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**Undescribed or little-known Tropical American
Tipulidae (Diptera). Part II**

Charles P. Alexander

2. *Austrolimnophila* (*Austrolimnophila*) *mannheimsi* Alexander

Austrolimnophila (*Austrolimnophila*) *mannheimsi* Alexander; Ent. News, 71: 15-17; 1960.

Male. — Length about 12 mm.; wing 11.5 mm.; antenna, about 2.5 mm. A medium sized species, as shown by the measurements; mesonotal praescutum brownish yellow with an intermediate pair of darker brown stripes; thoracic pleura yellow with small dark spots; legs dark brown. Wings (Fig. 1) obscure yellow, with abundant brown dots in all cells. Male hypopygium (Fig. 7).

Holotype, ♂, Hacienda Udima, near Taulis, Peru, circa 6°50' S. Lat., 79°10' W. Long., altitude 1600-2200 meters, December 1952 (H. W. Koepcke).

The species was named for the distinguished Dipterologist, Dr. Bernhard Mannheims (Bonn), who sent me the material.

3. *Limnophila colophallus* sp. n.

Size medium (wing of male about 5.5 mm.); general colouration of head and thorax gray, praescutum with three slightly darker brown stripes; halteres and legs yellow; wings faintly tinged with brown, stigma very pale brown; macrotrichia on veins beyond cord, lacking on basal veins and in the cells; veins R_3 and R_4 divergent, cell R_3 at margin very extensive, cell M_1 small, about one-third its petiole; male hypopygium with tergal lobes very low; outer dististyle setiferous, the apex unequally bidentate, free outer end of inner style slender; gonapophysis oval, the lateral spine large; aedeagus short.

Male. — Length about 5 mm.; wing 5.6 mm.; antenna about 0.9 mm. Rostrum brown, palpi brownish black. Antennae short, dark brown; verticils of the more proximal flagellar segments slightly longer than the outer ones. Head gray.

Pronotum brownish gray. Mesonotal praescutum gray with three slightly darker brown stripes; tuberculate pits and pseudo-sutural foveae black; scutal lobes brownish gray, posterior sclerites of notum light brown. Pleura light brown, faintly pruinose. Halteres long, obscure yellow. Legs with coxae and trochanters yellow; remainder of legs brownish yellow, terminal two tarsal segments darker. Wings (Fig. 2) very faintly tinged with brown, prearcular and costal fields more yellowed, stigma very pale brown; veins light brown. Macrotrichia on longitudinal veins beyond general level of cord, including a few on outer fourth of *1st A*; no trichia in wing cells. Venation: Sc_1 ending

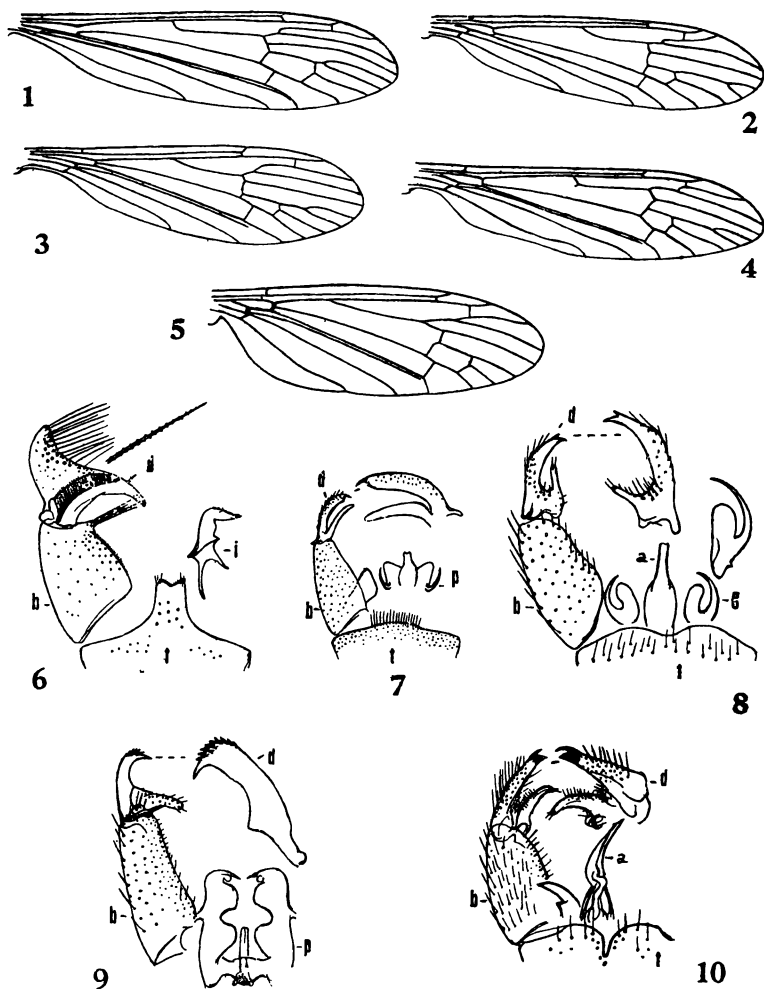


Fig. 1. *Austrolimnophila (Austrolimnophila) mannheimsi* Alexander; venation. — Fig. 2. *Limnophila colophallus* sp. n.; venation. — Fig. 3. *Limnophila ctenonycha* Alexander; venation. — Fig. 4. *Limnophila peñana* sp. n.; venation. — Fig. 5. *Hexatoma (Eriocera) schildeana* sp. n.; venation. — Fig. 6. *Austrolimnophila (Austrolimnophila) bulbifera* Alexander; male hypopygium. — Fig. 7. *Austrolimnophila (Austrolimnophila) mannheimsi* Alexander; male hypopygium. — Fig. 8. *Limnophila colophallus* sp. n.; male hypopygium. — Fig. 9. *Limnophila peñana* sp. n.; male hypopygium. — Fig. 10. *Shannonomyia halterata* sp. n.; male hypopygium. — (Explanation of symbols: a, aedeagus; b, basistyle; d, dististyle; g, gonapophysis; i, interbase; p, phallosome; t, tergite).

R_{1-2} nearly twice R_2 ; veins R_3 and R_4 divergent, cell R_3 at margin very extensive, nearly four times cell R_2 ; cell M_1 small, about one-third its petiole; $m-cu$ shortly beyond fork of M .

Abdomen brown, subterminal segments slightly more

8) with posterior border of tergite, *t*, shallowly emarginate, the lobes very low with very few setae, none close to border. Outer dististyle, *d*, black, tip unequally bidentate, the lateral spine smaller and more slender, outer surface with scattered long appressed setae from conspicuous tubercles; inner style with the free outer end very slender. Phallosome with gonapophyses, *g*, appearing as oval blades, the lateral spine strong; aedeagus, *a*, very short, extending only a short distance beyond the gonapophyses.

Holotype, ♂, Caramavida, Nahuelbuta, Arauco, Chile, altitude 1000 meters, February 5-10, 1953 (L. E. Peña).

Limnophila colophallus differs from other small sized regional members of the genus in the hypopygial structure, including especially the tergite, dististyles and aedeagus. Such species include *L. ctenonycha* Alexander, *L. inculta* Alexander, *L. humidicola* Alexander, and some others.

The present fly, as well as several others included in the present report and many others in my collection, was included in collections made in the Nahuelbuta range in Arauco Province, Chile, many in the *Araucaria* forests at the higher altitudes. A readily available paper on this habitat is: Anthony, H. E., Camping in a prehistoric forest. (*Natural History*, 30: 367-376, 10 figures, 1 map; 1930).

4. *Limnophila ctenonycha* Alexander

Limnophila ctenonycha Alexander; *Diptera Patagonia & South Chile*, 1: 136-137, fig. 70 (venation), fig. 207 (♂ hypopygium); 1929.

The type male and only other specimen known to me was from Peulla, at the east end of Lago Todos-los-Santos, altitude 500 feet, taken by Fred W. Edwards in December 1926. Two females now are available and I am describing one of these as allotype.

F e m a l e. — Length about 4 mm.; wing 4 mm.; antenna, about 0.9 mm. Characters generally as in the male, including the diagnostic features of wing venation and the long delicate trichia of the veins, as described. The leg is in poor condition but the claws appear to be toothed as in the male, but to a somewhat lesser degree. Wings (Fig. 3) showing the parallel veins R_3 and R_4 , with cell R_3 at margin less extensive than cell R_2 . Ovipositor with cerci long and slender, gently upcurved to the acute tips.

Allotype, ♀, Palo Botado, Contulmo, Nahuelbuta, Arauco, Chile, February 1, 1953 (Peña).

5. *Limnophila fuscostigmalis* sp. n.

General coloration of mesonotum black, the praescutum and scutal lobes more polished black; wings with a faint yellowish tinge, the oval stigma dark brown, very conspicuous; no stigmal trichia but with sparse series in outer ends of cells R_3 to R_5 inclusive; R_s nearly twice R_{2-3-4} ; cells R_2 and R_3 subequal at wing margin; $m-cu$ lying far distad; abdomen blackened.

F e m a l e. — Length about 8 mm.; wing 7.2 mm.; antenna about 2.1 mm. Rostrum and palpi black. Antennae of female relatively long, more than one-fourth the body, black throughout; flagellar segments passing into subcylindrical, with long conspicuous verticils. Head dark plumbeous; anterior vertex broad.

Pronotum dark brownish gray. Mesonotal praescutum and scutal lobes more polished black, the posterior sclerites of the notum and the pleura more opaque gray. Halteres with stem pale, knobs more infuscated. Legs with coxae medium brown, paler beneath at tips; trochanters obscure yellow; femora obscure yellow basally, becoming darker outwardly, the tips narrowly dark brown; tibiae and basitarsi obscure yellow, tips narrowly dark brown, remainder of tarsi darker, especially the terminal segment. Wings tinged with yellow, the prearcular and costal fields clearer yellow; stigma oval, dark brown, very conspicuous; veins dark brown, paler in the brightened fields. Sparse macrotrichia in outer ends of cells R_3 to R_5 inclusive; no stigmal trichia. Venation: Sc_1 ending opposite fork of R_s , Sc_2 near its tip; R_s nearly twice R_{2-3-4} ; R_2 slightly longer than R_{2-3} , at midlength of the stigma; vein R_3 arched, diverging gently from R_4 , cell R_3 at margin fully as extensive as cell R_2 ; $m-cu$ lying far distad, just before the level of m . (In the right wing of the type, cell M_2 is open by the atrophy of the basal section of vein M_3).

Abdomen black, the more proximal segments obscure yellow; genital shield brownish black; valves of ovipositor horn-yellow; cerci slender, gently upcurved to the acute tips.

Holotype, ♀. Aucar, Chiloe Island, Chile, January 6-15, 1952 (L. E. Peña).

Limnophila fuscostigmalis is most similar to *L. feriata pamphaea* Alexander, likewise from Chiloe Island, which differs in the poorly indicated stigmal area and in the venation, as the shorter R_{2-3-4} and the more basal position of $m-cu$. In the present fly, the femora are yellow basally, the tips narrowly dark brown.

6. *Limnophila peñana* sp. n.

Size large (wing of male 11.5-13 mm.); mesonotal praescutum and scutum gray, conspicuously patterned with brownish black; halteres yellowed; femora yellow, tips conspicuously blackened; wings whitened, heavily patterned with brown, *m-cu* beyond midlength of M_{3-4} ; male hypopygium with outer dististyle blackened, the margin before the terminal spine with numerous subappressed spinules; aedeagus very short.

Male. — Length about 15-16 mm.; wing 11.5-13 mm.; antenna about 2.2-2.4 mm. Rostrum brown, sparsely pruinose; palpi black. Antennae with scape brownish yellow, the remainder brownish black; basal four flagellar segments enlarged beneath, without verticils except on the dorsal surface, succeeding segments elongate-subcylindrical, with very long verticils. Head brownish gray, the vertex slightly more infuscated.

Pronotum light brown. Mesonotal praescutum light gray, with four brownish black stripes, the intermediate pair becoming paler and more obscured at both ends, humeral and lateral areas brown; scutum brownish gray, each lobe with two separate brownish black areas, the anterior one confluent across the suture with the lateral praescutal stripe; posterior callus yellowish brown; scutellum light brownish gray; mediotergite light gray, the posterior half more infuscated. Propleura brown; mesepisternum and pteropleurite gray, patterned with darker gray, metapleural region vaguely yellowed, dorsopleural membrane yellow. Halteres yellow. Legs with coxae and trochanters reddish brown; femora yellow, tips conspicuously blackened, the amount subequal on all legs, including about the outer eighth to tenth; tibiae yellow, base and apex narrowly blackened, the latter a little more extensive; proximal two tarsal segments obscure yellow, the outer segments blackened; segments of legs with long conspicuous setae. Wings (Fig. 4) whitened, heavily patterned with brown, the dark color subequal in extent to the ground; costal border pale brown; large solidly darkened brown areas in bases of cells *R* and *M*, origin of *Rs*, stigmal region, cord and outer end of cell 1st M_2 ; further brown clouds at ends of all longitudinal veins excepting R_5 , and at fork of M_{1-2} ; cells *M*, *Cu* and 2nd *A* extensively paler brown; no darkened cloud in outer half of cell *M* as in *auracania*; veins yellow to pale brownish yellow in the ground areas, darker in the clouded parts. Venation: *Sc* long, Sc_1 ending about opposite fork or *Rs*, Sc_2 near its tip; R_{2-3-4} from about twice to two and one-half times the basal section of R_5 ; cell M_1 subequal to its petiole; cell

1st M_2 relatively short and broad, $m-cu$ at near two-thirds M_{3-4} ; vein 2nd A elongate.

Abdominal tergites light brown or yellowish brown, sternites and hypopygium somewhat more yellowed. Male hypopygium (Fig. 9) with the ninth tergite, t , very narrow, posterior border shallowly emarginate to form very low obtuse lobes. Basistyle, b , elongate, without modified lobes. Dististyles, d , short, about one-third the basistyle; outer style a blackened rod, gently arcuated, terminating in a slender spine, with numerous smaller subappressed spinules on outer margin before apex; inner style a little longer, with setae throughout the length. Phallosome, p , including lateral apophyses that terminate in a flattened plate that is extended into a long spine. Aedeagus very short.

Holotype, ♂, Pillim Pilli, Nahuelbuta, Arauco, Chile, altitude 600-800 meters, January 17, 1954 (L. E. Peña). Paratopotype, 1 ♂.

I take great pleasure in naming this conspicuous fly for Señor Luis E. Peña. The most similar regional species is *Limnophila araucania* Alexander, which likewise has a conspicuous darkened wing pattern, with the markings quite different in arrangement from that in the present fly. The male hypopygium is distinct in the two flies, especially as regards the outer dististyle and the phallosome.

7. *Shannonomyia abortiva* sp. n.

Size medium (length of female about 9 mm.); wings markedly atrophied, about two and one-half times as long as the maximum breadth, veins without macrotrichia; mesonotum gray, praescutum with a brown central stripe that is narrower and darker in front; halteres normal; legs brownish yellow, tips of femora and tibiae vaguely darker, outer tarsal segments dark brown.

F e m a l e. — Length about 9 mm.; wing about 1.3 mm.; antenna about 1.4 mm.; fore femur 4.5 mm. Rostrum brown; palpi black. Antennae black; flagellar segments long-oval, the proximal segments with lower face slightly produced and lacking verticils. Head brownish gray; anterior vertex broad, nearly four times the diameter of the scape.

Pronotum brown above, gray on sides. Mesonotal praescutum gray with a brown central stripe that is narrower and darker in front, paler and more diffuse behind; pseudosutural foveae shiny black, relatively small, suboval; posterior sclerites of notum gray. Pleura gray; dorsopleural membrane buffy brown. Halteres normal for the genus, nearly as long as the wings; stem elongate, yellow, knob small, slightly darker. Legs with coxae light gray;

trochanters yellow; remainder of legs brownish yellow, tips of femora and tibiae vaguely darker, outer tarsal segments dark brown; femoral vestiture short, especially on basal third. Wings of female markedly atrophied, obscure yellow, the outer third more darkened; veins distorted, yellowed. Veins without macrotrichia, lacking even on costa. Wing base broad, costa strongly arched at near one-third the wing length; wing about two and one-half times the maximum breadth, the apex broadly obtuse.

Abdominal tergites dark brownish gray, sternites slightly paler brown, the posterior borders of the segments narrowly more yellowed. Ovipositor with cerci elongate, slender, gently upcurved.

Holotype, ♀, Calafate, Lago Argentino, Santa Cruz, Argentina, February 26, 1953 (A. Willink); Instituto Lillo, Tucumán.

Shannonomyia abortiva is distinguished from other regional members of the genus by characters of the wings and halteres. The species with wings subatrophied include *S. kuscheli* Alexander, of Juan Fernandez, *S. minutipennis* Alexander, of Patagonia, and *S. halterata* sp. n., of Tierra del Fuego. All of these differ from one another in wing shape. The only one having long costal macrotrichia, including the costal fringe, is *S. kuscheli*, which differs further in the unusual length of the legs. The halteres of the present fly are normal for the genus, contrasting with the modified condition in *S. halterata* and especially with the loss of the organ in the allied *Shannonomyia (Roraimomyia) permonstrata* Alexander, of Mount Roraima, on the Brazil-Venezuela border.

8. *Shannonomyia halterata* sp. n.

Size relatively large (wing of male about 1 mm., body length 9); subapterous, the wings deformed; halteres short and flattened, appearing as miniatures of the wing; mesonotum brownish yellow, praescutum with an interrupted central brown line; male hypopygium with the tergal emargination deep and narrow.

Male. — Length about 9 mm.; wing about 1 mm.; antenna about 1.2 mm.; mid femur 4.8 mm. Rostrum light brown; palpi with first segment light brown, the very short outer segments blackened, conspicuously hairy. Antennae with scape and pedicel light brown, flagellum black; basal flagellar segments with their lower faces slightly produced, shorter than the verticils. Head brown, heavily yellow pollinose; anterior vertex broad, exceeding the exposed diameter of one eye or about four times the diameter of the scape.

Pronotum brownish yellow, darker medially. Mesonotum brownish yellow, the praescutum with vague indications of a

narrow darkened central line in front, less evident near the suture, interrupted in between, tuberculate pits small but conspicuous, black; posterior sclerites of notum yellow pollinose. Pleura yellowed. Halteres yellow, flattened, appearing almost as a miniature of the wing, apex obtuse, with a few long setae. Legs of moderate length, as shown by the femoral measurement. Wings greatly atrophied and deformed, shorter than the antennae, yellowed; venation entirely distorted, veins without macrotrichia.

Abdominal tergites obscure yellow, the proximal half of each with a brown median area, outer segments darker, basal sternites clearer yellow. Male hypopygium (Fig. 10) with the emargination of tergite, *t*, deep and narrow, the major setae long but sparse, microscopic setulae very abundant. Basistyle, *b*, large. Outer dististyle, *d*, narrow, with long setae; outer fourth blackened, bidentate, outer tooth slender; inner style relatively narrow, tip obtuse, setae shorter. Gonapophyses, *g*, appearing as narrow flattened blades, the tips obtuse. Aedeagus, *a*, with the convolutions weakly developed.

Holotype, ♂, Port Williams, Navarino Island, Beagle Canal, Tierra del Fuego, altitude 600 meters, January 4, 1959 (G. Kuschel).

Shannonomyia halterata is told readily from other regional subapterous members of the genus, including *S. abortiva* sp. n. and *S. minutipennis* Alexander, by the nature of the wings and halteres, and where the male sex is known, by the hypopygial structure, including the tergite.

9. *Hexatoma (Eriocera) fulvithorax* sp. n.

Head and abdomen black or brownish black, thorax uniformly fulvous orange, unpatterned; antennae, halteres and legs brown to brownish black; wings with a strong blackish suffusion; macrotrichia of veins beyond cord sparse or lacking; R_{1-2} nearly twice R_2 , cell *1st* M_2 long-rectangular, slightly exceeding vein M_{1-2} beyond it, *m-cu* at near three-fifths the length of cell *1st* M_2 ; ovipositor with cerci very long and slender.

F e m a l e. — Length about 14 mm.; wing 13 mm. Rostrum and palpi dark brown. Antennae (female) 9-segmented, dark brown throughout; first flagellar segment nearly as long as the succeeding two combined; terminal segment a little longer than the penultimate. Head brownish black, sparsely pruinose.

Thorax, including the prothorax, fulvous orange, unpatterned; vestiture short and sparse. Halteres short, brownish black. Legs with coxae and trochanters brownish black; femora somewhat paler, especially the intermediate portions; tibiae and tarsi brown.

Wings with a strong blackish suffusion, the costal cell a trifle paler; stigma not apparent; veins brown. Macrotrichia lacking on veins beyond cord except on outer radial branches where they are small and sparse. Venation: R_{1-2} nearly twice R_2 , subequal to R_{2-3} ; R_{2-3-4} a little less than twice R_{2-3} ; cell 1st M_2 long-rectangular, slightly exceeding vein M_{1-2} beyond it; $m-cu$ at near two-thirds to three-fifths the length of the cell.

Abdomen brownish black, the tergites with vague reddish tints except on the more opaque darkened borders; genital shield darkened, valves of ovipositor castaneous; cerci very long and slender, nearly straight.

Holotype, ♀, Cuernavaca, Morelos, Mexico (R. Muller), bearing label '282'; United States National Museum.

Hexatoma (Eriocera) fulvithorax is distinguished from other somewhat similar regional species, such as *H. (E.) aurantionota* Alexander and *H. (E.) haemorrhoea* (Osten Sacken), by the uniformly fulvous thorax and in the details of venation. The fly bears a superficial resemblance to *Sigmatomera (Austrolimnobia) magnifica* (Alexander), described from the same locality (Cuernavaca).

10. *Hexatoma (Eriocera) schauseana* sp. n.

General coloration of thorax brownish gray, the praescutum with four poorly defined brown stripes, pleura and pleurotergite more pruinose; antennae of female 9-segmented, first flagellar segment pale yellow; wings weakly suffused with brown, not or scarcely patterned; vein R_2 before the fork, cell R_3 relatively short; abdomen yellow, the subterminal tergites with their posterior borders conspicuously infuscated; genital shield orange.

F e m a l e . — Length about 14 mm.; wing 11 mm. Rostrum short, obscure yellow; palpi small, basal segments yellow, the outer two light brown. Antennae (female) 9-segmented; scape orange, pedicel and first flagellar segment pale yellow, succeeding segments medium to darker brown; first flagellar segment a little longer than the next two combined, succeeding segments gradually shorter, the terminal one about one-half longer than the penultimate. Head orange; vertical tubercle large, weakly notched at summit.

Pronotum brownish gray. Mesonotal praescutum brownish gray with four poorly defined brown stripes that are produced by having less bloom than the ground, the intermediate pair separated by a still darker median vitta in front and a slightly wider ground line on the posterior two-thirds; a conspicuous darker brown spot at anterior end of lateral stripe, narrowly

reaching the margin; praescutal vestiture relatively long but sparse, pale; posterior sclerites of notum brown, sparsely pruinose. Pleura and pleurotergite more pruinose; pteropleurite and pleurotergite virtually confluent, the dividing suture indicated only above; mediotergite with an accessory sclerite cut off on its anterolateral part. Halteres with stem obscure yellow, knob dark brown. Legs with the coxae brownish yellow, sparsely pruinose; trochanters yellow; remainder of legs broken. Wings weakly suffused with brown, not or scarcely patterned; costal field a trifle more darkened; veins brown, paler in the costal part. Veins beyond cord glabrous. Venation: Sc_2 ending shortly before level of $r-m$, Sc_2 slightly shorter, near its tip; R_{1-2} and R_2 subequal, the latter before the fork, leaving a short element R_{3-4} that is about one-half to three-fourths R_2 alone; cell *1st* M_2 a little shorter than the distal section of M_{1-2} , its inner end arcuated; $m-cu$ at near one-fourth the length of cell *1st* M_2 , in transverse alignment with $r-m$.

Abdomen yellow, the first tergite a little darker; tergites five to seven with their posterior borders conspicuously infuscated, more extensively so on the outer segments; genital shield orange. Valves of ovipositor horn-yellow, long and very slender, especially the cerci.

Holotype, ♀, Cayuga, Guatemala, April 1915 (William Schaus); United States National Museum.

This interesting crane-fly is dedicated to the memory of the collector, the late Dr. William Schaus, distinguished student of the Neotropical Lepidoptera. The most similar species is *Hexatoma (Eriocera) breviscula* Alexander, of Peru, which differs in the details of coloration and venation.

11. *Hexatoma (Eriocera) schildeana* sp. n.

General coloration of head, thorax and abdomen orange; mesonotal praescutum with the ground dark brown, with four paler brown stripes, the intermediate pair more brightened, especially at their anterior ends; antennae with scape yellow, pedicel orange-brown, flagellum brownish black; halteres and legs brown; wings relatively broad, almost uniformly light brown.

Male. — Length about 14 mm.; wing 15 mm. Rostrum orange-yellow; palpi yellow basally, passing into dark brown. Antennae with scape yellow, pedicel orange-brown, flagellum brownish black (broken beyond the second flagellar segment); antennae evidently short, the first flagellar segment nearly equal in length to the scape, the second about two-thirds this length.

Head orange; vertical tubercle virtually entire to weakly notched at summit.

Pronotum obscure brownish yellow. Mesonotal praescutum with the ground dark brown, with four paler brown stripes, the intermediate pair brighter, especially on their anterior ends, narrowly separated by a ground vitta, lateral stripes more obsolete and separated by ground interspaces; conspicuous setae on sides of praescutum; scutum and parascutella dark brown, the central region of the former restrictedly paler; scutellum orange; postnotum clear orange-yellow, glabrous. Pleura orange-yellow, glabrous. Halteres brown. Legs with the coxae orange, trochanters slightly more infuscated; remainder of legs brown. Wings (Fig. 5) relatively broad, almost uniformly light brown, the prearcular and costal portions a trifle more suffused; an evident whitish streak that is bordered behind by dusky in cell *1st A* immediately behind the basal half of the vein; veins light brown. Veins beyond cord chiefly with macrotrichia, present on distal sections of veins M_{1-2} and M_3 , lacking on M_4 . Venation: Sc_1 ending shortly before fork of R_{2-3-4} , Sc_2 much shorter, Sc_1 alone nearly equal to R_2 ; R_{1-2} about one-half longer than R_2 or about two-thirds R_{2-3-4} ; cell *1st M*₂ subrectangular, nearly equal in length to distal section of M_{1-2} ; *m-cu* at near one-third to one-fourth the length of cell *1st M*₂.

Abdomen chiefly orange, vaguely more darkened along the pleural region, especially outwardly; segments without differentiated basal rings; hypopygium small, testaceous yellow.

Holotype, ♂, Higuato, San Mateo, Costa Rica (Pablo Schild); United States National Museum. Paratopotype, a badly broken specimen of doubtful sex.

The species is named in honor of the late Pablo Schild, veteran insect collector in Costa Rica. It is most similar to *Hexatoma (Eriocera) erythraea* (Osten Sacken) yet is entirely distinct in the almost uniform coloration of the body excepting only the mesonotal praescutum and scutum.

Eriopterini

12. *Gnophomyia (Gnophomyia) diacantha* sp. n.

Allied to *arcuata*; general coloration of body dull black; antennae and legs black; halteres black, outer half of knob light yellow; wings weakly darkened, stigma pale brown; R_{2-3-4} arcuated, with R_2 at or close to its fork, *m-cu* at near one-third M_{3-4} ; male hypopygium with lower margin of outer dististyle bearing a series of small obtuse denticles, inner style very small, oval, with long setae; phallosome with apex of the elongate aedeagus divided into two long slender spines.

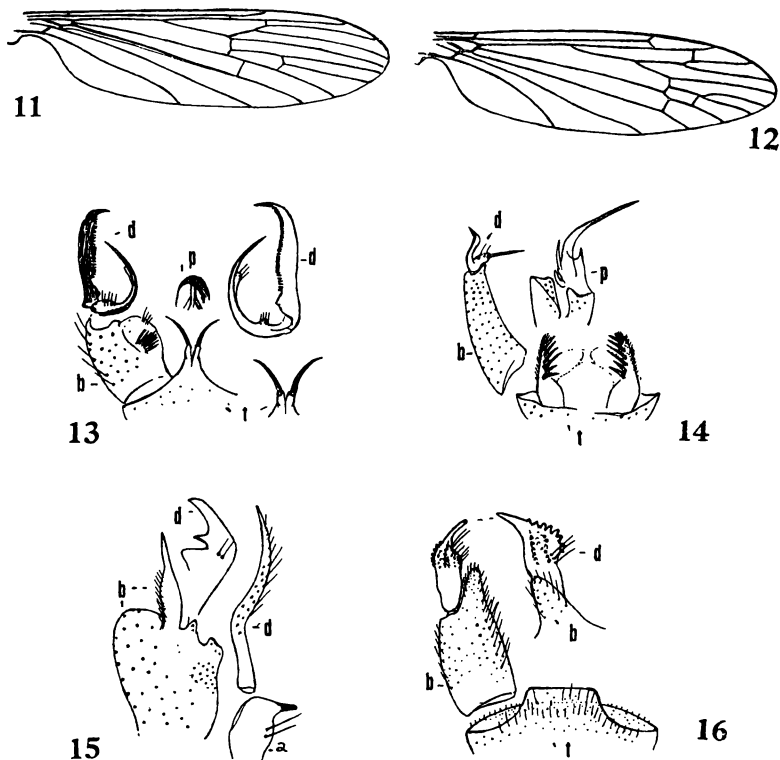


Fig. 11. *Gnophomyia (Gnophomyia) nahuelbutae* sp. n.; venation. — Fig. 12. *Aphrophila subterminalis* sp. n.; venation. — Fig. 13. *Gnophomyia (Gnophomyia) nahuelbutae* sp. n.; male hypopygium. — Fig. 14. *Gonomyia (Lipophleps) spiniterga* Alexander; male hypopygium. — Fig. 15. *Teucholabis (Teucholabis) subargentea* Alexander; male hypopygium. — Fig. 16. *Aphrophila subterminalis* sp. n.; male hypopygium. — (Explanation of symbols: a, aedeagus; b, basistyle; d, dististyle; p, phallosome; t, tergite).

Male. — Length about 6 mm.; wing 5.5 mm.; antenna about 1.4 mm. Body dull black, the sides of the pronotal scutellum not brightened. Palpi, antennae and legs black. Halteres black, the outer half of knob light yellow. Wings weakly darkened, stigma long and narrow, pale brown; veins brownish black. Venation: R_{2-3-4} arcuated, R_2 at or close to its fork; $m-cu$ at near one-third M_{3-4} .

Male hypopygium with posterior border of tergite truncate, medially produced into a small glabrous semicircular lobe. Basistyle unarmed. Outer dististyle a gently curved rod, narrowed to the subacute tip; ventral margin of style with a series of small obtuse denticles extending almost to base; inner style a very small oval lobe, with several setae, some longer than the style. Phallosome with the fused gonapophyses broadest at

midlength, narrowed to the obtuse tip. Aedeagus elongate, before apex divided into two long slender spines.

Holotype, ♂, Quincemil, Cuzco, Peru, altitude 740 meters, August 1962 (L. E. Peña).

Gnophomyia (*Gnophomyia*) *diacantha* differs from other regional species in the hypopygial structure, including especially the dististyles and aedeagus. It is most similar to species such as *G. (G.) longiterebra* Alexander, differing in the venation, as the more arcuated R_{2-3-4} and the position of *m-cu*. The male sex of the latter species remains unknown.

13. *Gnophomyia* (*Gnophomyia*) *latissima* sp. n.

Mesonotum light brown, sides of praescutum narrowly yellowed; knobs of halteres light yellow; legs obscure yellow, tips of femora and tibiae pale brown; wings pale yellow; male hypopygium with the outer dististyle unusually broad; phallosome with the gonapophyses separate; aedeagus before apex expanded into a subrectangular roughened blackened structure.

Male. — Length about 6 mm.; wing 5 mm. Rostrum small, obscure yellow; palpi black. Antennae with proximal segments light brown, the outer segments black (terminal segments broken). Head brownish gray; eyes very large.

Pronotum light yellow, pale brown on sides. Mesonotum light brown, sides of praescutum narrowly yellowed, as are the scutellum laterally, parascutella and along the interpostnotal suture. Halteres obscure yellow, the knob and base of stem clear light yellow. Legs with coxae brownish yellow; trochanters yellow; femora, tibiae and basitarsi obscure yellow, tips pale brown, outer tarsal segments passing into black. Wings pale yellow, unpatterned except for the linear pale brown stigma that appears as a narrow seam along vein R_{1-2} ; veins light brown. Venation: *Sc* long, Sc_1 opposite fork of R_{2-3-4} , Sc_2 shortly beyond level of fork of *Rs*; *r-m* close to fork of *Rs*; R_2 faintly indicated; R_{2-3} shorter than R_2 ; *m-cu* just beyond one-third the length of M_{3-4} .

Abdomen medium brown, hypopygium more yellowed. Male hypopygium with the tergite produced medially into a parallel-sided lobe, the sides darkened. Outer dististyle glabrous, unusually broad at near midlength, approximately one-fourth the length, apex of style obtuse; inner style with the base low, the free outer end straight, parallel-sided, apex very obtuse. Phallosome with the gonapophyses separated, their broadly obtuse tips microscopically roughened; central mass broad, enclosing the

simple aedeagus, before apex of the latter expanded into a subrectangular blackened structure, its surface microscopically serrulate.

Holotype, ♂, Rio Frio, Balao Chico, Ecuador, April 26-30, 1963 (L. E. Peña).

In its hypopygial structure, *Gnophomyia* (*Gnophomyia*) *latissima* is most like *G. (G.) lachrymosa* Alexander, *G. (G.) latilobata* Alexander and some others, differing in the broader outer dististyle and the structure of the phallosome.

14. *Gnophomyia* (*Gnophomyia*) *nahuelbutae* sp. n.

Thorax grayish brown, the sides of the praescutum broadly yellow; pleura dark brownish gray, restrictedly patterned with yellow; wings light yellow, including the veins; male hypopygium with the tergite produced into two strong divergent black spines; outer dististyle a narrow blade, its mesal edge with a row of about 40 blackened pegs, inner style a powerful slender rod that narrows gradually into an elongate spine.

Male. — Length about 8.5 mm.; wing 8.3 mm.; antenna about 2 mm.

Female. — Length about 8 mm.; wing 7.5 mm.

Rostrum brownish yellow; palpi darker brown. Antennae brown, the flagellum paler brown, the segments with a dense white pubescence and short sparse verticils. Head grayish brown, genae light yellow.

Pronotum brown, pretergites and sides of scutellum yellow. Mesonotal praescutum with disk grayish brown, the central area slightly darker brown with an obscure yellow spot immediately before suture, the humeral and lateral regions broadly light yellow; scutum brownish yellow, lobes grayish brown; scutellum and mediotergite light brown, gray pruinose, pleurotergite darker, bordered above and posteriorly by yellow. Pleura dark brownish gray, restrictedly patterned with yellow before wing root and in the metapleural region; dorsopleural membrane yellowed. Halteres with stem obscure yellow, knob light brown. Legs with coxae and trochanters obscure yellow; remainder of legs yellow, tips of femora vaguely more darkened, in the female the darkened area slightly subterminal, outer tarsal segments dark brown. Wings (Fig. 11) light yellow, veins darker yellow; in female, the veins behind *R* more darkened. Venation: *Sc*₁ ending opposite *R*₂, *Sc*₂ opposite fork of *R*_s; outer radial and medial veins long; *m-cu* at near one-third *M*₃₋₄.

Abdominal tergites dark brown, sternites lighter brown, hypopygium obscure yellow. Male hypopygium (Fig. 13) with

the tergite, *t*, narrow, the median region of posterior border farther produced and narrowed, at apex slightly divided, each half with a powerful black spine. Basistyle, *b*, with a group of strong blackened setae on mesal face. Dististyles, *d*, diagnostic; outer style a narrow blade, the tip a slender spine, mesal edge blackened and provided with a continuous series of about 40 peglike spines, their tips obtuse; inner style a powerful slender black rod that gradually narrows into a long spine, at near midlength on the concave margin with a yellow lobe provided with long yellow setae. Phallosome, *p*, semioval in outline.

Holotype, ♂, Pillim Pilli, Nahuelbuta, Arauco, Chile, altitude 600-800 meters, January 17, 1954 (L. E. Peña). Allotype, ♀, Contulmo, Palo Botado, Nahuelbuta, February 1, 1953 (L. E. Peña).

Gnophomyia (*Gnophomyia*) *nahuelbutae* is entirely different from the only other Chilean member of the genus, *G. (G.) chilota* Alexander. The structure of the male hypopygium readily separates the fly from all known species of the genus.

15. *Gnophomyia* (*Gnophomyia*) *subnimbifera* sp. n.

Allied to *nimbifera*; general coloration of entire body black, posterior thoracic pleura gray pruinose; antennae, halteres and legs black; wings pale brown, with broad darker brown bands at base and over the cord; *r-m* before fork of *Rs*, cell 1st *M*₂ narrow; male hypopygium with posterior border of tergite truncate, fringed with numerous spinoid setae; outer dististyle broadly dilated on basal half, inner style narrowed on outer half.

Male. — Length about 7.5 mm.; wing 5 mm.; antenna about 2.5 mm. Rostrum and palpi black. Antennae black, relatively long; flagellar segments elongate, some of the verticils of the more proximal ones long, about one-half longer than the segments. Head black.

Thorax black, the posterior pleura gray pruinose, the pronotal scutellum, narrow dorsopleural region and the metapleura yellowed. Halteres and legs black. Wings with the ground pale brown, clearer in cells *R* and *M*; two broad darker brown areas, the first at wing base, including the prearcular region and bases of cells *R*, *M* and *Cu*; second band equally broad, lying over the cord and adjacent cells, the posterior end at vein *Cu*, connected along this vein with the basal darkening; stigma still darker brown, very narrow; veins brownish black. Venation: *Sc*₁ ending shortly before fork of *R*₂₋₃₋₄; veins *R*₃ and *R*₄ generally parallel to one another, cell *R*₃ at margin about two-fifths as extensive

as cell R_2 ; $r-m$ on Rs shortly before fork; cell $1st M_2$ narrow-rectangular, with $m-cu$ at near midlength.

Abdominal tergites and hypopygium black, sternites more brownish black, the basal pleural membrane narrowly pale. Male hypopygium with tergite transverse, broader than long, narrowed on anterior half; posterior border virtually truncate, with an unbroken fringe of strong spinoid setae, totalling 80 or more. Basistyle short, unarmed. Outer dististyle broad on basal half, thence strongly narrowed, at the point of narrowing in inner margin produced into a darkened tooth; lower margin before apex slightly roughened; inner style shorter, broad on basal half, thence narrowed, upcurved, the margin with two small tubercles and strong setae. Phallosome with apophyses blackened, united on their proximal half, the separated outer plates broadly obtuse or truncate.

Holotype, ♂, Libertad, 6 km southeast of Tena, Napo-Pastaza, Ecuador, May 11, 1963 (L. E. Peña).

Gnophomyia (*Gnophomyia*) *subnimbifera* is most nearly related to *G. (G.) nimbifera* Alexander, of Peru, differing in the more conspicuously patterned wings and in hypopygial characters, particularly of both dististyles.

16. *Gnophomyia* (*Gnophomyia*) *tetracaena* sp. n.

General coloration dull black, including the antennae, halteres and legs, lateral ends of pronotal scutellum restrictedly yellow; wings pale brown basally, outer third slightly darker, central fourth dark brown to form a conspicuous band; male hypopygium having the posterior border of tergite with an uninterrupted fringe of slender darkened spinoid setae, more crowded on the slightly produced lateral ends; mesal face of proximal end of basistyle produced into a powerful spine; outer dististyle flattened, tip obtuse, inner style about two-thirds as long, at apex narrowed into a long slender spine.

Male. — Length about 5.5-6 mm.; wing 4.2-5 mm.; antenna about 2-2.3 mm.

Female. — Length about 7 mm.; wing 6 mm.

Palpi, antennae, halteres and legs black. Body black, the surface vaguely pruinose to appear opaque; lateral angles of pronotal scutellum yellow. Wings with cells before cord pale brown, apical third slightly darker, the central fourth over the cord conspicuously dark brown, including the still darker linear stigma, the area terminating at vein Cu ; prearcular field darkened, cell C before h more whitened; veins brown, darker in the more heavily patterned areas. Venation: $r-m$ close to fork of Rs ; $m-cu$ varying from just before to beyond midlength of M_{3-4} .

Abdomen, including hypopygium, black. Ovipositor with cerci elongate, with scattered erect setae virtually to the more blackened polished apex. Male hypopygium with the tergite relatively broad, narrowed outwardly, posterior border virtually truncate, with an unbroken fringe of long black slender spinoid setae, the lateral angles more produced to form a compact cluster or tuft, the total number of tergal setae approximately 100, more crowded and numerous at lateral ends of row. Basistyle at proximal end of mesal face with a powerful arm, the outer half narrowed into a long spine. Outer dististyle relatively short, flattened, tip obtuse; inner style about two-thirds as long, stout on proximal two-thirds, with abundant erect long setae, outer third narrowed into a slender spine. Lobes of gonapophyses obtuse.

Holotype, ♂, Libertad, 6 km southeast of Tena, Napo-Pastaza, Ecuador, May 10, 1963 (L. E. Peña). Allotopotype, ♀, pinned with type. Paratype, ♂, Quincemil, Cuzco, Peru, August 18, 1962 (L. E. Peña).

In the conspicuous spine on the basistyle of the male hypopygium, *Gnophomyia* (*Gnophomyia*) *tetracaena* is most similar to species such as *G. (G.) certa* Alexander, *G. (G.) astuta* Alexander and some others, differing in the coloration of the wings and especially in all details of the male hypopygium.

17. *Gnophomyia* (*Gnophomyia*) *tricepoides* sp. n.

Allied to *triceps*, differing especially in the structure of the male hypopygium; proximal end of basistyle on mesal face with a low tubercle; phallosome with terminal lobes blackened, slender, subequal in size to the median emargination.

Male. — Length about 5 mm.; wing 4.8 mm.; antenna about 2.1 mm.

Female. — Length about 7 mm.; wing 5 mm.

Palpi, antennae, halteres and legs black. Entire body polished black, the thoracic pleura with a broad more pruinose ventral stripe; lateral ends of pronotal scutellum obscure yellow. Wings slightly infuscated, with darker areas over anterior cord and along vein *Cu*, most evident in basal half of cell *M*, stigma linear, still darker brown; veins brown. Venation: *Rs* in longitudinal alignment with *R*₅; *r-m* at or close to fork of *Rs*; *m-cu* at near two-fifths *M*₃₋₄.

Male hypopygium with ninth tergite subrectangular, posterior border gently emarginate, with two confluent groups of long black spinoid setae, these totalling about 45 on either side. Mesal face of proximal end of basistyle with a large low

tubercle, its surface transversely wrinkled, without setae. Outer dististyle slender, narrowed outwardly, the tip a small curved spine, on ventral margin with about four recurved teeth, the outermost largest; inner style enlarged, at apex narrowed into a head that is unequally trispinous, the terminal beak longest; body of style with numerous long erect setae. Phallosome at apex produced into two narrow blackened lobes that are subequal in shape and diameter to the intervening emargination.

Holotype, ♂, Quincemil, along the Marcapata River, Cuzco, Peru, August 1962 (L. E. Peña). Allotopotype, ♀, pinned with type. Paratopotype, ♀, pinned with type.

The most similar described species is *Gnophomyia* (*Gnophomyia*) *triceps* Alexander, of Costa Rica, which differs especially in the hypopygial structure, most evidently the basistyle and phallosome.

18. *Neognophomyia crassistyla* sp. n.

Mesonotal praescutum and scutal lobes uniformly polished brown; pleura and pleurotergite with a nearly continuous blackened dorsal stripe; wings faintly tinged with yellow, with a narrow pale brown seam over the anterior cord; male hypopygium with tergal blades not or scarcely hinged, flattened, moderately sclerotized; inner dististyle very stout, narrowed to the subacute tip; phallosome not blackened at apex.

Male. — Length about 6 mm.; wing 5.6 mm.; antenna about 1.9 mm. Rostrum orange; proximal two palpal segments testaceous, outer two brown. Antennae with scape yellow, remainder brownish black; flagellar segments elongate, a little shorter than the longest verticils. Head polished yellow.

Pronotum yellowed. Mesonotal praescutum and scutal lobes polished brown. humeral and lateral borders of praescutum yellow; scutellum testaceous yellow, mediotergite light brown, with paired darker spots on posterior third, pleurotergite intensely black. Pleura beneath yellowish white, dorsally with extensive black spots on anepisternum and dorsal pteropleurite, virtually confluent with the pleurotergal area. Halteres with stem yellow, knob infuscated. Legs with coxae and trochanters yellow; remainder of legs broken. Wings with a faint yellow tinge, prearcular and costal fields clearer yellow; a narrow inconspicuous pale brown seam over the anterior cord; veins brown, those of basal third of wing and the costal region more yellowed. Venation: R_{2-3-4} short, subequal to R_2 ; vein R_3 parallel to R_{1-2} , about three times as long as the distance on costa between the veins; *m-cu* at near one-third M_{3-4} .

Abdominal tergites dark brown with a diffuse obscure yellow central stripe, on each segment more or less interrupted medially by a dusky line to appear as paired yellow spots; sternites more yellowed; hypopygium brown. Male hypopygium with the tergal blades not or scarcely hinged as in most species, appearing as flattened moderately sclerotized blades, the apices obtuse, at near midlength of the blade obliquely split to appear divided. Outer dististyle relatively slender, the surface with five long yellow setae, three close to the tip; inner style very stout, narrowed to the subacute tip, surface of outer part with conspicuous black setae, including three along the lower margin. Phallosome not blackened at apex as in most other species.

Holotype, ♂, Quincemil, along the Marcapata River, Cuzco, Peru, September 2, 1962 (L. E. Peña).

The most distinctive features of the present fly are found in the male hypopygium, particularly the tergal blades, inner dististyle and phallosome. The tergal blades are not blackened and acute, as in many species, but are much broader than in others. The only other species having broad unhinged tergal blades are *Neognophomyia hirsuta* (Alexander), of Brazil, and *N. immaculipennis* (Alexander), of southern Brazil and Paraguay.

19. *Neognophomyia cuzcoensis* sp. n.

Allied and generally similar to *bisetosa*; wings with stigma and anterior cord extensively infuscated, veins R_{1-2} and R_3 approximated at margin; male hypopygium with tergal spines pale, very long and slender; outer dististyle slender, not dilated at base, with four long setae, inner style with apex blackened, subobtuse; phallosome with apex of central plate broadly obtuse, blackened.

Male. — Length about 6 mm.; wing 5.7 mm. Rostrum obscure yellow, palpi black. Antennae with scape obscure yellow, darkened outwardly, remainder of organ black; flagellar segments elongate but shorter than their longest verticils. Eyes large; vertex narrow, obscure yellow.

Pronotum obscure yellow. Mesonotal praescutum with disk dark chestnut brown, humeral region yellow, posterior lateral borders more obscured, surface with abundant short appressed white setae; scutum obscure yellow, each lobe with two confluent blackened spots; scutellum brownish yellow, mediotergite obscure yellow on central part, whitish sericeous on sides, posterior border with two large oval black spots that are narrowly separated. Pleura beneath fulvous with silvery setulae, dorsally with an almost continuous dark stripe including major areas on dorsal anepisternum, pteropleurite and most of pleurotergite. Halteres

with stem yellow, knob infuscated. Legs with coxae fulvous, trochanters yellow; remainder of legs broken. Wings whitish subhyaline, with a narrow darkened seam from the stigma backward over the anterior cord, the area including most of cell R_2 ; posterior cord and outer end of cell 1st M_2 with veins brownish black, the remaining veins light brown, prearcular area yellowed. Venation: R_{1-2} and R_3 approximated at margin, the distance on C about one-third vein R_3 ; $m-cu$ at near one-third M_{3-4} .

Abdominal tergites brown with an irregular central yellow stripe, sternites and hypopygium more uniformly yellowed. Male hypopygium with the tergal spines pale, very long and slender, spinelike. Outer dististyle slender, base not dilated, surface with four long setae, one terminal; inner style of comparable size and outline, with three separate setae, the apex a narrowly blackened subobtuse point. Phallosome with the apophyses forming a single undivided plate, its apex broadly obtuse, blackened.

Holotype, ♂, Quincemil, along the Marcapata River, Cuzco, Peru, August 18, 1962 (L. E. Peña).

Among the numerous regional members of the genus the present fly is most similar to *Neognophomyia bisetosa* Alexander, of Junin, Peru, which differs especially in hypopygial characters.

20. *Gonomyia (Paralipophleps) diplacantha* sp. n.

Generally as in *pleuralis*, differing conspicuously in the structure of the male hypopygium; basistyle at apex produced into two broad-based spines; dististyle extended into a long spine, subequal in length to the basistyle, the fasciculate setae at near midlength.

Male. — Length about 4 mm.; wing 3.8-4 mm.

Female. — Length about 5.5-6 mm.; wing 4.5-5.5 mm.

Rostrum and palpi black. Antennae with the scape whitened, pedicel and first flagellar segment more yellowed, remainder of organ black; flagellar segments of male with exceedingly long verticils, as in the subgenus. Head light yellow.

Pronotum and pretergites white, the color continued past the wing root onto the dorsol postnotum. Mesonotal praescutum and scutum light cinnamon brown, narrowly bordered laterally by a brown line; scutum brownish yellow, the central area darker; mediotergite obscure yellow, at base with a brown triangular spot. Pleura with a longitudinal white stripe, bordered above and beneath by narrower dark brown lines, the dorsal pleurites and

ventral sternopleurite and meron more brownish yellow. Halteres with stem obscure yellow, knob infuscated. Legs with the coxae whitened; trochanters testaceous yellow; remainder of legs pale to darker brown, in cases with the tips of femora narrowly paler, outer tarsal segments darker. Wings brownish yellow, the prearcular and costal areas clearer yellow; stigma oval, dark brown, as in the subgenus; vague darkenings over cord and outer end of cell *1st M*₂; prestigmal and poststigmal brightened areas present; veins brown, very pale in the region of the stigma, darker in the clouded areas. Venation: Anterior branch of *Rs* with outer end strongly upcurved, cell *R*₄ at margin very extensive.

Abdominal segments obscure yellow, patterned with dark brown, on tergites including a central dash and the posterior margin; hypopygium brownish yellow to pale brown. Male hypopygium with the basistyle moderately long, at apex produced into two broad-based spines. Dististyle extended into a long spine, its total length subequal to the full length of the basistyle, the fasciculate setae placed on a widened flange at near midlength of the style. Phallosome with the major spines moderately long, much shorter than the dististyle.

Holotype, ♂, Santa Margarita, Rio Perene, Peru (Kuczynski and Godard); United States National Museum. Allotopotype, ♀, April 11, 1929. Paratopotypes, 1 ♂, 2 ♀.

Gonomyia (Paralipophleps) diplacantha is quite distinct from *G. (P.) pleuralis* (Williston) and certain other species that have the basistyle bispinous, differing particularly in the structure of the male hypopygium, including the basistyle and dististyle.

21. *Gonomyia (Lipophleps) fortibasis* sp. n.

Allied to *orthomera*; male hypopygium with proximal ends of dististyles strongly dilated, the diameter at base about three times that at midlength.

Male. — Length about 3 mm.; wing 3 mm. Rostrum, palpi and antennae black. Head yellowed anteriorly, more darkened behind.

Mesonotal praescutum and scutal lobes light brown, posterior sclerites of notum and the pleura more uniformly yellow. Halteres infuscated. Legs with coxae and trochanters light yellow; remainder of legs brown. Wings pale brown, costal border narrowly light yellow; veins light brown. Venation: Anterior branch of *Rs* strongly upcurved, narrowing cell *R*₂ which is about one-fourth as extensive at margin as cell *R*₄.

Abdomen with tergites light brown, sternites paler. Male hypopygium generally as in *orthomera* and *troilus*, differing in the details. Outer spine of basistyle very long and slender, narrowed gradually into an acute spine. Dististyle about one-half as long, its base strongly dilated, constricted at near midlength, the diameter across base about three times that at midlength. Phallosome with basal spine long and slender.

Holotype, ♂, Esmeralda, San Mateo, Ecuador, September 23, 1956 (Juan Foerster).

Although the present fly is allied to various other Neotropical species, including *Gonomyia* (*Lipophleps*) *borburatana* Alexander, *G. (L.) orthomera* Alexander, *G. (L.) subtroilus* sp. n., and *G. (L.) troilus* Alexander, it differs in the hypopygial structure, especially the strongly dilated base of the dististyle.

22. *Gonomyia* (*Lipophleps*) *spiniterga* Alexander

Gonomyia (*Lipophleps*) *spiniterga* Alexander; Jour. N. Y. Ent. Soc., 56: 147-148; 1948.

The type, a ♂, was from Boracéa, São Paulo, Brazil, altitude 800 meters, August 1947 (John Lane). Male hypopygium (Fig. 14).

23. *Gonomyia* (*Lipophleps*) *sublustralis* sp. n.

Belongs to the *manca* group, allied to *lustralis*; male hypopygimu with the outer lobe of basistyle short; phallosome terminating in three pale separate elements.

Male. — Length about 3 mm.; wing 3.5 mm. Rostrum and palpi brown. Antennae with scape and pedicel dark brown; flagellum broken. Head gray.

Pronotum and pretergites whitened. Mesonotum almost uniformly reddish brown, pseudosutural foveae virtually concolorous, postnotum slightly more testaceous. Pleura reddish brown. Halteres infuscated. Legs with coxae and trochanters testaceous yellow; femora light brown; remainder of legs broken. Wings with a weak brownish tinge, stigma not indicated; veins pale brown. Venation: Sc_1 ending nearly opposite origin of Rs ; basal section of R_5 elongate, about one-half as long as $m-cu$, the latter close to the fork of M .

Abdomen, including the hypopygium, brown. Male hypopygium generally as in *lustralis*. Basistyle with the outer lobe only moderately produced, about three times as long as thick, some of the setae very long. Dististyle a flattened blade,

with conspicuous setae, including the two longer modified ones near the outer end; a conspicuous blackened lobe on outer margin beyond base. Phallosome terminating in three separate elements, all pale; longest blade ending in an acute point, the intermediate one more slender, its tip rounded, the third element a small slender spikelike point.

Holotype, ♂, Santa Margarita, Rio Perene, Peru, April 11, 1939 (Kuczynski and Godard); United States National Museum.

The most similar species is *Gonomyia (Lipophleps) lustralis* Alexander, which differs in the hypopygial structure, as follows: Outer lobe of basistyle much longer, exceeding in length the main body of the style. Phallosome quite different, including three longer pale blades and a larger stout central mass, its tip broadly obtuse; of the three longer elements, two are paired or virtually so, their tips subacute, the third element a little longer, the apex pale and obtuse.

24. *Gonomyia (Lipophleps) subtroilus* sp. n.

Belongs to the *manca* group, allied to *troilus*; general coloration of notum cinnamon brown, darker posteriorly, pleura unstriped; male hypopygium with the outer apical angle produced into a long slender spine, its outer end with microscopic setulae; phallosome with the aedeagus relatively short.

Male. — Length about 3.2-3.5 mm.; wing about 3.4-4 mm. Rostrum yellow, palpi dark brown. Antennae dark brown; flagellar segments elongate, with the usual exceedingly long verticils found in the male sex of this subgenus. Head light gray.

Pronotum and pretergites very pale yellow. Mesonotal praescutum light cinnamon brown, the posterior sclerites slightly darker. Pleura reddish brown, with a very pale gray bloom but without stripes. Halteres infuscated, base of stem narrowly yellow. Legs with coxae and trochanters yellow; remainder of legs brown. Wings subhyaline, unpatterned, the prearcular and costal fields paler; veins pale brown. Venation: *Sc* short, *Sc*₁ some distance before origin of *Rs*, the distance approximately three-fourths the length of the latter, *Sc*₂ slightly removed; *m-cu* close to fork of *M*.

Abdominal tergites brownish yellow, sternites somewhat clearer yellow. Male hypopygium with the basistyle small, its outer apical angle produced into a long slender spine that is fully three times the length of the style itself, as measured along the outer face, outer end of spine with microscopic setulae. Dististyle elongate, the apical modified setae very unequal in size, the lower one strongly fasciculate. Phallosome with the

apical part (aedeagus) stout, as compared with the condition in *troilus*. In the latter the outer spine of the inner dististyle is somewhat shorter and stouter, with abundant setulae on outer half; dististyle narrower and more elongate; phallosome with the apical part (aedeagus) much more slender, its apex dilated.

Holotype, ♂, Santa Margarita, Rio Perene, Peru, April 11, 1939 (Kuczynski and Godard); United States National Museum. Paratopotypes, 4 ♂♂.

The most decisive characters for separating the present fly from *Gonomyia (Lipophleps) troilus* Alexander are found in the structure of the male hypopygium, especially the conformation of the aedeagus. Other species that appear to be less closely related include *G. (L.) borburatana* Alexander, *G. (L.) misera* Alexander, and *G. (L.) orthomera* Alexander.

25. *Teucholabis (Teucholabis) subargentea* Alexander

Teucholabis (Teucholabis) subargentea Alexander; Jour. N. Y. Ent. Soc., 56: 143-144; 1948.

The type, a ♂, was from Boracéa, São Paulo, Brazil, altitude 800 meters, August 1947 (John Lane). Male hypopygium (Fig. 15).

26. *Aphrophila subterminalis* sp. n.

Size large (wing of male 10 mm.); general coloration of thorax yellow, the praescutum with vague orange stripes; antennae with scape and pedicel yellow, flagellum black; legs yellow; wings yellowed, stigma pale brown, cells and veins before cord more orange; abdomen brownish black, lateral tergal borders broadly obscure yellow, sternites more broadly so; male hypopygium with apex of tergite broadly truncate; apex of basistyle produced beyond the point of insertion of the dististyle as a slender lobe; dististyle extended into a long terminal rod, the outer margin with a double serrated crest.

Male. — Length about 10 mm.; wing 10 mm.; antenna about 2 mm. Rostrum light yellow, faintly pruinose; palpi brownish black. Antennae with scape and pedicel yellow, flagellum black; flagellar segments oval, subequal to the longest verticils; terminal segment very small, tipped with three long bristles. Head very pale brownish yellow, anterior vertex more whitened.

Thorax yellowed, the praescutum with vaguely indicated more orange stripes. Halteres pale yellow. Legs with coxae and trochanters yellow; remainder of legs yellow, the outer three tarsal segments dark brown. Wings (Fig. 12) yellowed, the oval stigma pale brown; cells before cord with veins orange, the outer veins slightly more infuscated. Venation: Sc relatively long, Sc_1 about opposite one-third R_{2-3-4} , Sc_2 longer, near its tip;

R_2 shortly beyond fork of R_{2-3-4} ; one wing of type with cell 2nd M_2 very short-petiolate, obliterating m , as shown; on the opposite wing m is present, about one-third the basal section of M_3 .

Abdomen brownish black, the lateral tergal borders broadly obscure yellow, the sternites more obscure yellow and including also the posterior borders; hypopygium more yellowed. Male hypopygium (Fig. 16) with the tergite, t , produced medially, the apex broadly truncate; setae very small and delicate, yellow. Basistyle, b , produced beyond base of dististyle as a narrow lobe, the yellow setae longer but inconspicuous. Dististyle, d , at apex produced into a long simple terminal rod, the outer margin at its base with a double serrate crest, with fewer small tubercles between the rows.

Holotype, ♂, Chacay, Nahuelbuta, Arauco, Chile, altitude 1500 meters, February 11, 1953 (L. E. Peña).

Aphrophila subterminalis is told readily from the other regional species of the genus by the subterminal dististyles of the male hypopygium. The closest relatives include *A. viridinervis* Alexander and the smaller *A. coronata* Alexander, both differing in the structure of the hypopygium, as the terminal dististyles and conformation of the ninth tergite. The body and wings show no indication of the green coloration found in *viridinervis*.

27. Erioptera (Mesocyphona) subhistrio sp. n.

Allied to *histrio*; size very small (wing of female 2.8 mm.); pleural stripes brown, conspicuous, narrower than the intervening pale line; femora yellow, extensively pale brown at near midlength, with a narrow darker brown subterminal ring; wings with a contrasted light brown and whitened pattern, with further dark brown spots, costal border, including the outer radial field, more fulvous brown; R_s relatively short, subequal to vein R_3 .

F e m a l e. — Length about 3 mm.; wing 2.8 mm. Rostrum and palpi black. Antennae with scape and pedicel black, flagellum very pale brown, terminal segment paler; verticils of proximal segments long and coarse. Head light buffy.

Mesonotal praescutum brownish yellow, the interspaces very pale brown, extended across the suture onto the mesal edges of the scutal lobes. Pleura pale yellow with two conspicuous brown longitudinal stripes, narrower than the intervening pale line. Halteres yellow, apex of knob darkened. Legs with fore and middle coxae darkened, hind coxae and all trochanters yellow; femora yellow, extensively pale brown at near midlength, more extensively so on hind legs, with a narrow darker brown

subterminal ring that is preceded by a subequal clearer yellow ring, the broader apex slightly more brownish yellow; tibiae and tarsi light yellow. Wings with a contrasted light brown and whitened pattern, with further dark brown spots; costal border more fulvous brown, becoming more extensive in outer radial field; whitened areas before cord in outer ends of cells R_1 , R , M , virtually all of cells R_3 , M_3 and anterior half of M_4 , together with the posterior border of cell R_5 and outer end of cell *2nd* M_2 ; a further extensive whitened area occupies most of cells Cu and *1st* A excepting the base; the darkest spots are clearly defined, placed at tip of Sc_1 , Sc_2 , cord, tips of R_{1-2} , R_3 , M_3 , M_4 and Cu_1 , and the outer medial fork; veins pale yellow, infuscated in the dark brown spots. Venation: R_s relatively short, subequal to vein R_3 .

Abdominal tergites obscure yellow, the lateral margins narrowly darkened, sternites clearer yellow.

Holotype, ♀, Libertad, 6 km southeast of Tena, Napo-Pastaza, Ecuador, May 11, 1963 (L. E. Peña).

The only other generally similar species is *Erioptera (Mesocyphona) histrio* Alexander, of Ecuador and Peru, which differs evidently in the pattern of the wings and femora, as described.

28. *Amphineurus (Rhamphoneurus) nonnullus* sp. n.

Mesonotal praescutum yellow laterally, with a broad brown central stripe; pleura yellow, with a longitudinal brown stripe; wings weakly tinged with brownish yellow, unpatterned; male hypopygium with the tergite shallowly emarginate; mesal lobes of the basistyles of the two sides asymmetrical; phallosome a simple yellow rod that narrows to an acute blackened tip.

Male. — Length about 5 mm.; wing 6 mm. Rostrum and palpi black, the former approximately as long as remainder of head. Antennae chiefly pale yellow, the outer segments slightly darker; verticils very long and conspicuous. Head dark brown.

Pronotum above pale yellow, weakly infuscated medially in front. Mesonotal praescutum broadly pale brownish yellow on sides, the margins paling to yellow, the disk with a single broad brown median stripe that narrows behind; posterior sclerites of notum brown, narrowly yellowed on sides. Pleura and pleurotergite yellow, with a broad brown dorsal stripe that is more expanded behind. Halteres infuscated, the base of stem narrowly pale. Legs with all coxae and trochanters pale yellow; femora obscure brownish yellow but appearing much darker because of the abundant vestiture consisting of scattered setae

and very abundant linear scales, femoral tips vaguely paler; tibiae and tarsi brown. Wings weakly brownish yellow, the prearcular, costal and stigmal regions more saturated yellow; veins and trichia pale brown, more brightened in the saturated fields. Venation: Basal section of M_{1-2} short but distinct; *m-cu* at bases of veins M_3 and M_4 .

Abdomen dark brown, hypopygium more yellowed. Male hypopygium with the tergite shallowly and broadly emarginate posteriorly, the large lobes weakly infuscated, the tips obtuse. Basistyle with the mesal lobes of the two sides asymmetrical, one longer, narrowed gradually at a right angle into a long straight spine, the other lobe abruptly narrowed into a short apex that is produced into a shorter spine. Outer dististyle with stem moderately stout, the outer apical arm a long gently curved spine. Phallosome a slender gently curved rod that narrows to a long acute spine, the organ yellow with outer fourth blackened.

Holotype, ♂, Aucar, Chiloe Island, Chile, January 6-15, 1952 (L. E. Peña).

Amphineurus (Rhamphoneurus) nonnullus is most similar to *A. (R.) nullus* sp. n., differing especially in the details of coloration and in the structure of the male hypopygium, particularly the tergite, mesal lobes of the basistyle and the phallosome.

29. *Amphineurus (Rhamphoneurus) nullus* sp. n.

General coloration of head and thorax dark gray, the praescutum with a slightly darker central stripe that is best indicated anteriorly; femora yellow, the color obscured by darkened vestiture; wings with the ground very pale yellow, the prearcular, costal and stigmal regions more saturated yellow, the cord not darkened; male hypopygium with the notch of the tergite narrow and acute; mesal lobes of the basistyles similar on the two sides, terminating in an acute spine; both dististyles relatively stout, tips bifid; phallosome a simple blackened spine that is gently curved to the acute tip.

Male. — Length about 6 mm.; wing 7 mm.; antenna about 1.4 mm.

Female. — Length about 6.2 mm.; wing 7.5 mm.

Rostrum and palpi black, the former longer than remainder of head. Antennae relatively short; basal three or four segments yellow, the outer ones darker; verticils of proximal segments long and conspicuous. Head dark gray.

Pronotum brown, the pretergites pale yellow. Mesonotum of male dark gray, the praescutum in front with a slightly darker central stripe; in the female the praescutum more buffy laterally,

the central darkened stripe even more conspicuous. Pleura dark gray, the sternopleurite paler; in female, the ventral pleurites more extensively yellowed. Halteres yellow. Legs with the femora yellow, the color obscured by abundant darkened setae and linear scales; tibiae slightly darker, tarsi black. Wings with the ground very pale yellow, the base, costal region and stigma clearer yellow, the last more obscured by dark setae; no darkening of membrane at cord; veins and setae darkened, especially beyond cord. Venation: R_2 and R_{2-3} subequal; all medial veins very closely approximated at their origins.

Abdomen, including the hypopygium, dark brown. Male hypopygium with the tergite large, its posterior border with a very deep and narrow median notch, the lobes thus formed large, their apices obliquely truncated with glabrous margins. Basistyle with ventral lobe longest; mesal lobes of the two sides virtually symmetrical, appearing as a slender rod from a feebly dilated base, the apex narrowed into a long gently curved black spine, before the spine on lower face with a few very long delicate setae. Two dististyles of approximately equal length, the outer style very unequally bifid at tip, the inner style with its apical blades more nearly equal, the inner one a little broader. Phallosome a simple blackened spine that is gently curved to the acute tip.

Holotype, ♂, Aulen-Duhateo, Chiloe Island, Chile, February 6-8, 1952 (L. E. Peña). Allotopotype, ♀, pinned with type.

Amphineurus (Rhamphoneurus) nullus is closest to *A. (R.) fuscifusus* Alexander and *A. (R.) nonnullus* sp. n., differing from the latter in hypopygial structure. The male sex of *fuscifusus* still is unknown, the female being distinguished from the present fly by the coloration of the thorax and wings.

30. *Maietta trimedia* sp. n.

General coloration dark brown to black; vein R_2 angulated and spurred; three outer medial veins preserved; male hypopygium with the gonapophysis unequally bispinous.

Male. — Length about 3.5 mm.; wing 4 mm.

Female. — Length about 3.8-4 mm.; wing 4.5-4.8 mm.

Rostrum black, palpi brownish black. Antennae short, if bent backward extending to the wing root; basal segments obscure yellow, the outer ones darker; flagellar segments suboval, the verticils of outer ones long and conspicuous. Head brownish black, the vertex with very long erect black setae.

Thorax very dark brown to brownish black. Mesonotum posteriorly and especially the pleura with abundant elongate white scales. Halteres white. Legs with all coxae brown, trochanters obscure yellow; remainder of legs obscure testaceous yellow, clothed with flattened scales. Wings weakly infuscated, the costal region more yellowed, especially basally; veins pale brown; scales light brown, exceedingly abundant in all cells to produce a darkened to freckled appearance over the entire wing surface. Venation: Certain of the veins stout and conspicuous, others very weak to virtually evanescent, the latter including especially *M*, 1st *A* and the distal end of R_{1-2} ; R_{2-3-4} a little longer than the basal section of R_5 , R_{2-3} perpendicular at origin, the outer section of the vein directed at a right angle and here with a long basally directed spur at the bend, with R_2 placed basal of the angle; vein M_3 present, the cell about as long as its petiole.

Abdomen black. Ovipositor and male hypopygium much as in the genotype, *squamigera*, differing in details. Gonapophysis bifid, including a long inner axial spine and a shorter lateral spur, the latter longer in the paratype.

Holotype, ♂, Chepu, Chiloe Island, Chile, February 10-14, 1952 (L. E. Peña). Allotype, ♀, Aucar, Chiloe, January 6-15, 1952. Paratopotype, ♂, pinned with the allotype. Paratypes, 2 ♀ ♀, Caramavida, Nahuelbuta, Arauco, Chile, altitude 1000 meters, February 5-10, 1953 (L. E. Peña).

The discovery of a second species of this remarkable genus of crane-flies is of particular interest. It differs from the genotype, *squamigera* Alexander, in the much darker body coloration and in the presence of three outer medial veins in the wing. Additional material of *squamigera* confirms the fact that there are only two outer medial veins but in both known species certain of the veins are unusually pale and delicate, tend to become evanescent, and are difficult to trace with certainty.

31. *Molophilus (Molophilus) indurabilis* sp. n.

Belongs to the *plagiatus* group; mesonotal praescutum and the scutal lobes reddish brown; halteres pale yellow; wings brownish yellow, prearcular and costal regions clear yellow; male hypopygium with basal dististyle a nearly simple curved rod that terminates in a long slender spine, the lower margin before apex with three small points; phallosomic plate setuliferous, relatively broad, the apex virtually truncate.

Male. — Length about 4 mm.; wing 4.5 mm. Rostrum light brown, palpi black. Antennae with scape and pedicel clear light yellow; flagellum broken. Head light yellow, the central part of vertex light gray.

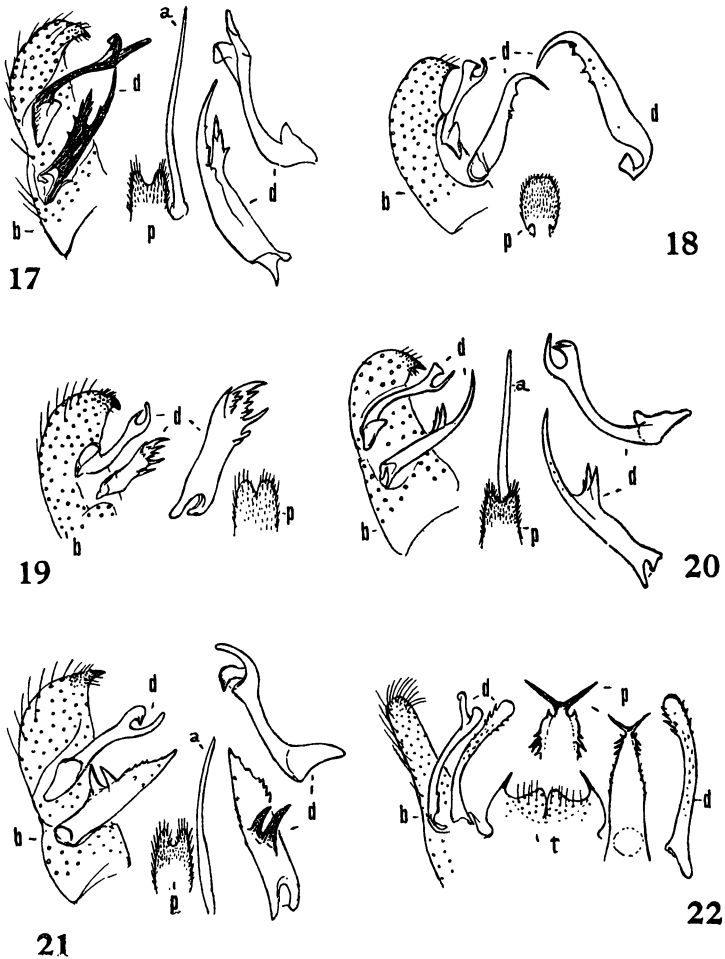


Fig. 17. *Molophilus (Molophilus) diceros* Alexander; male hypopygium. — Fig. 18. *Molophilus (Molophilus) indurabilis* sp. n.; male hypopygium. — Fig. 19. *Molophilus (Molophilus) nahuelbutae* sp. n.; male hypopygium. — Fig. 20. *Molophilus (Molophilus) neodicerus* sp. n.; male hypopygium. — Fig. 21. *Molophilus (Molophilus) paradicerus* sp. n.; male hypopygium. — Fig. 22. *Molophilus (Molophilus) tergo-spinosus* sp. n.; male hypopygium. — (Explanation of symbols: a, aedeagus; b, basistyle; d, dististyle; p, phallosome; t, tergite).

Pronotum and pretergites light yellow. Mesonotal praescutum reddish brown, the humeral and lateral borders broadly light yellow; scutum reddish brown, scutellum yellow; postnotum light brown, the suture between mediotergite and pleurotergite broadly yellow. Pleura reddish yellow, the dorsal pleurites dark brown, dorsopleural membrane yellowed. Halteres pale yellow. Legs with coxae yellow, the fore pair slightly darkened; trochanters yellow; femora yellow basally, slightly darker on about the outer third; tibiae and tarsi yellowed. Wings brownish yellow, prearcular

and costal regions clear yellow; veins yellow. Venation: Vein R_2 very shortly beyond level of $r-m$; petiole of cell M_3 about one-half longer than the oblique $m-cu$; vein 2nd A long, sinuous, ending about opposite the cephalic end of $m-cu$.

Abdomen brown, hypopygium yellowed. Male hypopygium (Fig. 18) with beak of basistyle, b , slender. Outer dististyle with the flattened outer arm produced into a darkened knob; basal style, d , a nearly simple curved rod that narrows gradually into a long blackened spine, the lower margin before the end with a weak flange that is produced into three weak knobs or points. Phallosomic plate, p , relatively broad, the apex very insensibly emarginate to nearly truncate, the surface densely setuliferous. Aedeagus long and slender.

Holotype, ♂, Caramavida, Nahuelbuta, Arauco, Chile, altitude 1000 meters, February 5-10, 1953 (L. E. Peña).

Other regional species, including *Molophilus (Molophilus) obliviosus* Alexander, *M. (M.) pastoris* Alexander, and *M. (M.) rubidithorax* Alexander, that have the basal dististyle of the hypopygium a simple rod differ from the present fly in the conformation and armature of the style and in the virtually entire phallosomic structure.

32. *Molophilus (Molophilus) nahuelbutae* sp. n.

Belongs to the *plagiatus* group; general coloration of thorax orange yellow, abdomen brown; legs obscure yellow; wings brownish yellow, the prearcular and costal fields clearer yellow; male hypopygium with basal dististyle on outer half armed with a concentration of large and smaller spines; phallosomic plate setuliferous, apex bilobed.

Male. — Length about 3.5 mm.; wing 4 mm. Head broken. Thorax uniformly deep orange yellow. Halteres obscure yellow. Legs obscure yellow but appearing darker because of long dark setae; outer tarsal segments infuscated. Wings brownish yellow, prearcular and costal fields clearer yellow; veins brownish yellow, the vein trichia light brown. Venation: Vein R_2 lying just distad of level of $r-m$; petiole of cell M_3 about one-third longer than $m-cu$; vein 2nd A long, gently sinuous, ending beyond the level of $m-cu$.

Abdomen brown, the hypopygium more yellowed. Male hypopygium (Fig. 19) with apical beak of basistyle, b , stout, blackened, with numerous small setae at its base, those of remainder of style long and conspicuous. Outer dististyle with branches unequal, the inner one long and slender, tip obtuse;

basal style, *d*, black, shorter than the outer style, conspicuously armed with spines on outer half, their arrangement as shown. Phallosomic plate, *p*, narrow, apex deeply emarginate, producing conspicuous setuliferous lobes. Aedeagus long and slender.

Holotype, ♂, Caramavida, Nahuelbuta, Arauco, Chile, altitude 1000 meters, February 5-10, 1953 (L. E. Peña).

The regional members of the *plagiatus* group that have the male hypopygium most like that of the present fly include *Molophilus* (*Molophilus*) *dicerus* Alexander and *M. (M.) perfidus* Alexander, most readily told by the structure of the basal dististyle.

33. *Molophilus* (*Molophilus*) *neodicerus* sp. n.

Belongs to the *plagiatus* group; general coloration of thorax dark brown; antennae relatively long; male hypopygium with the basal dististyle beyond midlength with two separate simple spines, narrowly united at their bases.

Male. — Length about 3.5-3.6 mm.; wing 3.8-4 mm.; antenna about 1-1.2 mm. Rostrum and palpi black. Antennae brownish black; flagellar segments long-oval, the verticils of the proximal segments very long; whitened vestiture long and erect. Head dark brown.

Thorax dark brown. Halteres obscure yellow. Legs with coxae and trochanters brown; remainder of legs brown, subbasal enlargement of fore tibia relatively conspicuous. Wings pale brown, veins and macrotrichia slightly darker. Venation: Vein R_2 a short distance beyond level of *r-m*; petiole of cell M_3 about one-half longer than *m-cu*; vein *2nd A* ending about opposite the basal third of petiole of cell M_3 .

Abdomen dark brown. Male hypopygium (Fig. 20) with beak of basistyle, *b*, moderately slender. Basal dististyle, *d*, with two separate simple subequal spines placed just beyond midlength of the style, in some paratypes these narrowly united at bases. Phallosomic plate, *p*, with a shallow U-shaped apical emargination, with setulae that are most conspicuous at ends of the lateral lobes.

Holotype, ♂, Contulmo, Palo Botado, Nahuelbuta, Arauco, Chile, February 1, 1953 (L. E. Peña). Paratopotypes, 5 ♂♂, February 1-10, 1953.

The most similar species is *Molophilus (Molophilus) diceros* Alexander, described from the Termas Rio Blanco, Curacautin, Chile (Bol. Dept. Sanidad Vegetal, 3: 134-135; 1944). This is distinguished from the present fly by the testaceous coloration of the mesonotum, short antennae, and the hypopygial structure, particularly the basal dististyle. This had not been illustrated previously and is shown for comparison with the present species (Fig. 17).

34. *Molophilus (Molophilus) paradiceros* sp. n.

Belongs to the *plagiatus* group, close to *neodiceros*; general coloration of thorax dark brown; male hypopygium with basal dististyle relatively short and broad, the diameter nearly equal for most of the length, the margin beyond the spines slightly serrated, spines unequal.

Male. — Length about 3.5 mm.; wing 4.2 mm.; antenna about 1.5 mm. Rostrum dark brown, palpi brownish black. Antennae brownish black; flagellar segments elongate, the more proximal ones with very long verticils. Head gray.

Thorax dark brown, virtually unpatterned. Halteres yellow, the base of stem paler. Legs with coxae and trochanters yellow; remainder of legs brownish yellow, appearing darker because of the abundant vestiture. Wings faintly tinged with brown, prearcular and costal fields more yellowed; veins light brown, the trichia darker. Venation: Vein R_2 beyond level of *r-m*; petiole of cell M_3 about one-fourth longer than *m-cu*; vein 2nd *A* ending about opposite anterior end of *m-cu*.

Abdomen dark brown. Male hypopygium (Fig. 21) generally as in *neodiceros*, differing in details of structure, especially the basal dististyle, *d*. This is unusually short and broad, of nearly equal diameter for most of its length, the outer point with margin slightly serrate; the two major spines unequal, the more proximal one larger.

Holotype, ♂, Butamalal, Nahuelbuta, Arauco, Chile, altitude 1400-1600 meters, February 21-25, 1953 (L. E. Peña).

In its hypopygial structure the present fly appears to be quite distinct from its nearest relative, *Molophilus (Molophilus) neodiceros* sp. n.

35. *Molophilus (Molophilus) tergospinosus* sp. n.

Belongs to the *gracilis* group, *ruficollis* subgroup; general coloration of body, antennae, halteres and legs yellow; wings pale yellow, macrotrichia of veins pale brown; male hypopygium with tergal region large, the outer lateral angles produced into strong spines; basal dististyle a simple rod, the tip obtuse, with strong subterminal spines; phallosome a blackened rod that terminates in two divergent black spines, the margin before apex with strong recurved points.

Male. — Length about 3.5 mm.; wing 4.2 mm.; antenna about 1 mm. Rostrum yellow, palpi black. Antennae yellow; flagellar segments oval, with very long verticils. Head brownish yellow.

Thorax yellow, central region of praescutum apparently slightly darker, pseudosutural foveae reddened; setae of praescutum and scutum long, yellow, the pteropleurite with still longer setae. Halteres pale yellow. Legs yellow, the tarsi passing into brown; fore tibia with a broad pale brown subbasal ring, as common in males of the group. Wings pale yellow, veins slightly darker; macrotrichia pale brown.

Abdomen yellowed throughout. Male hypopygium (Fig. 22) with tergal region, *t*, large, transversely oval in outline, the outer lateral angles produced into slender black spines; outer end of plate between the spines with two triangular yellow blades with numerous setae. Basistyle, *b*, with ventromesal lobe elongate, with strong yellow setae. Outer dististyle, *d*, unequally bifid at apex; basal style a simple rod, tip obtuse, before apex with strong appressed spines. Phallosome, *p*, distinctive, a relatively narrow blackened rod, at apex divided into two divergent black spines, the margin before apex with strong spines, mostly strongly recurved, the outermost directed caudad.

Holotype, ♂, Pichinahuel, Nahuelbuta, Arauco, Chile, altitude 1400-1600 meters, February 20, 1953 (L. E. Peña).

Molophilus (Molophilus) tergospinosus is quite distinct from other regional members of the *ruficollis* subgroup in the male hypopygium, especially the tergite and the phallosome.

36. *Molophilus (Rhynchomolophilus) perrostratus* Alexander

Molophilus (Rhynchomolophilus) perrostratus Alexander, Jour. Kansas Ent. Soc., 38: 451-452; October 1965.

General coloration of thorax and abdomen black; rostrum elongate, approximately twice the remainder of head, the palpi terminal; legs black, tibiae with very long setae, basitarsi white, base of tibia yellow; wings slightly darkened.

F e m a l e. — Length, including the rostrum, about 3.6-3.65 mm.; wing 3.6-3.8 mm.; rostrum alone about 6.5 mm.

Types from Quincemil, Cuzco, Peru, altitude 740 meters, August 1962 (L. E. Peña).

This remarkable fly, the type of the subgenus *Rhynchomolophilus* Alexander, is distinguished from all other known members of the great genus *Molophilus* Curtis by the elongate rostrum.