NEW OR LITTLE-KNOWN TIPULIDAE (DIPTERA) FROM SÃO PAULO, BRASIL — PART I

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More than 1000 species of Tipulidae are now known from South America yet despite this fact a vast amount of work remains to be done before this have any adequate knowledge of the seasonal and geographical distribution of these flies in southeastern Brasil. The extensive collections of crane-flies taken in the State of São Paulo in recent years make it advisable to prepare a series of papers on the Tipulidae of this state since it appears that mountainous São Paulo is quite typical of the entire southern section of the eastern Brasilian Highlands and that a thorough study of the crane-flies of this great state will give an indication of the possibilities of entire southeastern Brasil.

I am greatly indebted to various entomologists, chiefly associated with the Departamento de Zoologia da Secretaria da Agricultura de S. Paulo, for invaluable co-operation in this study, these including Messrs. FREDERICO and JOHN LANE, MESSIAS CARRERA, LAURO TRAVASSOS FILHO, L. R. GUIMARÃES, J. D'AMICO, and others mentioned in the text. I am further deeply obligated to P. JOSÉ SEBASTIÃO SCHWARZMAIER, of the Colégio Socorro, Pindamonhangaba, for numerous specimens of these flies.

The two stations, Juquiá and the Serra da Cantareira, where collections were made by Messrs. GUIMARÃES and TRA-
Vassos, were found to be unusually rich in Tipulidae and will evidently well repay a careful detailed survey throughout the entire year. I am greatly indebted to Mr. Travassos for the following data concerning the two localities labelled Juquiá, as mentioned in the text.

Juquiá, Collection I. Collections made while securing nocturnal Lepidoptera; I instal near the forest a strong shining electric light and focus this on a large white cloth. Dark and rainy nights are the best. This collection was taken near a virgin forest about 8 kilometers from Juquiá, some 50 kilometers from the sea-coast, at an altitude of between 30 to 50 meters, on rainy nights. This is among small hills, approximately 20 kilometers from the main range of the Paranapiacabá which has an average altitude of 800 meters. — Travassos. Collection made April 7, 1940; in Alexander collection through exchange with Carrera.

Juquiá, Collection II. Along the road between São Paulo and Juquiá in the mountains in virgin forest, altitude approximately 400 meters. Some species were collected in the evening while swarming over the tent, while others were secured on rainy nights, by means of a light trap. — Travassos. Collection made November 1940; in Departamento de Zoologia.

Materials received from P. Schwarzmaier and from Mr. Carrera are preserved in my collection through the kindness of the collectors, with duplicates, where available, in the Departamento de Zoologia; other specimens, including the types of most of the species, are in the Departamento de Zoologia. Except where indicated to the contrary, the types of the novelties herein described are preserved in the Departamento de Zoologia.

**Tipulinae**

Ozodicera (Dihexaclonus) terrifica, sp. n.

Allied to superarmata; longest flagellar branches a little shorter than the segment bearing them; praescutum with four brownish gray stripes; dorsopleural region dark brown, femora reddish brown, the
tips blackened; wings with a very brownish yellow tinge, the prearcular and costal fields more saturated; a conspicuous darkened cloud on anterior cord; male hypopygium with the caudal border of tergite very slightly emarginate; basistyle terminating in two blackened spines; inner dististyle a broadly flattened blade, at near midlength with outer margin triangularly produced and provided with numerous coarse setae; gonapophyses elongate spiniform.

♂. — Length, about 25 mm.; wing, 22 mm.; antenna, about 7 mm.

♀. — Length, about 28 mm.; wing, 22 mm.; antenna, about 8 mm.

Frontal prolongation of head reddish brown, darker laterally; nasus short and stout, dark brown; palpi black. Antennae (Fig. 4) elongate, approximately alike in both sexes; scape brown, pedicel somewhat brighter in color; flagellar segments yellowish brown or light brown, the branches darker; flagellar segments 2 to 7, inclusive, each with two branches that are a little shorter than the segments, one branch slightly longer than the other, the discrepancy a little more accentuated in female; terminal simple segments long and slender. Head brown, the posterior vertex somewhat darker; anterior vertex (male) very narrow, about one-half the diameter of scape; in female about two-thirds this diameter.

Pronotum reddish brown, variegated by darker areas, sparsely pruinose. Mesonotal praescutum yellowish pollinose, with four brownish gray stripes; scutum yellow, each lobe with two brownish gray areas; posterior selerites of notum heavily yellow pollinose, the sublateral portions of scutellum and mediotergite a little darker. Pleura heavily yellow pollinose, variegated by more grayish brown areas, the largest including the ventral sternopleurite; dorsopleural membrane dark brown. Halteres brown, the knob a little darker.

Legs with the coxae grayish yellow pruinose; trochanters brown; femora reddish brown, the tips relatively narrowly blackened, somewhat more narrowly so on posterior femora; tibiae obscure yellow, the tips narrowly blackened; tarsi passing through dark brown to black; tibial spur formula 2-2-2; claws (male) small, simple; legs, especially the tarsi, very long and slender. Wings (Fig. 1) with a very strong brownish yellow tinge, the broad costal border, including the prearcular field, more suffused; stigma only slightly darker than the costal border; a conspicuous darkened cloud on anterior cord, with a second smaller suffusion across the basal section of $M_3$; veins yellowish brown, darker in the clouded portions. Venation: Cell $M_1$ broadly sessile.

Abdomen of male with the first tergite gray pruinose; succeeding tergites with the ground brownish orange, the lateral portions
broadly blackened, the median area diffusely dark brown; on the outer segments the dark areas more extensive, the distal segments uniformly darkened; basal sternites orange, the third and succeeding segments more uniformly dark brown. In female, the brownish orange color of tergites more extensive, the dark lateral borders only poorly indicated. Male hypopygium (Fig. 8) with the tergite, 9t, transverse, the caudal margin virtually truncate, with only a tiny rounded median notch, the lateral lobes thus scarcely differentiated. Basistyle, b, of moderate length, terminating in two powerful blackened spines, one slender, gently curved to the acute tip, the other stouter, expanded at near two-thirds the length and here provided with several coarse setae, thence produced into a strong powerful spine. Outer dististyle, od, spatulate on distal half. Inner dististyle, id, a broadly flattened blade, the outer margin at near midlength triangularly produced and provided with numerous long coarse setae; ventral margin of style fringed with similar coarse setae; terminal spine at apex very unequally bidentate. Gonapophyses, g, appearing as very long slender rods that narrow at tips into elongate spines.

Holotype, ♂, Juquiá, altitude about 400 meters, November 1940 (Travassos). Allotypotype, ♀.

The nearest ally is Ozodicera (Dihexaclonus) superarmata Alexander 1941, of southeastern Brasil, which differs conspicuously in the structure of the male hypopygium, notably the tergite, apical spines of the basistyle, and the inner dististyle.

Ozodicera (Dihexaclonus) tripallens, sp. n.

General coloration yellowish brown, the praeascutum with four reddish brown stripes that are very poorly indicated by slightly darker margins; wings with a very strong brownish tinge, variegated by three major creamy yellow areas, the largest at and beyond the cord; male hypopygium with the basistyle at apex produced dorsad into a stout blackened lobe.

♂. — Length, about 26 mm.; wing, 19.5 mm.; antenna, about 4.6 mm.

♀. — Length, about 27 mm.; wing, 19.5 mm.; antenna, about 4.5 mm.

Frontal prolongation of head obscure yellow above, darkened laterally and at apex; nasus stout; palpi black. Antennae (Figs. 6, 7) with scape and pedicel brown; flagellar segments with axis yol-
lowish brown, the branches dark brown, the outer segments more uniformly darkened; flagellar segments with branches of both sexes about as long as the axis; in female (Fig. 7) with the branches of first segment fused for almost the proximal half, succeeding segments with fusion much shorter; in male (Fig. 6), with all basal fusions short, the two branches slightly unequal, the shortest with a single terminal seta. Head brown; anterior vertex (male) subequal in diameter to scape.

Pronotum brown, yellow pollinose. Mesonotal praeascutum yellowish brown, with four reddish brown stripes that are very poorly indicated by slightly darker margins; scutal lobes with weakly darkened centers; posterior sclerites of notum yellowish brown or olive brown, the posterior border of medioptergite more heavily yellow pollinose. Pleura heavily grayish yellow pollinose, clearer yellow on the dorsal sternopleurite and ventral pteropleurite, the posterior pleurites a little more grayish; dorsopleural membrane yellow. Halteres with stem light brown, knob dark brown. Legs long and slender; coxae grayish yellow; trochanters yellow; femora dark brown, the tips blackened, the basal half of fore and middle femora more or less conspicuously blackened; tibiae and tarsi dark brown. Wings (Fig. 2) with a very strong brown tinge, variegated by three cream yellow areas, the most basal one in cells Cu and 1st A at near one-fourth the wing length; second pale area near outer end of cell M; third area large, extending from the yellow stigma across subbasal portions of outer radial field, including about one-half the area of cell 1st M2; proximal end of stigma and the anterior cord weakly more infuscated; veins brown, paler in the yellow areas.

Venation: Cell M1 broadly sessile.

Abdominal tergites reddish orange, blackened laterally, very conspicuous and clearly delimited on the second tergite, on the third and succeeding segmentes becoming more extensive but paler; proximal portion of basal tergite yellow, the posterior end more grayish; basal sternites orange, the outer segments blackened. Male hypopygium (Fig. 9) with the caudal margin of tergite, 9t, with a narrow U-shaped notch, the adjoining lateral lobes relatively inconspicuous, provided with short dense setae. Basistyle, b, at apex produced into a short stout blackened point or lobe, directed dorsad, the margin microscopically crenulate. Outer dististyle, od, narrowed to apex. Inner dististyle, id, narrow, a little shorter than outer style, the outer margin with pale retrorse setae, the apex shallowly and unequally bidentate.

Holotype, ♂. Juquiá, altitude 400 meters, November, 1940 (Travassos). Allotopotype. ♀.
Ozodicera (Dihexaconlus) tripallens is readily distinguished from all other described members of the subgenus by the nature of the pattern of the wings.

Ozodicera (Dihexaconlus) lanei, sp. n.

Size medium (wing, male, 15 mm.); general coloration yellow pollinose, the prescutum with three very conspicuous black stripes, the median one very wide; antennæ (male) with seven bipectinate segments, the longest branches about twice the length of the segments, pleura uniformly yellow; legs brownish black to black; wings brownish gray, the costal region and stigma a trifle darker; abdominal tergites obscure yellow, trivittate with darker, the lateral stripes black; male hypopygium with the lobes of tergite very densely provided with short setae; apex of basistytle terminating in an obtuse blackened lobe; inner dististyple a slender blade, the apex simple.

♀. — Length, about 15 mm.; wing, 15 mm.; antenna, about 4.8 mm.

Frontal prolongation of head obscure brownish yellow, relatively long, about equal in length to remainder of head; nasus distinct; palpi black. Antennæ (Fig. 5) with scape and pedicel obscure yellow, flagellum black; flagellum with segments two to eight, inclusive, bipectinate, the branches relatively long, the longest about twice the length of the segment; both branches tipped with three or four subequal setae; three simple terminal segments each slightly shorter than the axis of the last branched segment. Head brown, the front, anterior vertex and posterior orbits more yellowish.

Pronotum obscure yellow, variegated with brown. Mesonotal praesentum with the restricted ground heavily yellow pollinose, the disk chiefly covered by three very conspicuous brownish black stripes, the median one very wide, confluent with the cephalic ends of the narrower lateral stripes, restricting the interspaces to linear triangles; humeral region darkened; scutum with lobes dark brown, the median area a little paler; scutellum and postnotum obscure yellow, weakly patterned with darker. Pleura and pterosternum heavily golden yellow pollinose. Halteres black. Legs with the coxae yellow pollinose; trochanters yellow; femora brownish black; remainder of legs black. Wings (Fig. 3) with a brownish gray tinge, the prearcular and costal fields a trifle darker; stigma pale brown, poorly differentiated against the ground; veins brown. Venation: Cell $M_1$ very narrowly sessile.

Abdominal tergites obscure brownish yellow, with a brown median and more conspicuous black lateral stripes, on the sixth and succeeding segments more uniformly darkened; pleural membrane
brownish black; sternites obscure yellow, the outer segments weakly darkened; hypopygium chiefly yellow. Male hypopygium (Fig. 10) with the tergite, $\theta$, extensive, the caudal margin produced into two triangular lobes that are separated by a notch of approximately similar size and conformation, each lobe very densely provided with short setae. Apex of basistyle, $b$, terminating in an obtuse blackened lobe that is microscopically roughened. Inner dististyle, $id$, a slender blade, the apex simple, at base of style with a pale setiferous cushion.

**Holotype.** $\delta$, Juquiá, altitude 400 meters, November, 1940 (Travassos).

I am very pleased to name this interesting fly in honor of Mr. Frederico Lane, in charge of the Entomological Section of the Departamento de Zoologia. The most similar described species is *Ozodicera (Dihexacteron) nesvi* Alexander 1940, of southeastern Brasil, which has the hypopygium of approximately similar construction though differing in the details, notably of the tergite. It further differs conspicuously from the present fly in the coloration of the body and legs and in the much longer flagellar pectinations.

**Macromastix (Macromastix) travassosana, sp. n.**

General coloration of thoracic notum and abdominal tergites polished black; thoracic pleura and pleurotergite abruptly yellow; head light silvery gray, the posterior portions blackened; antennae short, 10-segmented; femora obscure brownish yellow, the tips narrowly blackened; wings with a strong brown tinge, the prearcular and costal fields more yellow; cell $2nd A$ relatively narrow; dististyle with approximately 20 to 24 blackened spines and points.

$\delta$. — Length, about 7.5 — 8 mm.; wing, 9.2 — 9.5 mm.; antenna, about 1 mm.

Frontal prolongation of head relatively stout, obscure yellow, more darkened above, especially distally; palpi black. Antennae 10 — segmented, very small; scape dark brown, pedicel and flagellum black; First flagellar segment swollen, more than one-half as thick as the pedicel, the succeeding segments abruptly narrowed, cylindrical, with conspicuous verticils; terminal segment a trifle shorter than the penultimate. Head with the broad front and vertex light silvery gray, the occiput and adjoining portions of posterior vertex abruptly blackened; anterior vertex broad, exceeding four times the diameter of the scape, without a tubercle.

Thoracic notum uniformly polished black, contrasting abruptly with the obscure yellow pleura, pleurotergite and parascutella; dor-
sopleural membrane obscure yellow. Halteres brownish black. Legs with coxae obscure brownish yellow; trochanters yellow; femora obscure brownish yellow, the tips narrowly blackened, the amount subequal on all legs; tibiae light brown, the tips narrowly more blackened; tarsi black; claws simple. Wings (Fig. 11) with a strong brown tinge, especially distinct in cells beyond cord; prearecular and costal fields more yellow; stigma oval, slightly darker brown than the ground; veins black, lighter in the yellowed fields. Venation: \( Sc_1 \) atrophied; \( R_{arcuated} \), longer than \( m-cu \); vein \( R_3 \) elongate; cell \( M_1 \) long-petiolate; \( m-cu \) at or just beyond fork of \( M_2 \); cell 2nd \( A \) relatively narrow.

Abdomen with tergites polished black; sternites obscure brownish yellow, the eighth sternite darker; hypopygium orange yellow; in cases, the extreme bases of the individual tergites piceous. Male hypopygium (Fig. 15) with the tergite, \( 9t \), large, the caudal margin rounded, with a shallow median notch. Basistyle, \( b \), elongate. Dististyles fused basally, the outer, \( od \), a narrow spatulate blade, the inner, \( id \), broader, narrowed into a curved apical point, at base with some 20 to 24 blackened spines and obtuse blackened points.

Holotype, \( \delta \), Juquiá, altitude about 400 meters, November, 1940 (Travassos). Paratypotypes, 1 \( \delta \), 1 broken \( \delta \).

I am very privileged to dedicate this unusually distinct fly to the collector of many of the species discussed in the present report, Mr. Lauro Travassos Filho. The species is very different from all other members of the genus so far made known. In its small size it is closest to Macromastix (Macromastix) tijuana Alexander 1942, differing conspicuously in the polished black mesonotum and abdominal tergites and in the light silvery gray head.

Macromastix (Macromastix) guimarãesi, sp. n.

General coloration orange-yellow; antennae short, basal two segments yellow, flagellum black; halteres relatively long, black, the base of stem restrictedly yellow; femora brownish yellow; wings with a strong brownish yellow tinge, cells \( C \) and \( Sc \) more suffused; stigma large, darker brown; cell 2nd \( A \) relatively wide; male hypopygium small, the tergite with caudal border truncate; inner dististyle with a linear row of about six blackened spines.

\( \delta \) — Length, about 12 mm.; wing, 14 mm.; antenna, about 1.8 mm.

Frontal prolongation of head elongate, equal in length to remainder of head, dark orange, the apex above narrowly darkened; nasus lacking; palpi black. Antennae short, 12-segmented, not as
long as the head; scape and pedicle yellow, flagellum black; flagellar segments gradually decreasing in length outwardly; vertices short. Head orange, the center of the low simple vertical tubercle restrictedly darkened.

Pronotum obscure orange. Mesonotum orange yellow, vaguely patterned with darker, including a more or less distinct median prae-
central stripe, the usual dark vittae not differentiated except by slightly darker interspaces; scutellum and posinsertum somewhat clearer yellow, the former with indications of a short brown median vitta; setae of notum pale, relatively long but sparse and subap-
pressed. Pleura yellow, vaguely patterned with brown, including two very small brown dots on dorsal anepisternum at margin of the membrane; paler brown spots on the propleura, ventral anepis-
ternum and dorsal sternopleurite. Halteres relatively long, black, the base of stem restrictedly yellow. Legs with the coxae and tro-
chanters yellow; femora brownish yellow; tibiae darker brown; tarsi black; legs, especially the tarsi, long and slender; claws simple. Wings (Fig. 12) with a strong brownish yellow tinge, cells C and Sc somewhat darker brown; stigma oval, still darker brown, large and conspicuous; veins brownish black. Veins beyond cord virtually without macrotrichia, there being none on Rs, R2+3, R1+2, R2 or R3; distal section of R4+5 with sparse scattered setae. Venation: Sc1 lacking; Rs areuated at origin, exceeding m-cu: R1+2 preserved; pediole of cell M1 shorter than m; M3+4 and the basal section of M2 subequal; cell 2nd A relatively wide.

Abdomen with basal tergites reddish brown, darker laterally and caudally, the fourth and succeeding segments uniformly dark
brown; sternites yellow; hypopygium brownish yellow. Male hy-
popygium (Fig. 16) relatively small as compared with allied species. Ninth tergite, 9t, large, its caudal border truncate or virtually so, the outer caudal angles rounded. Basistyle, b, of moderate length, less than twice the length of the outer dististyle. Outer dististyle exceeding the inner style, tapering to the narrowly obtuse tip. Inner dististyle, id, with the apical bead slender; face of style with a low
flange bearing a linear row of about six blackened spines.

Holotype, ♂, Juquiá, altitude 400 meters, November, 1940 (Trav-
assos).

Macromastix (Macromastix) guimarãesii is dedicated to Mr.
L. R. Guimarães who collected numerous Tipulidae on the Serra
da Cantareira, in company with Mr. Travassos. The fly is very
different from all other regional species having short antennae,
especially in the orange yellow thorax, strongly tinted wings, and
structure of the male hypopygium.
Holorusia (Holorusia) antynympha, sp. n.

Allied to *zikani*; size large (wing, female, 25 mm.); antennae yellow, the outer four segments slightly more darkened; mesonotal praeescutum with four virtually entire brown stripes; median area of scutum, scutellum and mediointergite with a continuous brown median area of scutum, scutellum and mediointergite with a continuous brown median line; pleura yellow, restrictedly patterned with dark brown; halteres yellow; femora brownish yellow, the extreme tips narrowly yellow, preceded by a broad dark brown ring; wings light yellow, handsomely patterned with light and dark brown, the latter including very broad seams along vein Cu. on basal portion in cell Cu in distal portion in cell M.; abdominal tergites almost uniformly orange, the lateral borders gray, each segment with a single weakly darkened area; sternites pale yellow, the intermediate segments with paired darkened lateral spots.

♀. — Length, about 25 mm.; wing, 25 mm.; antenna, about 4 mm.

Frontal prolongation of head yellow above, narrowly darkened laterally; nasus short and stout, simple, tufted with long golden-yellow setae; palpi black. Antennae 12-segmented, yellow, the outer four segments slightly more darkened; flagellar segments cylindrical, gradually decreasing in length from the basal segments outwardly; vestiture short and inconspicuous, the verticles not differentiated from normal setae. Head orange yellow, the posterior vertex darkened behind each eye.

Pronotum yellow, narrowly dark brown medially and more broadly on the sides. Mesonotal praeescutum yellow, with four conspicuous, virtually entire, brown stripes that are narrowly bordered by slightly darker brown; lateral stripes at anterior ends confluent with the intermediate pair, isolating the posterior interspaces; lateral praeescutal borders and dorsal portion of pleural membrane broadly and conspicuously yellow; scutellum yellow, each lobe with confluent brown areas; remainder of mesonotum light yellow with a conspicuous brown median line extending from the suture across the scutum, scutellum and mediointergite, the posterior border of the latter further darkened. Pleura yellow, restrictedly patterned with dark brown, including a narrow dorsal longitudinal stripe involving the ventral dorsopleural region, extending from the propleura to the wing-root; remaining pleurites weakly variegated with small paler brown spots, including the propleura, anepisternum, sternopleurite, dorsal pteropleurite and meron; pleurotergite with the katapleurotergite more velvety white, narrowly bordered by darker brown. Halteres uniformly yellow.
Legs with the coxae yellow, the fore pair with darkened cloud on outer face; trochanters yellow; femora brownish yellow, the extreme tips narrowly yellow, preceded by a broader dark brown ring; tibiae dark brown; tarsi elongate, passing into black. Wings (Fig. 13) light yellow, handsomely patterned with brown, the larger and darker areas including broad longitudinal streaks along vein Cu, on the basal two-fifths lying in cell Cu, on distal two-fifths in cell M, the stripe broken at the central fifth; seams along m-cu and distal section of Cu1 in cell M4; stigma oval, dark brown; cells beyond cord with paired darkened areas at base and triangular marginal areas; outer end of cell R with paired dark spots; Anal cells with outer dusky clouds; veins dark yellow, the adjacent membrane narrowly bordered by pale yellow. Venation: Sc3 ending opposite fork of Rs; R3 evenly and gently arcuated; petiole of cell M1 shorter than m; m-cu shortly before fort of M3+4.

Abdominal tergites almost uniformly orange, the lateral borders gray, each segment with a single weakly darkened area; sternites pale yellow, segments three to seven, inclusive, with paired darkened spots on sides before posterior border. Ovipositor with cerci long and slender.

Holotype, ♀, Juquiá, altitude 400 meters, November, 1940 (Travassos).

The present fly is much larger and differently colored than Holorusia (Holorusia) zikani Alexander 1936, which is the closest ally. The nearly entire praescutal stripes and the differently patterned abdomen give the present fly a distinctive appearance.

Holorusia (Holorusia) horni Alexander 1926

Mogi das Cruzes, altitude about 1,000 meters, June 2, 1940; April 29, 1940 (Carrera).

Holorusia (Holorusia) ocellata (Enderlein 1912)

Juquiá, altitude 400 meters, November 1940 (Travassos).

Holorusia (Holorusia) zikani Alexander 1936

Ipiranga, January 4, 1941 (Frederico Lanh); Tremembé, July 19, 1940 (Worontzow); El Dorado, July 2, 1940 (Worontzow).

Tipula gladiator Alexander 1914

Varzea, January 10, 1941 (Carrera), São Paulo, Cidade Jardim, December 13, 1940 (Carrera).
Tipula guarani Alexander 1914
El Dorado, July 2, 1940 (Woronitzow).

Tipula guttcellula Alexander 1936
Valinhos, altitude 1,100 meters, December 24, 1940 (Guimarães).

Tipula sex-cincta, sp. n.

General coloration of head and thoracic notum dark brownish gray or plumbeous; apices of all tibiae broadly yellowish white or white, widest on posterior legs where about the distal two-fifths is included; wings with about the costal third brownish black, the remainder abruptly whitish hyaline; abdominal tergites brownish black, sternites whitish yellow, the last sternite and hypovalvae black, the cerci and preceding genital segment abruptly white.

♀. — Length, about 20 mm.; wing, 16 mm.

Frontal prolongation of head reddish brown, dark brown above, including the nasus; palpi brown, the terminal segment paling to reddish brown. Antennae with scape light brown; pedicel and first flagellar segment yellow; succeeding flagellar segments bicolored, dark brown basally, the remainder of segment yellow; yellow color of outer segments more obscured; verticils conspicuous. Head dark gray; anterior vertex broad, approximately four times the diameter of scape, without trace of a tubercle.

Pronotum and mesonotum almost uniformly dark brownish gray or plumbeous, the praeascutum without pattern, the lateral portions somewhat more reddened; setae small and sparse, including a lateral group of blackish setae on praeascutum and sparse yellow setae on mediotergite. Pleura reddish brown, the dorsopleural region, pleuropleurite and pleurotergite more dusky or plumbeous. Halteres brownish black, the base of stem restrictedly brightened. Legs with coxae light brown, the posterior pair darker; trochanters yellow; femora brownish yellow; tibiae obscure yellow, all legs with at least the distal third yellowish white or snowy white, the segment darker in color just before the pale ring; ring of posterior tibiae clearer white, wider, including about the distal two-fifths of segment; tarsi black; claws small and simple. Wings (Fig. 14) with about the costal third brownish black, the remainder abruptly whitish hyaline; the dark color includes the preasceral field and the broad costal border, involving the basal half cell $M$, extreme bases of $Cu$ and $1st A$, all but the outer caudal portion of $R$, most of $R_3$ and a narrow cephalic border to cell $M_1$; cell $R_5$ is interrupted by a pale area above cell $1st M_2$ and a tiny marginal spot; veins brown, darker and thinner in the brown areas. Venation: $R_2$ long, erect, subequal to free tip of
Sc₂; cell 1st M₂ long; m-cu on M₄ shortly beyond origin; cell 2nd A relatively wide.

Abdominal tergites brownish black; sternites whitish yellow, the first segment a little darker; last sternite, including the hypovalvæ, jet black; cerci, with the genital shield, abruptly white. Cerci moderately compressed, the tips obtuse.

Holotype, ♀, Serra da Cantareira, altitude about 900 meters, December 1940 (Guimarães & Travassos).

The nearest ally is Tipula perlaticosta Alexander 1941, of Brasil, which has only the posterior tibiae whitened at tips and the dark pattern of the wings even more extensive, including the basal two-thirds of cell M and more than the cephalic half of cell M₁. The other generally similar species do not have white coloration on the legs.

Brachyprema variitibia Alexander 1936
Serra da Cantareira, altitude about 900 meters, December 1940 (Guimarães & Travassos).

L I M O N I I N A E
LIMONIINI

Limonia (Dicranomyia) palliditerga, sp. n.

General coloration brownish yellow, the praescutum not or scarcely patterned; antennæ black throughout; halteres relatively short, brown; legs brown, the terminal tarsal segments black; wings with a very strong light brown or fulvous tinge; Sc₁ ending just before origin of Rs, Sc₂ some distance from its tip; abdominal segments eight and nine white, the basistyles of the male hypopygium abruptly blackened; rostral spines two, arising from a low common dark-colored tubercle.

♂. — Length, about 6.5 mm.; wing, 6.8 mm.

Rostrum dark brown, of moderate length, approximately one-third the remainder of head; palpi black. Antennæ black throughout; flagellar segments short-oval to subcylindrical, the outer segments more elongate; verticils subequal in length to the segments. Head brownish gray, somewhat clearer gray on orbits; anterior vertex about two and one-half times the diameter of scape.

Pronotum yellowish brown. Mesonotum almost uniform brownish yellow or yellowish brown, the praescutum not or scarcely patterned; vague indications of a more yellowish median area, most distinct on central portion of scutum. Pleura and pleurotergite brown-
ish yellow, a little lighter than the notum. Halteres relatively short, brown. Legs with the coxae and trochanters yellow; remainder of legs brown, the terminal tarsal segments black; claws with a single major spine. Wings (Fig. 17) with a very strong light brown to fulvous tinge, the oval stigma a trifle darker brown; preareuhrr field more yellowish; veins brown, brighter in the preareuhrr field. Ve- nation: Sc1 ending just before origin of Rs, Sc2 some distance from its tip Sc1 alone about four-fifths the length of Rs; cell 1st M2 shorter than any of the veins beyond it; m-cu at fork of M.

Abdomen dark brown, segments eight and nine abruptly whitened; basistyles black, the dististyles again pale, excepting the blackened dorsal style. Male hypopygium (Fig. 22) with the tergite, 9t, transverse, the caudal margin weakly emarginate, the lobes very low. Basistyle, b, small, the ventro-mesal lobe simple, much paler in coloration than the main body of style. Dorsal dististyle a stout, strongly curved rod, the apex suddenly acute. Ventral dististyle, vd, large and fleshy, its total area about twice that of the basistyle. Rostral prolongation short, pendant, the rostral spines two, arising from a short common dark-colored tubercle; spines placed close together, straight. Gonapophyses, g, relatively small, the mesal-apical lobe gently curved to the acute tip.

Holotype, ♂, Serra Cabecceiras do M'Boy Guassú, Campos, December 18, 1940 (D'Amico).

Limonia (Dicranomyia) palliditerga is entirely distinct from the other regional species of the subgenus. It is superficially most like L. (D.) smillima (Alexander 1913) but well-distinguished by the strongly tinted wings and, especially, the structure of the male hypopygium.

Limonia (Dicranomyia) mistura, sp. n.

General coloration brownish gray, the praescutum with three dark brown stripes; antennae black throughout; halteres with stem yellow, knob dark brown; legs brownish black, the femoral bases extensively paler; wings with a strong brown tinge, restrictedly patterned with still darker brown, including a conspicuous stigma; Sc1 relatively long; male hypopygium with the tergite deeply notched medially, the lateral lobes narrow; ventro-mesal lobe of basistyle unusually long and conspicuous; ventral dististyle fleshy, the rostral prolongation slightly expanded outwardly and bearing a small tubercle at outer caudal angle; rostral spines two, from a conspicuous basal tubercle placed at base of the prolongation.

♂. — Length, about 6.5 mm.; wing, 6 mm.

♀. — Length, about 5.5 mm.; wing, 6 mm.
Rostrum and palpi black. Antennae black throughout; basal flagellar segments short-oval, the outer ones passing into oval; terminal segment scarcely longer than the penultimate; verticils shorter than the segments. Head brownish gray, front and anterior vertex clearer gray; central portion of vertex with a more or less distinct darker median line; anterior vertex (male) about one-half wider than diameter of scape.

Pronotum brownish gray. Mesonotal praeascutum brownish gray with three conspicuous dark brown stripes, the extreme cephalic end of median stripe split by a pale vitta; scutum brownish gray, the lobes extensively dark brown; remainder of notum dark gray. Pleura and pleurotergite extensively pale, the color obscured by a heavy gray pollen; anepisternum and ventral sternopleurite more brownish black. Halteres of moderate length; stem yellow, knob dark brown. Legs with coxae pale, weakly infuscated on outer face, especially the fore and hind pairs; trochanters obscure yellow; remainder of legs brownish black, the femoral bases extensively paler; claws relatively small, with a basal spine. Wings (Fig. 18) with a strong brownish tinge, restrictedly patterned with still darker brown, including a small but conspicuous oval stigma; restricted dark seams at Sc₂, origin of Rs, cord and outer end of cell 1st M₂; veins brown. Venation: Sc₁ ending opposite origin of Rs, Sc₂ removed some distance from its tip, Sc₁ alone being a little less to a little more than one-half the length of Rs; a weak adventitious crossvein in cell Sc in the type male but not present in the allotype female; m-cu at or shortly beyond fork of M.

Abdominal tergites chiefly dark brown, the extreme caudal borders of the segments pale; sternites obscure yellow, the lateral portions of the segments conspicuously darkened to produce an hourglass-shaped pale central area; hypopygium and ovipositor dark. Ovipositor with eerci long and slender. Male hypopygium (Fig. 21) with the caudal margin of ninth tergite, 9t, deeply notched, the lateral lobes unusually narrow; setae restricted to lobes and lateral margin of sclerite. Basistyle, b, small, dark-colored; ventromesal lobe unusually long and conspicuous, longer than the style itself. Dorsal dististyle a very slender, gently curved rod, the tip a long spine. Ventral dististyle, vd, relatively large, about two and one-half times the area of the main body of the basistyle; rostral prolongation flattened, expanded outwardly, the outer caudal angle further produced into a small tubercle bearing several setae; rostral spines two, arising from a small cylindrical common tubercle close to base of prolongation; spines straight, about two and one-half times the length of the basal tubercle. Gonapophyses, g, with mesal-apical lobes appearing as weakly darkened horns.
Holotype, ♂, Serra Cabecicas do M'Boy Guassú, Campos, December 18, 1940 (D'AMICO). Allotopotype, ♀.

Limonia (Dicranomyia) mistura is entirely distinct from the host of Tropical American species of the subgenus so far described. The male hypopygium is entirely different from all other species so far made known.

Limonia (Rhipidia) annulicornis (Enderleni 1912)
Pindamonhangaba, September 15, 1940 (SCHWARZMAIER); Guarujá, altitude about 50 meters, January 30, 1941 (CARRERA); Ararquara, altitude 700 meters, January 18, 1941 (CARRERA).

Limonia (Rhipidia) domestica (Osten Sacken 1859)
Ipiranga, altitude about 800 meters, Abril 4, 1940 (CARRERA); Guarujá, altitude about 50 meters, January 30, 1941 (CARRERA); Sumaré, altitude 800 meters, November 4, 1940 (CARRERA); Juquiá, altitude 400 meters, October 1-5, 1940, November 1940 (TRAVASSOS).

Limonia (Geranomyia) cinereinota (Alexander 1913)
Guarujá, altitude about 50 meters, January 30, 1941 (CARRERA).

Limonia (Geranomyia) damicoi, sp. n.
Belongs to the biargentata group; legs yellow, only the terminal tarsal segments brownish black; wings with a strong yellow suffusion, very restrictedly patterned with darker; male hypopygium with the ventro-mesal lobe of basistyle large, with very long setae; rostral spines of ventral dististyle elongate, unequal, the longest from a small tubercle; gonapophyses terminating in an acute black spine.

♂. — Length, excluding rostrum, about 5-5.3 mm.; wing, 6-6.5 mm.; rostrum, about 2.7-3 mm.
♀. — Length, excluding rostrum, about 5.5 — 6 mm.; wing, 5.5 mm.; rostrum, about 2.5 mm.

Rostrum elongate, in male exceeding one-half the remainder of body, black. Antennae with scape and pedicel black, flagellum brown; flagellar segments oval. Head dark gray, the anterior vertex silvery gray, the color continued backward onto the occiput.

Pronotum brown, the scutellum paler. Mesonotal praeascutum with the dorsum orange, on either side of the broad median area with a narrow silvery stripe extending from the humeral region backwards to the suture, these stripes most distinct when viewed
from above; posterior sclerites of notum orange yellow, the median region of scutum and the scutellum more testaceous yellow. Pleura orange yellow, unmarked. Halteres yellow, knob weakly infuscated. Legs with the coxae and trochanters yellow; remainder of legs yellow, only the outer tarsal segments Brownish black. Wings (Fig. 19) with a strong yellow suffusion, very restrictedly patterned with darker, including tiny areas at the supernumerary crossvein in cell Sc, origin of Rs, Sc₂ and very insensibly along cord and outer end of cell 1st M₂, the dark pattern especially evident in the darker color of the otherwise yellow veins. Venation: Sc₁ ending about opposite midlength of Rs, Sc₂ at its tip; supernumerary crossvein in cell Sc at near two-thirds the length of cell; cell 1st M₂ shorter than vein M₁+₂ beyond it; m-cu at or shortly beyond the fork of M.

Abdomen, including hypopygium, obscure brownish yellow. Male hypopygium, (Fig. 20) with the tergite, 9t, narrowly transverse, the caudal margin subtruncate or very slightly emarginate, the margin with numerous coarse setae. Basistyle, b, with the ventromesal lobe large, with unusually long pale setae, the longest subequal in length to the lobe itself. Dorsal dististyle gently curved, the tip a long acute spine.

Ventral dististyle, vd, fleshy, its area somewhat less than the entire basistyle; rostral prolongation relatively short, broad-based, gradually narrowed to the subacute tip; rostral spines two, placed near base of prolongation, slightly unequal in length; longest spine nearly as long as the prolongation, arising from a low tubercle; shorter spine at its base, without a tubercle. Gonapophyses, g, terminating in an acute blackened spine, the outer margin developed into a pale flange; before apex with very sparse microscopic setulae. Aedeagus, a, narrowed to tip, the apex appearing as two feebly divergent lobes; sides of aedeagus near apex with microscopic setulae.

Holotypes, ♂, Serra Cabaceiras do M'Boy Guassú, Campos, December 18, 1940 (D'Amico). Allotopotype, ♀, pinned with type. Paratopotypes, 8 ♀ ♂, with types.

Limonia (Geranomyia) damicoi is named in honor of the collector of several rare and new species of Tipulidae, Mr. J. D'Amico. The fly is very different from all other members of the biargentata group, differing in the coloration of the legs, very restrictedly patterned wings, and, especially, in the details of structure of the male hypopygium, notably the basistyle, ventral dististyle, gonapophyses and aedeagus.

Helius (Helius) pallidipes Alexander 1926

Pindamonhangaba, September, 30, 1940 (Schwarzmaier). Formerly known from Paraguay.
HEXATOMINI

Austrolimnophila (Limnophitella) multipicta Alexander 1939

Serra da Cantareira, altitude about 900 meters, December 1940 (Guimarães & Travassos).

Austrolimnophila (Austrolimnophila) acutergata Alexander 1939

Serra da Cantareira, altitude about 900 meters, December 1940 (Guimarães & Travassos).

Austrolimnophila (Austrolimnophila) bifidaria, sp. n.

General coloration light brown, the praescutum in cases with a darker median area on cephalic portion; pleura testaceous yellow, unpatterned; femora obscure yellow, the tips brown; tibiae and tarsi yellow; wings subhyaline, spotted with brown, including a series of small areas in cell C; a supernumerary crossvein in cell M₁, at near midlength; male hypopygium with the tergal lobes broad, heavily blackened; basistyle with a conspicuous rounded lobe on mesal face; interbases bifid.

♂ . Length, about 9 — 10 mm.; wing, 10 — 11 mm.; antenna, about 1.7 mm.

Rostrum light brown; palpi black. Antennae relatively short; scape dark brown; pedicel somewhat paler; flagellum brownish black; flagellar segments oval, the outer ones more clongate, with very long conspicuous verticils. Head dark gray, the occipital region obscure brownish yellow; anterior vertex about twice the diameter of scape, provided with long conspicuous black setae.

Pronotum dark brown, paling to yellow on sides. Mesonotal praescutum light brown, in cases with indications of a darker median area on cephalic portion; posterior sclerites of notum more testaceous yellow. Pleura testaceous yellow, unpatterned. Halteres clongate, dark brown, the base of stem paling to yellow. Legs with coxae and trochanters yellow; femora obscure yellow, the tips moderately pale brown, the amount subequal on all legs; tibiae and tarsi light yellow. Wings (Fig. 23) with the ground color of cephalic half whitish subhyaline, of the posterior portion more grayish; a rather abundant brown pattern, as follows: A series of brown spots in cell C, more numerous in the basal portions; larger areas at origin of Rs, at proximal end or spur of latter, cord, outer end of cell 1st M₂, fork of R₂+₃+₄, R₂, tip of R₁₊₂, fork of M₁₊₂ and on the supernumerary crossvein in cell M₁; small brown marginal spots at ends of longitudinal veins, larger and more conspicuous in the radial field than in the more posterior cells; veins brown. Venation: Sc long, Sc₁ ending...
shortly beyond fork of $R_2+_{3+4}^+$; $R_2$ far from tip of $R_1+_{2+}$, the latter nearly twice the length of $R_2+_{3+4}^+$; petiole of cell $M_1$ subequal to or considerably longer than $m$; a supernumerary crossvein in cell $M_1$ near midlength; $m-cu$ about two-thirds its length beyond the fork of $M$.

Abdominal tergites brown, narrowly, darker sublaterally, the eighth and ninth segments, with the genital appendages, black; sternites yellow, the bases of the segments restrictedly darker. Male hypopygium (Fig. 30) with the caudal margin of tergite, $9t$, with a deep-Y-shaped notch, the lateral lobes truncate and heavily blackened, the mesal outer angle of each slightly produced into a low blackened spine. Basistyle, $b$, relatively short and stout, the mesal face with a conspicuous rounded lobe bearing numerous setae; interbase, $i$, conspicuously but unequally bifid, the outer arm longer and more slender than the inner one. Outer dististyle, $od$, narrow, the apex obtuse. Inner dististyle, $id$, a flattened disk, the outer angle produced into a curved blackened spine, the tip subacute.

**Holotype**, $\delta$, Serra da Cantareira, altitude about 900 meters (December 1940) (Guimarães & Travassos). **Paratopotype**, $\delta$.

*Austrolimnophila* (*Austrolimnophila*) *bifidaria* is entirely different from all other regional species, differing especially in the wing pattern, the presence of a supernumerary crossvein in cell $M_1$ and in the very distinct structure of the male hypopygium. The bifid interbases are not as deeply split as in *A. (A.) acentegra* Alexander 1939 where the two divisions appear as acute needle-like spines.

*Austrolimnophila* (*Austrolimnophila*) *pallidistyla*, sp. n.

Allied to *candiditarsis*; general coloration yellow, the mesonotum brown; thoracic pleura with a conspicuous dark brown transverse girdle on mesepisternum; tips of tibiae narrowly but conspicuously whitened; fore and middle basitarsi darkened on proximal ends, posterior basitarsi and outer tarsal segments whitened; wings whitish subhyaline, the veins bordered by dark brown to produce a longitudinally streaked appearance; $R_1+_{2}$ shorter than $m-cu$; ninth abdominal segment black, the basistyles abruptly white; tergite without narrow lobes or spinous points; mesal face of basistyle with a group of long powerful setae before the point of insertion of the dististyles; interbases appearing as simple curved horns, their tips acute; outer dististyle a pale rod, the tip narrowly and obtusely blackened.

$\delta$. Length, about 8 mm.; wing, 9.3 mm.

Rostrum light brown laterally, more blackened above; palpi black. Antennae with scape and pedicel obscure yellow, flagellum
brownish black; flagellar segments long-oval, passing into long-cylindrical, the longest vertexs unilaterally distributed and nearly three times as long as the segments. Head behind reddish brown, much darker on the broad vertex, the posterior orbits very narrowly pale.

Pronotum dark brown above, paling to yellow on sides. Mesonotal praescutum brown, with a broad, more yellowish, median stripe; posterior sclerites of notum medium brown, the scutellum a trifle more testaceous. Pleura yellow with a conspicuous transverse dark brown girdle, extending from the lateral border of praescutum behind the humeri, crossing the dorsopleural membrane and including the entire anepisternum and sternopleurite. Halteres elongate, dark brown, the base of stem restrictedly pale. Legs with coxae and trochanters yellow; femora brown; tibiae somewhat darker brown with the tips narrowly but conspicuously whitened, the amount subequal on all legs; fore and middle basitarsi dark brown on proximal third to fifth, the remainder of segment and all of posterior basitarsi white; remainder of tarsi, with the exception of the blackened terminal segment, snowy white. Wings (Fig. 24) whitish subhyaline, with a longitudinally streaked appearance, produced primarily by narrow dark seams to the veins, more conspicuous in the outer radial and medial fields; stigma small, oval, uniformly darkened; restricted brown clouds at origin of Rs, anterior cord, fork of $R_2$, and much less distinct on posterior cord and outer end of cell $1st M_2$; a linear paler brown streak extending down the center of cell $R$ for the entire length; veins dark brown. Venation: $R_1+2$ of moderate length, shorter than $m-cu$; Rs elongate, angulated and short-spurred at origin; cell $M_1$ from three to three and one-half times its petiole; $m-cu$ about one-half its own length beyond fork of $M$; Anal veins elongate.

Abdomen elongate; tergites dark brown, the caudal border of the segments very narrowly obscure yellow; basal sternites infuscated, the outer segments passing into yellow; seventh tergite much more broadly pale; eighth and ninth segments black, the remainder of hypopygium abruptly pale yellow, contrasting markedly with the black tergite; abdomen with rather coarse erect black setae. Male hypopygium (Fig. 32) with the caudal border of tergite, $9t$, only gently emarginate, the lateral lobes low and not spinous, the median area with pale membrane. Basistyle, $b$, stout, the mesal face with erect scattered setae but with no lobes or tufts with the exception of a group of seven or eight very strong, powerful setae far out near the dististyles; interbase, $i$, a strongly curved, simple rod. Outer dististyle, $od$, a pale rod, the tip narrowly blackened and slightly obtuse; outer margin of style with scattered setae. Inner dististyle, $id$, with the apical beak slender, long-produced.
Holotype, ♂, Serra da Cantareira, altitude about 900 meters, December 1940 (Guimarães & Travassos).

There are several species of Austrolimnophila in southeastern Brasil that are allied to candiditarsis Alexander 1937, differing among themselves in the pattern and venation of the wings; pattern of the legs, especially as to the degree of whitening at the tips of the tibiae; and in the structure of the male hypopygium which shows strong characters in the armature of the tergal lobes, the basistyle and interbase, and in the conformation of the dististyles. The structure described as an interbase in the members of the subtribe Epiphragmariina may actually prove to be a gonapophysis lying far laterad. The present fly is very different from other related forms in the whitened basistyles.

Austrolimnophila (Austrolimnophila) pallidistyla perlimbata, subsp. n.

♀. Length, about 9 mm.; wing, 9 mm.

Diffs from typical pallidistyla sp. n., as follows; Antennae with pedicel black. Mesonotal prae-seutom uniformly dark brown; median area of scutum narrowly testaceous. Halteres very long, if bent backward extending to base of fourth abdominal segment. Wings with the longitudinal veins very heavily seamed with brown, these dark borders subequal to or more extensive than the pale central streaks of the cells; darkened areas expanded at origin of Rs, along eord, outer end of cell 1st M₂ and on R₂; a conspicuous, dark brown, central streak the entire length of cell R₁ barely indicated in the typical form; Anal cells heavily infuscated. Venation: m-cu at midlength of lower face of cell 1st M₂. Abdominal tergites almost uniformly dark brown; sternites obscure yellow.

Holotype, ♂, Serra da Cantareira, altitude about 900 meters, December 1940 (Guimarães & Travassos).

Austrolimnophila (Austrolimnophila) tenuilobata, sp n.

Allied to candiditarsis; general coloration of mesonotum dark chestnut brown, the surfae polished; rostrum brownish yellow; antennae short, scape and pedicel whitish, flagellum black; pleura yellow, with a transverse brown girdle on mesepisternum; femora brownish yellow, the tips brownish black; libiae uniformly light brown; tarsi whitish, the basitarsi narrowly darkened on proximal portion; wings yellow, the veins, especially those beyond cord, with conspicuous dark seams; vein R₁₊₂ unusually long, approximately twice m-cu; cell M₁ very deep, sessile or virtually so; m-cu nearly its own length beyond the fork of M; abdominal tergites brownish
black, the posterior borders conspicuously yellow; sternites yellow, bordered laterally by darker; male hypopygium with the tergal lobes unusually long and slender, yellow; outer dististyle terminating in a long blackened spine; interbase simple, strongly curved at base, the remaining portion long and straight, with a decurved tip.

♂. Length, about 12 mm.; wing, 11.4 mm.

Rostrum brownish yellow; palpi dark brown. Antennae short; scape and pedicel whitish, flagellum black, the first segment a little paler at base; flagellar segments cylindrical, the longest verticils unilaterally distributed, about one-half longer than the segments. From yellow, more or less silvery pruinose; vertex dark brown; anterior vertex nearly twice the diameter of scape; head with abundant erect black setae.

Pronotum yellow, narrowly darkened above. Mesonotum dark chestnut brown, the surface polished; praescutum without evident stripes, the setae scattered and relatively short; median region of scutum, the scutellum, and cephalic portion of mediotergite obscure yellow, the posterior and lateral portions of the last darkened; pleurotergite darkened. Propodeum, pteropleurite and meron pale, the mesepisternum darkened, forming a weak brown girdle that does not include the dorsopleural membrane. Halteres elongate, black, the extreme base of stem yellow. Legs with coxae yellow, the posterior pair a trifle more darkened; trochanters yellow; femora brownish yellow, the tips narrowly but conspicuously brownish black; tibiae uniformly light brow, the tips not differently colored; tarsi whitish, the basitarsi more or less darkened on proximal portion; (fore legs broken). Wings (Fig. 25) with the ground color yellowish, the costal portion a trifle brighter yellow; a heavy brown pattern, appearing chiefly as conspicuous seams to the veins, most conspicuous on all veins beyond cord; more restricted dark seams at arculus, origin of Rs, cord and outer end of cell 1st M breakpoint, fork of Sc, R2 and tip of R1+2, the two latter enclosing a rather well differentiated yellow stigmatic area; veins dark brown, more yellowed in the region of the arculus. Venation: Rs angulated and short-spurred at origin; R1+2 unusually long, approximately twice m-cu and about equal to vein Sc2+R1; cell M4 very deep, virtually sessile or with a punctiform petiole; m-cu nearly its own length beyond the fork of M.

Abdominal tergites conspicuously bicolored, brownish black, the posterior borders of the segments broadly yellow, the second tergite similarly ringed with yellow at near midlength; sternites light yellow, the lateral borders at near midlength darkened, leaving both ends and the narrow central portion of the segment pale; ninth segment entirely blackened; abdomen with abundant long pale setae. Male hypopygium (Fig. 31) with the yellow lobes of the tergite, 9t,
unusually long and very slender, subtended laterally by a low yellow flange; apex of each lobe microscopically spiculose and provided with a few setae. Basistyle, b, with the interbase, i, simple, strongly bent near base, the long remaining portion straight, decurved to the acute point; a small pencil of setae on mesal face of basistyle near the dististyles. Outer dististyle, od, narrow, the apex a long slender acute point.

Holotype, ♂, Serra da Cantareira, altitude about 900 meters, December 1940 (Guimarães & Travassos).

*Austrolimnophila* (Austrolimnophila) *tenuilobata* is still another species allied to *candidilaris*, differing conspicuously from all described related forms in the venation, and especially in the structure of the male hypopygium, notably the tergite, outer dististyle and interbase.

*Austrolimnophila* (Austrolimnophila) *subpacifera*, sp. n.

Size large (wing, male, 13 mm. or over); mesonotal praeascutum with four conspicuous dark brown stripes that are slightly delimited by narrow darker borders; halteres elongate, black; legs dark brown, the tarsi chiefly yellow; wings narrow, with a strong brown tinge, stigma slightly darker; Rs elongate; cell M, short-petiolate; bale hypopygium with the caudal margin of the tergite produced into conspicuous triangular lobes that are separated from one another by a U-shaped notch.

♂. Length, about 11 — 12 mm.; wing, 13 — 14 mm.; antenna, about 2.3 mm.

Rostrum small, reddish brown; palpi brownish black. Antennae short; scape and pedicel brown, flagellum black; flagellar segments cylindrical, becoming more elongate and attenuated on the outer segments; verticils of basal three flagellar segments small and insignificant, of the outer segments very long and conspicuous, the longest unilaterally arranged and approximately twice the length of the segment. Head deep orange; anterior vertex wide, exceeding three times the diameter of scape.

Pronotum medium brown, paler laterally. Mesonotal praeascutum pale brown, with four conspicuous dark brown stripes that are slightly delimited by narrow darker borders, the intermediate pair closely approximated; scutum with median area broadly yellow, the lobes extensively dark brown, confluent across the suture with the lateral praeascutal stripe; central area of suture blackened; scutellum broad, yellow; postnotum obscure yellow. Pleura yellow, weakly bruninose, the ventral sternopleurite a trifle darker; a more or less
distinct darkened longitudinal line on propleura. Halteres elongate, black, the base of stem restrictedly yellow. Legs with coxae testaceous yellow; femora and tibiae dark brown; tarsi with proximal portion of basitarsi darkened, the distal half or more paling to yellow; remainder of tarsi yellow, the last segment blackened; claws simple. Wings (Fig. 26) with a strong brown tinge, the preareolar and costal fields slightly darker; stigma oval, slightly darker brown; veins dark brown. Venation $R_2$ and $R_{1+2}$ short, subequal; $Sc_2$ longer than $Sc_3$, ending beyond the fork of $R_2+3+4$; $Rs$ elongate; cell $M_1$ short-petiolate; $m-cu$ varying in position from just before middle of cell $1st M_3$ to near two-thirds the length of cell.

Abdominal tergites black; basal sternite yellow, the succeeding sternites dark brown, passing into black on the subterminal segments; hypopygium with styli orange yellow, the tergite and sternite black. Male hypopygium (Fig. 33) with the caudal margin of tergite, $9t$, produced into conspicuous triangular lobes that are separated by a U-shaped notch. Interbase, $i$, strongly curved but simple. Outer dististyle, $od$ relatively small and simple, terminating in a decurved blackened point. Inner dististyle, $id$, a narrow, gently curved blade, the apex obtuse.

Holotype, $\delta$, Serra da Cantareira, altitude about 900 meters, December 1940 (Guimarães & Travassos). Paratypotype, $\delta$.

The nearest relative of the present fly is Austrolimnophila (Austrolimnophila) pacifica Alexander 1937, of southeastern Brasil, which differs in the coloration of the body, legs and wings, in the broader wings with distinct venation, and in the structure of the male hypopygium, especially of the tergite, where the lobes are much lower and obtusely rounded.

Epiphragma (Epiphragma) solatrix imitans Alexander 1913.

El Dorado, July 2, 1940 (Worontzow); Tremembé, July 1940 (Worontzow).

Pseudolimnophila megalops, sp. n.

General coloration brownish gray, the praescutum with three dark brown stripes, the median one narrow; antennae black, the first flagellar segment light yellow; eyes of male very large, broadly contiguous beneath; pleura light gray; legs black, the incisure between femur and tibia restrictedly yellow; tarsal segments paling to brownish yellow; wings with a strong brown tinge, restrictedly patterned with darker; $R_{2+3+4}$ very long, subequal in length to $Rs$; $R_{1+2}$ about four times $R_2$; cell $M_1$ about three times its petiole; anterior arculus preserved.
δ : Length, about 8.5 mm.; wing, 8.7 mm.; antenna, about 2.2 mm.

Rostrum and palpi black. Antennae black, the first flagellar segment abruptly light yellow; flagellar segments long-cylindrical; verticals of basal segments relatively short, becoming longer on outer segments, before the terminal segment fully one-half longer than the segment alone. Eyes of male very large, very broadly confluent beneath; vertex a little less than twice the diameter of scape, blackened, the anterior vertex and orbits pruinose.

Prothorax relatively small, brownish gray. Mesonotal praescutum brownish gray, with three dark brown stripes, the median one narrow, the sublateral very broad; lateral praescutal margins behind humeri light gray; scutum gray, the lobes dark brown; scutellum and postnotum dark brown, sparsely pruinose. Pleura light gray. Halteres dark brown, the base of stem narrowly pale yellow. Legs with coxae pale yellow; the extreme bases of fore and middle pairs restrictedly darkened; trochanters black; femora and tibiae black, the inesures very narrowly yellow, involving both the femur and the tibia; tarsi black, the tip of basitarus and succeeding segments brownish yellow, with golden yellow vestiture; claws small, very slender, with an erect spine at extreme base. Wings (Fig. 27) with a strong brownish tinge, restrictedly patterned with darker brown at origin of Rs, fork of Rs, coid, Sc2, stigma, outer end of cell 1st M2 and fork of M4+5; veins pale brown, darker in the clouded areas, veins Sc and R more brownish yellow. Costal fringe short but dense. Venation: Sc1 ending about opposite two-thirds the length of R2+3+4; Rs and R5+6+7 subequal in length, the latter longer than cell 1st M2; R4+2 nearly four times R2 alone; Rs in longitudinal alignment with R5, the basal section of the latter about twice the length of r-m; cell M5 about three times its petiole, the latter twice as long as m; n-cu about one-third its length beyond the fork of M; anterior areolus preserved.

Abdomen dark brown, the lateral borders of the basal tergite restrictedly pale; sternites paler brown; hypopygium dark brown. Male hypopygium (Fig. 34) with the outer dististyle, od, elongate, approximately four-fifths as long as the basistyle, gradually narrowed to the long slender curved point, the ventral margin before this point with a few microscopic denticles. Inner dististyle, id, shorter and stouter than the outer style, provided with numerous setae of moderate length.

Holotype, δ, Juquiá, altitude 40 meters, April 7, 1940 (Travan-
sos); Alexander Collection through Carrera.

Pseudolimnophila megalops is very different from the other re-
gional species of the genus, differing from all in the venation, es-
Pseudolimnophila Alexander 1908

Polymera (Polymera) obscura Macquart 1838

Papaíns, altitude about 800 meters, Abril 4, 1940 (CARRERA).

Ctenolimnophila (Campbellomyia) neolimnophiloides, sp. n.

General coloration of mesonotal praescutum dark chestnut brown, variegated with black; posterior sclerites of notum and the pleura blackened; head and pronotum light gray pruinose; legs dark brown, the tarsi paling to obscure yellow; wings with a very strong fulvous brown tinge, the costal border more yellowish; cord and longitudinal veins narrowly and vaguely bordered by darker to produce a weak streaked appearance; \( R_{2+3+4} \) very long, only a little shorter than \( Rs \) and longer than \( R_3 \); vein \( R_2 \) atrophied; cell \( 1st M_3 \) rectangular. less than one-half of vein \( M_3 \) beyond it; \( m-cu \) at near midlength of cell \( 1st M_2 \); abdomen black, the outer segments weakly bicolored, the basal rings of the sclerites being a little paler.

♀ . Length, about 6.5 mm.; wing, 6.5 mm.

Rostrum and palpi black. Antennae with the scape black, sparsely pruinose; pedicel brownish yellow; flagellum broken. Head heavily light gray pruinose; anterior verex broad, approximately three times the diameter of scape.

Pronotum light gray pruinose, the color continued back to the wing-root as a narrow line along the dorsopleural region and extreme lateral border of praescutum. Mesonotal praescutum dark chestnut brown, slightly more darkened laterally behind the humeri and as a median blackening on cephalic portion; scutal lobes dark brown, more or less variegated with paler, the median line narrowly pale; posterior sclerites of notum dark brown. Pleura and pleurotergite dark brown or brownish black. Halteres with a weak dusky tinge, the base of stem restrictedly pale. Legs with coxae brownish black; trochanters obscure yellow; remainder of legs dark brown, the tarsi paling to obscure yellow; tibial spurs distinct. Wings (Fig. 28) with a very strong fulvous brown tinge, the costal border as far distad as end of vein \( Sc \) more yellowish; cord and longitudinal veins rather narrowly and vaguely bordered by darker to produce a weak streaked appearance, the centers of the cells remaining of the ground color; veins pale brown, \( Sc \) more yellow. Venation: \( Sc_1 \) ending about opposite fork of \( Rs \), \( Sc_2 \) a short distance from its tip; \( Rs \) elon-
gate, a little longer than $R_{2+3+4}$, the latter exceeding the sinuous
$R_3$; $R_2$ atrophied, not indicated in the unique type; cell 1st $M_2$ rec-
tangular, slightly less than one-half of vein $M_3$ beyond it; m-cu close to
midlength of cell 1st $M_2$.

Abdomen black, on the outer segments the basal rings a trifle
paler to produce a weak bicolor appearance; cerci black, slender
and straight; hypovalvae compressed, dark horn color.

Holotype, ♀, Juquiá, altitude 400 meters, November 1940 (Tra-
vassos).

Ctenolimnophilia (Campbellomyia) neolimnophiloides is entirely
different from its closest ally C. (C.) paulistae Alexander 1942, like-
wise from southeastern Brasil. The unusually long $R_{2+3+4}$ is more
like the Eriopterine genus Neolimnophilia Alexander but the generic
reference certainly appears to be the correct one.

**Hexatoma** (Eriocera) carreri, sp. n.

General coloration orange, the praescutum with scarcely indicated
darker stripes; antennae (male) 7-segmented, black, the scape and
pedicel obscure yellow; legs black, the tarsi snowy white; all basi-
tarsi with more than the proximal half darkened; wings brownish
yellow, the veins at and beyond the cord broadly seamed with pale
brown, greatly restricting the ground color; basal section of vein
$R_5$ subequal to $r-m$; abdominal tergites orange, the outer segments
more or less darkened.

♀ . Length, about $9 - 9.5$ mm.; wing, $9 - 9.5$ mm.; antenna,
about 1.5 mm.

Rostrum small, dark brown; palpi dark brown. Antennae (male)
short, 7-segmented; scape and pedicel obscure yellow, flagellum
black; flagellar segments long-cylindrical, the third longest, second
and fourth subequal, last segment a trifle shorter; verticils long and
conspicuous. Head dark brownish gray; anterior vertex wide.

Pronotum and mesonotum orange, the praescutum with scarcely
indicated darker stripes; central portion of suture weakly darkened;
scutellum pale brown. Pleura light yellow, the dorsal pleurites more
orange. Halteres elongate, black. Legs with the coxae and trochanters
yellow; femora, tibiae and proximal portions of basitarsi black, the
remainder of tarsi excepting the darkened last segment snowy white;
darkened proximal portion of basitarsi including more than one-half
the segment, the amount subequal on all legs. Wings (Fig. 29) with
a brownish yellow tinge, the cells at and beyond the cord weakly
darkened, appearing chiefly as broad seams to the veins that are so
extensive in the outer radial and medial fields as to restrict the
ground in these cells to narrow central vittae; cord and outer end
of cell 1st $M_2$ similarly seamed with brown; veins dark brown. Abundant coarse trichia on veins beyond cord. Venation: $Sc_1$ ending beyond fork of $Rs$, $Sc_2$ some distance from its tip, $Sc_1$ alone nearly as long as $m-eu$; $R_{1+2}$ slightly exceeding $R_2$; basal section of $R_5$ long, subequal to $r-m$; cell $M_1$ lacking; $m-eu$ at from one-fifth to two-fifths the length of the cell.

Abdominal tergites orange, the tergites more or less darkened before the narrow pale posterior borders, the amount of dark color increasing on the subterminal segments; hypopygium chiefly dark reddish brown; sternites obscure yellow.

**Holotype**, ♂, Guarujá, altitude 50 meters, January 30, 1941 (Carrera), Paratopotypes, 2 ♂ ♂ Alexander Collection through Carrera.

*Hexaloma (Eriocera) carrerae* is named in honor of the collector, Mr. Messias Carrera, capable student of the Brazilian Diptera, to whom I am indebted for several interesting lots of Tipulidae from São Paulo. The species is very distinct from other Neotropical members of the so-called "Pentoptera" group, being most similar to *H. (E.) batesi* (Alexander 1921) of Amazonian Brasil, differing conspicuously in the pattern of the legs, wings and abdomen.

**Atarba (Atarba) anthracina** Alexander 1937

Serra da Cantareira, altitude about 900 meters, December 1940 (Guimarães & Travassos).

### ERIOPTERINI

**Trentepohlia (Paramongoma) extensa** (Alexander 1913)

Pindamonhangaba, October 15, 1940 (Schwarzmaier). The species is widely distributed in Tropical America.

**Trentepohlia (Paramongoma) concumbens**, sp. n.

General coloration yellow, the mesonotum with a more or less distinct brownish dorsal pattern; halteres and legs yellow; wings light yellow, restrictedly clouded with pale brown, including a major area in center of cell $R_1$, a second at distal end of vein $Cu$ and a third along vein 2nd $A$.

♀ . Length, about 7 mm.; wing, 6.5 mm.

Rostrum and palpi yellow. Antennae with scape brown, pedicel and flagellum black; flagellar segments oval. Head yellow; anterior vertex reduced to a narrow strip.
Mesonotum chiefly obscure yellow, the posterior sclerites a trifle darker, the color beginning on the praeascutum and forming a more or less distinct dorso-median area covering much of the mesonotum. Pleura and pleurotergite light yellow. Halteres yellow. Legs with the coxae and trochanters yellow; remainder of legs yellow, the tarsi scarcely darker. Wings (Fig. 35) light yellow, restrictedly clouded with pale brown, including a major area at midlength of cell R₁ underneatn vein Sc₂; a further cloud in transverse alignment with the last, involving the distal end of vein Cu₁, Cu₁ and m-cu, the two areas widely separated in cell R; a third cloud on vein 2nd A; wing-tip in outer radial field less evidently darkened; veins yellow, becoming brown and distinct in the patterned areas. Distal section of vein R₅ with numerous trichia, the other veins beyond cold glabrous. Venation: R₄ long and gently arcuated; m-cu just before fork of M; cell 2nd A wide.

Abdominal tergites obscure yellow, the proximal portions of tergites broadly more yellow, producing a weak bicolored appearance; sternites and genital segment yellow. Ovipositor with the elongate cerci infuscated.

Holotype, ♂, Juquiá, altitude 400 meters November 1940 (Travaassos).

Trentepohlia (Paramongoma) concumbens is quite distinct from other small species of the subgenus having yellow legs and halteres, in the handsomely patterned wings. It is most similar to T. (P.) cubitatis Alexander 1931, which differs conspicuously in the pattern and venation of the wings.

Gymnastes (Paragymnastes) perexquisita Alexander 1938
Guarujá, altitude about 50 meters, January 30, 1941 (Carrera).

Teucholabis (Teucholabis) flavithorax (Wiedemann 1821).
Serra da Cantareira, altitude about 900 meters, December 1940 (Guimarães & Travassos).

Teucholabis (Teucholabis) jocosa Alexander 1913
Araraquara, altitude 700 meters, January 18, 1941 (Carrera).

Gonomyia (Progonomyia) subsaturata, sp. n.
General coloration medium brown, variegated with yellow and white; head above china-white; pleura brownish black dorsally, obscure yellow on sternopleurite and meron; legs yellow, the outer
tarsal segments black; wings with a strong brownish yellow tinge; 
\( Sc_1 \) ending a short distance before fork of \( Rs \); \( m-cu \) nearly its own 
length beyond the fork of \( M \); abdominal tergites brown, sternites and 
hypopygium yellow; male hypopygium with the tergite strongly 
produced; outer dististyle a long pale flattened blade that is weakly 
dilated at apex; apical spine of aedeagus elongate.

\( \delta \). Length, about 4.5 mm.; wing, 5 mm.

Rostrum and palpi black. Antennae with basal segments pale 
yellow, flagellum dark brown; flagellar segments passing into long-
cylindrical, with verticils of unusual length, the longest about four 
times the segments. Head above china-white.

Pronotum and pretergites china-white. Mesonotal praeascutum 
medium brown without evident markings; scutellum dark similarly 
medium brown, the central portion obscure yellow with a capillary 
darker median vitta; scutellum dark basally, the remainder brownish 
yellow; mediotergite brownish yellow on cephalic half, darker behind; 
pleurotergite blackened. Pleura brownish black on dorsal portion, 
the ventral parts, including the sternopleurite and meron, obscure 
yellow, the latter somewhat lighter yellow; mid-ventral region clear 
yellow. Halteres with stem black, knob broken. Legs with coxae and 
trochanters obscure yellow; femora, tibiae and most of basilaris yel-
low, the tip of last remaining tarsal segments black. Wings (Fig. 36) 
with a strong brownish yellow tinge, the prearcular and costal fields 
somewhat clearer yellow; veins brownish yellow. Venation: \( Sc_1 \) 
ending a short distance before fork of \( Rs \); \( Sc_2 \) about opposite four-
fifths the length of \( Rs \); \( R_3 \) before midlength of petiole of cell \( R_5 \); \( m-cu \) 
nearly its own length beyond fork of \( M \).

Abdominal tergites dark brown; sternites and hypopygium yel-
low. Male hypopygium (Fig. 37) with the tergite, \( 9t \), strongly pro-
duced into an obtuse rounded lobe, the surface with long scattered 
setae and abundant delicate setulae. Basistyle, \( b \), strongly narrowed 
toward somewhat pointed at apex. Outer dististyle, \( od \), a long pale flattened 
blade, gently curved, the surface and margin with weak appressed 
spinulae, the apex weakly dilated into a blade that is about one-half 
wider than the style immediately before apex. Inner dististyle short 
and compact, narrowed to a sharp beak. Apex of aedeagus, \( a \), a long 
curved spine that is subequal to or longer than the enlarged basal 
portion.

Holotype, \( \delta \), Serra Cabceiras do M'boy Guassú, Campos, De-
cember 18, 1940 (D'Amico).

Gononymia (Progononymia) subsaturata is most nearly related to 
G. (P.) criopterooides Alexander 1926 and G. (P.) saturata Alexander 
1937, all three species constituting a closely allied group of forms.
The male hypopygia of *eriopteroides* and *subsaturata* show distinct differences, especially of the tergite, outer dististyle and aedeagus. The male of *saturata* is still unknown and a comparison between the female of this latter fly and the types male of *subsaturata* must be made. The present fly shows the wings to be broader, with the ground color distinctly darker; vein 2nd A more sinuous, the cell slightly wider; m-cu lying much farther distad. I believe that the male sex of *saturata*, when discovered, will show further distinctions in the hypopygium.

**Molophilus (Molophilus) scabricornis**, sp. n.

Belongs to the *plagiatus* group; general coloration yellow, the praescutum with three confluent reddish brown stripes; pleura pale yellow, with a narrow longitudinal brown stripe; legs yellow, the tarsi black; wings pale yellow; male hypopygium with the outer arm of the outer dististyle roughened by spinous points; basal dististyle a long curved rod, the apex narrowed into a long black spine; phallosome structure blackened, produced into two long divergent arms that are provided with appressed spinous points.

♂. Length, about 3.5 mm.; wing, 4 mm.

Head broken.

Cervical region darkened. Pronotum pale yellow, slightly darker on sides. Mesonotal praescutum almost covered by three confluent reddish brown stripes, the humeral and lateral portions broadly and abruptly light yellow; remainder of mesonotum uniformly medium brown. Pleura pale brownish yellow with a narrow but relatively distinct longitudinal brown stripe occupying the propleura, ventral anepisternum and dorsal pteropleurite, becoming obsolete behind. Halteres with stem pale yellow, knob more orange yellow. Legs with coxae and trochanters yellow; femora and tibiae somewhat more obscure yellow; tarsal segments passing through brown to black; terminal segment with a row of erect spinous setae. Wings strongly and uniformly pale yellow; veins slightly darker yellow, poorly indicated against the ground; trichia elongate, pale brownish yellow. Venation: *R*₂ lying just proximad of level of *r-m*; petiole of cell *M₃* about twice *m-cu*; vein 2nd A moderately sinuous, ending about opposite mid-length of *m-cu*.

Abdomen, including hypopygium, yellow, the styli and phallosome blackened. Male hypopygium (Fig. 38) with the beak of basistyle, *b*, relatively slender, straight, feebly blackened, the apex subacute. Outer dististyle, *od*, with stem very short and stout; outer arm slender, gently arcuated, the surface with numerous appressed spinulæ; inner arm longer and stouter, blackened, the apex obtusely
rounded. Basal dististyle, *bd*, a long curved rod, the apex narrowed into a long straight black spine; surface of style with sparse scattered setigerous punctures. Phallosome, *p*, a powerful structure, consisting of a short broad base that forks into two long divergent arms, heavily blackened and terminating in an acute spine; surface of arms with conspicuous appressed spinulae. Aedeagus relatively small, pale, with a lateral flange on either side, the total length a trifle more than either arm of the phallosome.

Holotype, ♂, Serra Cabecceiras do M’boy Guassú, Campos, December 18, 1940 (D’Amico).

*Molophilus* (*Molophilus*) *scabricornis* is entirely distinct from other regional species of the subgenus. The structure of the phallosome is distinctive, being very different from that of other regional species while suggesting the general condition found in the subgenus *Eumolophilus* Alexander.

**EXPLANATION OF FIGURES**

Fig. 1. *Ozodicera* (*Dihexaclonus*) *terrifica* sp. n.; venation.
Fig. 2. *Ozodicera* (*Dihexaclonus*) *tripallens* sp. n.; venation.
Fig. 3. *Ozodicera* (*Dihexaclonus*) *lanei* sp. n.; venation.
Fig. 4. *Ozodicera* (*Dihexaclonus*) *terrifica* sp. n.; antenna ♂.
Fig. 5. *Ozodicera* (*Dihexaclonus*) *lanei* sp. n.; antenna ♂.
Fig. 6. *Ozodicera* (*Dihexaclonus*) *tripallens* sp. n.; antenna ♂.
Fig. 7. *Ozodicera* (*Dihexaclonus*) *tripallens* sp. n.; antenna ♂.
Fig. 8. *Ozodicera* (*Dihexaclonus*) *terrifica* sp. n.; male hypopygium.
Fig. 9. *Ozodicera* (*Dihexaclonus*) *tripallens* sp. n.; male hypopygium.
Fig. 10. *Ozodicera* (*Dihexaclonus*) *lanei* sp. n.; male hypopygium.

*Symbols*: *b*, basistyle; *g*, gonapophysis; *id*, inner dististyle; *od*, outer dististyle; *t*, 9th tergite.
Fig. 11. *Macromastix (Macromastix) travassosana* sp. n.; venation.

Fig. 12. *Macromastix (Macromastix) guimarãesi* sp. n.; venation.

Fig. 13. *Holorusia (Holorusia) antinympha* sp. n.; venation.

Fig. 14. *Tipula sex-cincta* sp. n.; venation.

Fig. 15. *Macromastix (Macromastix) travassosana* sp. n.; male hypopygium.

Fig. 16. *Macromastix (Macromastix) guimarãesi* sp. n.; male hypopygium.

*Symbols:* $b$, basistyle; $d$, dististyles; $id$, inner dististyle; $od$, outer dististyle; $t$, 9th tergite.

Fig. 17. *Limonia (Dicranomyia) palliditerga* sp. n.; venation.

Fig. 18. *Limonia (Dicranomyia) mistura* sp. n.; venation.

Fig. 19. *Limonia (Geranomyia) damicoi* sp. n.; venation.

Fig. 20. *Limonia (Geranomyia) damicoi* sp. n.; male hypopygium.

Fig. 21. *Limonia (Dicranomyia) mistura* sp. n.; male hypopygium.

Fig. 22. *Limonia (Dicranomyia) palliditerga* sp. n.; male hypopygium.

*Symbols:* $a$, aedeagus; $b$, basistyle; $g$, gonapophysis; $t$, 9th tergite; $vd$, ventral dististyle.
Fig. 23. *Austrolimnophila* (*Austrolimnophila*) *bifidaria* sp. n.; venation.

Fig. 24. *Austrolimnophila* (*Austrolimnophila*) *pallidistyla* sp. n.; venation.

Fig. 25. *Austrolimnophila* (*Austrolimnophila*) *tenuilobata* sp. n.; venation.

Fig. 26. *Austrolimnophila* (*Austrolimnophila*) *subpacifera* sp. n.; venation.

Fig. 27. *Pseudolimnophila* *megalops* sp. n.; venation.

Fig. 28. *Ctenolimnophila* (*Campbellomyia*) *neolimnophiloides* sp. n.; venation.

Fig. 29. *Hexatoma* (*Eriocera*) *carrerai* sp. n.; venation.

Fig. 30. *Austrolimnophila* (*Austrolimnophila*) *bifidaria* sp. n.; male hypopygium.

Fig. 31. *Austrolimnophila* (*Austrolimnophila*) *tenuilobata* sp. n.; male hypopygium.

Fig. 32. *Austrolimnophila* (*Austrolimnophila*) *pallidistyla* sp. n.; male hypopygium.

Fig. 33. *Austrolimnophila* (*Austrolimnophila*) *subpacifera* sp. n.; male hypopygium.

Fig. 34. *Pseudolimnophila* *megalops* sp. n.; male hypopygium.

Symbols: *a*, aedeagus; *b*, basistyles; *g*, gonapophysis; *i*, interbase; *id*, inner dististyle; *od*, outer dististyle; *t*, 9th tergite.
Fig. 35. *Trentepohlia (Paramongoma) concumbens* sp. n.; venation.

Fig. 36. *Gonomyia (Progonomyia) subsaturata* sp. n.; venation.

Fig. 37. *Gonomyia (Progonomyia) subsaturata* sp. n.; male hypopygium.

Fig. 38. *Molophilus (Molophilus) scabicornis* sp. n.; male hypopygium.

*Symbols*: $a$, aedeagus; $b$, basistyle; $bd$, basal dististyle; $id$, inner dististyle; $od$, outer dististyle; $p$, phallosome; $t$, 9th tergite.