# NEW OR LITTLE-KNOWN NEOTROPICAL TIPULIDAE (DIPTERA). II

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The present paper continues the study of Neotropical Tipulidae in considering the materials that were discussed in the initial account. The species here treated chiefly are South American where they were collected by the veteran entomologist, Luis Peña Guzman and some others. Peña's materials are from Ecuador, Bolivia and Chile. A few further species were taken by Dr. Thomas H. G. Aitken in Panama and by Alberto Prosen in Bolivia. I express my deep thanks and appreciation to these friends for these interesting materials, the types of the described novelties being preserved in the Alexander Collection, now the property of the Smithsonian Institution, as was briefly discussed in the first paper.

#### HEXATOMINI

#### Shannonomyia nebrioptera sp.n.

General coloration of head and thorax light gray, pronotum and praescutum with a narrow continuous brown central line; legs black; wings whitened, with a sparse spotted and streaked brown pattern; Rs long; cord oblique, r-m arched, cell  $Ist\ M_1$  long and narrow; male hypopygium with tergal lobes low and rounded; interbase suboval, with numerous parallel delicate lines; phallosome with gonapophyses long, filiform, basal plates conspicuous; aedeagus basally strongly convoluted.

Male. — Length about 5.8-6.2 mm., wing 6.5-7.5 mm; antenna about 1.1-1.2 mm.

Rostrum gray pruinose; palpi black. Antennae black; proximal flagellar segments short-oval to subglobular, outer segments oval, more slender. Head gray.

Thorax light gray, dorsally with a narrow brown central stripe extending from the pronotum to the suture, slightly widened on posterior half of praescutum. Halteres with stem yellow, knob slightly darkened. Legs with coxae light gray; trochanters obscure yellow; remainder of legs black. Wings (Fig. 1) whitened, with a sparse spotted and streaked brown pattern that includes the stigma and marks on the outer veins, especially the cord and apices of veins  $R_1$  and  $R_2$ ; in some individuals, including the type, with a series of very small brown spots along vein  $SC_1$  veins pale, darker in the patterned areas. Venation:  $R_2$  long; cord oblique,  $R_3$  more distad, r-m

Contribution from the Entomological Laboratory, University of Massachusetts.

arched; cell Ist  $M_1$  long and narrow, as shown; m-cu at from about one-fourth to one-third the length of cell Ist  $M_2$ ; m far distad, lacking in one paratype.

Abdomen dark brownish gray. Male hypopygium (Fig. 6) with tergal lobes, t, low and rounded. Outer dististyle, od, narrow, terminating in a slender spine, the narrow subterminal point strongly arched, divergent; inner dististyle, id, narrow. Interbase, i, of peculiar conformation, suboval, surface with a number of subparallel transverse lines, about as shown. Phallosome, p, with gonapophyses, g, long, filiform, their basal plates conspicuous; aedeagus, a, elongate, strongly convoluted basally.

Holotype. —  $\circ$ , Cordillera Tanajillas, South Cuenco, Azuay, Ecuador, 3100 meters, March 18-19, 1965 (Peña). Paratopotypes, 3  $\circ$   $\circ$ , March 18-20, 1965 (Peña).

Shannonomyia nebrioptera is most similar to species such as S. ignava Alexander, Peru, differing especially in the wing pattern and venation, blackened legs, and in details of hypopygial structure, especially the tergite and interbase.

# Shannonomyia perreticularis sp.n.

Size large (wing of male 8.5-11 mm.); antennae short, segments with long conspicuous verticils; thorax almost uniformly light gray, praescutum with four poorly indicated slightly darker stripes; halteres long, knobs yellow; legs black; wings yellowed, with a conspicuous reticulated brown pattern, cell  $M_1$  present; abdomen black, proximal sternites obscure yellow; male hypopygium with tergal lobes broadly rounded; interbases apparently lacking; aedeagus elongate, conspicuously sigmoid outwardly.

Male. — Length about 8-10 mm.; wing 8.5-11 mm.; antenna about 1.4-1.5 mm. Rostrum and palpi dark brown. Antennae short, dark brown; proximal flagellar segments short-cylindrical, with reduced setae, the segments progressively longer outwardly; verticils long and conspicuous, especially on the outer segments where they are about one-half longer than the segment; outer half of terminal segment slightly dilated. Head dark brownish gray.

Thorax almost uniformly light gray, praescutum with four poorly indicated slightly darker stripes, centers of scutal tobes with a similar darkening. Halteres long, obscure yellow, including the lengthened knobs. Legs with coxae brownish gray; trochanters obscure yellow; remainder of legs black, femoral bases narrowly more brightened. Wings yellow, with a conspicuous reticulated brown pattern, with darkened areas in all cells, more sparse in the costal and radial fields, more abundant in the apical and posterior cells, appearing as narrow to slightly broader parallel lines, interspaces broader than the darkened lines in holotype, somewhat broader in paratypes; stigma and a continuous line over the cord to form an oblique band; veins brown, darker in the patterned areas. Venation: Rs long, especially in the type where it slightly exceeds the upper branch of Rs ( $R_{2+1}$  and  $R_3$ ); cell  $M_1$  present, approximately as long as its petiole; m-cu at near one-third the length of cell  $lst M_2$ .

Abdomen black, proximal sternites obscure yellow. Male hypopygium (Fig. 7) with tergite, t, narrow, posterior border with two low rounded lobes, median emargination slightly more membranous, vestiture short and inconspicuous; sternite longer, gradually narrowed outwardly, apex truncate. Phallosome, p, with a conspicuous basal sheath. Interbase not evident in available materials and apparently not developed. Aedeagus, a, long, conspicuously convoluted or sigmoid before apex. Basistyle, b, with whitened membrane on inner face. Outer dististyle, od, simple, appearing as a very gently curved blade, apex unequally bidentate; conspicuous long setae beyond base and more scattered on outer margin before apex; inner dististyle shorter and stouter, apex obtuse, dorsal surface with relatively long retrorse setae.

Holotype. —  $\circ$ , Yungas, Chapare, Cochabamba, Bolivia, 2900 meters, January 29-31, 1976 (Peña). Paratopotypes, 4  $\circ$   $\circ$ , with type.

The present fly is one of the largest and having very conspicuously patterned wings of any of the known regional species. All such forms are smaller and differ in coloration of the legs and wings. The apparent loss of the typopygial interbases should be noted.

# Shannonomyia reticularis sp.n.

General coloration of head and thorax brownish gray; abdomen brownish black in male, paler in female; antennae black, flagellar segments short-oval; halteres light yellow; legs in male black, with narrowly yellowed femoral bases, in female legs more extensively yellowed, tips of the segments narrowly more darkened; wings yellow, with a sparse brown pattern, on anterior half reduced to small spots, in the cubital and anal cells with darkened areas larger, appearing as transverse lines; veins  $R_{2*3*4}$  and basal section of  $R_3$  subequal; cord slightly oblique, cell  $M_1$  present; male hypopygium with tergal lobes low, rounded, with very small delicate setulae; outer dististyle a slender curved rod, apex with two small blackened points, outer surface of style with numerous relatively small setae; phallosome with a long triangular basal sheath; aedeagus moderately long, outer half slightly sigmoid; interbase apparently lacking.

Male. — Length about 7.2-7.5 mm; wing 6.8-7 mm.

Female. — Length about 9.5 mm; wing 8.8 mm.

Rostrum brownish gray, palpi black. Antennae black; flagellar segments short-oval, progressively smaller outwardly. Head brownish gray.

Thorax gray, mesonotal praescutum with two long pale brown intermediate stripes, lateral stripes and scutal lobes less evidently darkened. Halteres light yellow. Legs with coxae gray, trochanters more yellowed; in the holotype male remainder of legs black, femoral bases very narrowly yellowed; in female and paratype male legs slightly different, yellowed, with tips of femora, tibiae and basitarsi narrowly darkened; remainder of tarsi black. Wings yellow, with a sparse brown pattern, on anterior half in radial and outer medial cells reduced to small

spots; in the cubital and anal cells darkened areas larger, appearing as transverse lines that are in alignment across the cells or virtually so, with about six such lines in cell M, four or five in outer halves of cells Cu and Ist A, four or five in basal two-thirds of cell 2nd A; a narrow oblique darker brown line over the cord, in stigmal region forking to enclose a small yellow ground area; veins yellow, darker in the clearer brown areas. Venation:  $R_{2,3+4}$  and basal section of  $R_3$  subequal; cord slightly oblique; cell Ist  $M_3$  present, subequal in length to its petiole.

Abdomen in male uniformly brownish black, in female paler brown, especially ventrally. Male hypopygium (Fig. 8) with tergal lobes, t, low, rounded, with very small delicate setulae. Distityles, d, as shown; outer style, od, a narrow gently curved rod, apex with two small black points, the outermost more slender; outer face of style with numerous relatively small setae; inner style smaller, boomerang-shaped, outer half more slender, apex obtuse. Phallosome, p, with interbase very reduced; proximally with a long-triangular basal sheath, the enclosed aedeagus, a, moderately long, outer half gently sigmoid.

Holotype. —  $\sigma$ , Siberia, Cochabamba, Bolivia, 2900 meters, February 18, 1976 (Peña). Allotopotype, Q, pinned with type. Paratopotypes,  $\sigma \sigma$ , with types.

Other generally similar allied species include Shannonomyia evanescens Alexander, Ecuador, S. perreticularis sp.n., and some others having cell  $M_1$  of the wings present, all differing among themselves in the patterns of the legs and wings and in hypopygial characters.

# Shannonomyia subexillipes sp.n.

General coloration of head and thorax brownish gray; legs unusually long and slender, dark brown; wings pale yellow, stigma conspicuous, brown; male hypopygium with outer dististyle terminating in two spines; inner dististyle unusually slender; aedeagus relatively short, with a low flange.

Male. - Length about 6 mm.; wing 6.5 mm.

Rostrum and palpi dark brown, terminal segment of the latter darker, short-cylindrical, subequal in length to the penultimate segment. Antennae of type male broken at the seventh segment, dark brown; proximal flagellar segments short-oval, the more rounded lower face without setae. Head brown, presumably gray pruinose in dry specimens.

Thorax almost uniformly light gray, praescutum with three very slightly darker stripes, the lateral pair crossing the suture to include the central parts of the scutal lobes. Pleura gray. Halteres with stem elongate, pale, knob slightly darker. Legs with coxae and trochanters obscure brownish yellow; remainder of legs dark brown, femoral bases narrowly yellowed; legs unusually long and slender, tibiae slightly longer than the femora, shorter than the tarsi. Wings pale yellow, stigma brown, conspicuous; veins light brown. Trichia of veins beyond cord involving all of vein  $R_1$ , with sparse scattered trichia at outer ends of veins  $R_2$ ,  $M_{12}$  and  $M_1$ ;  $M_2$  and

distal section of  $Cu_1$ , with one or two more basal trichia. Venation:  $Sc_1$  ending shortly before fork of Rs,  $Sc_2$  close to tip;  $R_2$  shortly before fork, subequal to  $R_{11}$ ; cell  $Ist M_2$  long and narrow, the longer veins almost parallel; m-cu at near one-third  $M_{11}$ .

Abdomen dark brown, ninth segment slightly paler. Male hypopygium (Fig. 9) with the outer dististyle, od, terminating in two relatively small blackened spines; inner style unusually slender. Phallosome, p, relatively small, outer half of the relatively short aedeagus, a, with a low flange. Interbase, i, shaped as figured.

Holotype. —  $\sigma$ , Cordillera Tinajilla, South Cuenca, Azuay, Ecuador, 3100 meters, March 18-19, 1965 (Peña).

In its hypopygial structure and the very slender legs, the present fly is similar to *Shannonomyia* (Roraimomyia) exilipes Alexander, from this same general part of Ecuador. This latter fly belongs to the subgenus Roraimomyia Alexander that is characterized by the virtually complete atrophy of both the halteres and wings and in the reduction in number of antennal segments.

#### Shannonomyia subsopora sp.n.

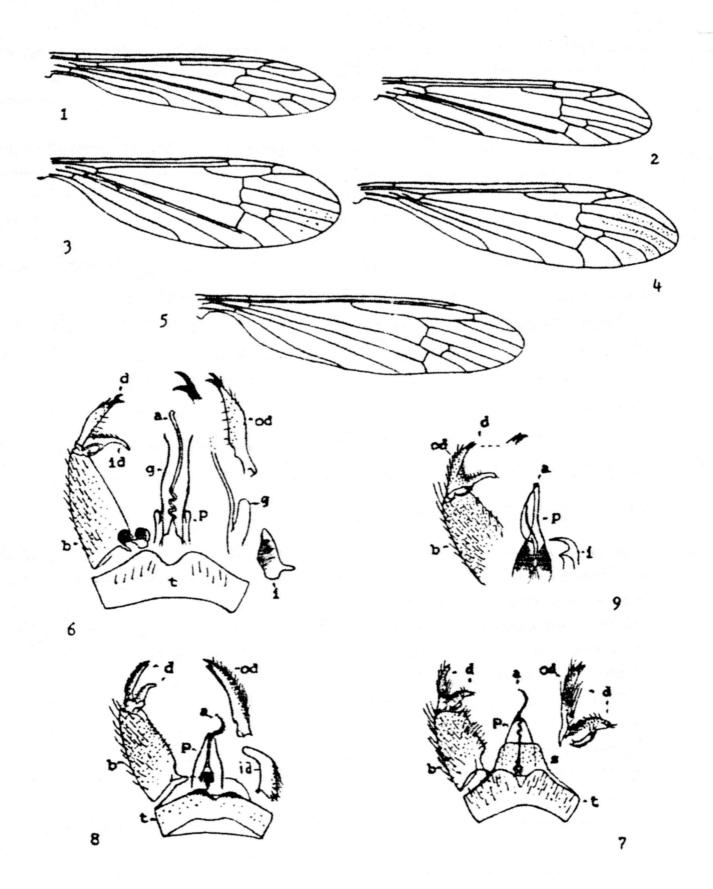
Allied to sopora; general coloration of body dark brown to black; halteres yellow; legs brownish black to black; wings pale yellow, unmarked except for the dark brown stigma; cell  $R_1$  at margin extensive, cell  $Ist\ M_2$  long and narrow; male hypopygium with apices of tergal lobes narrowly obtuse; interbase with three chitinized projections; phallosome with aedeagus and apophyses elongate.

Male. — Length about 7 mm.; wing 7 mm.; antenna about 1.5 mm.

Rostrum and palpi brown, terminal segment of palpus small, about one-half the penultimate. Antennae brown, scape and pedicel darker; proximal flagellar segments long-oval, the ends truncated, becoming progressively more slender outwardly; verticils of intermediate segments about twice the segment. Head dark brown.

Thorax generally black, sparsely gray pruinose, praescutal stripes black. Halteres yellow. Legs with fore coxae black, remaining coxae and the trochanters yellow; fore and middle legs with femora brownish black, bases narrowly yellowed, posterior femora brownish yellow, tips narrowly more darkened; tibiae dark brown, tips darker; tarsi brownish black. Wings (Fig. 2) whitened to pale yellow, the oval stigma dark brown; veins of proximal half of wing pale yellow, beyond the cord light brown and more apparent. Venation about as shown; vein  $R_4$  generally parallel to  $R_3$ , at margin cell  $R_3$  extensive, about four times cell  $R_3$ ; elements of cord transverse, r-m only gently arcuated; cell  $lst M_1$  long and narrow, about one-third cell  $2nd M_3$ ; m-cu at near midlength of cell  $lst M_2$ .

Abdomen dark brown. Male hypopygium (Fig. 10) with posterior border of tergite, t, broadly U-shaped, the triangular lateral lobes narrowly obtuse at apices. Outer dististyle, od, slender, outer end narrowed, terminating in an acute spine, with a lower more basal broader point. Phallosome, p, with aedeagus, a, very long and



Text-Figs. 1-9. — Fig. 1, Shannonomyia nebrioptera sp.n., venation; Fig. 2, Shannonomyia subsopora sp.n., venation; Fig. 3, Shannonomyia torus sp.n., venation; Fig. 4, Shannonomyia trichophora sp.n., venation; Fig. 5, Hexatoma (Eriocera) setosivena sp.n., venation; Fig. 6, Shannonomyia nebrioptera sp.n., male hypopygium; Fig. 7, Shannonomyia perreticularis sp.n., male hypopygium; Fig. 8, Shannonomyia reticularis sp.n., male hypopygium; Fig. 9, Shannonomyia subexilipes sp.n., male hypopygium.

Male hypopygium: a, aedeagus; b, basistyle; d, dististyles; g, gonapophysis; i, interbase; id, inner dististyle; od, outer dististyle; p, phallosome; s, 8th sternite; t, 9th tergite.

strongly convoluted before midlength, the subtending apophyses long-filiform.

Holotype. —  $\sigma$ , Paracti, Chapare, Cochabamba, Bolivia, 2200-2900 meters, February 2-4, 1976 (Peña).

The most similar regional species are Shannonomyia sopora Alexander, Peru, and S. phaeostigmosa Alexander, Peru, which differ especially in hypopygial structure, including the tergal lobes, interbase and phallosome, the last two being distinctive. The interbase, i, has three chitinized projections, the outermost a slender spine, with a microscopic more basal point, the lowest spine broader, as shown.

## Shannonomyia torus sp.n.

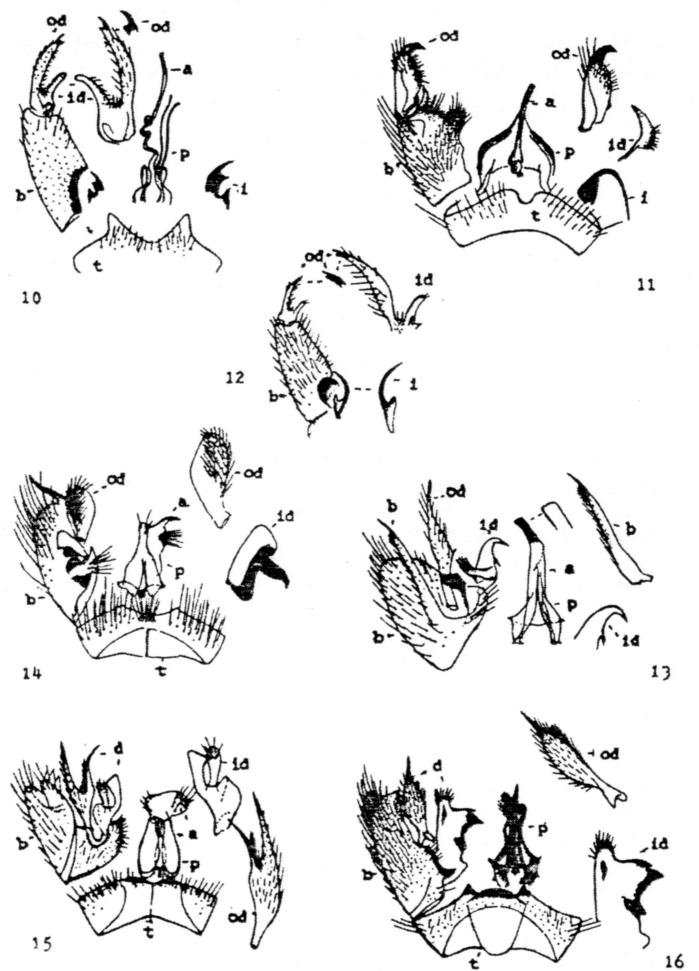
General coloration of body brownish black; legs dark brown, femoral bases more yellowed; wings almost uniformly light brown, the small stigma slightly darker; cell  $R_1$  at margin about twice as extensive as cell  $R_2$ ; cell  $Ist\ M_2$  small, cell  $M_1$  lacking; outer ends of cells  $R_1$  to  $M_2$  with very sparse trichia; male hypopygium with a conspicuous darkened tubercle on mesal face of basistyle; dististyles very unequal, the inner style small; gonapophysis outwardly narrowed into a long slender curved spine; phallosome expanded on basal half; aedeagus short, straight, without convolutions.

Male. — Length about 6 mm.; wing 5.6 mm.; antenna about 2 mm.

Rostrum and palpi brown; terminal palpal segment shorter and more slender than the penultimate. Antennae dark brown; proximal segments oval, the ends truncated, outer segments progressively smaller, terminal segment about one-third the size of the penultimate. Head brownish black.

Thorax uniformly brownish black, the notum more polished. Halteres brown. Legs with coxae brownish black; trochanters obscure yellow; remainder of legs dark brown, femoral bases more yellowed; claws small. Wings (Fig. 3) almost uniformly light brown, costal region and the small oval stigma slightly darker brown; veins dark. Longitudinal veins beyond general level of origin of Rs with abundant trichia, including Rs and outer third of M, more restricted on cord; outer sixth of Ist A and half of 2nd A with trichia. Outer ends of cells Rs, 2nd Ms and Ms with very sparse trichia (shown in figure by dots). Venation:  $Sc_1$  ending shortly before fork of Rs,  $Sc_2$  near its tip; Rs and Rs, st in alignment, the latter about one-half longer than the basal section of Rs; r-m arcuated; cell Ist Ms small, shorter than any of the veins beyond it; cell Ms, lacking; m-cu at near one-third the length of cell Ist Ms.

Abdomen blackened, hypopygium very slightly paler. Male hypopygium (Fig. 1t) with tergal lobes, t, very low and rounded, median emargination small. Basistyle, b, on mesal face shortly beyond midlength with a conspicuous semioval darkened lobe. Outer dististyle, od, with basal two-thirds stout, mesal face with numerous long setae; distal third of style narrowed, apex very shallowly emarginate, the lower point larger; inner dististyle, id, very small, as shown, narrowed outwardly into a spinous point. Interbase, i, narrowed into a very long curved spine.



Text-figs. 10-16. — Fig. 10, Shannonomyia subsopora sp.n., male hypopygium; Fig. 11, Shannonomyia torus sp.n., male hypopygium; Fig. 12, Shannonomyia trichophora sp.n., male hypopygium; Fig. 13, Teucholabis (Teucholabis) adamesi sp.n., male hypopygium; Fig. 14, Teucholabis (Teucholabis) clavistyla sp.n.; Fig. 15, Teucholabis (Teucholabis) diacantha sp.n.; Fig. 16, Teucholabis (Teucholabis dilatipes sp.n.; male hypopygium.

Male hypopygium: a, aedeagus; b, basistyle; d, dististyles; g, gonapophysis; i, interbase; id, inner dististyle; od, outer dististyle; p, phallosome; t, 9th tergite.

Phallosome, p, much expanded on more than basal half, the lateral borders more darkened; aedeagus, a, short, extended beyond the base, without convolutions such as are common in the genus.

Holotype. —  $\sigma$ , Paracti, Chapare, Cochabamba, Bolivia, 2200-2900 meters, February 2-4, 1976 (Peña).

Shannonomyia torus is readily told by the conspicuous darkened tubercle on mesal face of the basistyle, in conjunction with the loss of cell  $M_1$  of the wings. The only other regional species with a somewhat comparable tubercle on the basistyle is Shannonomyia tuber Alexander, of Chile, which has cell  $M_1$  of wings present, more abundant trichia in the outer wing cells, and with the hypopygial structure quite different. The unusually small inner dististyle should be noted. S. microstyla Alexander, Panama, has a somewhat similar reduced inner style but differs in many other hypopygial features and in other characters.

# Shannonomyia trichophora sp.n.

General coloration of entire body dark brown; antennae very short, apparently 13-segmented, with very long verticils; halteres very long, slightly exceeding the entire thorax; legs light brown; wings faintly infuscated, stigma small, slightly darker brown; outer radial and medial cells with longitudinal rows of trichia; Rs long; cell  $R_1$  at margin very extensive, about four and one-half times that of cell  $R_2$ ;  $R_{4+3}$ , outer medial veins and  $Cu_1$  bent caudad, especially the last; male hypopygium with outer dististyle slender, terminating in two appressed black spines, inner style very small, digitiform; interbase a long slender curved spine.

Male. - Length about 5 mm.; wing 5.8 mm.; antenna about 0.6 mm.

Mouthparts brown, poorly preserved in the unique type. Antennae very short, apparently 13-segmented, dark brown; scape and pedicel small, all flagellar segments with very long verticils, the longest about 3.5 times the segments, on the intermediate flagellar segments. Head dark brown.

Thorax almost uniformly dark brown. Halteres very long, slightly exceeding the entire thorax, stem yellow, the small knob brownish black. Legs with coxae light brown, trochanters more yellowed; remainder of legs uniformly light brown. Wings (Fig. 4) faintly infuscated, the small oval stigma slightly darker brown. Cells  $R_1$  to  $M_1$  with linear rows of small delicate trichia at near midwidth, more numerous in cells  $R_4$  and  $R_5$ . Trichia on longitudinal veins beyond general level of origin of  $R_5$ , with further scattered trichia on outer two-thirds of vein 2nd A. Venation:  $Sc_1$  long, extending beyond tip of  $Sc_1$  and shortly before fork of  $R_5$ ,  $R_5$  long, slightly longer than its anterior branch; vein  $R_4$  bent strongly caudad, ending before wing apex, cell  $R_4$  about four and one-half times as extensive as cell  $R_5$ ; all outer veins bent strongly caudad,  $Cu_1$  most so; elements comprising the cord transverse, r-m arcuated; m-cu at near midlength of cell lst  $M_4$ ; vein lst A very delicate, difficult to

see in slide mount.

Abdomen brown. Male hypopygium (Fig. 12) with the tergite and aedeagus of the unique type damaged, the latter long and slender, as in the genus. Outer dististyle, od, slender, narrowed very gradually outwardly, the apex including two closely appressed black spines; inner style, id, small, digitiform. Interbase, i, appearing as a long slender curved spine from a triangular base.

Holotype. —  $\circ$ , Paracti, Chapare, Cochabamba, Bolivia, 2200-2900 meters, February 2-4, 1976 (Peña).

Other Neotropical species of the genus that have trichia in the wing cells include Shannonomyia araguae Alexander, Venezuela, S. crassicornis Alexander, Jamaica, S. myersiana Alexander, Jamaica, S. olssoni (Alexander), Panama, and some others, all being quite distinct from the present fly.

# Hexatoma (Eriocera) setosivena sp.n.

Head dull black; thoracic dorsum blackened, praescutum yellow with four polished orange stripes; dorsal pleurites and membrane blackened, sternopleurite, meron, coxae and trochanters abruptly orange, remainder of legs brownish black; wings light brown, prearcular and costal fields darker brown, the small stigmal area still darker; longitudinal veins in outer radial and medial fields with long conspicuous trichia, more sparse on vein  $M_4$ :  $Sc_1$  ending opposite fork of  $R_{2*2*4}$ ; abdominal tergites brownish black, proximal sternites and hypopygium yellow, intermediate sternites brownish black.

Male. — Length about 14 mm.; wing 12.5 mm.; antenna about 3 mm.

Rostrum black, gray pruinose; palpi black. Antennae short, 7-segmented, dark brown; all segments of flagellum long-cylindrical, progressively shorter outwardly, with long conspicuous setae, especially on the lower faces. Head dull black, sparsely pruinose, the entire vertical tubercle more heavily; eyes conspicuous.

Pronotum blackened. Mesonotal praescutum yellow with four more polished orange stripes, the intermediate pair narrowly margined with darker orange; scutum polished black, scutellum and postnotum less conspicuously blackened. Dorsopleural membrane, an episternum and extreme dorsal margin of pleura blackened, sternopleurite and meron abruptly orange. Halteres black. Legs with coxae and trochanters orange; remainder of legs dark brown to brownish black, femoral bases not brightened. Wings (Fig. 5) light brown, cells C and Sc, with the prearcular field darker brown; stigma small, long oval, darker brown; veins dark brown. Most longitudinal veins beyond cord with long conspicuous trichia, including the outer radial and medial fields, more sparse on vein  $M_4$ ; veins before cord and posterior to R glabrous. Venation:  $Sc_1$  ending opposite the fork of  $R_{2+3+4}$ ; cell  $Ist\ M_2$  rectangular, with m-cu at midlength.

Abdominal tergites brownish black, second segment vaguely more yellowed; proximal sternites light yellow, the outer ones brownish black; hypopygium yellow.

Holotype. —  $\sigma$ , Finca Montequini, Chicacao, Guatemala, 3500 feet, July 4, 1949 (T. H. Farr).

In its general appearance the present fly is most similar to Hexatoma (Eriocera) haemorrhoa (Osten Sacken) and H. (E.) mesoxantha (Osten Sacken), both described from Mount Orizaba, Mexico, collected by Sumichrast. The former is most like the present fly, differing evidently in the venation of the radial and medial fields, and especially in the trichiation of the veins, lacking trichia on all veins posterior to R excepting four or five scattered punctures on distal section of vein  $R_s$ .

#### ERIOPTERINI

# Teucholabis (Euparatropesa) clavistyla sp.n.

General coloration of body polished black, thorax and abdominal sternites patterned with yellow; knobs of halteres yellow; legs chiefly black, in the male with basitarsi of posterior legs slightly dilated; wings yellowed, patterned with pale brown, including the broad apex, stigma dark brown; male hypopygium with basistyle terminating in a long spine; outer dististyle a flattened oval blade.

Male. - Length about 8 mm.; wing 8 mm.

Female. - Length about 7 mm.; wing 7.5 mm.

Rostrum and palpi black. Antennae black; proximal flagellar segments subglobular, outwardly passing from short-oval to elongate. Head polished black.

Prothorax polished black, posterior border and pretergites light yellow. Mesonotum almost entirely polished black, central area of scutum, posterior borders of scutal lobes and the extreme outer border of scutellum obscure yellow. Pleura polished black, dorsopleural membrane and propleura restrictedly yellow; anterior half of pleurotergite more silvery white, produced by dense silvery white setulae; meral region extensively whitened. Halteres with stem black, knob light yellow. Legs with fore and hind coxae polished black, middle coxae more yellowed; trochanters brownish yellow; remainder of legs black, posterior tibiae slightly paler, bases of fore and middle femora narrowly yellowed; posterior basitarsi with more than the proximal half slightly dilated in male, normal in female. Wings with ground yellowed, outer fourth and extensive seams in cells M and apex of 1st A pale brown; stigma narrowly dark brown, extended over basal section of R<sub>1</sub> and the remainder of cord; veins brownish black. Venation as in the subgenus;  $Sc_1$  ending opposite or slightly beyond origin of Rs, the latter strongly arcuated;  $R_1$  at or shortly before the fork of Rs; cell R3 present, as in the subgenus; m-cu shortly beyond fork of M, in cases to about one-third its length.

Abdominal tergites and the hypopygium black; in male, sternites one to seven with broad obscure yellow posterior borders, on outer segments including approximately one-half the segment; in female, the pale yellow borders narrower, becoming almost obsolete on outer segments. Sternal pocket of fifth abdominal segment

of male very conspicuous, elongate, widest posteriorly, with sparse subtending setae. Male hypopygium (Fig. 14) with ninth tergite, t, narrowly transverse, posterior border with two widely separated small lobes, with a larger median discal tubercle that is provided with long setae. Basistyle, b, with a nearly terminal slender spine, outer face of style with long setae, stouter and more numerous near apex; mesal face of style near base with a triangular blackened flange. Outer dististyle, od, a flattened oval blade with a concentration of setae on outer half, the marginal series long and subappressed, the more discal ones short; inner dististyle, id, about as shown, appearing as a flattened yellow blade, the lower margin and a powerful black spine or beak more blackened. Phallosome, p, terminating in a strong black spine, a.

Holotype. —  $\circ$ , Paracti, Chapare, Cochabamba, Bolivia, 2300 meters, February 1-5, 1976 (Peña). Allotopotype,  $\circ$ , same data. Paratopotypes,  $1 \circ$ ,  $1 \circ$ , same data.

The genus *Teucholabis* is discussed in some detail in the report where the subgenus *Euparatropeza* Alexander was defined (Rev. de Entomologia, 17:375-400, 14 figs.; 1946). From the more than a dozen Neotropical species of the subgenus, the present fly is readily distinguished by hypopygial structure. *Teucholabis* (*Euparatropesa*) martinezi Alexander, likewise from Bolivia is quite distinct.

# Teucholabis (Teucholabis) adamesi sp.n.

Allied to melanocephala; general coloration black, thorax variegated with yellow; legs with femora light yellow, the extreme tips brown; wings subhyaline, conspicuously patterned with brown, forming three major areas, the outermost being the broad apex; male hypopygium with spine of basistyle far cephalad, elongate, terminating in a slender point; blackened mesal flange of basistyle small, the margin without distinct teeth; outer dististyle long, dilated at midlength; outer third narrowed into a blackened blade, its apex obliquely truncate.

Male. - Length about 6.5 mm.; wing 5.8 mm.

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

Types in spirit, mounted on slides in balsam. Rostrum and palpi dark brown. Antennae brown, scape slightly paler; flagellar segments oval, progressively smaller outwardly. Head brownish black.

Prothorax yellow. Mesothorax chiefly polished black, including the praescutum, mesopleura and postnotum; scutal region paler brown; scutellum and meral region light yellow. Halteres with stem brown, knob more yellowed. Legs with coxae and trochanters yellow; femora light yellow, extreme tip brown, not blackened as in aequinigra; tibiae and basitarsi pale brownish yellow, outer tarsal segments brown. Wings subhyaline, conspicuously patterned with brown, including a large area at basal third extending from origin of Rs to tip of vein 2nd A, more expanded in cell

M to involve about the central half of the cell; stigma brown, behind confluent with a paler brown band over the cord, darker and more extensive in radial field; wing apex broadly brown, extended basad almost to outer end of cell Ist  $M_2$ ; veins pale brown, darker along the cord. Venation: Sc. slightly arched immediately beyond stigma, widening the cell; at margin cell  $R_2$  more extensive than cell  $R_4$ ; m-cu at or shortly beyond fork of M.

Abdomen uniformly polished black. Sternal pocket of segment five with abundant long setae, more concentrated on lateral and posterior margins, the pocket much more developed than in aequinigra. Male hypopygium (Fig. 13) with spine of the basistyle, b, placed far cephalad, elongate, terminating in a long slender spike; mesal flange a small compact blackened structure, the margin without acute points. Outer dististyle, od, subequal in length to the spine of the basistyle, dilated at midlength, on inner margin with a very small black spine; inner style, id, as shown, the apical spine long, curved. Aedeagus, a, slender, outer third narrowed into a blackened blade, the apex obliquely truncate.

Holotype. —  $\circ$ , Fortuna Dam Site, Chiriqui River, Chiriqui Province, Panama, 920 meters, February 1976 (Thomas Aitken).

I am most pleased to dedicate this species to Señor Abdiel Adames. Director of the Fortuna Dam Project, who greatly assisted Dr. Aitken in his work on the biting flies of Panama.

The fly is generally similar to Teucholabis (Teucholabis) melanocephala (Fabricius), T. (T.) aequinigra Alexander, T. (T.) amblyphallos Alexander, and some others, all differing among themselves in details of body, wing and leg coloration, and especially in hypopygial structure, including the armature of the basistyle, both dististyles, and the aedeagus.

# Teucholabis (Teucholabis) diacantha sp.n.

General coloration of body polished black, thorax conspicuously patterened with yellow; knobs of halteres clear light yellow; legs chiefly black, femoral bases yellowed, posterior tibiae paler, basitarsi slightly dilated basally; wings hyaline, stigma small, dark brown; radial branches nearly parallel, cell  $R_1$  at margin about twice as extensive as cell  $R_4$ ; male hypopygium with apex of basistyle bilobed, without spines; outer dististyle forked into two long spines; apical emargination of inner dististyle with a conspicuous darkened club.

Male. — Length about 5-5.5 mm.; wing 5.2-6.2 mm.; antennae about 1.2-1.6 mm.

Rostrum and mouthparts black. Antennae brownish black, scape somewhat paler; proximal flagellar segments subglobular, outer ones progressively smaller, oval, outer four or five markedly reduced. Head polished black.

Pronotum polished black, pretergites chiefly yellow, narrowly darkened medially. Mesonotal praescutum polished black, with light yellow areas at humeral region,

median area at end of praescutum, anterior half of central part of scutum and the scutellum; remainder of scutum, postnotum and parascutella polished black. Pleura polished black, dorsopleural membrane and a broad stripe on dorsal sternopleurite, with the meral region, light yellow. Halteres with stem pale brown, knob clear light yellow. Legs with the small coxae blackened, trochanters obscure yellow, the apices narrowly darkened; femora obscure yellow, apices broadly black, most extensive on fore legs; fore and middle tibiae light brown, posterior pair paler brown, the outer ends darkened; tarsi brownish black; posterior basitarsi with nearly the proximal half slightly dilated. Wings hyaline, the small stigma dark brown; veins darker brown. Venation:  $Sc_1$  ending about opposite one-third  $Rs_2$  radial branches nearly parallel, on outer third slightly divergent; cell  $R_1$  at margin about twice as extensive as cell  $R_4$ ; m-cu shortly beyond fork of M.

Abdomen, including hypopygium, polished black. Male hypopygium (Fig. 15) with posterior border of tergite, t, nearly truncate, the two low lobes darkened. Basistyle, b, with apex divided into two obtuse lobes. Outer dististyle, od, at near midlength divided into two slender points, the axial one stouter, with numerous setae; inner spine a stender needle, with long pale setae at base; inner style, id, smaller, inner angle produced into a flattened dark blade, the apex oblique, in the apical emargination with a conspicuous darkened club, provided with sparse long apical setae. Aedeagus, a, about as shown, apical lobe oval, without spines.

Holotype. —  $\sigma$ , Paracti, Chapare, Cochabamba, Bolivia, 2300 meters, February 1-3, 1976 (Peña). Paratopotypes, 5  $\sigma \sigma$ , February 2-4, 1976 (Peña).

Other generally similar regional species include *Teucholabis* (*Teucholabis*) brevisetosa Alexander, Peru, T. (T.) distifurca Alexander, Ecuador, T. (T.) rectangularis Alexander, Bolivia, T. (T.) schististyla Alexander, Peru, and some others, all differing among themselves in details of coloration and in hypopygial structure.

# Teucholabis (Teucholabis) dilatipes sp.n.

Size large (wing of male over 8 mm.); head yellow, vertex blackened; pronotum yellow, mesonotum polished black with yellow areas on praescutum, central region of scutum; and the scutellum; pleura chiefly polished black, with dense silvery white setae; knobs of halteres light yellow; fore legs black, femoral bases broadly yellow; middle legs with femora yellow, tips narrowly black; posterior femora yellow, base and apex black; middle and posterior tibiae obscure yellow; tarsi black; posterior basitarsi dilated on proximal three-fourths; wings with proximal two-thirds light yellow, outer end and posterior margin pale brown; stigma and anterior cord darker brown; Sc short, Sc, opposite origin of Rs, the latter broadly arched at base; r-m short; abdomen brown, hypopygium black; male hypopygium as shown, outer dististyle elongate, narrowed into a long terminal spine, tergite having posterior border with a low median lobe, at either end with ventral triangular point.

Male. — Length about 9.5-10.5 mm.; wing 8.5-9.5 mm.; antenna about 2.3-2.5 mm.

Rostrum yeslow, palpi black. Antennae with scape black, restrictedly yeslowed basally, remainder of organ black; proximal flagellar segments shorter and broader, without long verticils; outer segments progressively longer, outer seven subequal in length. Head polished yeslow, vertex blackened, the area narrowed posteriorly, the sides extensively yellow.

Pronotum and pretergites light yellow, the latter narrowly blackened on cephalic border. Mesontal praescutum and scutal lobes polished black, praescutum medially at suture and an adjoining triangular area of scutum light yellow; scutellum yellow, paracutella and postnotum black. Propleura and mesopleural meron yellow, remainder of pleura polished black; dorsopleural membrane yellow; conspicuous light silvery areas of dense silvery white setae on posterior mesopleura and ventral metapleura. Halteres with stem black, knob conspicuously light yellow. Legs with fore and middle coxae yellow to brownish yellow, posterior pair black; fore legs with femora yellow, tips black, tibiae and tarsi black; middle legs with femora yellow, tips narrowly blackened; basitarsi obscure yellow, remainder black; posterior legs longest, femora yellow, tips narrowly black, subbasally more extensively darkened, tibiae obscure yellow, tips very narrowly black, tarsi black; basitarsi with proximal three-fourths dilated, apex and remainder of tarsi yellow. Wings on proximal twothirds light yellow, the outer third of wing and margins of the cubital and anal cells pale brown, including a darker longitudinal seam in cell M adjoining vein Cu; stigma transversely oval, darker brown; remainder of cord and outer end of cell 1st  $M_1$ , with small areas over h, base of cell Sc and anterior cord slightly before fork of Rs, in alignment with remainder of cord; Rs broadly arched at base; Sc short, Sc, ending opposite origin of Rs, Sc, removed from tip, subequal in length to R<sub>1</sub>; r-m short, narrowing cell  $R_i$ ; m-cu shortly beyond the fork of M.

Abdomen of type yellowish brown, of the paratype more brownish black; hypopygium black. Sternal pocket on fifth abdominal segment unusually large and conspicuous, widest posteriorly. Male hypopygium (Fig. 16) with tergite, t, narrowly transverse, posterior margin with a low rounded lobe, at either end with a more ventral triangular point. Basistyle, b, rounded at tip, inner apical margin with a small blackened point, the lobe with abundant long setae; mesal margin below the insertion of the dististyles with a large erect spine. Outer dististyle, od, elongate, narrowed into a long terminal spine, surface with abundant setae, mesal face before apex with a microscopic spine; inner style, id, about as figured, appearing as a broad flattened blade, with blackened points and lobes, as shown. Phallosome, p, as shown, dilated below the long terminal spine, the lobe with a brush of strong black setae.

Holotye. —  $\sigma$ , Paracti, Chapare, Cochabamba, Bolivia, 2400 meters, February 4, 1976 (Peña). Paratopotype,  $\sigma$ , February 1-5, 1976 (Peña).

The present fly is readily told from all other large sized regional

species by the venation, especially the unusually short Rs, by the dilated posterior basitarsi and in the details of the hypopygium and abdominal sternal pocket of the male abdomen.

It should be emphasized that while the essential features of the venation indicate that the species is correctly placed in the typical subgenus, certain venational features, notably the short Sc and the arrangement of the veins in the radial field are more as in the subgenus Euparatropesa.

## Teucholabis (Teucholabis) perebenina sp.n.

General coloration of entire body polished black, thoracic dorsum with inconspicuous yellow areas, posterior pleurites silvery pruinose; halteres black, apices of knobs obscurely yellowed; legs black; wings pale brownish subhyaline, stigma pale brown;  $Sc_1$  ending about opposite midlength of  $Rs_i$ ; cell  $R_2$  at margin about twice as extensive as cell  $R_4$ ; m-cu shortly beyond the fork of  $M_i$ ; male hypopygium with the mesal face of apex of the basistyle produced into an elongate blade that narrows into a point; outer dististyle an elongate flattened paddle-like blade, its vestiture very sparse and inconspicuous; aedeagus long and narrow, terminating in a strong spine.

Male. — length about 6.5-7 mm.; wing 6.5-6.8 mm.; antenna about 1.6-1.65 mm. Head polished black, frontal prolongation paler; palpi brownish black. Antennae brownish black; proximal flagellar segments short-oval, progressively longer and more slender outwardly, terminal segment smallest.

Prothorax polished black, lateral ends of scutellum narrowly eyllow. Thoracic dorsum chiefly intense polished black, restrictedly yellowed on anterior half of median area of scutum and posterior borders of scutal lobes; scutellum obscure yellow. Pleura polished black, the ventral posterior sclerites and the meron more silvery pruinose. Halteres black, apices of knobs obscure yellow, more evident in the paratype. Legs black. Wings chiefly pale brownish subhyaline, the costal and basal cells clearer hyaline; stigma small, pale brown; veins dark brown. Venation:  $Sc \log_3 Sc_1$  about opposite midlength of  $Rs_3$ ,  $Sc_2$  close to its tip; anterior branch of Rs nearly straight, parallel to Rs except at outer end, cell Rs at margin about twice as extensive as cell Rs; cell lst Ms with m oblique, longer than the transverse basal section of Ms; m-cu shortly beyond the fork of Ms.

Abdomen polished black. Sternal pocket of fifth segment large but inconspicuous, including only small delicate setae; sixth segment with a few comparable setae on either side of the midline. Male hypopygium (Fig. 18) with posterior border of tergite, t, produced into a low lobe, each outer angle of this an acute blackened spine. Basistyle, b, with apex bearing an elongate-flattened blade that narrows outwardly into an acute spine, inner marginal setae moderately long. Outer dististyle, od, distinctive, an elongate flattened paddle-like blade, widened outwardly, apex obtuse; vestiture very sparse and inconspicuous, including about 25

short setae; inner style, id, about as shown. Aedeagus, a, long and slender, terminating in a strong nearly straight spine.

Holotype. —  $\sigma$ , Paracti, Chapare, Cochabamba, Bolivia, 2400 meters, February 4, 1976 (Peña). Paratopotype,  $\sigma$ , 2300 meters, February 1-5, 1976 (Peña).

The present fly is quite distinct from other black species having unpatterned wings by the hypopygial characters, including the tergite, basistyle, outer dististyle and aedeagus.

#### Teucholabis (Teucholabis) subinulta sp.n.

Mesonotum restrictedly yellowed, praescutum with three nearly confluent black stripes, pleura chiefly polished black; knobs of halteres brownish black; legs with femora chiefly black, with a narrow yellow ring at near two-thirds the length; wings subhyaline, with poorly indicated pale brown washes subbasally and narrowly in the outer radial field; abdomen with proximal segments blackened; male hypopygium with subterminal lobule of basistyle extended into a long black spine; outer dististyle long and slender; aedeagus elongate, narrow, apex slightly bifurcate, without a terminal spine.

Male. - length about 8 mm.; wing 7.2 mm.; antenna about 2 mm.

Rostrum brownish black; palpi black, outer three segments approximately subequal in size. Antennae with scape obscure yellow, remaining segments brownish black; proximal flagellar segments oval, beyond the third more lengthened, cylindrical, subequal to their longest verticils. Head brownish yellow, patterned with brown.

Pronotum brownish black. Mesonotal praescutum yellowed anteriorly and medially at the suture, disk with three nearly confluent black stripes; scutal lobes polished black, median area more narrowly yellow; scutellum obscure yellow; postnotal mediotergite with anterior third yellow, including the narrow adjoining border of the pleurotergite. Propleura-obscure yellow, remainder of pleura polished black, the sternopleurite and ventral metapleura light silvery. Halteres obscure yellow, knob brownish black. Legs with fore coxae and trochanters obscure yellow; femora obscure yellow, the broad apex and a narrower ring at midlength blackened; tibiae light brown, tip narrowly blackened; basitarsi obscure yellow, outer segments black; middle legs with coxae blackened, pruinose, trochanters brown, remainder broken; posterior legs with coxae blackened, sparsely pruinose, trochanters brown; femora black, with a narrow yellow ring at near twothirds the length; tibiae obscure yellow, tips very narrowly brown; tarsi with basitarsi with proximal fourth very slightly enlarged and blackened, remainder yellow, second segment yellow, outer segments black. Wings almost entirely subhyaline, with scarcely indicated pale brown washes subbasally in cells Cu and 1st A; wing margin in cells  $R_1$  and  $R_2$  very narrowly pale brown; veins brown. Venation:  $Sc_1$ ending about opposite midlength of Rs, R, shortly beyond fork of Rs (this area of wing slightly deformed in right wing of type mounted on slide); cell R<sub>2</sub> at margin nearly three times as extensive as cell  $R_4$ ; m-cu shortly beyond fork of M.

Abdomen with proximal segments chiefly black, sternites more yellowed, outer segments paler, lined longitudinally on sides with brown; hypopygium yellow, proximal ends of basitarsi more darkened. Sternal pocket of segment five with outer setae very long, bent strongly cuadad, the more basal setae small. Sternite six with seven or eight strong black setae on either side of midline, the more posterior ones longer, progressively shorter anteriorly; setulae of anterior half of pocket arranged in parallel longitudinal rows, about as in *inulta*. Male hypopygium (Fig. 19) with tergite, t, yellow, the posterior border produced medially, at and near apex with sparse moderately long setae, the more lateral setae much longer. Basistyle, b, with apical lobe narrow; subterminal lobule before apex extended into a long black spine; mesal edge of style with a blackened flange, its margin with sparse points. Outer dististyle, od, long, slender, inner style, id, small and compact, outwardly with a curved blackened spine. Acdeagus, a, long and slender, apex slightly bifurcate, apparently without a terminal spine.

Holotype. — &, Coca, Napo River, Ecuador, April 30, 1965 (Peña).

The most similar species is *Teucholabis (Teucholabis) inulta* Alexander, of southeastern Brasil, which differs in details of coloration and hypopygial structure, including especially the dististyles and aedeagus.

# Trentepohlia (Mongoma) suberrans sp.n.

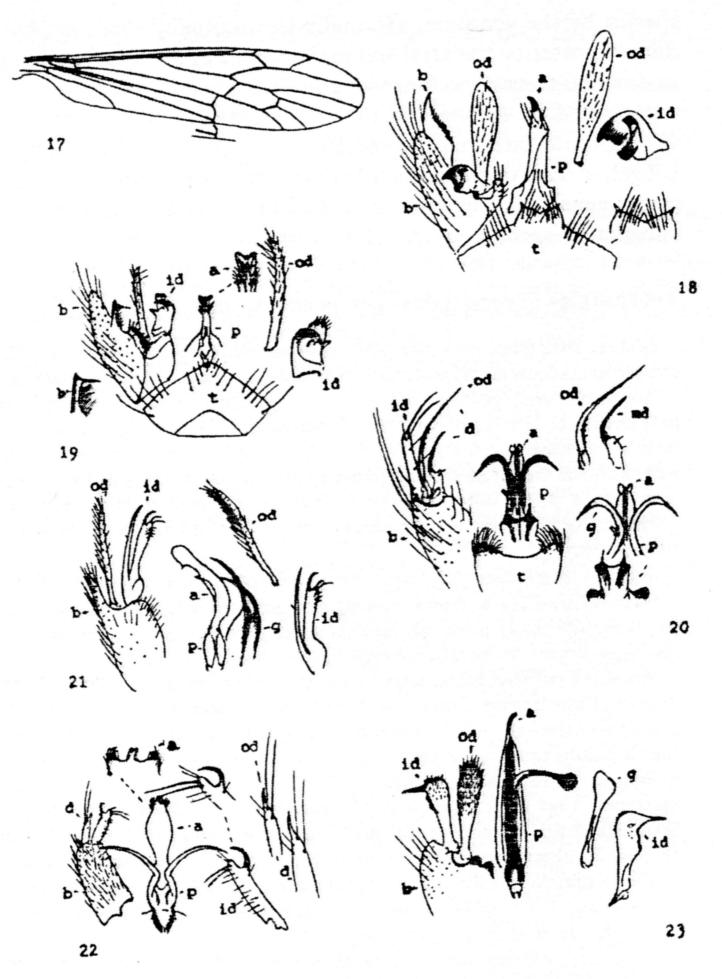
Head and thorax light yellow, abdominal tergites brown medially, basal sternites yellow, the seventh segment darker brown; legs light brown; wings very pale brown, prearcular and costal fields light yellow, veins pale brown, clearly visible; longitudinal veins glabrous except for a few scattered trichia on outer section of  $R_3$ ; veins Cu and  $Ist\ A$  shortly fused at margin.

Male. — Length about 6.5 mm.; wing 5.6 mm.; antenna about 1.0 mm.

Rostrum and palpi yellow. Antennae with scape and pedicel yellowish brown, flagellar pale brown; flagellar segments long-oval, exceeding their verticils in length. Head yellow.

Thorax uniformly yellow, the notum somewhat darker than the pleura. Halteres with stem yellow, knob weakly more darkened. Legs with coxae and trochanters light yellow; remainder of legs light brown. Wings (Fig. 17) very pale brown, prearcular and costal fields light yellow; veins pale brown, clearly visible. Longitudinal veins posterior to R entirely glabrous except for a series of about seven trichia scattered along the entire length of outer section of  $R_3$ . Venation as shown; cell Cu closed at margin by a short apical fusion of veins Cu and  $Ist\ A$  (shown enlarged in subfigure).

Text-Figs. 17-23. — Fig. 17, Trentepohlia (Mongoma) suberrans sp.n., venation; Fig. 18, Teucholabis (Teucholabis) perebenina sp.n., male hypopygium; Fig. 19, Teucholabis (Teucholabis) subinulta sp.n., male hypopygium; Fig. 20, Gonomyia



(Gonomyia) aitkeniana sp.n., male hypopygium; Fig. 21, Gonomyia (Gonomyia) basispina sp.n., male hypopygium; Fig. 22, Gonomyia (Gonomyia) parvistyla sp.n., male hypopygium; Fig. 23, Cryptolabis (Cryptolabis) aviformis sp.n., male hypopygium.

Male hypopygium: a, aedeagus; b, basistyle; d, dististyles; g, gonapophysis, i, interbase; id, inner dististyle; md, middle dististyle; od, outer dististyle; p, phallosome; t, 9th tergite.

Abdominal tergites medium brown, basal sternites yellowed, seventh segment darker brown.

Holotype. —  $\sigma$ , El Limbo, Chapare, Cochabamba, Bolivia, 2000 meters, March 1953 (Alberto Prosen).

The only other Neotropical member of the subgenus *Mongoma* is *Trentepohlia (Mongoma) errans* Alexander, from Ecuador. This is most readily distinguished by the much paler veins that are scarcely discernible against the ground. In this species veins *Cu* and *Ist A* are merely contiguous at the wing margin, not shortfused as in the present fly.

#### Gonomyia (Gonomyia) aitkeniana sp.n.

Allied to unicolor; general coloration of body brown, thoracic pleura vaguely patterned with paler; wings light brown, veins darker; male hypopygium with outer dististyle a very long slender spine; phallosome with aedeagus short and straight, apophyses blackened, strongly curved into slender spines.

Male. - Length about 5 mm.; wing 4.5 mm.; antenna about 0.9 mm.

Described from the type mounted in balsam. Rostrum and palpi dark brown. Antennae brown; pedicel enlarged; proximal flagellar segments oval, the outer ones more elongate; verticils of intermediate segments about one-half longer than the segments. Head brown.

Thoracic dorsum brown; pleura vaguely patterened with paler. Halteres brown. Legs with coxae and trochanters brown; remainder of legs broken. Wings light brown, veins darker brown. Venation:  $Sc_1$  ending opposite origin of Rs,  $Sc_2$  retracted,  $Sc_3$  about one-half Rs; r-m on vein  $R_3$  shortly beyond origin; m-cu shortly before midlength of cell 1st  $M_3$ .

Abdomen brown, the sternites and incisures paler. Male hypopygium (Fig. 20) with tergal lobes, t, bearing long delicate setae. Three dististyles, d, as shown on slide mount with the normally innermost style, id, on the extreme left side, long and narrow, terminating in two very long yellow setae that are only slightly shorter than the lobe itself; outer style, od, very long and slender, basal half slightly more dilated, with sparse weak spinules, outer half a needlelike spine; innermost style, md, the shortest, base dilated, outer part extended into a slender black spine. Phallosome p, with aedeagus, a, very short; apophyses, g, appearing as long powerful black spines, at near two-thirds the length curved outwardly, terminating in an acute point.

Holotype. —  $\circ$ , Fortuna Dam Site, Chiriqui River, Chiriqui Province, Panama, 920 meters, February 1976 (Thomas Aitken).

The species is dedicated to Dr. Thomas H. G. Aitken who collected a particularly interesting series of craneflies from Panama and to whom I am indebted for many favors. It differs from other

regional species in the hypopygial structure, as described and figured. The closest regional relatives are Gonomyia (Gonomyia) unicolor Alexander, Mexico to Panama, and G. (G.) subunicolor Alexander, Panama.

# Gonomyia (Gonomyia) basispina sp.n.

General coloration dark brown, thoracic pleura with a pale longitudinal stripe; wings with cell  $M_1$  open by atrophy of basal section of  $M_1$ ; male hypopygium with outer dististyle long and slender, inner style near base bearing a long appressed spine; phallosome with aedeagus elongate, apex expanded; gonapophyses appearing as two slightly dissimilar black spines.

Male. — Length about 5 mm.; wing 5 mm.; antenna about 1.0 mm.

Described from types mounted in balsam. Rostrum and palpi brown. Antenna brown throughout, relatively long; proximal flagellar segments long-oval, progressively more slender outwardly; verticils of proximal and outer segments short, longer on the intermediate ones, some subequal to or slightly exceeding the segments. Head brown.

Thoracic dorsum dark brown, praescutum paler laterally. Pleura brown, with a longitudinal pale stripe, in the holotype the pale color more extensive than the darkened areas. Halteres brown. Legs with coxae brown, trochanters paler; remainder of legs brown. Wings pale brown, stigma slightly darker brown; veins dark brown. Venation:  $Sc_1$  ending opposite origin of Rs (in holotype), some distance before in paratype;  $Sc_2$  slightly removed; cell  $M_2$  open by atrophy of basal section of  $M_3$ ; m-cu at or close to fork of M.

Abdominal tergites dark brown, sternites and hypopygium paler brown. Male hypopygium (Fig. 21) with outer lobe of basistyle, b, less than one-half the length of outer dististyle. Two dististyles, the outer, od, long and slender, its lower margin with a row of elongate setae; inner style, id, close to base on upper surface bearing a long appressed spine that is narrowed gradually into a slender point, outer margin shortly beyond midlength with a single small seta; body of style narrow, near apex of outer margin with a strong slender spine that extends outwardly to beyond the apex, the latter with the usual two modified larger setae. Phallosome, p, with the long complex aedeagus, a, shaped about as figured, flattened, the apex expanded. Gonapophyses, g, appearing as two slightly dissimilar black spines from more expanded bases.

Holotype. —  $\sigma$ , Fortuna Dam Site, Chiriqui River, Chiriqui Province, Panama, 920 meters, February 1976 (Thomas Aitken). Paratopotype,  $\sigma$ , on slide.

Other Neotropical species of the genus having cell  $M_1$  of the wings open as in the present fly include Gonomyia (Gonomyia) anserina Alexander, peru, G. (G.) debilis Alexander, Mexico, G. (G.) illicis Alexander, Argentina, G. (G.) jejuna Alexander, Peru, and G. (G.) remigera Alexander, Mexico, all differing among

themselves in hypopygial structure, including the dististyles and phallosome.

# Gonomyia (Gonomyia) parvistyla sp.n.

General coloration dark brown; wings almost uniformly light brown, without stigmal darkening, Sc. ending opposite or close to origin of Rs. cell  $1st M_0$ , closed: male hypopygium with outer dististyle very small, slender, tip acute, with two very long nearly terminal setae; inner dististyle stouter, with a strongly curved black spine on upper surface before apex; phallosome entirely pale, gonapophyses long and slender, divergent; apex of aedeagus with small lateral lobes that are provided with numerous nearly hyaline short setae.

Male. - Length about 5 mm.; wing 5 mm.; antenna about 1.0 mm.

Described from types mounted in balsam. Antennae and palpi dark brown; scape and pedicel stout, flagellum long, progressively more slender outwardly. Head dark brown.

Thoracic dorsum dark brown, pleura paler brown, inconspicuously patterned by paler. Halteres light brown. Legs with coxae and trochanters brown; remainder of legs broken. Wings almost uniformly light brown, stigma not indicated; veins slightly darker brown. Venation:  $Sc_1$  ending opposite (in holotype) or slightly beyond origin of  $Rs_1, Sc_2$  subequal in length;  $Rs_2$  shorter than  $R_2, ...$ ; cell  $Ist_1 M_2$  closed; m-cu shortly beyond fork of M in holotype, slightly more so in paratype.

Abdominal tergites and hypopygium dark brown, sternites slightly paler. Male hypopygium (Fig. 22) distinctive. Outer dististyle, od, very small, slender, extended outwardly into a small point; inner style, id, a stouter rod, before apex on outer surface with a strongly curved black spine. Phallosome, p, entirely pale, the apophyses appearing as long slender divergent rods, not blackened as in most other species; aedeagus, a, with outer half conspicuously expanded, apex terminating in two short brown lobes, the slightly developed lateral apical angles very pale, with numerous almost hyaline short setae.

Holotype. —  $\sigma$ , Fortuna Dam Site, Chiriqui River, Chiriqui Province, Panama, 920 meters, February 1976 (Thomas Aitken). Paratopotype,  $\sigma$ .

The present fly is quite distinct from other regional species, especially in hypopygial structure. It is most similar to Gonomyia (Gonomyia) stenorhabda Alexander, similarly from Panama, differing in several details of the hypopygium.

# Cryptolabis (Cryptolabis) aviformis sp.n.

General coloration of body blackened, thorax more pruinose to appear gray; halteres whitened; legs brown, tarsi paler; wings light gray, with conspicuous macrotrichia in outer cells beyond the general level of the cord, more sparse in basal cells; male hypopygium with inner dististyle dilated on outer two-thirds, near apex produced laterad into a straight spine; phallosome with aedeagus darkened;

gonapophyses with about the outer third expanded into a relatively small blackened spatula.

Male. - Length about 4.5 mm.; wing about 5.5 mm.

Female. - Length about 4 mm.; wing 5.3 mm.

Rostrum, palpi and antennae black; flagellar segments oval, progressively smaller outwardly. Head black, heavily gray pruinose.

Thorax above brownish black to black, heavily pruinose to appear gray; dorsopleural region and lateral ends of propleura yellowed. Halteres obscurely whitened. Les with coxae and trochanters brown; femora and tibiae light brown, apices more brownish black, tarsi more uniformly darkened, especially the outer segments. Wings uniformly light gray; veins light brown. Conspicuous macrotrichia in all cells beyond general level of cord; cells R and M with trichia in about the outer half, lacking basally; cells Cu and both Anals with trichia more generally distributed. Venation much as in atmophora (see figure 107 in Alexander, South Chile volume, 1929).

Abdomen uniformly brownish black, pruinose. Male hypopygium (Fig. 23) with outer dististyle, d, an elongate yellow blade, more dilated outwardly, with long pale setae; inner style, id, with outer two-thirds dilated, near apex produced laterally into a straight spine, suggesting a bird's head and beak, as indicated in the specific name. Phallosome, p, with aedeagus, a, elongate, darkened; gonapophyses, g, with the outer third or less expanded into a relatively small suboval blackened spatula.

Holotype. — ©, Las Trancos, Nuble, Chile, 1300 meters, December 14-15, 1976 (Peña). Allotopotype, Q, pinned with type. Other generally similar regional species include Cryptolabis (Cryptolabis) atmophora Alexander, C. (C.) penai Alexander, C. (C.) phallostena Alexander, and especially C. (C.) spatulata Alexander, all differing among themselves in the details of the hypopygium, especially the dististyle and the spatula of the gonapophysis.

# Molophilus (Molophilus) bibaculus sp.n.

Belongs to the plagiatus group; general coloration of thoracic dorsum brown, pleura blackened; halteres yellow; wings pale brown; abdomen brownish black; hypopygium with basal dististyle profoundly bifid, the main axis stouter, sinuous, extended apically into a long straight spine, lower margin with rows of sparse appressed spinules; aedeagus very long and slender.

Male. — Length about 3.8 mm.; wing 4.3 mm.; antenna about 1.3 mm.

Rostrum and palpi brownish black. Antennae with scape and pedicel black; flagellum brown; flagellar segments long-oval, progressively smaller outwardly, provided with long erect white setulae. Head brownish gray.

Pronotum dark brown, pretergites obscurely whitened. Mesonotal praescutum

light brown, posterior sclerites and the pleura blackened. Halteres yellow, knobs clearer. Legs with fore coxae dark brown, remaining coxae and all trochanters paler; femora pale brown basally, outerly dark brown, more extensive on posterior pair; tibiae obscure yellow, tips very narrowly darkened; tarsi light brown. Wings pale brown throughout; veins light brown.

Abdomen brownish black. Male hypopygium (Fig. 24) with beak of basistyle, b, slender, decurved at outer end. Outer dististyle, od, about two-thirds the length of basal style. Basal dististyle, bd, distinctive, appearing as a profoundly bifid structure, main axis stouter, slightly sinuous, apex a long straight spine, at base with about 8 to 10 small acute spines, the axis of style on lower margin with a series of about 8 larger subappressed spines, the outermost larger. Aedeagus, a, very long and slender.

Holotype. —  $\sigma$ , Cabreria, Cordillera Nahuelbuta, Malleco, Chile, 1100 meters, January 15-20, 1977 (Peña).

The present fly is most readily told from other generally similar regional species by the hypopygial structure, especially the distinctive deeply divided basal dististyle.

#### Molophilus (Molophilus) ctenophorus sp.n.

Belongs to the *plagiatus* group; male hypopygium with basal dististyle a gently curved slender rod that terminates in a point, outer margin of apical third with a compact comb of contiguous flattened spines, lower margin at near one-third the length with a short compact row of longer setae.

Male. - Length about 5 mm.; wing 6 mm.

General coloration of the entire body and legs brown. Antennae with flagellar segments elongate, the more proximal ones more than twice as long as broad.

Male hypopygium (Fig. 25) with beak of basistyle, b, relatively stout, nearly parallel-sided, apex subtruncate. Outer dististyle with the arms parallel, the upper one slender, sinuous, outer half slightly decurved. Basal dististyle, bd, distinctive, as shown, appearing as a gently curved narrow rod that terminates in a spine; outer margin of apical third with a compact comb of appressed flattened contiguous spines; at near one-third the length on lower margin of style with a short compact row of longer setae, as shown; the two rows of armature vaguely interconnected across the surface of style at near midlength.

Holotype. —  $\sigma$ , mounted on slide, with the head, wing, legs and hypopygium. Cordillera Tinajillas, South of Cuenca, Azuay Province, Ecuador, 3200 meters, March 15, 1965 (Peña)

In its hypopygial structure, the present fly is quite distinct from all presently described species, especially in the basal dististyle.

# Molophilus (Molophilus) diacanthus sp.n.

Allied to *flavidus*, being similar in the general structure of the hypopygium, including the dististyles; inner arm of basal style terminating in two unequal spines; phallosome oval, the low apex convex.

Male. — Length about 4-4.3 mm.; wing 4.8-5.5 mm.; antenna about 1.25-1.3 mm. Rostrum and palpi brownish black. Antennae light brownish yellow; outer flagellar segments oval. Head light yellow.

Pronotum and pretergites light yellow. Thoracic dorsum orange, humeral region of praescutum more yellowed. Pleura yellow, the dorsopleural region paler yellow. Halteres yellow. Legs with coxae and trochanters pale yellow; remainder of legs yellow, outer tarsal segments more darkened; subbasal darkened ring of fore tibia of male pale brown. Wings, including veins, yellow, trichia slightly darker.

Abdomen light brown; hypopygium yellowed, the appendages darkened. Male hypopygium (Fig. 26) with beak of basistyle, b, long and slender, very gently decurved. Quter dististyle, od, large, in length approximately equal to the basal dististyle, bd, the latter distinctive, its outer arm slender, terminating in a spine; outer area of appressed black spines narrow, the outermost elements larger and more distinct; inner arm of style shorter and stouter, terminating in two acute spines, the lower or axial one longer. Phallosome, p, oval, pale, apex convex. Aedeagus, a, long, outwardly narrowed into a long spine.

Holotype. —  $\circ$ , Pillim Pilli, Nahuelbuta, Arauco, Chile, 600-800 meters, January 15, 1954 (Peña). Paratopotypes, 2,  $\circ$ , with the type.

Most readily distinguished from generally similar regional species that are allied to *flavidus* by the structure of the hypopygium, especially the basal dististyle. The two terminal acute spines of the inner arm of the style have suggested the specific name. Other generally similar species have a single such spine, the second arm in this general area of the style being a modified serrulate flange.

# Molophilus (Molophilus) margarita sp.n.

Belongs to the gracilis group, ruficollis subgroup; general coloration of head and thorax gray, abdomen dark brown; halteres light yellow; legs light brown, outer four tarsal segments brownish black; wings yellowed, restrictedly patterned with brown at stigma and along the cord; vein  $R_{1+1}$  slightly more basad than the remaining elements of cord; male hypopygium with outer lobe of basistyle long and slender; outer dististyle with the outer blade distinctive; inner dististyle profoundly bifid into two long slender spines; apex of phallosome structure with two widely divergent spines; aedeagus long and very slender.

Male. - Length about 5 mm.; wing 6.3 mm.

Rostrum and mouthparts, including the palpi, brown; terminal palpal segment about one-fifth longer than the penultimate. Antennae broken. Head gray.

Thorax gray, praescutum chiefly covered by darker brownish gray confluent stripes; scutal lobes slightly more darkened; dorsopleural membrane obscure yellow. Halteres light yellow. Legs with coxae and trochanters light yellow; remainder of legs light brown, the four outer segments brownish black. Wings yellowed, costal

region more saturated; a restricted brown pattern, including the stigma and a confluent area over the cord disconnected from the similarly darkened m-cu; pale brown clouds posterior to the cord, including veins M, to Cu; veins yellow, brown in the more darkened areas. Venation: Vein  $R_{1+1}$  strongly arched at origin, only slightly before the vertical vein  $R_3$ ;  $R_3$  in longitudinal alignment with  $R_4$ ; m-cu oblique, at the fork of M.

Abdomen dark brown, hypopygium slightly more yellowed. Male hypopygium (Fig. 27) distinctive. Basistyle, b, with outer lobe longer and more narrowed than the inner or mesal lobe. Outer dististyle, od, with stem very slender, outer blades distinctive, as shown; inner dististyle, id, profoundly bifid into two long slender spines, the outer one slightly longer, curved on basal half; inner branch broad at base, curved and narrowed on outer half. Phallosomic structure, p, terminating in two widely divergent spines. Aedeagus, a, thickened at base, the outer portion very slender, appearing as a very long needlelike spine, the organ about equal in length to the dististyle.

Holotype. —  $\sigma$ , Cordillera Tinajillas, South Cuenca, Azuay, Ecuador, 3100 meters, March 18-20, 1965 (Peña).

This distinct species is named in honor of my dear wife and lifelong collaborator in the study of the World Tipulidae, co-author of the two Catalogues of the Tipulidae, the Neotropical (1970) and the Oriental (1973), each including more than 3000 species of these flies. The present species is readily distinguished by hypopygial structure, as described and figured. *Molophilus (Molophilus) dizygus* Alexander, Bolivia, has somewhat comparable features of the hypopygium but is quite distinct.

# Molophilus (Molophilus) nubleanus sp.n.

Belongs to the plagiatus group; general coloration of body, halteres and legs yellow; wings clear light yellow; male hypopygium with basal dististyle including four slender spines, the axial rod longest, with three shorter subappressed slender spines on basal half.

Male. — Length about 4.5 mm.; wing 5 mm.; antenna about 1.3 mm.

Rostrum yellow, palpi light brown. Antennae light brown; flagellar segments long-oval. Head yellow.

Pronotum yellow. Mesonotal praescutum yellow, with three broad more reddish stripes that are confluent behind; setae of the interspaces very long, yellow; posterior notal sclerites yellow, the scutal lobes reddened. Pleura reddish yellow, dorsopleural membrane clear yellow. Halteres light yellow. Legs yellow, outer tarsal segments pale brown; fore tibiae with a narrow brown subterminal ring, shorter than the yellow tip. Wings clear light yellow, veins darker yellow; trichia of veins brownish yellow.

Abdomen yellow. Male hypopygium (Fig. 28) with beak of basistyle, b, with a

small projection at base above. Basal dististyle, bd, distinctive, as shown, appearing as a long central rod that narrows outwardly into a slender spine, on basal half with three smaller more narrowed spines, with a further small point shortly beyond. Phallosome, p, a broad yellow cushion, the apex shallowly emarginate.

Holotype. —  $\sigma$ , Las Trancas, Nuble, Chile, 1260 meters, February 23-30, 1956 (Peña).

The most similar regional species is *Molophilus* (Molophilus) amphacanthus Alexander, of the Juan Fernandez Islands, Chile, differing in the yellow body coloration and especially in hypopygial structure, as described and figured.

#### Molophilus (Molophilus) polychaeta sp.n.

Belongs to the gracilis group, ruficollis subgroup; head light yellow, rostrum and palpi black; antennae with proximal three segments yellow, remainder brownish black; pretergites whitened, praescutum dull orange, posterior sclerites of notum brown, pleura grayish brown with a broad darker brown dorsal stripe; halteres whitened; femora yellow, outer third light brown, tibiae light brown, tarsi darker brown; wings light yellow, veins darker yellow, abdominal tergites dark brown, sternites paler brown; male hypopygium with basal dististyle bearing two very unequal lobes that terminate in long black setae and spinoid setae.

Male. - Length about 5 mm.; wing 5.6 mm.; antenna about 1.6 mm.

Rostrum and palpi black. Antennae with scape, pedicel and first flagellar segment light yellow, remainder of flagellum brownish black; flagellar segments elongate, the proximal ones with abundant microscopic vestiture, the outer segments with longer yellow setulae; three proximal segments with two or three very long setae, the longest about one-half longer than the segment; on outer segments setae progressively shorter, virtually lost on the subterminal two or three segments. Head light yellow.

Pretergites and dorsopleural membrane whitened. Mesonotal praescutum dull orange, whitened on sides; posterior notal segments brown. Pleura grayish brown, with a broad darker brown dorsal stripe. Halteres whitened. Legs with fore coxae brown, remaining coxae and all trochanters light yellow; femora yellow, outer third light brown; tibiae light brown, tarsi darker brown. Wings light yellow, veins darker yellow; trichia of veins long and very slender, light brown.

Abdominal tergites dark brown, sternites paler brown; hypopygium yellow, dististyles black. Male hypopygium (Fig. 29) distinctive, especially the basal dististyle. Tergite terminating in two broad obtuse lobes, separated by a narrow notch. Outer dististyle, od, with outer half black, both lobes obtuse; basal dististyle, bd, a powerful bilobed structure, the outer arm longer, extended into a slender straight spine; outer margin of distal half of arm with numerous long setae and an inner series of fewer strong bristles; inner arm of style a low protuberance tipped with about a score of long spinoid setae.

Holotype. —  $\sigma$ , Siberia, Cochabamba, Bolivia, 2900 meters, February 18-19, 1976 (Peña).

The present fly is readily told from all other regional species by the hypopygial structure, especially the basal dististyle.

# Molophilus (Molophilus) rhamphus sp.n.

Belongs to the plagiatus group; general coloration of entire body dark brown; halteres yellow; legs yellowed, darker outwardly; wings brownish yellow; male hypopygium with apical beak of basistyle a small obtuse blackened lobe; outer dististyle a strongly curved simple spine; basal dististyle long and narrow, the apex a slender spine, before midlength of style with a long subappressed spine.

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

Female. — Length about 4.2 mm.; wing 4.2 mm.

Rostrum brown, palpi black. Antennae light brown, relatively short, proximal flagellar segments long-oval, becoming more elongated outwardly, shorter than their longest verticils. Head brown.

Pronotum brown; pretergites light yellow. Mesonotal praescutum medium brown, the posterior sclerites darker brown. Pleura dark brown, dorsopleural membrane and adjoining areas clear light yellow. Halteres yellow. Legs with coxae and trochanters yellow; fore femora brown, remaining femora yellowed, the outer ends brown, more extensive on posterior legs, tarsi brown; darkened subbasal ring of fore tibia in male slightly indicated. Wings pale brownish yellow, base and costal field clear light yellow; veins pale brown. Venation:  $R_{4+3}$  in longitudinal alignment with  $R_{5}$ ; m-cu shortly beyond fork of M.

Abdomen medium brown. Male hypopygium (Fig. 30) with apical beak of basistyle, b, a small blackened obtuse lobe, immediately below this with a large low tubercle with dense yellow setae. Outer dististyle, od, a simple strongly curved spine, narrowed gradually to the acute apex. Basal dististyle, bd, long and narrow, about equal in length to the entire basistyle; straight, at apex narrowed into a slender spine, before midlength of style on outer margin with a strong subappressed spine, subequal in size and length to the terminal axial spine. Aedeagus, a, a slender rod that narrows to an acute point, the outer half of organ very pale, almost transparent.

Holotype. —  $\circ$ , Pillim Pilli, Nahuelbuta, Arauco, Chile, 600-800 meters, January 15, 1954 (Peña). Allotopotype,  $\circ$ , pinned with type.

Text-FIGS. 24-32. — Fig. 24, Molophilus (Molophilus) bibaculus sp.n., male hypopygium; Fig. 25, Molophilus (Molophilus) ctenophorus sp.n., male hypopygium; Fig. 26, Molophilus (Molophilus) diacanthus sp.n., male hypopygium; Fig. 27, Molophilus (Molophilus) margarita sp.n., male hypopygium; Fig. 28, Molophilus (Molophilus) nubleanus sp.n., male hypopygium;

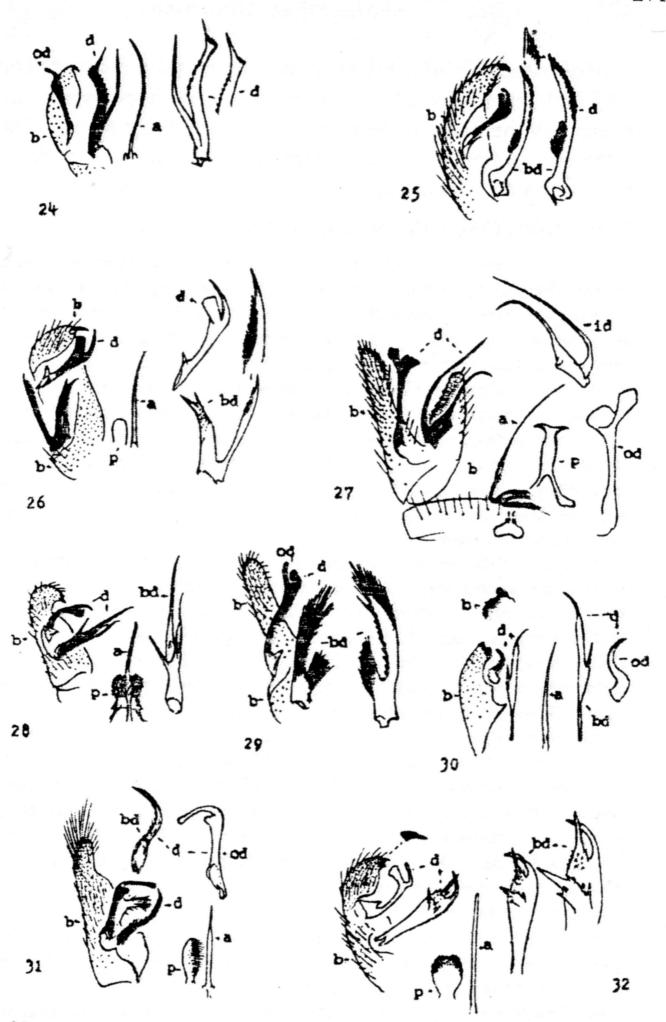


Fig. 29, Molophilus (Molophilus) polychaeta sp.n., male hypopygium; Fig. 30, Molophilus (Molophilus) ramphus sp.n., male hypopygium; Fig. 31, Molophilus (Molophilus) setilobatus sp.n., male hypopygium; Fig. 32, Molophilus (Molophilus) spinulosus sp.n., male hypopygium.

Male hypopygium: a, aedeagus; b, basistyle; bd, basal dististyle; g, gonapophysis; i. interbase; id, inner dististyle; od, outer dististyle; p, phallosome.

Molophilus (Molophilus) rhamphus is quite distinct from other regional members of the genus in the hypopygial structure, especially the beak of the basistyle and both dististyles. Particular attention is directed to the simple curved outer dististyle, the conformation of which has suggested the specific name.

# Molophilus (Molophilus) setilobatus sp.n.

Belongs to the gracilis group, ruficollis subgroup; general coloration of body yellow, thoracic dorsum patterned with light brown; legs light brown, tarsi darker brown; male hypopygium with outer lobe of basistyle moderately long, outer face and apex with rows of very long yellow setae; mesal face of style with a smaller lobule; dististyles blackened, the slightly longer outer style with a broad lobe beyond midlength; phallosomic structure with abundant short pale setae.

Male. - Length about 5 mm.; wing 5.5 mm.; antenna about 1.1 mm.

Rostrum yellow, palpi brown, terminal segment about one-third longer than the penultimate. Antennae with scape and pedicel yellow, flagellum brown; segments long-subcylindrical, with long basal verticils. Head yellow, flagellum brown; segments long-subcylindrical, with long basal verticils. Head yellow, central area of posterior vertex brown.

Pronotum light yellow. Mesonotal praescutum yellow with three light brown stripes, lateral pair short; remainder of mesonotum yellow, scutal lobes with very pale brown areas. Pleura yellow, dorsopleural membrane clear pale yellow. Halteres yellow, base of club extensively slightly darker. Legs with coxac and trochanters clear light yellow; femora yellow, slightly more darkened outwardly; tibiae light brown, tarsi dark brown. Wings yellowed, base and costal region clear light yellow; veins brownish yellow, trichia darker.

Abdomen yellow, the tergites slightly darker than the sternites; hypopygium clear light yellow. Male hypopygium (Fig. 31) with the outer lobe or extension of basistyle, b, moderately long, with a row of very long yellow setae extending from base of lobe along the outer surface to apex; mesal face of style just beyond the insertion of the dististyles with a conspicuous smaller lobule provided with numerous short pale setae. Dististyled, d, as shown, each appearing as a slightly curved blackened rod, the glabrous outer style, od, slightly longer, with a broad obtuse lobe on lower face beyond midlength, the long outer part slightly expanded before the slightly expanded apex; lower or basal style, bd, with the long base more yellowed, outer two-thirds a blackened rod that terminates in an acute spine, surface with scattered short setae from conspicuous basal punctures. Phallosomic structure, p, oval, with abundant short pale setae. Aedeagus, a, a relatively short straight rod, apex very slender, slightly darkened.

Holotype —  $\circ$ , Alto Vilches, Talca, Chile, December 12, 1976 (Peña).

The more similar regional species Molophilus (Molophilus) araucanus Alexander and M. (M.) hecate Alexander, Chile, and

M. (M.) shannoninus Alexander, Argentina, all differing evidently in hypopygial structure, especially the shape and vestiture of the basistyle.

# Molophilus (Molophilus) spinulosus sp.n.

Beiongs to the plagiatus group; general coloration of thorax brownish black, sternal region paler brown; legs brownish yellow, tarsi darker; wings yellowed, veins and trichia slightly darker; male hypopygium with apical beak of basistyle slender; basla dististyle, bd, distinctive, clavate, terminating in three strong spines, their bases with microscopic spicules, as shown.

Male. - Length about 4 mm.; wing 4 mm.; antenna about 1.3 mm.

Rostrum and palpi light brown; terminal segment of palpus one-third longer than the penultimate. Antenna brown, relatively long; intermediate flagellar segments about three times as long as broad. Head dark brown.

Thorax above uniformly brownish black, sternal region paler brown. Setae of dorsal interspaces long, light yellow. Halteres with stem light yellow, knob light brown. Legs with coxae and trochanters yellow, fore coxae darker; remainder of legs light brownish yellow, tarsi slightly darker. Wings yellowed, veins and trichia slightly darker.

Abdomen medium brown. Male hypopygium (Fig. 32) with apical beak of basistyle, b, unusually slender. Outer dististyle, d, with outer arm slender, strongly curved basally; basal dististyle, bd, distinctive; clavate, outer two-thirds dilated, t, with outer arm slender, strongly curved basally; basal dististyle, bd, distinctive; clavate, outer two-thirds dilated, terminating in two slender spines, with a stouter more basal spike, all spines with microscopic points to produce a spinulose appearance, as shown. Phallosomic structure, p, broadest at near midlength, apex shallowly emarginate, outer end with microscopic setulae.

Holotype. —  $\sigma$ , La Picado, east of Mount Osorno, Osorno, Chile, March 14, 1957 (Peña).

Molophilus (Molophilus) spinulosus is readily distinguished from other generally similar regional species by the hypopygial structure, especially the basal dististyle, as described and figured.