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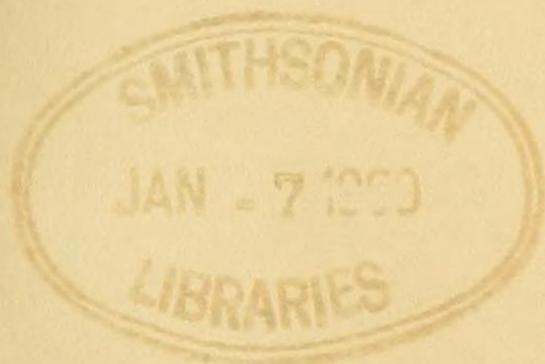
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*Conspice naturam;  
Inspice structuram!*

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## NEW OR LITTLE-KNOWN TIPULIDAE FROM CHILE AND PERU

(Diptera: Tipulidae)

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### SUMARIO

Veinte especies de Tipúlidos de Chile y Perú, de las cuales 14 son especies nuevas para la ciencia, se describen en este trabajo, que también incluye un nuevo subgénero (*Habrolimnophila*) y un nuevo género (*Chilelimnophila*), agregándose nuevos caracteres para especies conocidas, antecedentes de distribución geográfica de otras, etc.

The new and rare species of crane flies discussed at this time were collected chiefly by Señor Luis E. Peña in Chile with fewer species recorded from Peru, as considered throughout the report. I am greatly indebted to the various colleagues mentioned and for the privilege of retaining the types of the various novelties in my personal collection of these flies.

### LIMONIINI

**Limonia (Dicranomyia) globulicornis** (Alexander).

*Dicranomyia globulicornis* Alexander; Ent. News, 35: 63 - 64; 1924.

The types were from Tilcara, Jujuy, Argentina, taken March 20, 1920 by Vladimir Weiser. It also is known from Catamarca, Argentina, at high altitudes.

*Chile*: Noasa, Iquique, altitude 11,375 feet, September 21 - 22, 1951 (L. E. Peña).

The species belongs to the *brevivena* group that includes a small number of South American forms, including *Limonia (Dicranomyia) ambigua* Alexander, of Argentina, *L. (D.) atrostyla* Alexander, Perú, *L. (D.) capra* Alexander, Venezuela, and a few others.

**Limonia (Dicranomyia) polystonyx** sp. n. (Fig. 3).

General coloration of thorax orange; antennae brownish black; legs and wings brownish yellow, *Sc* long, *Sc*<sub>1</sub> ending opposite two-thirds *Rs*, *m-cu* close to fork of *M*; male hypopygium with posterior border of ninth tergite shallowly emarginate; dorsal dististyle blackened, microscopically scabrous, ventral

style small, its rostral prolongation long and slender, the two spines approximated, the more basal one from summit of a tubercle at near midlength of prolongation; gonapophysis with mesal-apical lobe slender, blackened outwardly.

*Male*. Length about 4.5 mm.; wing 5.2 mm.; antenna about 1.1 mm.

*Female*. Length about 5.5 mm.; wing about 6 mm.

Rostrum and palpi brownish black. Antennae brownish black; proximal flagellar segments subglobular, outer segments more elongate. Head blackened, sparsely pruinose.

Pronotum brown. Mesonotum orange, the praescutum with a vaguely differentiated pale brown central stripe. Halteres with stem yellow, knob slightly darkened. Legs with coxae and trochanters yellow; remainder of legs brownish yellow; claws long and slender, nearly straight, with a long spine at near one-third the length. Wings weakly brownish yellow, prearcular and costal fields clearer yellow, stigma barely indicated; veins light brown. Longitudinal veins beyond general level of origin of *Rs* with abundant black trichia. Venation: *Sc* long, *Sc*<sub>1</sub> ending opposite two-thirds *Rs*, *Sc*<sub>1</sub> and *Sc*<sub>2</sub> subequal; free tip of *Sc*<sub>2</sub> in transverse alignment with *R*<sub>2</sub>, both pale and without trichia; *m-cu* close to fork of *M*, slightly longer than distal section of *Cu*<sub>1</sub>.

Abdominal tergites brownish yellow, sternites clearer yellow, hypopygium orange. Male hypopygium (Fig. 3) with tergites, *t*, transverse, posterior border generally rounded, with a median notch to form two lobes provided with sparse elongate setae, thickened margins conspicuous, especially the posterior

border. Basistyle, *b*, slightly larger than the ventral dististyle, ventromesal lobe large: Dorsal dististyle, *d*, a strong blackened hook, the long terminal spine glabrous, intermediate part of style with abundant microscopic spicules to produce a scabrous appearance; ventral style small, extending scarcely beyond the dorsal style, the lobe on its face with unusually long setae; rostral prolongation long and slender, spines two, placed close together at near midlength of outer margin, inner spine at summit of a tubercle, the slightly smaller lower spine near base of tubercle. Gonapophysis, *g*, with mesal-apical lobe slender, smooth, blackened, especially outwardly. Aedeagus slightly bilobed at apex, genital tubes approximated outwardly. *Holotype*, male, Chaiten, Chiloe prov., Chile, in virgin forest, February 5 - 8, 1954 (L. E. Peña). *Allotype*, female, Dalcahue, Chiloe, February 10 - 12, 1954 (L. E. Peña).

There are four regional species of the subgenus having a close general resemblance, including virtually unpatterned wings with vein *Sc* elongate. All of these differ among themselves in hypopygial structure, two, *Limonia (Dicranomyia) exereta* Alexander and *L. (D.) seposita* Alexander, have the rostral spines widely separated at their bases, the others, including *L. (D.) commina* Alexander and the present fly, with these spines approximated. *L. (D.) polystonyx* is readily told by various details of the hypopygium, especially the conformation of the tergite, size and shape of the ventral dististyle, the gonapophyses, and the scabrous dorsal dististyle.

***Orimarga (Diotrepha) subprotrusa* sp. n.**

(Fig. 4)

General coloration of thorax brownish yellow, restrictedly patterned with brown; legs clear light yellow throughout; wings pale brown, prearcular and costal fields light yellow, veins with the exception of costa virtually glabrous; male hypopygium very large and complex, especially the phallosome, proximal end of basistyle bearing a complex lobe, dististyle single, divided at near two-thirds the length.

*Male*. Length about 7 mm.; wings 5.8 mm. Rostrum brownish black, palpi black. An-

tennae with basal segments black; flagellum broken. Head dark gray; eyes very large.

Pronotum brownish black. Mesonotal praescutum light brownish yellow, lateral borders with a darker brown area; posterior sclerites light brown, scutal lobes yellowed. Pleura light yellow, dorsal sternopleurite with a narrow light brown longitudinal stripe. Halteres with stem whitened, knob medium brown. Legs with coxae and trochanters light yellow; remainder of legs clear light yellow throughout. Wings pale brown, prearcular and costal fields clear light yellow; a short mark in stigmal region and a seam along vein *Cu* slightly darker brown; veins very pale brown. Veins with the exception of costa glabrous, excluding a short row of about six strong black trichia at outer end of  $M_1 + 2$ . Venation: *Sc* long, *Sc*<sub>2</sub> at its tip, nearly opposite midlength of the long *Rs*; free tip of *Sc*<sub>2</sub> opposite outer end of *Rs* before the fork; *R*<sub>1</sub> beyond *Sc* deflected caudad, narrowing cell *R*<sub>1</sub>, *R*<sub>2</sub> very short as compared to the nearly evanescent *R*<sub>1 + 2</sub> which is in transverse alignment with *R*<sub>2</sub>; *r-m* shortly before level of *R*<sub>2</sub>; *m-cu* at near one-fourth the length of *Cu*.

Abdomen, including the very large male hypopygium, brownish black. Male hypopygium (Fig. 4) with a conspicuous lobe on proximal face of basistyle, *b*, the apex bilobed, each lobule with stiff setae and an isolated group of longer more delicate setae. Dististyle, *d*, single bilobed at near two-thirds the length, the glabrous outer or axial blade narrowed gradually into a small point, lower lobe shorter, with dense erect dark setae. Phallosome, *p*, very large, as illustrated, including two massive elements, the lateral blades of upper portion with a series of about six strong appressed spines.

*Holotype*, male, Chanchamayo, Peru, altitude 1,200 meters, March 7, 1949 (José Schunke).

The most similar species include *Orimarga (Diotrepha) profusa* Alexander, of Peru, and *O. (D.) syndactyla* Alexander, of Ecuador. All three species have the male hypopygium unusually large, with the dististyles conspicuously united basally and with the phallosome complex, all species differing among themselves in all structural details.

## HEXATOMINI

*Limnophila* Macquart*Habrolimnophila* subgen. n.

Characters as in *Limnophila*, differing especially in the structure of the male hypopygium and in the venation, including the unusually short vein *Sc*.

Antennae 16-segmented; flagellar segments long, subcylindrical, with very long verticils in both sexes, the longest more than twice the segments. Wings (Fig. 1) with trichia on longitudinal veins beyond general level of cord, including also the outer end of vein *M*. Stigmal region with few to numerous trichia, occurring in both cells *R*<sub>1</sub> and *R*<sub>2</sub>; two elongate blackened squamal setae lying far basad, Venation: *Sc* short, *Sc*<sub>1</sub> ending before midlength of *Rs*, *Sc*<sub>2</sub> slightly removed, shorter than *Sc*<sub>1</sub>; *R*<sub>2</sub> subequal to *R*<sub>1+2</sub>, placed at or shortly before the fork, in the latter case leaving a short element *R*<sub>3+4</sub>; cell *M*<sub>1</sub> present, subequal to its petiole; *m-cu* shortly before midlength of *M*<sub>3+4</sub>; anterior arculus lacking, its position indicated by a triangular thickening. Male hypopygium (Fig. 8) with the outer dististyle entirely glabrous, outwardly gradually narrowed, apex unequally bispinous. Phallosome, *p*, with the gonapophyses appearing as slender smooth blackened hooks, bases dilated. Basal plates dilated, connected along their posterior border, the condition somewhat suggestive of the genus *Epiphragma*. Aedeagus short and straight, about equal in length to the gonapophysis.

Subgenotype- *Limnophila* (*Habrolimnophila*) *celestissima* Alexander (Chile: Arauco, Nahuelbuta).

The type is the only species of the subgenus presently known and is one of the most beautiful crane flies in the Chilean fauna. It was described from a single female (Agr. Téc. Chile, 5, N° 1: 17-19, Fig. 9, venation; 1945) and was referred to the genus *Austrolimnophila* Alexander but further materials, including the male sex, indicate that the present assignment is more nearly correct.

*Chilelimnophila* gen. n.

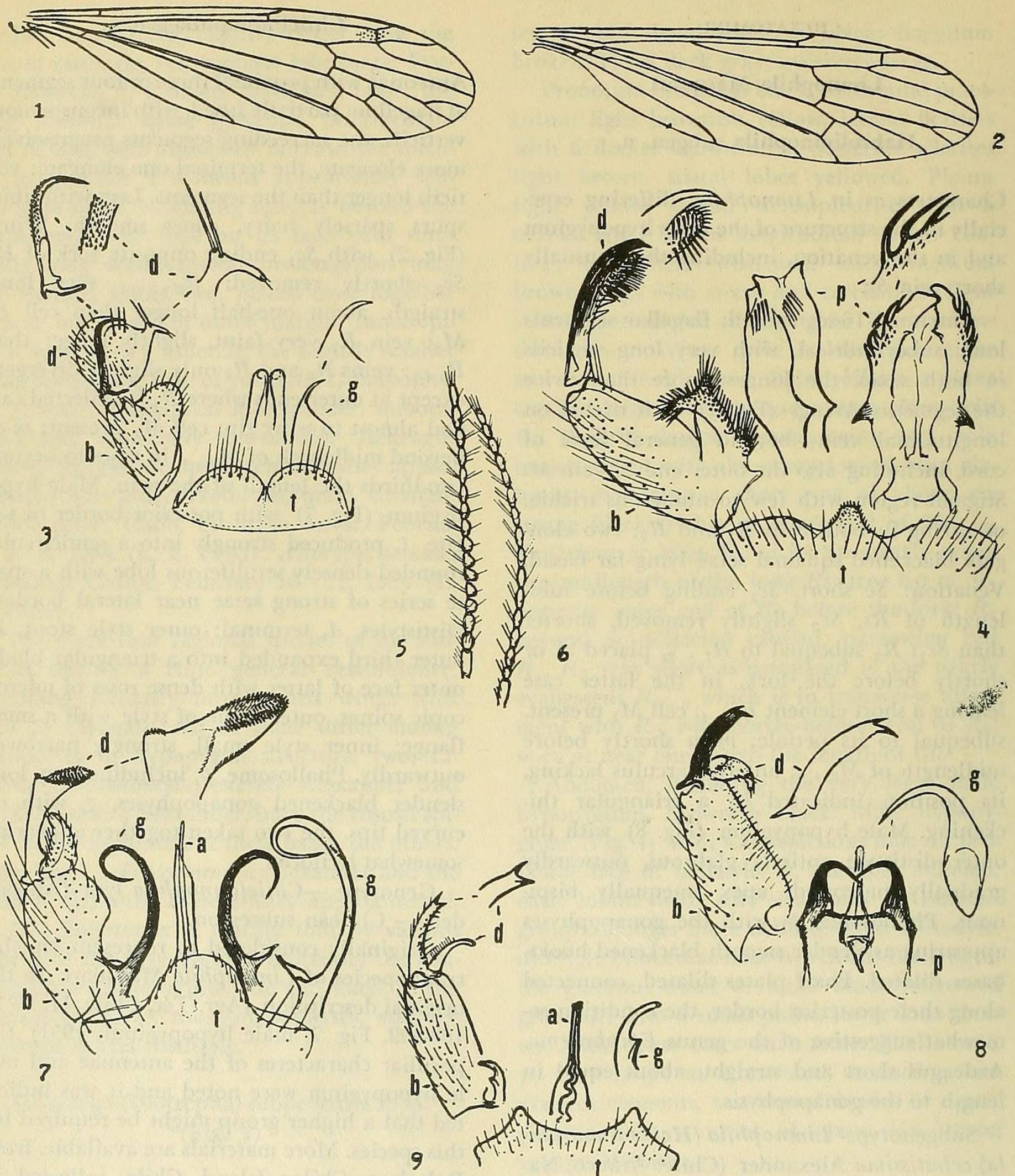
Antennae with proximal three or four segments of flagellum partially fused, with inconspicuous verticils, the succeeding segments progressively more elongate, the terminal one elongate; verticils longer than the segments. Legs with tibial spurs sparsely hairy, claws smooth. Wings (Fig. 2) with *Sc*<sub>1</sub> ending opposite fork of *Rs*, *Sc*<sub>2</sub> shortly removed; *R*<sub>2+3+4</sub> very long, straight, about one-half longer than cell *1st M*<sub>2</sub>; vein *R*<sub>2</sub> very faint, slightly longer than *R*<sub>1+2</sub>; veins *R*<sub>3</sub> and *R*<sub>4</sub> only slightly divergent except at outer ends where *R*<sub>4</sub> is deflected caudad almost to wing tip; cell *M*<sub>1</sub> present; *m-cu* beyond midlength of *M*<sub>3+4</sub>, in cases to beyond two-thirds the length of the vein. Male hypopygium (Fig. 7) with posterior border of tergite, *t*, produced strongly into a semicircular rounded densely setuliferous lobe with a sparse series of strong setae near lateral borders. Dististyles, *d*, terminal; outer style stout, its outer third expanded into a triangular blade, outer face of latter with dense rows of microscopic spines, outer angle of style with a small flange; inner style small, strongly narrowed outwardly. Phallosome, *p*, including very long slender blackened gonapophyses, *g*, with recurved tips, the two taken together appearing somewhat lyrifiform.

Genotype — *Chilelimnophila lyra* (Alexander) — Chilean subregion.

Originally considered to represent an aberrant species of *Limnophila* Macquart. In the original description (Agr. Téc. Chile, 11, N° 2: 108-109, Fig. 7, male hypopygium; 1951) the peculiar characters of the antennae and male hypopygium were noted and it was indicated that a higher group might be required for this species. More materials are available, from Dalcahue, Chiloe Island, Chile, collected in February 1945 by Peña.

*Shannonomyia* Alexander

The genus *Shannonomyia* is greatly developed throughout Tropical America, with only two species known from the Nearctic region, including the genotype, *Shannonomyia lenis* (Osten Sacken). As indicated at the time of erection of the genus (Diptera of Patagonia and South



## PLATE I

Fig. 1. *Limnophila* (*Habrolimnophila*) *celestissima* Alexander; venation.

Fig. 2. *Chilelimnophila lyra* (Alexander); venation.

Fig. 3. *Limonia* (*Dicranomyia*) *polystonyx* sp. n.; male

Fig. 4. *Orimarga* (*Diotrepha*) *subprotrusa* sp. n.; male hypopygium.

Fig. 5. *Shannonomyia globulicornis* sp. n., antenna, male.

Fig. 6. *Shannonomyia cacoxena* Alexander; antenna, male.

Fig. 7. *Chilelimnophila lyra* (Alexander); male hypopygium.

Fig. 8. *Limnophila* (*Habrolimnophila*) *celestissima* Alexander; male hypopygium.

Fig. 9. *Shannonomyia globulicornis* sp. n.; male hypopygium.

(Explanation of figures, *a*, aedeagus; *b*, basistyle; *d*, dististyle; *g*, gonapophysis; *p*, phallosome; *t*, tergite).

Chile 1: 143; 1929) it appears that *Shannonomyia* should include not only the species that lack cell  $M_1$  of the wings, as originally considered, but also various others with this cell present, in the Chilean fauna these including *Shannonomyia bullockiana* (Alexander) and *S. fuscostigmalis* (Alexander) with cell  $M_2$  open by the atrophy of the basal section of vein  $M_3$  to produce a pectinate venation, and others with normal venation, including *S. feriata* (Alexander), *S. seclusa* (Alexander), *S. sparsissima* (Alexander) and *S. tuber* (Alexander). All of these were formerly placed in *Limnophila*.

*Shannonomyia globulicornis* sp. n.

(Figs. 5, 9)

General coloration gray, praescutum and scutal lobes patterned with darker; antennae short, black throughout, proximal flagellar segments broad to appear subglobular; halteres yellow; wings faintly infuscated, stigma small and poorly indicated, veins  $R_3$  and  $R_4$  divergent; male hypopygium with tergal lobes widely separated, their tips narrowly obtuse, aedeagus relatively short and straight.

*Male* Length about 6,5-6,8 mm.; wing 7-8 mm.; antenna about 1,2-1,4 mm.

*Female*. Length about 8 mm.; wing 8 mm.

Rostrum gray, palpi black. Antenna (Fig. 5) short, black throughout; proximal flagellar segments with lower face rounded, short and broad to appear subglobular, outer segments passing through short-oval to oval, all shorter than their verticils. Head infuscated above, front and orbits gray.

Pronotum gray, more infuscated medially. Mesonotal praescutum gray with three brown stripes, the median one broader and conspicuous, lateral pair pale, crossing the suture to include the scutal lobes; posterior sclerites of notum and the pleura gray, dorsopleural membrane light brown. Halteres yellow. Legs with fore and middle coxae gray, posterior pair yellowed, sparsely pruinose; trochanters yellow; femora light brown to brownish black, bases more yellowed, tips gradually more darkened; tibiae and tarsi dark brown to brownish black. Wings faintly infuscated, prearcular and costal fields more yellowed; stigma very pale brown, small and poorly indicated; veins darker

brown. Macrotrichia on veins beyond general level of origin of  $R_s$ . Venation:  $R_{1+2}$  and  $R_2$  subequal, the latter shortly before the fork, in extreme cases  $R_{3+4}$  nearly as long as  $R_2$ ; veins  $R_3$  and  $R_4$  divergent, cell  $R_3$  at margin more than three times cell  $R_2$ ; cell *1st*  $M_2$  closed; *m-cu* from about one-fifth to nearly at mid-length of  $M_{3+4}$ .

Abdomen brown, heavily gray pruinose; in cases, hypopygium paler brown, more fulvous in type. Male hypopygium (Fig. 9) with tergal lobes, *t*, widely separated, apices narrowly obtuse. Outer dististyle, *d*, with apical point blackened, the outer spur slender; vestiture of membranous inner angle with numerous long delicate setae. Aedeagus, as compared with *jaffueli*, relatively short and straight.

*Holotype*, male, Las Brizas, Santiago Prov. (Coast), Chile, August 14, 1951 (L. E. Peña). *Allotopotype*, female, pinned in copula with a paratype. *Paratopotypes*, 7 males, with the types, August 12-14, 1951.

Other generally similar regional species include *Shannonomyia barilochensis* Alexander, readily distinguished by the large size and darkened stigma, *S. cacoxena* Alexander, *S. jaffueli* Alexander and *S. penumbrosa* Alexander, most readily told by antennal structure and in the details of coloration and by hypopygial structure. The subglobular proximal flagellar segments of the present fly contrast with the more oval condition found in *cacoxena* (Fig. 6).

ERIOPTERINI

*Teucholabis (Teucholabis) atahualpa* sp. n.

(Fig. 12)

Size large (wing of male 7 mm.); general coloration of thorax brownish yellow, praescutum with blackened areas, centers of scutal lobes similarly blackened; knobs of halteres clear light yellow; legs yellow, tips of femora conspicuously blackened; wings broad, especially at midlength in cell *1st*  $A$ , light yellow, with three broad brown crossbands that are expanded on posterior ends to be virtually confluent; abdomen dark brown, incisures narrowly yellowed; male hypopygium with mesal flange of basistyle entire; outer dististyle conspicuous, unequally bifurcate, both branches terminating in slender spines; end of aedeagus trun-

cate, further extended into a slender straight spine.

*Male.* Length about 7.5 mm.; wing 7 mm.; antenna about 1.3 mm.

Rostrum black, elongate, subequal to remainder of head; palpi black. Antennae black; flagellar segments subcylindrical, the more proximal ones shorter than their verticils, segments with dense short white setae. Head darkened.

Thorax of the unique type deformed; praescutum brownish yellow with three blackened areas, the median one on anterior third, the widely separated lateral pair not reaching the suture; scutum yellow, each lobe with a single major blackened area; scutellum yellow; mediotergite black, broadly yellow laterally, pleurotergite chiefly darkened. Halteres with stem pale brown, knob clear light yellow. Legs with trochanters yellow; femora yellow, tips conspicuously blackened, most distinct on posterior legs; tibiae yellow, tips narrowly brown, tarsi light brown; posterior legs without modifications of tibiae or tarsi. Wings with ground light yellow, with three broad brown crossbands that are expanded and virtually connected with one another along the posterior border but distinctly separated along costal margin; basal band ending at origin of  $R_s$ , second band at cord, darker in stigmal region; terminal band at wing tip, not including the bases of outer medial cells; distal end of cell *1st M*<sub>2</sub> seamed with brown; veins light yellow in the ground areas, brown in the darkened fields, more intense along cord and just beyond arculus on veins  $Sc$  and  $R$ . Wings broad, specially at midlength in cell *1st A*. Macrotrichia on distal sections of veins  $R_5$ ,  $M_{1+2}$  and  $M_3$ . Venation:  $Sc$  long,  $Sc_1$  ending about opposite three-fourths the long  $R_s$ ,  $Sc_2$  slightly removed;  $R_2$  gently sinuous, longer than  $R_{2+3+4}$ ;  $m-cu$  about one-half its length beyond fork of  $M$ .

Abdomen dark brown, the incisures narrowly yellowed, hypopygium darker brown. Sensory pocket of fifth sternite small and weak, with relatively few major setae, those of central part small and weak; sternite six with four strong setae on either side of midline. Male hypopygium (Fig. 12) with the spine of basistyle,  $b$ , broad at proximal end, outer fourth narrowed into a long straight spine, inner mar-

gin of widened part with a fringe of abundant long yellow setae; darkened mesal flange unusually extensive, margin smooth; inner basal part of basistyle with several unusually long and powerful setae. Outer dististyle,  $d$ , diagnostic, unequally bifurcate, at near one-third the length with a strong lateral arm, the axial stem longer, both branches extended into unusually acute slender spines, the lateral arm with abundant delicate setae, axial arm with fewer very long setae; inner style with the blade shallowly bidentate, lateral rod relatively small, darkened, with few setae. Aedeagus,  $a$ , straight-sided, terminating abruptly and extended farther into a slender straight spine; before apex with four long setae arranged in ventral and dorsal pairs.

*Holotype*, male, Chanchamayo, Peru, altitude 1,200 meters, January 23, 1949 (José Schunke).

The species is named for the last Inca king of Peru. Other large regional species having patterned wings include *Teucholabis* (*Teucholabis*) *cybele* Alexander, *T. (T.) diana* Alexander, *T. (T.) ducalis* Alexander, *T. (T.) felicitata* Alexander, *T. (T.) pulchella* Alexander, and some others. The additional *melanocephala* groups, including about 20 species as presently known, differ from all other groups within the genus in the nature of the sternal abdominal pockets. All of the species concerned are most readily told from one another by hypopygial characters.

#### *Teucholabis* (*Teucholabis*) *inca* sp. n.

(Fig. 13)

General coloration of thorax orange, head darkened; legs beyond the trochanters black; wings pale brown, slightly darker apically; male hypopygium with spine of basistyle and the inner dististyle distinctive, as described and figured.

*Male.* Length about 7 mm.; wing 6.5 mm.; antenna about 1.5 mm.

Rostrum and palpi dark brown. Antennae dark brown; basal flagellar segments subglobular, at near midlength of organ the segments slightly more oval, shorter than longest verticils. Head darkened.

Prothorax and mesothorax uniformly orange, only the ventral mesopleura slightly more

yellow. Halteres with stem brown, knob black. Legs with coxae and trochanters orange; remainder of legs black, femoral bases restrictedly paler; posterior tibia before tip with a very slightly enlarged more yellowed glandular ring, about equal in length to the darkened apex; terminal tarsal segment with a conspicuous basal fingerlike epicondyle. Wings tinged with pale brown, lightest near base, slightly darker apically, including cell  $R_2$  and more narrowly in the outer radial and medial fields; stigma and a narrow seam on anterior cord darker brown; veins brown. Macrotrichia on longitudinal veins beyond cord with the exception of  $Cu_1$ , also on  $Rs$  and distal end of  $M$ . Venation:  $Sc$  long,  $Sc_1$  ending about opposite three-fifths the long  $Rs$ ,  $Sc_2$  removed,  $Sc_1$  alone about one-half longer than  $R_2$  or subequal to  $R_{1+2}$ ;  $m-cu$  at fork of  $M$ .

Abdomen, including hypopygium, black. Sensory pocket of sternite five a darkened triangle with the point directed cephalad, the surface with dense short triangular points, the margins with several very long black setae that are decussate across the pocket. Male hypopygium (Fig. 13) with the spine of basistyle,  $b$ , distinctive, virtually apical in position, appearing as a flattened yellow blade that is very narrow at base, at apex extended into a strong black spine, with numerous yellow setae at its base, at near midlength of blade with margin produced into a triangular point; mesal flange with a darkened triangular point and several setae of various sizes. Outer dististyle,  $d$ , a long simple rod that narrows outwardly into a short spine, slightly more dilated at near one-third the length, surface with scattered setae; inner style with blade bidentate, as shown, on outer margin beyond base with a slender rod that is tipped with three strong spinoid setae. Aedeagus,  $a$ , flattened, at apex produced into a gently curved black spine, at its base with two very long setae, outer angle before the spine with two comparable somewhat shorter setae.

*Holotype*, male, Chanchamayo, Peru, altitude 1,200 meters, February 23, 1949 (José Schunke).

In its general appearance, *Teucholabis* (*Teucholabis*) *inca* suggests species such as *T. (T.) cariosa* Alexander, *T. (T.) laxa* Alexander,

*T. (T.) podagra* Alexander and *T. (T.) spinigera* Schiner, differing from all in the distinctive hypopygium, particularly the inner dististyle and the spine of the basistyle.

***Aphrophila bidentata* sp. n.**

(Figs. 10, 14)

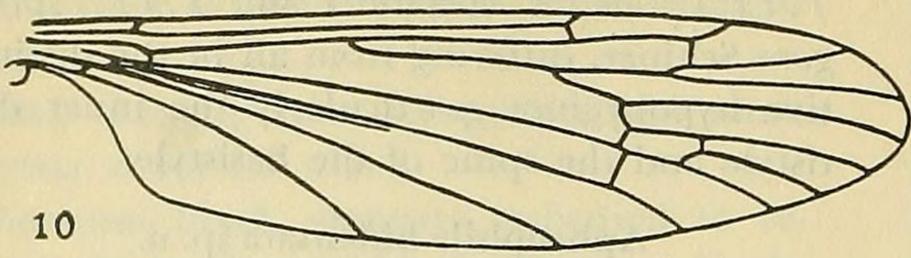
Size medium (wing of male 8,5 mm.); general coloration black, including the antennae and legs; wings weakly darkened, stigma brown, macrotrichia of veins long and conspicuous, black,  $Rs$  about two and one-half times the basal section of  $R_5$ ; male hypopygium with dististyle produced at apex into a flattened blade terminating in two teeth, the outer more slender, its tip acute.

*Male*. Length about 7,5 mm.; wing 8,5 mm.; antenna about 1,7 mm.

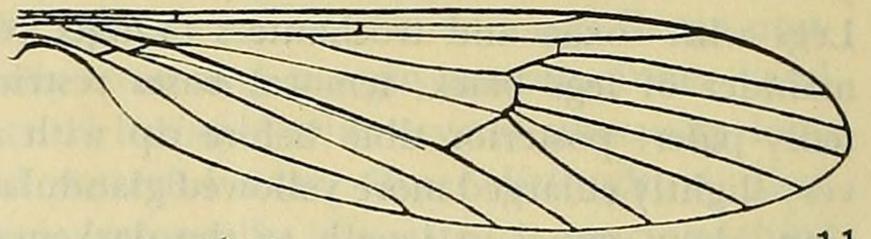
Rostrum and palpi black. Antennae black throughout; flagellar segments oval, slightly exceeding their verticils. Head brownish black, anterior vertex and the narrow orbits light brown.

Mesonotum almost uniformly blackened, surface sparsely pruinose to appear plumbeous, praescutal stripes poorly defined, the intermediate pair separated by a capillary dull black vitta. Pleura more evidently pruinose, dorsopleural membrane light brown. Halteres obscure yellow. Legs with coxae brownish black; trochanters brown; remainder of legs brownish black, more intense outwardly; claws with three very long bristles along lower margin. Wings (Fig. 10) weakly darkened, stigma darker brown, small, suboval; veins brown. Macrotrichia of outer veins long and conspicuous, black, very abundant in outer radial field, somewhat fewer on medial branches, basad of cord on veins beyond general level of origin of  $Rs$ , on anal veins virtually to bases. Venation:  $Rs$  longer than in *carbonaria*, about two and one-half times the basal section of  $R_5$ ; cell  $M_2$  open by atrophy of  $m$  on one wing of *holotype*, closed on the other;  $M_{3+4}$  shorter than  $M_4$ .

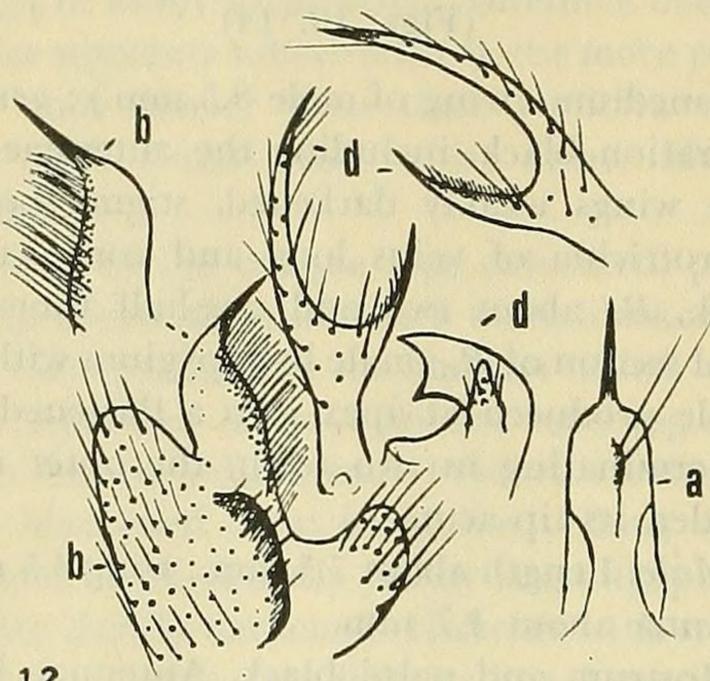
Abdomen, including hypopygium, black. Male hypopygium (Fig. 14) with dististyle,  $d$ , produced at apex into a flattened blade that terminates in two teeth, the outer more slender, its tip acute, lower tooth shorter and stouter with an obtuse flange on side; setae of



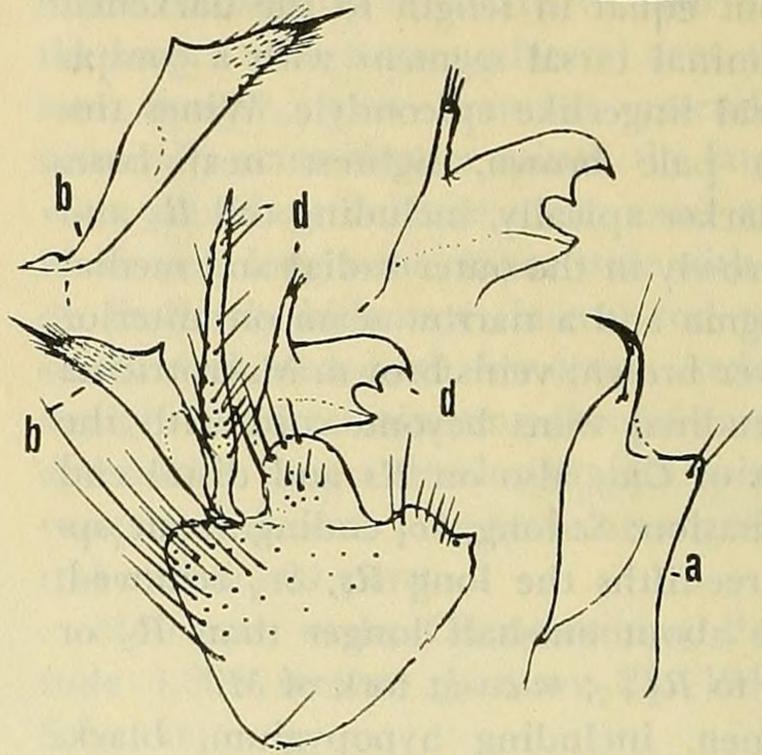
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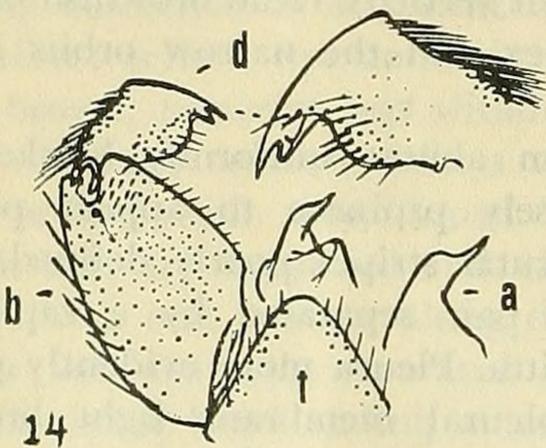
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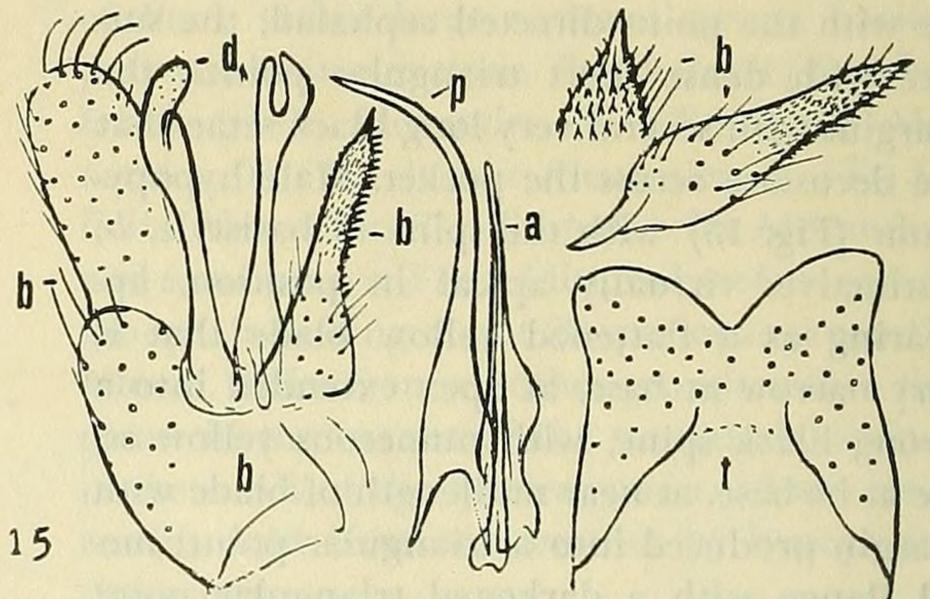
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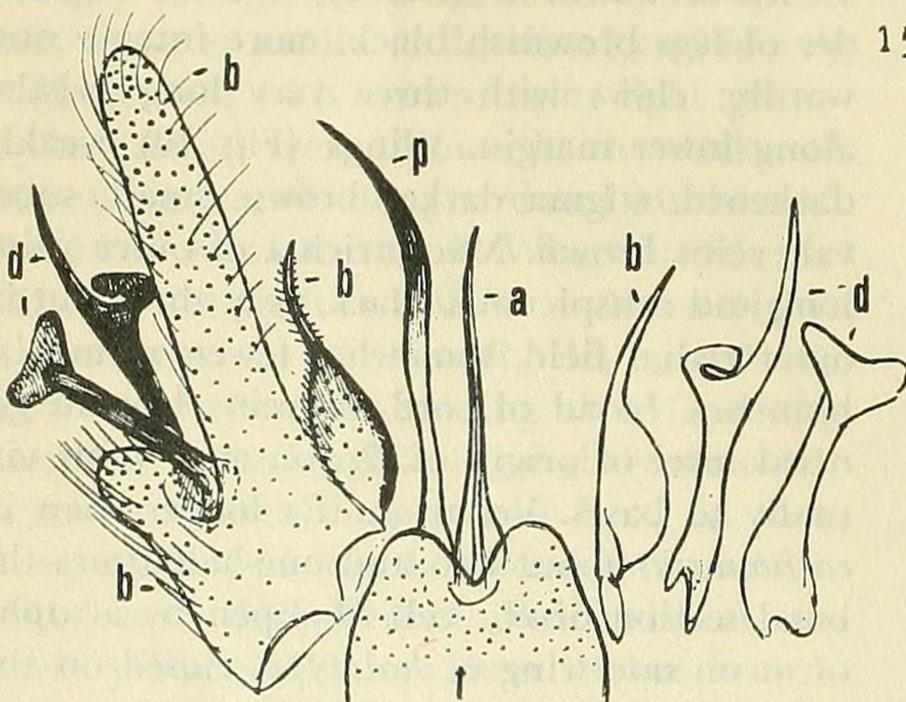
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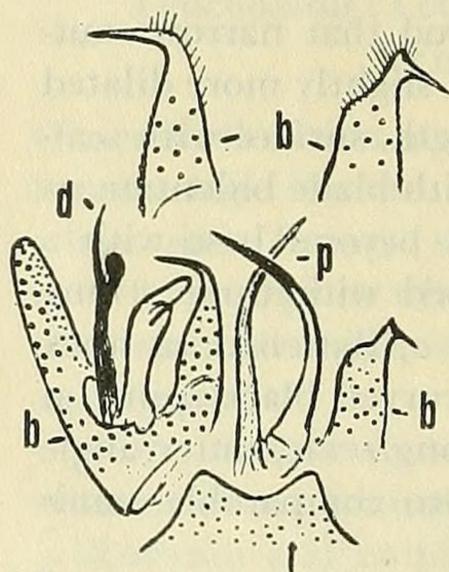
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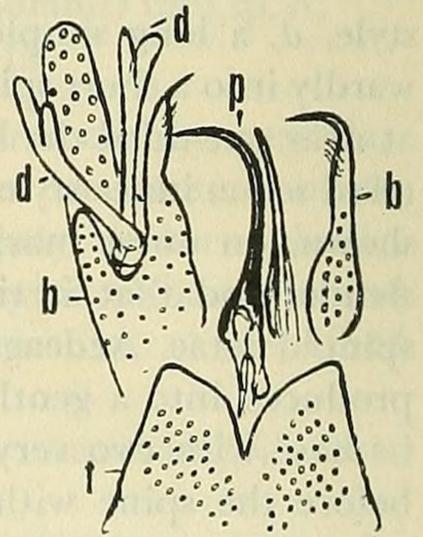
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posterior crest abundant, the more basal ones long and conspicuous.

*Holotype*, male, Lago Nonthué, Neuquen, Argentina, February 1, 1951 (S. Schachovsky).

The most similar species is *Aphrophila carbonaria* Alexander, of Argentina and South Chile, differing in details of coloration and in the structure of the male hypopygium.

**Gonomyia (Progonomyia) weiseri Alexander.**

*Gonomyia (Gonomyella) weiseri* Alexander; Ent. News, 31: 215-216; 1920.

Previously known only from high Andean stations in Jujuy, Argentina. Chile (Iquique): Mamiña, altitude 8,775 feet, September 15, 1951; Noasa, altitude 11,375 feet, September 22, 1951; Parca, altitude 8,450 feet, September 20, 1951; Yamijña, altitude 9,750 feet, September 21, 1951 (all collected by Peña).

**Amphineurus (Rhamphoneurus) apiculatus sp. n. (Fig. 15)**

Generally similar to *nullus* in the unvariegated legs and wing and in the long simple phallosomic structure of the hypopygium, differing from all other regional species in the nearly symmetrical mesal lobes of the basistyle, which are nearly straight on outer half, terminating in a small acute point.

*Male*. Length about 6 mm.; wing 6.8 mm.; antenna about 1.4 mm.

PLATE II

- Fig. 10. *Aphrophila bidentata* sp. n.; venation.  
 Fig. 11. *Amphineurus (Rhamphoneurus) nullus* Alexander; venation.  
 Fig. 12. *Teucholabis (Teucholabis) atahualpa* sp. n.; male hypopygium.  
 Fig. 13. *Teucholabis (Teucholabis) inca* sp. n.; male hypopygium.  
 Fig. 14. *Aphrophila bidentata* sp. n.; male hypopygium.  
 Fig. 15. *Amphineurus (Rhamphoneurus) apiculatus* sp. n.; male hypopygium.  
 Fig. 16. *Amphineurus (Rhamphoneurus) nullus* Alexander; male hypopygium.  
 Fig. 17. *Amphineurus (Rhamphoneurus) nonnullus* Alexander; male hypopygium.  
 Fig. 18. *Amphineurus (Rhamphoneurus) rutristylus* sp. n.; male hypopygium.

(Explanation of figures, *a*, aedeagus; *b*, basistyle; *d*, dististyle; *p*, phallosome; *t*, tergite).

Rostrum dark brown, about one-half as long as remainder of head, palpi black. Antennae relatively short; light yellow, especially the scape, outer segments light brown; intermediate flagellar segments about one-half their longest verticils. Head dark brownish gray.

Pronotal scutum yellowish brown, with long erect setae; scutellum and pretergites light yellow. Mesonotal praescutum with ground yellow, humeral areas light yellow, interspaces obscured, with long pale setae, disk with three dark brownish gray stripes, the central one very vaguely divided behind; scutum and scutellum brownish gray, the latter yellowed behind, parascutella yellow; mediotergite gray, yellowed posteriorly, pleurotergite chiefly darkened. Pleura pale brown, ventral sternopleurite and dorsopleural membrane more yellowed. Halteres yellow. Legs with coxae and trochanters light yellow; remainder of legs obscure yellow with darkened setae, outer tarsal segments dark brown to brownish black. Wings subhyaline to very slightly tinted, stigmal region vaguely more yellowed; veins brownish yellow, vestiture light brown. Venation: Cell  $M_3$  virtually sessile, with *m-cu* at the fork; vein *2nd A* sinuous, ending far before the level of *m-cu*.

Abdomen brown. Male hypopygium (Fig. 15) with the tergite, *t*, pale, broad, posterior border with a V-shaped emargination to form wide lobes; numerous pale setae scattered over the tergal plate with the exception of the apices of lobes. Basistyle, *b*, and dististyles, *d*, as figured, the latter glabrous. Mesal lobes of the two basistyles nearly symmetrical, one slightly longer than the other, each with base slightly dilated, the outer half to two-thirds straight, terminating in an acute spine; surface of outer part of lobe with abundant stout setae and microscopic scaly points. Phallosomic structure uniformly darkened, appearing as a long slender smooth rod that narrows to a small acute point.

*Holotype*, male, Chaihuin, Valdivia Prov. (Coast), South Chile, altitude 810 meters, March 20, 1955 (L. E. Peña).

The almost symmetrical mesal lobes of the basistyles of the hypopygium separates the present fly from other generally similar regional

members of the subgenus, including *Amphineurus* (*Rhamphoneurus*) *nonnullus* Alexander and *A. (R.) nullus* Alexander.

***Amphineurus* (*Rhamphoneurus*) *nonnullus* Alexander.**

*Amphineurus* (*Rhamphoneurus*) *nonnullus* Alexander; *Studia Entomologica*, 9: 491-492; 1966.

The type was from Aucar, Chiloe Island, Chile, taken January 6-15, 1952, by Peña.

Male hypopygium (Fig. 17).

***Amphineurus* (*Rhamphoneurus*) *nullus* Alexander.**

*Amphineurus* (*Rhamphoneurus*) *nullus* Alexander; *Studia Entomologica*, 9: 492-493; 1966.

Types from Aulen-Duhatao, Chiloe Island, Chile, taken February 6-8, 1952, by Peña.

Venation (Fig. 11), male hypopygium (Fig. 16).

***Amphineurus* (*Rhamphoneurus*) *rutristylus* sp. n. (Fig. 18)**

Allied to *glabristylus*; mesonotum grayish brown, humeral and lateral margins of praescutum yellowed; halteres yellow; legs brown; wings yellowed, stigma vaguely more darkened; male hypopygium with outer dististyle blackened, glabrous, inner style terminating in a triangular blade to appear shovel-shaped; mesal lobes of basistyle nearly identical on the two sides, terminating in a long setuliferous spine; phallosomic structure a long slender spine.

*Male*. Length about 7 mm.; wing 7.5 mm.; antenna about 2.2 mm.

Rostrum, including the labial palpi, nearly equal in length to remainder of head, dark brown; palpi brown. Antennae brown; intermediate flagellar segments strongly narrowed outwardly, with individual verticils that exceed the segments and additional dense very long pale setae. Head dark brown.

Pronotal scutum brown, paler behind; scutellum and pretergites light yellow. Mesonotum grayish brown, humeri and lateral margins of praescutum yellowed, disk with

four darker brown stripes, intermediate pair narrow, lateral stripes very broad, crossing the suture onto the scutal lobes; posterior sclerites of notum brown, scutellum paler. Pleura brown above, ventral mesepisternum more reddish brown. Halteres yellow. Legs with coxae and trochanters yellowed, posterior coxae darker; remainder of legs brown, outer segments darker, especially the tarsi. Wings yellowed, slightly darker beyond cord, stigmal region vaguely more infuscated; veins brown, trichia darker. Venation:  $R_{2+3+4}$  about twice the basal section of  $R_5$ ;  $r-m$ , basal section of  $M_{1+2}$ , and  $M_{1+2+3}$  all short and in transverse alignment.

Abdomen brown, hypopygium with tergite more yellowed with the exception of the apical lobes. Male hypopygium (Fig. 18) with tips of tergal lobes, *t*, obtuse, glabrous. Ventral lobe of basistyle, *b*, long and relatively slender. Outer dististyle, *d*, blackened, stem relatively short, apical lobes glabrous, dissimilar, the outer a long acute spine, inner lobe short and appressed; inner style distinctive, appearing as a straight rod, its apex triangularly expanded to form a shovel-shaped structure. Basistyle, *b*, with the mesal lobes of the two sides virtually identical, broad-based, terminating in a long black spine with delicate erect setulae almost to the tip. Phallosomic structure a long slender spine with less than the outer half blackened.

*Holotype*, male, Enco, Valdivia, Chile, altitude 1,400 - 1,600 meters, March 6, 1955 (L. E. Peña).

*Amphineurus* (*Rhamphoneurus*) *rutristylus* is told most readily by the structure of the hypopygium, including both dististyles and the mesal lobes of the basistyle. The shovel-shaped inner dististyle is distinctive.

***Maietta trimedia* Alexander.**

*Maietta trimedia* Alexander; *Studia Entomologica*, 9: 493 - 494; 1966.

The holotype male was from Chepu, Chiloe Island, Chile, collected February 10 - 14, 1952; paratypes from Aucar, Chiloe Island and from Caramavida, Nahuelbuta, Arauco, Chile, all specimens taken by Peña.

Venation (Fig. 19); male hypopygium (Fig. 20).

**Molophilus (Molophilus) binarius** sp. n.

(Fig. 21)

Belongs to the *plagiatus* group; general coloration of thorax brownish black; antennae of male relatively long; about one-third the body; male hypopygium with apical spine of basistyle slender, blackened; basal dististyle a blackened rod that divides at near two-thirds the length into two smooth subequal spines; phallosome at apex with two narrow setiferous lobes separated by a slightly broader emargination.

*Male*. Length about 4.5 mm.; wing. 5 mm.; antenna about 1.5 mm.

*Female*. Length about 5 mm.; wing 6 mm.

Rostrum and palpi black. Antennae of male relatively long, about one-third the body, scape and pedicel light brown, flagellum black; flagellar segments long-oval, the more proximal ones with very long verticils. Head brownish gray.

Pronotal scutum dark brown, scutellum and pretergites yellowed. Mesonotum and pleura dark brown to brownish black, dorsopleural membrane pale; in female, thorax vaguely more pruinose. Halteres very weakly darkened, base of stem yellowed. Legs with coxae pale brown or yellowish brown; trochanters yellowed; remainder of legs light brown, terminal tarsal segments blackened; subbasal enlargement on fore tibia of male distinct but only slightly more darkened than remainder, sensory area distinct. Wings pale brownish yellow, prearcular and costal fields clear light yellow; veins only slightly darker than ground. Venation:  $R_2$  lying shortly beyond level of  $r-m$ ; petiole of cell  $M_3$  a little longer than  $m-cu$  in male, slightly longer in female; vein 2nd  $A$  ending about opposite midlength of  $M_{3+4}$ .

Abdomen dark brown, hypopygium slightly more brightened. Male hypopygium (Fig. 21) with beak of basistyle,  $b$ , a slender blackened spine mesal face of style cephalad of this expanded into a glabrous flange. Basal dististyle,  $d$ , a stout black rod, at near two-thirds the length divided into two smooth spines, subequal in length, the inner one a trifle stouter. Phallosome,  $p$ , a flattened cushion, posterior border with two narrow lobes separated

by a slightly broader emargination, lobes with conspicuous setae, outer ones longest. The paratype has the basal style slightly different, with the outer spines less equal in size, but the distinctive phallosome alike in both specimens.

*Holotype*, male, Las Piedras, Magallanes, Chile, January 11, 1966 (O. S. Flint, Jr.). *Allotopotype*, female. *Paratopotype*, male.

Certain other Chilean members of the genus have the basal dististyle of the hypopygium somewhat as in the present fly, including especially certain species from the Islas Juan Fernández, including *Molophilus (Molophilus) antimenus* Alexander, *M. (M.) filiolus* Alexander, and *M. (M.) filius* Alexander, all differing among themselves in details of hypopygial structure, including especially the basal dististyle and the phallosome. Illustrations of the hypopygium of the numerous species of *Molophilus* presently known from Juan Fernández are provided in another paper by the writer (Rev. Chilena Ent., 2: 35-80, 47 Figs.; 1952).

**Molophilus (Molophilus) flavexemptus** sp. n.

(Figs. 22, 28)

Belongs to the *plagiatus* group, allied to *subexemptus*; general coloration of thorax light fulvous yellow; antennae very short; halteres yellow; legs brownish yellow; wings pale yellow, the veins only slightly darker; male hypopygium with beak of basistyle very slender; both dististyles relatively small, basal lobe of outer style stout, basal style short and stout, widened outwardly, apex oblique, with abundant blackened setae; apex of phallosomic plate truncate; aedeagus a powerful blackened rod, lower surface with small square to rectangular projections.

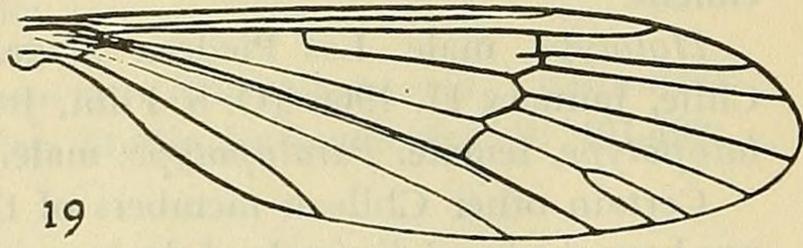
*Male*. Length about 3.5 - 3.6 mm.; wing 4.2 - 4.4 mm.; antenna about 0.8 mm.

Head light brownish gray; palpi brownish black. Antennae unusually short, light brown; flagellar segments long-oval with truncated ends, verticils of proximal segments very long.

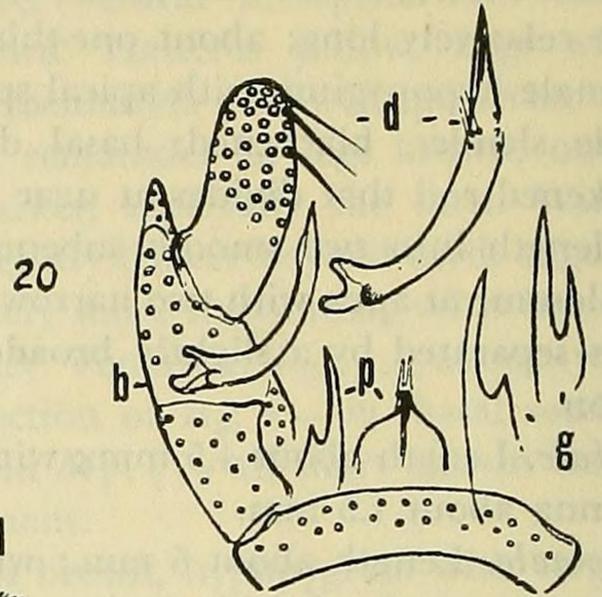
Pronotum and pretergites light yellow. Mesonotum light fulvous yellow, humeral region of praescutum clearer yellow. Pleura yellow, dorsally with a poorly indicated pale brown stripe. Halteres light yellow. Legs with coxae

and trochanters light yellow; remainder of legs pale brownish yellow; subbasal enlargement of fore tibia only slightly developed. Wings pale yellow, veins and trichia only

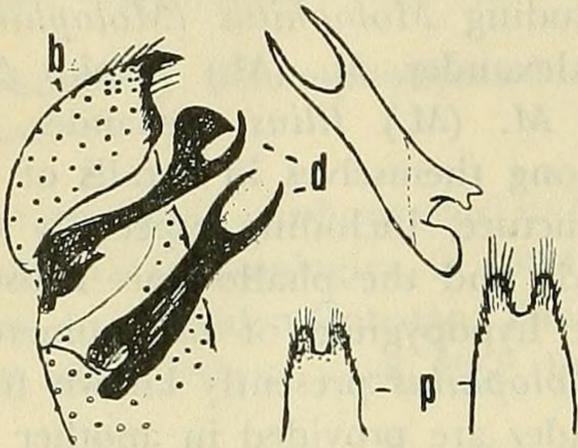
slightly darkened and difficult to see in balsam mounts. Venation:  $R_2$  nearly in transverse alignment with  $r-m$ ; petiole of cell  $M_3$  nearly twice  $m-cu$ ; vein 2nd  $A$  long, the cell narrow.



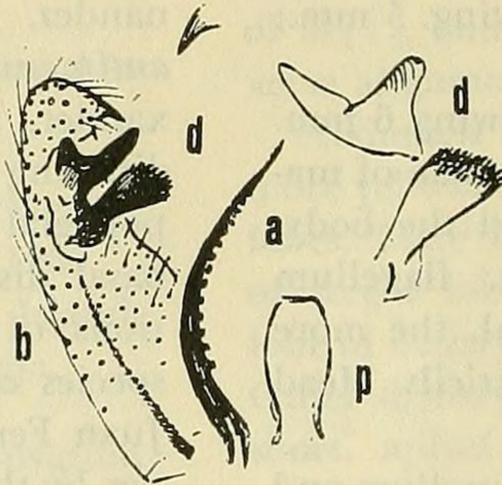
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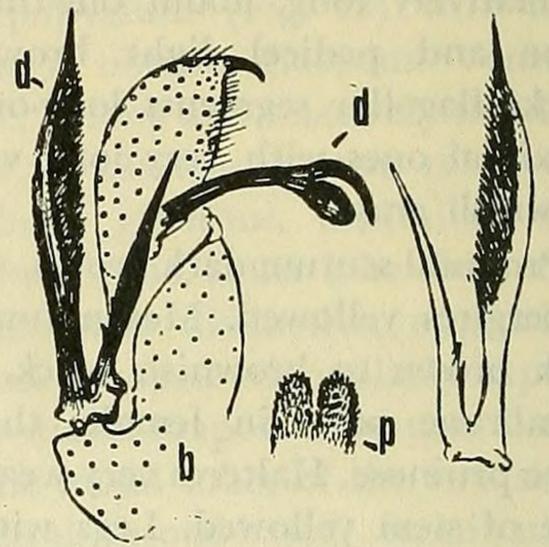
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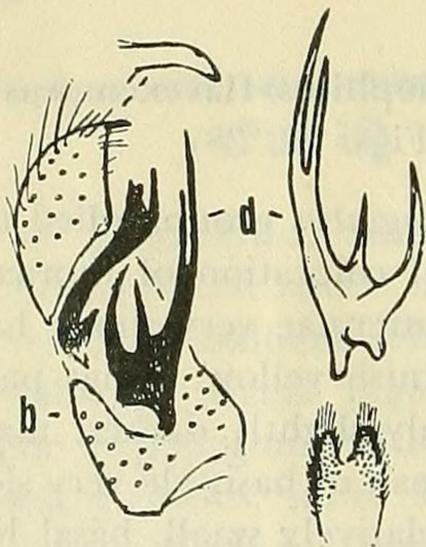
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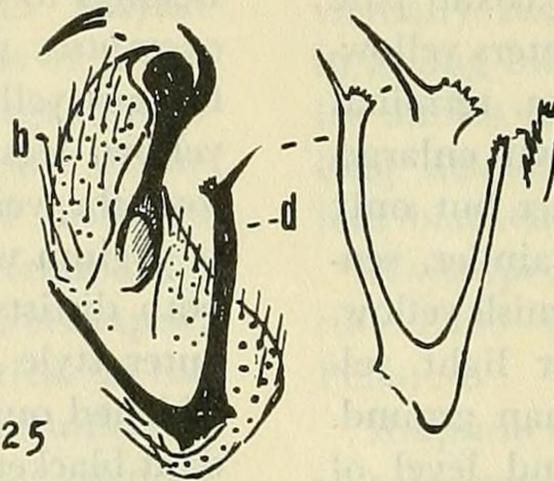
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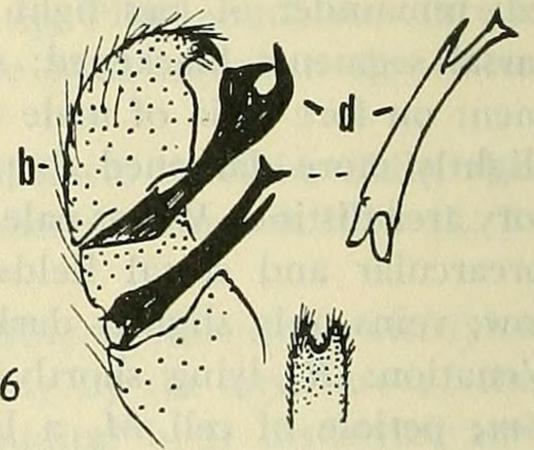
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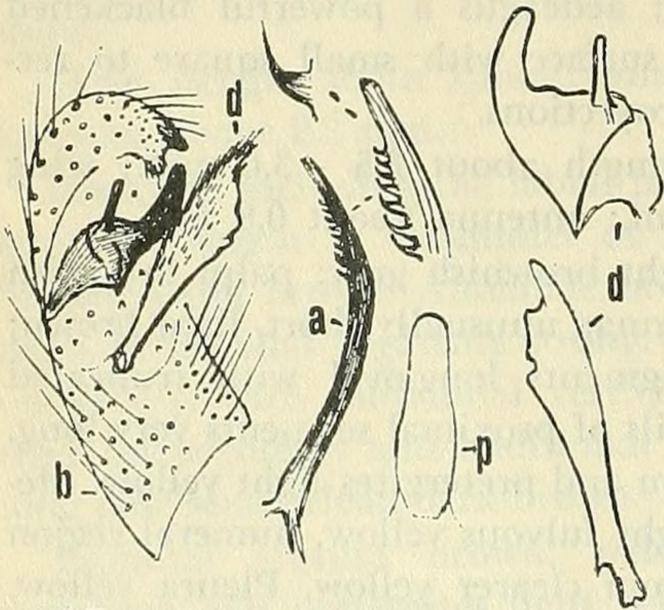
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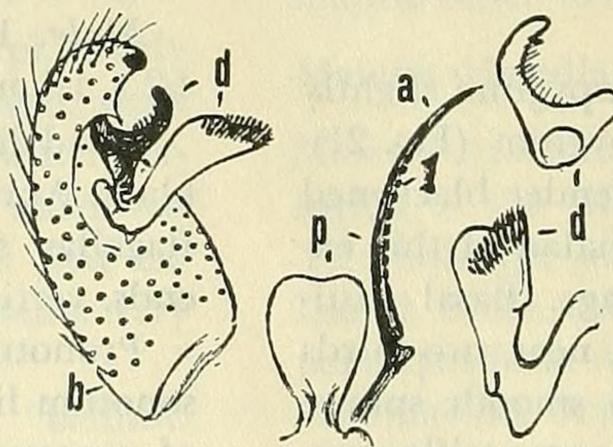
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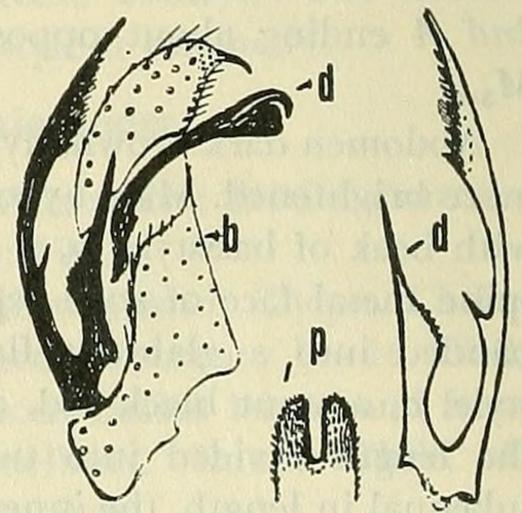
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Abdomen pale brownish yellow, hypopygium clearer yellow. Male hypopygium (Fig. 22) with beak of basistyle, *b*, very slender. Both dististyles, *d*, placed far distad; outer style a stout curved blackened structure, the basal lobe stouter than the apical point; basal style short and stout, subequal in length to outer style, widened outwardly, the oblique apex with abundant blackened setae. Phallosomic plate, *p*, about twice as long as broad, the greatest width beyond midlength, apex truncate. Aedeagus a powerful gently curved rod that narrows to a long terminal spine, lower surface almost to base with small square or rectangular projections that become smaller and more crowded outwardly.

*Holotype*, male, Chaihuín, Valdivia Prov. (Coast) South Chile, March 20, 1955 (L. E. Peña). *Paratype*, male, Rio Chaquigua, Valdivia altitude 460 meters, March 18, 1955 (L. E. Peña).

The most similar species is *Molophilus (Molophilus) subexemptus* Alexander, of South Chile, which is distinct in the very different darkened body and wing coloration, longer antennae, and in hypopygial details, including the stout obtuse beak of the basistyle and the different shape of the phallosomic

plate, with the apex shallowly emarginate (fig 28). Various other species in the Chilean fauna have the aedeagus heavily blackened, as in the present fly, including *M. (M.) exemptus* Alexander, *M. (M.) leonurus* Alexander, *M. (M.) lethaeus* Alexander, *M. (M.) pectinatus* Alexander, *M. (M.) phallogonatus* sp. n., *M. (M.) pretiosus* Alexander, *M. (M.) subexemptus* Alexander, and *M. (M.) tergo-spinosus* Alexander, all differing among themselves in the details of hypopygial structure.

#### *Molophilus (Molophilus) flinti* Alexander

*Molophilus (Molophilus) flinti* Alexander; Jour. Kansas Ent. Soc., 40: 380-381; 1967.

Types from Los Piedras, Magallanes, Chile, January 11, 1966, taken by Oliver S. Flint, Jr., for whom the species is named.

Male hypopygium (Fig. 23).

#### *Molophilus (Molophilus) magellanicus* sp. n. (Fig. 24)

Belongs to the *plagiatus* group; general coloration of thorax almost uniformly dark gray; antennae relatively short, brownish black; knobs of halteres light yellow; legs brownish black; wings yellowed basally, the remainder, including cell *2nd A* very pale brown; male hypopygium with basal dististyle with four unequal spines, the outer pair appressed, from a long base.

*Male*. Length about 4.5 mm.; wing 4.8 mm.; antenna about 1.3 mm.

Rostrum and palpi brownish black, terminal segment of the latter slender, longer than the third. Antennae relatively short, brownish black; flagellar segments oval, much shorter than the very long verticils of the more proximal segments. Head dark brownish gray.

Pronotum black, gray pruinose, pretergites restrictedly light yellow. Mesonotum almost uniformly dark gray, praescutal stripes scarcely differentiated; setae of praescutal interspaces very long, light yellow. Pleura dark gray. Halteres with stem pale brown at base, paler outwardly, knob light yellow. Legs with coxae and trochanters dark brown; remainder of legs brownish black, subbasal enlargement of fore tibia concolorous. Wings with basal half excepting the Anal field yellow, the remainder suffused with very pale brown, including cell *2nd A*; veins pale brown in the more darkened

#### PLATE III

Fig. 19. *Maietta trimedia* Alexander; venation.

Fig. 20. *Maietta trimedia* Alexander; male hypopygium.

Fig. 21. *Molophilus (Molophilus) binarius* sp. n.; male hypopygium.

Fig. 22. *Molophilus (Molophilus) flavexemptus* sp. n.; male hypopygium.

Fig. 23. *Molophilus (Molophilus) flinti* Alexander; male hypopygium.

Fig. 24. *Molophilus (Molophilus) magellanicus* sp. n.; male hypopygium.

Fig. 25. *Molophilus (Molophilus) ozotus* sp. n.; male hypopygium.

Fig. 26. *Molophilus (Molophilus) pansus* sp. n.; male hypopygium.

Fig. 27. *Molophilus (Molophilus) phallogonatus* sp. n.; male hypopygium.

Fig. 28. *Molophilus (Molophilus) subexemptus* Alexander; male hypopygium.

Fig. 29. *Molophilus (Molophilus) tehuelche* sp. n.; male hypopygium.

(Explanation of figures,— *a*, aedeagus; *b*, basistyle; *d*, dististyle; *g*, gonapophysis; *p*, phallosome; *t*, tergite).

ed fields, *Sc* and *Cu* more yellowed. Venation:  $R_2$  in transverse alignment with *r-m*; petiole of cell  $M_3$  about one-fourth longer than *m-cu*; vein 2nd *A* relatively long, ending about opposite midlength of  $M_{3+4}$ .

Abdomen brownish black, hypopygium slightly more brightened. Male hypopygium (Fig. 24) with the beak of basistyle, *b*, slender, nearly straight. Outer dististyle, *d*, with branches unequal, the inner one slender, straight; basal style distinctive, base stout, produced into four long slender spines, as illustrated, the more basal one stouter; outer pair of spines from a long base, closely appressed, inner spine longer, exceeding the base in length. Phallosomic plate, *p*, with the narrow lobes setiferous, separated by a subequal emargination.

*Holotype*, male, Las Piedras, Magallanes, Chile, January 11, 1966 (O. S. Flint, Jr.).

Various regional species of the *plagiatus* group have the basal dististyle of the hypopygium with long slender spines but none having the arrangement and relative proportions as in the present fly. By my key to the Chilean species of the genus (Diptera Patagonia and South Chile, 1: 200-202; 1929) it runs to species such as *Molophilus (Molophilus) appressus* Alexander and *M. (M.) perfidus* Alexander, differing from these and forms subsequently defined by the structure of this style.

***Molophilus (Molophilus) ozotus* sp. n.**

(Fig. 25)

Belongs to the *plagiatus* group; general coloration of mesonotum fulvous, humeral region of praescutum yellow; antennae brown, relatively long; legs yellow, outer tarsal segments dark brown; male hypopygium with beak of basistyle slender; basal dististyle profoundly bifid, the base very short, outer arm simple, slender, inner arm slightly longer and stouter, terminating in a long spine with a small flange that is margined with five or six small spines.

*Male*. Length about 3.5 mm.; wing 4.2 mm.; antenna about 1.4 mm.

Rostrum brownish yellow; palpi brown, terminal segment about one-half longer than the penultimate. Antennae brown, relatively long, as shown by the measurements; basal fla-

gellar segments long-oval, verticils small. Head yellowish brown.

Pronotum brown, pretergites clear light yellow. Mesonotum fulvous, humeral region of praescutum yellow. Pleura yellow, slightly darker dorsally, dorsopleural region yellow. Halteres with stem yellow, knob light brown. Legs with coxae and trochanters yellow; femora and tibiae obscure yellow; tarsi brownish yellow, outer segments dark brown. Wings obscure yellow, prearcular and costal fields clear yellow; veins light brown, the long trichia slightly darker brown. Venation:  $R_2$  some distance beyond level of *r-m*; petiole of cell  $M_3$  about one-half longer than *m-cu*, vein 2nd *A* ending opposite the latter.

Abdomen brownish yellow, incisures paler. Male hypopygium (Fig. 25) with the beak of basistyle, *b*, long and slender, black. Outer dististyle, *d*, very unequally bifid, outer blade very broad, tip obtuse, inner arm long and slender; basal style profoundly bifid, base very short, outer arm slender, apex with a few microscopic spines, inner arm stouter, extended into a long straight spine, at its base on outer margin with a round flange with five or six teeth.

*Holotype*, male, Rio Ancoa, Linares, Chile, October 12, 1951 (L. E. Peña).

*Molophilus (Molophilus) ozotus* is most similar to *M. (M.) flavidus* Alexander, which agrees in lacking setae on the basal dististyle of the hypopygium, the spines few and small. In *flavidus* the simple outer arm of the style is very long and slender, fully one-half longer than the inner arm, with the apical teeth differently arranged.

***Molophilus (Molophilus) pansus* sp. n.**

(Fig. 26)

Belongs to the *plagiatus* group; general coloration of thorax cinnamon brown; antennae of male relatively long, nearly one-half the body; legs pale brown; male hypopygium with basal dististyle a blackened rod, near apex divided into two unequal spines, the apex of the longer axial one divided into two very small divergent points.

*Male*. Length about 4 mm.; wing 4.5 mm.; antenna about 2 mm

Rostrum and palpi brown. Antennae dark

brown, relatively long, nearly one-half the body; flagellar segments long, narrowed outwardly, with abundant erect very long white setae. Head brownish gray, more yellowed anteriorly.

Pronotal scutum reddish brown, scutellum and pretergites light yellow. Mesonotum almost uniformly light cinamon brown, median region of praescutum darker brown anteriorly. Pleura reddish brown, slightly darker above beneath the yellowed dorsal membrane. Halteres light brown, base of stem restrictedly yellow; remainder of legs pale brown, femoral bases more yellowed; darkened subbasal ring of fore tibia only slightly differentiated. Wings almost uniformly suffused with pale brown, prearcular and costal regions vaguely more yellowed; veins pale brown, trichia darker. Venation:  $R_2$  opposite to slightly beyond level of  $r-m$ ; petiole of cell  $M_3$  about one-third longer than  $m-cu$ , the latter shortly before termination of vein *2nd A*.

Abdomen brown, hypopygium more yellowed. Male hypopygium (Fig. 26) with beak of basistyle,  $b$ , slender. Apex of outer dististyle,  $d$ , unequally bifid, inner arm slender, outer blade subtriangular in outline; basal style a very gently curved blackened rod, divided before tip into two unequal spines, the slightly longer axial one again split shallowly into two very small divergent points, the short lateral spine slender, acute, appressed. Phallosomic plate,  $p$ , ending in two slender lobes that are separated by a U-shaped emargination, surface with abundant setae that are longer on lobes, especially apically.

*Holotype*, male, Puerto Fuí, Valdivia, Chile, altitude 600-800 meters, March 4, 1955 (L. E. Peña). *Paratopotype*, male, pinned with type.

*Molophilus (Molophilus) pansus* suggests species such as *M. (M.) echo* Alexander in the conformation of the basal dististyle of the hypopygium, differing in the shallow apical fork of the axial spine of this style and in the deeply emarginate phallosomic plate.

***Molophilus (Molophilus) phalodontus* sp. n.**  
(Fig. 27)

Belongs to the *plagiatus* group, allied to *pretiosus*; size relatively large (wing of male

5.5 mm.); antennae long; general coloration of body brownish black; halteres yellow; legs brownish yellow; wings obscure yellow; male hypopygium with basal lobe of outer dististyle slender; basal style elongate, dilated at near midlength, thence narrowed and extended into a point; phallosomic plate glabrous, long, pale, tip obtuse; aedeagus heavily blackened, outer third with about twenty strong erect points, each extended into a hairlike filament.

*Male*. Length about 5 mm.; wing 5.5 mm.; antenna about 2.0 mm.

Rostrum and palpi dark brown. Antennae relatively long, exceeding one-third the wing, dark brown; flagellar segments long, verticils long but pale and inconspicuous. Head dark brown.

Pronotum variegated dark brown and yellow, pretergites clear light yellow. Mesonotum brownish black, sparsely pruinose, humeral region of praescutum restrictedly yellow. Pleura brownish black, dorsopleural membrane light yellow. Halteres yellow. Legs with fore coxae brown, remaining coxae and all trochanters brownish yellow; remainder of legs brownish yellow, femoral tips narrowly darker, outer two tarsal segments black. Wings obscure yellow, prearcular and costal fields, with the stigma, clear light yellow; veins dark yellow, trichia pale brown. Venation:  $R_2$  some distance beyond level of  $r-m$ ; petiole of cell  $M_3$  nearly three times  $m-cu$ ; vein *2nd A* long, ending about opposite two-thirds the petiole of cell  $M_3$ .

Abdomen brownish black, hypopygium more brownish yellow. Male hypopygium (Fig. 27) with beak of basistyle,  $b$ , blackened, stout, ventrally extended into a paler triangular lobe. Outer dististyle,  $d$ , entirely smooth, outer portion black, strongly bent, tip obtuse, basal lobe very slender, erect; basal style much longer, proximally relatively slender, at near midlength dilated and thence narrowed to a point, inner margin with about three obtuse lobes to appear coarsely crenate, outer two-thirds of style with abundant appressed setae, those at apex longer. Phallosome,  $p$ , a long depressed-flattened pale plate, broader on proximal half, thence slightly narrowed, tip obtuse, no marginal teeth, surface glabrous.

Aedeagus a heavily blackened gently curved rod that encases the penis, outer third of lower margin with about 20 strong erect points that are farther produced into hairlike extensions directed outwardly.

*Holotype*, male, Enco, Valdivia, Chile, altitude 1,400 - 1,600 meters, March 6, 1955 (L. E. Peña).

The most similar species is *Molophilus (Molophilus) pretiosus* Alexander, likewise from South Chile, which differs evidently in details of hypopygial structure, including especially the basal dististyle and armature of the aedeagus. In *pretiosus* the microscopic points of the latter are much more numerous and their tips are not extended into hairlike filaments. In *pretiosus* these points commonly are triangular in outline but in some specimens that appear to be conspecific are flat tipped and more numerous.

***Molophilus (Molophilus) tehuelche* sp. n.**  
(Fig. 29)

Belongs to the *plagiatus* group; size large (wing of male 6 mm.); mesonotal praescutum brownish gray, the humeral and lateral borders broadly light yellow, pleura dark brown, dorsopleural region yellow; fore tibiae of male with a very conspicuous black subbasal ring; wings strongly yellowed, veins darker yellow; male hypopygium with basal dististyle profoundly bifid, entirely black, distal fourth of outer arm slightly expanded, with relatively few appressed setae and spines.

*Male*. Length about 6 mm.; wing 6 mm.

*Female*. Length about 6 mm. wing 7 mm.

Rostrum testaceous yellow, palpi black. Antennae of male broken, of female relatively long, if bent backward reaching the wing root, basal five or six segments yellowed, the outer ones slightly more darkened; flagellar segments oval, with very long verticils and dense white pubescence. Head light brownish gray.

Pronotum light yellow, darker laterally, pretergites clear light yellow. Mesonotal praescutum with disk chiefly covered by three confluent brownish gray stripes, posterior half of central area more reddened, humeral and lateral borders broadly light yellow; pseudosutural foveae black, conspicuous; scutum with

lobes brownish gray, central area paler; scutellum infuscated, sides and the parascutella more yellowed; mediotergite chiefly brown, the broad anterolateral angles abruptly yellow, this including also the extreme dorsal border of the pleurotergite, the remainder brown. Pleura conspicuously dark brown, dorsopleural region broadly light yellow. Halteres light yellow. Legs with fore coxae brown, remaining coxae more testaceous yellow; trochanters yellow; femora brownish yellow; tibia yellow, in male fore tibia with a very conspicuous black subbasal ring that is more extensive than the yellow base, tips dark brown; tarsi brown, outer segments brownish black. Wings strongly yellowed, veins clear dark yellow. Venation:  $R_2$  slightly distad of level of  $r-m$ ; petiole of cell  $M_3$  about one-half longer than  $m-cu$ , vein 2nd  $A$  ending a short distance beyond origin of  $M_{3+4}$ .

Abdomen dark brown, hypopygium more yellowish brown. Male hypopygium (Fig. 29) with beak of basistyle,  $b$ , slender, decurved gently to the acute tip. Outer dististyle unequally bifid, upper blade with outer third strongly decurved, lower blade broad. Basal dististyle,  $d$ , as shown, entirely black, profoundly bifid into two unequal arms from a short base, the long outer arm slightly expanded on distal fourth, with relatively few dense appressed setae and fewer strong teeth, at near one-third the length of inner margin with a strong appressed spine, outer margin of arm with microscopic appressed spinules; inner arm of style slightly dilated on outer margin at near midlength, surface with microscopic spicules, outer third a long straight spine.

*Holotype*, male, Las Piedras, Magallanes, Chile, January 11, 1966 (O. S. Flint, Jr.). *Allotopotype*, female, pinned with type.

The most similar species is *Molophilus (Molophilus) armatistylus* Alexander, which differs in the coloration of the thorax and legs and in the details of structure of the male hypopygium, especially the basal dististyle. The hypopygium of *armatistylus*, and several related species, has been illustrated in my *Diptera of Patagonia and South Chile*, 1, Figs. 236-244, 1929; British Museum of Natural History.