

Notes on the Tropical American Species of the Genus *Tipula* *Linnaeus* (Tipulidae, Diptera). Part II.

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(With 25 figures)

The preceding paper under this same general title was published in the *Revista de Entomologia*, 1945, pp. 330-356. In that report I prepared an introduction to the greatly developed subgenus *Microtipula* Alexander and therein indicated that many further additional species were available to me for definition. At this time I am describing some of these flies and at the same time have taken the opportunity to provide illustrations of the male hypopygia of various other previously defined species. Except where indicated to the contrary, the types of the various novelties are preserved in my extensive collection of World Tipulidae. I am very greatly indebted to the various entomologists and collectors who have aided in this work and whose names are given throughout the text.

Tipula (*Microtipula*) *scelesta*, sp. n.

Allied to *diacanthos*; general coloration of thorax reddish yellow; antennae (male) very long; male hypopygium with the proctiger including two elongate blackened rods; eighth sternite sheathing, at apex produced into two strong divergent horns.

Male. — Length, about 13 mm.; wing, 13.5 mm.; antenna, about 10 mm.

Frontal prolongation of head reddish brown, very stout, especially at base where it slopes directly onto the posterior portion of head without a notch; palpi testaceous yellow. Antennae very long, as shown by the measurements; scape and pedicel yellow; flagellum black, the base of the first segment paler; flagellar segments long-cylindrical, slender, with small oval basal enlargements; verticils short, a little less than one-third the length of the segments; segments with an abundant dense erect white pubescence that is longer than the diameter of the stem. Head opaque buffy yellow.

Thoracic dorsum reddish yellow, the surface polished, unpatterned. Pleura yellow. Halteres with stem yellow, knob dark brown. Legs with the coxae and trochanters yellow; femora obscure yellow, the tips weakly more darkened; tibiae and

basitarsi obscure yellow, the outer tarsal segments passing into somewhat darker brown. Wings brownish yellow, stigma, with cells C and Sc, pale brown; veins pale brown. Venation: *Rs* subequal to or a trifle shorter than *m-cu*, gently arcuated; *R*₁₋₂ preserved; cell 1st *M*₂ relatively small.

Abdominal tergites yellow, the sternites a trifle darker; a conspicuous dark brown pleural line involving the lateral borders of the tergites; segment seven, tergite eight, and restricted posterior portions of segment six blackened to form a narrow ring; hypopygium yellow. Male hypopygium (Fig. 1) with the caudal border of the tergite, *9t*, conspicuously trilobed, the lateral lobes narrower, with the tips glabrous, more darkened and sclerotized; median lobe broad, depressed, the apex obtusely rounded. Proctiger, *pr*, large and complex, including two slender arms that are slightly dilated and blackened at tips, the actual apices subacute; longest arm, near its tip, with several long retrorse setae. Dististyle, *d*, small, oval, compact, shaped about as figured. Appendage of ninth sternite, *9s*, a depressed-flattened plate, its apex broadly obtuse. Gonapophysis a small, parallel-sided blade, the tip obtusely rounded. Aedeagus flattened, the distal third abruptly narrowed and paler. Eighth sternite, *8s*, sheathing, at apex produced into two strong simple divergent horns.

Habitat: Bolivia.

Holotype, ♂, Buenavista, Santa Cruz (Francisco Steinbach).

This fly is allied to species such as *Tipula* (*Microtipula*) *diacanthos* Alexander, *T. (M.) horribilis* Alexander, and *T. (M.) quadricollis* Alexander, and more remotely to *T. (M.) smilodon* Alexander and *T. (M.) terribilis* Alexander, differing from all in the structure of the male hypopygium. Despite the quite different eighth sternite, I believe that the most similar of the above mentioned forms is *quadricollis*.

Tipula (*Microtipula*) *mandator*, sp. n.

Allied to *diacanthos* and *quadricollis*; general coloration of thorax testaceous yellow, the praescutum with four brown spots representing the anterior ends of the usual stripes; antennae (male) elongate, approximately three-fifths the length of either the body or wing, the intermediate flagellar segments weakly bicolored; abdomen brownish yellow, with a narrow black sub-terminal ring; male hypopygium with the central third of tergite densely provided with long black setae, the caudal margin trilobed, the central lobe broad, shallowly emarginate at apex; proctiger with upper lobe produced into two blackened spines; appendage

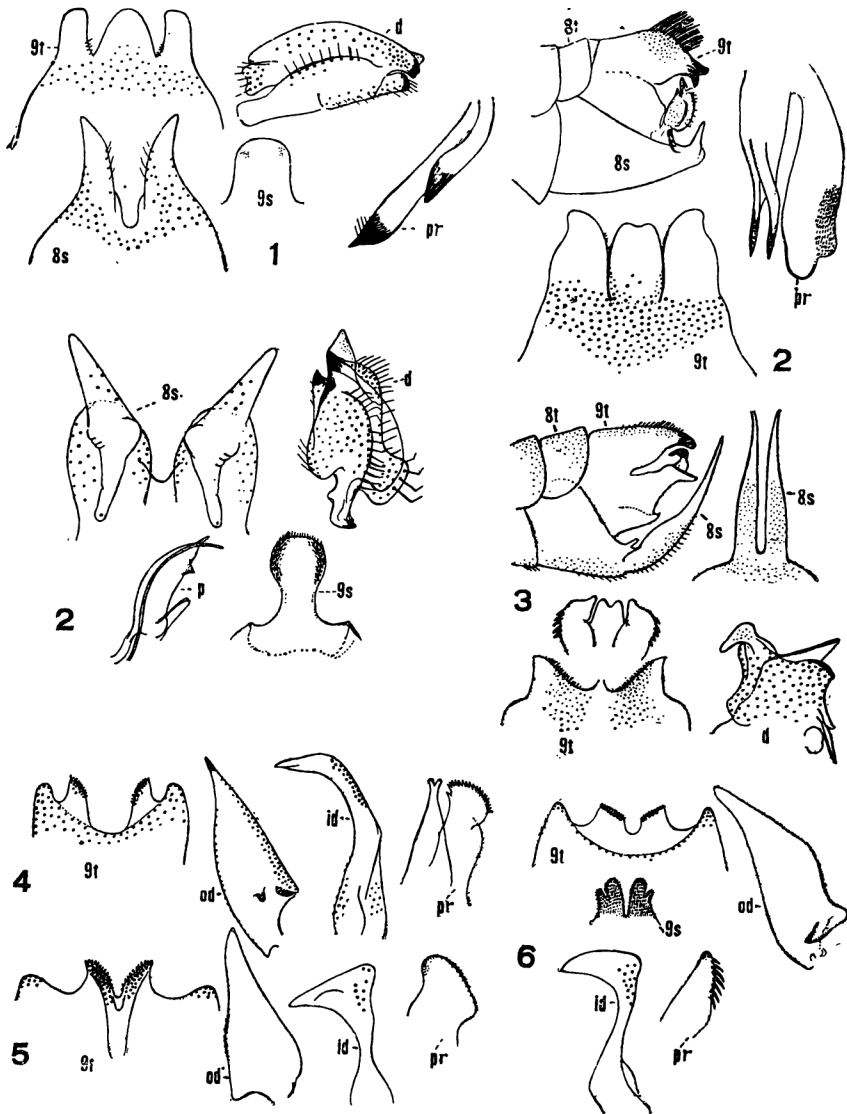


Fig. 1. *Tipula (Microtipula) scelestus*, sp. n.; male hypopygium. — Fig. 2. *Tipula (Microtipula) mandator*, sp. n.; male hypopygium. — Fig. 3. *Tipula (Microtipula) smilodon* Alexander; male hypopygium. — Fig. 4. *Tipula (Microtipula) manniana*, sp. n.; male hypopygium. — Fig. 5. *Tipula (Microtipula) tecta* Alexander; male hypopygium. — Fig. 6. *Tipula (Microtipula) auricularis* Alexander; male hypopygium. — (Symbols: *d*, dististyle; *ld*, inner dististyle; *od*, outer dististyle; *p*, phallosome; *pr*, proctiger; *s*, sternite; *t*, tergite).

of ninth sternite a median spatula; eighth sternite sheathing, at apex divided into two portions by a deep U-shaped median notch, each half produced into two fingerlike lobules.

Male. — Length, about 15 mm.; wing, 14 mm.; antenna, about 9 mm.

Frontal prolongation of head obscure yellow; nasus distinct; palpi yellow. Antennae (male) elongate, approximately three-fifths the length of the body or wing; scape, pedicel and first flagellar segment yellow; succeeding flagellar segments weakly bicolored, the small basal swellings medium brown, the stems yellow; at about midlength of the organ, the stems, excepting their apices, become darker and finally the entire segment is uniformly infuscated. Head testaceous yellow, sparsely pruinose; anterior vertex relatively broad, about three times the greatest diameter of scape.

Pronotum obscure yellow. Mesonotal praescutum chiefly obscure testaceous yellow, with four large, medium brown areas along the anterior and lateral borders, representing the cephalic ends of the usual praescutal stripes; remainder of thorax, including pleura, almost uniformly testaceous yellow. Halteres with stem yellow, knob infuscated. Legs with the coxae and trochanters yellow; remainder of legs yellow, the extreme tips of the femora and tibiae infuscated, tarsi passing into brown; claws (male) toothed. Wings brownish yellow, the costal border a trifle darker; stigma oval, pale brown; obliterative areas before stigma and across cell *1st M*₂ exceedingly small and inconspicuous; veins brown. Venation: *Rs* subequal to *m-cu*; *R*₂₋₃ almost in longitudinal alignment with *R*₃; petiole of cell *M*₁ subequal to *m*; cell *2nd A* relatively broad.

Abdomen brownish yellow, segments six and seven black, to produce a narrow subterminal ring. Male hypopygium (Fig. 2) of the particular type of this particular group of species. Ninth tergite, *9t*, elongate, the apical third glabrous and more decurved, the apex conspicuously trilobed; lateral lobes still more decurved than the slightly upcurved median blade, the latter shallowly emarginate at apex; central third of the dorsal surface, back of the lobes, densely provided with long black setae, the cephalic third of the sclerite again glabrous. Proctiger, *pr*, with the upper half produced into two blackened spines; ventral portion much deeper, with a pale setuliferous lobe on the ventral margin. Appendage of ninth sternite, *9s*, a relatively small median spatula, the setoid extensions more concentrated into a submarginal row

on either side, those at the nearly truncated apex paler and more sparse. Dististyle, *d*, a compact simple structure, about as shown. Eighth sternite, *8s*, sheathing, at apex divided into two lobes by a deep U-shaped notch, each lobe further produced into two relatively slender fingerlike lobules, the outer one more pointed, the cephalic lobule more blackened, with a more or less distinct basal swelling.

Habitat: Costa Rica.

Holotype, ♂, Higuito, San Mateo (Pablo Schild); United States National Museum.

The present fly is most nearly allied to species such as *Tipula (Microtipula) diacanthos* Alexander and *T. (M.) quadricollis* Alexander, from which it differs especially in the structure of the male hypopygium, particularly of the tergite, proctiger and eighth sternite.

Tipula (Microtipula) smilodon Alexander

Tipula smilodon Alexander; Ann. Mag. Nat. Hist., (11) 6: 196-198; 1940.

Type: Playas de Montalvo, Los Rios, Ecuador, altitude 15 meters, April 20, 1938 (Macintyre). Male hypopygium (Fig. 3).

Tipula (Microtipula) manniana, sp. n.

Belongs to the *tecta* subgroup; general coloration of mesonotum obscure yellow, with three dull orange stripes; antennae (male) elongate, approximately two-thirds the length of wing, flagellum black; wings relatively narrow, with a strong brownish tinge, restrictedly patterned with still darker brown; *R*₁₋₂ atrophied; abdominal tergites obscure yellow, the median region weakly darkened, the posterior borders more strongly so; segments seven and eight brownish black to form a subterminal ring; male hypopygium with the median notch of tergite very large, the sublateral emarginations correspondingly small; proctiger with the spines relatively large and numerous; inner dististyle narrow throughout.

Male. — Length, about 13 mm.; wing, 11.8 mm.; antenna, about 8 mm.

Type specimen dried and pinned after having been preserved in spirit.

Frontal prolongation of head obscure yellow, relatively short; nasus short and stubby; palpi with first segment yellow, segments two and three light brown, terminal segment elongate, yellow, narrowly more darkened at base. Antennae (male) elongate, as shown by the measurements; scape, pedicel and extreme base of first flagellar segment yellow, remainder of

organ black; flagellar segments long-cylindrical, the basal enlargements very poorly indicated; longest verticils only a little more than one-third the segments. Head with the posterior vertex brown, the relatively broad front and anterior vertex yellow.

Pronotum obscure orange medially, paling to yellow on sides. Mesonotal praescutum with three obscure orange stripes, the central one vaguely divided medially by a slightly darker line; interspaces and humeral region obscure yellow, with sparse short black setae; scutal lobes obscure brownish orange, the median region darker; scutellum and postnotum light brown, more or less patterned with yellow, including the parascutella, lateral borders of scutellum, and areas on the mediotergite; pleurotergite with the anapleurotergite slightly pruinose. Pleura and katepleurotergite clear light yellow. Halteres infuscated, the base of stem restrictedly yellow, the apex of knob obscure yellow. Legs with coxae and trochanters yellow; remainder of legs brown, the femoral bases very restrictedly brightened; claws (male) simple, microscopically setulose at bases. Wings relatively narrow, with a strong brownish tinge; prearcular field and cells C and Sc darker brown; stigma oval, still darker; cells beyond cord somewhat darker than the basal ones, with indications of weak clouds over the cord and outer veins, especially the anterior cord; veins brown. Venation: Sc_2 entering R_1 about opposite midlength of R_s , the latter a little exceeding $m-cu$; R_{1-2} atrophied; petiole of cell M_1 about three times m ; M_{3-4} short, subequal to $r-m$, with $m-cu$ at its fork; cell 2nd A of moderate width.

Abdomen elongate; tergites obscure yellow, the sides of the basal rings clear light yellow, the segments restrictedly more darkened medially, the posterior borders conspicuously ringed with brown; sternites similarly yellow, the posterior borders less evidently darkened; segments seven and eight brownish black, to form a subterminal ring; hypopygium yellow. Male hypopygium (Fig. 4) of the general type of *tecta* but differing in all details. Ninth tergite, $9t$, with the lateral and submedian lobes both small and separated from one another only by a small rounded notch that has about the same outline as the lateral lobe; intermediate lobes with blackened pegs at apex and down the mesal face; median notch large, U-shaped, many times larger than the lateral emargination. Proctiger, pr , with the spines relatively numerous and of moderate size. Appendage of ninth sternite of the general type of *tecta*, the broader mesal lobule not extending conspicuously caudad beyond the level of the small lateral one. Outer dististyle,

od, terminating in a sharp spinous point; on face near base with two pale flattened lobes or flanges. Inner dististyle, *id*, unusually narrow throughout, the setae about 20-22 in number, erect, black.

Habitat: Bolivia.

Holotype, ♂, Ivon, Beni, February 1922 (William M. Mann); Mulford Biological Expedition 1921-1922; United States National Museum.

I am very pleased to name this fly for Dr. William M. Mann who was the entomologist of the Mulford Expedition. The species is related to *auricularis* and *tecta*, which I had synonymized in the preceding paper under this title but which now appear to represent closely related but distinct forms. The type of hypopygium, especially the appendage of the ninth sternite, indicates a special subgroup which is here termed the *tecta* subgroup, from the first described species.

The distinctions between the three species now known lie chiefly in the structure of the male hypopygium. I am redescribing and figuring the two other members of the subgroup, the illustrations being based on the holotype specimens.

Tipula (Microtipula) tecta Alexander

Tipula tecta Alexander; Insec. Inscit. Menst., 14: 166-167; 1926.

Type: Tachira, Tachira, Venezuela, April 10, 1920 (Williamson). Male hypopygium (Fig. 5) having the ninth tergite, *9t*, with the lateral lobes widely separated from the submedian pair by broad U-shaped notches that are much more extensive than the median emargination. Proctiger, *pr*, stout at tip, the apical teeth numerous but small. Outer dististyle, *od*, narrowly obtuse at tip, without basal flanges. Inner dististyle, *id*, at apex expanded into a triangular head.

Tipula (Microtipula) auricularis Alexander

Tipula auricularis Alexander; Journ. N. Y. Ent. Soc., 50: 136-137; 1942.

Type: Palmar, Manabi, Ecuador, altitude 150-200 meters, May 12-15, 1941 (Laddey).

The male hypopygium (Fig. 6) is most like that of *tecta*, differing in various details. Ninth tergite, *9t*, with the submedian lobes broad, obliquely truncate at apex and here set with numerous blackened spicules, the lobes almost twice as broad as the width of the median notch. Proctiger, *pr*, narrowed at tip, the spines unusually large and few in number, in the type (figured) only about 7 in number, in the paratype about 9; in the latter slide there is a double row, with this number of spines in each row but in the holotype only the single row of 7 spines is evident; if the rows are double, the one is directly superimposed

above the other in the slide mount. Outer dististyle, *od*, subacute at tip, near base with a single recurved flange. Inner dististyle, *id*, with the stem relatively long, the apical blade expanded.

Tipula (Microtipula) alecto, sp. n.

Allied to *urophora*; thorax almost uniformly opaque fulvous-yellow; antennae (male) more than one-half the length of wing, basal flagellar segments bicolored; male hypopygium with the ninth tergite gradually narrowed outwardly, terminating in two divergent lobes; proctiger unarmed with spinous points; inner dististyle with the beak unusually long and slender, conspicuously setiferous.

Male. — Length, about 12 mm.; wing, 12.5 mm.; antenna, about 7.2 mm.

Frontal prolongation of head yellow; nasus conspicuous; palpi yellow throughout. Antennae (male) relatively long, exceeding one-half the length of wing; scape, pedicel and first flagellar segment yellow; succeeding segments conspicuously bicolored, the bases brown, the outer portion of the segments yellow, the dark color increasing in amount on the outer segments; on the fourth and fifth flagellar segments the dark color includes the proximal two-thirds to three-fourths, the outer segments uniformly infuscated; flagellar segments elongate, very gently incised; verticils shorter than the segments, basal in position excepting a single one on outer face of each segment beyond midlength. Head fulvous, light gray pruinose in front and on the narrow orbits.

Thorax almost uniformly opaque fulvous yellow, unpatterned, the pleura somewhat clearer yellow. Halteres yellow, knobs weakly darkened. Legs with the coxae and trochanters yellow; remainder of legs obscure yellow, the tarsi passing into dark brown; claws (male) toothed. Wings with a strong fulvous ground, the prearcular field, cell *C* and the stigma darker brown; cell *Sc* yellow for most of its length; outer radial field a little more infuscated than the remainder of ground; obliterative areas restricted to a small mark across the base of cell *1st M*₂ into the adjoining cells; veins brownish yellow to pale brown, *Cu* clearer yellow. Venation: *Rs* arcuated, a little shorter than *m-cu*; petiole of cell *M*₁ nearly one-half the cell, longer than *m*; cell *2nd A* broad.

Abdomen yellow, the basal segments without pattern; a very narrow black subterminal ring, involving segment seven and the

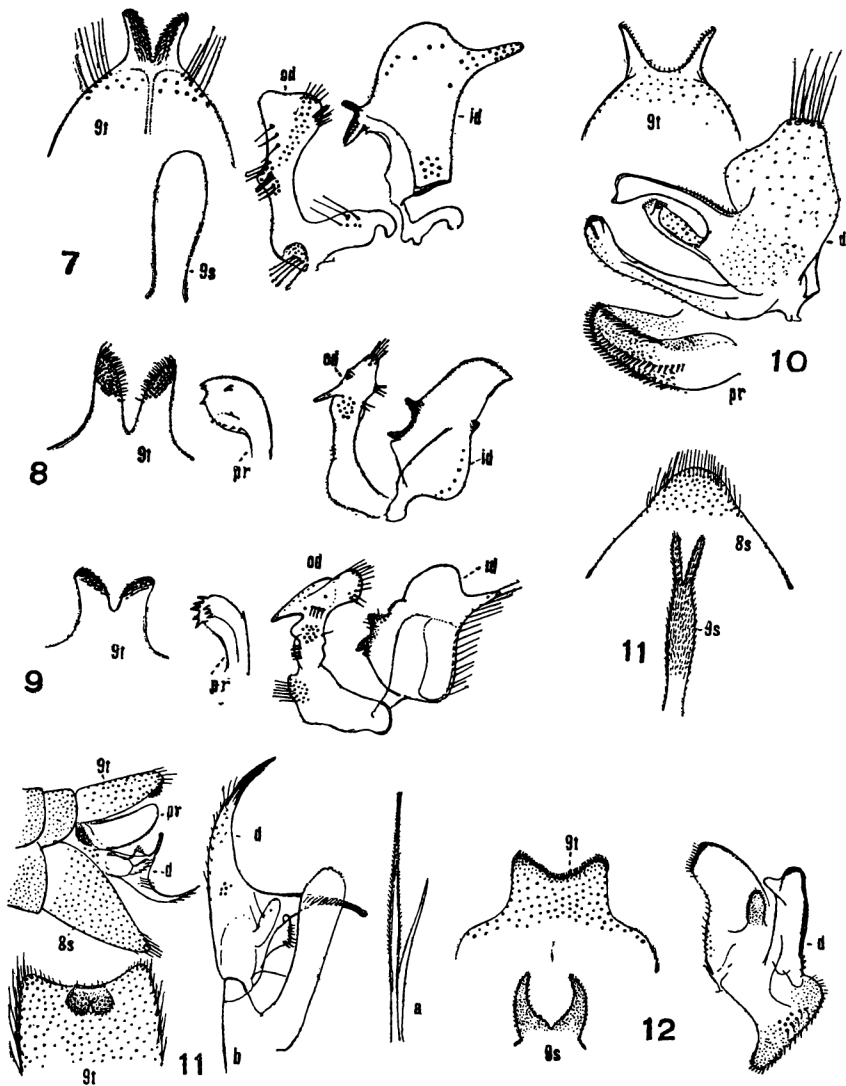


Fig. 7. *Tipula (Microtipula) alector*, sp. n.; male hypopygium. — Fig. 8. *Tipula (Microtipula) erostrata*, sp. n.; male hypopygium. — Fig. 9. *Tipula (Microtipula) urophora* Alexander; male hypopygium. — Fig. 10. *Tipula (Microtipula) effulta* Alexander; male hypopygium. — Fig. 11. *Tipula (Microtipula) orton* Alexander; male hypopygium. — Fig. 12. *Tipula (Microtipula) tucumanensis*, sp. n.; male hypopygium. — (Symbols: a, aedeagus; b, basistyle; d, dististyle; id, inner dististyle; od, outer dististyle; pr, proctiger; s, sternite; t, tergite).

restricted adjoining portions of the eighth tergite and sternite; hypopygium yellow. Male hypopygium (Fig. 7) with the ninth tergite, *9t*, large, gradually narrowed outwardly, terminating in two divergent lobes that are separated from one another by a narrow V-shaped notch; lobes of moderate size, their tips narrowly obtuse, the mesal face and margin with abundant stout retrorse black setae. Proctiger without spinous points. Basistyle without a blackened lobe on mesal face. Outer dististyle, *od*, about as figured, appearing as a flattened yellow blade, strongly curved beyond the base, at apex more dilated into an irregular spatula that is provided with long black setae; outer margin of style at near midlength produced into a low dusky lobe and, near the same point, a slender fingerlike lobe that is directed backward. Inner dististyle, *id*, about as figured; beak unusually long and slender, conspicuously setiferous; outer margin of style near base bearing a bilobed blackened structure, the lobes microscopically scabrous. Appendage of ninth sternite, *9s*, an entire pale spatula, the blade long-oval, about twice as broad as the base, the surface with abundant long setoid extensions. Eighth sternite entire.

Habitat: Peru.

Holotype, ♂, Satipo, Jauja, Junin, altitude 800-900 meters, December 31, 1939 (Paprzycki).

Tipula (Microtipula) alecto is allied to *T. (M.) trinitatis* Alexander and *T. (M.) urophora* Alexander, especially the former, differing in the structure of the male hypopygium, particularly of the ninth tergite, proctiger and both dististyles. The lobes of the tergite and the appendage of the ninth sternite are generally similar in all members of this group.

Tipula (Microtipula) erostrata, sp. n.

Formerly placed in the type series of *T. (M.) urophora* Alexander (Rev. de Ent., 9: 429-431; 1938) as paratypes; the latter species, as now restricted, is still known only from Trans-Andean or Pacific Ecuador (Playas de Montalvo, Los Rios, altitude 15 meters, April 15-18, 1938; Macintyre).

Compared with *urophora*, the present fly has the antennae longer (male, 8 mm.) and shows slight differences in the wing venation, with *Rs* more arcuated and *R*₂ more elongate, subequal to *r-m*. The chief distinctive characters are to be found in the structure of the male hypopygium.

Male hypopygium (Fig. 8) having the ninth tergite, *9t*, with the incision that separates the lobes deeper, extending virtually to the bases of the lobes, the latter narrower and more pointed

at their tips. Both dististyles differently shaped in the two species but especially the inner styles, as shown. In the present species, the inner dististyle, *id*, terminates in a broad cultrate blade but is not narrowed into a beak as in other members of the group. In *urophora* (Fig. 9) the style, *id*, has a slender beak of moderate length. Proctiger, *pr*, in *erostrata* with the ends of the blades more expanded, with smaller, more scattered spinous points; in *urophora* (Fig. 9, *pr*) the tips less dilated but with larger and more conspicuous spines.

Habitat: Colombia.

Holotype, alcoholic ♂, Muzo, Department of Boyaca, altitude 900 meters, 1936 (Jos. Bequaert). Paratopotype, 1 alcoholic ♂.

It may be re-affirmed that the two other members of this particular group of species, *T. (M.) alecto*, sp. n., and *T. (M.) trinitatis* Alexander, have no spinous points on the proctiger yet are obviously closely allied to the two species above considered.

Tipula (Microtipula) effulta Alexander

Tipula effulta Alexander; Ann. Mag. Nat. Hist., (11) 8: 109-111; 1941.

Type: Rio Blanco, near Banos, Tungurahua, Ecuador, altitude 1600 meters, August 15, 1937, October 5, 1936 (Macintyre). Male hypopygium (Fig. 10).

Tipula (Microtipula) ortonii Alexander

Tipula ortonii Alexander; Ann. Ent. Soc. America, 38: 1945 (in press).

Type: Cavinass, Beni, Bolivia, February 1922 (W. M. Mann); Mulford Biological Expedition 1921-1922. Male hypopygium (Fig. 11).

Tipula (Microtipula) tucumanensis, sp. n.

General coloration of thorax yellow or orange-yellow; abdomen (male) yellow with a broad black subterminal ring; antennae chiefly yellow; wings subhyaline, stigma and the narrow costal border slightly more darkened; male hypopygium with the central third of tergite produced into a broad median lobe, the caudal margin of which is broadly and shallowly emarginate, densely provided with short black setae; appendage of ninth sternite small, deeply bilobed, each lateral arm very slender and pale throughout.

Male. — Length, about 12 mm.; wing, 12 mm.; antenna, about 6 mm.

Characters generally as in *amoenicornis*, differing especially in the structure of the male hypopygium.

Antennae chiefly yellow, the verticils of the small basal swellings with darkened areas to produce a very weak clouding; segments feebly incised; longest verticils shorter than the segments.

Thorax chiefly yellow to orange yellow. Wings subhyaline, virtually unpatterned; stigma pale brown, cells *C* and *Sc* more brownish yellow; veins brownish yellow, those at and near the anterior cord slightly darker. Venation: *Rs* about one-half longer than *m-cu*, gently arcuated; *r-m* reduced by the approximation of veins R_{4-5} and M_{1-2} ; cell 1st M_2 almost parallel-sided; petiole of cell M_1 subequal to *m*.

Basal abdominal segments clear yellow, unpatterned; a broad black subterminal ring involving segments six to eight, inclusive, the ninth tergite a little paler brown; remainder of hypopygium yellow. Male hypopygium (Fig. 12) with the tergite, 9*t*, transverse, the central third or more produced into a broad median lobe, the caudal margin of which is broadly and shallowly emarginate, densely fringed with short black setae. Proctiger without blackened points, the major blades microscopically setuliferous, the more slender arms with their surface covered with delicate papillae. No blackened lobe on basistyle. Dististyle, *d*, single, consisting of a larger blade or style, with a smaller and narrower posterior arm; larger blade very slightly narrowed to the subtruncated apex or beak, heavily blackened and provided with a few small setae; posterior arm blackened at apex and along outer margin, near base of the latter with a few small denticles; cephalic margin of arm, before the obtusely rounded apex, produced into a small flattened beaklike blade; posterior portion of style a widely expanded pale lobe or cushion, with abundant microscopic setae and about ten larger bristles. Appendage of ninth sternite, 9*s*, small, pale throughout, deeply bilobed, each arm small and slender, narrowed to the subacute tip, the entire surface with microscopic setulae. Gonapophyses appearing as flattened blades that subtend the aedeagus, only the distal third or fourth free. Eighth sternite moderately projecting, the caudal margin convexly rounded, with a dense brush of long yellow setae but without lobes.

Habitat: Argentina.

Holotype, ♂, Quebrada Famaillá, Tucuman, Argentina, altitude 1600 meters, October 16, 1920 (Vladimir Weiser).

The present fly is generally similar to species such as *Tipula* (*Microtipula*) *amoenicornis* Alexander, from which it differs especially in

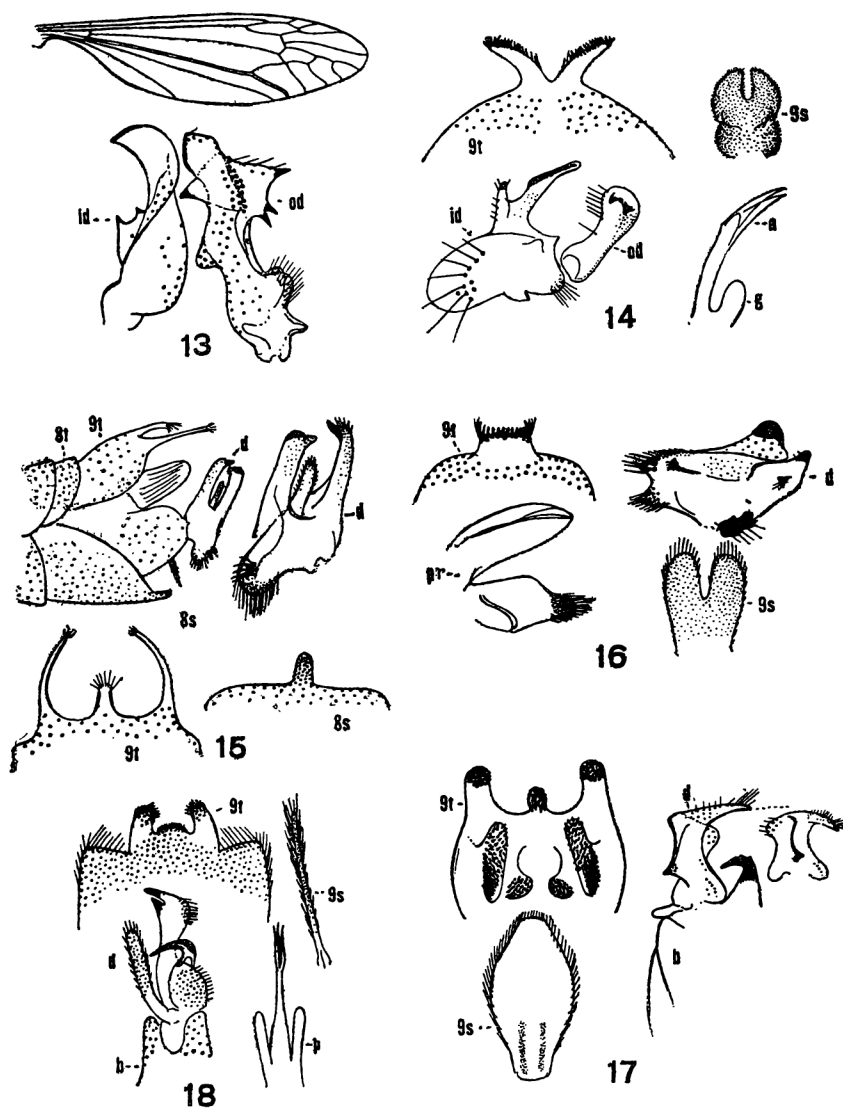


Fig. 13. *Tipula (Microtipula) plaumannina* Alexander; venation, male hypopygium. — Fig. 14. *Tipula (Microtipula) pretiosa*, sp. n.; male hypopygium. — Fig. 15. *Tipula (Microtipula) tenuilobata* Alexander; male hypopygium. — Fig. 16. *Tipula (Microtipula) proctotricha*, sp. n.; male hypopygium. — Fig. 17. *Tipula (Microtipula) bruesti*, sp. n.; male hypopygium. — Fig. 18. *Tipula (Microtipula) icasta* Alexander; male hypopygium. — (Symbols: *b*, basistyle; *d*, dististyles; *id*, inner dististyle; *od*, outer dististyle; *p*, phallosome; *pr*, proctiger; *s*, sternite; *t*, tergite).

the structure of the male hypopygium, particularly of the tergite, dististyle and appendage of the ninth sternite. This is one of the most southerly members of the subgenus so far discovered.

Tipula (Microtipula) plaumannina Alexander

Tipula plaumannina Alexander; Ann. Ent. Soc. America, 38; 1945 (in press).

Type: Nova Teutonia, Santa Catharina, Brazil, October 30, 1935; November 18, 1936; February 12, 1937 (Fritz Plaumann). Male hypopygium (Fig. 13).

Tipula (Microtipula) pretiosa, sp. n.

Allied to *smithi*; general coloration of thorax reddish brown, the pleura more testaceous yellow; antennae weakly bicolored, pale brown, the small enlargement a little darker; legs obscure yellow, outer tarsal segments dark brown; claws (male) toothed; wings light gray, handsomely patterned with brown; male hypopygium with the caudal border of tergite convexly rounded, the apex produced into two slender divergent lobes that are provided with strong black setae; two dististyles; aedeagus at apex split into two strong spines; appendage of ninth sternite conspicuously bilobed.

Male. — Length, about 10-11 mm.; wing, 10.5-12 mm.; antenna, about 7 mm.

Female. — Length, about 13 mm.; wing, 12.5 mm.

Frontal prolongation of head brown above, slightly paler on sides; nasus concolorous; palpi brown. Antennae of male elongate; basal three segments yellow, succeeding segments weakly bicolored, pale brown, the small basal swelling a little darker; in female, outer segments of antennae brownish yellow to very pale brown. Head brown, the center of vertex somewhat darker.

Thoracic dorsum chiefly reddish brown, especially on the praescutum and scutum, the posterior sclerites somewhat more testaceous. Pleura and pleurotergite testaceous yellow. Halteres with stem obscure yellow, knob infuscated. Legs with coxae and trochanters pale yellow; remainder of legs obscure yellow, the outer tarsal segments passing into dark brown or brownish black; claws (male) toothed. Wings with the ground color light gray, handsomely and extensively patterned with brown, including the prearcular field, broad costal border, stigma, almost all of the outer radial field, and a major spot at junction of *m-cu* and *Cu*₁; cell *Sc* paler; remainder of cord, outer end of cell 1st *M*₂

and outer medial branches more narrowly bordered by brown; ground color of outer third of wing, in the general vicinity of the cord, more whitish subhyaline, in the outer medial field following along the veins to midlength or more, the remainder of outer medial cells weakly clouded; veins brown. Venation: *Rs* strongly arcuated, about one-half longer than *m-cu*; *r-m* reduced by the approximation of *R*₄₋₅ and *M*₁₋₂; cell *M*₁ short and broad, less than twice its petiole; *m-cu* at near midlength *M*₃₋₄; cell 2nd *A* moderately wide. In the allotype, *m-cu* at fork of *M*₃₋₄.

Abdomen chiefly obscure yellow, the sides of the tergites narrowly infuscated; sternites clearer yellow; in male, a conspicuous brownish black subterminal ring, involving segments seven and eight and the posterior portion of six; hypopygium yellow. In female, the abdomen chiefly dark-colored but this apparently caused by discoloration. Ovipositor with the cerci compressed, provided with unusually long and conspicuous setae. Male hypopygium (Fig. 14) with the tergite, *9t*, transverse, its caudal border convexly rounded, further produced into two narrow divergent lobes, one on either side of the midline, separated by a V-shaped notch; mesal edges of the lobes with numerous black setae, some shorter and more spinous. Proctiger with the upper lobe broad and stout, its tip obtuse; lower lobe slender and conspicuously hairy. Basistyle without a blackened mesal lobe. Outer dististyle, *od*, a short clavate structure, near its apex restrictedly blackened and weakly toothed, the margin with a few scattered elongate setae. Inner dististyle, *id*, with the beak unusually long and narrow, blackened; posterior portion of style produced into an entire tumid lobe, its face at near midlength with a few long coarse setae. Appendage of ninth sternite, *9s*, short and stout, conspicuously bilobed, each half with abundant microscopic setulae or extensions. Gonapophyses, *g*, short and obtuse, subtending the aedeagus, *a*, the latter strong, at apex split into two strong spines. Eighth sternite moderately sheathing, narrowed posteriorly, the margin very insensibly emarginate and provided with sparse long pale setae.

Habitat: Peru.

Holotype, ♂, Satipo, Jauja, Junin, altitude 800-900 meters, July 24, 1940 (Paprzycki). Allotopotype, ♀, May 23, 1940. Paratopotype, 1 ♂, July 23, 1940.

The most similar described species include *Tipula* (*Microtipula*) *epione* Alexander, *T. (M.) intemperata* Alexander, *T. (M.) smithi* Alexander, (*T. (M.) temperata* Alexander, and *T. (M.) tenuilobata* Alexander, all of which are well-distinguished by the structure of the male hypopygium.

Tipula (Microtipula) tenuilobata Alexander

Tipula tenuilobata Alexander; Ann. Mag. Nat. Hist., (11) 8: 198-200; 1940.

Type: Jatun Yacu, Napo-Pastaza, Ecuador, altitude 700 meters, March 1937 (Macintyre). Male hypopygium (Fig. 15). A further male, Zamora, Santiago-Zamora, Ecuador, altitude 1200 meters, October 24, 1941 (Laddey).

Tipula (Microtipula) proctotricha, sp. n.

Allied to *trichoprocta*; general coloration of mesonotum light brown, pleura testaceous yellow; legs yellowish brown; wings grayish subhyaline, rather conspicuously patterned with brown, cell *Sc* yellow; *Rs* nearly one-half longer than *m-cu*; male hypopygium with the median region of tergite produced caudad into a very low transverse lobe, its apex truncated and provided with blackened spinous setae; lower lobe of proctiger densely provided with long delicate setae; appendage of ninth sternite pale, strongly bilobed; eighth sternite with the caudal margin very gently concave.

Male. — Length, about 13 mm.; wing, 12.5 mm.; antenna, about 6.8 mm.

Female. — Length, about 13 mm.; wing, 13 mm.

Frontal prolongation of head brownish yellow; nasus distinct; palpi brown, the outer segments somewhat paler. Antennae with the basal three segments yellow, remainder of organ chiefly brownish black, the small basal swellings more intensely blackened; longest verticils unilaterally arranged, shorter than the segments. Head brown, more grayish on the orbits.

Pronotum testaceous brown. Mesonotum chiefly light brown or reddish brown, the scutellum and postnotum somewhat more testaceous. Pleura testaceous yellow. Halteres with stem pale brown, knob more infuscated. Legs with the coxae and trochanters yellow; remainder of legs yellowish brown, the outer tarsal segments darker. Wings with the ground grayish subhyaline, rather conspicuously patterned with brown; stigma, prearcular field and cell *C* brown; cell *Sc* light yellow; brown clouds in base of cell *R*, at origin of *Rs*, in outer radial field, along cord and as narrow seams over the veins beyond the cord; a small isolated pale spot near the base of cell *R*₃, followed by a small darkened area; veins brown. Squama naked. Venation: *Rs* nearly one-half longer than *m-cu*; *R*₁₋₂ entire; *r-m* very reduced to obliterated by the approximation of veins *R*₄₋₅ and *M*₁₋₂; cell

M_1 about one-half longer than its petiole; cell *2nd A* relatively wide.

Abdomen of male with the tergites reddish brown, the mid-dorsal area somewhat darker; basal tergites with conspicuous sublateral brown spots, these becoming smaller on the outer segments; sternites more uniformly yellow; a conspicuous black subterminal ring that includes segments six to eight; hypopygium yellow. In female, the tergites more uniformly dark brown, very restrictedly patterned sublaterally with obscure yellow; sternites yellow. Male hypopygium (Fig. 16) with the median region of the tergite, *9t*, produced caudad into a very low transverse lobe, its apex truncated and provided with a single or irregularly double row of setae and spinous setae, the latter on the central portion of the margin. Proctiger, *pr*, with the lower or smaller lobe bearing an unusually dense brush of long delicate pale setae. Basistyle without a modified lobe on mesal face. Dististyle, *d*, relatively simple and compact, about as figured, provided with various blackened lobes and spinous points; posterior portion distinctly bilobed, the upper lobe with longer and stronger setae than those of the lower lobe. Appendage of ninth sternite, *9s*, conspicuous, entirely pale, appearing as a depressed, strongly bilobed plate. Gonapophyses small, subtending the aedeagus. Eighth sternite only moderately sheathing, the caudal margin very gently concave, provided with a sparse fringe of long pale setae, more grouped on the low lateral lobes and again in the median region.

Habitat: Ecuador.

Holotype, ♂, Rio Nanganitza, Mayaico, Santiago-Zamora, altitude 1000 meters, November 14, 1941 (Laddey). Allotopotype, ♀, pinned with type.

The most similar described species is *Tipula (Microtipula) trichoprocta* Alexander, which differs in the details of coloration of the body and wings, and, especially, in the structure of the male hypopygium, including the ninth tergite, dististyle, and appendage of the ninth sternite.

Tipula (Microtipula) bruesi, sp. n.

Size relatively small (wing, male, 11.5 mm.); antennae less than one-half as long as wing and about two-thirds the length of the fore femur; scape and pedicel yellow, flagellum black; wings brownish yellow, the costal border narrowly more darkened; male hypopygium with the ninth tergite unusually provided at apex and on ventral surface with lobes that are set with abundant

blackened spines; appendage of ninth sternite a broad flattened spatula.

Male. — Length, about 11 mm.; wing, 11.5 mm.; antenna, about 5.1 mm.; fore femur, 7.5 mm.

Frontal prolongation of head obscure yellow; nasus short and stout; palpi obscure yellow, the terminal segment a trifle darker. Antennae (male) relatively short, about two-thirds as long as the fore femur and somewhat less than one-half the length of the wing; scape and pedicel yellow, flagellum black, the extreme base of the first segment brightened; flagellar segments moderately incised, longer than the verticils. Head light cinnamon brown, sparsely pruinose on front and on the narrow posterior orbits; anterior vertex nearly four times as wide as the diameter of the scape.

Pronotum testaceous yellow. Mesonotal praescutum and scutum chiefly orange-yellow, without pattern; scutellum clearer yellow; postnotum pale yellow, sparsely pruinose. Pleura fulvous yellow. Halteres with stem yellow, knob more darkened. Legs with the coxae and trochanters light yellow; remainder of legs more obscure yellow or brownish yellow, the outer tarsal segments weakly infuscated (terminal segments broken). Wings with a brownish yellow tinge, the prearcular field, cells *C* and *Sc*, and the stigma pale brown; obliterative areas restricted in area; veins light brown. Venation: *Rs* moderately long, subequal to *m-cu*; *m* and the petiole of cell *M*₁ subequal.

Basal abdominal tergites fulvous, the lateral borders broadly brown, the posterior margins not or scarcely darkened; sternites yellow; a narrow blackened subterminal ring, involving the seventh segment and very slightly the adjoining sclerites. Male hypopygium (Fig. 17) with the ninth tergite, *9t*, broad, the posterior border with three slender lobes that are separated by broad rounded emargination; median lobe at apex more compressed than the laterals, all three lobes terminating in a compact group of blackened spines; on ventral surface of tergite with a further development of four lobes that are similarly provided with blackened spines, the lateral lobes broadly flattened and with the spines more concentrated on the lower or cephalic end, the intermediate lobes much smaller. Proctiger short and stout, the tip obtuse, not provided with spinous points. Appendage of ninth sternite, *9s*, simple, a broadly flattened spatula that is densely covered with setoid hairs. Dististyle, *d*, about as figured, having

a slightly different appearance from different aspects; beak long and narrow, near its apex with several unusually long setae. Just mesad of the dististyles and apparently borne by the ninth sternite at the base of the median spatula with a conspicuous lobe, its apex more blackened and slightly roughened.

Habitat: Lesser Antilles.

Holotype, ♂, Grand Etang, Grenada, September 1910 (Glover Allen and Charles T. Brues); through Charles W. Johnson.

I am very pleased to name this fly for my long-time friend, Dr. Charles Thomas Brues, distinguished student of the Diptera and Hymenoptera. The most similar species appears to be *Tipula (Microtipula) subinfuscata* Williston, of the Island of Saint Vincent, which differs in certain details of coloration of the antennae and in the length of the latter in regard to the femora, this being described as about equal in length to the fore femur. Williston's comparison of his species with *Tipula infuscata* Loew (now *cunctans* Say) was based on a vague superficial resemblance between the two flies and there is no close relationship. It is unfortunate that there is no description of the male hypopygium of *subinfuscata* yet available.

Tipula (Microtipula) icasta Alexander

Tipula icasta Alexander; Ann. Mag. Nat. Hist., (11) 8: 118-120; 1941.

Type: Jatun Yacu, Napo-Pastaza, Ecuador, altitude 700 meters, March 1937 (Macintyre). Male hypopygium (Fig. 18).

Tipula (Microtipula) infida Alexander

Tipula infida Alexander; Ann. Mag. Nat. Hist., (11) 8: 116-118; 1941.

Type: Jatun Yacu, Napo-Pastaza, Ecuador, altitude 700 meters, March 1937 (Macintyre). Male hypopygium (Fig. 19).

Tipula (Microtipula) percomptaria, sp. n.

Allied to *decens*; size medium (wing, male, 11.5 mm.) antennae relatively short, less than one-half the length of the wing; general coloration of thorax buffy yellow, almost unpatterned; femora obscure yellow, the outer segments of the leg passing into black; wings grayish, stigma and costal border narrowly infuscated; male hypopygium with the ninth tergite emarginate, produced medially into a lobe that is densely provided with retrorse black setae; proctiger at apex with numerous spinous setae; appendage of ninth sternite pale, lyriform, each arm on mesal face further produced into a lateral branch; outer dististyle with the outer half an elongate blade; inner dististyle with the beak unusually long and slender.

Male. — Length, about 11 mm.; wing, 11.5 mm.; antenna, about 5 mm.

Frontal prolongation of head yellow; palpi yellow or brownish yellow, the tip of the last segment a trifle darkened. Antennae (male) relatively short, as shown by the measurements; scape and pedicel light yellow; first flagellar segment yellow on about the proximal half, thence darkened, the tip again yellow; succeeding one or two segments black, the extreme tips yellowed; remainder of flagellum black; flagellar segments gently incised; longest verticils unilaterally distributed, shorter than the segments. Head buffy yellow, a little grayish on orbits.

Pronotum buffy yellow, slightly more darkened medially. Mesothorax almost uniformly buffy yellow, the praescutum with four more reddish stripes that are scarcely indicated; interspaces a little pruinose. Halteres with stem obscure yellow, knob brownish black. Legs with the coxae and trochanters yellow; femora obscure yellow; tibiae brown, passing into black; tarsi black; claws (male) toothed. Wings grayish, prearcular field more yellowed; stigma and costal border narrowly infuscated, cell *C* palest; wing-tip very vaguely more darkened; veins brown, more brownish yellow in the prearcular field. Venation: *Rs* arcuated, a little longer than *m-cu*; *m* a little shorter than the petiole of cell *M*₁; cell *2nd A* relatively broad.

Abdomen yellow, the sixth to eighth segments with a black subterminal ring; hypopygium yellow. Male hypopygium (Fig. 20) with the ninth tergite, *9t* large, slightly widened outwardly; median region emarginate, produced into an obtusely truncated lobe that is densely set with retrorse black setae, this row continued cephalad on the ventral face of the sclerite, at the cephalic end forking into two arms that are similarly provided with these blackened setae; lateral tergal lobes broad, the apex emarginate to produce two shallow lobules, the outermost provided with relatively few but long setae, the inner lobule very pale, densely covered with setulae. Proctiger, *pr*, at apex narrowed into a lobe that is set with numerous spinous setae, the dorsal edges of the structure raised into two obtuse flattened lobes. Basistyle with the mesal lobe very small and pale. Dististyles about as figured, the outer style, *od*, on outer half expanded into an elongate blade; inner style, *id*, with the beak unusually long and slender. Appendage of ninth sternite, *9s*, pale, conspicuously lyriform, each arm on inner margin just beyond

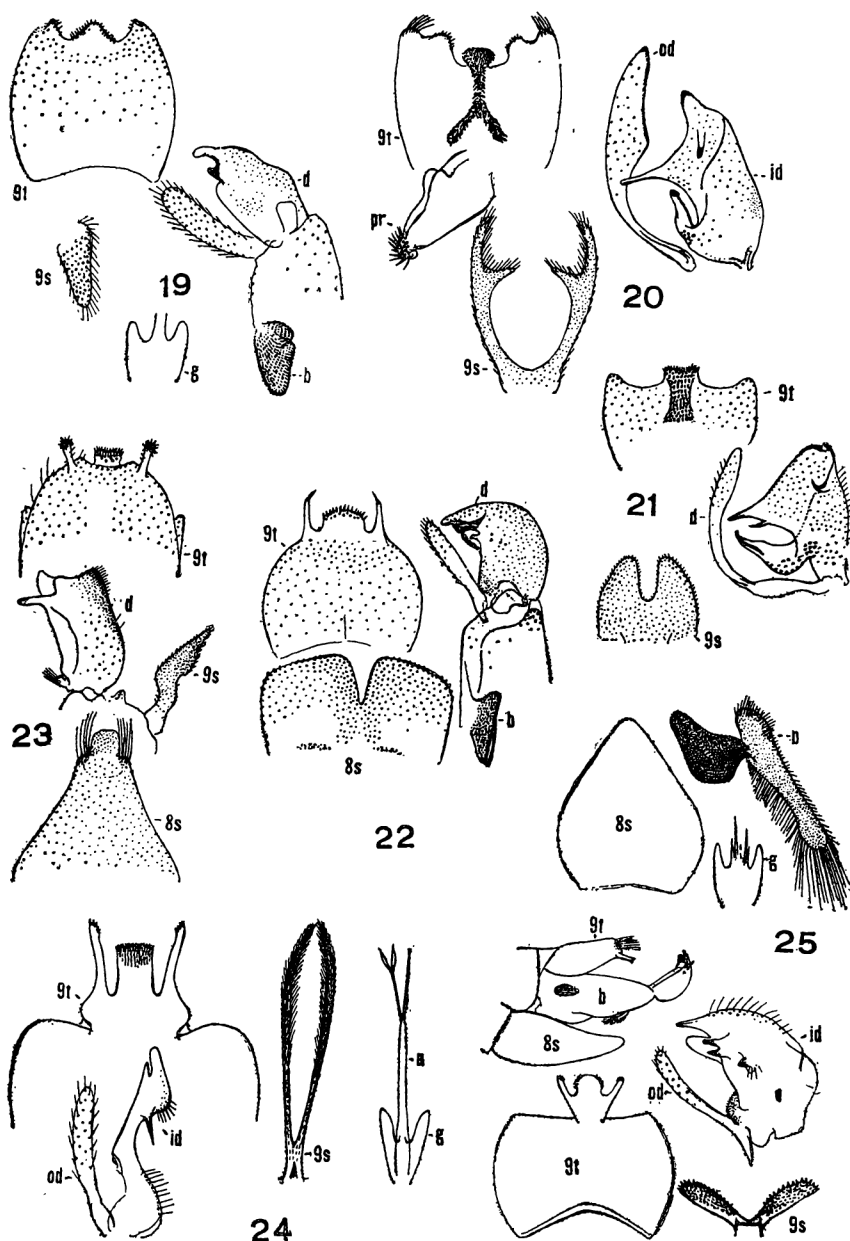


Fig. 19. *Tipula (Microtipula) infida* Alexander; male hypopygium. — Fig. 20. *Tipula (Microtipula) percomptaria*, sp. n.; male hypopygium. — Fig. 21. *Tipula (Microtipula) sternohirsuta* Alexander; male hypopygium. — Fig. 22. *Tipula (Microtipula) lenta* Alexander; male hypopygium. — Fig. 23. *Tipula (Microtipula) proluxisterna* Alexander; male hypopygium. — Fig. 24. *Tipula (Microtipula) megalura*, sp. n.; male hypopygium. — Fig. 25. *Tipula (Microtipula) scaphula*, sp. n.; male hypopygium. — (Symbols: a, aedeagus; b, basistyle; d, dististyles; g, gonapophysis; id, inner dististyle; od, outer dististyle; pr, proctiger; s, sternite; t, tergite).

midlength produced into a lateral branch, the whole structure with abundant setoid extensions.

Habitat: Ecuador.

Holotype, ♂, Mayaico, Rio Nanganitza, Santiago-Zamora, altitude 1000 meters, December 2, 1941 (Laddey).

The most similar described species include *Tipula* (*Microtipula*) *decens* Alexander and *T. (M.) sternohirsuta* Alexander, which, while evidently allied, differ conspicuously in all details of structure of the male hypopygium, particularly the ninth tergite, proctiger, appendage of the ninth sternite, and both dististyles.

Tipula (*Microtipula*) *sternohirsuta* Alexander

Tipula sternohirsuta Alexander; Ann. Mag. Nat. Hist., (11) 8: 115-116; 1941.

Type: Jatun Yacu, Napo-Pastaza, Ecuador, altitude 700 meters, March 1937 (Macintyre). Male hypopygium (Fig. 21).

Tipula (*Microtipula*) *lenta* Alexander

Tipula lenta Alexander; Ann. Mag. Nat. Hist., (11) 8: 112-114; 1941.

Type: Playas de Montalvo, Los Rios, Ecuador, altitude 15 meters, March 3, 1938 (Macintyre). Male hypopygium (Fig. 22).

Tipula (*Microtipula*) *prolixisterna* Alexander

Tipula prolixisterna Alexander; Ann. Mag. Nat. Hist., (11) 8: 111-112; 1941.

Type: Jatun Yacu, Napo-Pastaza, Ecuador, altitude 700 meters, March 1937 (Macintyre). Male hypopygium (Fig. 23).

Tipula (*Microtipula*) *megalyra*, sp. n.

Allied to *lyriformis*; general coloration of thoracic notum dark brown to plumbeous; wings with a strong dusky tinge, costal border and stigma darker; cell 2nd A very narrow; abdominal tergites brown, sternites yellow, segments six to eight blackened to form a conspicuous subterminal ring; male hypopygium with the ninth tergite unequally trilobed, the lateral lobes very slender, tipped with five or six black spines; inner dististyle unusually simple; appendage of ninth sternite appearing as two very elongate arms from a short common base, the structure appearing more or less lyriform; aedeagus terminating in a simple slender rod and a second stem that divides at apex into two flattened pale blades.

Male. — Length, about 11.5-12 mm.; wing, 11.5-13 mm.; antenna, 5-7 mm.

Frontal prolongation of head obscure brownish yellow; nasus very small to scarcely indicated; palpi obscure yellow, the first and last segments a little darker. Antennae (male) elongate, especially in the holotype (maximum figure given above), shorter in the paratypes; scape and pedicel brown, flagellum black; flagellar segments elongate, very feebly incised; verticils only a little more than one-half the length of the segments. Head dark brown, sparsely pruinose, more heavily so on the front and on the narrow orbits; anterior vertex broad.

Pronotum medium brown. Mesonotum chiefly dark brown to plumbeous, the three praescutal stripes barely indicated by brighter interspaces. Pleura obscure yellow. Halteres blackened. Legs with the coxae and trochanters yellow; femora brownish yellow; tibiae and tarsi deepening to black; claws (male) with a conspicuous tooth. Wings with a strong dusky tinge, cell *Sc* and the stigma dark brown, the prearcular field and cell *C* a very little lighter; obliterative areas before stigma and across cell *1st M*₂ very restricted to scarcely evident; veins dark brown. Venation: *R*₁₋₂ entire; cell *2nd A* very narrow.

Basal abdominal tergites brown, sternites light yellow; segments six to eight, inclusive, conspicuously blackened to form a broad subterminal ring; hypopygium, including posterior portions of the eighth segment, fulvous yellow. Male hypopygium (Fig. 24) with the tergite, *9t*, large, its caudal margin nearly truncate, the central portion produced into three lobes, the lateral pair slender, each tipped with five or six blackened spines; median lobe much broader, tipped with several blackened spines that are replaced back from the border by blackened setae. Proctiger without spinous points but with the surface microscopically scabrous. Basistyle with a blackened, microscopically scabrous plate on mesal face. Outer dististyle, *od*, a simple, narrowly clavate lobe with relatively few setae. Inner dististyle, *id*, unusually simple, appearing as a setiferous basal portion that narrows into a slender stem terminating in an obtuse beak and a more acute lower beak; margin of style obliquely opposite the lower beak with a retrorse acute spine. Appendage of ninth sternite, *9s*, appearing as two slender, very elongate arms from a short common base, the arms appearing more or less lyriform, each slightly expanded outwardly and provided with long conspicuous setoid extensions; in a position of rest, the arms

are directed cephalad, being bent back upon the base and lying appressed to the sternite. Aedeagus, *a*, terminating in a slender apical rod and a second slender stem that divides at apex into two more flattened pale divergent blades.

Habitat: Peru, Ecuador.

Holotype, ♂, Satipo, Jauja, Junin, Peru, altitude 800-900 meters, September 10, 1940 (Paprzycki). Paratypes, 1 ♂, Mayaico, Rio Nanganitzá, Santiago-Zamora, Ecuador, altitude 1000 meters, December 2, 1941 (Laddey); 2 ♂♂, Zumbi, Rio Zamora, Santiago-Zamora, Ecuador, altitude 700 meters, October 28-30, 1941 (Laddey).

There are a number of generally similar regional species having darkened wings, with cell *2nd A* very narrow. Among such forms, the present fly is closest to *Tipula (Microtipula) lyriformis* Alexander, of Amazonian Peru, despite the very distinct structure of the male hypopygium, involving almost every structure. The tergite superficially suggests the condition found in *T. (M.) tenuilobata* Alexander, which actually belongs to a distinct group of the subgenus.

Tipula (Microtipula) scaphula, sp. n.

General coloration of the thorax orange-yellow, the pleura and pleurotergite uniformly pale yellow; antennae (male) exceeding one-half the length of wing, the flagellar segments beyond the first two uniformly black; wings relatively narrow, with a strong brown suffusion; stigma and cell *Sc* darker brown; cell *2nd A* long and narrow; male hypopygium with the apex of tergite produced into a trilobed median plate; basistyle, on mesal face, in addition to the common blackened lobe, provided with an elongate, densely setiferous lobe; appendage of ninth sternite appearing as two divergent narrow blades that are provided with spinous setoid projections; aedeagus beyond the point of insertion of the gonapophyses with several elongate pale spines; eighth sternite produced caudad into a prowlike sheathing lobe that narrows to the obtuse tip.

Male. — Length, about 14 mm.; wing, 12.5 mm.; antenna, about 6.8 mm.

Type apparently first preserved in spirit, now dried and pinned.

Frontal prolongation of head yellow, relatively short, a little more than one-half longer than the remainder of head; nasus distinct; basal two segments of palpi obscure yellow, the remainder

broken. Antennae relatively long, exceeding one-half the length of wing; basal three segments yellow, the succeeding segments black, the extreme base and apex of second flagellar segment obscure yellow; flagellar segments elongate but rather conspicuously incised, the outer portion nearly as dilated as the basal enlargement; longest verticils a trifle more than one-half the segments. Head orange-yellow, the vertex with a brown triangle, its point directed forward.

Pronotum testaceous yellow. Mesonotal praescutum with three obscure orange-yellow stripes, the humeral and lateral portions, with the narrow interspaces, more testaceous yellow; scutal lobes more brownish yellow; scutellum darkened basally, the broad posterior border obscure orange-yellow; mediotergite weakly infuscated medially, the lateral portions obscure yellow; posterior border of sclerite with two yellow spots. Pleura and pleurotergite, including dorsopleural membrane, pale yellow. Halteres infuscated, the base of stem and apex of knob more yellowed. Legs with the coxae and trochanters yellow; femora and tibiae obscure yellow, very vaguely darkened at tips; remainder of legs broken. Wings relatively narrow, with a strong brownish suffusion; stigma and cell *Sc* darker brown; veins brown. Venation: R_{1-2} preserved; R_s relatively long and straight, a very little longer than *m-cu*; petiole of cell M_1 and *m* subequal; *m-cu* on M_4 just beyond the perpendicular base; cell *2nd A* long and narrow.

Abdominal tergites brownish yellow sublaterally, the apices and central portions of the segments narrowly more darkened, the bases, and especially the basal rings, clearer yellow; sternites clear yellow; seventh segment brownish black to form a narrow subterminal ring; hypopygium, including segments eight and nine, yellow. Male hypopygium (Fig. 25) with the ninth tergite, *9t*, transverse, the caudal margin truncate, the median portion produced into a depressed-flattened plate that is conspicuously trilobed; median lobe broad, its apex truncate, the sides provided with about ten spinous setae; lateral arms of plate slender, divergent, each tipped with about six spinous setae. Proctiger with the apices of the lower blades with abundant pale papillae and a few scattered setae. Basistyle, *b*, with a blackened lobe on mesal face, in addition to a closely connected elongate pale lobe that is densely set with long pale setae or setoid extensions,

those at and near apex very long, the longest exceeding one-half the length of the lobes. Outer dististyle, *od*, a simple, nearly cylindrical rod, a trifle expanded at apex and here provided with relatively few small setae with other setigerous punctures on the outer two-thirds. Inner dististyle, *id*, with the beak slender; lower beak much broader, both blackened; on face of style near base of lower beak with a blackened lobe that terminates in two spines; slightly more basad with a simple conical lobule. Appendage of ninth sternite, *9s*, appearing as two narrow winglike lobes from a common base, strongly divergent, the outer margin with conspicuous stout setoid extensions, the remainder of surface with these much smaller and inconspicuous. Gonapophyses, *g*, narrow, the tips obtuse; surface of aedeagus just beyond the point of insertion of the apophyses with several elongate spines of various lengths, the longest extending to beyond midlength of the aedeagus. Eighth sternite, *8s*, a simple prowlike sheathing lobe, broad subbasally, thence gradually narrowed to the obtuse tip; surface with scattered setae; on either side back from apex with microscopic groups of setulae that are radiately grouped, with approximately a dozen hairs of various lengths in each aggregation.

Habitat: Panama.

Holotype, ♂, Barro Colorado Island, Canal Zone, June 14, 1939 (James Zetek); United States National Museum.

Among the rather numerous species that have darkened wings and with cell 2nd A very narrow, including *Tipula* (*Microtipula*) *effeta* Alexander, *T. (M.) falcifer* Alexander, *T. (M.) heterodactyla* Alexander, *T. (M.) icasta* Alexander, *T. (M.) infida* Alexander, *T. (M.) lyriformis* Alexander, *T. (M.) megalyra*, sp. n., and others, the present fly is quite distinct in all details of structure of the male hypopygium, including the tergite, basistyle and its lobes, both dististyles, appendage of the ninth sternite, and the aedeagus. The prowlike eighth sternite is somewhat as in the otherwise quite different *T. (M.) pala* Alexander and *T. (M.) paloides* Alexander.