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

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The preceding instalment under this general title was published in June, 1940 (Journal of the New York Entomological Society, 48: 105–116). The novelties discussed herewith were received from Mr. Pablo Anduze, who collected them at San Esteban and Borburata, Venezuela, between December, 1939, and March, 1940. I am very deeply indebted to Mr. Anduze for the privilege of retaining the types of these species; wherever represented by duplicates, allotype or paratype specimens have been returned to Mr. Anduze for the National Collection.

Genus Ozodicera Westwood

Ozodicera (Ozodicera) striatipennis new species.

General coloration of mesonotum yellowish gray, the præscutum with four conspicuous dark brown stripes; pleura yellowish gray pollinose; antennæ, with its branches, relatively short; flagellum black, the segments vaguely paler at their bases; wings pale brown, conspicuously patterned with white, especially in cells R and M and beyond the cord; cells M_1 broadly sessile; abdominal tergites obscure yellow, trivittate with black.

FEMALE.—Length about 17 mm.; wing 14.5 mm.

Frontal prolongation of head brown; palpi black. Antennæ relatively short; scape obscure yellow, pedicel clearer yellow; flagellum black, the bases of the individual segments restrictedly paler; outer simple segments vaguely more dimidiate, the basal half obscure brownish yellow to pale brown, the outer portion darker; terminal segments broken, preceding three segments short and decreasing very gradually in length outwardly. Head brownish gray, the front and very narrow anterior orbits darker.

Pronotum yellowish gray, variegated with dark brown. Mesonotal præscutum yellowish gray, with four conspicuous dark brown stripes, the intermediate pair distinctly separated, their mesal edges on anterior fourth more darkened; lateral stripes darker; humeral region blackened; scutum and scutellum brown, the latter more yellow pollinose; mediotergite dark, the surface yellow pollinose. Pleura conspicuously yellowish gray pollinose, the ventral pleurites more pruinose; dorsopleural membrane darkened. Halteres relatively long and slender, brownish black, the base of stem slightly paler. Legs with the coxæ gray pruinose; trochanters obscure yellow;

femora obscure yellow, the tips rather narrowly but conspicuously blackened; tibiæ brown, the tips narrowly more blackened; tarsi black. Wings conspicuously patterned with pale brown and white, the latter chiefly as a broken central longitudinal stripe; cells C and Sc more yellowish brown; the white areas occupy the outer ends of cells R and M, most of cell 1st M_2 , subbasal portions of R_3 and R_5 , outer two-fifths of R_5 , and broad bases of cells M_1 to M_4 inclusive; veins dark brown, Sc more brownish yellow. Venation: Cell M_1 broadly sessile.

Abdominal tergites obscure yellow, trivittate with black, the median vitta narrowly more interrupted on the basal ring; basal sternites obscure yellow, the outer segments concealed by the overlapping tergal margins; ovipositor with the cerci long and slender, brownish yellow.

Holotype, ♀, Antimano, Venezuela, altitude 900 meters, January 13, 1940 (R. Lichy); through P. Anduze.

Ozodicera (Ozodicera) striatipennis is closest to the Brazilian O. (O.) epicosma Alexander, differing very conspicuously in the nature of the wing pattern.

Genus Gonomyia Meigen

Gonomyia (Progonomyia) compacta new species.

General coloration gray, the præscutum with four more or less distinct brown stripes; thoracic pleura with a more or less distinct gray to clear yellow stripe; knobs of halteres darkened; legs brownish yellow; wings subhyaline, unpatterned except for the faintly indicated stigma; male hypopygium with the apex of basistyle terminating in three or four strong flattened setæ; outer dististyle short and compact, heavily blackened; ædeagus with rounded lateral shoulders.

MALE.—Length about 5-6 mm.; wing 5.5-6.5 mm.

Female.—Length about 6-7 mm.; wing 6-7 mm.

Rostrum brown; palpi black. Antennæ black; flagellar segments longoval, the outer segments shorter and smaller. Head gray.

Pronotum and pretergites obscure yellow. Mesonotum brownish gray, the posterior portion of scutellum more obscure yellow to brownish yellow; præscutum, in cases, with four more or less distinct darker brown stripes; humeral and lateral portions of præscutum obscure yellow. Pleura gray, with a grayish to clear yellow longitudinal stripe. Halteres with stem obscure yellow, knob dark brown. Legs with coxæ darkened basally, the surface pruinose; trochanters light brownish yellow; remainder of legs brownish yellow, the terminal tarsal segments darkened. Wings subhyaline, the prearcular and costal portions more whitish; stigma oval, very pale brown; veins dark, paler in the brightened portions. Venation: Sc_1 ending beyond midlength of the long Rs; m-cu at or just before fork of M.

Abdomen, including hypopygium, dark brown. Male hypopygium with the terminal three or four setæ of basistyle shorter and stouter than the remainder but scarcely spinous. Outer dististyle short and compact, heavily blackened, terminating in an acute spine. Inner dististyle with the apical spine long and straight. Ædeagus ending in a short curved point, the lateral shoulders rounded but relatively conspicuous.

Holotype, &, Borburata, altitude 500 meters, March 15, 1940 (Anduze). Allotopotype, &, pinned with type. Paratopotypes, 8 & Q, with the types. Paratype, 1 &, San Esteban, January 1, 1940 (Anduze).

The nearest allies are *Gonomyia* (*Progonomyia*) balzapambæ Alexander and G. (P.) patruelis Alexander, both of which differ in the structure of the male hypopygium, especially of the dististyles.

Gonomyia (Lipophleps) anduzeana new species.

Belongs to the *manca* group; mesonotum dark brown, the caudal border of scutellum obscure yellow; thoracic pleura brown with a conspicuous yellowish white longitudinal stripe; legs brownish yellow, the outer segments darker; wings with a weak brown tinge, the costal border paler; Sc relatively long; male hypopygium with the dististyle bilobed, the lateral lobe a blackened spine; phallosome large and blackened, with a single blackened spinous point.

MALE.—Length about 3-3.5 mm.; wing 3.5-4 mm.

Rostrum obscure yellow; palpi black. Antennæ black throughout. Head dark gray, the occipital region more yellowish.

Pronotum and lateral pretergites china-white. Mesonotum chiefly dark brown, the caudal border of scutellum obscure yellow. Pleura brown, with a conspicuous yellowish white longitudinal stripe extending from the fore coxe to the base of abdomen, passing beneath the root of the haltere. Halteres dusky. Legs with the coxe testaceous, trochanters a little darker; remainder of legs obscure yellow to brownish yellow, the outer tarsal segments darker. Wings with a weak brown tinge, the prearcular and costal portions more whitish; stigma scarcely indicated; veins brown. Venation: Sc relatively long, Sc_1 extending to shortly beyond the origin of Rs, Sc_2 immediately before this origin; m-cu close to fork of M.

Abdominal tergites dark brown; sternites and hypopygium yellow. Male hypopygium with the outer lobe of basistyle fleshy, cylindrical to feebly bulbous at distal end. Dististyle bilobed, the lateral lobe a blackened spine that bears a brush of setæ in its curve; outer lobe obtuse and narrowly blackened at apex, the fasciculate bristles near lateral margin. Phallosome large and flattened, with a single blackened spinous point that bears a few setæ on lower face before the spine; margin of phallosome with a conspicuous, obtusely rounded lobe.

Holotype, &, San Esteban, January 6, 1940 (Anduze). Paratopotype, &, with type.

I take great pleasure in dedicating this distinct species to the collector, Mr. Pablo Anduze. It is entirely different from all described species in the structure of the male hypopygium. While somewhat similar to *Gonomyia* (*Lipophleps*) macswaini Alexander, of northern Panama and Costa Rica, all details of the male hypopygium are distinct.

Gonomyia (Lipophleps) vindex new species.

Belongs to the *manca* group; mesonotum brownish gray, the median region of the scutum and the scutellum obscure yellow; thoracic pleura with a scarcely indicated pale longitudinal stripe; legs brown; wings with a weak brownish tinge; Sc_1 ending opposite origin of Rs; male hypopygium with the basistyle produced into a stout fleshy lobe; dististyle bearing two powerful black spines on outer margin; phallosome prolonged apically into a neck that terminates in a head and further provided with spinous points.

Male.—Length about 3.3 mm.; wing 3.8 mm.

Rostrum obscure yellow; palpi black. Antennæ black. Head brownish gray.

Pronotum dark, china-white laterally. Mesonotum brownish gray, the lateral pretergites china-white; median region of scutum and the scutellum except at base obscure yellow. Pleura obscure yellow to pale brownish yellow, with a scarcely indicated paler ventral longitudinal stripe. Halteres with stem pale, knob weakly darkened. Legs with the coxæ and trochanters testaceous yellow; remainder of legs brown, the tarsi a little darker. Wings with a weak brown tinge, the prearcular and costal fields more whitish; stigma scarcely differentiated; veins brown. Venation: Sc relatively long, Sc_1 ending immediately opposite origin of Rs, Sc_2 a short distance from its tip; m-cu at or just beyond fork of M.

Abdominal tergites brown; sternites and hypopygium more brownish yellow. Male hypopygium with the outer angle of basistyle produced into a stout fleshy lobe that extends slightly beyond the level of all other elements of the hypopygium. Dististyle bearing two powerful black spines on outer margin. Phallosome a flattened pale mass that is produced apically into a slender neck that bears an apical head, the latter further produced into a slender straight spine, with a second smaller spine placed slightly more distad; apex of head with abundant microscopic setulæ; a strong curved black spine at base of the apical prolongation of the phallosome.

Holotype, &, Borburata, altitude 500 meters, March 15, 1940 (Anduze).

Gonomyia (Lipophleps) vindex is quite distinct from all of the now very numerous species of the subgenus that have been described. The fly falls in that section where the male hypopygium has the basistyle produced apically into a stout fleshy lobe so that the dististyle is subterminal in position; dististyle with spinous armature; phallosome asymmetrical and complex, provided with blackened spinous points, including an apical one that terminates a distinctly dilated head. It comes closest to G. (L.) macswaini Alexander and G. (L.) anduzeana new species, yet is entirely distinct.

Gonomyia (Lipophleps) borburatana new species.

Belongs to the *manca* group; thoracic pleura weakly striped; legs pale brown; wings pale brown, the prearcular and coastal fields more yellow; *Sc* short; male hypopygium with the outer angle of basistyle prolonged into a slender spine; dististyle simple; phallosome without blackened spines or points.

MALE.—Length about 3 mm.; wing 3 mm.

Rostrum obscure yellow; palpi black. Antennæ brownish black. Head buffy yellow.

Pronotum china-white. Mesonotum reddish brown, the præscutum darker brown in front; scutellum and mediotergite more infuscated, the former with the posterior border obscure yellow. Pleura pale brown, with a scarcely indicated paler ventral longitudinal stripe. Halteres weakly darkened, the base of stem restrictedly pale. Legs pale brown. Wings with a pale brown tinge, the prearcular and costal fields more yellow; veins brown. Venation: Sc short, Sc_1 ending a distance before origin of Rs about equal to three-fourths to four-fifths the total length of the latter vein; m-cu at or just before fork of M.

Abdominal tergites pale brown; sternites more yellow; hypopygium obscure yellow. Male hypopygium with the basistyle small, its outer apical angle produced into a very long spine that is much longer than the dististyle. Dististyle a simple elongate structure, slightly narrowed outwardly, both margins weakly roughened or serrulate; fasciculate setæ unequal in size. Phallosome pale, without blackened spines or points.

Holotype, &, Borburata, altitude 500 meters, March 10, 1940 (Anduze).

Gonomyia (Lipophleps) borburatana is quite different from all regional species of the subgenus, differing especially in the structure of the male hypopygium. Superficially, the hypopygium resembles that of G. (L.) macintyrei Alexander but the details of structure are entirely different.

Genus Teucholabis Osten Sacken

Teucholabis (Teucholabis) nocturna new species.

General coloration polished black, including the head and thorax; rostrum unusually long; apices of knobs of halteres yellow; legs black, the femoral bases more brightened; wings whitish subhyaline, restrictedly patterned with brown, including the narrow apex and a seam along cord; male hypopygium

with the outer dististyle very large and conspicuous, bilobed, both lobes terminating in short spines; ædeagus terminating in a slender spine.

MALE.—Length about 7 mm.; wing 6 mm.

Rostrum unusually long, exceeding in length the remainder of head, black; palpi black. Antennæ black throughout; flagellar segments passing through oval to long-oval, gradually decreasing in size outwardly. Head polished black.

Thorax polished black, the pleura with a broad gray pruinose longitudinal stripe extending from behind the fore coxæ to the base of abdomen, passing beneath the root of the halteres. Halteres black, the apex of knob restrictedly yellow. Legs with the coxæ and trochanters black; femora black, the bases a trifle paler, somewhat more extensively and broadly so on the middle and hind legs; tibiæ and tarsi uniformly black. Wings broad, whitish subhyaline, restrictedly patterned with brown; cell Sc darkened except at outer end; stigma and a narrow confluent seam on cord dark brown; wing tip narrowly darkened, extending from cell R_2 to M_3 inclusive; no darkening of cells basad of cord; veins black, the prearcular ones paler. Venation: Sc relatively long, Sc_1 extending to opposite three-fifths the length of Rs, Sc_2 a short distance from its tip; anterior branch of Rs nearly straight; m-cu about one-third to one-fourth its length beyond fork of M.

Abdomen black throughout. Male hypopygium with the lobe of basistyle relatively short, flattened, at apex directed laterad into a strong black spine; inner margin of lobe with numerous setulæ. Outer dististyle very large and conspicuous, bilobed, both lobes terminating in short spines, the outer lobe longest. Inner dististyle a blackened cultriform blade, the outer margin simple, not bidentate. Ædeagus terminating in a slender, gently curved spine.

Holotype, &, San Esteban, December 19, 1939 (Anduze).

Teucholabis (Teucholabis) nocturna is readily distinguished from other uniformly black species by the wing pattern and the structure of the male hypopygium. The wing pattern is most like that of T. (T.) decora Alexander, T. (T.) stygica Alexander, and similar forms, but the species is entirely distinct.

Genus Gnophomyia Osten Sacken

Gnophomyia (Gnophomyia) digitiformis new species.

General coloration brown, the thoracic pleura indistinctly variegated with yellow; antennal flagellum black; wings with a very faint dusky tinge, the stigma lacking or restricted to a narrow seam along vein R_{1+2} ; male hypopygium with the sides of tergite produced into slender finger-like lobes.

MALE.—Length about 6.5 mm.; wing 7 mm.

Rostrum dark brown; palpi black. Antennæ with the scape and pedicel brownish yellow, flagellum black; flagellar segments subcylindrical, the verticils subequal in length to the segments. Head gray.

Pronotum pale brown. Mesonotum medium brown, without præscutal stripes, the humeral region of præscutum vaguely brightened. Pleura brown, with a more yellowish longitudinal stripe involving the dorsal sternopleurite and ventral pteropleurite. Halteres with stem obscure yellow, knob darkened. Legs with the coxæ yellow, the middle pair slightly more darkened; trochanters yellow; femora, tibiæ and basitarsi obscure yellow or brownish yellow, the tips of the tibiæ and basitarsi narrowly more darkened; terminal tarsal segments uniformly dark brown. Wings with a very faint dusky tinge, the prearcular field more flavous; stigma lacking or barely indicated by a darkened seam along vein R_{1+2} ; veins brown. Venation: Sc_1 ending opposite R_2 , the latter just beyond the fork of R_{2+3+4} ; r-m close to fork of R_8 ; m-cu nearly its own length beyond fork of M.

Abdominal tergites brownish yellow, the sternites clearer yellow; hypopygium scarcely darkened. Male hypopygium with the outer dististyle rather strongly arcuated, conspicuously narrowed on outer fourth, the apex narrowly subacute. Inner dististyle relatively small and weak, narrowed apically. Phallosome broad, the ædeagus extending caudad beyond the level of the phallosomic mass; sides of tergal plate produced caudad into slender fingerlike lobes, one on either side of the phallosome.

Holotype, &, San Esteban, December 19, 1939 (Anduze).

Gnophomyia (Gnophomyia) digitiformis is generally similar to G. (G.) subhyalina Alexander, differing especially in the structure of the male hypopygium, as the dististyles and the tergite. The peculiar digitiform tergal lobes on either side of the phallosome (as they appear in a microscopic slide mount) are not found in any other of the now numerous species of the genus in Tropical America.

Gnophomyia (Gnophomyia) stenophallus new species.

Allied to subhyalina; general coloration brown, the thoracic pleura brightened on ventral portion; wings with a weak brown tinge; R_2 very faint to subatrophied, placed close to fork of R_{2+3+4} ; male hypopygium with both dististyles blackened, the outer style unusually straight, gradually narrowed to the subacute tip; inner style parallel-sided, its tip subtruncate; phallosomic mass blackened apically, widest at base.

Male.—Length about 5 mm.; wing 5.2 mm.

Rostrum light brown, palpi slightly darker. Antennæ with basal three or four segments pale brown or yellowish brown, the outer segments darker; flagellar segments oval, gradually decreasing in size outwardly. Head gray; eyes (male) very large, reducing the anterior vertex to a narrow line.

Pronotum darkened, the pretergites yellow. Mesonotum almost uniformly brown, the surface very sparsely pruinose, the scutal callosities more yellowish; lateral margins of præscutum behind the pseudosutural foveæ restrictedly yellow. Pleura with the dorsal sclerites darker brown than the ventral

and posterior ones, forming a vague stripe on the anepisternum. Halteres dusky, the base of stem yellow. Legs with the coxe and trochanters yellow; remainder of legs yellow, the terminal tarsal segments darkened; very vague indications of a narrow darkened subterminal ring on femora. Wings with a weak brown tinge, the prearcular field slightly more yellow; veins brown. Venation: Sc_1 ending just before fork of R_{2+3+4} , Sc_2 some distance from its tip and nearly opposite the fork of Rs; R_2 close to fork of R_{2+3+4} , very faint to nearly atrophied; r-m at fork of M; cell 1st M_2 widened outwardly; m-cu approximately one-half its length beyond the fork of M.

Abdominal tergites dark brown, the sternites more yellow; hypopygium brownish yellow. Male hypopygium with the outer dististyle unusually straight, blackened, gradually narrowed to the subacute tip; inner style a similarly blackened, parallel-sided rod, the tip subtruncate but not widened. Phallosome massive, blackened apically, unusually narrow, widest at base, the apex with a microscopic median notch.

Holotype, &, San Esteban, January 6, 1940 (Anduze).

Gnophomyia (Gnophomyia) stenophallus is closest to G. (G.) subhyalina Alexander, differing especially in the structure of the male hypopygium, notably of the inner dististyle and the phallosome.

Gnophomyia (Gnophomyia) rubicundula Alexander.

1921. Gnophomyia rubicundula Alexander, Proc. Acad. Nat. Sci. Philadelphia, 1921: 74–75.

The unique type (Yurimaguas, Peru, April 1, 1920, *H. S. Parish*) was described as being a male. The genitalia of the dry specimen was badly shrunken and it was only when a slide mount was made that it was found to represent the female sex. The valves of the ovipositor are unusually short and fleshy, the cerci being reduced to triangular plates that are provided with setæ to their tips.

Genus Neognophomyia Alexander

Neognophomyia monophora new species.

General coloration yellow to fulvous yellow; thoracic pleura with two major black spots to form an interrupted dorsal stripe; legs yellow, the four terminal tarsal segments infuscated; wings subhyaline, with a narrow dark band along cord; male hypopygium with the inner dististyle terminating in a simple blackened point; phallosome terminating in a single small black knob.

MALE.—Length about 5 mm.; wing 5 mm.

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

Rostrum yellow; palpi brown. Antennæ with scape and pedicel brownish yellow, flagellum dark brown; flagellar segments oval to long-oval. Head yellow; anterior vertex relatively narrow.

Pronotum and mesonotum almost uniformly yellow to fulvous yellow, the surface polished, the lateral præscutal stripes and centers of the scutal lobes a trifle darkened. Pleura yellow, with major black areas on the anepisternum and pleurotergite, separated by the pale pteropleurite. Halteres with stem yellow, knob infuscated. Legs with the coxæ and trochanters yellow; remainder of legs yellow, the four terminal tarsal segments infuscated. Wings subhyaline; a narrow dark band along cord, extending from the stigma to posterior end of m-cu; veins brownish yellow to pale brown, darker in the central clouded area. Venation: R_2 at near midlength of petiole of cell R_3 ; m-cu a little less than its own length beyond the fork of M.

Abdomen of male yellow, narrowly darkened laterally, the subterminal segments weakly darkened; hypopygium yellow. In the female, abdomen with tergites more extensively dark brown, including the lateral portions of the more basal segments and all of segments five and six; sternites pale. Male hypopygium with the inner dististyle terminating in a narrow blackened point. Interbases entirely pale, sinuous, the distal half a long straight spine. Phallosome a broadly depressed plate, the apex a single slender blackened knob; a more slender pale blade lying above the phallosome.

Holotype, &, San Esteban, December 28, 1939 (Anduze). Allotopotype, Q, pinned with type. Paratypes, 2 & &, Borburata, altitude 500 meters, March 10-15, 1940 (Anduze).

Neognophomyia monophora is entirely distinct from the now rather numerous species. The nearest described form is N. trinitatis Alexander, which has the male hypopygium entirely distinct. The hypopygial structures described here and elsewhere as being interbases certainly appear to be such, but the strict homologies cannot be affirmed at this time.

Genus Cryptolabis Osten Sacken

Cryptolabis (Cryptolabis) nebulicincta new species.

General coloration yellow, the mesonotal præscutum reddish brown; a conspicuous, dark brown, dorsal pleural stripe; legs dark brown; wings with a weak dusky tinge, the prearcular field more yellowish; a very diffuse dusky seam along the cord; macrotrichia in all but basal portions of cells beyond cord; Rs long, sinuous on distal half; abdomen yellow, the caudal margins of the tergites broadly and conspicuously blackened.

Female.—Length about 4.5 mm.; wing 5.2 mm.

Rostrum testaceous yellow; palpi black. Antennæ with the scape and pedicel dark brown, flagellum paler brown. Head yellow.

Pronotum yellow above, dark brown on sides. Mesonotal præscutum reddish brown, the lateral margins restrictedly pale yellow; scutal lobes slightly darker brown; median region of scutum and the scutellum more testaceous yellow, the latter slightly pruinose; mediotergite darkened. Pleura yellow, with a conspicuous, dark brown, longitudinal stripe extending from the pronotum across the dorsal pleurotergite to the abdomen, passing above the root of the halteres. Halteres yellow. Legs with the coxe and trochanters yellowish testaceous; remainder of legs dark brown, the femoral bases restrictedly obscure yellow. Wings with a weak dusky tinge, the prearcular field more yellow; a very diffuse dusky seam along the cord, not quite attaining the posterior border behind; a less evident darkened seam along vein Cu in cell M; wing-axil darkened; veins brown, more yellowish in the prearcular and subcostal fields. Numerous macrotrichia in cells beyond cord, lacking only in the basal portions of these cells. Venation: Rs long, sinuous on distal half; R_{2+3} angulated and short-spurred at near midlength; m-cu about its own length beyond the fork of M.

Abdominal segments yellow, the caudal margins of the tergites broadly and conspicuously blackened to produce a ladder-like appearance.

Holotype, Q, San Esteban, December 19, 1939 (Anduze).

Cryptolabis (Cryptolabis) nebulicincta is closest to C. (C.) laticostata Alexander (Ecuador) and C. (C.) schadeana Alexander (Southeastern Brazil), differing from both in the coloration of the body and wings, and from the latter in the pattern of the legs.



Alexander, Charles P. 1941. "Records and Descriptions of Neotropical Crane-Flies (Tipulidæ, Diptera), XII." *Journal of the New York Entomological Society* 49, 139–148.

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