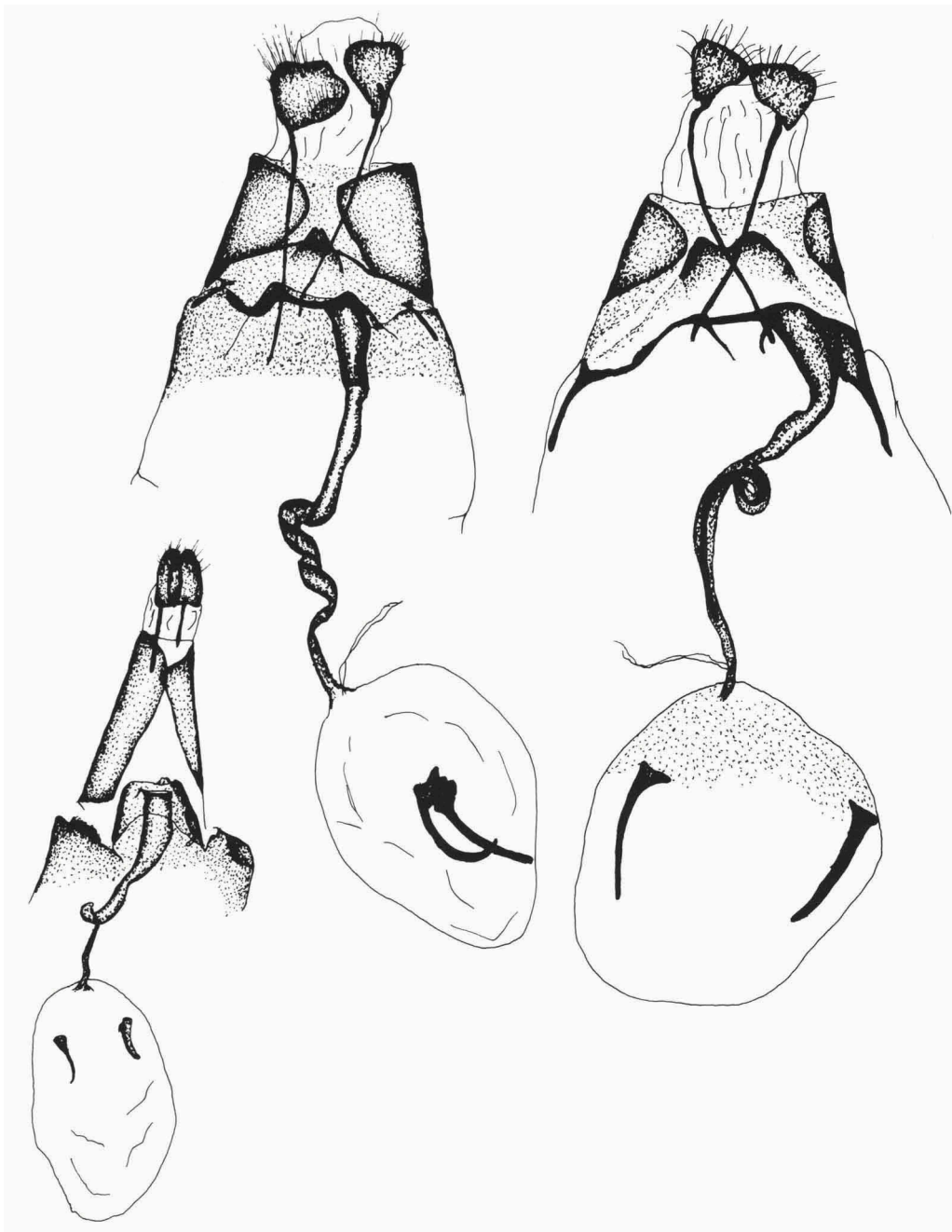


Fig. 114 (upper left), *Stenoptilodes sematodactylus* (Berg). Argentina, Buenos Aires, Ramos Mejia, 5. xii.1961 (Topal), genitalia CG 4091, coll. ZMUC. Fig. 115 (right), *S. juanfernandicus* spec. nov. Holotype, Chile, Masatierra, Bahia Cumberland, 20.iii.1951 (Kuschel), genitalia CG 1983, coll. MNHC. Fig. 116 (lower left), *S. gilvicolor* (Zeller). Holotype, Colombia, Bogota, 22.iii, genitalia BM 4968, coll. BMNH.

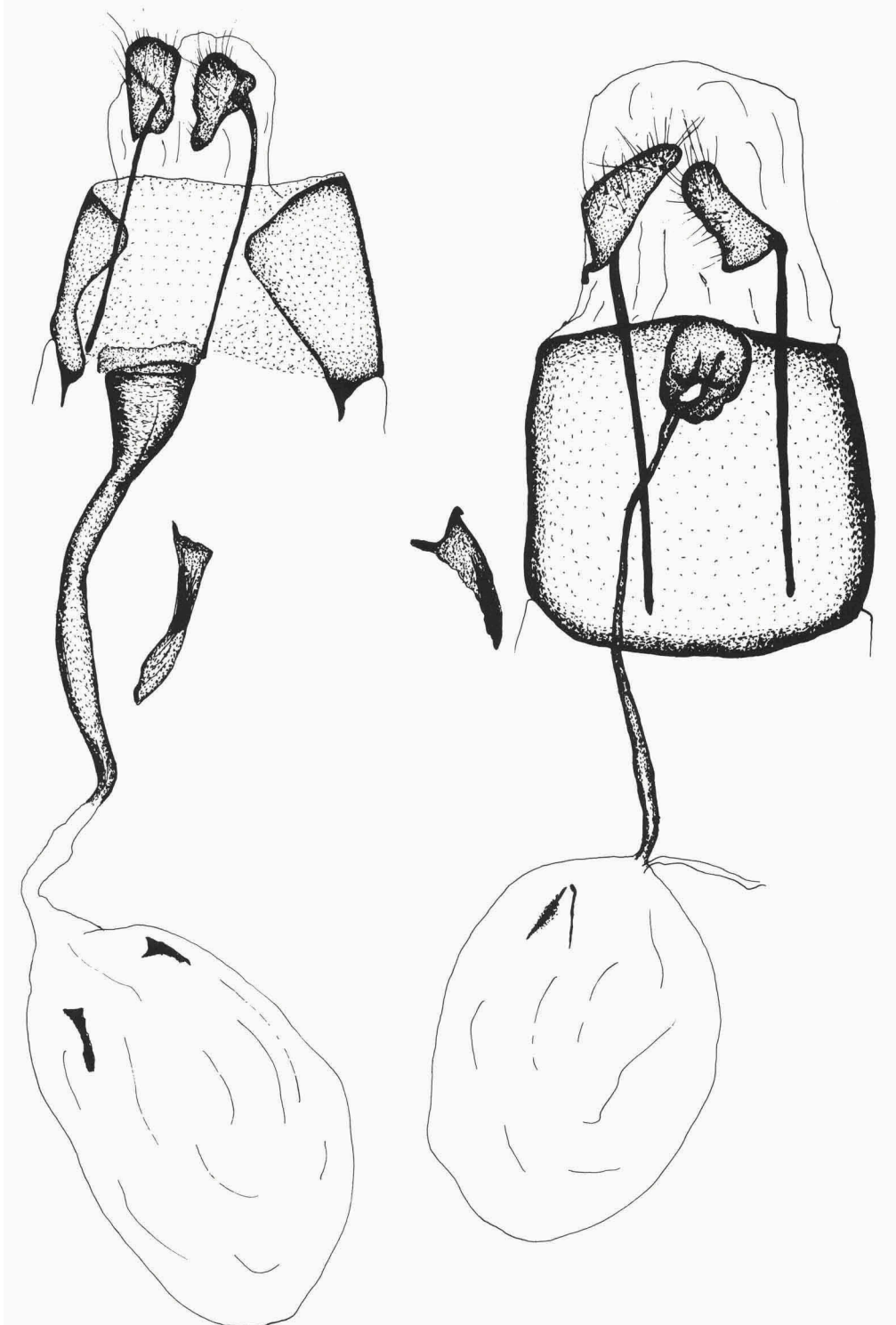


Fig. 117 (left), *Paraamblyptilia eutalanta* (Meyrick). Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 810 m, 9.xii.1978 (Mis. Sci. Dan., Sta 7), genitalia CG 4098, coll. ZMUC. Fig. 118 (right), *Patagonophorus murinus* spec. nov. Paratype, Argentina, Neuquen, San Martin de los Andes, Quilquihue, 750 m, 25-26.xi.1981 (Gentili, Sta. 32), genitalia CG 4117, coll. ZMUC.

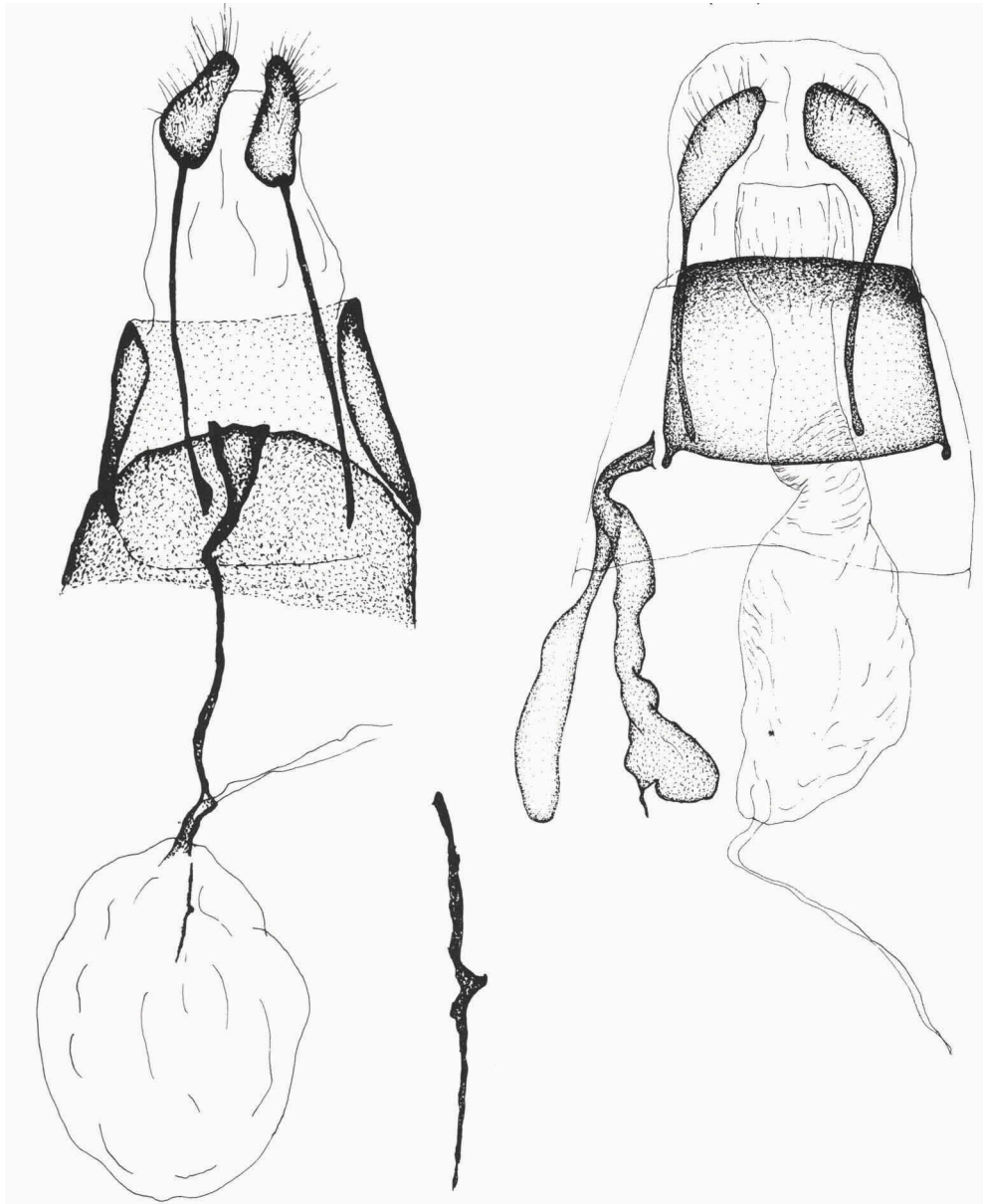


Fig. 119 (left), *Pselnophorus alternarius* (Zeller). Argentina, Buenos Aires, Ramos Mejia, 5.xii.1961 (Topal), genitalia CG 4085, coll. ZMUC. Fig. 120 (right), *Oidaematophorus siskaellus* spec. nov. Paratype, Argentina, Rio Negro, San Carlos de Bariloche, Colonia Suiza, 810 m, 6.i.1979 (Mis. Sci. Dan., Sta. 7), genitalia CG 4127, coll. ZMUC.

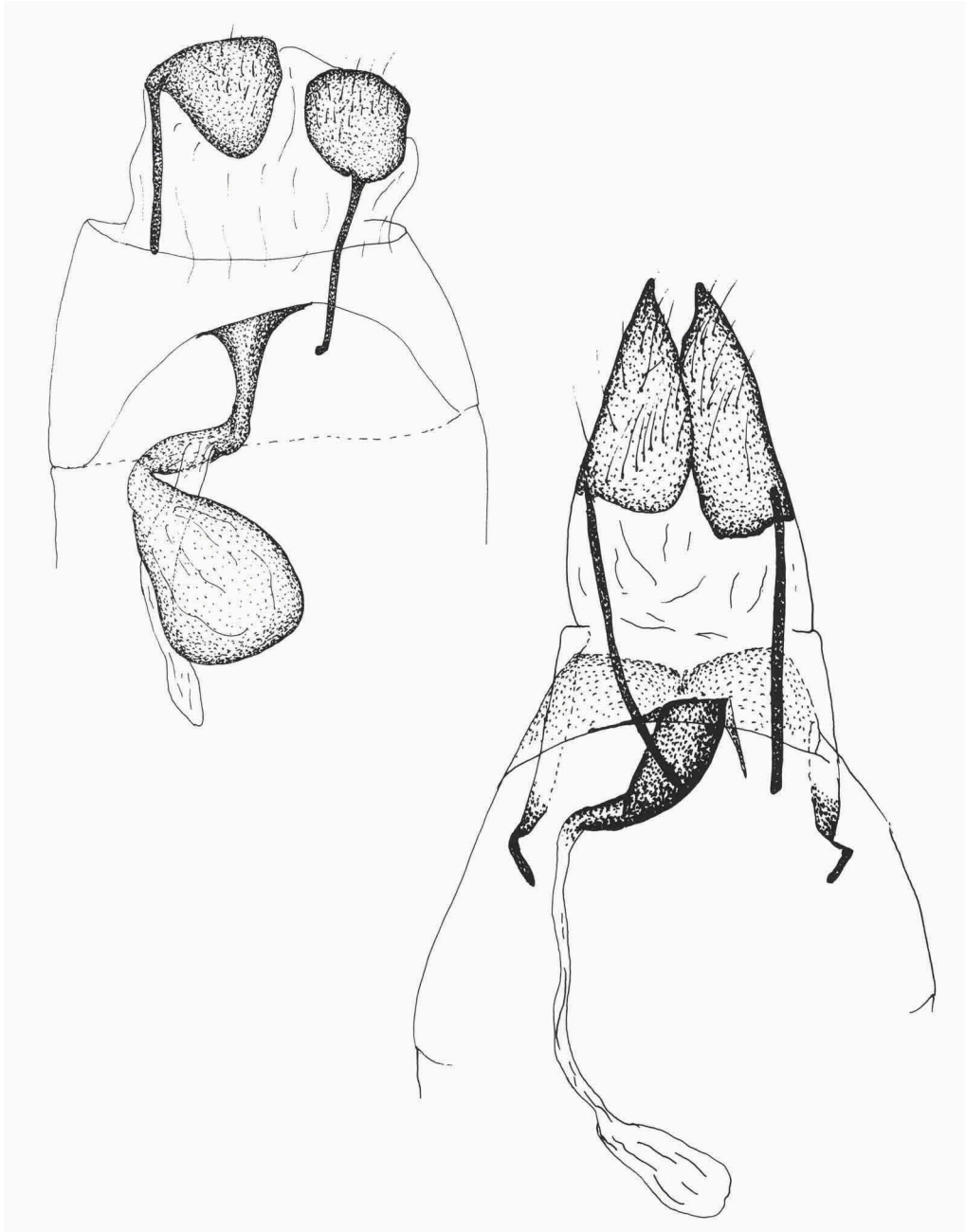


Fig. 121 (left), *Oidaematophorus betsiae* spec. nov. Paratype, Chile, Santiago, Guayacan, x.1952 (Peña), genitalia CG 6046, coll. CNC. Fig. 122 (right), *O. pelodactylus* (Berg). Argentina, Buenos Aires, 1.iii.1906 (Wilkinson), genitalia BM 18463, coll. BMNH.

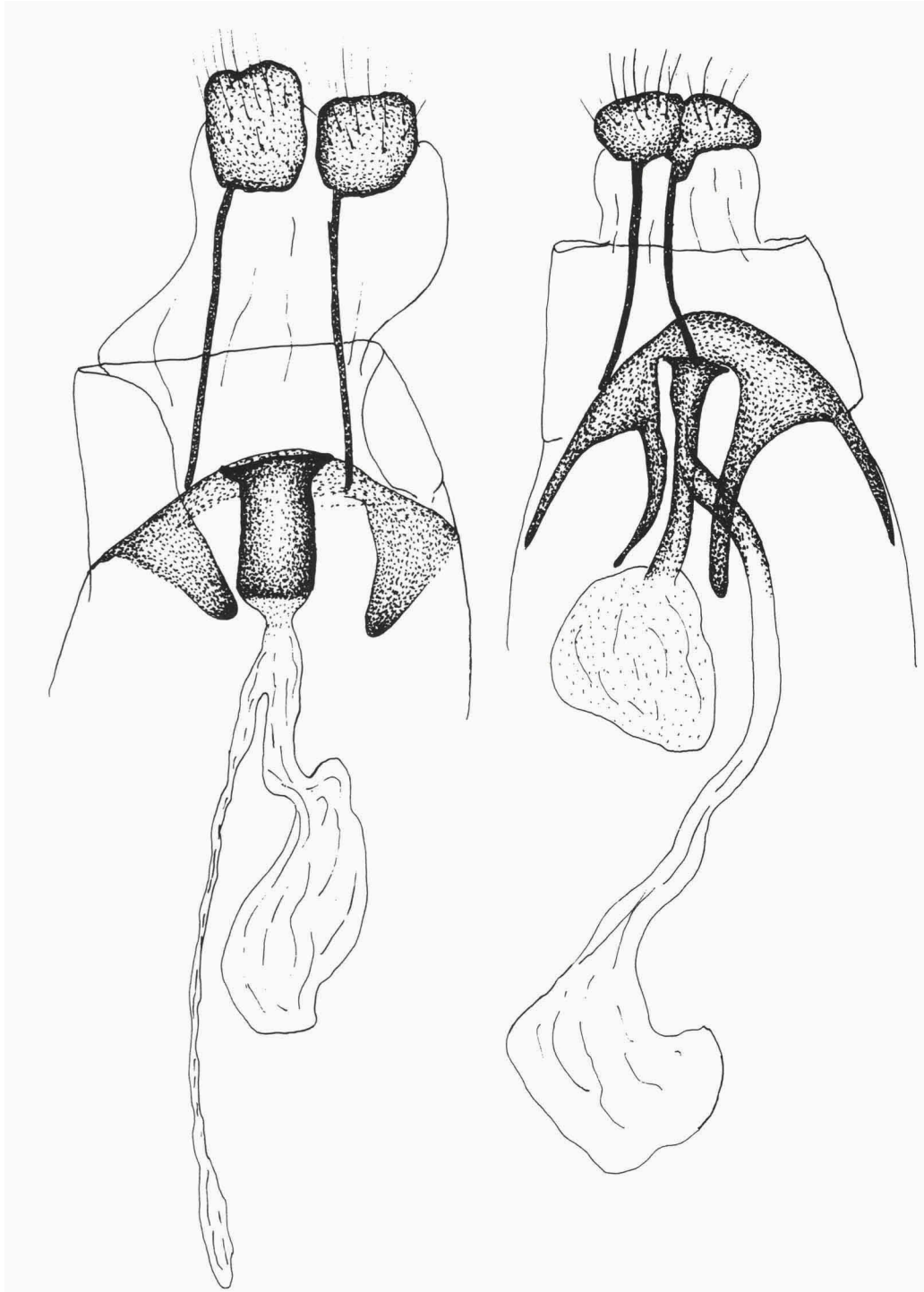


Fig. 123 (left), *Oidaematophorus mauleicus* spec. nov. Paratype, Chile, El Portezuela, 7 km N Santiago, 22-25.x.1981 (Davis), genitalia CG 6090, coll. USNM. Fig. 124 (right), *O. hololeucos* (Zeller). Chile, V. del Mer, El Salto, Vegetacion, 2.ii.(19)83 (Prado), genitalia CG 1982, coll. MNHC.

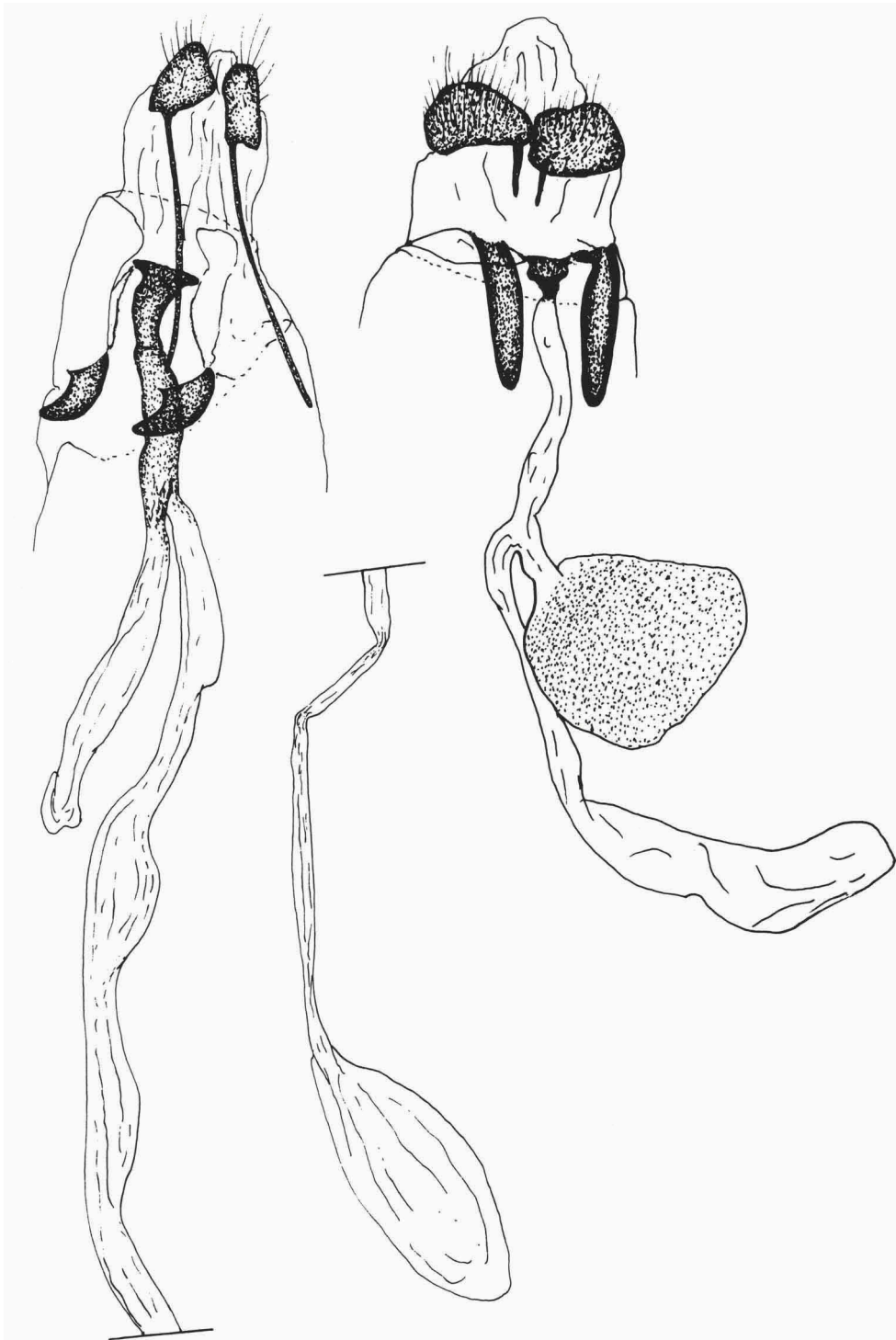


Fig. 125 (right), *Oidaematophorus mallecoicus* spec. nov. Paratype, Chile, Mallesco, Angol, Los Alpes, 650 m, 17. iii.1979 (Mis. Sci. Dan., Sta. 60), genitalia CG 4167, coll. ZMUC. Fig. 126 (left), *O. coquimbensis* spec. nov. Holotype, Chile, Coquimbo, Nague, 11 km N Los Vilos, 20 m, 4-5.xi.1981 (Davis), genitalia CG 6065, coll. USNM.

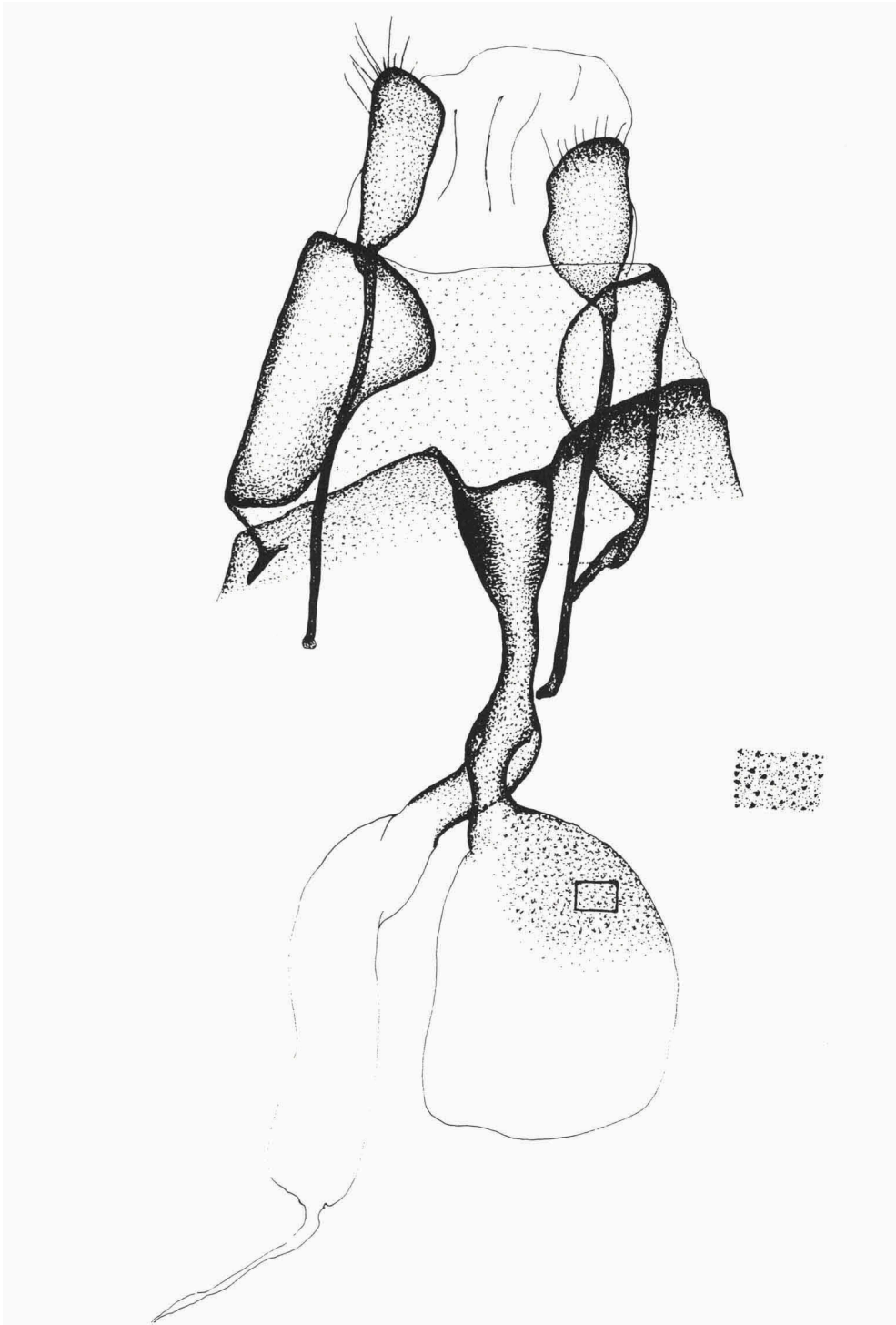


Fig. 127, *Oidaematophorus angulofuscus* spec. nov. Paratype, Paraguay, Asuncion, 15-30.vi.1905 (Babarczy), genitalia CG 4102, coll. ZMUC.

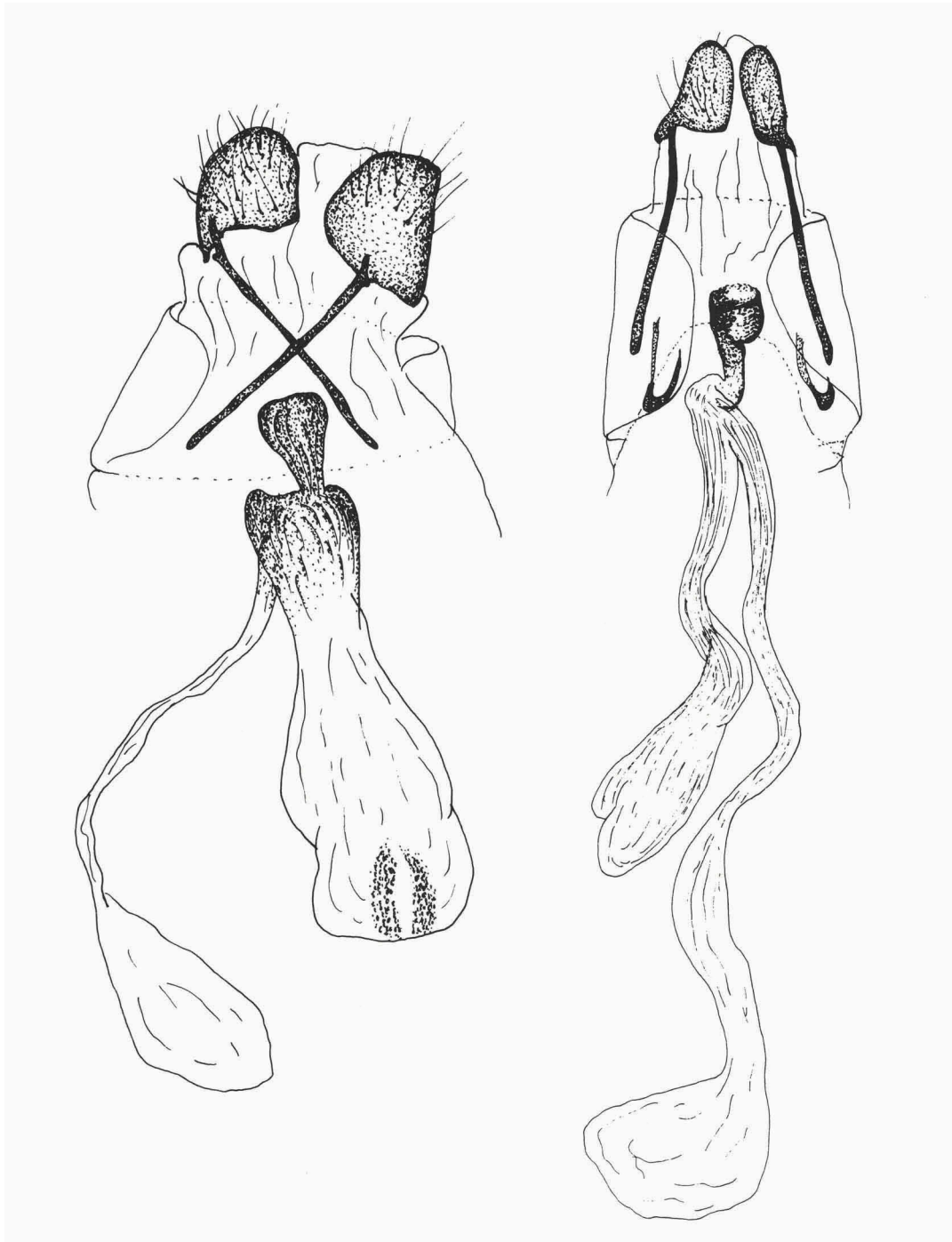


Fig. 128 (left), *Oidaematophorus grandaevus* (Meyrick). Argentina, Tierra del Fuego, Estancia Haberton, 25.i.1979 (Mis. Sci. Dan., Sta. 39), genitalia CG 4166, coll. ZMUC. Fig. 129 (right), *O. glaphyrotus* (Meyrick). Brazil, M.G., Sete Lagoas, 720 m, 13.iii.1972 (Becker), genitalia CG 6093, coll. Becker nr. 9332.

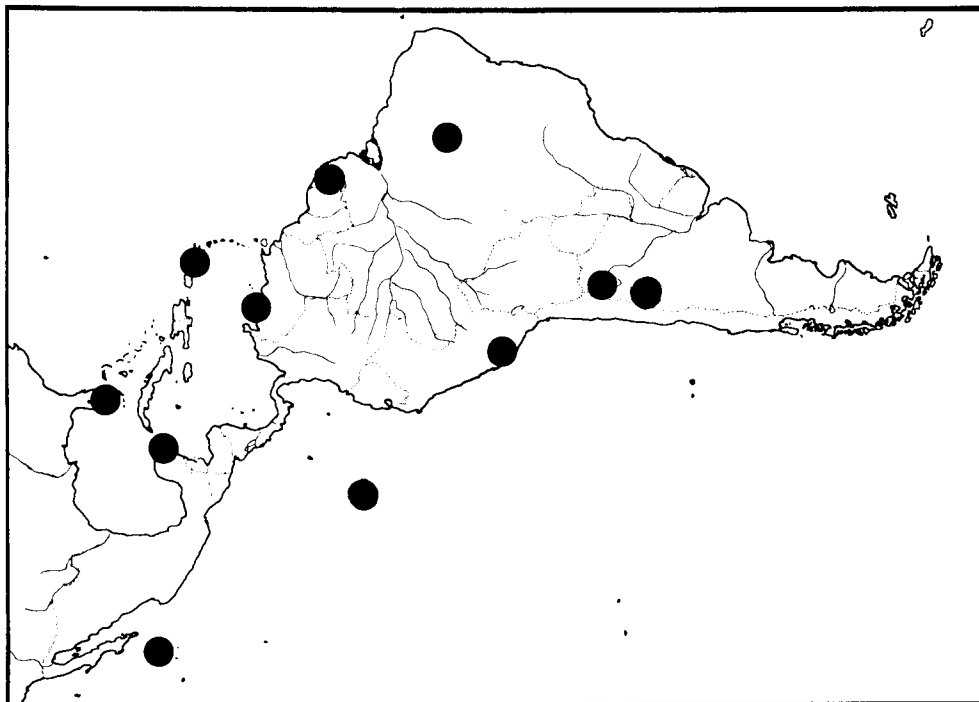
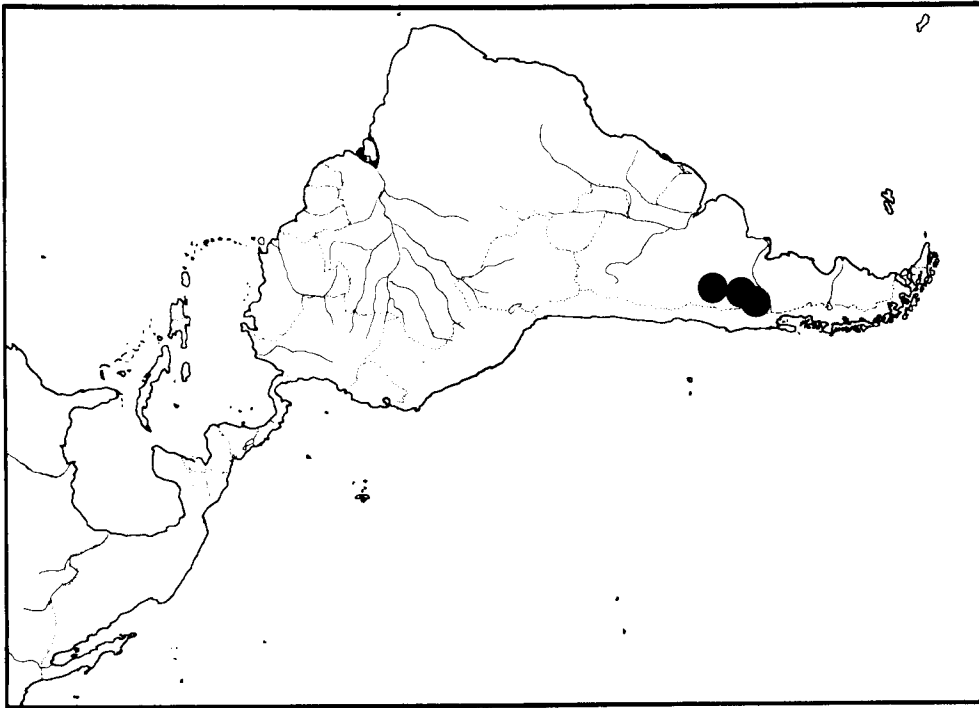


Fig. 130 (left), *Megalorhipida defectalis* (Walker); 131 (right), *M. pseudodefectalis* Gielis. Distribution.

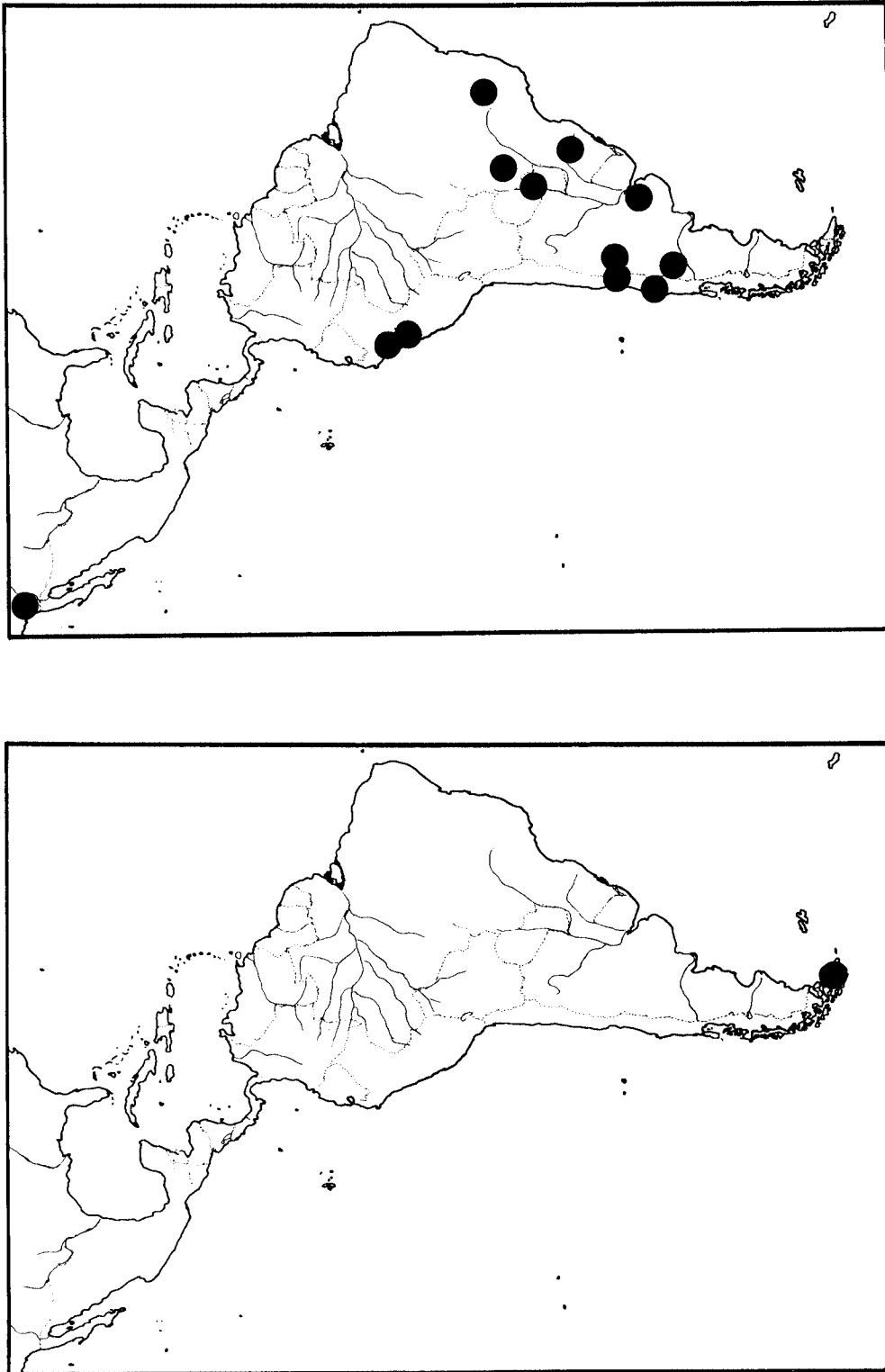


Fig. 132 (left), *Lioptilodes subantarcticus* spec. nov.; 133 (right) *L. parvus* (Walsingham). Distribution.

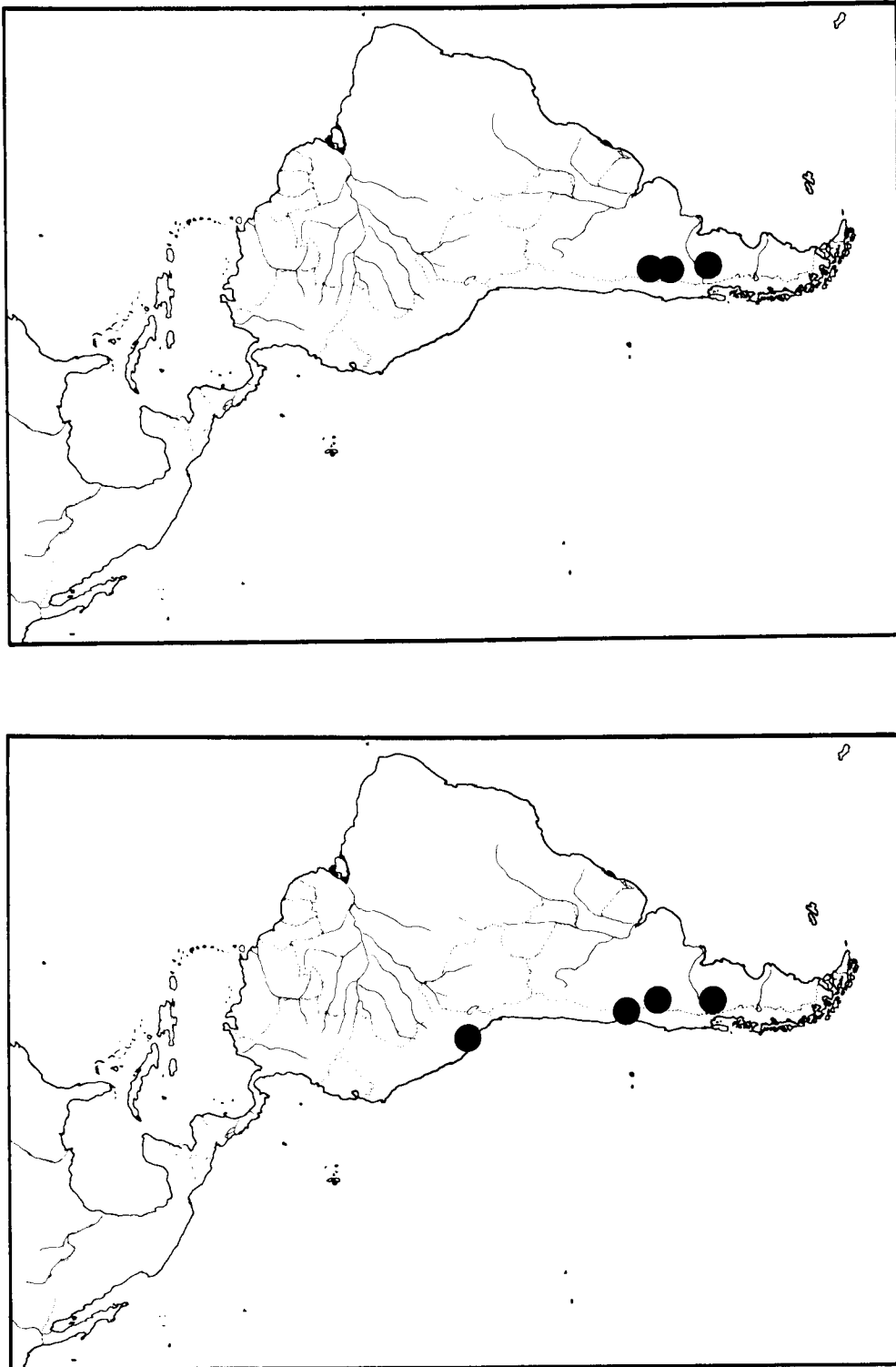


Fig. 134 (left), *Lioptilodes zapalaicus* spec. nov.; 135 (right), *L. rionegroicus* spec. nov. Distribution.

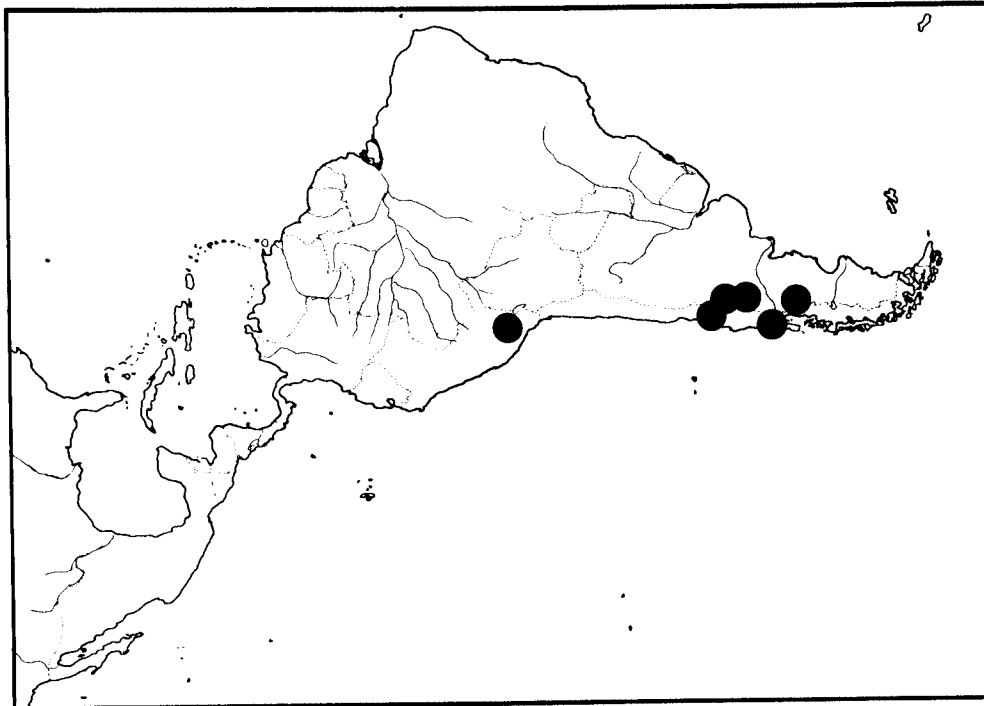
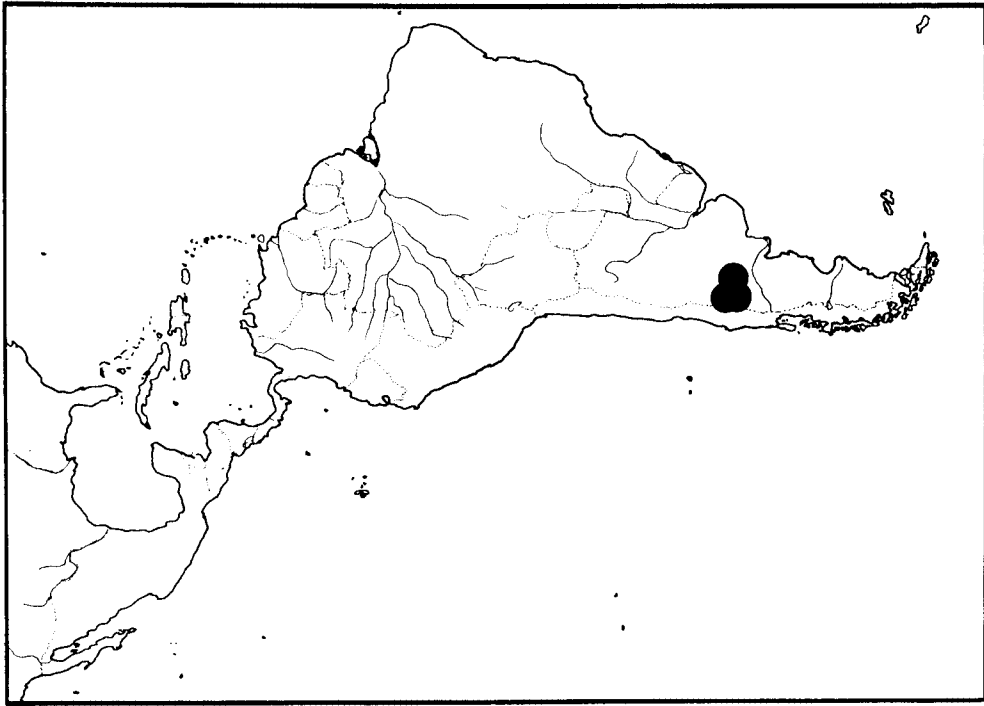


Fig. 136 (left), *Liophilodes neuquenicus spec. nov.*; 137 (right), *L. aguilaius spec. nov.* Distribution.

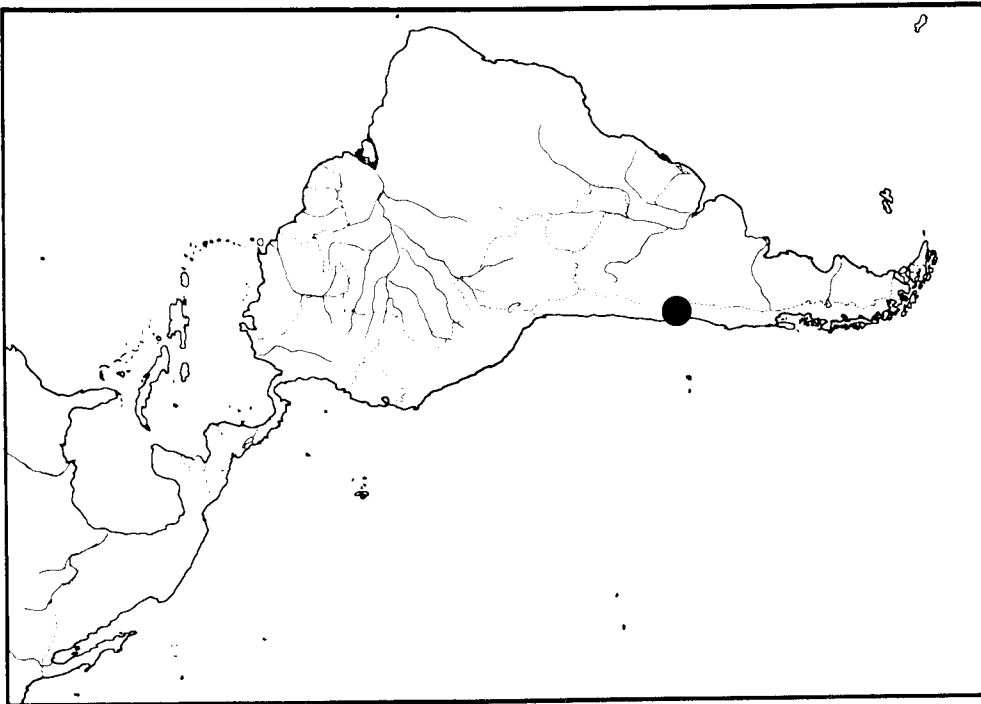
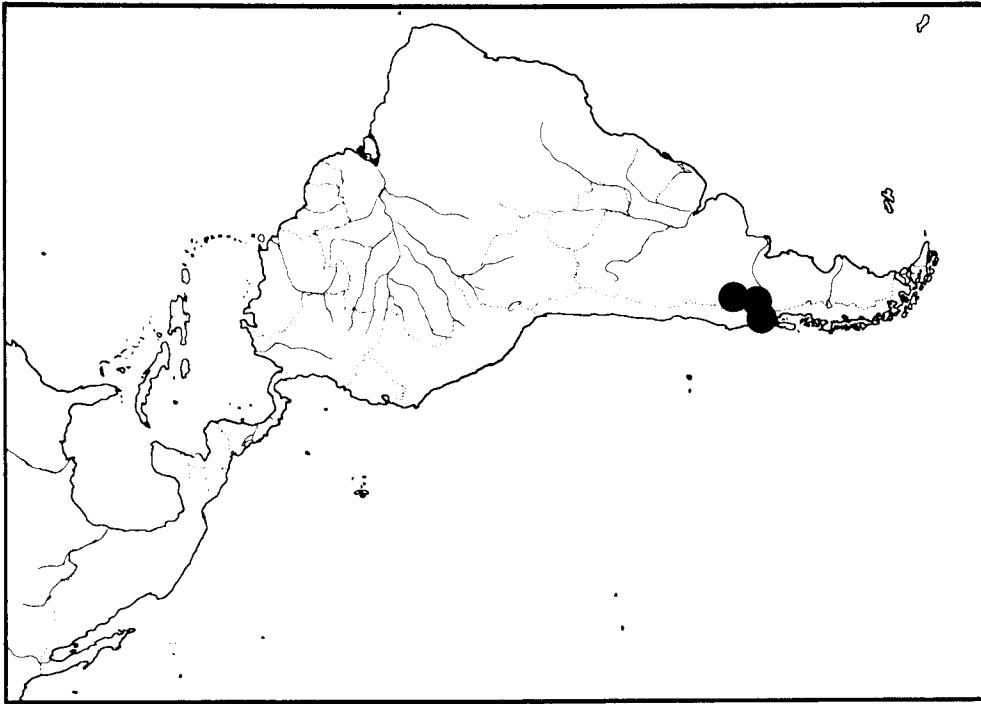


Fig. 138 (left), *Lioptilodes fetisi* spec. nov.; 139 (right), *L. alolepidodactylus* spec. nov. Distribution.

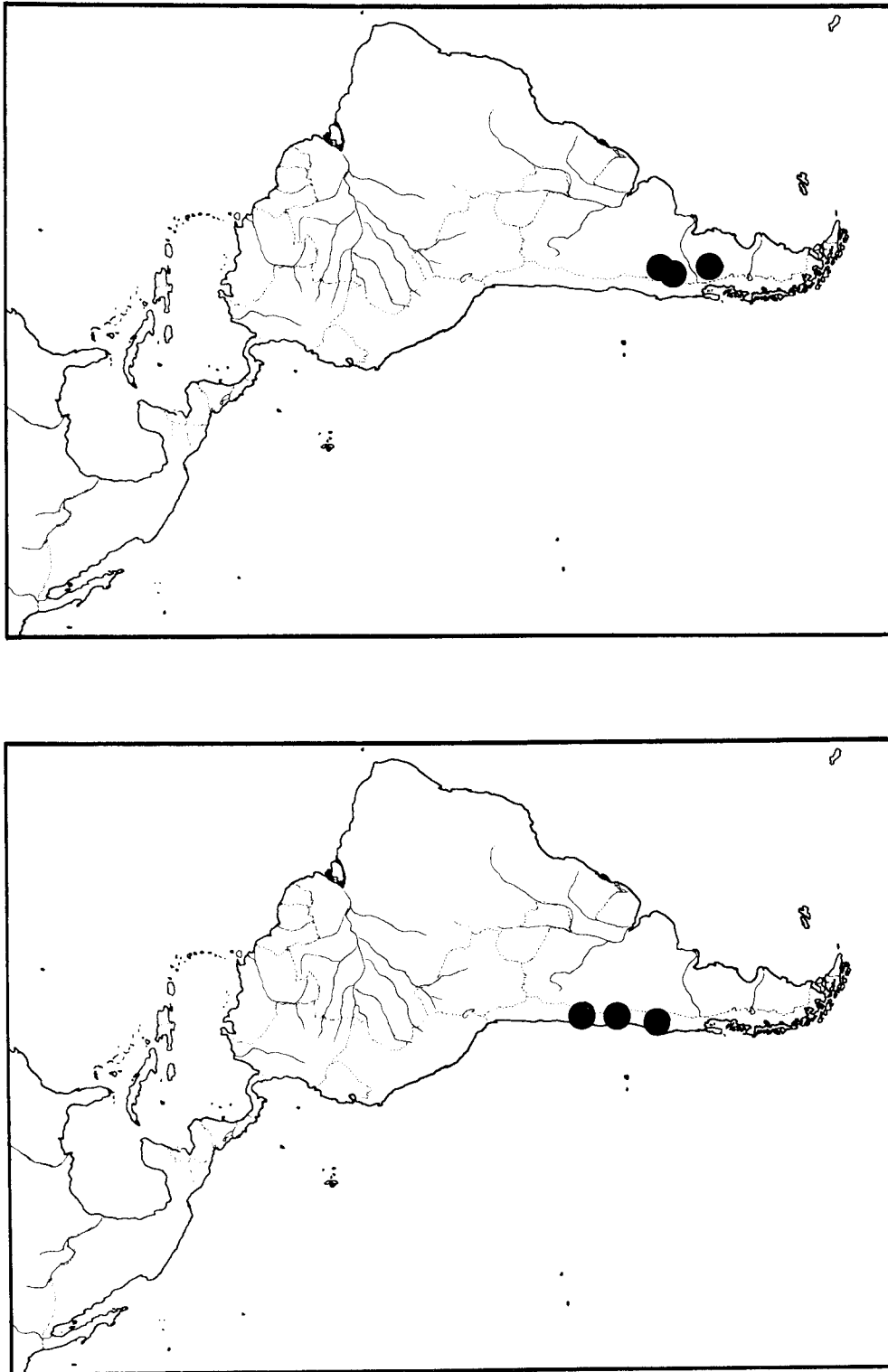


Fig. 140 (left), *Lioptilodes testaceus* (Blanchard); 141 (right), *L. topali* spec. nov. Distribution.

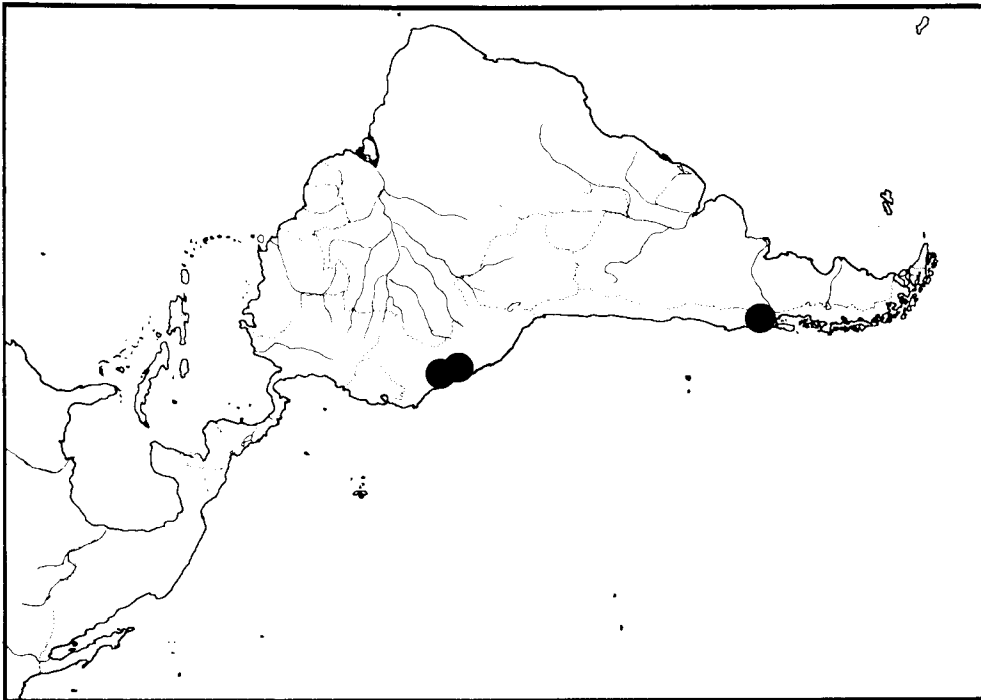
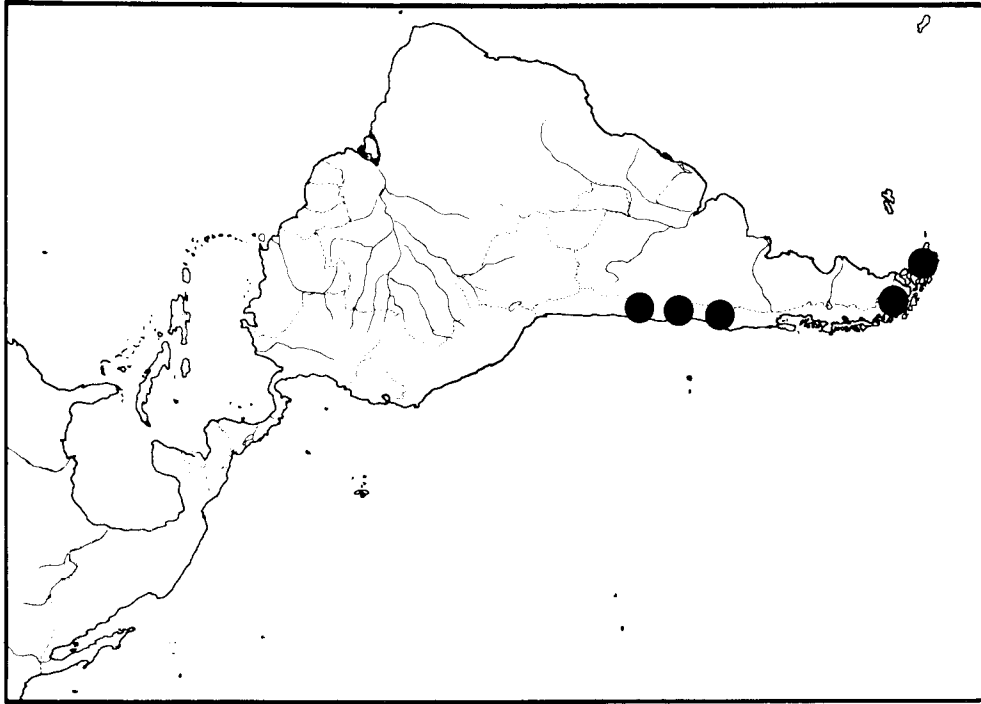


Fig. 142 (left), *Lioptilodes tribomius* (Meyrick); 143 (right), *L. antarcticus* (Staudinger). Distribution.

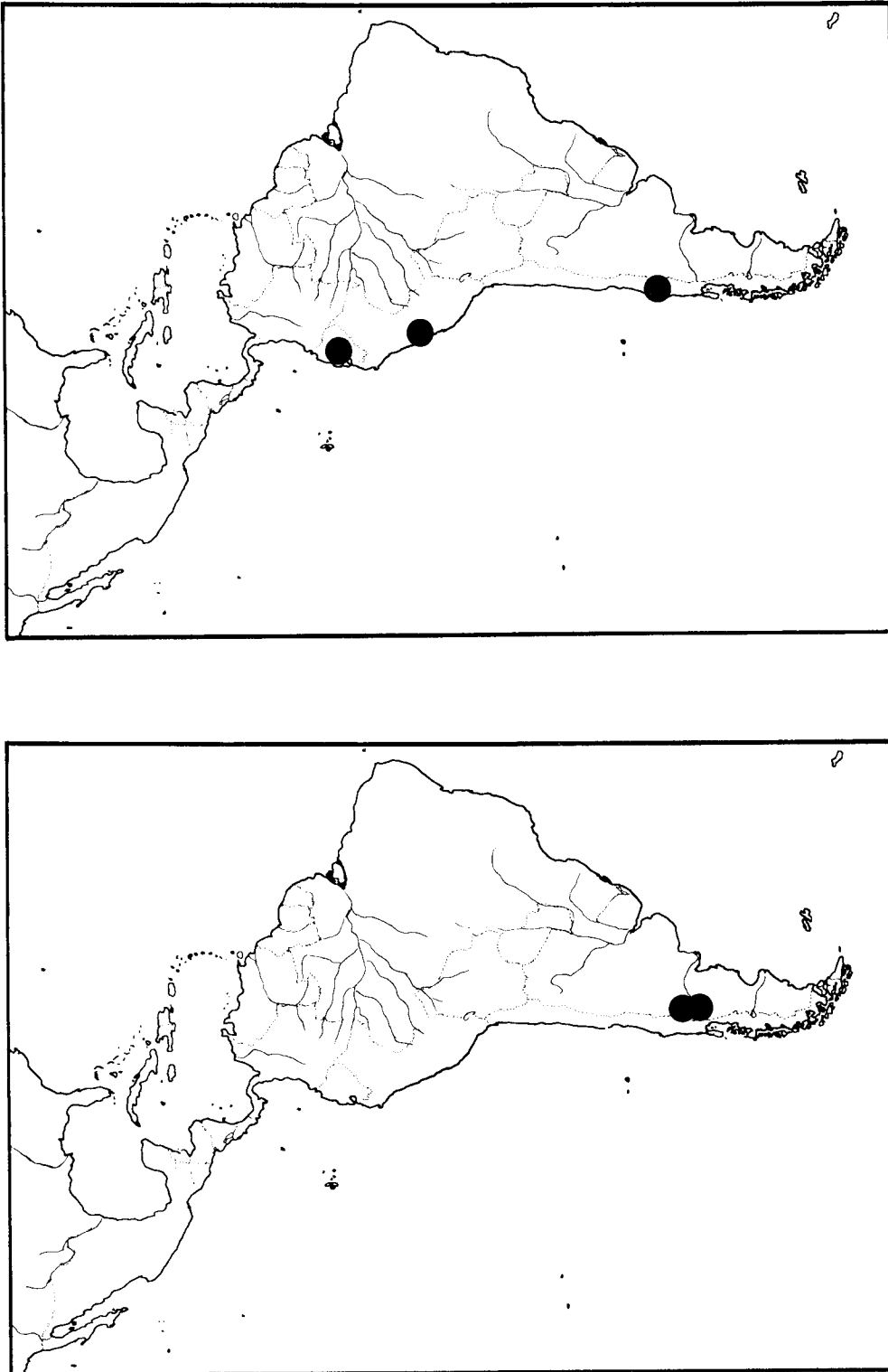


Fig. 144 (left), *Lantianophaga nielsenii* spec. nov.; 145 (right), *L. aestuosa* (Meyrick). Distribution.

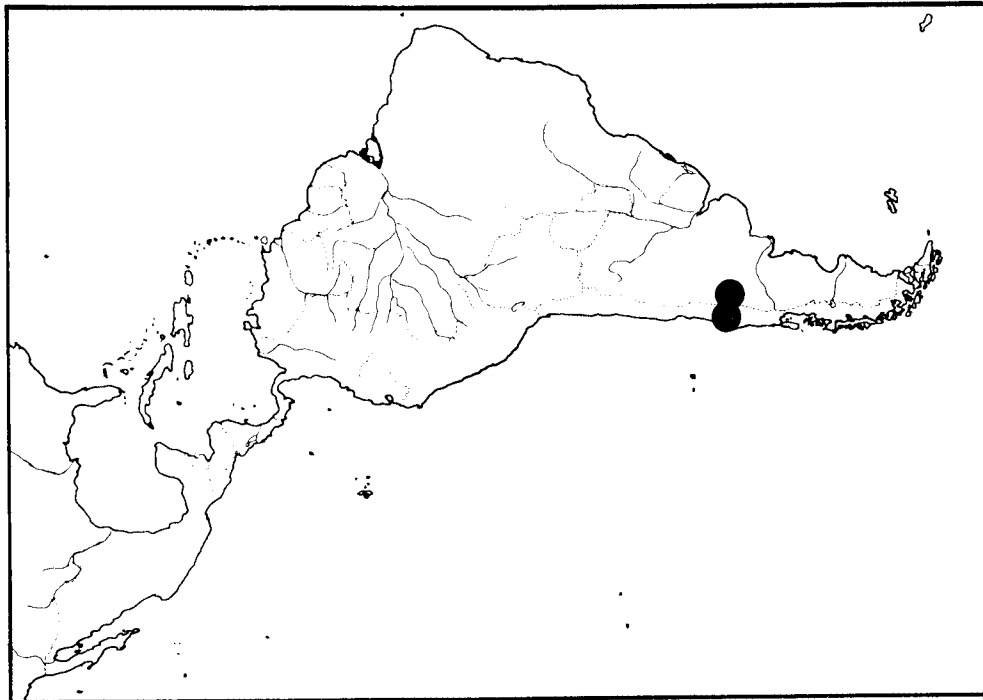
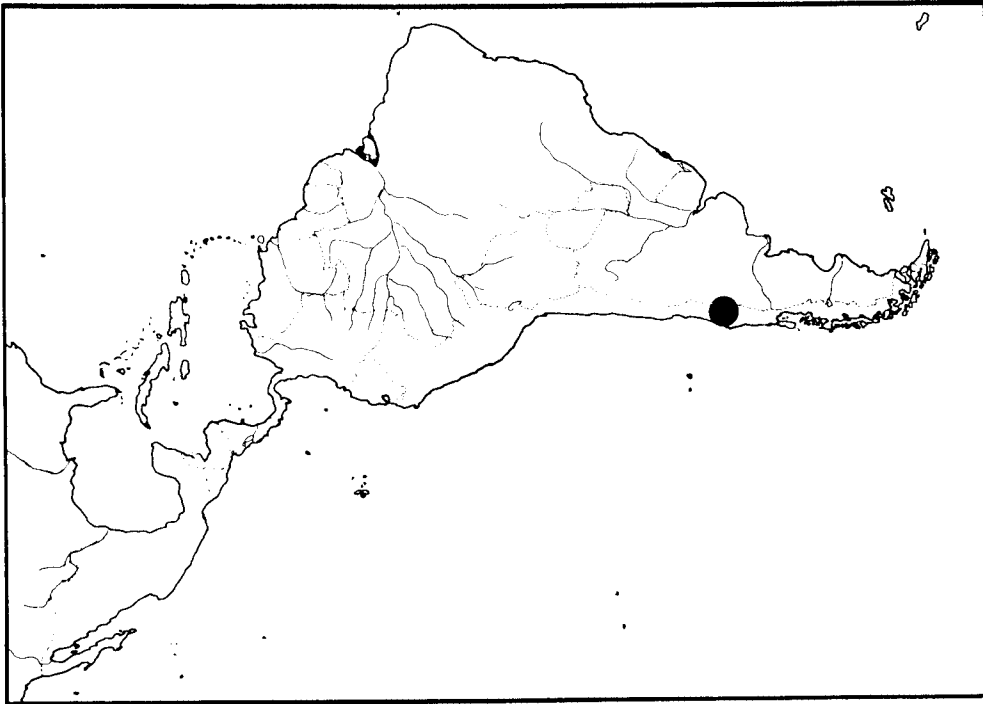


Fig. 146 (left), *Platyptilia gentiliae* spec. nov.; 147 (right), *P. davisi* spec. nov. Distribution.

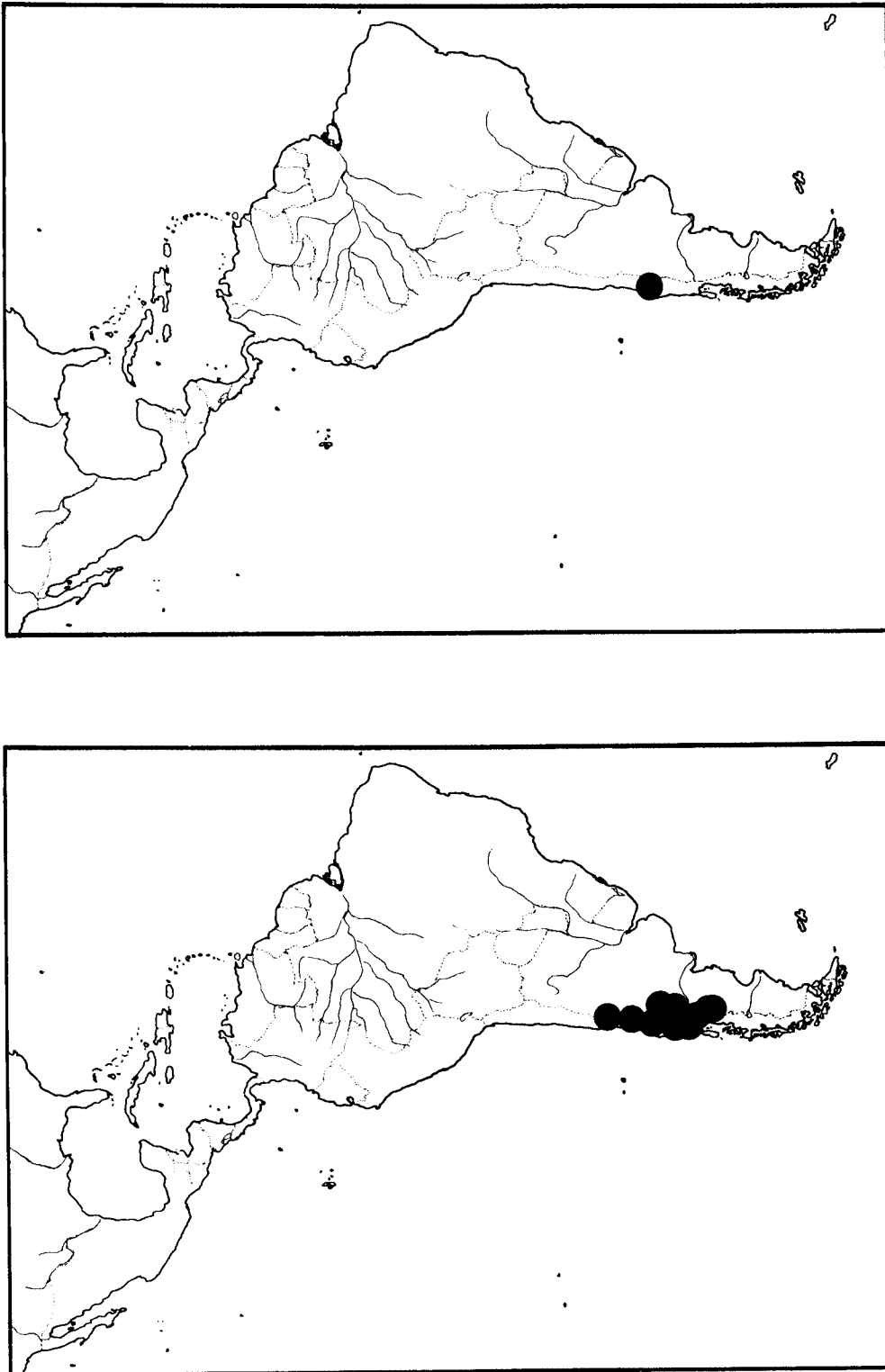


Fig. 148 (left), *Postplatyptilia camptosphaena* (Meyrick); 149 (right), *P. eelkoi* spec. nov. Distribution.

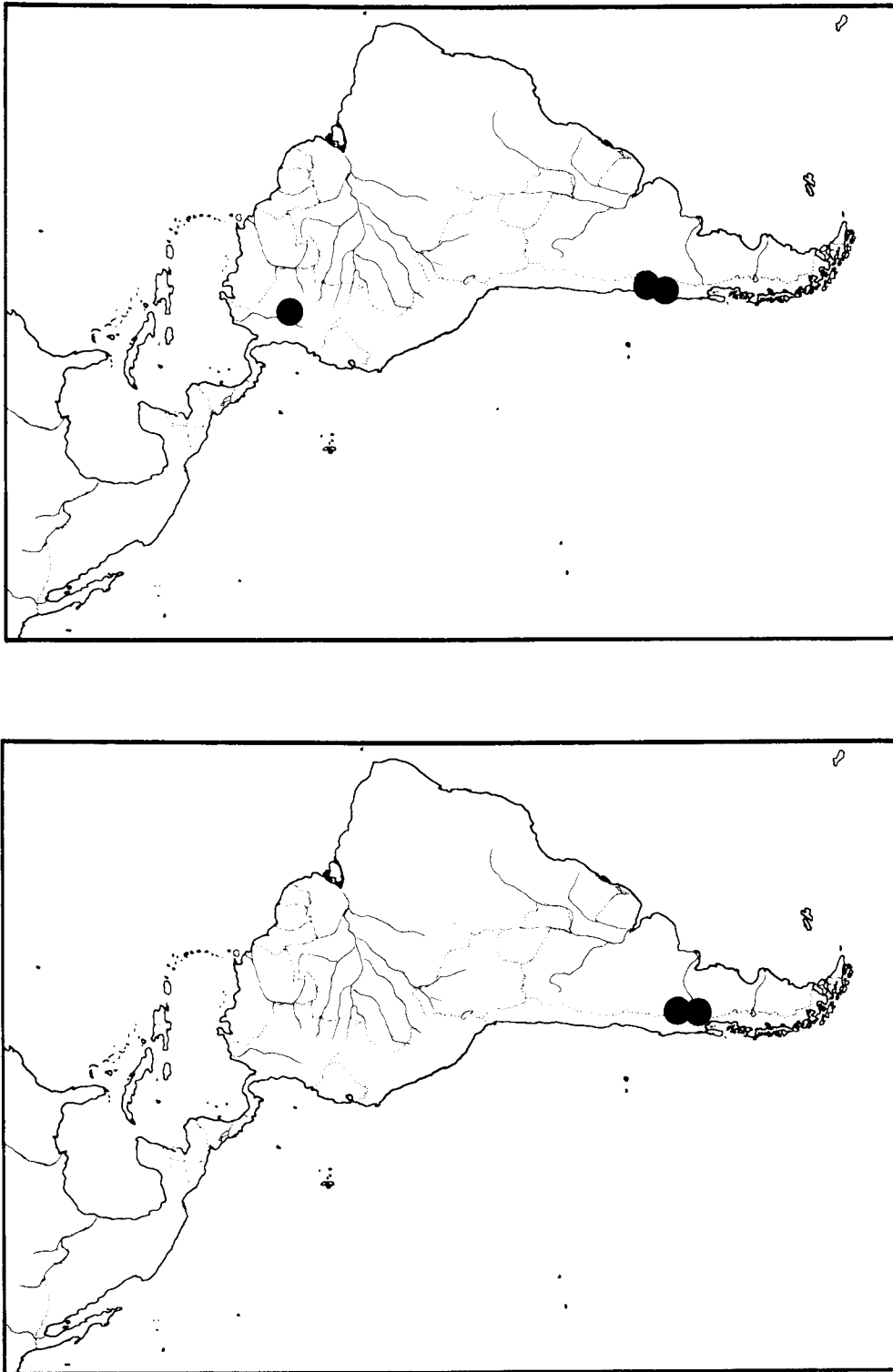


Fig. 150 (left), *Postplatypilia naranja* spec. nov.; 151 (right), *P. fuscicornis* (Zeller). Distribution.

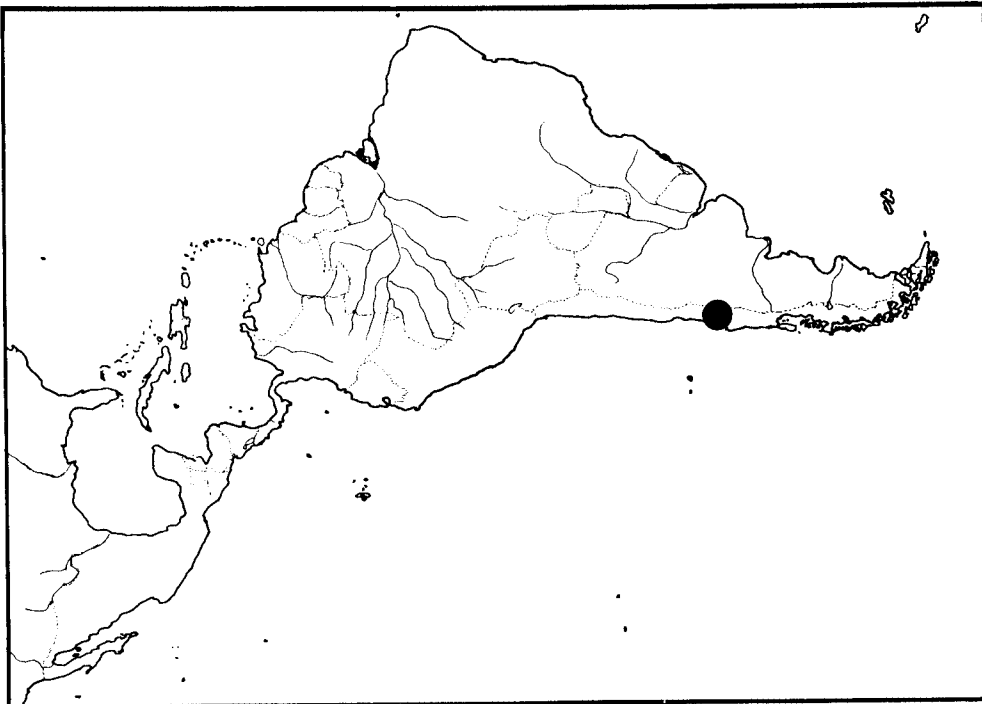
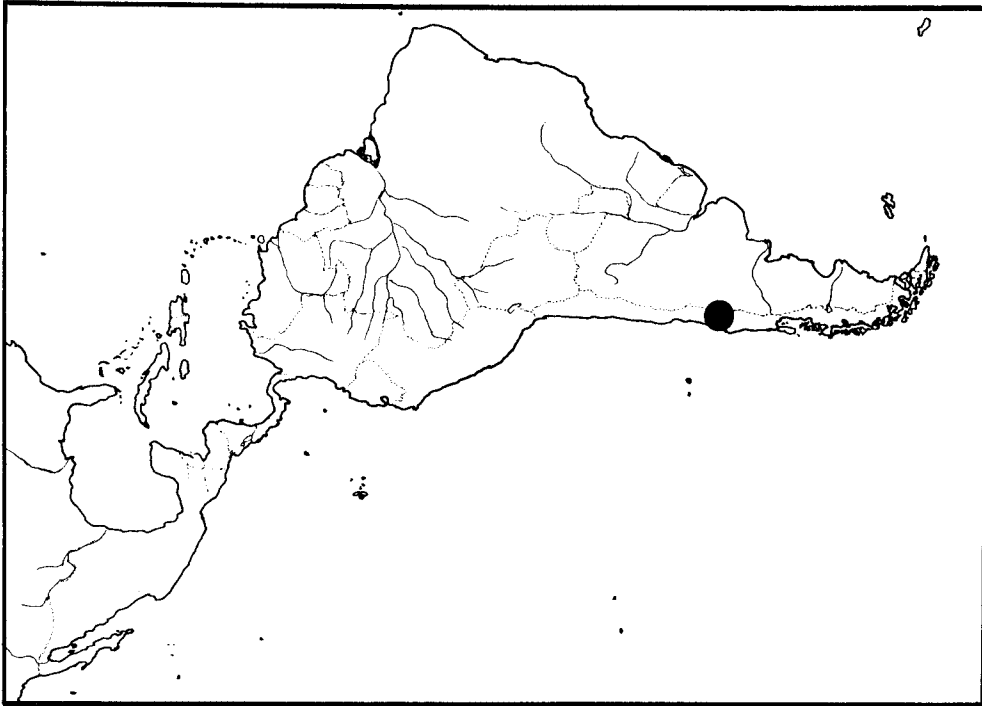


Fig. 152 (left), *Postplatyptilia nublica* spec. nov.; 153 (right), *P. alexisi* spec. nov. Distribution.

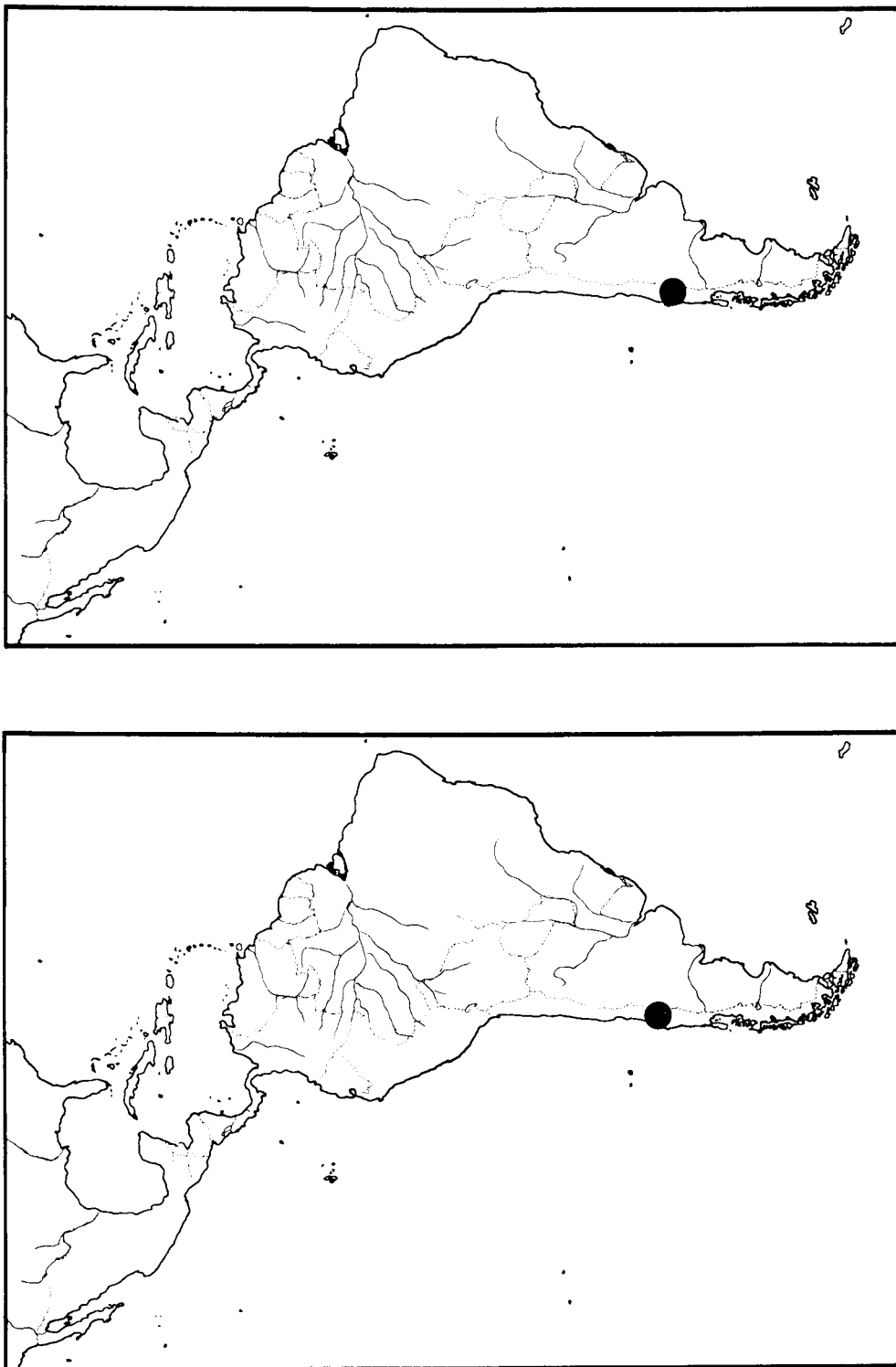


Fig. 154 (left), *Postplatypylia akkerbergi* spec. nov.; 155 (right), *P. biobioica* spec. nov. Distribution.

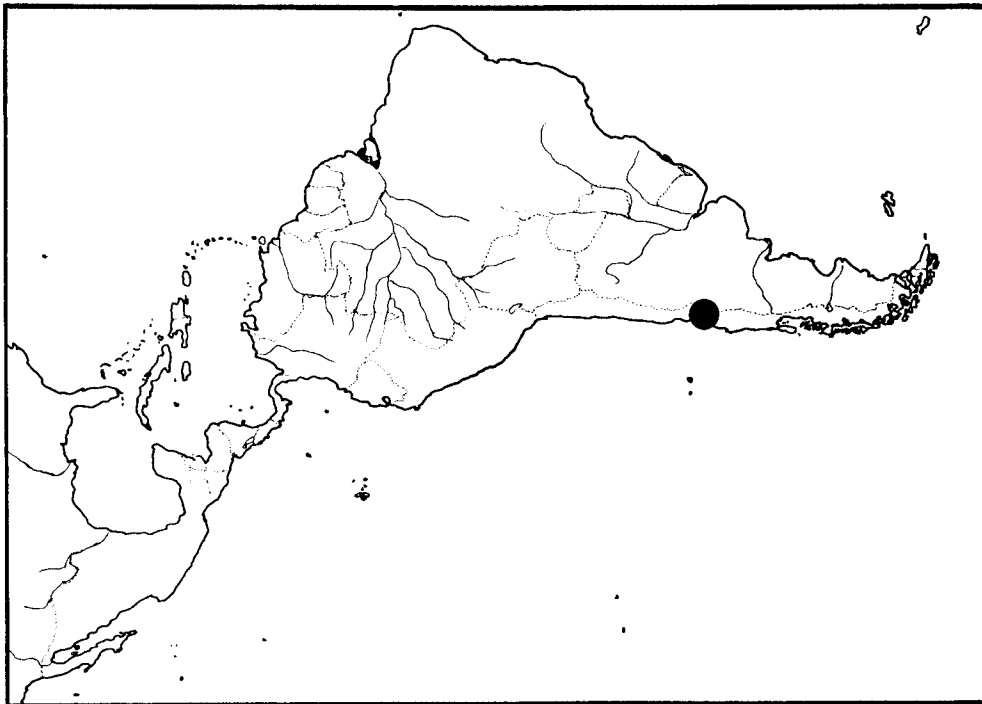
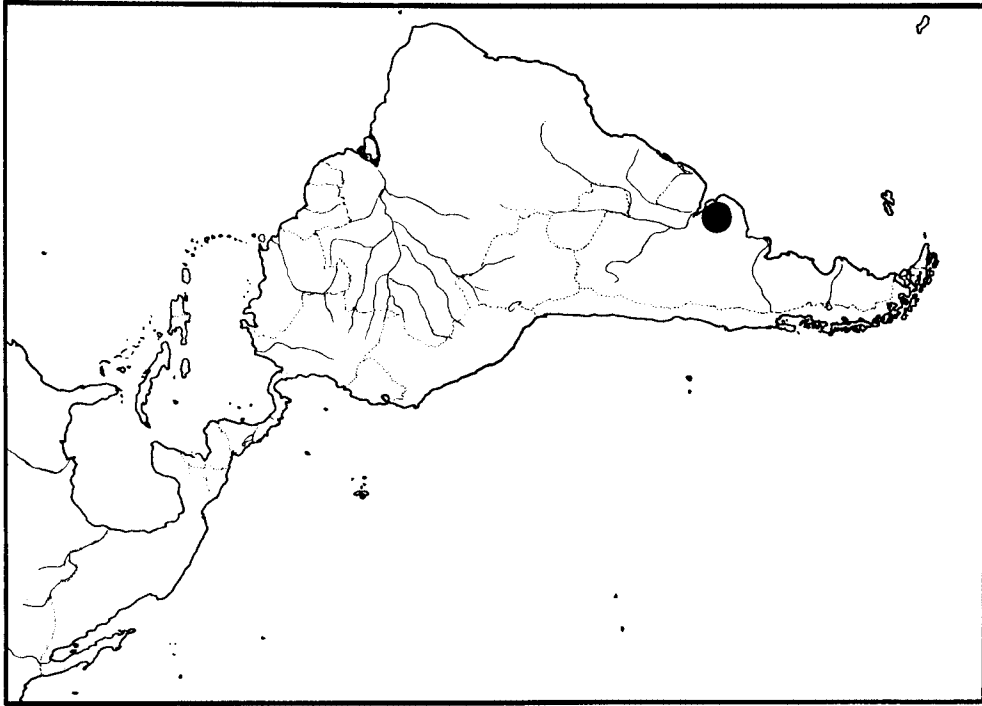


Fig. 156 (left), *Postplatyptilia talcaica* spec. nov.; 157 (right), *P. finii* spec. nov. Distribution.

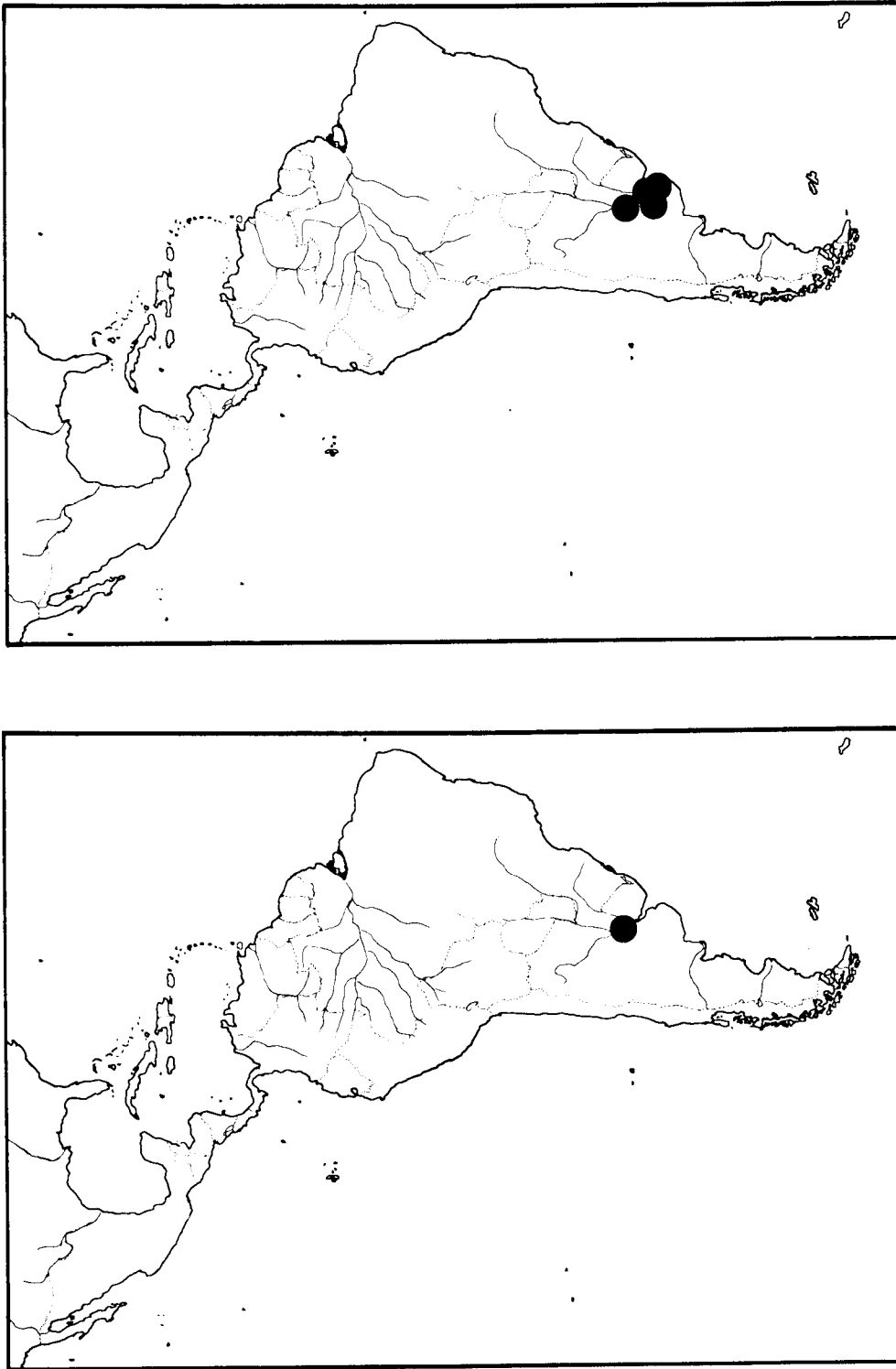


Fig. 158 (left), *Postplatyptilia paraglyptis* (Meyrick); 159 (right), *Stenopilodes sematodactylus* (Berg). Distribution.

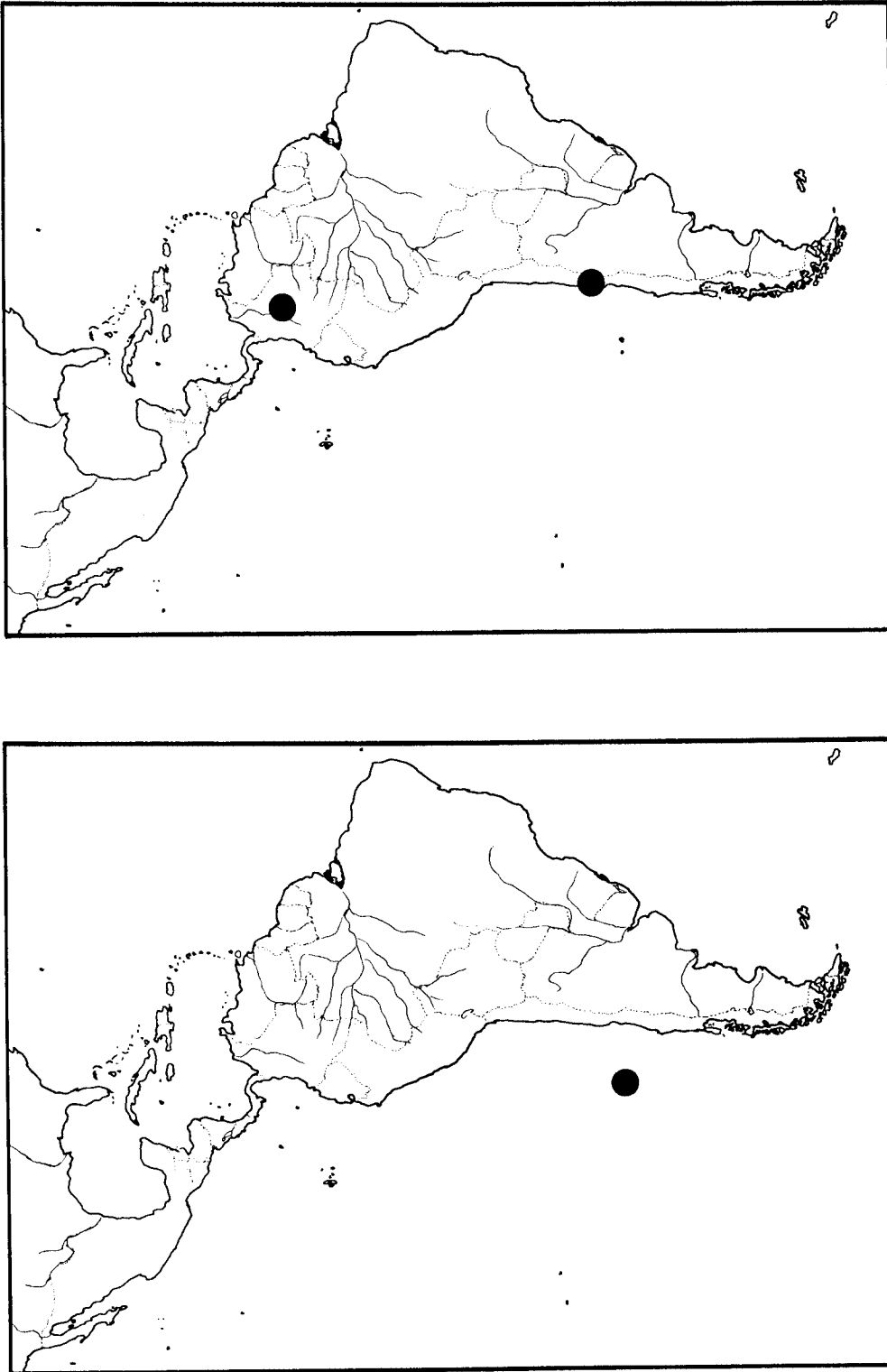


Fig. 160 (left), *Stenoptilodes juanfernandicus* spec. nov.; 161 (right), *S. gibbicolor* (Zeller). Distribution.

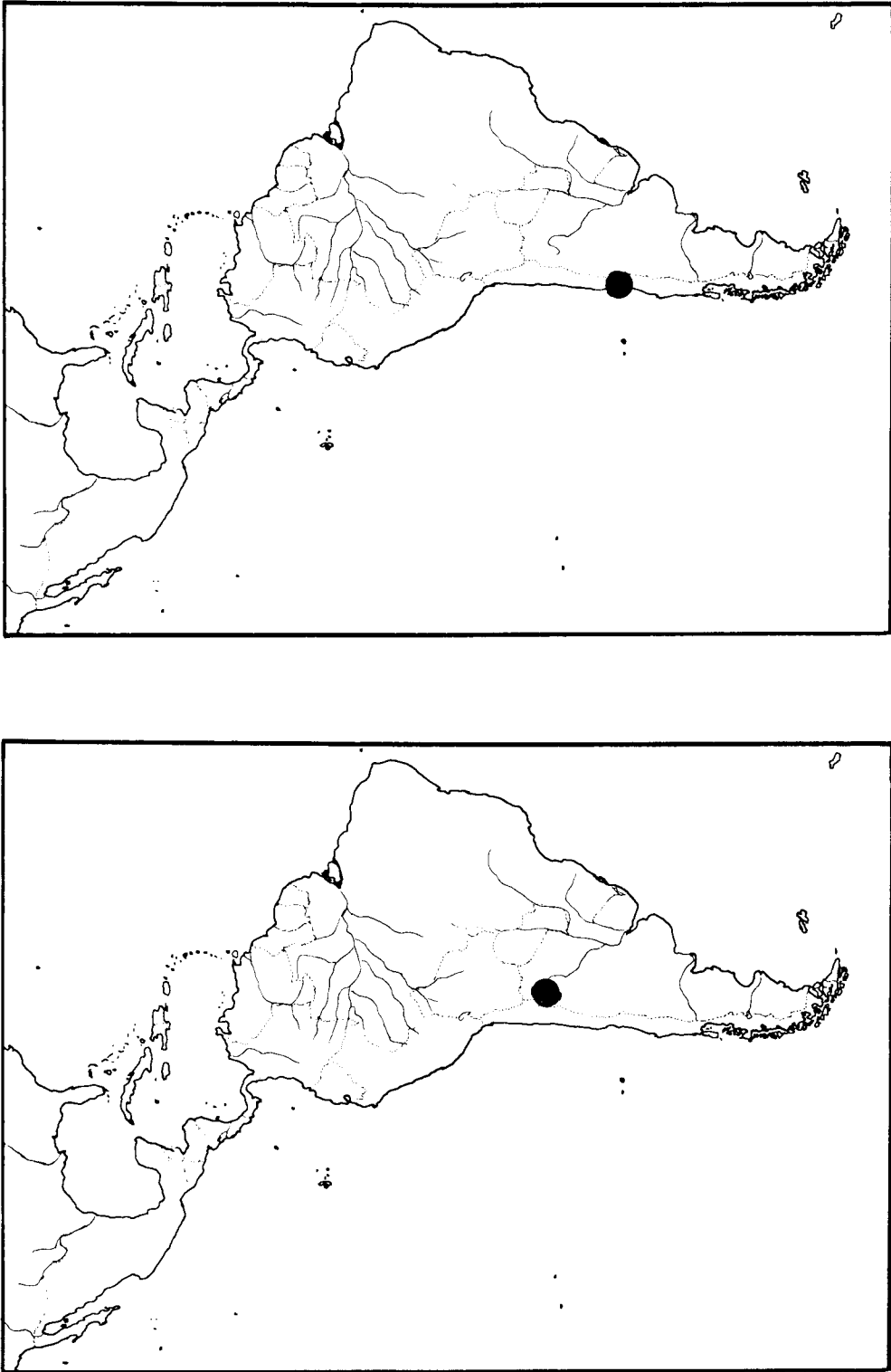


Fig. 162 (left), *Stenoptilodes duckworthi* spec. nov.; 163 (right), *Uroloba fuscicostata* Walsingham. Distribution.

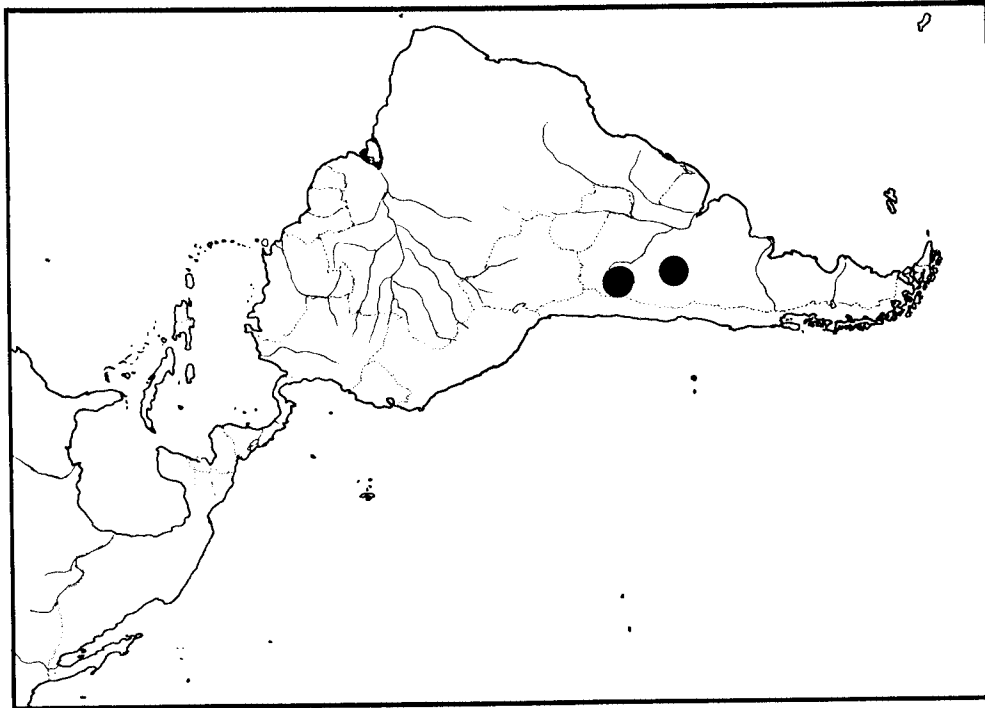
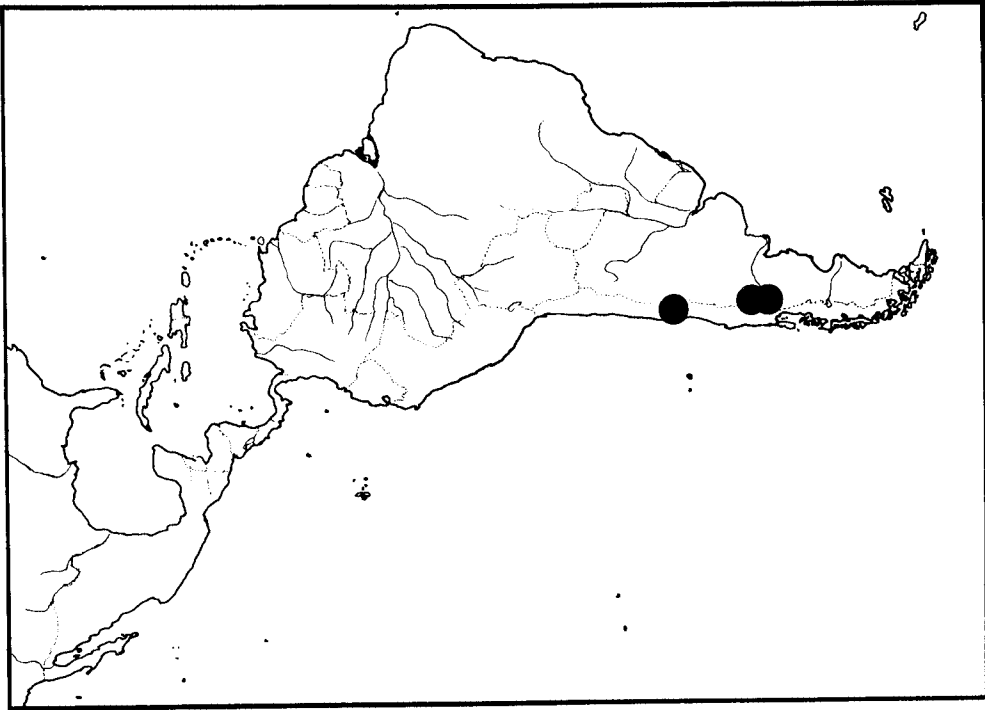


Fig. 164 (left), *Uroloba calycospila* (Meyrick); 165 (right), *Paramblyptilia eutalanta* (Meyrick). Distribution.

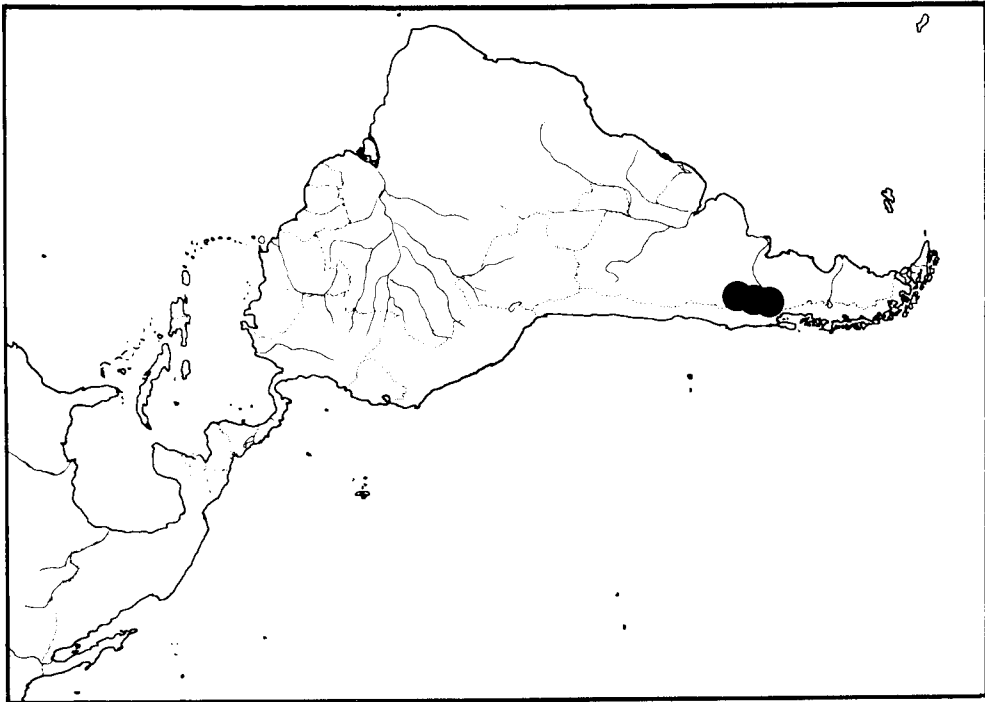
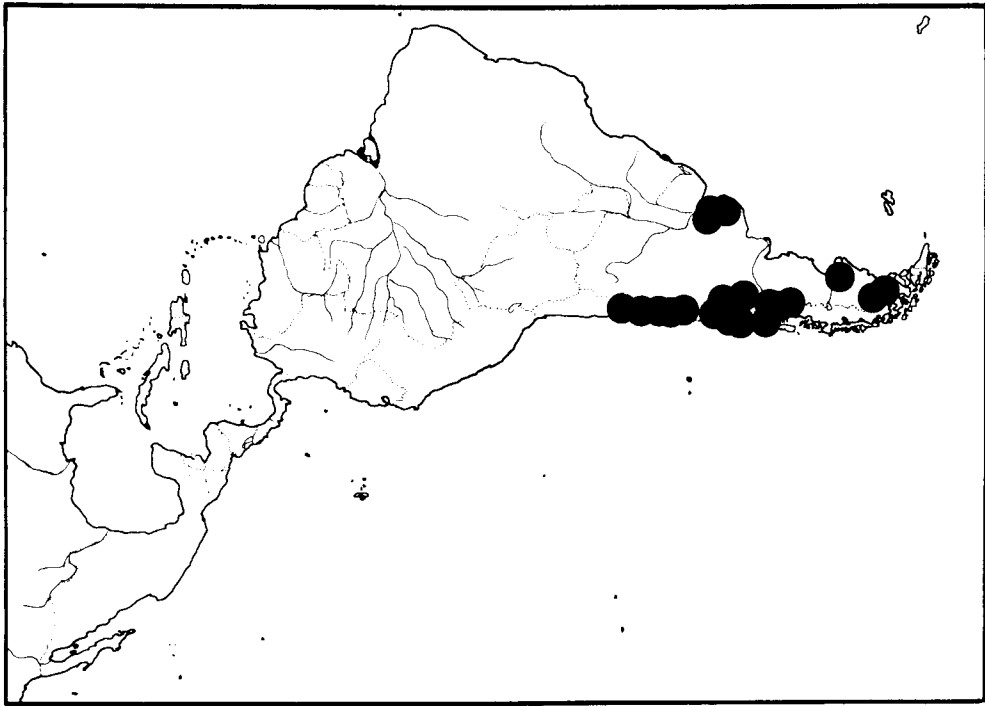


Fig. 166 (left), *Patagonophorus murinus* spec. nov.; 167 (right), *Pselnophorus alternarius* (Zeller). Distribution.

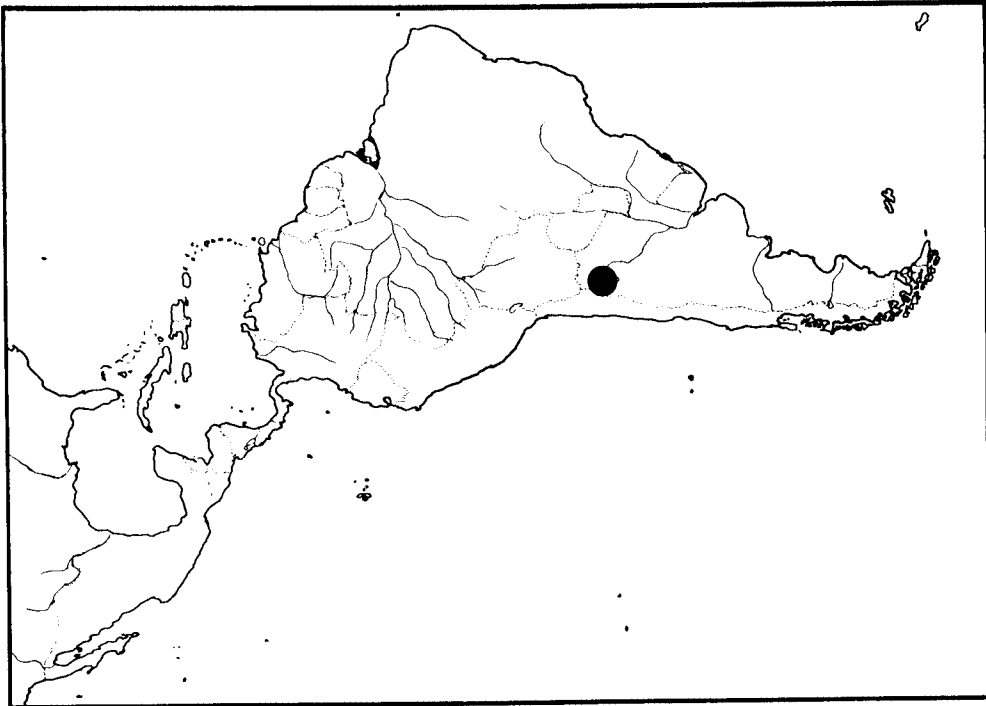
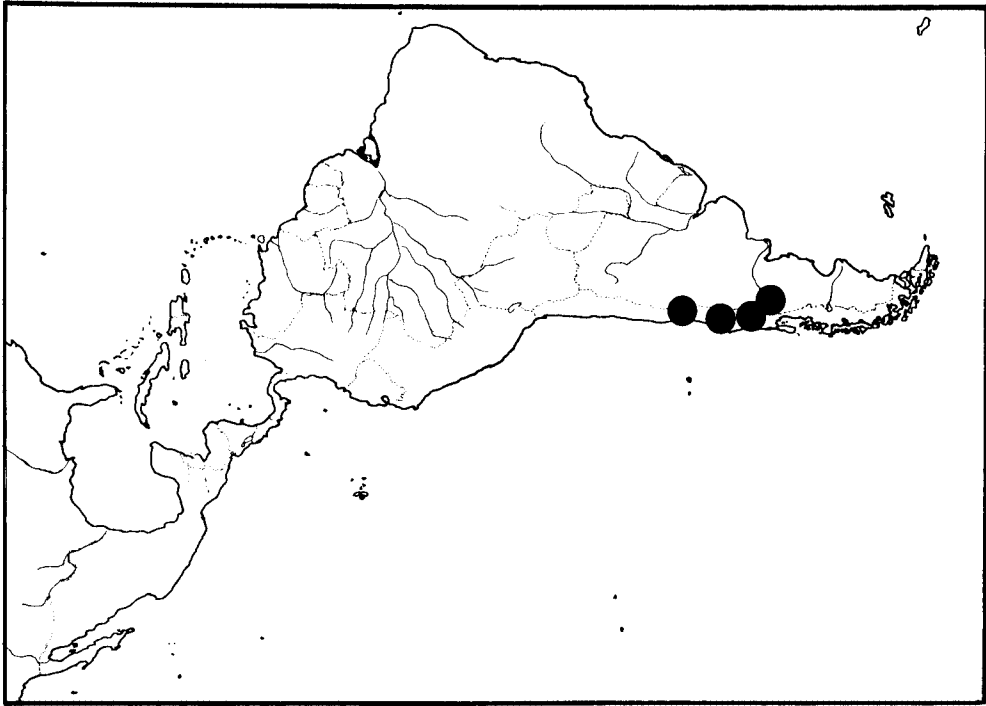


Fig. 168 (left), *Adaina everdinae* spec. nov.; 169 (right), *Oidaematophorus siskaelius* spec. nov. Distribution.

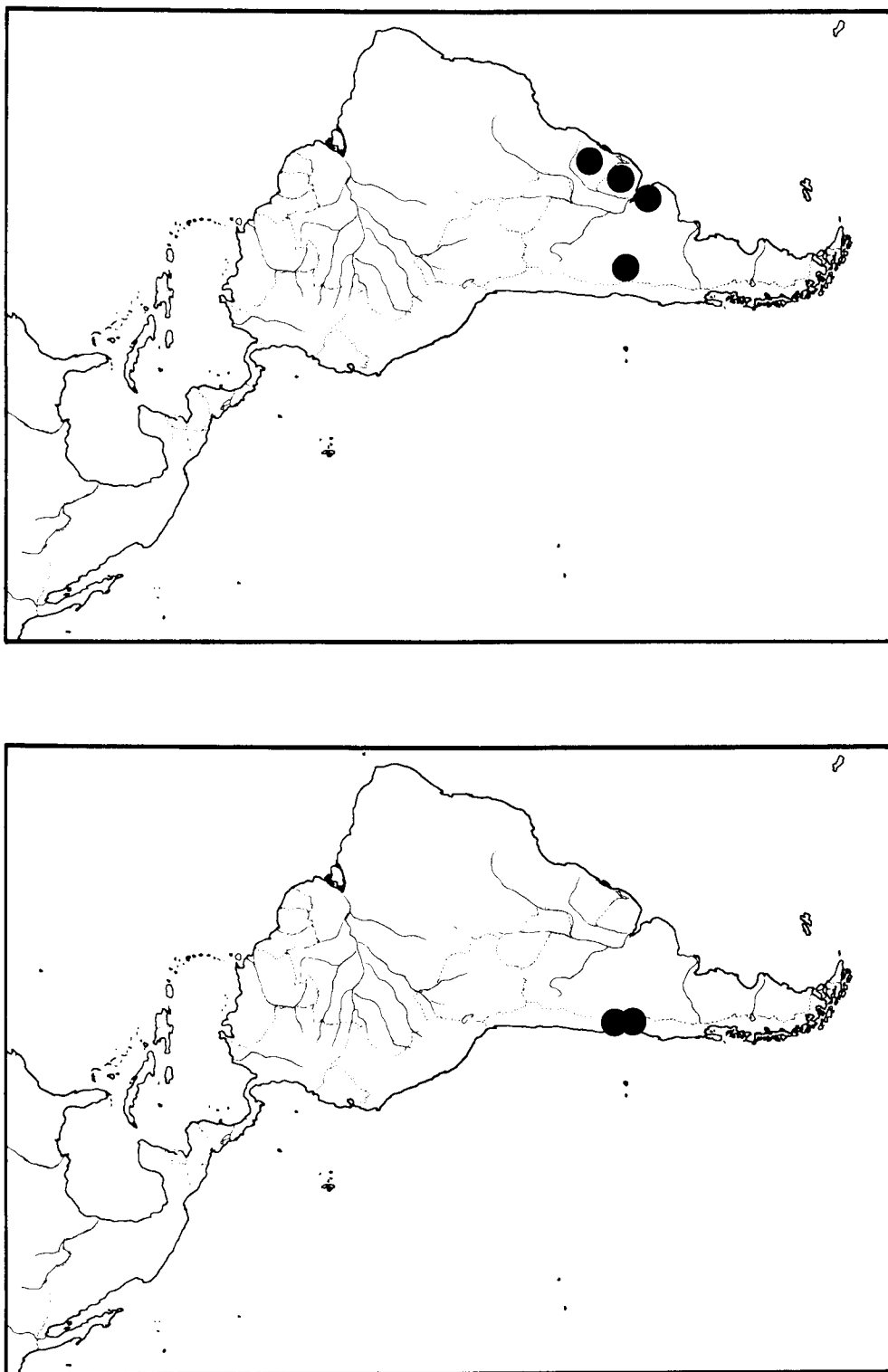


Fig. 170 (left), *Oidaematophorus betsiarum* spec. nov.; 171 (right), *O. pelodactylus* (Berg). Distribution.

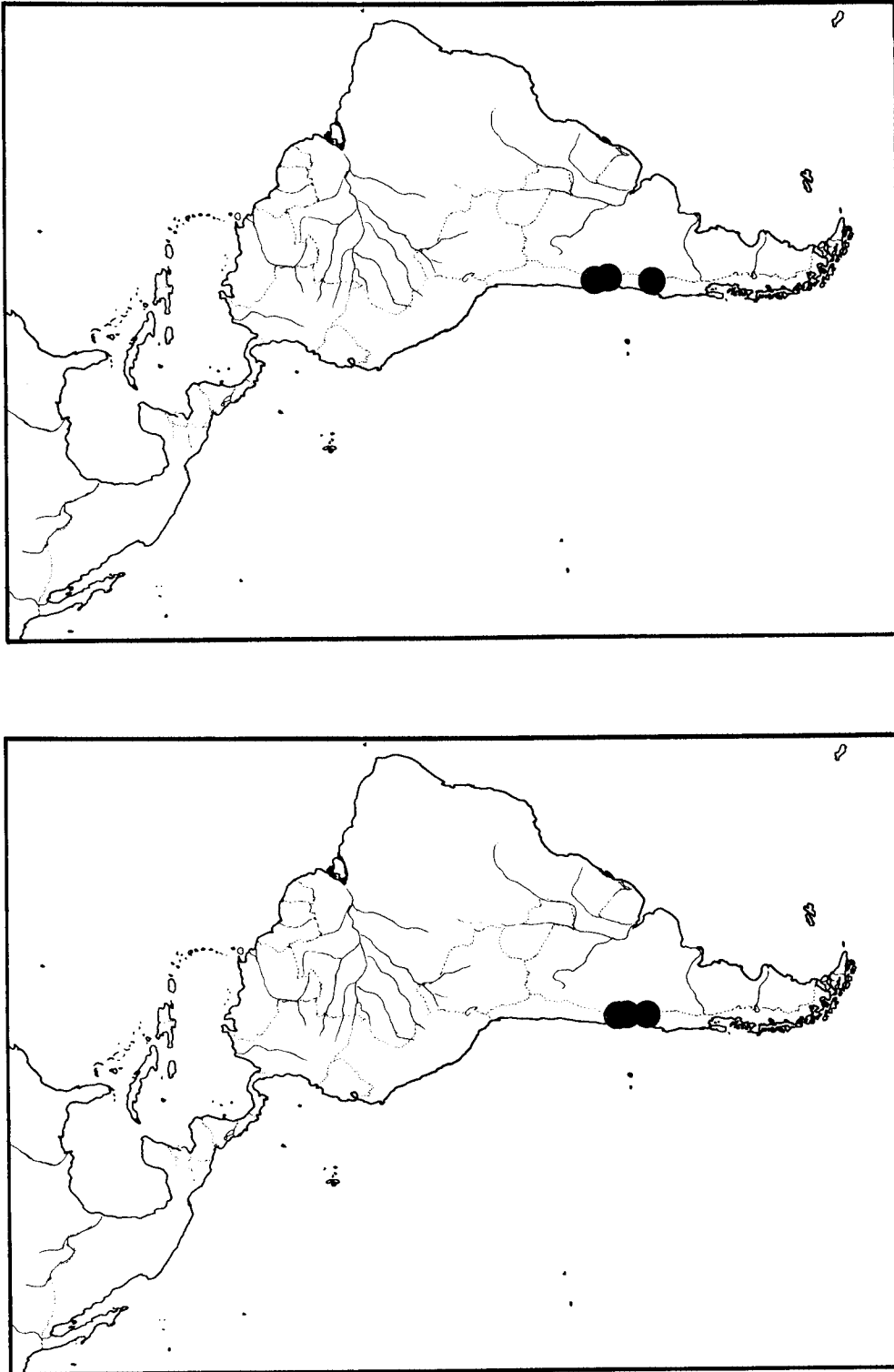


Fig. 172 (left), *Oidaematophorus mauleucus* spec. nov.; 173 (right), *O. hololeucus* (Zeller). Distribution.

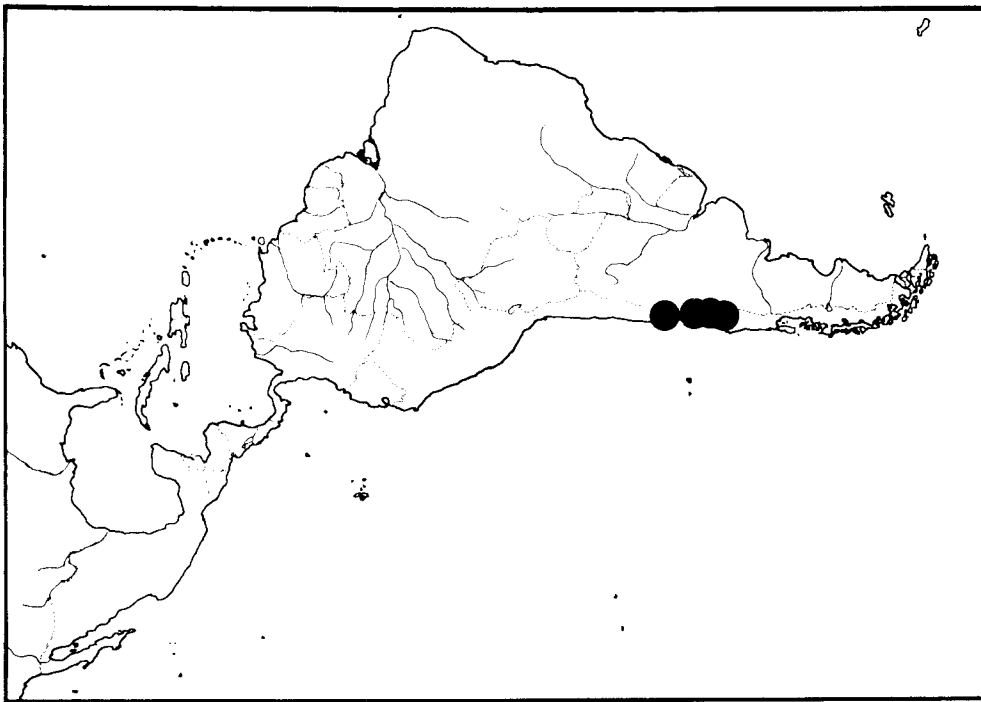
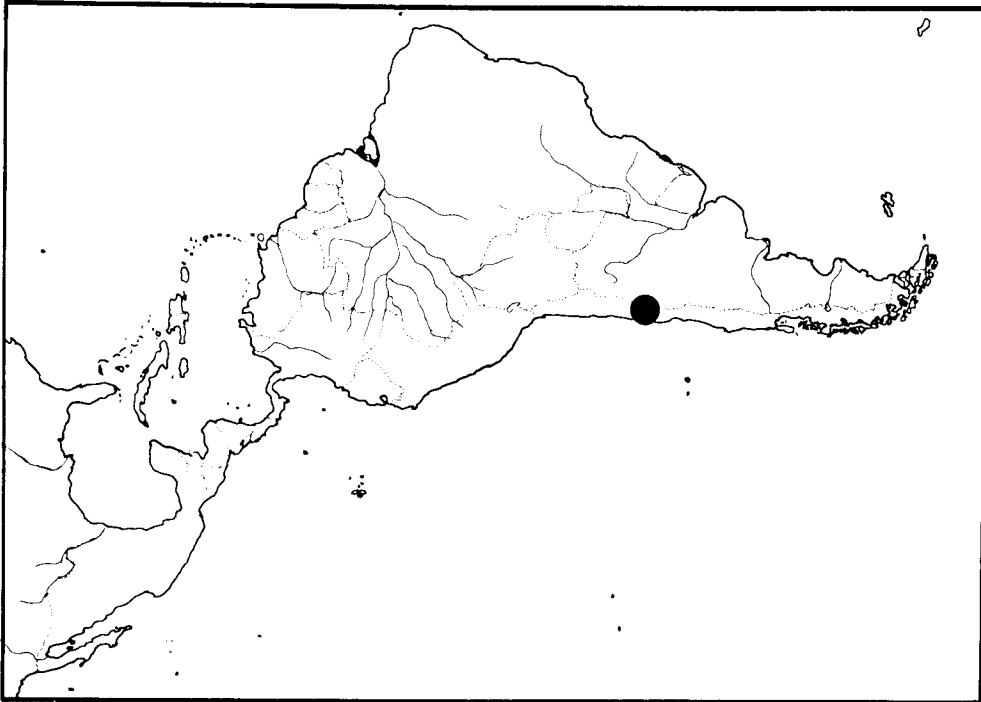


Fig. 174 (left), *Oidaenatophorus mallecoicus* spec. nov.; 175 (right), *O. coquimbobius* spec. nov. Distribution.

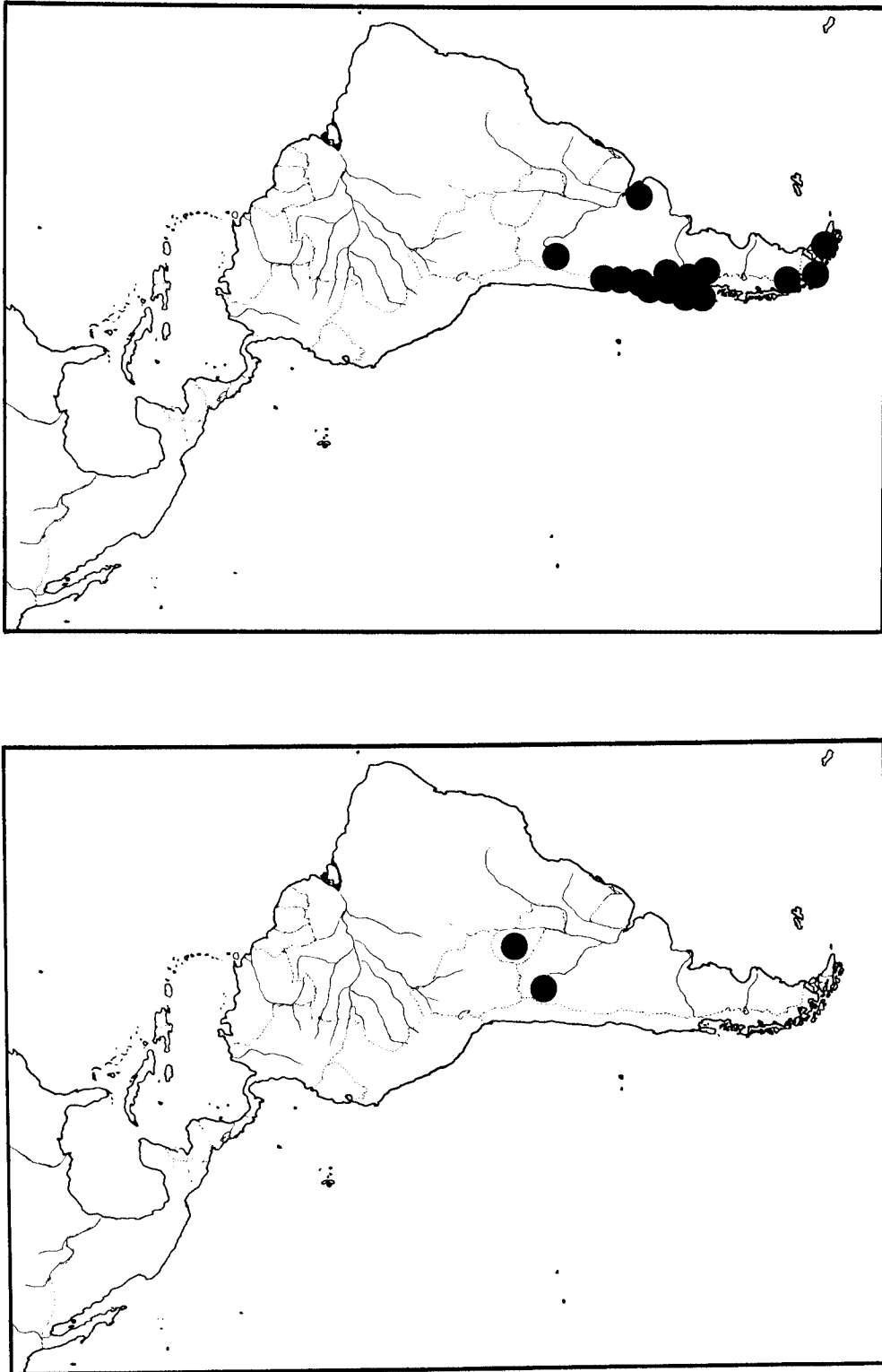


Fig. 176 (left), *Oidaematophorus angulofuscus* spec. nov., 177 (right), *O. grandaevus* (Meyrick). Distribution.

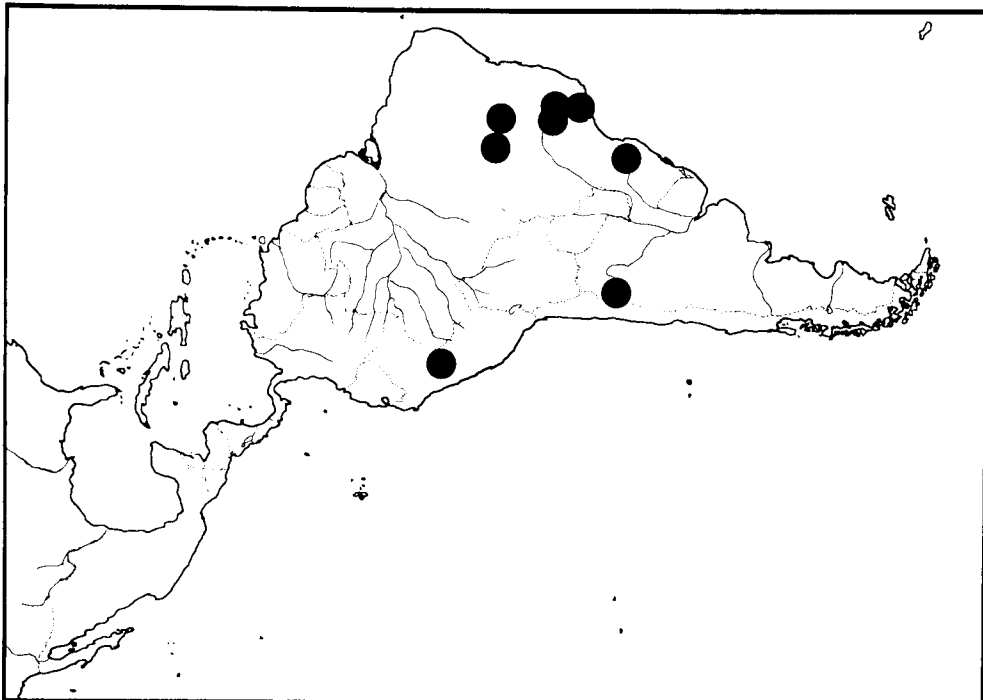


Fig. 178. *Oidaematophorus glaphyrotus* (Meyrick). Distribution.