

RECORDS AND DESCRIPTIONS OF NEOTROPICAL
CRANE-FLIES (TIPULIDÆ, DIPTERA), XXVIII

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The preceding part under this general title was published in the Journal of the New York Entomological Society, 61: 147-157; 1953. At this time I am considering a series of Tipulidæ that were taken at El Limbo, in the Yungas del Palmar, Province of Chapare, Department of Cochabamba, Bolivia, at a general altitude of 2,000 meters, in March 1953. This important series of crane-flies was received from Mr. Alberto F. Prosen, to whom I express my sincere appreciation. The types of the novelties are preserved in my personal collection.

Besides the Tipulidæ herein described as new, a considerable number of additional species were included, with the same data as given above. Most of these were known previously only from Ecuador and Peru and provided marked extensions of range.

Tipula (Eumicrotipula) conspicillata Alex.

Limonia (Limonia) bimucronata Alex.

L. (L.) *brachyacantha* Alex.

L. (*Dicranomyia*) *labecula* Alex.

L. (D.) *subandicola* Alex.

L. (*Geranomyia*) *aequalis* Alex.

L. (G.) *carunculata manabiana* Alex.

L. (G.) *stoica* Alex.

Shannonomyia sopora Alex.

Atarba (Ischnotrix) obrusiloba Alex.

A. (*Atarba*) *macracantha* Alex.

A. (A.) *scabrosa* Alex.

Elephantomyia (Elephantomyia) boliviensis Alex.

Teucholabis (Teucholabis) ducalis Alex.

Gonomyia (Paralipophleps) heteromera Alex.

G. (*Lipophleps*) *projecta* Alex.

G. (L.) *senaria* Alex.

Erioptera (Empeda) austronymphica Alex.

- E. E. boliviana* Alex.
E. E. percipida Alex.
E. (Erioptera) andina Alex.
E. E. multiannulata Alex.
E. E. urania Alex.
Molophilus (Molophilus) piger Alex.
M. (M.) tucumanus Alex.

Genus *Tipula* Linnæus

Tipula (Eumicrotipula) longurioides new species

Belongs to the *glaphyroptera* group; general coloration of præscutum yellow, subnitidous, with three reddish brown stripes; a conspicuous brown spot on the pretergite beneath the humeri; antennæ very short; femora obscure yellow, darker outwardly, with a vague darker nearly terminal ring; wings weakly tinged with brown, almost unpatterned; cells *C* and *Sc*, with the stigma, darker brown; vein R_{1+2} entirely atrophied; abdomen black, the basal segments and the hypopygium yellowed; male hypopygium with the posterior border of tergite produced into a short median point; gonapophysis very large and conspicuous; eighth sternite unarmed.

Male. Length about 12 mm.; wing 14 mm.; antenna about 2.4 mm.

Female. Length about 11.5 mm.; wing 14 mm.; antenna about 2 mm.

Frontal prolongation of head yellow; nasus very short; basal three segments of palpi yellow, the terminal one abruptly black. Antennæ unusually short in both sexes; basal three segments yellow, the remainder black; flagellar segments subcylindrical, with poorly developed basal enlargements; verticils much shorter than the segments; terminal segment very reduced. Head buffy; vertical tubercle low.

Pronotum obscure yellow, restrictedly patterned with darker medially and on sides. Mesonotal præscutum yellow with three reddish brown to brown stripes, the surface subnitidous; a very conspicuous black spot on the pretergites opposite the humeral region of the præscutum; posterior sclerites of notum yellow, patterned with more reddish brown, including the scutal lobes, scutellum and central line of the mediotergite. Pleura and pleurotergite more opaque yellow; a very small black dot on dorsal anepisternum before the wing-root. Halteres with stem pale brown, knob obscure brownish yellow. Legs with the coxæ and trochanters obscure yellow; femora obscure yellow, more infuscated outwardly, with a vague darker nearly terminal ring; tibiæ and tarsi more reddish brown, the outer tarsal segments darker; claws (male) simple. Wings with a weak brownish tinge, cells *C* and *Sc*, with the stigma,

darker brown; small and vague darkenings at origin of R_5 , cord and outer end of vein Cu ; obliterative areas before stigma and across cell $1st\ M_2$ restricted and inconspicuous; veins brown. Venation: R_{1+2} entirely atrophied; petiole of cell M_1 about one-half longer than m ; basal section of vein M_1 perpendicular.

Basal abdominal segments broadly yellow laterally, the tergites with a conspicuous blackened central stripe, the fourth and succeeding segments black; hypopygium light yellow. Male hypopygium with the tergite transverse, its posterior border broadly emarginate, the median area produced into a small carinate blade; lateral angles narrowly produced into longer points. Basistyle small, unproduced, its lobes reduced and inconspicuous. Outer dististyle a weak club with relatively few long setæ. Inner dististyle with the beak and lower beak conspicuous, the latter smaller and more blackened; setæ of dorsal region long but scattered and relatively few in number. Gonapophysis very conspicuous, appearing as a broadly flattened obtuse blade, with a smaller inner one that narrows outwardly, bidentate at extreme tip. Eighth sternite unarmed, the posterior border pale and very shallowly emarginate.

Holotype, ♂, El Limbo, Cochabamba, 2000 meters, March 1953.

Allotopotype, ♀.

The present fly is quite distinct in the coloration, venation and structure of the male hypopygium. It is most similar to species such as *Tipula* (*Eumicrotipula*) *flavidula* Alexander but quite distinct in the coloration, wing pattern, and details of structure of the male hypopygium.

Genus *Limonia* Meigen

Limonia (*Rhipidia*) *proseni* new species

General coloration of mesonotum light brown, pleura with a broad darker brown longitudinal stripe; antenna (male) unipectinate, black throughout except for the pale apical pedicels of the segments; femora obscure yellow, pale brown outwardly, most extensively so on the fore legs; wings faintly infuscated, with a restricted darker brown pattern; Sc_1 ending just before midlength of R_5 ; cell $1st\ M_2$ long-rectangular; $m-cu$ shortly before fork of M ; male hypopygium with two short rostral spines.

Male. Length about 6.5 mm.; wing 7 mm.

Rostrum black, relatively long, about one-half the remainder of head; palpi black. Antennæ black, the glabrous apical pedicels of the flagellar segments obscure yellow; flagellar segments unipectinate, the longest branches nearly as long as the segments; penultimate segment vaguely produced, darkened except for the apical stem, shorter than the terminal segment. Head light brown; anterior vertex reduced to a capillary line.

Pronotum dark brown. Mesonotal præscutum almost uniformly light brown, without clearly defined stripes, the sides paler; scutal lobes light brown; remainder of notum more testaceous yellow. Pleura with a broad diffuse darker brown longitudinal stripe, the ventral pleurites yellow. Halteres with stem pale yellow, knob weakly darkened. Legs with coxæ and trochanters testaceous yellow, the fore coxæ darker; femora obscure yellow, the tips passing into pale brown, most extensive on the fore legs, very narrow on the hind pair; tibiæ and tarsi pale brown, the outer tarsal segments darker. Wings faintly infuscated, with a restricted darker brown pattern, arranged much as in *domestica* and allies; small spots at near midlength of cell Sc , origin of R_s and fork of Sc ; cord and outer end of cell $1st M_s$; stigma ringed with pale brown, the center pale; a dusky streak in cell R_2 beyond stigma, with scarcely indicated similar darkenings in cells R_3 and R_4 ; broad but diffuse dusky clouds in cell R adjoining vein M and in base of cell $1st A$; veins pale brown, darker in the patterned areas. Venation: Sc relatively long, Sc_1 ending shortly before midlength of R_1 , Sc_2 close to its tip; cell $1st M_2$ long-rectangular, nearly equal to the distal section of vein M_3 ; *m-cu* about one-fifth its length before the fork of M .

Abdomen dark brown, including the hypopygium, the basal sternites a trifle paler. Male hypopygium with the tergite semicircular in outline, the posterior border broadly rounded; setæ relatively few, marginal. Basistyle with the ventromesal lobe relatively large, with a small accessory lobule near base. Dorsal dististyle a stout rod, strongly curved on outer half, suddenly narrowed into a terminal spine. Ventral dististyle fleshy, its area approximately three times that of the basistyle; rostral prolongation stout, with two short spines that are not quite as long as the prolongation beyond their insertion. Gonapophysis with mesal-apical lobe black, nearly straight, the narrowed tip a little curved.

Holotype, ♂, El Limbo, Cochabamba, 2000 meters, March 1953.

Limonia (Rhipidia) proseni is dedicated to Señor Alberto F. Prosen. It is most similar to species such as *L. (R.) sycophanta* Alexander and *L. (R.) thysbe* Alexander, differing in the coloration, venation, and slight details of the male hypopygium.

Limonia (Geranomyia) neanthina new species

Generally similar to *anthina* and *glauca*; size relatively small (wing under 8 mm.); general coloration greenish yellow, the præscutum with a broad reddish brown central stripe; femora with two blackened rings, the narrower one subterminal; wings pale yellow, with a conspicuous brown pattern; male hypopygium with the notch of the tergite very deep and narrow, the lobes conspicuous; rostral spines straight, from a small common basal tubercle.

Male. Length, excluding rostrum, about 6 mm.; wing 7.5 mm.; rostrum about 4 mm.

Female. Length, excluding rostrum, about 6.5 mm.; wing 7.6 — 7.8 mm.; rostrum about 4 mm.

Rostrum black throughout, long in both sexes, exceeding one-half the wing. Antennæ black; flagellar segments oval with short verticils. Head above black, with a narrow buffy gray central line over the entire vertex.

Pronotum reddish brown, paling to greenish yellow on sides. Mesonotal præscutum with a broad median reddish brown stripe, the lateral borders less evidently darkened, leaving broad pale green intermediate areas between the stripes; posterior sclerites of notum strongly greenish, the centers of the scutal lobes darkened. Pleura and pleurotergite greenish, presumably fading to yellow in long dead specimens. Halteres with stem pale green, knobs infuscated. Legs with the coxæ and trochanters pale green; femora on proximal half chiefly blackened, the bases yellowed, least extensive on fore legs, more broadly so on the middle and posterior pairs; outer half or less yellow, enclosing a second blackened ring that is subequal to the yellow annuli before and beyond it; tibiæ dark brown or blackened, the bases yellowed; tarsi light brown, the outer segments black. Wings tinged with yellow, the prearcular and costal fields more saturated; a relatively heavy brown pattern, as follows: Bases of cells *R* and *M*; supernumerary crossvein in cell *Sc*; origin of *R*₅; fork of *Sc*; stigma, confluent with a complete band at cord; outer end of cell *1st M*₂; marginal clouds at ends of longitudinal veins, largest over the Anals; a restricted heavy darkening at midlength of cell *2nd A*; veins light yellow, infuscated in the patterned areas. Venation: *Sc* long, *Sc*₁ ending about opposite midlength of *R*₅, *Sc*₂ near its tip; *r-m* reduced by approximation of adjacent veins; cell *1st M*₂ subequal in length to distal section of vein *M*₁₊₂.

Abdomen pale brown, strongly suffused with green, including the hypopygium. Male hypopygium with the tergite narrowed posteriorly, the caudal border with a deep and narrow notch, the lobes obtuse, conspicuous. Ninth sternite broadly semioval, with numerous rather short setæ that are well-distributed over the surface. Dorsal dististyle a gently curved rod that narrows to the long straight terminal spine. Ventral dististyle large and fleshy, its area exceeding four times that of the basistyle; rostral prolongation moderately long, with two straight spines that exceed the prolongation, placed close together at summit of a low common tubercle. Gonapophysis pale, the mesal-apical lobe relatively slender, without a lateral flange, gently curved to the acute tip. Aedeagus relatively broad, glabrous, terminating in two very large apical flaps, their apices obtuse.

Holotype, ♂, El Limbo, Cochabamba, 2000 meters, March 1953.

Allotopotype, ♀. Paratopotypes, 2 ♀ ♀.

The most similar described species is *Limonia (Geranomyia) anthina* Alexander, of Peru, which differs in the larger size, details of coloration, and in the structure of the male hypopygium.

Genus *Orimarga* Osten Sacken

Orimarga (Orimarga) subcostata new species

Size relatively small (wing, female, about 5.5 mm.); general coloration gray, the præscutum with three vaguely darker stripes; intermediate flagellar segments nearly globular; legs obscure yellow, the outer tarsal segments darkened; wings with a weak brownish tinge; *Sc* very long, *Sc*₁ ending beyond three-fourths the length of *R*₅; *R*₂ longer than *R*₁₊₂; basal section of *R*₄₊₅ short, suberect at origin; *m-cu* nearly three times its length before fork of *M*.

Female. Length about 6 mm.; wing 5.6 mm.

Rostrum and palpi brownish black, the former about one-third the remainder of head. Antennæ very pale brown, the pedicel brighter; intermediate flagellar segments nearly globular, with inconspicuous vestiture; outer segments passing into oval. Head light gray; anterior vertex about three times the diameter of scape.

Thoracic dorsum gray, the præscutum with three scarcely indicated brownish gray stripes; scutal lobes faintly brownish gray. Pleura infuscated dorsally, more brownish yellow below. Halteres obscure yellow. Legs with the coxæ and trochanters testaceous yellow; remainder of legs brownish yellow to obscure yellow, the outer tarsal segments darkened. Wings with a weak brownish tinge, the prearcular and costal fields more whitened; veins very pale brown, more yellowed at the wing base. Anterior branch of *R*₅ without macrotrichia; veins *R*₄₊₅, *M*₁₊₂, *M*₃ and *M*₄ with trichia. Venation: *Sc* very long, *Sc*₁ ending beyond three-fourths the length of *R*₅, *Sc*₂ some distance from its tip, with no indication of the free tip of *Sc*₂; *R*₅ angulated at origin, long, about equal to the distal section of vein *R*₄₊₅; *R*₁₊₂ shorter than *R*₂; *m-cu* nearly three times its length before fork of *M*, about opposite *Sc*₂; basal section of vein *R*₄₊₅ short, suberect at origin, about in alignment with fork of *M*; cell *M*₃ longer than its petiole. In one wing of type, vein *R*₂ entirely atrophied.

Abdomen dark brown, including the genital shield; cerci short, slightly upcurved, horn-yellow, the tips ending almost on a level with those of the hypovalvae.

Holotype, ♀, El Limbo, Cochabamba, 2000 meters, March 1953.

Orimarga (Orimarga) subcostata is quite distinct from all other described regional species in the venation, particularly the combination

of very long *Sc* and short R_{1+2} . In general, it is closest to species such as *O. (O.) dampfi* Alexander, yet quite distinct in the features listed.

Genus *Atarba* Osten Sacken

Atarba (Ischnothrix) rectangularis new species

General coloration of thorax buffy; antennæ (male) elongate, approximately equal to the body, the flagellar segments with a long outspreading pubescence; wings tinged with brown, the long-oval stigma darker brown; vein R_3 short, oblique, *m-cu* beyond midlength of cell 1st M_2 ; abdominal segments bicolored, especially the sternites; male hypopygium with the median area of the posterior border of the eighth sternite produced into a long parallel-sided lobe, the ninth sternite into two strong horns; aedeagus small and weak.

Male. Length about 6 — 6.2 mm.; wing 6.6 — 7 mm.; antenna about 6.3 — 6.4 mm.

Rostrum obscure yellow; palpi dark brown. Antennæ (male) very long, approximately equal to the body; scape and pedicel light yellow, flagellum dark brown; flagellar segments very long-cylindrical, with abundant erect white pubescence, this three or four times as long as the diameter of the segment. Head light brown.

Thoracic dorsum buffy, without a distinct pattern; scutellum and postnotum darker, pruinose. Halteres with stem pale, knob weakly darkened. Legs with the coxæ pale, the fore pair darker in front; trochanters pale yellow; remainder of legs light brown, the outer tarsal segments blackened. Wings tinged with brown, the long-oval stigma darker brown; veins dark brown. Venation: *Sc* relatively long, Sc_1 ending beyond midlength of R_3 , Sc_2 a short distance from its tip; vein R_3 short, oblique, subequal to the distance on margin between it and the tip of R_{1+2} ; *m-cu* beyond midlength of cell 1st M_2 .

Abdominal tergites brown, the posterior borders more yellowed; sternites bicolored, yellow, with a darkened ring at near midlength of each; subterminal segments dark brown, forming a conspicuous ring; basistyles of hypopygium light yellow. Male hypopygium with the posterior border of the eighth sternite produced into a long parallel-sided lobe, its apex truncate, the length about two and one-half times its width. Ninth sternite produced into two stout yellow horns that are only slightly divergent, narrowed to the acute tips. Basistyle elongate, without mesal lobes. Outer dististyle slender, gently curved toward apex, with a series of about a score of appressed spines, the outer ones longer; inner style a little longer, dark colored. Aedeagus slender, unusually small and weak.

Holotype. ♂, El Limbo, Cochabamba, 2000 meters, March 1953.

Paratopotype, ♂.

This fly is most similar to species such as *Atarba* (*Ischnothrix*) *capitella* Alexander and *A. (I.) digitifera* Alexander, differing from all in the structure of the male hypopygium, especially the nature of the lobe of the eighth sternite. The paratype is much darker, with slightly different venation, yet seems to be conspecific.

Genus *Teucholabis* Osten Sacken

Teucholabis (*Teucholabis*) *analis* new species

General coloration of entire body polished black, the pronotal scutellum, an area at center of the suture and the mesonotal scutellum yellow; antennæ and legs entirely black; halteres black, the knobs orange; posterior tibiæ and basitarsi weakly dilated; wings whitish, restrictedly patterned with brown, including the cord and wing tip; basad of cord with no dark areas except at end of vein *2nd A*; *Sc* relatively long, *Sc*₁ ending about opposite two-fifths *R*₁, the branches of the latter parallel to one another; sternal pocket of fifth segment conspicuous.

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

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

Rostrum, palpi and antennæ black, the flagellar segments subglobular. Head black.

Thorax almost uniformly polished black, the pronotal scutellum and pretergites, a restricted median area at the suture, and the mesonotal scutellum light yellow. Pleura polished black, the dorsopleural membrane pale yellow. Halteres with stem black, the apex of knob orange. Legs entirely black, in male the posterior tibia before midlength and posterior basitarsus on proximal third slightly dilated. Wings whitish, rather restrictedly patterned with dark brown, including the stigma and a confluent band over the cord, outer end of cell *1st M*₂, and a weak cloud at end of *Sc*; wing tip rather broadly dark brown, leaving nearly the basal halves of cells *2nd M*₂ and *M*₃ pale, the dark pattern continued basad as a very narrow marginal seam to vein *Cu*; cell *Sc* dark; no darkening basad of cord except a single spot at end of vein *2nd A*; veins dark brown, more yellowed in the prearcular field. Venation: *Sc* relatively long, *Sc*₁ ending about opposite two-fifths *R*₁; *R*₂ only a little distad of level of cord, *R*₂₊₃₊₄ thus very short to virtually lacking; branches of *R*₁ extending parallel to one another for virtually their whole lengths.

Abdomen black throughout. Sternal pocket of fifth segment conspicuous, including a dense concentration on either side of a narrow longitudinal cleft, with coarser, inwardly-directed bristles on either side; on sternite six with a group of about twenty very long setæ on either side of a broad central area. Hypopygium lost.

Holotype, ♂, El Limbo, Cochabamba, 2000 meters, March 1953.

Allotopotype, ♀, pinned with type.

Teucholabis (*Teucholabis*) *analis* is most similar to species such as *T. (T.) cybele* new species and *T. (T.) decora* Alexander, differing in the coloration of the body and appendages, and in the distribution of the wing pattern.

Teucholabis (*Teucholabis*) *cybele* new species

Head and abdomen black; thorax variegated black, yellow and fulvous, præscutum black with a transverse fulvous band at midlength; a major black area on the mesepisternum; halteres black; legs black, the fore and middle femora broadly yellow basally; wings with the restricted ground pale yellow, heavily patterned with dark brown; pocket of fifth abdominal sternite in male an oval area of dense microscopic points; male hypopygium with the spine of basistyle short and straight; outer dististyle a flattened black blade, terminating in a black spine; inner dististyle a divided blade, the inner arm elongate, the beak terminating in two unequal spines.

Male. Length about 8 mm.; wing 8.5 mm.

Female. Length about 6.5 mm.; wing 7 mm.

Rostrum and palpi black, the former nearly as long as the remainder of head. Antennæ black throughout; flagellar segments oval to long-oval. Head black.

Pronotum yellow. Mesonotal præscutum black medially on anterior third, the posterior third uniformly black, the intermediate part fulvous, forming a broad crossband at near midlength; scutum black, the region of the suture more reddened; scutellum yellow; postnotum reddish. Pleura with the mesepisternum polished black, the propleura and mesepimeron yellow; meron black; dorsopleural region chiefly yellow. Halteres black throughout. Legs with all coxæ black; trochanters brownish yellow, darker beneath, the posterior pair more uniformly so; fore femora with the bases broadly yellow, the outer half or more black; middle femora with outer two-thirds black, the posterior femora entirely blackened; tibiæ and tarsi black; posterior basitarsi a trifle enlarged on proximal fourth. Wings with the restricted ground pale yellow,

the basal region more conspicuously flavous; a broad and conspicuous dark brown pattern, restricting the ground to the bases of the Anal cells, and X-shaped mark before cord, and an incomplete band beyond cord; veins dark brown, yellow in the brightened areas. Costal fringe (male) normal. Venation: Sc_1 ending shortly beyond midlength of R_s ; veins R_{1+2} and R_3 subequal; branches of R_s virtually parallel to one another for their entire lengths.

Abdomen black, the basal sternites restrictedly yellowed. Pocket of fifth sternite of male an oval area densely set with microscopic points; sixth sternite with a group of mesally directed setæ on either side of midline; seventh sternite with a few similar setæ, scarcely forming a pocket. Male hypopygium with the apical spine of basistyle short and straight. Outer dististyle a flattened black blade that terminates in a slightly curved black spine, the inner angle of the blade produced into a small point; style with numerous setæ, the outer ones large and conspicuous. Inner dististyle a blackened divided blade, the main body or beak terminating in two unequal spines, the posterior lobe elongate, bearing several strong setæ on its expanded outer end. Aedeagus with the apical spine longitudinal in position, almost in alignment with the main axis; two long setæ on outer part of aedeagus, with a group of about four others on the axis before the spine.

Holotype, ♂, El Limbo, Cochabamba, 2000 meters, March 1953.

Allotopotype, ♀, pinned with type. Paratopotypes, ♂ ♀.

Teucholabis (Teucholabis) cybele is most similar to *T. (T.) decora* Alexander, differing in the pattern of the wings and in all details of the male hypopygium.

Genus *Gnophomyia* Osten Sacken

Gnophomyia (Gnophomyia) toleranda new species

General coloration of mesonotum light brown, the præscutum with three darker brown stripes; posterior sclerites of notum dark brown, the apex of the scutellum broadly paler; femora yellow with a nearly terminal light brown ring; wings yellow, weakly patterned with darker, including brown seams over cord and outer end of cell *1st M*₂; vein R_2 at or very close to fork of R_{2+3+4} ; *m-cu* about its own length beyond the fork of *M*; abdominal tergites vaguely bicolored; male hypopygium with the posterior margin of the tergite long-produced medially; outer dististyle a relatively narrow flattened blade, its tip obtuse; phallosome blackened, the outer margin vaguely lobed.

Male. Length about 7 mm.; wing 7.5 mm.

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

Rostrum brown; palpi black. Antennæ dark brown, relatively long; flagellar segments passing through oval to long-oval. Head ochreous in front and behind, the vertex chiefly dark brown; anterior vertex broad, nearly twice the diameter of the scape.

Pronotum darkened medially, broadly light yellow on sides. Mesonotal præscutum with the ground light brown, with three darker brown stripes, the lateral borders somewhat more brightened; scutum dark brown; scutellum darkened medially, the apex broadly paler; postnotum dark brown. Pleura and pleurotergite dark brown dorsally, the ventral part broadly yellow. Halteres short, the stem infuscated, the large knobs yellow. Legs with the coxæ and trochanters yellow; femora yellow, with a nearly terminal light brown ring; tibiæ and tarsi yellow, the outer tarsal segments darkened. Wings with the proximal third weakly infuscated, the remainder of the ground more yellowed; a further vague brown pattern at origin of R_1 and more extensively along the outer end of vein Cu ; stigma and seams over the cord and outer end of cell $1st\ M_2$ darker brown; veins yellow in the ground, darker in the patterned areas. Venation: Sc long, Sc_1 ending shortly beyond R_2 , the latter at or very close to fork of R_{2+3+4} ; $r-m$ at fork of R_3 , vein R_3 being in direct longitudinal alignment with R_1 ; $m-cu$ about its own length beyond the fork of M ; cell $2nd\ A$ broad.

Abdominal tergites vaguely bicolored, reddish brown, the posterior and lateral borders darker brown; sternites more uniformly brownish yellow; hypopygium scarcely more brightened. Male hypopygium with the posterior border of the tergite long-produced medially. Basistyle short and stout. Outer dististyle a relatively narrow flattened blade, the narrowly darkened tip obtuse; inner dististyle with the outer part long-oval, with several long setæ. Phallosome a transverse blackened structure, its outer margin vaguely lobed. Aedeagus short.

Holotype, ♂, El Limbo, Cochabamba, 2000 meters, March 1953.

Allotopotype, ♀, pinned with type.

Gnophomyia (*Gnophomyia*) *toleranda* is most similar to species such as *G. (G.) argutula* Alexander, *G. (G.) duplex* Alexander, and *G. (G.) laticincta* Alexander, differing from all in the details of coloration, venation, and structure of the male hypopygium.

Genus *Molophilus* Curtis***Molophilus (Molophilus) sponsus* new species**

Belongs to the *plagiatus* group; general coloration of thorax reddish brown, the pleura with a conspicuous brownish black longitudinal stripe; antennæ short; male hypopygium with the beak of the basistyle slender, black; basal dististyle unequally bifid, the main axis a long gently curved spine, the inner arm shorter; phallosome an oval glabrous plate.

Male. Length about 3.7 — 4.2 mm.; wing 4.5 — 5 mm.; antenna, about 1.1 — 1.2 mm.

Rostrum dark brown; palpi black. Antennæ short; scape and pedicel light brown, flagellum black; flagellar segments subcylindrical to long-oval, with very long verticils. Head grayish white.

Pronotum and pretergites whitened. Mesonotal præscutum, scutum and scutellum reddish brown, the humeral region of the præscutum pale yellow; postnotum darker brown, its posterior end blackened. Pleura yellow, with a conspicuous brownish black longitudinal stripe extending from the cervical region to the postnotum, more or less interrupted on the propleura and pteropleurite. Halteres pale yellow. Legs with all coxæ and trochanters pale yellow; fore legs chiefly dark brown, remaining femora obscure yellow, the tips vaguely more darkened; tibiæ darkened; tarsi passing into black; glandular ring on fore tibia of male distinct. Wings pale yellow, the prearcular and costal regions more saturated; macrotrichia darker. Venation: R_2 lying distad of level of $r-m$; petiole of cell M_3 about twice $m-cu$; vein $2nd A$ elongate, gently arcuated, ending about opposite one-third the length of the petiole of cell M_3 .

Abdomen dark brown; hypopygium brownish yellow. Male hypopygium with the beak of the basistyle slender, black, the tip gently decurved. Outer dististyle with the unequal arms blackened, the stem horn-yellow. Basal dististyle unequally bifid, the main axis a long gently curved spine, the inner arm a shorter straight spine that is about one-third as long, the common base subequal in length to the shorter arm; a few scattered setæ on axial spine and, in cases, on base of lateral one. Phallosome a long-oval plate, its apex obtuse, surface glabrous. Aedeagus long and slender.

Holotype, ♂, El Limbo, Cochabamba, 2000 meters, March 1953.

Paratopotypes, ♂ ♂.

Most similar to species such as *Molophilus* (*Molophilus*) *cladocerus* Alexander and *M. (M.) gymnocladus* Alexander, differing especially in the structure of the male hypopygium.

Genus *Toxorhina* Loew

Toxorhina (*Ceratocheilus*) *revulsa* new species

General coloration of thorax gray, the præscutum with three darkened stripes, the central one more blackened; rostrum shorter than body; knobs of halteres weakly darkened; legs black; wings with a strong dusky tinge, the prearcular region and base of costal field more whitened; veins delicate; *Sc* short, *Sc*₁ ending immediately beyond origin of *Rs*; inner end of cell 1st *M*₂ pointed, the first section of vein *M*₁₊₂ long; male hypopygium with spine of basistyle and arms of ædeagus relatively slender, the latter terminating in hyaline membrane.

Male. Length, excluding rostrum, about 6 — 6.3 mm.; wing 6.5 — 7 mm.; rostrum about 5 — 5.2 mm.

Rostrum shorter than the wing or the remainder of body, black. Antennæ black throughout. Front, anterior vertex and narrow orbits gray, the remainder of vertex dark brown; anterior vertex broad, about three times the diameter of scape.

Cervical region and pronotum black. Mesonotal præscutum with the central region blackened, narrowly divided at posterior end; lateral stripes a little paler than the central area, lateral borders buffy gray; scutal lobes dark brown, the median region and scutellum more pruinose; postnotum and dorsal pleurites blackened, the ventral pleurites with a broad dark gray stripe. Halteres with stem and base of knob brownish white, the apex of the latter more infuscated. Legs with the coxæ blackened, sparsely pruinose; remainder of legs black. Wings with a strong dusky tinge, the prearcular region and base of costal field more whitened; veins brown, paler in the prearcular area. Veins more delicate than in *vulsa*. Venation: *Sc* short, *Sc*₁ ending immediately beyond origin of *Rs*, the latter a little longer than the basal section of *R*₅; inner end of the cell 1st *M*₂ pointed, with *m-cu* slightly basad of the fork; first section of *M*₁₊₂ long, equal to the second section. In the paratype, cell *M*₁ open by the atrophy of *m*.

Abdomen, including hypopygium, black. Male hypopygium with the apical spine of basistyle relatively slender. Base of outer dististyle less expanded than in *vulsa*. Arms of ædeagus darkened, relatively slender, terminating in hyaline membrane.

Holotype, ♂, El Limbo, Cochabamba, 2000 meters, March 1953.

The present fly differs from *Toxorhina* (*Ceratocheilus*) *vulsa* Alexander, of Peru, in the coloration and venation of the wings, the more delicate veins, and in slight details of structure of the male hypopygium.

Toxorhina (*Ceratocheilus*) *revulsa macrorhyncha* new subspecies

Female. Length, excluding rostrum, about 9 mm.; wing 7.5 mm.; rostrum about 6.2 mm.

Generally as in typical *revulsa* new species, differing in the longer rostrum and in slight details of coloration and venation.

Rostrum only a little shorter than the wing, black throughout. Præscutal stripes virtually confluent to form a single discal area; scutellum and postnotum clear light gray. Wings with veins heavier and more conspicuous, brownish black. R_1 nearly straight, subequal to the basal section of R_5 ; inner end of cell $1st\ M_2$ less pointed; basal section of vein M_{1+2} shorter than the second section. Wings less heavily suffused with darker, the prearcular field paler but not abruptly so.

Holotype, ♀, El Limbo, Cochabamba, 2000 meters, March 1953.