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**NEW SPECIES OF CRANE FLIES FROM TROPICAL
AMERICA III. (Diptera: Tipulidae)**

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NEW SPECIES OF CRANE FLIES FROM TROPICAL AMERICA III. (Diptera: Tipulidae)¹

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The species considered herewith are chiefly from Honduras and Nicaragua and were included in extensive series of these flies received from Colonel Gordon Field, of the Edgewood Arsenal, Maryland. Two further species are from Chile where they were collected by Dr. Oliver S. Flint, Jr., of the United States National Museum, and by Señor Luis E. Peña, to whom I am indebted for invaluable series from many parts of Chile and elsewhere in South America. I am greatly indebted to all of the above entomologists for the privilege of retaining the types of the included species.

Polymera (Polymera) neoclausula, new species

General coloration of body brownish black to black, thoracic sternopleurite paler brown; wings light brown, cells *C* and *Sc* slightly darker, R_{2+3+4} long, about two-thirds to three-fourths R_5 , cell 1st M_2 closed.

Male. Length about 5.3–5.5 mm; wing 5.8–6 mm; antenna 8 mm.

Rostrum and palpi black. Antennae brownish black, elongate, as shown by the measurements; flagellar segments binodose, with long erect verticils at the nodes. Head brownish black.

Thorax very dark brown to brownish black, the dorsal pleural region slightly darker than the dorsum, sternopleurite paler brown. Halteres brownish black, base of stem obscure yellow. Legs with coxae and trochanters brownish yellow; remainder of legs broken. Wings tinged with light brown, cells *C* and *Sc* slightly darker; veins brown. Venation: *Sc* long, Sc_1 ending nearly opposite fork of R_{2+3+4} , the latter long, about two-thirds to three-fourths R_5 , more than one-half R_{2+3} or from four to five times the basal section of R_5 ; cell 1st M_2 present, elongate.

Abdomen black, the hypopygial basistyles obscure yellow.

Holotype, male, Lancetilla, Honduras, September 16, 1953.

The only other regional member of the genus having cell 1st M_2 of the wings closed is *Polymera (Polymera) clausa* Alexander, of Ecuador, readily told from the present fly by the venation of the radial field. In *P. clausa* vein R_{2+3+4} is much shorter, being about one-fourth R_{2+3} or about twice the basal section of R_5 .

Gynoplistia penana, new species

Size large (wing of male 20 mm); general coloration of thorax dark brown, pruinose; antennae of male 20-segmented, with twelve

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branched segments; femora yellow, each with two brown rings, the broader one at and before midlength; wings whitened, with a very conspicuous irregular pattern of dark and paler brown; *Rs* shorter than the very long cell *1st M*₂, petiole of cell *M*₁ shorter than *m*; abdomen very long.

Male. Length 27 mm; wing 20 mm; antenna about 5.5 mm; abdomen alone 22 mm.

Rostrum brown; palpi brownish black. Antennae of male 20-segmented, the formula 2 + 2 + 10 + 6; scape and pedicel brownish black, extreme bases yellowed, flagellum black, the incisures of the more proximal segments restrictedly yellow; flagellar segments one to twelve with long branches, the longest nearly five times the segment, last branch exceeding the segment; terminal segments elongate, narrowed at either end, with long verticils. Head brown, light gray pruinose, posterior genae restrictedly patterned with yellow.

Pronotum obscure yellow, central region broadly dark brown, the sides narrowly of this color. Mesonotal praescutum with the ground dark brown to brownish black with four more grayish brown stripes that are narrowly bordered by pale gray; intermediate stripes with about the anterior two-thirds separated by a brownish black line; scutum and scutellum light brown, heavily light gray pruinose; postnotum cinnamon brown, restrictedly gray pruinose. Pleura chestnut brown, light silvery pruinose behind, anterior border of anepisternum narrowly more blackened. Halteres with stem light yellow, knob dark brown. Legs with coxae brown, light gray pruinose; trochanters brown; femora yellow, each with two brown rings, the broader basal band at and before midlength, the outer ring about one-half as wide and nearly three times as extensive as the yellow apex; tibiae very light yellow, with a narrow nearly basal brown ring, tip more extensively darkened; tarsi with proximal three segments pale yellow, remainder brown. Wings with the ground whitened, slightly more yellowed in cells *C*, *Sc*, basal two-thirds of *M* and along vein *2nd A*; a conspicuous brown pattern that includes major irregular darker areas in cells *R* and *M* beyond arculus and at origin of *Rs*; a second large mark at anterior cord extended outwardly to beyond the paler brown stigma; further markings at outer end of cell *1st M*₂ and along veins *M*₂ and *M*₃ to the margin; cubital and anal fields with paler spots that are margined with darker brown, including areas at *Cu*₁, *1st A* and *2nd A*, with a series of three in cell *2nd A*, all attaining the anal border; further scattered dark brown lines in central third of cell *Cu* and near base of cell *1st A* adjoining vein *2nd A*; veins yellow, including those in the darkened areas. Venation: *Rs* shorter than cell *1st M*₂, the latter unusually long, exceeding in length the veins beyond it; cell *M*₁ deep, its petiole slightly more than one-half *m*; *m-cu* beyond two-thirds *M*₃₊₄.

Abdomen elongate, as shown by the measurements; tergites brown, with a vague narrow more yellowed central line; sternites paler, more yellowish brown; outer abdominal segments, including the hypopygium, dark brown.

Holotype, male, El Coigual, Cordillera Curico, Chile, January 21–25, 1964 (L. E. Peña).

This exceptionally distinct and interesting species is named for Luis E. Peña, who has collected very many new and rare crane flies in Chile and elsewhere in South America. There is no close relative, the most similar being *Gynoplistia schachovskoyana* Alexander, of Argentina, which differs conspicuously in the pattern of the legs and wings and in the venation.

Elephantomyia (Elephantomyia) cinctiventris, new species

General coloration of thorax yellow, patterned with brown, including a transverse girdle on the pleura; rostrum nearly as long as wing, the latter weakly suffused with brown; abdominal segments conspicuously bicolored, black, apices broadly yellow; male hypopygium with gonapophyses long and slender, penefilum very long, coiled.

Male. Length, excluding rostrum, about 5.5 mm; wing 5.6 mm; rostrum about 5.2 mm.

Rostrum light brown, a little shorter than the wing or the remainder of body. Antennae black; outer flagellar segments long, with very long verticils. Head light gray, posterior vertex light brown; anterior vertex narrow, less than the diameter of the scape.

Pronotum yellow, narrowly brownish black above, Mesonotal praescutum yellow with a light brown central stripe, the extreme cephalic border blackened; scutum brownish yellow; scutellum brownish black, parascutella yellowed; mediotergite dark brown, pleurotergite yellow. Pleura yellow, the mesepisternum dark brown to produce a conspicuous transverse stripe. Halteres with stem yellow, knob dark brown. Legs with coxae and trochanters yellow; femora light brown, remainder of legs broken. Wings weakly suffused with brown, costal region a little darker, prearcular field somewhat brighter; stigma long-oval, darker brown; veins brown. Venation: Sc_1 ending about opposite four-fifths R_s , Sc_2 near its tip; branches of R_s diverging very gradually outwardly, cell R_2 at margin a little more extensive than cell R_4 ; $m-cu$ at near two-fifths M_{3+4} .

Abdomen conspicuously bicolored, with approximately the basal half of the segments black, apices yellow, the pattern more contrasted on the sternites; subterminal segments uniformly brownish black to form a ring, hypopygium brownish black. Male hypopygium with outer dististyle bidentate at tip, the lower spine erect to slightly recurved; inner style longer, its outer third narrowed, the base with relatively long sparse setae. Gonapophyses long and slender. Penefilum very long, coiled.

Holotype, male, Lancetilla, Honduras, December 3, 1953. Paratopotype, male, pinned with the type.

Elephantomyia (Elephantomyia) tigriventris Alexander, of Ecuador, has the bicolored abdominal pattern somewhat as in the present

fly but with the yellow bands much narrower. It differs further in the entirely different male hypopygium, particularly the outer dististyle and phallosome.

Cryptolabis (Cryptolabis) perdistans, new species

General coloration of thorax yellowed, praescutum restrictedly patterned with darker, pleura conspicuously striped with brown above; legs dark brown, femora with abundant erect blackened setae; wings light yellow, prearcular and costal regions brighter, veins yellow, those comprising the cord light brown; male hypopygium with the dististyle terminal, bidentate; aedeagus relatively slender, not convoluted.

Male. Length about 3 mm; wing 3.5 mm.

Female. Length about 3 mm; wing 3.5 mm.

Rostrum light brown, palpi black. Antennae with scape and pedicel black; flagellum broken. Head gray.

Pronotum yellow. Mesonotal praescutum obscure yellow, patterned with brown, in the type narrowly on midregion of anterior half, more broadly on sides, posterior sclerites of notum yellowed. Pleura yellow, dorsally with a conspicuous brown stripe. Halteres yellow. Legs with coxae and trochanters yellow; femora and tibiae dark brown, the former yellowed basally, setae abundant, blackened, long and erect; tibiae uniformly dark brown; tarsi broken. Wings light yellow, the prearcular and costal regions clearer yellow; veins yellow, those comprising the cord light brown. Macrotrichia in distal ends of cells R_2 through M_4 . Venation: Cord at near two-thirds the wing length, the cells and longitudinal veins beyond correspondingly short; R_s more than three times $R_{2,3+4}$.

Abdomen, including hypopygium, yellowed. Male hypopygium unusually generalized in structure; basistyle without accessory lobes; dististyle terminal, about three times as long as broad, apex conspicuously bidentate, outer tooth shorter, broad-based. Aedeagus simple, relatively slender, not convoluted.

Holotype, male, Lancetilla, Honduras, September 16, 1953. Allotopotype, female, pinned with type. Paratopotype, female.

The most similar regional species is the larger *Cryptolabis (Cryptolabis) diversipes* Alexander, of Costa Rica, which differs in the coloration of the legs and wings, the venation, including the position of the cord and the relative lengths of the veins beyond it, and in the structure of the blackened hypopygium.

Cryptolabis (Cryptolabis) tridenticulata, new species

General coloration light yellow; wings yellowed, the prearcular and costal fields clear light yellow, veins brownish yellow, clearer yellow in costal field; male hypopygium with the dististyle large, bearing two darkened arms, the stouter one terminating in three short fingerlike points; aedeagus very long and slender, recurved into three appressed sections, the terminal one longest.

Male. Length about 3.5 mm; wing about 3.8–4 mm.

Female. Length about 3.5 mm; wing about 4 mm.

Rostrum light yellow; palpi with basal segment yellow, the remainder dark brown. Antennae light brown. Head yellow.

Thorax light yellow, the pleura with a vaguely indicated pale brown dorsal stripe that continues backward to posterior border of mediotergite. Halteres pale yellow. Legs with coxae and trochanters light yellow; femora light brown, tibiae brownish yellow, tips narrowly darkened; tarsi brown. Wings yellowed, prearcular and costal fields clear light yellow; veins brownish yellow, clear yellow in the brightened fields, *Cu* darker, outer section of R_5 less evidently infuscated. Venation: R_s relatively long, gently sinuous at midlength, from two to two and one-half times the arcuated R_{2+3+4} ; *m-cu* shortly before midlength of M_{3+4} .

Abdomen yellow, including the hypopygium; in female, appearing almost black due to enclosed eggs. Male hypopygium with dististyle terminal, complex in structure, appearing as a flattened yellow blade that is extended into two darker more sclerotized arms, the stouter one terminating in three short fingerlike points tipped with short spines, second arm a slender cylindrical rod. Phallosome with the apophyses appearing as small paired blackened blades; aedeagus very long and slender, recurved into three appressed sections, the terminal one longest, the others subequal.

Holotype, male, Lancetilla, Honduras, September 16, 1953. Allotopotype, female, pinned with type. Paratopotypes, two males, with the types, September 16–17, 1953.

Cryptolabis (Cryptolabis) tridenticulata is entirely distinct from other regional species, especially in hypopygial structure. *Cryptolabis (C.) tropicalis* Alexander while being generally similar in coloration and venation, has the hypopygium quite different.

Erioptera (Mesocyphona) bievexa, new species

General coloration of head and thorax almost uniformly dark brown, abdomen more blackened; femora dark brown, tibiae and tarsi lighter brown; wings strongly suffused with brown, unpatterned; male hypopygium with a single three-branched dististyle, the lower pair of arms with obtuse tips, the longer outer branch microscopically spinulose along lower margin.

Male. Length about 2.8–2.9 mm; wing 3–3.3 mm.

Female. Length about 3 mm; wing 3.2 mm.

Rostrum, palpi and antennae black. Head brown.

Thorax almost uniformly dark brown, pleura a trifle paler; setae of scutum and posterior praescutum sparse but long and erect. Halteres with stem yellowed, knob dark brown. Legs with coxae light brown; trochanters obscure yellow; femora dark brown, tibiae and tarsi lighter brown. Wings strongly suffused with brown, unpatterned; veins darker

brown. Venation: R_{2+3+4} relatively long, about twice R_{2+3} ; cell 2nd M_2 deep, $m-cu$ before fork of M .

Abdomen, including hypopygium, black. Male hypopygium distinctive. Dististyle single, three-branched, the fused base only a little less than the shorter arms; longest branch a strong nearly straight spine, narrowed gradually to the long acute tip, lower margin with a longitudinal series of strong spinules; shorter branches slightly united basally, stout, tips very blunt to truncate, the apex of intermediate arm with numerous microscopic nodules to appear macelike, lower arm at apex slightly produced laterad, provided with relatively few microscopic punctures. Phallosome including powerful blackened lateral spines that narrow gradually to acute points; inner apophyses broad, base pale, the short apical spine blackened. Arms of aedeagus diverging at a right angle.

Holotype, male, Guapinolar, Nicaragua, October 22, 1953. Allotopotype, female, pinned with type. Paratopotypes, two males.

The species is readily recognized by the hypopygial structure. In the Neotropical fauna there are numerous species with unpatterned wings that superficially resemble the present fly, including *Erioptera* (*Mesocypbona*) *immaculata* Alexander and *E. (M.) modica* Alexander, with the hypopygia quite distinct.

Erioptera (*Mesocypbona*) ***pachyrhampha***, new species

Allied to *E. fuscivena*; male hypopygium with the inner gonapophyses very stout, blackened, outer lateral spine long and slender, about twice the inner hook.

Male. Length about 3 mm; wing 2.8 mm.

Rostrum and palpi black. Antennae with the enlarged scape and pedicel black; flagellum broken. Head variegated light yellow, gray and dark brown, the darker colors on the posterior vertex.

Pronotum brownish black, yellowed laterally. Mesonotal praescutum obscure yellow, with lateral borders and paired intermediate discal brown stripes; scutum obscure yellow, patterned with brown; scutellum light yellow with a brown central spot at base; postnotum brownish gray. Pleura yellow, with two conspicuous brown longitudinal stripes, the dorsal one extending from the fore coxae to the pleurotergite above the halteres, ventral stripe including the lower sternopleurite, dorsal meron and the metapleura; dorsopleural membrane yellow. Halteres with stem yellow, knob weakly infuscated. Legs with fore coxae darkened, remaining coxae and trochanters somewhat more yellowed; remainder of legs broken. Wings weakly infuscated, prearcular and costal fields more yellowed, stigmal region slightly darker; veins light brown, cord and vein R_5 darker. Venation: R_{2+3+4} nearly twice R_{2+3} , the latter subequal to R_2 ; cell 2nd M_2 deep, its petiole shorter than $m-cu$.

Abdomen brown, ninth segment more yellowed, basistyles dark brown. Male hypopygium generally as in *E. fuscivena*, especially as

regards the dististyles. Phallosome distinctive, especially the gonapophyses, the inner blackened hook very stout at base, narrowed into a slender spine; outer lateral point long and slender, about twice the blackened hook, the tip acute, narrowly blackened.

Holotype, male, Villa Somoza, Nicaragua, September 28, 1953.

The closest relatives of the present fly are *Erioptera* (*Mesocyphona*) *fuscivena* Alexander, of southeastern Brazil, northern Argentina and Paraguay, and *E. (M.) immaculata* Alexander, of Mexico and Central America. The latter regional species differs from the present fly in the unusually small hook of the gonapophysis of the hypopygium.

Erioptera (*Mesocyphona*) ***scabrifolia***, new species

Size very small (wing of male less than 2.5 mm); general coloration dark brown, thoracic pleura with a broad yellowed longitudinal stripe; knob of halteres dark brown; legs whitened, femora with two broad brown rings; wings weakly tinged with brown, unpatterned; abdomen brownish black; male hypopygium with dististyle profoundly divided into two substyles, the outer branch of the inner one a long flattened blade that is densely covered with appressed spines; phallosome including a single pair of powerful blackened spines.

Male. Length about 2.5 mm; wing 2.3–2.4 mm.

Female. Length about 2.8 mm; wing 2.6 mm.

Rostrum, palpi and antennae black. Front and anterior vertex silvery white, remainder of head dark brown.

Pronotum dark brown, lateral borders narrowly yellow. Mesonotum almost uniformly dark brown, scutellum a little more yellowed. Pleura brown, with a broad yellowed longitudinal stripe that is narrowly margined with darker brown, dorsopleural region yellowed. Halteres with stem pale yellow, knob dark brown. Legs with coxae and trochanters obscure yellow; femora yellowish white with two broad brown rings, the outer one about three times the pale apex, tibiae and tarsi whitened. Wings unpatterned, weakly tinged with brown, veins slightly darker.

Abdomen brownish black, base of hypopygium obscure yellow. Male hypopygium with the dististyle profoundly divided into two substyles, the outer one a long slender rod, outer surface of distal third with sparse appressed spinules; inner substyle longer, at near midlength divided into two unequal branches, the outer a longer flattened leaf-like blade that is densely covered with appressed spines, inner branch a slender rod. Phallosome including a single pair of powerful blackened spines, the outer third more curved, narrowed into a long slender spine.

Holotype, male, Lancetilla, Honduras, November 12, 1953. Allotopotype, female. Paratopotype, one male, pinned with type.

Erioptera (*Mesocyphona*) *scabrifolia* is one of the smallest members of the subgenus having unpatterned wings. The most similar of the numerous regional species is *E. (M.) factiosa* Alexander, of Ecuador and Peru, which differs especially in the dististyle and more slender

gonapophyses. Other more distantly related species include *E. (M.) gulosa* Alexander and *E. (M.) invariegata* Alexander.

Erioptera (Mesocyphona) subcynthia, new species

Allied to *E. cynthia*; general coloration of thorax dark brown, pleura conspicuously striped with pale yellow; legs whitened, femora with two brown rings; wings weakly tinged with brown, unpatterned; male hypopygium with dististyle deeply divided, lower arm relatively narrow; phallosome with lateral apophysis powerful, blackened point of inner apophysis small.

Male. Length about 3 mm; wing 2.5–2.8 mm.

Female. Length about 3.5–4 mm; wing 3–3.2 mm.

Rostrum, palpi and antennae black. Head dark brown.

Thoracic dorsum dark brown; pleura dark brown, dorsopleural membrane and a longitudinal ventral stripe pale yellow, extending from behind the fore coxae to the halteres. Halteres with stem whitened, knob infuscated. Legs with coxae brown, trochanters paler; remainder of legs whitened, femora with two brown rings, the subapical one about twice the whitened tip, central ring less distinct. Wings weakly tinged with brown, veins slightly darker. Venation: R_{2+3+4} from two to nearly three times R_{2-3} .

Abdomen dark brown, hypopygium darker. Male hypopygium generally as in *E. cynthia*. Dististyle deeply divided, base short; outer arm a long gently curved spine from a broader base; lower arm or style a flattened glabrous blade, broadest on basal two-thirds, only a little narrower outwardly, apex very obtuse. Phallosome with lateral apophyses appearing as powerful nearly straight spikes, terminating in a blackened spine; inner apophysis a pale yellow plate, its inner apical angle extended into a small blackened curved point.

Holotype, male, Lancetilla, Honduras, December 2, 1953. Allotopotype, female, pinned with type. Paratopotypes, several of both sexes, September 2–17, December 2, 1953; paratype, male, Guapinolar, Nicaragua, October 29, 1953.

The only close relative among the numerous Neotropical members of the subgenus having unpatterned wings is *Erioptera (Mesocyphona) cynthia* Alexander, of Ecuador, which differs especially in the structure of the hypopygium, including both the dististyle and the phallosome. This species has the fused base of the dististyle longer, the outer arm very slender, lower arm broader, its outer margin strongly curved or arched. Phallosome with the lateral apophyses more slender throughout, the point of the inner apophysis being an elongate slender spine.

Molophilus (Molophilus) flinti, new species

Belongs to the *M. plagiatus* group; mesonotal praescutum dark chestnut brown, the stripes separated by narrow impressed blackened lines, pleura dark brown; wings broad, brownish yellow, prearcular

and costal fields more yellowed; male hypopygium with beak of basistyle slender; basal dististyle profoundly bifid, the base reduced, mesal face of outer arm with more than the distal half with an elongate row of long appressed spines.

Male. Length about 5 mm; wing 5.2 mm.

Female. Length about 6.5 mm; wing 6.4 mm.

Rostrum and palpi black. Antennae black. Head dark gray.

Pronotal scutum light brown, remainder light yellow. Mesonotal praescutum of holotype with three dark chestnut brown stripes that are separated by narrow impressed blackened lines, humeri and pretergites light yellow, posterior sclerites of notum darker brown. In the females the thorax is more uniformly brownish gray, the praescutal impressed lines not indicated. Pleura dark brown. Halteres yellow. Legs with coxae and trochanters brown; femora yellowish brown, tips darker; tibiae yellowish brown, outer tarsal segments darker. Wings broad, brownish yellow, prearcular and costal fields clearer yellow; veins brownish yellow. Venation: R_2 about in transverse alignment with $r-m$; M_{3+4} about one-half longer than the very oblique gently sinuous $m-cu$; vein $2nd\ A$ long, gently sinuous, ending about opposite mid-length of M_{3+4} .

Abdomen brownish black. Male hypopygium with beak of basistyle slender, strongly decurved. Outer dististyle with arms very unequal, the outer one a slender gently curved spine. Basal dististyle profoundly bifid, the base greatly reduced, outer arm a long strong rod that is extended into a slender straight spine, the mesal face on more than the outer half with an elongate row of long blackened appressed spines, totalling far more than one hundred but so crowded as to make exact counting difficult; inner arm of style slightly more than one-half the outer arm and very slender, gently dilated at near midlength, thence narrowed into a long straight spine, on basal half with two or three scattered appressed spinules.

Holotype, male, Los Piedras, Magallanes, Chile, January 11, 1966 (O. S. Flint, Jr.). Allotopotype, female, pinned with type. Paratopotype, one female, pinned below the allotype.

I am very pleased to name this fly for Dr. Oliver S. Flint, Jr., long time friend and former student at the University of Massachusetts, who collected several crane flies of interest in extreme southern Chile. As regards the conformation of the basal dististyle of the hypopygium, the most similar regional species include *Molophilus* (*Molophilus*) *ternarius* Alexander and *M.* (*M.*) *setosistylus* Alexander, especially the latter, all three differing among themselves in the details of the hypopygium, particularly the basal dististyle. The number of modified spines on this style in the present fly appears to exceed that of any of the now very numerous Neotropical species in the group having comparable areas with spines and strong setae. The differences in the color and structure of the thorax in the two sexes as described indicates a possibility that the materials may be wrongly associated.