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

by

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In the series of papers to be attempted under the present title, I wish to describe some of the many remarkable new species of crane-flies that have been discovered in various States of Brazil and to provide additional records of distribution. In this initial installment, the materials considered were all taken by Mr. J. F. Zikán, at and near Campo Bello, State of Rio de Janeiro, near the southern spurs of Mount Itatiaya, and at an average altitude of from 700 to 800 meters. I wish to thank Mr. Zikán for the privilege of studying this interesting series of Tipulidae, the types and uniques of which are preserved in my collection of these flies.

Records of distribution

Tanypremna (Tanipremna) longipes (Fabricius). — March 14, 1933, male; February 21, 1934, female.

Limonia (Limonia) contradistincta Alexander. — May 6, 1930, female; May 17, 1930, male.

Limonia (Neolimnobia) diva (Schiner), var. — December 10, 1931, female.

Limonia (Neolimnobia) hypocrita Alexander. — February 14, 1932, female.

Limonia (Rhipidia) annulicornis (Enderlein). — May 21, 1930, female.

Limonia (Geranomyia) argentinensis — April 30, 1930 female; November 15, 1933, male.

Helius (Helius) rubicundus Alexander. - March 9, 1931, male.

Limnophila kertészi Alexander. — April 27, 1932, female; Nov. 19, 1933, female. This species is closest to the subspecies angustilineata Alexander.

Hexatoma (Eriocera) nigra (Wiedemann). — February 23, 1933, male, Hexatoma (Eriocera) variegata Alexander. — October 7, 1931, male. Neognophomyia hirsuta (Alexander). — December 6, 1933, female. Cryptolabis (Cryptolabis) schadei Alexander. — Dec. 29, 1932, ale

Toxorhina (Toxorhina) mendosa (Alexander). — March 9, 1934. male; August. 11, 1931, male and female, in copula.

Descriptions of new species Habromastix exempta, sp. n.

Mesonotum polished black, the praescutum with a more castaneous median stripe; antennae (♂) about one-half longer

than the body, the flagellar segments black, with long erect black setae: wings brownish yellow, the costal border broadly dark brown, the posterior cells more brownish yellow, variagated by clearer, yellow areas in the bases of Anal cells, near outer end of cell M and in the outer radial field.

Male. — Length, about 9-10 mm.; wing, 10.5-11 mm.; antenna, 14-15 mm.

Frontal prolongation of head obscure yellow, relatively short; nasus short and stout; basal segment of palpus brown, the outer segments darker brown. Antennae (3) about one-half longer than the entire body; scape and pedicel obscure yellow; flagellar segments beyond the first black, elongate-cylindrical, with very conspicuous erect black setae. Head orange, a little darker behind; vertical tubercle small and slender.

Pronotum brownish testaceus. Mesonotum almost uniformly polished black or brownish black, the praescutum with a broad, median, more castaneous, stripe; scutellum brownish black. Pleura testaceus vellow, with a conspicuous brownish black transverse girdle, including the anepisternum and sternopleurite. Halteres with the stem obscure yellow, the knobs brownish black. Legs with the coxae and trochanters yellow; femora yellow, the tips narrowly and abruptly blackened, the amount subequal on all legs; tibiae obscure yellow, the tips narrowly infuscated; tarsi black, the proximal portions of basitarsi paler; tibial spur formula 1-2-2; claws simple. Wings brownish yellow, the costal border broadly and conspicuously dark brown, this color including the prearcular field, base and costal portion of cell R, all of cells R_1 , Sc_2 and R_2 , and all of cell R_3 excepting a pale spot at near one-third the length; clearer yellow areas in bases of Anal cells, near outer end of cell M, and in the ground-areas of the outer radial field; veins brown. Venation: R_{1+2} entire; Rs shorter than R_{2+3} ; anterior cord very oblique; petiole of cell M_1 nearly twice m; m-cu at fork of M_{3+4} ; cell 2nd A narrow.

Abdominal tergites with a black median line that expands on the posterior borders of the individual segments, the ground-color obscure yellow, more or less restricted to the lateral borders; hypopygium brownish black; sternites with the basal portions reddish brown, the outer borders black.

Holotype, &, Campo Bello, December 18, 1931 (Zi-kán). Paratopotype, &, November 17, 1931 (Zikán).

The only approximately similar species is Habromastix lemniscata Alexander, likewise from the State of Rio de Janeiro. The present fly differs notably in the much longer antennae of the male, with long, conspicuous, erect, black setae distributed throughout the length of the segments, and also in the distinct wing-pattern.

Habromastix nigroabdominalis, sp. n.

General coloration uniformly pale brown, the praescutum with three more grayish stripes; antennae (\mathcal{S}) nearly as long as the body; legs unusually long and slender, especially the tarsi; wings almost uniformly tinged with pale brown, cell Sc and the stigma darker brown; abdominal tergites black, only the terminal two segments orange.

Male. — Length, about 12 mm.; wing, 11.5 mm.; antenna, about 11 mm.

Female. — Length, about 14 mm.; wing, 125 mm.

Frontal prolongation of head pale testaceous brown; nasus distinct; palpi pale brown. Antennae of male nearly as long as body, of female much shorter, if bent backward extending about to wing-root; scape and pedicel yellow, flagellum black; flagellar segments with abundant short white pubescence and scattered erect secund verticils, on the intermediate segments there being about five such setae to a single segment. Head brownish gray, the front and narrow orbits clearer gray.

Mesonotum almost uniformly brown, the three praescutal stripes a trifle more grayish but appearing very indistinct against the ground. Pleura pale yellow. Halteres relatively long, yellow, the knobs infuscated. Legs long and slender, especially the tarsi which are only a little shorter than the combined femur and tibia; coxae and trochanters pale, remainder of legs pale brown, the outer tarsal segments passing into black; claws small and simple. Wings almost uniformly tinged with pale brown, cell Sc and the stigma slightly darker brown; veins brown. Squama naked; no macrotrichia on vein R_{1-2} , distal two-thirds of R_3 , M_{1+2} , or any of the veins behind M_1 , the latter with a scattered series on distal half. Venation: Rs a little longer than m-cu, the latter immediately beyond origin of vein M_4 ; cell 2nd A of moderate width.

Abdominal tergites one to seven uniformly black, the outer segments orange; basal two sternites obscure yellow, the remaining segments black.

Holotype, ♂, Campo Bello, December 26, 1931 (Zi-kán). Allotopotype, ♀, in copula with the type.

The nearest described ally appears to be Habromastix decolorata Alexander (Paraguay), which differs most evidently in the larger size and differently patterned abdomen. H. brasiliensis (Wiedemann), likewise from Brazil, seems similarly related but I have never seen an authentic specimen. Osten Sacken regarded the latter species as being an aberrant Nephrotoma (Pachyrrhina) but this particular group of Neotropical forms seems more closely allied to Habromastix, though deviating from the Australian genotype and allies in the presence of a nasus and in the structure of the ovipositor.

Tipula gutticellula, sp. n.

General coloration of thorax almost uniformly buffy, the praescutum with very vague indications of four slightly darker stripes; antennal flagellum bicolorous; femora yellow; wings subhyaline, the costal border dark brown; outer radial and medial cells with individual small brown dots and streaks in centers; *m-cu* very oblique; abdomen obscure yellow, the tergites blackened laterally; subterminal segments black; genitalia light yellow.

Female. — Length, about 13 mm.; wing, 11.5 mm.; antenna, 3 mm.

Frontal prolongation of head of moderate length; nasus short and stout; palpi obscure yellow. Antennae bicolorous, the basal four segments yellow, the succeeding segments brown basally, the distal end yellow, the degree of darkening increasing on the outer segments. Head buffy, the front and anterior vertex light gray; rather conspicuous black setae on posterior orbits.

Mesonotum and pleura almost uniformly buffy, the praescutum with vague indications of four very slightly darker stripes. Halteres obscure yellow, the knobs weakly darkened. Legs with the coxae buffy; trochanters obscure yellow; femora yellow throughout; tibiae yellow, the tips narrowly dark brown: tarsi brownish black; tibial spur formula 1-?-2 (middle legs broken); tarsi long and slender; claws simple. Wings with the ground-color subhyaline, cell C and the stigma dark brown; prearcular region, cell Sc, anterior border of cell R, and distal ends of cells R_2 to R_5 less strongly darkened; conspicuous individual brown dots and streaks in centers of cells R_5 , M_1 , 1st M_2 , 2nd M_2 , M_3 and outer end of cell M; base of Rs and posterior end of m-cu seamed with brown; veins brown. Squama naked; veins R_{1+2} , R_3 , and distal section of R_{4+5} with complete and conspicuous series of trichia; M_1 , M_2 and distal section of M_3 with less conspicuous series. Venation: Rs about one-third longer than the very long and oblique m-cu; R_{1+2} entire; cell M_1 ample; m-cu before midlength of M_{3+4} ; cell 2nd A wide.

Abdomen obscure yellow, the lateral borders black, on the fourth and succeeding segments becoming more extensive and including the caudal border; seventh and eighth segments black; genital segments light yellow. Ovipositor with cerci short and fleshy, the hypovalvae longer, with obtuse tips.

Holotype, ♀, Campo Bello, December 12, 1931 (Zi-kán).

The only close destribed allies are *Tipula parishi* Alexander, *T. smithi* Alexander, and probably *T. appendens* (Enderlein). All of these differ conspicuously from the present fly in the body-coloration and wing-pattern.

Holorusia zikáni, sp. n.

Mesonotal praescutum yellow, with four brownish gray stripes that are narrowly bordered by dark brown; mediotergite trivittate with brown; antennae pale yellow throughout; thoracic pleura yellow, striped longitudinally with dark brown, including the dorso-pleural membrane; legs yellow, the femora with a conspicuous, nearly apical, brown ring; wings yellowish, clouded with brown, especially the outer and posterior cells near the wing-margin; vein Cu bordered on basal third in cell Cu by brown; distal fourth of same vein similarly bordered in cell M; veins yellow.

Female. — Length, about 18 -- 20 mm.; wing, 17 — 20 mm.

Frontal prolongation of head brown; nasus conspicuous, simple; palpi black. Antennae yellow throughout; flagellar segments cylindrical. Head pale brown.

Mesonotal praescutum obscure yellow, the lateral borders broadly and conspicuously so; four brownish gray stripes that are narrowly bordered by dark brown, the lateral pair more conspicuously so; anterior ends of lateral and intermediate stripes inter-connected across the interspaces by a dusky area; a small brown spot on lateral border of praescutum just before suture; scutum with median area and median half of each lobe pale brown, the outer half of lobe dark gray, bordered by brown; scutellum gray, with a dusky median line; mediotergite gray pruinose, trivittate with darker, the lateral areas more extensive. Pleura yellow, with a ventral

and a dorsal brown stripe, separated across the dorsal sternopleurite by an area of the ground-color that is wider than either dark area; dorso-pleural region dark brown, bordered beneath by a narrow yellow line; ventral meral region darkened. Halteres yellow, the base of knob weakly darkened. Legs vellow, the femora with a conspicuous, nearly apical, brown ring; tibiae yellowish brown, the tips passing into darker brown; tarsi brownish black. Wings with the groundcolor yellowish, clouded with brown, more especially so in the cells beyond the level of origin of Rs, the veins very narrowly bordered by yellowish; vein Cu bordered on basal third in cell Cu by brown; distal fourth of same vein in cell M similarly bordered; darkened clouds in outer ends of all cells adjoining the margin, including most of cell 2nd A; veins yellow. Venation: Vein R_3 relatively short and strongly upcurved; Rs gently arcuated, subequal to R_{2+3} ; petiole of cell M_1 variable, subequal to or shorter than m_i ; *m-cu* at or shortly before fork of M_{3+4} .

Abdominal tergites reddish brown, the lateral borders narrowly light gray, bordered internally by a broken, darker brown line that is more extensively developed on the basal segments; caudal margins of tergites narrowly pale; sternites yellow, variegated laterally by darkened subterminal spots.

Holotype, ç, Campo Bello, November 22, 1933 (Zi-kán). Paratopotype, ç, March 31, 1929 (Zikán).

I take great pleasure in naming this very distinct *Holorusia* in honor of the collector, Mr. F. Zikán. The fly is very different from all other described members of the genus, being most generally similar to *Holorusia cellata* (Enderlein) of this same general region. The pattern of the wing is very distinctive.

Limonia (Rhipidia) flabelliformis brachynema, subsp. n.

Very closely related to typical *flabelliformis* Alexander (Northern Panama), differing especially in the shorter branches of the antennal flagellum, the longest being approximately one-fourth the length of the organ.

Holotype, ♂, Campo Bello, October 4, 1932 (Zi-kán).

Hexatoma (Eriocera) perrara, sp. n.

Mesonotum black, the praescutum velvety-black with three polished nacreous stripes that are confluent behind; antennae

yellow, the terminal three segments darkened; head fiery orange above; legs with femora yellow, the distal sixth abruptly black; wings dark brown, handsomely variegated by yellow, including the anterior prearcular field; a narrow band completely crossing the wing at the cord; a large area in cells R and M before origin of Rs and the extensive basal portions of cell $Ist\ A$; macrotrichia of veins very sparse; abdomen with tergites black, segments two to four with their bases narrowly yellow; genital shield orange; cerci brownish black.

Female. — Length, about 17 mm.; wing, 13 mm.

Rostrum yellowish brown; palpi with basal segment brown, the succeding segments black. Antennae yellow, the terminal three segments darkened; 10-segmented, the segments gradually decreasing in length to the penultimate, the terminal segment again longer. Head above fiery orange, beneath more liver-brown; vertical tubercle broad, minutely notched in middle.

Pronotum black. Mesonotal praescutum velvety-black, with three polished nacreous stripes that are entirely confluent behind; posterior sclerites of mesonotum chiefly nacreous black. Pleura black. Halteres black. Legs with the coxae and trochanters black; femora vellow, the tips narrowly (about the distal sixth) and abruptly black, the amount subequal on all legs; tibiae vellowish brown, the extreme base and apex blackened; basitarsi dark brown, the remainder of tarsi black. Wings dark brown, handsomely variegated by yellow; anterior prearcular field brighter yellow; a narrow, complete, paler yellow band entirely crossing wing at and on either side of cord; a large pale area before origin Rs in cells R and M; almost all of cell 1st Asimilarly pale yellow; cells C and Sc brown, interrupting the yellow of the prearcular field and the cross fascia; veins brown, clear yellow in the flavous areas. Macrotrichia of veins very sparse, lacking on veins R_3 , R_4 and veins M, Cuand A; a very restricted series on outer section of vein R_5 . Venation: Sc_1 much longer than Sc_2 ; R_3 a little less than twothirds Rs; m-cu at near one-third the length of cell 1st M_2 , a little longer than the distal section of Cu_1 .

Abdomen with tergites black, segments two to four, inclusive, with less than the proximal half yellow; genital shield elongate, fiery-orange; cerci brownish black; sternites with

basal segments obscure yellow, the incisures narrowly darker; subterminal segments entirely black.

Holotype, ♀, Campo Bello, March 25, 1934 (Zikán).

The most similar described species is Hexatoma (Eriocera) jurata Alexander, which differs conspicuously in the coloration on the body and legs, and in the details of the wing-pattern. H. (E.) nigrochalybea (Alexander), which bears a general resemblance to the present fly, is well-distinguished by the presence of abundant macrotrichia on the longitudinal veins beyond the cord.

Hexatoma (Eriocera) vittinervis, sp. n.

Mesonotum black, the praescutum with the ground-color yellow pollinose, with three very conspicuous black stripes; head fiery orange; femora obscure yellow, the tips narrowly blackened, and with a more or less distinct median dark ring, wider and more conspicuous on fore legs; wings yellow, the veins conspicuously bordered by brown to produce a vittate appearance; macrotrichia of veins very reduced; abdomen black, tergites two to four with the basal portion yellowish; genital segments orange.

Male. — Length, about 12 mm.; wing, 11 mm.

Female. — Length, about 15 mm.: wing, 11.5 mm.

Rostrum and palpi brownish black. Antennae with basal four segments yellow, the outer segments brownish black; 7-segmented in male, 10-segmented in female. Head fiery orange; vertical tubercle broad, with a shallow V-shaped median notch.

Pronotum brownish black. Mesonotal praescutum with the ground-color yellow pollinose, with three very conspicuous, opaque, black stripes, the interspaces behind more grayish; posterior sclerites of notum, including the suture, black, the surface, especially the median area of scutum, gray pruinose. Pleura black, gray pruinose. Halteres obscure brownish yellow, the knobs black. Legs with the coxae black, gray pruinose; trochanters brownish black; fore femora chiefly black, the base and a narrow subterminal ring obscure reddish yellow; remaining femora yellow, the tips narrowly and conspicuously black, with a more or less distinct darkened annulus at near midlength of the segment, especially on upper surface; tibiae obscure yellowish brown to brown, the tips darker; tarsi brownish black. Wings with the ground-color yellow,

the anterior prearcular field and cell Sc clearer yellow; cell C weakly infumed; longitudinal veins and cell Sc bordered by conspicuous brown seams, greatly restricting the ground-color in the cells beyond cord; cells R_1 , R, outer end of M and more than the basal half of 1st A of the yellow ground-color; veins dark brown, yellow in the ground areas. Macrotrichia of veins very reduced, beyond the cord with only a scattered series of about 12 to 14 scattered over the entire length of the distal section of R_5 . Venation: R_2 perpendicular to a little oblique in position, subequal to R_{2+3} ; basal section of vein R_5 nearly in longitudinal alignment with the outer section; m-cu at near one-third to one-fourth the length of cell 1st M_2 , subequal to the distal section of Cu_1 .

Abdomen black, tergites two to four with about the basal half more yellowish and nacreous; subterminal segments intensely black; genitalia in both sexes orange, more obscure in female; cerci elongate, brownish black.

Holotype, &, Campo Bello, March 2, 1933 (Zikán). Allotopotype, φ, in copula with type. Paratopotype, φ, March 11, 1932 (Zikán).

The only approximately similar regional species is *Hexatoma* (Eriocera) myrtea (Alexander), likewise from Brazil, which differs especially in the liver-brown coloration of the thorax and abdomen, the brown antennae, and the much less contrasted pattern of the wings.

Sigmatomera varicornis, sp. n.

General coloration of thorax deep ferruginous, the praescutum darker laterally; antennae (σ) with flagellar segments bicolorous, black, the distal portion of each segment light yellow; flagellar segments only moderately incised; femora narrowly darkened at and immediately before tips; wings clear light yellow, with a restricted dark brown pattern; supernumerary crossveins at near midlength of cells R_3 and R_4 ; m-cu close to fork of M; abdomen deep reddish brown, the outer segments and hypopygium even darker colored.

Male. — Length, about 11 mm.; wing, 11.5 mm.; antenna, about 6 mm.

Rostrum pale brownish yellow; palpi yellow. Antennae (o') with flagellar segments weakly binodose, the condition not nearly as accentuated as in the same sex of shannonianu; scape yellow; pedicel brownish black; flagellar segments black,

the greater portion of the distal lobe of each segment light yellow, producing a bicolorous appearance. Head dull yellow.

Pronotum obscure vellow. Mesonotal praescutum nitidous. chiefly deep ferruginous, the humeral and lateral portions more infuscated; posterior sclerites of mesonotum deep ferruginous. Propleura yellow, the meso and metapleural sclerites much darker, especially the anepisternum, pteropleurite and pleurotergite. Halteres pale yellow. Legs with the fore coxae light yellow, middle and hind coxae darker; trochanters vellow; femora yellow, narrowly darkened at or slightly before tip; tibiae yellow, the tips narrowly infuscated; tarsi brownish yellow, the outer two segments darker. Wings clear light yellow, the prearcular and costal regions clear buttervellow; a restricted dark brown pattern, including spots at arculus, origin of Rs, Sc₂, and narrow dark seams along cord, outer end of cell 1st M_2 and the supernumerary crossveins in the outer radial cells; all veins yellow, except where traversing the darkened areas. Venation: R_{2+3+4} unusually complicated by angles and spurs, in addition to the ordinary spur into cell R_1 there being a second shorter one immediately caudad, jutting into cell 1st R_1 ; supernumerary crossveins in cells R_3 and R_4 (and in the left wing of type in cell R_5 also) at near midlength of the cells; cell 1st M_2 closed; m-cu close to fork of M.

Abdomen deep reddish brown, the outer segments and hypopygium still darker brown.

Holotype, ♂, Campo Bello, December 5, 1931 (Zi-kán).

By my most recent key tho the species of Sigmatomera (Encyclopédie Entomologique, Diptera, 5: 3 — 4; 1930), the present fly runs to S. shannoniana Alexander (Brasil: Bahia) by the presence of a supernumerary crossvein in cell R_3 . The present fly is very distinct in the much less strongly nodose, bicolorous, flagellar segments of the male sex, the presence of a supernumerary crossvein in cell R_4 , m-cu close to the fork of M, the darkened femoral tips, and marked differences in the wing-veins, most of the longitudinal veins being darkened in shannoniana, clear yellow and infuscated only in the restricted darkened areas in varicornis.

Teucholabis (Teucholabis) invaripes, sp. n.

Mesonotal praescutum deep reddish yellow, with three extensive, polished black stripes; prothorax yellow; legs obscure yellow, the terminal tarsal segments darkened; wings

broad, widest opposite cell 1st A, uniformly pale yellow, the stigma conspicuous, dark brown; abdominal segments weakly dimidiate, black, the outer portions obscure yellow; male hypopygium with the spine on mesal face of basistyle very long and slender, terminating in an acute point, before which are several microscopic appressed spinulae.

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

Rostrum brownish black, exceeding one-half the remainder of head; palpi black. Antennae black throughout. Head black, the surface very sparsely pruinose.

Prothorax yellow. Mesonotal praescutum deep reddish yellow, polished, the surface virtually covered by three intense black stripes; scutal lobes similarly blackened, the median area paler; scutellum black, the posterior border paler; mediotergite black, the cephalic fourth paler. Mesopleura black, with a paler, silvery gray, longitudinal stripe extending across the dorsal sternopleurite, from the fore coxae to the base of abdomen; meral region pale. Halteres dusky, the knobs yellow. Legs with the coxae and trochanters obscure yellow; remainder of legs obscure yellow, the terminal tarsal segments darkened; each claw with long basal spine. Wings broad, uniformly pale yellow, the stigma dark brown, conspicuous, subcircular in outline; veins yellowish brown; wings widest opposite cell 1st A, the margin of this cell protruding caudad beyond the level of the other cells. Venation: Sc_1 extending to near midlength of Rs, Sc2 at about mid-distance between origin of Rs and tip of Sc_1 ; R_2 about one-third its length beyond the fork of Rs; veins R_4 and R_5 extending nearly parallel to one another to just before outer end, cell R_2 being nearly three times as extensive at magnin as is cell R_4 ; cell 1st M_2 closed; m shorter than basal section of M_3 ; m-cu at or just beyond fork of M.

Abdominal segments weakly dimidiate, black, the outer portions obscure yellow; hypopygium darkened. Male hypopygium with basistyle unarmed at apex; spine on mesal face very long and slender, terminating in an acute point, immediately before which are several microscopic appressed spinulae. Outer dististyle a similar long slender arm, the basal fourth dilated, the outer portion long and slender, the tip acute. Inner dististyle entirely blackened, the apex subequally bispinous.

Holotype, ♂, Campo Bello, December 31, 1931 (Zi-kán).

The most generally similar species are *Teucholabis* (*Teucholabis*) dedecora Alexander and *T. (T) lugubris* Alexander, both of which have the male hypopygium of entirely different structure.

Molophilus (Eumolophilus) angustior, sp. n.

General coloration grayish brown, the pleura clearer brown; wings relatively narrow; male hypopygium with the arms of the phallosome provided with erect setae and stout spines on a little less than the apical half of each arm.

Male. — Length, about 3.6 mm.; wing, 4.6×1.1 mm. Rostrum and palpi brown. Antennae (3) elongate, only a little shorter than the body, nodulose; flagellar segments dark brown, with long outspreading verticils; apical pedicels paler. Head grayish brown.

Mesonotum grayish brown, the pleura clearer brown. Halteres dark brown. Legs with the coxae and trochanters yellow; remainder of legs brown, the white setae of the fore basitarsi greatly reduced; posterior legs with sparse white setae at genua and on the outer tarsal segments. Setal fans of posterior tibiae and basitarsi large and conspicuous, fully as developed as in *pennipes*. Wings much narrower than in *pennipes*, as shown by the above measurements; whitish, the veins and trichia dark brown; prearcular region restrictedly whitish. Venation: Cells correspondingly narrower than in *pennipes*.

Abdomen dark brown. Male hypopygium with the arms of the phallosome stouter than in *pennipes*, with abundant setae and erect spines on a little less than the apical half of each arm; in *pennipes*, these spines are more restricted to a little more than the distal third of each arm.

Holotype, ♂, Campo Bello, November 3, 1927 (Zi-kán).

Molophilus (Eumolophilus) augustior is closest to M. (E.) pennipes Alexander (Brazil: Amazonas), which differs especially in the darker colaration of the entire body, slightly wider wings, and in slight details of the male hypopygium, especially of the phallosome.

Toxorhina (Ceratocheilus) maculipennis, sp. n.

General coloration gray, the praescutum with three brown stripes; pleura striped longitudinally with brown and yellow; legs brown, the tarsi darker; wings grayish subhyaline, patterned with brown along vein Cu and on anterior cord; anterior branch of Rs long, approximately three times as long as Rs alone; cell $Ist\ M_2$ closed; abdominal segments bicolorous, obscure yellow, the caudal fourth of the individual segments brownish black.

Male. — Length, excluding rostrum, about 7 mm.; wing, 7 mm.; rostrum alone, about 7.5 mm.

Rostrum dark brown. Antennae black throughout. Head gray.

Mesonotum brownish gray, the praescutum with three darker brown stripes; median region of scutum yellow, the lobes conspicuously dark brown; scutellum obscure yellow; mediotergite dark brown. Pleura chiefly dark brown, with a conspicuous yellowish longitudinal stripe, extending from behind the fore coxae, passing beneath the root of the halteres. Halteres yellow. Legs with the coxae pale; middle coxae more or less darkened basally; trochanters brown; remainder of legs uniformly brown, the outer tarsal segments black. Wings grayish subhyaline, the prearcular and costal fields clearer yellow; a brownish wash along basal half of vein Cu and a broader and more conspicuous similar darkening on and adjoining r-m and the fork of M, narrower and less evident on Rs and basal section of R5; veins brown. Venation: Sc_1 ending beyond one-third the length of Rs, Sc_2 opposite the origin of the latter; anterior branch of Rs long, exceeding three-fourths the distal section of R_5 and approximately three times Rs; cell 1st M2 closed; m-cu at fork of M; approximation of veins Cu and 1st A on their basal portions less pronounced than in most species of the genus.

Abdominal segments conspicuously bicolorous, obscure yellow, the caudal fourth of the individual segments brownish black. Male hypopygium with a slender apical spine on mesal face of basistyle, the tip acute. Dististyle bilobed, the outer arm shorter, terminating in an obtuse blackened head, the inner arm nearly twice as long, slightly dilated and conspicuously setose at base, the distal one-half to three-fifths appearing as a gently curved blade that gradually narrows to the

outer end, the apex with microscopic setae. Arms of aedeagus of moderate length.

Holotype, &, Campo Bello, March 9, 1931 (Zi-kán); at light, associated with *Helius (Helius) rubicundus* Alexander and *Toxorhina (Toxorhina) mendosa* Alexander.

The present fly is very different from the other described Neotropical species of *Ceratocheilus*, *americana* Alexander and *niveitarsis* Alexander, in the distinctly patterned wings. The venation of the radial field is more as in *niveitarsis* than in the more isolated *americana*.