Records and descriptions of Brazilian Tipulidae (Dipt.) Part VI

by

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With 15 figures)

The undescribed and rare species of crane-flies discussed at this time were contained in extensive series of these flies received from Mr. Fritz Plaumann, taken in the vicinity of Nova Teutonia, Santa Catharina (Rev. de Ent., 9: 247; 1938) and from P. José Sebastião Schwarzmaier, taken at Campinas, Goyaz. The specimens are preserved in my collection of these flies.

Records of distribution

Holorusia lævis Alexander. — Campinas, Goyaz, October 1938 (Schwarzmaier). Hitherto from Paraguay.

'Holorusia ocellata (Enderlein). — Nova Teutonia, Santa Catharina, November 29, 1938 (Plaumann).

Tanypremna (Tanypremna) invaripes Alexander. — Nova Teutonia, Santa Catharina, October 20, 1936; November 4, 1938 (Plaumann) In the former specimen, cell M_1 of the wings is very short-petiolate to narrowly sessile.

Brachypremna pictipes Osten Sacken. — Nova Teutonia, Santa Catharina, September 17, October 6, 1936 (Plaumann) The dark tibial ring is subequal in extent on all legs, varying in different specimens from about 3 to 4.5 millimeters in extent. As usual in the genus, the males are considerably larger than the females.

Brachypremna subsimilis Alexander. — Campinas, Goyaz, 1938 (Schwarzmaier). Hitherto from northern Argentina.

Brachypremna variitibia Alexander. — Nova Teutonia, Santa Catharina, February 8, 1939 (Plaumann)

¹⁾ The present paper is a contribution to the memorial volume of the Revista de Entomologia, published in honor of Dr. Arthur Neiva.

Brachypremna williamsoni Alexander. — Campinas, Goyaz, 1938 (Schwarzmaier)

Helius (Ilelius) larotypa Alexander. — Nova Teutonia, Santa Catharina, October 25-26, 1938 (Plaumann) Hitherto from Paraguay.

Limnophila expressa Alexander. — Nova Teutonia, Santa Catharina, October 26, November 29, 1933 (Plaumann)

Sigmatomera occulta Alexander. — Nova Teutonia, Santa Catharina, December 13, 1938 (Plaumann); Neu Bremen, Rio Laeiss, October 14, 1937 (Hoffmann) Hitherto from Paraguay.

Trentepohlia (Neomongoma) disjuncta (Alexander). — Nova Teutonia, Santa Catharina, October 25, November 4, 1938; November 28, 1935 (Plaumann) A series of four specimens show a considerable range in venation, especially as regards the degree of erection of vein R_3 (Fig. 7) and the length of the petiole of cell R_5 . In cases, this latter is longer than m, while in other specimens the cell is so short-petiolate as to be virtually sessile, as is the case in the holotype female (from Espirito Santo).

Descriptions of new species

Ozodicera (Dihexaclonus) neivai, sp. n.

General coloration buffy yellow, the praescutum with four conspicuous dark brown stripes; flagellar branches unusually long and slender, on the intermediate segments exceeding three times the segments alone; wings with a strong brown tinge; male hypopygium with the apex of basistyle obtuse; outer dististyle with the base expanded and truncate, tridentate; inner dististyle a simple sclerotized blade.

Male. — Length, about 17-18 mm.; wing, 15-16 mm.; antenna, about 5.5-6 mm.

Frontal prolongation of head slender, obscure brownish yellow nasus stout, black; palpi black, the third segment somewhat paler. Antennae (Fig. 8) with basal three segments brownish yellow, remainder of flagellum dark brown, the branches black; flagellar branches unusually long and slender, longest on flagellar segments four to six, inclusive, where they exceed three times the length of the segments themselves; longest branch about three-fourths the length of the combined three simple terminal segments; branches of second flagellar segment a little shorter, about two and one-half times the segment alone; branch of eighth flageliar segment only a little longer than the segment itself. Head obscure brownish yellow; anterior vertex a little wider than diameter of scape.

Pronotum light brown. Mesonotal praescutum obscure

buffy yellow, with four conspicuous dark brown stripes, the intermediate pair confluent on cephalic ends; anterior margin of praescutum narrowly bordered by black; posterior sclerites of notum yellow pollinose, the scutal lobes variegated with darker; mediotergite vaguely patterned with brown. Pleura brown, heavily yellow pollinose. Halteres with stem brownish yellow, narrowly darker at base, knob dark brown. Legs with coxae yellow pollinose; trochanters yellow; femora brown, a little darker at tips, the bases somewhat paler; tibiae brown; tarsi passing into black. Wings (Fig. 1) with a strong brown tinge, the stigma a little darker than the ground; veins brown. Venation: Rs longer than $R_{2\cdot3}$; $R_{1\cdot2}$ oblique; cell Ist M_2 long; cell M_1 broadly sessile.

Basal abdominal tergites yellowish brown, the succeeding segments passing into brown; subterminal segments brownish black; tergites beyond the first conspicuously margined laterally with black; a vague, ill-defined, median vitta; hypopygium obscure yellow. Male hypopygium (Fig. 9) with the apex of basistyle, b, broadly obtuse, microscopically roughened. Outer dististyle od, broadly expanded at base which is truncated and bears three points. Inner dististyle, id, a simple sclerotized blade.

Hab. Brazil (Santa Catharina).

Holotype, ô. Nova Teutonia, February 8, 1937 (Plaumann). Paratopotype, ô. March 1, 1937 (Plaumann).

I take pleasure in naming this species in honor of the famous Brazilian scientist Dr. Arthur Neiva.

The most similar species are the smaller Ozodicera (Dihexaclonus) gracilirama Alexander. of Bolivia, and the species next defined as O. (D.) macracantha, sp. n. These three species differ conspicuously in the coloration and, especially, the structure of the male hypopygium.

Ozodicera (Dihexaclonus) macracantha, se. n.

General coloration of mesonotum yellow, the praescutum with four pale brown stripes that are narrowly bordered by darker brown; wings with a strong brown tinge, the stigma scarcely darker; a small but conspicuous darker brown cloud on anterior cord; abdominal tergites yellow, with conspicuous brownish black lateral stripes and a much paler median vitta; male hypopygium with the ninth tergite having a deep Ushaped median notch; basistyle terminating in a conspicuous blackened spine that is provided with numerous setae; inner

dististyle very unequally bidentate at apex, the outer tooth a long spine.

Male. — Length, about 22-23 mm.; wing, 18-19 mm. antenna, about 6 mm.

Female. — Length, about 33 mm.; wing, 21.5 mm. Frontal prolongation of head yellowish brown; nasus broad, distinct; palpi brownish black, the basal segment paler.

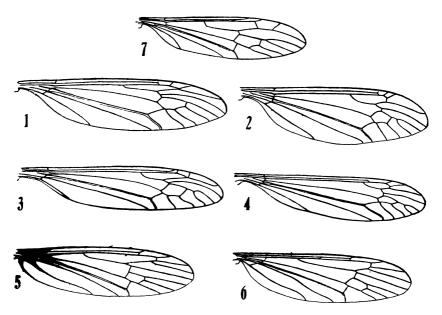


Fig. 1. Ozodicera (Dihexacionus) neivai, sp. n.; venation. — Fig. 2. Tanypremna (Tanypremna) proavita, sp. n.; venation. — Fig. 3. Brachypremna integristigma, sp. n.; venation. — Fig. 4. Tipula schwarzmaieri, sp. n.; venation. — Fig. 5. Hexatoma Eriocera) venavita, sp. n.; venation. — Fig. 6. Hexatoma (Eriocera) goyozensis, sp. n.; venation. — Fig. 7. Trentepohlia (Neomongoma) disjuncta Alexander; venation.

Antennae with basal three segments yellow, succeeding segments a trifle darker, more brownish yellow, the flagellar branches abruptly black; branches (male) long and conspicuous, the longest approximately twice the segments, clothed with a long white pubescence; in the female the branches are shorter yet still long and conspicuous, exceeding the segments in length. Head buffy brown, the vertex vaguely patterned with brown on either side of midline.

Pronotum yellow, variegated with brown. Mesonotal praescutum yellow, with four pale brown stripes that are narrowly bordered by darker brown; scutum yellow, the lobes darkened; posterior sclerites of notum yellow pollinose. Pleura

yellow. Halteres yellowish brown, the knobs a little darker. Legs with the coxae and trochanters yellow; femora obscure yellow, the tips narrowly and weakly infuscated; tibiae brown, the tips narrowly brownish black; tarsi dark brown. Wings with a strong brown tinge, stigma scarcely darker; a small but conspicuous darker brown cloud on anterior cord; cell Cu_1 darkened; veins obscure yellow. Venation: Cell M_1 broadly sessile.

Abdominal tergites obscure yellow, with conspicuous brownish black lateral stripes and a much less conspicuous, paler brown, median vitta; sternites yellow, the outer segments darker; hypopygium pale brown. Abdomen of female longer than usual in the genus. Male hypopygium with the caudal margin of tergite a deep U-shaped median notch, the dusky lobes obtuse. Basistyle (Fig. 10, b) elongate, at tip produced into a long conspicuous blackened spine that is provided with numerous setae. Outer dististyle, od, broadly flattened, pale throughout. Inner dististyle, id, very unequally bidentate at apex, the outer tooth a long acute spine, the inner a small obtuse lobe. Gonapophyses relatively long and slender.

Hab. Brazil (Santa Catharina).

Holotype, &, Nova Teutonia, March 3, 1937 (Plaumann).

Allotopotype, Q, February 23, 1937 (Plaumann) Paratopotype, &, with the holotype.

In the elongate branches of the antennal flagellum, Ozodicera (Dihexaclonus) macracantha is most similar to O. (D.) gracilirama Alexander and O. (D.) neivai, sp. n. It is readily told by the very distinct structure of the male hypopygium, notably the long spine of the basistyle.

Macromastix (Macromastix, goyazana, sp. n.

General coloration of mesonotum buffy brown, the praescutum with four pale brown stripes that are narrowly bordered by darker brown; antennae (male) elongate; femora yellow, the tips narrowly brownish black; wings brownish yellow, the costal border broadly infuscated; Sc_1 entire; cell 1st M_2 relatively small, shorter than any of the veins beyond it; abdomen yellow, the subterminal segments blackened.

Male. — Length, about 10 mm.; wing, 11.5 mm.; antenna, about 19 mm.

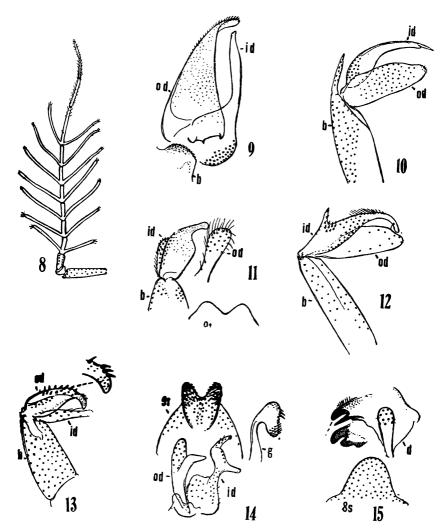


Fig. 8. Ozodicera (Dihexacionus) neivai, sp. n.; antenna, male. — Fig. 9. Ozodicera (Dihexacionus) neivai sp. n.; male hypopygium. — Fig. 10. Ozodicera (Dihexacionus) macracantha, sp. n.; male hypopygium. — Fig. 11. Macromastix (Macromastix) goguzana, sp. n.; male hypopygium. — Fig. 12. Macromastix (Anacomyia) lutriviga, sp. n.; male hypopygium. — Fig. 13. Tanypremna (Tanypremna) proavita, sp. n.; male hypopygium. — Fig. 14. Tipula schwarzmaieri, sp. n.; male hypopygium. — Fig. 15. Tipula pai ides, sp. n.; male hypopygium. (Symbols: b) hasistyle; d, dististyle; g, gonapophysis; id, inner dististyle; od, outer dististyle; s, sternite; t, tergite).

Frontal prolongation of head obscure yellow, relatively long, nearly equal in length to remainder of head; nasus distinct; palpi brownish black. Antennae (male) elongate, as shown by the measurements, being nearly twice as long as the body; scape and pedicel brownish yellow, flagellum brownish black; flagellar segments more slender than in

brasiliæ, not expanded at tips; verticils shorter than the white pubescence. Head brownish yellow; vertical tubercle conspicuous, bulbous.

Mesonotal praescutum buffy brown, with four pale brown stripes that are conspicuously bordered by darker brown; intermediate stripes only a little longer than the laterals, their cephalic ends on a level with the pseudosutural foveae; a very short median brown vitta on cephalic portion of praescutum; posterior sclerites of notum brown, sparsely pollinose, the scutal lobes weakly darkened; vestiture of mesonotum short and pale. Pleura yellow, with small brown spots on propleura, anepisternum, sternopleurite and pteropleurite. Halteres with stem obscure yellow, knob dark brown. Legs with the coxae brownish yellow; trochanters yellow; femora yellow, the tips narrowly but conspicuously brownish black; tibiae narrowly obscure yellow at bases, passing through brown to brownish black at tips; tarsi black. Wings brownish yellow, the costal border broadly infuscated, involving the prearcular field, cells C and Sc, and the adjoining portions of cells R and R_1 , this dark color gradually merging with the ground; stigma brown, scarcely differentiated from the darkened costal border; veins brownish yellow, darker in the infuscated portions. Venation: Sc_1 entire, long and erect, lying opposite fork of Rs; cell 1st M₂ relatively small, much shorter than any of the veins beyond it; petiole of cell M_1 longer than m; cell 2nd A wide.

Basal abdominal segments yellow, the pleural border narrowly darkened; sixth to eighth segments blackened; hypopygium pale. Male hypopygium (Fig. 11) with the tergite, 9t, strongly notched medially, the lateral lobes obtusely rounded; surface of disk of lobes with abundant microscopic setae distributed in small groups of five or six. Outer dististyle, od, a small flattened club. Inner dististyle, id, with blackened spines on outer face at base; rostral lobe shorter than in brasiliae.

Hab. Brazil (Goyaz).

Holotype, $^{\circ}$, Campinas, October 1938 (Schwarz-maier).

Allied to Macromastix (Macromastix) brasiliae Alexander, of south-eastern Brazil, agreeing in the general details of antennal length and structure, pattern of mesonotum and coloration of wings. It differs especially in the details of pattern of mesonotum, blackened tips of femora, and in the structure of the antennae and the male hypopygium.

Macromastix (Araucomyia) luteistigma, sp. n.

Mesonotal praescutum with four conspicuous brown stripes that are vaguely and narrowly bordered by darker brown; antennae short in both sexes, 11-segmented; wings with a brownish tinge, the costal border still darker, the stigma light yellow; abdominal tergites obscure yellow medially, with very broad, nearly lateral, brown stripes; subterminal segments uniformly darkened; male hypopygium with the tergite transverse, the caudal border truncate; basistyle very long and slender; inner dististyle with a conspicuous lobe on outer margin at about the basal third of length.

Male. — Length, about 12-13 mm.; wing, 13 mm. antenna, about 1.5-1.6 mm.

Female. — Length, about 20-22 mm.; wing, 16-17 mm. Frontal prolongation of head orange-yellow, relatively long and slender, subequal to or a little longer than the remainder of head; nasus lacking; palpi brownish black. Antennae shorter than the head, 11-segmented; scape and pedicel yellow, flagellum brownish black; flagellar segments simple. Head buffy yellow with a slight pruinosity, the vertex vaguely patterned with brown, chiefly appearing as double stripes on posterior vertex, the median line pale; vertical tubercle low.

Mesonotal praescutum obscure yellow, with four conspicuous brown stripes that are vaguely and narrowly bordered by darker brown; intermediate stripes well-separated; centers of scutal lobes darkened; scutellum and postnotum yellowish pollinose. Vestiture of mesonotum very short to virtually lacking. Pleura yellow pollinose. Halteres infuscated. Legs with the coxae yellow, sparsely pruinose; trochanters yellow; femora brown; tibiae slightly dark; tarsi black. Wings with a brownish tinge, the prearcular and costal fields, especially cell Sc, more strongly darkened; stigma light yellow, conspicuous; veins brown. Venation: Rs nearly twice m-cu; R_{1-2} entire; petiole of cell M_1 a little longer than m.

Abdominal tergites with median area obscure yellow, the sides chiefly covered by very broad stripes; extreme lateral borders buffy; seventh and eighth segments uniformly darkened; basal sternites obscure yellow; hypopygium pale. Abdomen of female relatively elongate; valves of ovipositor long and slender, especially the cerci. Male hypopygium with the tergite transverse, the caudal border truncate, unnotched. Basi-

style (Fig. 12, b) very long and slender. Inner dististyle, id, elongate, on outer margin at near one-third the length produced into a slender lobe that is tipped with a short black spine, this lobe surrounded by a group of short spinous setae; outer margin of style long retrorse setae before the decurved apex.

Hab. Brazil (Santa Catharina).

Holotype, &, Nova Teutonia, October 20, 1935 (Plaumann). Allotopotype, ♀, November 2, 1936 (Plaumann). Paratopotypes, 4 & ♀, October 20, 1935; October 30, 1935; December 2, 1936; December 7, 1935.

Macromastix (Araucomyia) luteistigma is quite distinct from the other regional species of the genus. I am referring this and certain other Brazilian species to the subgenus Araucomyia Alexander, chiefly on the basis of the structure of the ovipositor.

Tanypremna (Tanypremna) proavita, sp. n.

General coloration of mesonotum brownish yellow, indistinctly patterned; pleura yellow, unmarked; halteres dark brown throughout; femora brown, tibiae and tarsi black; wings with a strong brown suffusion, vaguely patterned with darker; Rs long, arcuated; m-cu a short distance before fork of M_{3+4} ; abdomen unusually short, only as long as the wing, reddish brown, the terminal segments darker brown.

Male. — Length, about 15 mm.; wing, 11 mm.; antenna, about 1.3 mm.; abdomen alone, about 11 mm.

Frontal prolongation of head obscure yellow; palpi black. Antennae short; scape yellow, pedicel and flagellum black; outer flagellar segments progressively more lengthened, with long conspicuous verticils. Head orange, the simple vertical tubercle clearer orange; numerous black setae on posterior orbits and adjoining margins of vertex.

Mesonotum obscure brownish yellow, the praescutum narrowly and indistinctly lined with brown to indicate the usual interspaces, the median vitta especially distinct. Pleura yellow, unmarked. Halteres relatively short, dark brown throughout. Legs with the coxae and trochanters yellow; femora brown; tibiae and tarsi black. Wings (Fig. 2), with a strong brown suffusion, cell Sc and the small irregular stigmal area darker brown; a weak brown seam along vein Cu; veins brown. Veins without trichia, excepting C and the outer portion of main stem of R_1 . Venation: Sc_1 faintly indicated; R_2 conspicuous, erect; petiole of cell M_1 a little

shorter than m; m-cu shortly before fork of M_{3+4} ; cell-2nd A wide.

Abdomen unusually short, subequal in length to wing; tergites reddish brown, the basal sternites more yellowish; terminal segments more infuscated. Male hypopygium (Fig. 13) with the styli of moderate length only, especially the dististyles. Basistyle, b, unarmed. Outer dististyle, od, with the outer margin provided with strong blackened spines and spinous setae. Inner distisyle, id, subequal in length to the outer style, nearly straight.

Hab. Brazil (Santa Catharina).

Holotype, &, Nova Teutonia, November 29, 1938 (Plaumann)

Tanypremna (lanypremna) proavita is readily told from all members of the subgenus so far discovered by the short abdomen and the details of venation, especially the long arcuated Rs.

Brachypremna integristigma, sp. n.

Mesonotal praescutum with four conspicuous dark brown stripes; tips of femora and bases of tibiae broadly white, the amount subequal; fore and middle tibiae with very broad black rings; posterior tibiae with a narrow subbasal black ring; tarsi white; wings whitish subhyaline, clouded with darker, the stigma uniformly dark brown; Rs relatively long; abdominal tergites dark brown, the basal rings narrowly but conspicuously pale.

Male — Length, about 18-20 mm.; wing, 21-25 mm. Female. — Length, about 16-18 mm.; wing, 19-21 mm.

Frontal polongation of head, with the long nasus, yellow; palpi with basal segment infuscated, segments two and three yellow, terminal segment brownish black. Antennae with scape and pedicel obscure yellow, flagellum black. Head infuscated, the anterior vertex and very narrow orbits gray.

Mesonotal praescutum buffy, with four conspicuous, dark brown stripes, the interspaces much reduced; scutum yellow, the lobes extensively dark brown; scutellum testaceous, weakly infumed on central portion, parascutella darker; postnotum brown. Pleura buffy yellow, variegated with brown. Halteres yellow, the knobs brown. Legs with the coxae yellow, variegated with brown; trochanters yellow; femora brown, passing into black, the tips broadly and abruptly white; tibiae black, the bases white, in degree equal to the femoral tips; apices

of tibiae broadly white leaving a broad dark medial ring, on fore and middle tibiae including about two-thirds the total length of segment, on posterior tibiae narrow, including about one-fifth to one-sixth the length of the segment; tarsi white. Wings (Fig. 3) whitish subhyaline, clouded with darker; stigma uniformly dark brown, conspicuous; dark seams at ends of outer radial veins; veins M_2 , M_3 and M_4 just before margin interrupted by white dots; medial field, including cells 1st M_2 and most of M_1 and 2nd M_2 whitened. Venation: Rs longer than usual, arcuated.

Abdominal tergites dark brown, with narrow but conspicuous pale basal rings on segments three to seven; segment eight and base of nine uniformly darkened; styli of male chiefly pale.

Hab. Brazil (Santa Catharina).

Holotype, &, Nova Teutonia, February 8, 1939 (Plaumann) Allotopotype, ♀. Paratopotypes, 1 &, 1

Brachypremna integristigma is most similar to B. basilica Alexander, of Amazonian Peru, differing especially in the details of coloration of the body and wings.

Tipula schwarzmaieri, sp. n.

General color of mesonotum brownish yellow, the praescutum without distinct stripes; antennae (male) elongate, exceeding one-half the length of body; femora yellow; wings narrow, tinged with brown, the costal border more heavily so; veins of outer medial field seamed with darker brown, this latter further margined externally by narrow lines of whitish subhyaline; veins R_3 and R_{4+5} sinuous; abdomen reddish yellow with a black subterminal ring, hypopygium yellow; male hypopygium with the tergite terminating in a median discal shield that is set with blackened spinous setae; outer dististyle with a lateral branch.

Male. — Length, about 11 mm.; wing, 11.5 mm.; autenna, about 6.5 mm.

Frontal prolongation of head brownish yellow; palpi dark brown. Antennae (male) elongate, exceeding one-half the length of body; basal three segments yellow, succeeding flagellar segments bicolored, darkened; flagellar segments elongate, very gently incised, the basal verticils unusually short. Head pale brown, the orbits narrowly more grayish.

Mesonotum almost uniformly brownish yellow, the prae-

scutum without distinct stripes, the posterior sclerites more uniformly yellow. Pleura yellow. Halteres elongate, the stem obscure yellow, the knob infuscated. Legs with the coxae and trochanters yellow; femora yellow; tibiae and tarsi slightly darker, especially the latter. Wings (Fig. 4) narrow, tinged with brown, the prearcular field, narrow costal border and outer radial field more heavily suffused; veins comprising the outer medial field, together with m-cu, narrowly seamed with dark brown, the areas narrowly bordered by whitish that involves virtually all of cell 1st M_2 ; centers of outer medial cells weakly darkened; veins pale, darker in the clouded portions. Venation: Rs of moderate length, gently arcuated, a little longer than the very oblique m-cu; veins R_3 and R_{4+5} sinuous; petiole of cell M_1 longer than m; m-cu shortly before fork of M_{3+4} ; cell 2nd A of moderate width.

Abdomen reddish yellow, with a black subterminal ring; hypopygium vellow. Male hypopygium (Fig. 14) with the tergite, 9t, narrowed outwardly, terminating in a slightly more sclerotized yellow shield, its apex emarginate, the surface with numerous blackened spinous setae, those on the lateral portions directed mesad. Outer dististyle, od, bearing a lateral branch on outer half. Inner dististyle, id, of peculiar conformation, as figured. Gonapophyses, g, terminating in a mace-like head.

Hab. Brazil (Goyaz).

Holotype, & Campinas, October 1938 (Schwarzmaier).

I take unusual pleasure in naming this interesting species of *Tipula* in honor of the collector, P José Sebastião Schwarzmaier formerly resident in Campinas. It is allied to *Tipula smithi* Alexander and some related species yet is very distinct in the nature of the wing pattern and in the details of structure of the male hypopygium.

Tipula paloides, sp. n.

Allied to pala; general coloration reddish brown, the praescutum with four more grayish brown stripes; antennae (male) elongate; wings strongly tinged with brown, the stigma and cell Sc darker; R_{1+2} entire; Rs subequal in length to m-cu; abdominal tergites grayish black, the hypopygium yellow; male hypopygium with the inner dististyle produced into an acute slender spine just above the flattened apical beak; lobe of eighth sternite unusually broad, its apex very obtusely rounded.

Male. — Length, about 13 mm.; wing, 13 mm.; antenna, about 6 mm.

Frontal prolongation of head yellow; nasus short; palpi obscure yellow. Antennae (male) elongate, nearly one-half the length of body; scape and pedicel yellow, first flagellar segment light brown; remainder of flagellum black, the extreme tips of the more proximal segments a little reddened; flagellar segments rather strongly incised; verticils shorter than the segments. Head brownish yellow, the posterior portion a little darker.

Mesonotum reddish brown, the praescutum with four more grayish brown stripes that are ill-delimited against the ground. Pleura yellow. Halteres with stem yellow, knob infuscated. Legs with the coxae and trochanters yellow; remainder of legs brownish yellow to yellowish brown, the tarsi passing into dark brown. Wings with a strong brown tinge, cell Sc and the stigma a little darker than the ground; veins brown. Venation: R_{1+2} entire; Rs gently arcuated, subequal in length to m-cu; cell $Ist\ M_2$ narrow; cell $2nd\ A$ of moderate width.

Abdominal tergites grayish black; basal sternites slightly brightened; hypopygium yellow. Male hypopygium generally as in pala, differing especially in the structure of the inner dististyle and eighth sternite. Inner dististyle (Fig. 15, d) terminating in a flattened black beak, the margin back from this point with a darkened flange, the margin of which is microscopically serrulate; a further prolongation a little more dorsad appears as a slender acute spine. Lobe of eighth sternite, 8s, unusually broad, the apex very obtusely rounded, much more so than in pala.

Hab. Brazil (Santa Catharina).

Holotype, &, Nova Teutonia, October 12, 1935 (Plau-mann)

The nearest ally of the present fly is the generally similar *Tipula pala* Alexander, likewise from southeastern Brazil. The chief distinctions lie in the structure of the male hypopygium, especially of the inner dististyle and the eighth sternite.

Hexatoma (Eriocera) venavitta, sp. n.

Size large (wing, male, 17 mm.); mesonotal praescutum brownish yellow pollinose, with four more grayish black stripes that are narrowly bordered by darker; posterior sclerites of mesonotum yellow pollinose; legs yellow, the tips of femora and tibiae blackened, the latter more narrowly so; central portion of femora more or less darkened; wings yellow, conspicuously streaked longitudinally with dark brown; macrotrichia of wing veins very sparse; Rs of moderate length, about one-fourth longer than R_{2+3+4} ; m-cu at near one-third the length of cell Ist M_2 ; abdominal tergites brown, more pruinose laterally.

Male. Length, about 22 mm.; wing, 17 mm.; antenna, about 3.5 mm.

Rostrum and palpi brownish black. Antennae yellow, the last segment darkened; antenna (male) 7-segmented, longer than in vittinervis; second, third and fourth flagellar segments subequal in length. Head testaceous yellow; vertical tubercle high, conspicuously notched in front.

Mesonotal praescutum with the ground color brownish yellow pollinose, with four more gravish black stripes that are narrowly margined with black; scutal lobes gravish black, narrowly bordered by blackish; median area of scutum vellow pollinose, with a capillary darker median vitta; scutellum pollinose, parascutella dark; mediotergite golden vellow pollinose, the cephalic lateral portions blackened. Mesepisternum obscure vellow, much paler than the mesepimeron and metapleura, the surface not pruinose. Halteres short, dark brown, the base of stem restrictedly pale. Legs with the coxae brown; trochanters more brownish yellow; femora obscure yellow, the tips narrowly but conspicuously blackened, the amount subequal on all legs, including about the distal seventh to ninth; a more or less distinct brown ring at near midlength of the femora, especially distinct on the fore legs; tibiae yellow, the tips narrowly blackened, about one-half as extensive as the femoral blackening; basal tarsal segments obscure yellow, the outer segments dark brown. Wings (Fig. 5) yellow, conspicuously streaked longitudinally with dark brown, including seams along Rs, R 2:1814, R5, stigma, cephalic portion of cell Ist M_2 most of cell M excepting the outer portion, and cell 2nd A; cells C and Sc lighter brown; veins pale brown, darker in the patterned areas. Macrotrichia of veins very sparse, beyond cord restricted to a very limited series on distal section of vein R_5 . Venation: R_5 of moderate length, about one-fourth longer than R_{2+2+1} , the latter exceeding twice the length of R_{1+2} ; basal section of R_5 short; m-cu at near one-third the length of cell 1st M_2 .

Abdominal tergites brown, more pruinose laterally, the subbasal segments not brightened, as in *vittinervis*; hypopygium dark.

Hab. Brazil (Santa Catharina).

Holotype, &, Nova Teutonia, November 29, 1938 (Plaumann)

Hexatoma (Eriocera) venavitta is somewhat similar to the smaller H. (E.; vittinervis Alexander, likewise of southeastern Brazil, differing conspicuously in the pattern of the thorax and abdomen and in the details of wing coloration and venation.

Hexatoma (Eriocera) goyazensis, sp. n.

General coloration of mesonotal praescutum brown, with four more brownish yellow stripes, the surface opaque; legs yellow, the terminal tarsal segments darkened; veins brownish yellow, very restrictedly patterned with brown; veins of basal and costal portions yellow, the remainder dark brown, conspicuous; macrotrichia of veins very sparse; Rs unusually long, only a little less than twice R alone; basal section of R_5 very short.

Female. — Length, about 11 mm.; wing, 10.5 mm.

Rostrum and palpi brown. Antennae with scape and pedicel yellow; flagellum broken. Head yellow, variegated with brown; anterior vertex crushed in the unique type.

Mesonotal praescutum with the ground color brown, sparsely pruinose, with four more brownish vellow stripes, the surface opaque; scutum with the lobes weakly darkened, the median region pale; scutellum and postnotum yellow. Pleura yellow, without evident markings. Halteres with stem yellow, knob broken. Legs with coxae and trochanters yellow; remainder of legs yellow, the terminal tarsal segments passing into brownish black. Wings (Fig. 6) with the ground color brownish yellow, the prearcular and costal fields clearer yellow; radial field very weakly infumed, especially in the vicinity of the stigma and along vein R₅; veins dark brown and yellow, the latter including the prearcular veins, C, Sc and R, and the bases of M and Cu; outer veins dark brown, the extreme basal portion of Rs yellow. Macrotrichia of veins very sparse, lacking on veins beyond cord. Venation: Rs unusually long, being nearly twice R alone; basal section of R_5 very short; \overline{R}_{1+2} subequal to R_{2+3+4} ; m-cubeyond fork of M.

Abdominal tergites yellow, margined laterally with brownish black; ovipositor with elongate valves.

Hab. Brazil (Goyaz).

Holotype, Q. Campinas, October 1938 (Schwarz-maier)

Hexatoma (Eriocera) goyazensis is entirely distinct from the Neotropical species of the subgenus hitherto made known. It is best distinguished by the nearly unpatterned wings, with Rs unusually long, in conjunction with the somewhat unusual pattern of the praescutum.