NEW OR INSUFFICIENTLY-KNOWN CRANE-FLIES FROM CHILE (FAMILY TIPULIDAE, ORDER DIPTERA)

Part III (*)

By

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Since the publication of the two preceding papers under this general title, our knowledge of the distribution of the Tipulidae in Chile has advanced materially. Important series of specimens have been taken particularly by Messrs. Raúl Cortés P., Guillermo Kuschel and Luis E. Peña G., to whom I am very greatly indebted for the opportunity of continuing the study of Chilean crane-flies. A further very important collection of these flies was taken by the California Academy of Science Expedition, 1950-1951, under the leadership of Dr. Edwards S. Ross. All of these materials will be studied and the results published in succeeding reports. In the present paper I am describing a series of species belonging to the Eriopterine genus *Molophilus* Curtis, richly developed in the South Chilean fauna. The types of the novelties are preserved in my collection, with paratypes and duplicates of certain species to be returned for the National Collection of Chile.

In continuing this study it seems advisable to record the species described or included in the preceding parts and to give these consecutive numbers, which may be used when referring to such species in the future. This system of consecutive numbering will be followed in the present paper and in subsequent reports under this same title.

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TIPULINAE

1 *Macromastix* (*Macromastix*) *atrirostris* Alexander; II: 5-6.
2 *M. M. nahuelbutae* Alexander; II: 7-8.
3 *M.* (*Araucomyia*) *bullocki* Alexander; I: 118.
4 *M. A. penita* Alexander; I: 118-119.
5 *Holorusia problematica* Alexander; II: 8-10.
6 *Tipula* (*Eumicrotipula*) *angolensis* Alexander; I: 119-121.
7 *T. E. antarctica* Alexander; I: 121.
8 *T. E. anthonympha* Alexander; I: 121.
9 *T. E. araucania* Alexander; I: 119.
10 *T. E. bigotiana* Alexander; II: 10.
11 *T. E. brethesiana* Alexander; I: 121.
12 *T. E. brevicoma* Alexander; I: 121-122.
13 *T. E. chillanica* Alexander; II: 10-12.
14 *T. E. dimorpha* Alexander; I: 122.
15 *T. E. duseni* Alexander; I: 122.
16 *T. E. lanigera tau* Alexander; I: 122-124.
17 *T. E. latifolia* Alexander; I: 124-126.
18 *T. E. microspilota* Alexander; I: 126.
19 *T. E. pallidisignata salutatoria* Alexander; II: 12-13.
20 *T. E. parviloba* Alexander; I: 126.
21 *T. E. pirioni* Alexander; I: 126.
22 *T. E. spatulifera* Alexander; I: 126.
23 *T. E. subandina* Philippi; I: 126.
24 *T. E. subligulata* Alexander; I: 126; II: 13.
25 *T. E. tersoides* Alexander; II: 13-15.
26 *T. E. triemarginata* Alexander; I: 127.

CYLINDROTOMINAE

27 *Stibadocerina chilensis* Alexander; II: 15.

LIMONIINAE

LIMONIINI

28 *Limona* (*Dicranomyia*) *bullockiana* Alexander; I: 127.
29 *L. D. infumata* (Philippi); II: 15.
30 *L. D. pinodes* Alexander; II: 15.
31 *Helius* (*Helius*) *araucariae* Alexander; II: 15-17.

PEDICIINI

32 *Pedicia* (*Tricyphona*) *aysenensis* Alexander; I: 127-129.
33 *P. T. chilota* Alexander; I: 129.
34 *P. T. serrimarga* Alexander; I: 129-130 (Patagonia).

HEXATOMINI

35 *Austrolimnophila* (*Limnophilella*) *patagonica* Alexander; II: 17.
36 *A.* (*Austrolimnophila*) *celestissima* Alexander; II: 17-19.
37 *A. A. hazelae* Alexander; I: 130.
38 *A. A. merklei* Alexander; II: 19.
39 *A. A. microsticta* Alexander; I: 130.
40 *A. A. varitarsis* Alexander; II: 20.
41 *A. A. xanthoptera cayutuensis* Alexander; I: 130-131.
42 *Limnophila armigera* Alexander; II: 20-21.
43 *Gynoplistia* (*Gynoplistia*) *bicolor* (Philippi); II: 21.
44 *G. G. variicalcarata* Alexander; II: 21.

ERIOPTERINI

45 *Sigmatomera* (*Austrolimnobia*) *bullocki* (Alexander); I: 131.
46 *Aphrophila aurantiaca* Alexander; I: 131-132.
47 *A. coronata* Alexander; I: 132-134.
48 *A. viridinervis* Alexander; I: 134.
49 *Molophilus* (*Molophilus*) *diceros* Alexander; I: 134-135.

50 *Molophilus* (*Molophilus*) *monostyloides*, sp. n.

Belongs to the *monostylus* group; general coloration grayish brown; antennae short; male hypopygium with the basistyle terminating in a stout oval lobe that is provided with about eight long stout setae; a single unequally trilobed dististyle, the inner lobe placed far basad on lower margin.

Male. Length about 5 - 5.2 mm.; wing 5.5 - 5.8 mm.; antenna about 1.4 - 1.5 mm.

Rostrum and palpi brown. Antennae brownish black, relatively short, as shown by the measurements; flagellar segments long-suboval, the longest verticils approximately one-half longer than the segments, which are provided with a short dense white pubescence. Head grayish brown.

Pronotum brownish gray; pretergites obscure yellow. Mesonotum grayish brown, the praescutum with two poorly indicated intermediate brown stripes; pseudosutural foveae elongate, blackened; posterior sclerites more pruinose. Pleura grayish pruinose, with long yellow setae. Halteres obscure yellow, the knobs clearer yellow. Legs with the coxae brown; trochanters brownish yellow; femora brown, slightly more brightened basally; tibiae brownish yellow, the tips narrowly darkened, the posterior tibiae clearer yellow; tarsi brownish black. Wings with a dusky tinge, the prearcular and costal fields more yellowed; veins brown, the macrotrichia still darker. Venation: R_2 lying slightly distad of level of *r-m;* petiole of cell M_3 relatively short, about one-third longer than *m-cu;* vein *2nd A* long but only slightly sinuous.

Abdomen dark brown, the hypopygium slightly more yellowish brown. Male hypopygium (Fig. 1) with the basistyle, *b,* terminating in a stout oval lobe that is provided with about eight long stout setae; surface of lobe microscopically scabrous. A single dististyle, *d,* that is unequally trilobed; longest lobe a narrow central blade, its tip obtuse; outer lobe at near two-thirds the central blade on outer margin, appearing as a strong blackened spine; inner lobe a strong black spine, placed far basad on lower margin, its base and axil with delicate setae. Aedeagus elongate, its basal part consisting of two narrow blackened rods.

Holotype, male, Curacautin, Malleco, altitude 400 meters, December 18, 1950 (Peña). *Paratopotypes,* ♂♂.

The present fly is readily distinguished from the only other described member of the *monostylus* group, *Molophilus* (*Molophilus*) *monostylus* Alexander, by the structure of the male hypopygium. The hypopygium of this latter species has been figured in another report by the writer (Rev. de Entomologia, 18: 339; 1947).

51 *Molophilus* (*Molophilus*) *peñai,* sp. n.

Belongs to the *gracilis* group, *ruficollis* subgroup; general coloration fulvous yellow; halteres and wings pale yellow; male hypopygium with the outer dististyle having both arms shorts, obliquely truncated at tips; basal dististyle a long simple spine; phallosomic plate glabrous, gently widened outwardly, the apex subtruncate.

Male. Length about 4.2 mm.; wing 4.8 mm.; antenna about 1.2 mm.

Rostrum yellow; palpi brownish black. Antennae short; scape yellow, flagellum dark brown; flagellar segments subcylindrical to truncated long-oval, the verticils very long. Head yellow, somewhat paler behind.

Pronotum and pretergites pale yellow. Mesonotum fulvous, the lateral praescutal margin and humeral triangles clearer yellow. Pleura fulvous; dorsopleural membrane yellow. Halteres pale yellow. Legs with the coxae and trochanters yellow; remainder of legs yellow, the outer tarsal segments brownish black; modified subbasal ring of fore tibia of male conspicuous, dark brown, a little more extensive than the paler base. Wings pale yellow, the veins and macrotrichia darker yellow. Venation: R_2 lying slightly distad of the level of *r-m;* cell M_3 deep, its petiole correspondingly shortened, approximately twice *m-cu;* vein *2nd A* long, sinuous, ending some distance beyond the level of *m-cu.*

Abdomen yellow, the hypopygium somewhat more fulvous. Male hypopygium (Fig. 2) with the ventral lobe of the basistyle, *b,* long-produced, the mesal lobe much shorter. Both dististyles placed at base of ventral lobe, their points of insertion close together. Outer dististyle with both outer arms short, obliquely truncated at tips, separated by a small oval notch. Basal dististyle, *bd,* a long simple spine, its basal third more twisted. Phallosomic plate, *p,* glabrous, gently widened outwardly, the apex subtruncate.

Holotype, male, Termas de Rio Blanco, Malleco, altitude 1050 meters, March 20, 1951, (Peña).

I take great pleasure in naming this very distinct fly for the collector, Señor Luis E. Peña Guzmán, who captured all of the species discussed in the present report. By my key to the Chilean species of *Molophilus* (Diptera of Patagonia and South Chile, 1: 200-202; 1929), the present fly runs to *Molophilus* (*Molophilus*) *pirioni* Alexander, an entirely different fly. In its general appearance and coloration, it more resembles *M.* (*M.*) *flavidus* Alexander and allies, which belong to an entirely different group of the genus.

52 *Molophilus* (*Molophilus*) *perextensus,* sp. n.

Belong to the *plagiatus* group, *flavidus* subgroup; general coloration dark brown, sparsely pruinose; halteres uniformly yellow; wings broad, with a strong dusky tinge; male hypopygium with the outer lobe of the basistyle provided with unusually long setae; outer dististyle strongly widened outwardly; basal dististyle profoundly bifid, the outer arm long and slender, very gradually narrowed into a long apical spine, beyond midlength of mesal face with a compact group of about a dozen appressed spines; inner arm likewise narrowed to a simple acute spine, near base with two or three strong spines.

Male. Length about 4.5 mm.; wing 5 mm.; antenna about 1.3 mm. Rostrum and palpi black. Antennae black, approximately one-

fourth the length of wing; flagellar segments oval, with very long verticils, especially on the more proximal segments, and with a shorter dense white pubescence. Head dark gray.

Pronotum dark brown, the anterior pretergites narrowly yellow. Mesonotum dark brown, sparsely pruinose; humeral region very restrictedly obscure yellow. Pleura dark brownish gray, the dorsopleural region more yellowed. Halteres uniformly yellow. Legs with the coxae testaceous yellow; trochanters yellow; remainder of legs brown, the outer tarsal segments somewhat darker; fore legs broken. Wings broad, with a strong dusky tinge, the prearcular and costal regions a little more brightened; veins pale brown, the macrotrichia darker. Venation: R_2 lying just beyond the level of *r-m;* petiole of cell M_3 about twice *m-cu;* vein *2nd A* moderately sinuous, ending beyond one-third the length of the petiole of cell M_3.

Abdomen, including hypopygium, brownish black. Male hypopygium (Fig. 3) with the beak of the basistyle, *b,* long and slender, strongly curved, blackened; surface of outer lobe of basistyle with unusually long setae. Outer dististyle strongly widened outwardly, the two arms very dissimilar; the outer with an oblique blackened ridge before the obtuse tip. Basal dististyle, *bd,* distinctive, profoundly bifid as in the subgroup; the glabrous outer arm long and slender, very gradually narrowed into a long apical spine; on mesal face just beyond midlength with a compact group of about a dozen appressed spines but no setae; inner arm of style about two-thirds as long, likewise narrowed to a simple acute spine, near its base with two or three strong spines.

Holotype, male, Termas de Rio Blanco, Malleco, altitude 1050 meters, March 20, 1951 (Peña).

The present fly is most similar to species such as *Molophilus* (*Molophilus*) *serrulatus* Alexander, differing in the coloration and, especially, the structure of the male hypopygium.

53 *Molophilus* (*Molophilus*) *dilatus,* sp. n.

Belongs to the *plagiatus* group, *flavidus* subgroup; general coloration yellow, including the antennae, halteres and legs; male hypopygium with the curved apical spine of the basistyle and both dististyles heavily blackened; basal dististyle profoundly bifid, the outer arm longer, its stem slender, scabrous, the outer fourth a little expanded, the inner margin with about 10 to 12 appressed blackened teeth, the setae lacking or very reduced in number; inner arm terminating in an acute spine, the outer margin at near midlength produced into a broad flange or crest, its margin microscopically toothed.

Male. Length about 4.2 - 4.5 mm.; wing 4.6 - 5 mm.; antenna about 1.4 - 1.5 mm.

Rostrum yellow; palpi brown. Antennae (male) relatively long, nearly one-third as long as the wing or body, obscure yellow to brownish yellow; flagellar segments long-oval, with very long verticils. Head pale yellow.

Thoracic dorsum reddish yellow, the pleura clearer yellow. Halteres pale yellow throughout. Legs yellow, the outer tarsal segments more infuscated. Wings subhyaline, the veins pale brownish yellow, macrotrichia darker. Venation: Petiole of cell M_3 about one-half longer than *m-cu;* vein *2nd A* long, slightly sinuous, ending just beyond the level of *m-cu.*

Abdomen, including hypopygium, obscure yellow. Male hypopygium (Fig. 4) with the basistyle, *b,* terminating in a strong curved blackened hook. Outer dististyle very unequally bifid at apex, the outer arm a gently curved blackened rod, the inner one broadly flattened, its apex subtruncate. Basal dististyle, *bd,* profoundly bifid, as in the *flavidus* subgroup, both arms entirely blackened; outer arm longer, its stem slender, scabrous, with about the outer fourth a little expanded, glabrous, its inner edge with a series of about 10 to 12 appressed blackened teeth but with few or no setae, the apex a strong straight spine; inner arm shorter, terminating in an acute spine, the margin at near midlength produced into a broad flange, its margin microscopically toothed or crenate.

Holotype, male, Termas de Rio Blanco, Malleco, altitude 400 meters, March 5-27, 1951 (Peña). *Paratopotypes,* ♂♂. *Paratypes,* ♂♂, Curacautin, Malleco, altitude 400 meters, December 8-18, 1950 (Peña).

Among the rather numerous species of the *flavidus* subgroup, the present fly seems most nearly related to *Molophilus* (*Molophilus*) *inflexibilis* Alexander, of Patagonia, especially in the expanded inner arm of the basal dististyle. It differs evidently in the details of structure of the remainder of the male hypopygium.

54 *Molophilus* (*Molophilus*) *metuendus,* sp. n.

Belongs to the *plagiatus* group; general coloration reddish brown to darker brown; antennae (male) short; halteres pale; legs brown; male hypopygium with the beak of the basistyle long and slender, curved; basal dististyle profoundly branched near base, the axial arm expanded at distal end, its outer margin with a series of about 10 to 12 obtuse teeth, the apex a long slender spine; on lower face a short distance from the base with a long powerful simple rod that terminates in a strong spine.

Male. Length about 3.8 - 4 mm.; wing 4.5 - 5 mm.; antenna about 1.0 - 1.2 mm.

Female. Length about 4.5 - 4.6 mm.; wing 5 mm.

Rostrum and palpi brownish black. Antennae brown, the flagellum somewhat paler than the basal segments; flagellar segments oval, with long conspicuous verticils. Head brownish gray to clear gray.

Pronotum brown, the scutellum and pretergites narrowly whitened. Mesonotum reddish brown to brown, the humeral region of the praescutum restrictedly brightened. Pleura dark brown; dorsopleural membrane pale. Halteres yellow, in cases the knobs appearing darker because of setae. Legs with the coxae brownish testaceous; trochanters obscure yellow; remainder of legs brown. Wings tinged with brownish gray, the base and costal region more yellowed; veins and macrotrichia brown, the latter darker. Venation: R_2 lying distad of the level of *r-m;* petiole of cell M_3 relatively long, nearly three times *m-cu;* vein *2nd A* long, very gently sinuous, ending about opposite one-third the length of the petiole of cell M_3.

Abdomen, including hypopygium, dark brown. Male hypopygium (Fig. 5) with the beak of the basistyle, *b,* long and slender, strongly decurved to an acute point. Outer dististyle with the two arms very unequal, the inner slender, curved. Basal dististyle, *bd,* distinctive, profoundly branched near base, the axial expanded at distal end, the outer margin of the expanded part with a series of from 10 to 12 obtuse teeth; apex of style thence produced into a long slender, slightly upcurved spine; basal arm of style a powerful simple rod that extends virtually to the apex of the main arm, at tip narrowed into a long spine.

Holotype, male, Curacautin, Malleco, altitude 400 meters, December 18, 1950 (Peña). *Allotopotype,* ♀, pinned with type. *Paratopotypes,* ♂♀, December 8-18, 1950 (*Peña*).

In some respects, the present fly suggests certain dark-colored species of the *flavidus* subgroup, but from the structure of the basal dististyle of the male hypopygium scarcely seems to be placeable with them. In the present fly, the common base of the style is much longer than in virtually all the species being more as in the otherwise quite distinct *Molophilus* (*Molophilus*) *gymnocladus* Alexander.

55 *Molophilus* (*Molophilus*) *fortidens,* sp. n.

Belongs to the *plagiatus* group; general coloration of mesonotal praescutum and scutum reddish, the postnotum and pleura dark plumbeous brown; legs obscure brownish yellow, the subbasal fore tibial ring of male conspicuously darkened; wings broad; male hypopygium with the basal dististyle a powerful three-spines structure, one spine being

on the outer margin before midlength, the remaining pair on outer half of a broad flattened plate; phallosome a strongly bilobed cushion, provided with long dense setae.

Male. Length about 4.3 - 4.8 mm.; wing 4.5 - 5.5 mm.; antenna about 1.2 - 1.4 mm.

Female. Length about 4 - 4.5 mm.; wing 4.5 - 5.5 mm.

Rostrum and palpi brown. Antennae relatively long, approximately one-fourth as long as wing, dark brown, the more proximal segments a trifle paler; flagellar segments suboval, with truncated ends; verticils very long, especially on the more proximal segments, the longest nearly three times the segments; a pale dense pubescence. Head gray.

Pronotum and pretergites whitened. Mesonotal praescutum and scutum reddish, very weakly pruinose, the praescutum more heavily darkened medially in front; scutellum yellow; postnotum and pleura dark plumbeous brown. Halteres yellow, the knobs very slightly darker. Legs with the coxae yellow, the fore pair slightly darker; trochanters yellow; remainder of legs obscure brownish yellow to pale brown, the outer tarsal segments dark brown; subbasal fore tibial ring of male darkened, conspicuous. Wings broad, yellow, the outer half a trifle more darkened. Venation: R_2 lying immediately distad of level of *r-m;* petiole of cell M_3 short, only about one-third to one-half longer than *m-cu;* vein *2nd A* sinuous, ending shortly beyond level of *m-cu.*

Abdomen brown, the hypopygium more brightened, in cases yellow. Male hypopygium (Fig. 6) with the beak of the basistyle, *b,* slender, only gently curved. Outer dististyle with the arms very unequal, the outer one flattened, its apex truncated, with the inner angle farther produced into a short point. Basal dististyle, *bd,* appearing as a powerful three-spined structure, including a long spine on outer margin before midlength; beyond this point the style is broad, forking on outer half or less into two stout spines. Phallosome, *p,* a strongly bilobed cushion, the surface with dense long setae. Aedeagus, *a,* weakly dilated at near midlength.

Holotype, ♂, Termas de Rio Blanco, Malleco, altitude 1050 meters, March 5, 1951 (Peña). *Allotopotype,* ♀, pinned with type. *Paratopotypes,* ♂♀.

Molophilus (*Molophilus*) *fortidens* is most nearly related to species such as *M.* (*M.*) *appressus* Alexander and *M.* (*M.*) *subappressus* Alexander, differing most evidently in the structure of the male hypopygium, particularly the basal dististyle.

56 *Molophilus* (*Molophilus*) *furcus*, sp. n.

Belongs to the *plagiatus* group; general coloration brownish yellow to darker brown; male hypopygium with the basal dististyle a powerful blackened rod, at midlength forking into two subequal spines, the inner one a little shorter; phallosome an oval setiferous plate, the apex entire, truncate.

Male. Length about 3.5 - 4 mm.; wing 3.9 - 4.6 mm.; antenna about 1.3 - 1.5 mm.

Rostrum obscure yellow; palpi black. Antennae with the basal segments yellow, remainder of flagellum brownish black; basal segments enlarged; flagellar segments oval, the unilaterally distributed verticils greatly exceeding the segments. Head light gray.

Thorax almost uniformly brownish yellow to ochreous, the surface sparsely pruinose. Halteres whitened. Legs with the coxae and trochanters yellow; remainder of legs pale brown. Wings with a grayish tinge, the prearcular and costal fields more yellowed; veins brownish yellow, the macrotrichia dark brown. Venation: R_2 in approximate transverse alignment with *r-m; m-cu* oblique, varying from about two-thirds the petiole of cell M_3 to subequal in length to it; vein *2nd A* sinuous, ending about opposite midlength of *m-cu*.

Abdomen, including hypopygium, dark brown. Male hypopygium (Figs. 7, 7A) with the beak of the basistyle, *b*, slender, decurved. Outer dististyle with the arms unequal, the inner one slender, cylindrical. Basal dististyle, *bd*, appearing as a powerful blackened rod, at midlength forking into two unequal spines, the inner one a little shorter. Phallosome, *p*, an oval plate, covered with abundant relatively short setae, the apex entire, truncate. Aedeagus, *a*, long and slender, a trifle dilated shortly before midlength.

The paratype is smaller (the smallest measurements given) and darker, especially the rostrum and mesonotum. There is a slight difference in the shape of the basal dististyle but the two flies must be regarded as being conspecific.

Holotype, ♂, Termas de Rio Blanco, Malleco, altitude 1050 meters, March 5-27, 1951 (Peña). *Paratype*, ♂, Curacautin, Malleco, altitude 400 meters, December 6-24, 1950 (Peña).

In the nature of the phallosomic plate of the male hypopygium, the present fly is most like *Molophilus* (*Molophilus*) *rubidithorax* Alexander, which differs very evidently in the structure of the basal dististyle. Most other allied species have the outer end of the phallosome deeply emarginate.

57 *Molophilus* (*Molophilus*) *monoctenus,* sp. n.

Belongs to the *plagiatus* group; general coloration brownish gray; antennae of moderate length, approximately one-fourth the wing; male hypopygium with the basal dististyle appearing as a powerful blackened rod, strongly pectinate on outer margin, including a series of about seven branches, the outer three spines much reduced; phallosome a bilobed setiferous cushion.

Male. Length about 4.5 - 4.7 mm.; wing 5.1 - 5.5 mm.; antenna about 1.3 - 1.4 mm.

Rostrum and palpi brownish black. Antennae moderately long, approximately one-fourth the length of the wing; scape yellow, remainder of organ brownish black; flagellar segments long-oval, with truncated ends; verticils of the more proximal segments very long, approximately two and one-half times the segments themselves; an additional dense white pubescence. Head dark gray.

Pronotum brown, the pronotum obscure yellow; anterior pretergites more whitened. Mesonotal praescutum virtually covered by three confluent brownish gray stripes, the humeral triangles and narrow lateral borders yellow; most of remainder of notum brownish gray, the scutellum obscure testaceous yellow. Pleura brownish gray, the dorsal sternopleurite a trifle paler; dorsopleural membrane yellow. Halteres whitened. Legs with the coxae and trochanters yellow; remainder of legs yellow, the outer tarsal segments darker; fore tibia of male with the subbasal ring brown, relatively broad. Wings broad, strongly tinged with yellow; veins darker yellow, macrotrichia brown. Venation: R_2 virtually in transverse alignment with *r-m,* R_{2+3+4} thus unusually short, arcuated; petiole of cell M_3 about one-fourth longer than *m-cu;* vein *2nd* A strongly sinuous, ending about opposite the cephalic end of *m-cu.*

Abdomen dark brown, the hypopygium conspicuously yellow. Male hypopygium (Fig. 8) with the beak of the basistyle, *b,* slender, darkened, with conspicuous setae surrounding its base. Outer dististyle with the two arms only slightly unequal, the outer one broadest. Basal dististyle, *bd,* distinctive, appearing as a powerful blackened rod, strongly pectinate on the outer margin, including a series of about seven branches, the most basal before midlength, shorter than the subequal second and third, the latter at near two-thirds the style; fourth spine about one-half the size of the basal one; outer three spines progressively more reduced, the last placed close to the short apical point. Phallosome, *p,* a bilobed cushion that is covered with unusually long and conspicuous setae and with scattered fleshy setiferous protuberances. Aedeagus, *a,* long and slender, more dilated at near midlength.

Holotype, male, Termas de Rio Blanco, altitude 1050 meters, March 5-27, 1951 (Peña). *Paratopotype,* ♂.

The most similar described species is *Molophilus* (*Molophilus*) *perfidus* Alexander, which is well-distinguished by the structure of the male hypopygium, particularly the basal dististyle. The hypopygium of *M.* (*M.*) *pectinatus* Alexander also is generally similar but quite distinct in the various details.

58 *Molophilus* (*Molophilus*) *apicidens,* sp. n.

Belongs to the *plagiatus* group; general coloration brownish yellow; antennae short; halteres and legs yellow, the outer tarsal segments brownish black; wings brownish yellow; male hypopygium with the ventral lobe of the basistyle unusually slender; outer dististyle with both apical arms appearing as slender spines; basal dististyle a long slender rod, at apex expanded into a blade, each outer apical angle farther produced into a curved black spine; phallosome truncated at apex, the surface microscopically setuliferous.

Male. Length about 3 mm.; wing 3.7 mm.

Female. Length about 4.5 mm.; wing 5.2 mm.

Rostrum yellow; palpi brownish black. Antennae short, the outer segments broken; scape and pedicel yellow, flagellum a trifle darker; flagellar segments oval, about one-half as long as the longest verticils. Head gray.

Thorax almost uniformly brownish yellow, the pronotum and humeral triangles of the praescutum clearer yellow. Halteres yellow. Legs yellow, the outer tarsal segments brownish black; fore tibial darkened ring of male narrow but distinct. Wings weakly brownish yellow, the prearcular and costal portions clear light yellow; veins slightly darker than the ground; macrotrichia dark brown. Venation: R_2 and *r-m* virtually in transverse alignment; petiole of cell M_3 approximately three times *m-cu;* vein *2nd A* gently sinuous, ending a short distance beyond *m-cu.*

Abdomen brown, the hypopygium a trifle more brightened. Male hypopygium (Fig. 9) with the lobe of the basistyle, *b,* unusually slender, the beak stout and scarcely curved; mesal face of lobe more setuliferous. Outer dististyle slender-stemmed, the two apical arms blackened, appearing as slender spines, the outer one longest, curved at tip. Basal dististyle, *bd,* a long slender rod, at apex expanded into a blade, each outer apical angle of which is farther produced into a curved black spine. Phallosome, *p,* gently widened outwardly, the apex truncated, surface microscopically setuliferous. Aedeagus, *a,* relatively small and slender.

Holotype, male, Curacautin, Malleco, altitude 400 meters, December 19, 1950 (Peña).

This fly is most similar to species such as *Molophilus* (*Molophilus*) *appressus* Alexander, and allies, differing particularly in the structure of the male hypopygium, especially of the styli.

59 *Molophilus* (*Molophilus*) *leonurus*, sp. n.

Belongs to the *plagiatus* group; general coloration of thorax reddish yellow, the dorsal pleural region slightly darker; head yellow; male hypopygium with the basistyle elongate, at apex produced into a decurved double beak; outer dististyle primarily bilobed, the outer arm emarginate to form two lobules; basal dististyle a long curved simple rod, gently expanded on outer end which splits into approximately a score of points or fimbriations; phallosome glabrous; aedeagus conspicuously blackened, its lower face with microscopic spinulae.

Male. Length about 4 - 4.2 mm.; wing 4.5 - 4.8 mm.; antenna about 1 mm.

Female. Length about 5 mm.; wing 5 - 5.2 mm.

Rostrum obscure yellow; palpi dark brown. Antennae relatively short, obscure testaceous yellow, the outer segments slightly more darkened; flagellar segments long-oval with truncated ends; verticils, especially of the more proximal segments, very long. Head yellow, the posterior vertex more or less darkened medially.

Pronotum yellow. Mesonotum chiefly reddish yellow, the pretergites and humeral region of praescutum clearer yellow. Pleura with a pale brown dorsal longitudinal stripe, the ventral portions and dorsopleural region yellow. Halteres pale yellow. Legs with the coxae and trochanters yellow; remainder of legs yellow, the outer tarsal segments more infuscated; darkened ring of fore tibia of male narrow but conspicuous, darkest in color on the outer surface. Wings pale yellow, the prearcular and costal regions somewhat more saturated; veins yellow, macrotrichia brown. Venation: R_2 lying a short distance beyond the level of *r-m;* petiole of cell M_3 relatively long, a little less than three times *m-cu;* vein *2nd A* sinuous, ending some distance beyond *m-cu.*

Abdomen pale brown, the hypopygium darker. Ovipositor with the valves, especially the cerci, long and slender, only gently upcurved. Male hypopygium (Fig. 10) distinctive in all details. Basistyle, *b*, elongate, narrowed outwardly, the apex a decurved double beak. Both dististyles arising close together at near midlength of the style. Outer dististyle entirely blackened, primarily bilobed, the outer lobe again deeply emarginate to form two lobules; basal lobe longest, cylindrical,

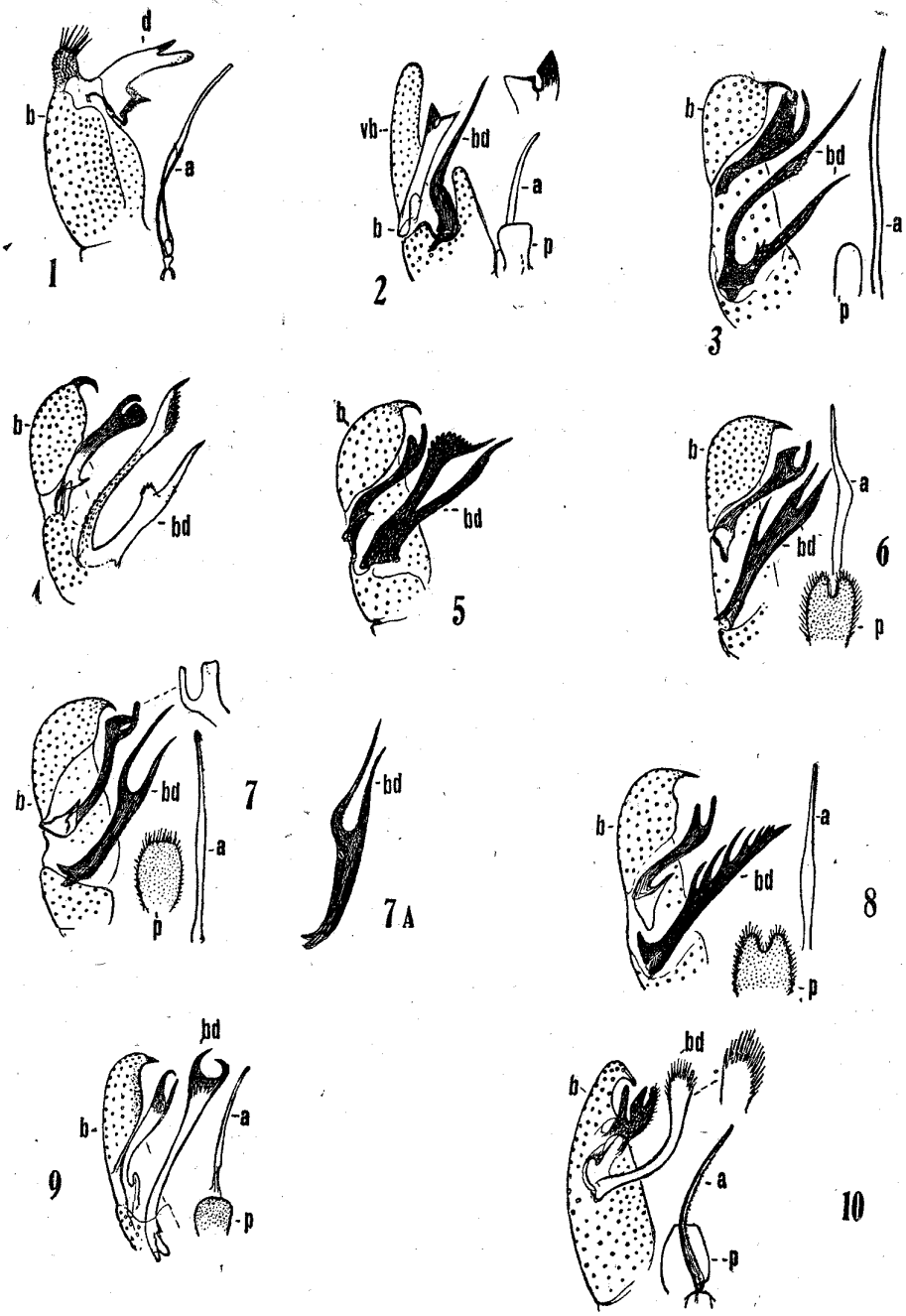
simple; outer bifid lobe conspicuously setiferous. Basal dististyle, *bd,* a long curved simple rod, gently expanded at outer end which is conspicuously fimbriate with nearly a score of slender spinous points, some of which again are split apically. Phallosome, *p,* glabrous, narrowed outwardly, the apex truncate. Aedeagus, *a,* conspicuously blackened, curved on basal third, the lower face for much of the length with microscopic spinulae.

Holotype, male, Curacautin, Malleco, altitude 400 meters, December 6-24, 1950 (Peña). *Allotopotype,* female, pinned with type. *Paratopotype,* 1 male.

The present fly is so distinct from all other regional members of the genus that no close relatives can be indicated. The double beak of the basistyle, trilobed outer dististyle, and very peculiar structure of the basal dististyle all mark the fly as being entirely distinct. The most similar species is perhaps *Molophilus* (*Molophilus*) *pretiosus* Alexander.

SUMARIO

El autor continúa en este trabajo sus anteriores publicaciones sobre Tipulidae (Diptera) de Chile que con el mismo título han aparecido en esta Revista. En el presente trabajo se describe diez nuevas especies chilenas del género *Molophilus* Curtis, todas procedentes de Curacautín, provincia de Malleco, Chile.



EXPLANATION OF FIGURES

Fig. 1. *Molophilus* (*Molophilus*) *monostyloides*, sp. n.
Fig. 2. *Molophilus* (*Molophilus*) *peñai*, sp. n.
Fig. 3. *Molophilus* (*Molophilus*) *perextensus*, sp. n.
Fig. 4. *Molophilus* (*Molophilus*) *dilatus*, sp. n.
Fig. 5. *Molophilus* (*Molophilus*) *metuendus*, sp. n.
Fig. 6. *Molophilus* (*Molophilus fortidens*, sp. n.
Fig. 7. *Molophilus* (*Molophilus*) *furcus*, sp. n.
Fig. 8. *Molophilus* (*Molophilus*) *monoctenus*, sp. n.
Fig. 9. *Molophilus* (*Molophilus*) *apicidens*, sp. n.
Fig. 10. *Molophilus* (*Molophilus*) *leonurus*, sp. n.

(Explanation of symbols: *a*, aedeagus; *b*, basistyle; *bd*, basal dististyle; *d*, dististyle; *p*, phallosome; *vb*, ventral lobe of basistyle).