

Records and descriptions of Tipulidae from
tropical America (Diptera). Part I.

by

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In a series of papers proposed to be published under the above general title I wish to supply records of distribution that add materially to our present knowledge of the subject, and to describe new species from the many countries included in the Neotropics. It seems certain that this vast region will prove to be one of the two richest in the entire World, being equalled or exceeded only by the Oriental. The types of the novelties herewith described are preserved in my private collection of these flies, except where indicated to contrary in text.

Records of distribution

Brachypremna dispellens (Walker). — Colombia: Muzo, Department of Boyacá, altitude 900 meters, 1936 (Jos. Bequaert). Trinidad: St. John's Valley, December 29, 1929 (J. G. Myers).

Limoni (*Limonia*) *pampæcila* (Alexander). — Colombia: In train, Chiquiniquita to Bogotá, July 20, 1936 (Jos. Bequaert). Venezuela: Silla de Caracas, Lower Paramo, altitude 2300 meters, December 21, 1931 (J. G. Myers). Ecuador: Baños, altitude 1800 meters, June 1936 (Macintyre). Wide-spread in Tropical America.

Limonia (*Neolimnobia*) *diva* (Schiner), var. — Colombia: Restrepo, Department of Meta, altitude 500 meters, August 17, 1936 (Jos. Bequaert).

Limonia (*Rhipidia*) *annulicornis* (Enderlein). — Costa Rica: San José, May 8, 1910 (H. Schmidt), in Hamburg Museum. Ecuador: Naranjito, bred from decaying cacao hulls, 1933 (Campos).

Limonia (*Rhipidia*) *pleuralis* (Alexander). — Colombia: Muzo, Department of Boyacá, altitude 900 meters, 1936 (Jos. Bequaert).

Limonia (*Dicranomyia*) *trituberculata* Alexander. — Chile: Angol, September 28, 1931 (D. S. Bullock).

Limonia (*Geranomyia*) *glauca* (Alexander). — Ecuador: Abitagua, Rio Pastaza, altitude 1200 meters, August 15, 1937 (Macintyre).

Limonia (Geranomyia) plumbeipleura Alexander. — Trinidad: St. Joseph, February 26, 1935 (J. G. Myers); N.º 4958. Hitherto from Colombia and Ecuador.

Limonia (Geranomyia) recondita (Alexander). — Ecuador: Abitagua, Rio Pastaza, altitude 1200 meters, September 20-21, 1937 (Macintyre). Hitherto from Peru.

Limonia (Geranomyia) tibialis (Loew). — Ecuador: Chatham Island, Galapagos, April 18, 1932; Backwater Bay, Charles Island, Galapagos, April 25 — May 14, 1932 (M. Willows); Templeton-Crocker Expedition, University of California.

Limonia (Geranomyia) townsendi (Alexander). — Peru: Verrugas Cañon, Lima, June 25, 1928 (R. C. Shannon); U. S. National Museum.

Limonia (Geranomyia) walkeri Alexander. — Venezuela: Rancho Grandé, Estado Aragua, altitude 1100 meters, September 5, 1937 (G. Vivas-Berthier). Hitherto from Colombia and Brazil.

Limonia (Zelandoglochina) angelica Alexander. — Chile: Angol, September 7-28, 1931 (D. S. Bullock). Hitherto known only from the unique type taken at Lago Nahuel Huapi, Patagonia. The male hypopygium is very different from that of all other described species.

Limonia (Zelandoglochina) parvispinosa Alexander. — Chile: Valparaíso, September 20, 1932 (E. P. Reed); Renaca, near Valparaíso, October 1, 1932 (E. P. Reed).

Limonia (Zelandoglochina) tenuipalpis Alexander. — Chile: Valparaíso, September 20, 1932 (E. P. Reed).

Limonia (Zelandoglochina) torticornis Alexander. — Chile: Valparaíso, September 20, 1932 (E. P. Reed).

Austrolimnophila diversipes (Alexander). — Ecuador: Abitagua, Rio Pastaza, altitude 1200 meters, September 21, 1937 (Macintyre). Formerly from Peru.

Atarba (Atarba) cincticornis Alexander. — Ecuador: Abitagua, Rio Pastaza, altitude 1200 meters, September 18, 1937 (Macintyre). Formerly from British Guiana.

Trentepohlia (Paramongoma) longifusa Alexander. — Ecuador: Abitagua, Rio Pastaza, altitude 1200 meters, April 5, 1937 (Macintyre). Peru: Iquitos, March-April 1931 (R. C. Shannon); U. S. National Museum.

Trentepohlia (Paramongoma) metatarsata Alexander. — Costa Rica: Punta Arenas (R. Paessler); Hamburg Museum. Formerly known only from: Panama.

Teucholabis (Teucholabis) jocosa Alexander. — Ecuador: Baños, altitude 1800 meters, June 1936 (Macintyre).

Teucholabis (Teucholabis) spinigera Schiner. — Colombia: Rio Frio, Magdalena, March 20, 1925 (F. W. Walker). Sevilla, Magdalena, May 13, 1926 (F. W. Walker); University of Michigan.

Gonomyia (Lipophleps) amazona Alexander. — Ecuador: Abitagua, Rio Pastaza, altitude 1200 meters, April 5-19, 1937 (Macintyre). Hitherto from Brazil and Peru.

Erioptera (Erioptera) micromyia Alexander. — Peru: Iquitos, March-April 1931 (R. C. Shannon); U. S. National Museum.

Erioptera (Erioptera) multiannulata Alexander. — Ecuador: Abitagua, Rio Pastaza, altitude 1200 meters, April 2-11, 1937 (Macintyre). Hitherto from southern Brazil.

Erioptera (Mesocyphona) parva Osten Sacken. — Ecuador: Abitagua, Rio Pastaza, altitude 1200 meters, April 4-5, 1937 (Macintyre).

Toxorhina (Ceratocheilus) americana (Alexander). — Colombia: La Union, northeast of Restrepo, on flowers, August 8, 1936 (Jos. Bequaert).

Descriptions of new species

Tipula balloui, sp. n.

Belongs to the *monilifera* group; antennae elongate, flagellum beyond first segment uniformly black; pleura uniformly ochreous; femora brownish yellow, the tips narrowly blackened; wings almost uniformly pale brown, with restricted darker brown and subhyaline areas, lacking the contrasted white pattern commonly found in the group; subhyaline area beyond stigma occupying base of cell R_2 only; male hypopygium with outer lateral angles of tergite rounded; lobe of basistyle short, with long coarse setae; median lobe of eighth sternite reduced to a small tubercle.

Male. — Length, about 14 mm.; wing, 15 mm.; antenna about 10 mm.

Frontal prolongation of head ochreous, nasus long and slender; palpi black. Antennae (male) elongate, as shown by the measurements; scape, pedicel and first flagellar segment yellow, remainder of flagellum black throughout. Head grayish buffy, narrowly darkened medially.

Pronotum buffy, narrowly infuscated above. Mesonotal praescutum buffy, the narrow intermediate stripes nearly colorless, best indicated by narrow, darker brown borders, the median vitta darker colored; lateral stripes better defined, uniformly brown; interspaces with conspicuous brown setigerous punctures; scutum buffy, each lobe with two entire brown areas, median region with a few setigerous punctures; scutellum brown, paler apically; mediotergite brownish gray, more infused behind and on sides. Pleura almost uniformly ochreous. Halteres dark brown, the base of stem restrictedly yellow. Legs with the coxae and trochanters pale yellow; femora brownish yellow, the tips narrowly (1 mm.) blackened; tibiae pale brown, passing into black at tips; tarsi black. Wings almost uniform pale brown, sparsely variegated with

darker brown and subhyaline areas, the usual white pattern of the *monilifera* group almost lacking; darker brown areas include much of cell *Sc*, stigma, cord, outer radial field and base of cell *Cu*; subhyaline areas include poorly delimited marks in base of cell *M*, at midlength of cell *R*, before and beyond stigma, the latter involving only cell *R*₂, and across the base of cell *1st M*₂; veins brown. Venation: Cell *1st M*₂ relatively large, second section of vein *M*₁₊₂ nearly twice *m*.

Abdominal tergites yellowish brown, with three interrupted brown stripes, these becoming heavier and more nearly entire near outer end of abdomen. Male hypopygium with lobes of tergite truncated, the outer angle rounded, the inner angle square, forming a short linear median split; distal third of tergite yellow, the caudal border virtually destitute of setae. Basistyle with lobe short, about twice as long as thick, provided with abundant long coarse setae. Inner dististyle narrow, especially before the weakly dilated head, the latter produced into a blackened beak and provided with coarse ribs or corrugations. Eighth sternite with a small median tubercle inserted in membrane of caudal margin.

Habitat: Costa Rica.

Holotype, ♂, Coliblanco, January 1937 (W. Quesada).

I take great pleasure in naming this distinct fly in honor of my long-time friend, Professor Charles H. Ballou, to whom I am indebted for many specimens of Neotropical Tipulidae. The wing-pattern of the fly is much like that of *Tipula bogotana* Alexander or *T. carizona* Alexander, both of Colombia, but the structure of the male hypopygium is quite distinct.

Tipula urophora, sp. n.

General coloration light brown; antennae (male) elongate, yellow, the basal enlargements of the flagellar segments darkened; halteres pale yellow; legs yellow; wings with a strong yellowish brown tinge, the anterior border broadly more infuscated; abdomen orange, segments seven and eight chiefly blackened; male hypopygium with the ninth sternite deeply notched medially and bearing a strongly curved tail-like structure from the incision.

Male. — Length, about 12-14 mm.; wing, 11-14 mm.; antenna 6-8 mm.

Female. — Length, about 15 mm.; wing, 13 mm.

Frontal prolongation of head relatively short, stout and *high, almost in alignment with the vertex due to the lack of a vertical tubercle*; nasus short; palpi pale brownish yellow. Antennae (male) elongate, as shown by the measurements; yellow, the small basal swelling of the flagellar segments dark brown with the exception of their extreme basal portions; flagellar segments elongate-cylindrical. Head light brown; a row of black orbital setae.

Mesonotal praescutum almost uniformly light brown, the setae of the interspaces very reduced in size; scutum and parascutella darker brown; scutellum and mediotergite pale yellow, the pleurotergite again darker. Pleura yellow. Halteres pale yellow, relatively slender, with small heads. Legs with the coxae and trochanters yellow; remainder of legs yellow, the outer tarsal segments passing into brown. Wings with a strong yellowish brown tinge, the anterior border broadly more infuscated, even more expanded in the radial field; cell *Sc* paler than either cell *C* or the cephalic portion of *R*; stigma only a trifle darker than the adjoining portions of the anterior border; anterior cord dark brown; posterior cord, outer end of cell *1st M*₂ and small marginal seams paler brown; veins pale brown, *Cu* and the anal veins pale yellow. Venation: *Rs* short, a little longer than *m-cu*; cell *M*₁ short, subequal to or longer than its petiole.

Abdomen orange, segments seven and eight chiefly blackened; hypopygium orange. Male hypopygium with the tergite elongate, the caudal margin produced into two slightly divergent pale lobes that are separated by a narrow U-shaped notch, their apices with abundant spinous setae that are directed chiefly mesad. Dististyles irregular in conformation, the outer slender, pale, on outer margin near apex with a retrorse pale spine; inner style more flattened, the margins blackened, the outer edge with two or three roughened black spines or spinous points. Gonapophyses subtending the aedeagus, at apex bearing numerous small spines. From the deep notch of the ninth sternite juts a curved tail-like structure, directed cephalad and then bent caudad on itself, the outer end expanded and cushioned with abundant pale setae. Eighth sternite unarmed.

Habitat: Colombia, Ecuador.

Holotype, ♂, Playas de Montalvo, Los Rios, Ecuador, altitude 15 meters, April 18, 1938 (Macintyre). Alloto-

potype, a broken ♀, with type. Paratopotypes, 2 ♂♂, April 15-16, 1938 (Macintyre); paratypes, 2 alcoholic ♂♂, Muzo, Department of Boyacá, Colombia, altitude 900 meters, 1936 (Jos. Bequaert).

Tipula urophora is readily told from allied forms by the coloration of the antennae and wings, and, especially, by the structure of the male hypopygium.

Tipula perangustula, sp. n.

General coloration yellow; antennae (male) moderately long, flagellum black; mesonotum chiefly darkened; pleura yellow except for a transverse dark girdle on the mesepisternum; legs yellow, the tips of femora and tibiae blackened; wings with a faint brown tinge, the costal and apical portions strongly darkened; *Rs* short, subequal to *m-cu*; cell 2nd *A* very narrow, linear; abdominal segments yellow, variegated medially with brown areas; male hypopygium with both dististyles blackened, simple.

Male. — Length, about 11 mm.; wing, 14 mm.; antenna, about 4 mm.

Described from an alcoholic specimen.

Frontal prolongation of head short, obscure yellow; nasus very reduced; palpi with basal three segments brown, the elongate terminal segment paling to whitish. Antennae moderately long; basal three segments yellow, the third more infumed above, remainder of antennae black; terminal segment small, oval; flagellar segments weakly incised, exceeding the longest verticils in length. Head obscure yellow.

Pronotum yellow, darkened medially. Mesonotal praescutum with humeral region light yellow, the disk chiefly covered by three nearly confluent dark brown stripes; posterior sclerites of notum dark brown, including the postnotal mediotergite but not the pleurotergite. Pleura yellow with a transverse brown girdle occupying the mesepisternum, the remainder of pleura abruptly pale. Halteres elongate, stem yellow, knob broken. Legs with the fore and middle coxae light yellow, the hind coxae a trifle infumed basally; trochanters yellow; femora yellow, the tips narrowly blackened; tarsi black (only one leg, middle, remains). Wings with a faint brown tinge, the prearcular field, cells *C* and *Sc*, and the outer radial field dark brown, the stigma scarcely differentiated; veins brown. Venation: *Rs* short, subequal to *m-cu*; M_{3+4} short, about

one-third M_{1+2} ; cell M_1 deep, more than twice its petiole; cell 2nd A very narrow, linear.

Abdomen variegated yellow and dark brown; tergites yellow with a broken median brown stripe; area on tergite two constricted at midlength; on segments three and four much narrower at base; succeeding tergites chiefly dark brown; hypopygium pale; sternites yellow, the caudal portions extensively dark brown, least indicated on fourth and fifth sternites, especially the latter. Male hypopygium with the tergite longer than wide, the caudal margin with a broad U-shaped notch, the stout lateral lobes with blackened spines and setae; on ventral face with a \wedge -shaped area of similarly blackened spines. Both dististyles blackened, simple, the inner with a spinous flange on outer half. Eighth sternite extensive, the caudal margin very feebly emarginate. Gonapophyses appearing as small flattened plates, their tips obtusely rounded.

Habitat: Colombia (Boyacá).

Holotype, alcoholic ♂, Muzo, altitude 900 meters, 1936 (Jos. Bequaert).

The most similar described species having cell 2nd A of the wings very narrow is *Tipula effeta* Alexander, which in all other regards is a very distinct fly.

Nephrotoma lateropolita, sp. n.

General coloration yellow, the praescutum and scutum with dark brown stripes; outer ends of lateral praescutal stripes outcurved, blackened and highly polished; a black spot on margin of praescutum before suture; lateral ends of suture extensively blackened; thoracic pleura variegated with reddish areas; knobs of halteres obscure yellow; wings subhyaline, stigma obscure yellow; abdominal tergites reddish yellow, with median and lateral dark brown spots; male hypopygium with eighth sternite large, deeply incised medially, the lobes clothed with long curved yellow setae.

Male. — Length, about 11-12 mm.; wing, 10.5-11.5 mm.; antenna, about 3.8-4 mm.

Female. — Length, about 13 mm.; wing, 11.5 mm.

Frontal prolongation of head obscure yellow; nasus conspicuous, tufted with black setae; palpi yellow, the outer segment passing into dusky. Antennae with basal three segments yellow, flagellum black; flagellar segments moderately

incised. Head orange, clearer yellow anteriorly; occipital brand reduced to a tiny polished triangle.

Pronotum yellow. Mesonotal praescutum yellow, with three conspicuous stripes, the median one dark brown, the lateral borders of anterior half blackened, the point of the stripe crossing the suture and forming a black point on midline of scutum; lateral praescutal stripes brown, polished, the anterior ends outcurved to margin, blackened and highly polished; a black dash on dorsal pleural membrane just before suture; lateral ends of suture conspicuous velvety black; scutum yellow, each lobe with two reddish brown areas; scutellum liver-brown, parascutella yellow; mediotergite yellow, the median area reddish, darker behind. Pleura and pleurotergite yellow, variegated with large reddish brown areas, most conspicuous on propleura, anepisternum, ventral sternopleurite and ventral pleurotergite. Halteres infuscated, the knobs chiefly obscure yellow. Legs with the coxae and trochanters reddish yellow; femora obscure yellow, the tips narrowly blackened or infumed; tibiae brown, the tips passing into black; tarsi black. Wings subhyaline, cell *Sc* a little darker; stigma obscure yellow, poorly delimited; veins dark brown. In cases, a group of trichia in outer end of cell R_5 , the character variable; stigmal trichia few in number. Venation: Sc_2 ending opposite origin of Rs ; cell M_1 sessile.

Abdomen reddish yellow, the tergites with median and lateral dark brown spots shortly before the caudal borders of the segments; hypopygium reddish yellow. Male hypopygium with the caudal margin of tergite narrowed, produced into two submedian lobes that are separated by a U-shaped median notch, the apices of lobes obliquely truncated and set with blackened spicules, abundant and crowded mesally, becoming more sparse and scattered laterad, the outer angles of the lobes glabrous; beneath each lobe near lateral portion with a slender lobe with blackened points. Beak of inner dististyle acutely pointed; dorsal crest relatively high, the margin entire. Eighth sternite large, deeply incised medially, the lobes densely clothed with long curved yellow setae.

Habitat: Costa Rica.

Holotype, ♂, San Pedro de Montes de Oca, July 8, 1937 (C. H. Ballou).

Allotopotype, ♀, with type. Paratopotype, ♂, February

By means of Osten Sacken's key to the Middle American species of *Nephrotoma* (Biol. Centrali-Americana, Insecta, Diptera, 1:15; 1886, as *Pachyrrhina*), the present fly disagrees with both major couplets in the coloration and arrangement of the praescutal stripes. It agrees with *N. usta* (Osten Sacken) in the highly polished black areas at ends of the lateral praescutal stripes but differs in all details of coloration. Despite the coloration of the mesonotum, it seems that the present fly is most nearly allied to *N. ferruginea* (Fabricius) and *N. occidentalis* (Doane).

Limonia (Limonia) capnora metae, subsp. n.

Male. — Length, about 7 mm.; wing, 8 mm.

Very similar to the typical form (Peru), differing in slight details of coloration, especially of the legs. Legs with the femora and tibiae brownish black, the tips of the latter broadly and abruptly yellowish white, involving the distal fourth or fifth; basitarsi strongly infuscated, the distal end and succeeding segments pale. In typical *capnora*, the femora and tibiae are yellow, the tips of the latter and the tarsi only a very little paler. Wings not as strongly infumed as in the typical form; *Rs* strongly angulated at origin.

Habitat: Colombia (Meta).

Holotype, alcoholic ♂, Restrepo, altitude 500 meters, 1936 (Jos. Bequaert).

Limonia (Rhipidia) nigrostrata muzoensis, subsp. n.

Male. — Length, about 8 mm.; wing, 7 mm.

Differs from the typical form (Southern Brazil), as follows:

Size smaller, as shown by the measurements. Wing-pattern about the same, the pale spot at end of vein *2nd A*, in cell *1st A*, unusually distinct. Male hypopygium with the armature of the basistyle of the same general plan but the details distinct, the lobes closer together, separated by a deep U-shaped notch. Ventral dististyle smaller, its length shorter than the rostral prolongation, the latter with the outer cephalic angle produced into an acute spinous point. Gonapophyses with mesal-apical lobe less expanded.

Habitat: Colombia (Boyacá).

Holotype, alcoholic ♂, Muzo, altitude 900 meters, 1936 (Jos. Bequaert).

Limonia (Geranomyia) bustilloi, sp. n.

General coloration yellow and brown; rostrum (male) a little more than one-half the length of body; tips of femora narrowly darkened; wings subhyaline, stigma oval, dark brown; Sc_1 extending to opposite three-fifths the length of Rs , the latter straight; free tip of Sc_2 lying proximad of the long, oblique R_1 and R_2 ; male hypopygium with the ventral dististyle large and fleshy, its rostral prolongation trispinous.

Male. — Length, excluding rostrum, about 7 mm.; wing, 6 mm.; rostrum, 3.8 mm.

Described from microscope slide preparations.

Rostrum brown, elongate, slightly exceeding one-half the length of body; basal segment of maxillary palpus slender, pale; second segment oval, brownish black. Antennae brownish black throughout; flagellar segments short-cylindrical, with very short and inconspicuous basal pedicels; segments with very short verticils; terminal segment subequal in length to the penultimate but oval. Head brown; anterior vertex of moderate width.

Mesonotum brown, the praescutum apparently darker medially, pale on lateral portions. Pleura pale. Halteres pale, the knobs more infuscated. Legs with the coxae and trochanters pale; femora pale, the tips narrowly dark brown, the amount subequal on all legs and involving about the distal tenth to twelfth; tibiae and tarsi pale, the distal segments of the latter a little darker. Wings relatively narrow, subhyaline; stigma oval, conspicuous, dark brown; a narrow and scarcely evident darker clouding along cord; veins brown. Venation: Sc relatively long, Sc_1 extending to about opposite three-fifths the length of Rs , Sc_2 at its tip; free tip of Sc_2 transverse, lying proximad of the longitudinal to oblique R_1 and R_2 , which bend gradually into R_{2-3} ; Rs straight; cell 1st M_2 moderately long, shorter than vein M_{1-2} beyond it; $m-cu$ at fork of M ; cell 2nd A of moderate width.

Abdominal tergites and hypopygium dark; sternites paler. Male hypopygium with the caudal margin of tergite only feebly emarginate, the lobes with abundant setae. Ventral dististyle much larger and more extensive than the small basistyle; rostral prolongation compressed, relatively short, with a group of three spines placed on the face at near midlength; spines arising close together from short, inconspic-

uous basal tubercles. Gonapophyses with mesal apical lobes simple, gently curved, the tips narrowly blackened, acute.

Habitat: El Salvador.

Holotype, ♂ on microscope slide, San Salvador (Señor Juan Bustillo C); type in the U. S. National Museum.

This species is named in honor of the collector, Secretary General of the Board of Sanitation of San Salvador. In its general appearance, it suggests *Limonia (Geranomyia) canadensis* (Westwood), *L. (G.) argentinensis* (Alexander) and allied forms, but from the structure of the male hypopygium is an entirely distinct species. In the latter feature the fly agrees most closely with *L. (G.) brevispinula* Alexander yet is quite different.

Austrolimnophila vivas-berthieri, sp. n.

General coloration brown, the praescutum with three poorly indicated, darker brown stripes; mediotergite pale, narrowly darkened medially; pleura yellow with a brown dorso-longitudinal stripe; halteres elongate, knobs dark brown; legs brown; wings tinged with brown, sparsely patterned with darker brown clouds; cell M_1 nearly twice its petiole; cell 1st M_2 unusually broad, the length less than one-half longer than the greatest breadth; *m-cu* far distad; abdominal tergites dark brown, sternites yellow.

Female. — Length, about 9 mm.; wing, 10.5 mm.

Rostrum brown; palpi chiefly pale. Antennae with scape and pedicel black; first flagellar segment brownish yellow, remaining segments black with the incisures vaguely paler; terminal segments a little less intensely colored; flagellar segments cylindrical; verticils short. Head brown, the front and anterior vertex more grayish; anterior vertex narrow, less than the diameter of scape.

Pronotum brown. Mesonotal praescutum reddish brown, with three poorly indicated, darker brown stripes, the median one broad and entire; lateral borders of praescutum narrowly darkened; scutal lobes dark, variegated with still darker, median area pale; scutellum brown; mediotergite pale, narrowly darkened medially. Pleura yellow, with a brownish dorso-longitudinal stripe; dorsopleural membrane pale brown. Halteres long and slender, the stem pale, the knob dark brown. Legs with the coxae and trochanters pale yellow, the fore coxae a trifle darker; femora brown, the bases a little paler; tibiae and tarsi brownish black. Wings with a brownish tinge, the costal border a trifle more yellowish; a sparse pattern

of slightly darker brown clouds, arranged as follows: Origin of R_s , cord, outer end of cell $1st\ M_2$ and $m-cu$; marginal spots at Sc_1 , R_{1+2} , R_3 and very reduced on R_4 ; a tiny cloud at fork of M_{1+2} ; veins brown, a trifle darker in the clouded portions. Venation: Sc_1 ending opposite fork of R_{2+3+4} , Sc_2 longer, at its tip; R_s long, weakly angulated at origin; R_{2+3} longer than R_3 ; cell M_1 deep, nearly twice its petiole; cell $1st\ M_2$ unusually short and broad, the length less than one-half longer than the greatest width; $m-cu$ far distad, less than one-half its length from fork of M_{3+4} .

Abdominal tergites dark brown; sternites yellow, the lateral portions narrowly darker; cerci yellow, strongly upcurved.

Habitat: Venezuela (Aragua).

Holotype, ♀, Rancho Grande, near Maracay, altitude 1100 meters, September 5, 1937 (Vivas-Berthier).

Austrolimnophila vivas-berthieri is named in honor of the collector, my friend Señor Gastón Vivas Berthier, to whom I am indebted for many favors. The species is very distinct from the other regional species, especially in the wing pattern and venation, notably the short, broad cell $1st\ M_2$ and distal position of $m-cu$.

Hexatoma (Eriocera) bequaertiana, sp. n.

Mesonotum chiefly yellow, the disk of praescutum chiefly covered by a black area; dorsopleural region chiefly darkened; antennae with scape yellow, pedicel and flagellum black; head fiery orange-yellow; halteres dark brown, the base of stem whitened; legs black; wings brown, variegated by a large yellow discal area before cord; macrotrichia of wing-veins very sparse; R_{2+3+4} short, subequal to R_{2+3} , the latter longer than R_{1+2} ; $m-cu$ beyond fork of M ; abdomen yellow, segments five to eight inclusive, black; hypopygium yellow.

Male. — Length, about 9 mm.; wing, 8 mm.

Described from an alcoholic specimen.

Rostrum obscure yellow; palpi black. Antennae (male) 7-segmented, relatively short, if bent backward extending to shortly beyond the wing-root; scape yellow, pedicel and flagellum uniformly black; first flagellar segment longest, the succeeding three nearly equal and about two-thirds as long as the first; terminal segment about one-third the penultimate; vestiture of segments consisting of scattered setae. Head uniformly fiery orange yellow.

Pronotum dark brown. Mesonotal praescutum chiefly cov-

ered by blackish stripes that are entirely confluent behind, restricting the obscure yellow ground to the humeral and lateral regions of the sclerite; scutum, scutellum and postnotum uniformly yellow. Propleura and dorsopleural membrane back to the wing-root blackened; mesopleura yellow excepting the dorsal sternopleurite, which is blackened. Halteres short, dark brown, the base of stem whitened, the apex of knob paling to obscure yellow. Legs with the coxae blackened, especially the fore pair, the remaining coxae with their posterior faces a little paler; remainder of legs black. Wings with a strong brown suffusion, variegated by a large yellow discal area lying before cord, extending from veins R_1 to Cu_1 , inclusive, its proximal edge at near one-third the length of R_s ; basal portion of cell *1st A* a little paler than the ground; veins dark brown, yellow in the discal area. Macrotrichia of veins beyond cord very sparse, virtually restricted to a series on distal section of R_5 ; two setae near outer end of vein R_3 . Venation: R_{2+3+4} short, subequal to R_{2+3} and about one-half longer than the basal section of R_5 ; R_{2+3} longer than R_{1+2} ; cell M_1 lacking; cell *1st M*₂ shorter than vein M_3 ; *m-cu* more than one-third its length beyond the fork of M ; vein *2nd A* only slightly sinuous.

Abdomen with basal four segments yellow, the extreme caudal border of tergites two to four inclusive with dark margins; base of tergite five yellow, the succeeding segments black; hypopygium orange-yellow.

Habitat: Colombia (Boyacá).

Holotype, alcoholic ♂, Muzo, altitude 900 meters, 1936 (Jos. Bequaert).

Hexatoma (Eriocera) bequaertiana is named in honor of the distinguished collector, Doctor Joseph Bequaert, of the Harvard University Medical School. The fly is quite distinct from all other described regional species. By keys it runs to *H. (E.) melanacra* (Wiedemann), of Brazil, which has the praescutum gray with three blackish stripes, the basal abdominal segment black and the wing-base yellowish.

Gonomyia (Lipophleps) guayaquilensis, sp. n.

Belongs to the *pleuralis* group; most closely related to *gladiator* Alexander, differing especially in the hypopygial details.

Male. — Length, about 5.5 mm.; wing, 4 mm.

Legs brown, the terminal tarsal segments darker; no brightening of femoral tips. Stigma of wings paler brown than usual in group. Male hypopygium with spine of basistyle much shorter and more slender, nearly straight, the tip acute. Dististyle similar in shape to *gladiator*. Phallosome with ventral bispinous plate with short spines. Paired blades of phallosome obtusely rounded at apex, not microscopically spinulose as in *gladiator*. No flattened plate with margin serrulate, as in *gladiator*.

Habitat: Ecuador.

Holotype, ♂, Guayaquil (R. Paessler); Hamburg Museum, leg. April 14, 1905, ded. July 6, 1905.

Teucholabis (Teucholabis) subleridensis, sp. n.

Male. — Length, about 5.5-6 mm.; wing, 5.8-6 mm.

Close to *leridensis* Alexander, of northern Panama and confused with this species in the original description (Ann. Ent. Soc. America, 27: 69-70; 1934).

Male hypopygium distinct; apical spine of basistyle long and straight, subequal in length to the outer dististyle, terminating in an acute spinous point; inner margin fringed with long delicate setulae throughout most of the length. Outer dististyle flattened on basal portion, the margin with three or four strong appressed teeth, the apex a simple spine. Inner dististyle with apical beak broad, only feebly emarginate. Aedeagus with apical point unusually long, nearly equal to the erect basal portion, the tip obtusely rounded.

Habitat: Panama (Chiriqui).

Holotype, ♂, Finca Lerida, altitude 5,350 — 6,200 feet, September 14, 1932 (W. K. A. Lawlor). Paratopotypes, 2 ♂♂.

Rhabdomastix (Sacandaga) parvula, nom. n.

1913. (*Sacandaga*) *parva* Alexander, Proc. U. S. Nat. Mus., 44: 508-509; nec *Rhabdomastix parva* (Siebke), Nyt Magaz. f. Naturvidensk., 12: 178; 1863.

Lackschewitz and Edwards have discovered that the long unrecognized *Limnobia parva* Siebke, of northern Europe, is referable to *Rhabdomastix*, necessitating the above change of name for the species later described from the Greater Antilles by the present writer.

Rhabdomastix (Rhabdomastix) tantilla, sp. n.

General coloration dark brown; antennae with scape and pedicel dark brown, the flagellum yellow with undarkened incisures; wings with a faint grayish tinge, the poorly differentiated stigma very pale brown; R_{2+3+4} and R_4 subequal; distance on costa between R_{1+2} and R_3 a little greater than the length of vein R_3 ; male hypopygium with the outer dististyle nearly straight; gonapophyses with distal half prolonged into a hairlike spine.

Male. — Length, about 3 mm.; wing, 3.5 mm.; antenna, about 10 mm.

Described from an alcoholic specimen.

Rostrum and palpi brown. Antennae (male) approximately three times the body; scape and pedicel dark brown, flagellum yellow, the outer segments a trifle darker; flagellar segments cylindrical, with sparse vestiture. Head dark brown.

Pronotum brownish yellow. Mesonotum in alcohol almost uniform dark brown, the humeral and lateral regions of praescutum obscure brownish yellow. Pleura dark brown. Halteres pale. Legs with the coxae dark; trochanters obscure yellow; femora and tibiae brownish yellow, the tips darker; tarsi darkened. Wings with a faint grayish tinge, the prearcular and costal regions a trifle more yellow; stigma very pale brown, scarcely darker than the ground; veins brown. Wing veins virtually without trichia, even R and R_1 glabrous; costal fringe short, restricted to the extreme cephalic margin of vein. Venation: Sc_1 ending about opposite two-thirds the length of Rs , Sc_2 faint, a short distance from its tip; R_{2+3+4} and R_4 subequal, the latter gently curved; R_3 straight, oblique, a little shorter than the distance on costa between veins R_{1+2} and R_3 .

Abdomen dark brown, the pleural membrane and incisures paler. Male hypopygium with the outer dististyle nearly straight, the surface with microscopic appressed denticles. Inner dististyle shorter, the apex not strongly prolonged. Gonapophyses with distal half produced into a slender hairlike spine.

Habitat: Colombia (Meta).

Holotype, alcoholic ♂, Restrepo, altitude 500 meters, August 17, 1936 (Jos. Bequaert).

Rhabdomastix (*Rhabdomastix*) *tantilla* is the smallest member of the subgenus so far discovered. Besides its size, the species is distinguished from its regional allies by the venation and details of the male hypopygium.
