EXTRAIT

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NEW OR LITTLE-KNOWN CRANE-FLIES

Part III

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The preceding part under this general title was published in *Diptera*, vol. 4, fasc. 1, pp. 17-27, December 1927. In the present instalment I wish to discuss a series of unusually interesting species that were taken at and near Nova Teutonia, Rio Grande do Sul, southern Brazil, by Mr. Fritz Plaumann, to whom I am greatly indebted for collecting these fragile flies. All types are preserved in my extensive collection of Tipulidae. Nova Teutonia is situated at 52°23' West Longitude and 27°11' South Latitude, in mountainous primaeval forest near the River Uruguay. The altitude ranges between 1625 and 2925 feet.

1. Limonia (Limonia) indomita sp. n.

General coloration reddish brown; thoracic pleura with a broad black longitudinal stripe; antennae black, the flagellar segments with long, unilaterally distributed verticils; front silvery; tibiae and tarsi black; wings heavily patterned with brown; vein Sc long, Sc_1 lying opposite the fork of Rs; abdominal tergites brownish black; male hypopygium with the rostral prolongation of the ventral dististyle large and expanded, with two small spines on face near base, these located in an area of delicate silken setae; gonapophyses with mesalapical lobe blackened and expanded at apex.

Male. — Length about 6 mm.; wing 8.2 mm.

Rostrum of moderate length, black; palpi black. Antennae black throughout; basal flagellar segments short, the outer ones long-oval to subcylindrical, with very short apical necks; terminal segment very long, nearly equal to the preceding two taken together; a single very long verticel on outer face of each flagellar segment, these unilaterally arranged. Front silvery; posterior vertex black, vaguely paler on midline; eyes contiguous or virtually so.

Pronotum light yellow, darker laterally. Mesonotum polished reddish brown, the praescutum with three slightly darker brown, ill-defined stripes, the lateral margins yellow; scutal lobes dark brown, the median area testaceous; scutellum testaceous brown; postnotum

dark brown to brownish black. Pleura yellow, with a broad black longitudinal stripe extending from the cervical region across the propleura and dorsal mesopleura to abdomen, paler and narrowly interrupted above the fore coxae; ventral sternopleurite narrowly darkened. Halteres black, the base of stem narrowly pale. Legs long and slender; coxae and trochanters yellow; femora black, yellow basally, more broadly so on fore legs; tibiae and tarsi black. Wings weakly tinged with brown; a heavy dark brown pattern arranged as follows: Arculus at one-third length of cell R; origin of Rs; fork of Sc and end of Rs; cord and outer end of cell 1st M_2 ; stigmal area large, more or less confluent with a subapical dark fascia crossing the radial and medial fields; a small dark area at end of vein R_3 ; dark clouds at ends of Anal veins, larger on 2nd A; axilla weakly darkened; veins pale, darker in the clouded areas. Venation: $Sc \log_{1} Sc_{1}$ ending opposite fork of Rs, Sc₂ at its tip; Rs long, nearly square and short-spurred at origin; inner end of cell 1st M2 arcuated but lying distad of that of cell R_3 ; m-cu at fork of M.

Abdominal tergites brownish black; basal sternites bicolorous, yellow basally, the apices black, the latter more extensive on outer segments; hypopygium black, the ventral dististyle pale. Male hypopygium with the caudal margin of the ninth tergite gently emarginate. Basistyle larger than the ventral dististyle; ventromesal lobe large but simple. Dorsal dististyle slender, nearly straight on basal portion, thence gently curved to the acute tip. Ventral dististyle with the body small, the rostral prolongation very expanded and extensive, narrowed into a slender apical portion; two small rostral spines, placed close together on the face of the expanded portion of the prolongation near base, surrounded by a dense area of delicate silken setae. Gonapophyses with mesal-apical lobe blackened and expanded at apex. Aedeagus broad, parallel-sided, the apex with two divergent black lobes.

Hab. Brazil (Rio Grande do Sul).

Holotype, &, Nova Teutonia, November 24, 1935 (Plaumann).

Limonia (Limonia) indomita is very different from all other described species in the Neotropical fauna. It is most similar to L. (L.) caribæa Alexander (Cuba), differing conspicuously in the details of venation, wing-pattern and structure of the male hypopygium.

2. Limonia (Limonia) hostica sp. n.

General coloration of mesonotum almost uniformly dark brown, the pleura paler; halteres darkened; wings subhyaline, the stigma a little darker than the ground; Sc relatively long, Sc_1 extending to beyond midlength of Rs; male hypopygium with the ventral dististyle smaller than the basistyle, the rostral spines arising from a low common base; gonapophyses with mesal-apical lobe slender, especially the apex.

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

Female. — Length about 6 mm.; wing 6.5 mm.

Rostrum brownish yellow, moderately elongate, exceeding one-third the length of remainder of head; palpi dark brown. Antennae black; flagellar segments oval. Head dark brown; anterior vertex subequal in width to diameter of scape.

Mesonotum almost uniformly dark brown, the humeral region of praescutum obscure yellow. Pleura and pleurotergite chiefly pale testaceous. Halteres dusky, the base of stem a little paler. Legs with the fore and middle coxae slightly darker than the posterior pair; trochanters yellow; remainder of legs pale brownish yellow to brown. Wings subhyaline or faintly tinged with darker; stigma pale brown, only a little darker than the ground; veins brown. Venation: Sc relatively long, extending to beyond midlength of the long Rs, the latter arcuated to feebly angulated at origin; m-cu at fork of M in female, more than one-third its length before this fork in male.

Abdominal tergites dark brown, the sternites paler. Male hypopygium with the tergite narrowly transverse, the caudal margin truncated or nearly so. Area of ventral dististyle less than that of basistyle and noticeably smaller than in *villaricæ*; rostral prolongation slender, the spines arising from a low common base. Gonapophyses with mesalapical lobe slender, especially the apex, the lateral margin with coarse teeth.

Hab. Brazil (Rio Grande do Sul).

Holotype, 3, Nova Teutonia, October 3, 1936 (Plaumann). Allotopotype, \circ , October 2, 1936.

The only allied species is Limonia (Limonia) villaricæ Alexander, of Paraguay, which differs especially in hypopygial and venational characters. The latter fly has the ventral dististyle larger, equalling or exceeding the basistyle in area, the two rostral spines close together but arising from individual tubercles, and the gonapophyses with the mesal-apical lobes stout and blunt at apex.

3. Limonia (Limonia) immodica sp. n.

Belongs to the sanctæ-martæ group; mesonotal praescutum yellowish brown, the posterior sclerites of notum dark brown; pleura testaceous yellow; femora yellow, with a clearly-defined but narrow black

ring, placed more than its own length before tip; tibiae and tarsi black; wings pale yellow, restrictedly spotted with dark brown, the posterior cells extensively washed with paler brown; abdominal tergites dark brown.

Female. — Length about 8 mm.; wing 9.8 mm.

Rostrum and palpi black. Antennae black throughout; basal flagellar segments subglobular, passing into oval, the incisures constricted; verticils exceeding the segments in length. Front and anterior vertex silvery; posterior portion of head dark gray, the central portion of the posterior vertex narrowly blackened; anterior vertex narrow.

Pronotum dark brown to brownish black. Mesonotal praescutum yellowish brown, a little darker in front, the surface subnitidous; scutum light brown, the mesal portions of lobes narrowly darker; scutellum and postnotum dark brown. Pleura testaceous yellow, the pleurotergite abruptly dark brown. Halteres yellow. Legs with the coxae and trochanters testaceous-yellow; femora yellow, with a clearlydefined though narrow black ring, a little more than its own length from tip; basal third or fourth of femora weakly darkened; tibiae and tarsi black. Wings with the ground-color pale yellow, spotted with dark brown and with extensive paler brown washes; the clearly-defined darker areas include the origin of Rs, fork of Sc, stigma, cord, outer end of cell 1st M_2 and small marginal spots at ends of all longitudinal veins, becoming less distinct on the more posterior veins; the paler brown washes include the region between the stigma and r-m, together with the outer portions of cells 2nd M2 to 2nd A, these cells variegated by clear yellow spots at margin; longitudinal brown washes in base of cell R and along posterior border of cell M; outer radial field weakly darkened but with the outer edge clear deep yellow; cells R_5 and 1st M_2 of the ground-color; veins yellow, dark brown in the clouded areas. Stigmal trichia about six in number. Venation: Sc1 ending about opposite two-thirds the length of the long, feebly angulated Rs; vein Sc_2+R_1 bent strongly cephalad opposite inner end of stigma; free tip of Sc_2 and R_2 subequal; cell 1st M_2 subequal to vein M_{1+2} beyond it; m-cu shortly before fork of M.

Abdominal tergites dark brown, the sternites more testaceous; genital segment obscure yellow: cerci small, slender, upcurved.

Hab. Brazil (Rio Grande do Sul).

Holotype, ♀, Nova Teutonia, August 20, 1936 (Plaumann).

Limonia (Limonia) immodica is allied to L. (L.) lawlori Alexander (Panama), L. (L.) roraimæ Alexander (northern Brazil) and L. (L.) sanctæ-martæ Alexander (Colombia), differing from all in the pattern

of the legs and general coloration of the body and wings. All of these species have vein Sc_2+R_1 bent strongly cephalad just before the proximal end of the stigma. The present fly is most similar to roraim x yet is very distinct in the leg and wing pattern and in the presence of stigmal macrotrichia.

4. Limonia (Rhipidia) simplicicornis sp. n.

General coloration of mesonotal praescutum reddish brown, with four slightly darker stripes; antennae nearly simple in both sexes; flagellar segments black, with white apical pedicels; thoracic pleura striped longitudinally with black; knobs of halteres darkened; tips of femora broadly darkened; wings yellow, conspicuously patterned with brown, including well-defined seams along cord and outer end of cell 1st M_2 and the wing-apex; abdomen obscure yellow, the segments margined with black; hypopygium black; male hypopygium with the rostral prolongation of the ventral dististyle slender, with two long spines arising from a common base.

Male. — Length about 8-9 mm.; wing 8-9 mm.; antenna about 1.7-1.8 mm.

Female. — Length about 10.5-11 mm.; wing 9-9.5 mm.

Rostrum and palpi black. Antennae black, the apical pedicels of the flagellar segments abruptly white; basal flagellar segments of male a trifle produced yet scarcely subjectinate; middle and outer flagellar segments oval to long-oval; terminal segment elongate. Head gray; anterior vertex narrow.

Pronotum dark brown. Mesonotal praescutum reddish brown, with four slightly darker stripes that are poorly defined; scutal lobes brown, the median area and base of scutellum more testaceous; remainder of mesonotum dark brown. Pleura brown, sparsely gray pruinose, with two narrow black longitudinal stripes, the more dorsal one longer, extending from the cervical region to base of abdomen; ventral pleural stripe chiefly across bases of coxae and on sternopleurite. Halteres obscure yellow, the knobs darker. Legs with the coxae yellow, darkened basally, more extensively so on the fore pair, the posterior coxae almost uniformly pale; trochanters yellow; femora yellow basally, the distal fourth or less passing into dark brown; tibiae and tarsi brownish black to black. Wings with the ground-color yellowish, conspicuously patterned with brown, including cells C and Sc, the wing-tip and posterior border of wing except in cell 2nd A; well-defined circular dark clouds at origin of Rs, fork of Sc, stigma, cord and outer end of cell 1st M_2 ; a pale spot reaches the posterior margin in cell 1st A at end

of vein $2nd\ A$; veins yellow, darker in the infuscated areas. Venation: Sc of moderate length, Sc_1 ending about opposite midlength of Rs, Sc_2 at its tip; Rs angulated at origin; m-cu before fork of M.

Abdomen moderately long in both sexes; segments obscure yellow, narrowly margined laterally and caudally by blackish; hypopygium and preceding segment black. Male hypopygium with the tergite transverse, the caudal margin very gently emarginate. Basistyle much smaller in area than the ventral dististyle; ventro-mesal lobe simple, obtuse at apex, with two fasciculate setae in addition to numerous simple ones. Ventral dististyle with the rostral prolongation slender, with two long spines placed just beyond midlength; spines nearly equal in length, arising from a short common tubercle, each spine about equal to twice the apex of rostrum beyond the point of their insertion. Gonapophysis with mesal-apical lobe relatively slender, blackened, the tip subacute. Ovipositor with the basal shield black; cerci short, slender and directed strongly upward.

Hab. Brazil (Rio Grande do Sul).

Holotype, &, Nova Teutonia, August 13, 1936 (PLAUMANN).

Allotopotype, \circlearrowleft , September 1, 1936. Paratopotypes, several \circlearrowleft \circlearrowleft , October 4-30, 1935; August 12-October 2, 1936.

Limonia (Rhipidia) simplicicornis is very different from the other allied species of the subgenus in the nearly simple antennae. The affinities of the fly appear to be closer to members of the maculata group, with bipectinate antennae in the male sex, than with the domestica group, having subjectinate to nearly simple antennae in both sexes. The present fly adds another to the extensive list of species on the borderline between the subgenera Limonia and Rhipidia.

5. Limonia (Rhipidia) longurio sp. n.

Size large, abdomen of male long (male, length about 15 mm., abdomen about 12 mm.); antennae (male) unequally tripectinate; wings brownish yellow, with a sparse brown pattern; Rs angulated and sometimes weakly spurred at origin; male hypopygium with the rostral prolongation of the ventral dististyle long and slender, the distal half yellow; rostral spines two, long, from a small common tubercle.

Male. — Length about 14-15 mm.; wing 9.5-10.5 mm.; abdomen alone about 11.5-12 mm.; antenna about 5.6-6 mm.

Female. — Length about 12-13 mm.; wing 9-10 mm.

Rostrum and palpi black. Antennae (male) with the scape black; pedicel dark brown; flagellum with the basal enlargement and branches black, the pedicel china-white; flagellar segments unequally tri-

pectinate; first segment with a single branch that is nearly one-half longer than the segment; flagellar segments two to eleven, inclusive, each with two long branches and a short axillary stub; longest branch (about midlength of organ) approximately one-third the entire length of flagellum; branches of last pectinate segment fully three times the segment and exceeding in length the simple terminal segment; axillary stubs about one-third as long as the segments. Head dark gray; eyes (male) broadly holoptic, of female smaller, separated by a linear strip.

Pronotum dark brown, sparsely variegated with paler. Mesonotal praescutum yellowish brown to reddish brown on anterior portion, a little less than the posterior half dark brown where traversed by the usual stripes, the interspaces gray; scutal lobes dark brown, the median area paler; scutellum dark, pruinose; postnotum dark reddish brown. Pleura gray, indistinctly striped longitudinally with brownish black. Halteres yellow, the knobs infuscated. Legs with the fore coxae chiefly brownish black; middle coxae with more than the basal half darkened, the apex light yellow; posterior coxae with less than the basal half darkened, the remainder yellow; trochanters yellow; femora brownish yellow, the tips narrowly darkened; tibiae dark brown to brownish black; tarsi black. Wings with a brownish yellow tinge, sparsely but clearly patterned with brown, including areas at h, midlength of cell Sc, origin of Rs, fork of Sc, stigma, cord and outer end of cell 1st M2; cell C strongly darkened, especially on proximal half; a weak dark cloud at end of vein 2nd A; veins brown, darker in the clouded areas, Cu more yellowish. Venation: Sc long, Sc_1 ending at near two-thirds the length of Rs, Sc2 at its tip; Rs angulated and sometimes weakly spurred at origin; m-cu at or before fork of M.

Abdomen elongate, especially in male; tergites brown, the outer segments and hypopygium black; caudal borders of basal tergites narrowly darker; basal sternites light yellow, the posterior margins narrowly darker; outer segments more uniformly darkened. Male hypopygium with the ninth tergite transverse, the caudal margin very gently concave. Basistyle relatively small, the ventro-mesal lobe obtusely rounded at apex, with a small fleshy tubercle on face and terminating in one or two fasciculate setae. Ventral dististyle more extensive than the basistyle; rostral prolongation long and slender, with more than the distal half yellow and more compressed; rostral spines two, placed very close together on a small common tubercle at near midlength of the prolongation, slightly unequal in length, the longest subequal to the apex of rostrum beyond the point of its inser-

tion. Gonapophysis with mesal-apical lobe relatively narrow, blackened, the tip obliquely truncated.

Hab. Brazil (Rio Grande do Sul, Santa Catharina).

The other species of Rhipidia with tripectinate flagellar segments in the male sex are Limonia (Rhipidia) inæquipectinata Alexander (northern Argentina) and L. (R.) tripectinata Alexander (Colombia), both of which differ from the present fly in their small size, pale wingpattern, and in having the abdomen of male of normal length. In the present insect, the abdomen is of unusual length and has suggested the specific name, longurio, from the Latin and signifying a tall man.

6. Limonia (Rhipidia) nigrorostrata sp. n.

General coloration reddish brown, variegated by brownish black; antennae (male) with ten long-bipectinate flagellar segments, the basal segment with a single long branch; thoracic pleura with two narrow black stripes; tips of femora narrowly darkened; wings with a brown tinge, rather weakly patterned with darker brown; Sc long, m-cu before fork of M; abdomen of moderate length, yellowish brown, the caudal and lateral margins of the segments dark brown; outer abdominal segments black; male hypopygium with the ventro-mesal lobe of basistyle bifid; rostral prolongation of ventral dististyle elongate, black, the apex obliquely truncated, the two rostral spines placed close together at near midlength.

Male. — Length about 10-11 mm.; wing 8.5-9 mm.; antenna about 4-4.2 mm.

Rostrum dark brown; palpi black. Antennae (male) with the scape black; pedicel brown; basal enlargements and branches of flagellar segments black, the apical pedicels of the latter abruptly white; terminal segment elongate, uniformly black; basal flagellar segment with a single long branch that exceeds the segment in length; flagellar segments two to eleven, inclusive, each with two very long branches, the longest (at near midlength of the organ) equalling or exceeding one-fourth the length of the whole antenna and approximately four times as long as the segment itself; branches clothed with a long erect white pubescence; terminal segment nearly as long as the branches of the penultimate segment. Head brownish gray, the central portion

of posterior vertex more darkened; anterior vertex reduced to a linear strip or practically obliterated.

Pronotum brownish black. Mesonotal praescutum reddish brown, darker on posterior half; scutal lobes dark brown, the median area paler; posterior sclerites of mesonotum darkened. Pleura brown, sparsely pruinose, with two narrow black longitudinal stripes, the more dorsal crossing the anepisternum to base of abdomen, the ventral stripe extending from the fore to the mid-coxae across the sternopleurite. Halteres pale, the knobs darkened. Legs with the coxae pale, more or less darkened basally; trochanters yellow; femora yellow, the tips narrowly and somewhat weakly darkened; tibiae light brown; tarsi passing into black. Wings with a brown tinge, patterned with slightly darker brown, the markings diffuse and ill-defined, distributed as follows: Circular areas at origin of Rs, fork of Sc and end of Rs; stigma; cord and outer end of cell 1st M_2 seamed with pale brown; wing-tip and axilla a trifle darkened; veins pale brown, a little darker in the clouded areas. Venation: Sc_1 ending about opposite threefourths the length of Rs, Sc, close to its tip; free tip of Sc, and R, in transverse alignment; m-cu before fork of M.

Abdomen moderately long but much shorter than in longurio; basal segments yellowish brown, the caudal and lateral margins narrowly dark brown; subterminal segments and hypopygium black. Male hypopygium with the tergite transverse, its caudal margin broadly emarginate, the lobes with relatively few setae. Basistyle small, the ventro-mesal lobe bifid, produced into two lobes, the more mesal one at apex further extended into a cylindrical branch that is tufted with long setae. Ventral dististyle fleshy, its area greater than that of the basistyle; rostral prolongation elongate, exceeding the dorsal dististyle in length, black throughout, its apex a little expanded and obliquely truncated; rostral spines two, placed close together at near midlength of the prolongation, each spine shorter than the apex of the prolongation beyond its insertion. Gonapophysis dilated on mesal-apical portion, the apex narrowed into a short point.

Hab. Brazil (Rio Grande do Sul).

Holotype, &, Nova Teutonia, August 30, 1936 (Plaumann).

Paratopotypes, 3 &&, August 31-October 2, 4936.

Limonia (Rhipidia) nigrorostrata is readily told from all other regional species of the subgenus with long bipectinate flagellar segments by the structure of the male hypopygium, especially of the basistyle and rostral prolongation of the ventral dististyle.

7. Sigmatomera (Astelobia) plaumanniana sp. n.

General coloration orange; antennal flagellum black; cephalic portion of mesonotal praescutum polished black, the color continued laterad, crossing the mesopleura as a narrow transverse girdle; halteres yellow; legs orange, the basal half of fore femora black; wings pale yellow, the prearcular region, cells C and Sc and the stigma deep yellow.

Male. — Length about 17 mm.; wing 15.5 mm.; antenna about 4.2 mm.

Rostrum black; palpi brownish black. Antennae with the scape obscure yellow; pedicel brown; flagellum black; flagellar segments simple, subcylindrical, with a short dense pubescence and longer verticils that are subequal in length to the segments or a little longer. Head testaceous-yellow; eyes broadly holoptic.

Mesonotal praescutum with the cephalic third polished black, the color continued laterad along the cephalic border of the praescutum. crossing the dorsopleural membrane and forming a narrow transverse girdle on the anepisternum and sternopleurite, the ventral portion of the latter paling to reddish; median posterior region of praescutum testaceous-yellow, the ground-color not differentiated from the stripes except for being a little less polished; lateral portion of praescutum more grayish, bordered internally by a narrow blackish line to the suture, representing the lateral portion of the normal lateral praescutal stripes; posterior sclerites of notum vellow, the scutal lobes weakly darkened. Pleura yellow, with a black girdle, as described above. Halteres yellow. Legs with the coxae and trochanters yellow; fore femora black on basal half, thence passing into orange; remainder of all legs orange, only the outer tarsal segments a trifle infumed. Wings pale vellow, the prearcular region, cells C and Sc and the stigma deep yellow; a seam along vein Cu and the axilla pale yellow; veins black, yellow in the flavous areas, the main stem of M brown; costa yellow except for the section above the stigmal area which is black. Venation: R_{2+3+4} weakly angulated before midlength; cell 1st M_2 closed; m-cu a short distance before fork of M.

Abdomen, including hypopygium, orange.

Hab. Brazil (Rio Grande do Sul).

Holotype, 3, Nova Teutonia, October 12, 1936 (Plaumann).

Sigmatomera (Astelobia) plaumanniana is named in honor of the collector, Mr. Fritz Plaumann, who has added materially to our knowledge of the Tipulidae of southern Brazil. The fly is strikingly diffe-

rent from the two Neotropical species hitherto described, S. (A.) bullocki (Alexander) and S. (A.) maiæ (Alexander), both of Chile. In the strongly angulated to weakly spurred R_{2+3+4} , the present insect suggests the subgenus Sigmatomera Osten Sacken, but the simple antennae of the male sex indicates that this is a true Astelobia. Keys to the known species of Astelobia (1) and Sigmatomera (2) have been supplied by the writer in other papers.

8. Gonomyia (Lipophleps) condensa sp. n.

Belongs to the cinerea group; fore femora black, the tips narrowly pale; remaining femora pale with a narrow brown subterminal ring; tibiae and basitarsi yellowish white; wings weakly tinged with brown, the costal border more whitened; cell 1st M, closed; male hypopygium with three dististyles, the inner style fleshy; third style bifid, its lateral arm a curved slender black spine, the mesal arm a curved pale tail-like blade.

Male. — Length about 4 mm.; wing 4.5 mm.

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

Rostrum and palpi black. Antennae with basal segments orange, the outer flagellar segments darker. Head infuscated medially, the front and orbits yellow.

Pronotum yellow, darkened medially; anterior lateral pretergites light yellow. Mesonotum dark grayish brown, the humeral and lateral region of praescutum a trifle brightened; median region of scutum and posterior border of scutellum obscure yellow; mediotergite pruinose, the lateral-cephalic border narrowly yellow. Pleura brown to brownish black, with a longitudinal narrow white stripe extending from the fore coxae to base of abdomen, narrowly bordered both dorsally and ventrally with blackish. Halteres with stem obscure yellow, knob darkened. Legs with fore coxae chiefly white, as described; remaining coxae more testaceous; trochanters testaceous; fore femora black, the tips narrowly pale; remaining femora obscure yellow with a narrow brown subterminal ring; tibiae and basitarsi yellowish white, the tips narrowly and weakly infumed; outer tarsal segments brownish black. Wings with a weak brown tinge, the costal border more whitened but not contrasting as conspicuously with the remainder of wing as is the case in many other members of the cinerea group; stigma oval, brown; axillary region weakly darkened; veins comprising the cord somewhat darker than the remaining veins. Venation:

⁽¹⁾ Astelobia Edwards; Revista Chilena Hist. Nat., 39: 104; 1935.
(2) Sigmatomera Osten Sacken; Encycl. entomol., Diptera, 5: 3-4; 1930.

Sc short, Sc_1 ending a distance before origin of Rs nearly equal in length to the latter, Sc_2 at tip of Sc_1 ; cell 1st M_2 closed in both types, but this possibly a variable character.

Abdominal tergites dark brown, the caudal borders of the intermediate segments narrowly paler; hypopygium brownish yellow. Male hypopygium with the tergal lobes relatively long and slender, with long, coarse setae. Basistyle short and stout. Outer dististyle with a slender basal spine, directed cephalad and mesad; arm of the style slender, in the type male broken beyond midlength, its base with a straight black spine from an expanded yellow base. Inner dististyle fleshy, unarmed. A third style at base of the others, deeply bifid, the lateral arm a curved slender black spine, the mesal arm a curved pale tail-like blade, the apex a slender, nearly hyaline spine.

Hab. Brazil (Rio Grande do Sul).

Holotype, S, Nova Teutonia, July 11, 1936 (Редимани).

Allotopotype, \circ , August 26, 1935.

The male hypopygium of the present fly is most similar to that of Gonomyia (Lipophleps) schadeana Alexander, yet differs from this and all other members of the group in the structure of the styli. If the character of a closed cell 1st M_2 proves to be a normal one for the species, the present fly will be very easily distinguished from allied forms by this feature.

9. Gonomyia (Gonomyia) serpentina sp. n.

General coloration brownish black; legs black; wings with a dusky tinge, the stigmal area darker; Sc_1 ending about opposite origin of Rs, the latter shorter than R_{2+3+4} ; m-cu from one-third to one-half the length of cell $1st\ M_2$; abdominal tergites dark brown; male hypopygium with the outer dististyle flattened, truncated at apex, densely set with microscopic spines; outer dististyle terminating in a long curved spine.

Male. — Length about 4.6-4.7 mm.; wing 5-5.2 mm.

Female. — Length about 5 mm.; wing 5.5 mm.

Rostrum black above, obscure yellow laterally; palpi black. Antennae black, the scape paler at base; flagellar verticils elongate. Head brownish black.

Mesonotum almost uniformly brownish black, the anterior pretergites restrictedly brightened. Pleura paler grayish brown. Halteres elongate, darkened, the base of stem restrictedly pale. Legs with the coxae grayish brown; trochanters brown; remainder of legs black. Wings with a strong dusky tinge, the stigmal area still darker; veins

dark brown. Costal fringe (male) relatively long and conspicuous. Venation: Sc relatively long, ending opposite or just before origin of Rs, Sc_2 a short distance from tip; Rs short, less than R_{2+3+4} ; R_2 moderately oblique; m-cu from one-third to one-half the length of cell $1st M_2$.

Abdomen dark brown, the basal sternites a little paler; hypopygium obscure brownish yellow. Male hypopygium with no apical lobe on basistyle. Two dististyles, the outer shorter, parallel-sided or gently expanded outwardly, the apex truncated; outer end, especially the margin, with abundant microscopic spines and spinulae; on face of style at near two-thirds the length with a single seta of unusual length, exceeding the entire style. Inner dististyle longer than the outer, the basal half more expanded, the distal half narrowed into a long curved black spine; basal expanded portion with about seven or eight coarse setae, with an additional fasciculate bristle at apex, the latter projecting a little beyond the actual origin of the terminal spine. Phallosome with two long, feebly divergent spines that subtend the aedeagus, these apophyses equal in size and shape or approximately so.

Hab. Brazil (Rio Grande do Sul).

Holotype, o, Nova Teutonia, October 2, 1936 (Plaumann).

Allotopotype, \circ . Paratopotype, $1 \circ$.

In the structure of the male hypopygium, Gonomyia (Gonomyia) serpentina is very different from all other members of the subgenus described to this date. It is the first member of the subgenus to be described from Brazil.

10. Teucholabis (Paratropesa) sanguinolenta sp. n.

General coloration of thorax reddish yellow, the praescutum with three black oval areas, one at the cephalic-median portion, the others laterally before the suture; legs yellow, the extreme femoral tips blackened, the fore femora extensively brownish black; wings subhyaline, the stigma and proximal half of cell Sc blackened; in male, wing dilated opposite cell $1st\ A$; abdomen obscure yellow, the basal segments more or less darkened; hypopygium yellow.

Male. — Length about 7-8 mm.; wing 7.5-9 mm.

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

Rostrum obscure yellow, about one-half as long as remainder of head; palpi black. Antennae black, the scape brownish yellow; flagellar segments oval, the more basal ones subglobular. Head with central portion of vertex brownish black, the anterior vertex and occiput paler brown.

Pronotum obscure yellow. Mesonotal praescutum reddish yellow with three restricted black areas, including a median oval spot occupying about the cephalic third of the sclerite and more circular to short-oval nearly lateral spots before the suture; remaining sclerites of notum, together with the pleura, reddish yellow. Halteres dusky, the knobs yellow. Legs with the coxae reddish yellow; trochanters obscure yellow; femora yellow, the extreme tips blackened, the amount of the latter equal on all legs; ventral surface of fore femora extensively brownish black; fore tibiae brownish black, the remaining tibiae yellow; basitarsi obscure yellow to brownish yellow, the tips darker; remaining tarsal segments black; posterior basitarsi slightly dilated at proximal third and with a darkened area. Wings subhyaline, the proximal half of cell Sc blackened; stigma subcircular, dark brown; a very narrow and scarcely evident darkening along cord, chiefly evidenced by the blackened veins; remaining veins yellow to brownish yellow. Wings of male conspicuously dilated opposite cell 1st A, of the female normal. Venation: R_2 approximately one-half its length beyond fork of Rs; r-m present; m-cu close to fork of M.

Abdomen obscure yellow, the basal segments more or less darkened; hypopygium yellow.

Hab. Brazil (Rio Grande do Sul).

Holotype, &, Nova Teutonia, October 1, 1936 (PLAUMANN).

Allotopotype, \mathfrak{P} , with the type. Paratopotype, \mathfrak{F} , October 3, 1936. By my latest key to the American species of Paratropesa Schiner (Konowia, 12:44-46; 1933), the present fly runs to Teucholabis (Paratropesa) jactans (Alexander), likewise from Brazil. The latter fly has the praescutum dull yellow, with three broad dark brown stripes that are confluent behind; mediotergite brownish black; wings with evident dark seams along cord and outer end of cell 1st M_2 , together with a paler brown wash at near one-third the length of the wing.

Diptera, t. IX, 15.II.1938 (Paris, P. Lechevalier).