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## NEW OR LITTLE-KNOWN CRANE-FLIES

### PART IV.

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The preceding instalment under this title was published in *Diptera*, vol. IX, pp. 23-36, February 1938. The *Tipulidæ* considered in the present article were taken at Potrerillos, « The Valley of the Clouds », in Chiriqui, northern Panama, by Messrs. D. V. Brown and J. W. MacSwain, in 1934 and 1935. This rich series of specimens gives us an excellent idea of the great variety of forms existing in the Neotropics. The types of the novelties are preserved in my personal collection of the *Tipulidæ* of the World.

#### 1. *Limonia* (*Limonia*) *vorax* sp. n.

Belongs to the *apicata* group; antennæ (male) elongate, conspicuously nodulose, the flagellar segments cordate, with long apical necks; wings strongly tinged with brown, the oval stigma darker brown; male hypopygium with the lobes on mesal face of basistyle small; dististyle complex, strongly constricted before the beak, which is split into three outer lobes; apical crest of dististyle with a comb of about fifteen teeth; gonapophyses with mesal-apical lobes stout and broad.

Male. — Length about 4,8-5 mm.; wing 5-5,5 mm.; antenna about 2,8-3 mm.

Female. — Length about 6,5 mm.; wing 6 mm.

Rostrum and palpi black. Antennæ brownish black, in male elongated, conspicuously nodulose; flagellar segments dilated, cordate, with long glabrous apical necks; on the outer segments the bases are somewhat narrower but still expanded; terminal segment elongate; flagellar segments provided with a dense white pubescence. In the female, the antennæ are less conspicuously nodulose. Head dark brown.

Mesonotal praescutum brownish yellow laterally, the median area dark brown, the marking expanded behind; scutal lobes dark brown; scutellum pale basally, darkened behind; mediotergite darkened. In some specimens, the mesonotum is more uniformly

brown throughout. Pleura testaceous yellow, extensively variegated with dark brown, the ventral sclerites paler. Halteres with base of stem yellow, the remainder dark brown. Legs with coxae and trochanters obscure yellow; remainder of legs brown. Wings strongly tinged with brown, the oval stigma darker brown; veins brown. Venation: *Sc* long, *Sc*<sub>1</sub> ending a short distance before the fork of *R*<sub>s</sub> *Sc*<sub>2</sub> at its tip; *m-cu* close to fork of *M*.

Abdominal tergites dark brown; sternites obscure yellow, the lateral portions darker; hypopygium dark. Male hypopygium with the caudal margin of ninth tergite broadly emarginate medially, the surface with abundant coarse setae. Basistyle on mesal face with two relatively small lobes that are provided with long setae; near apex of style with a third setiferous lobe. Dististyle complex. The main body a globular setiferous lobe, bearing a comb of about fifteen teeth on outer margin; the usual beak is set off from body of style by a strong constriction; at apex the beak is divided into three distinct lobes. Gonapophyses with mesal-apical lobes unusually broad and stout, the tips obtuse. Aedeagus narrowed at apex.

*Holotype*, ♂, Potrerillos, altitude 3,500 feet, May 12, 1934 (Brown). *Allotopotype*, ♀. *Paratopotypes*, 1 ♂, with type (Brown); 6 ♂♀, altitude 3,000 feet, May 14-25, 1935 (MacSwain).

*Limonia (Limonia) vorax* is very distinct from the other described members of the group, especially in the elongate nodulose antennae and in the structure of the male hypopygium. The latter somewhat suggests *L. (L.) rapax* (Alexander), of Amazonian Peru, but the resemblance is not particularly close.

## 2. *Limonia (Limonia) sica* sp. n.

Belongs to the *apicata* group; general coloration of praescutum obscure yellow, with a broad black median stripe; flagellar segments with glabrous apical necks; cell 1st *M*<sub>2</sub> short-quadrate; male hypopygium with the dististyle simple, extended into a slender dagger-like blackened beak

Male. — Length about 5 mm.; wing 6 mm.; antenna about 1.7 mm.

Rostrum and palpi black. Antennae black throughout, of moderate length, as shown by the measurements; flagellar segments oval to subcylindrical, with conspicuous glabrous apical necks; terminal segment about one-half longer than the penultimate. Head blackish, sparsely priunose.

Pronotum brownish black. Mesonotal praescutum with the ground color obscure yellow ; a broad median black stripe, widened behind ; scutal lobes infuscated, the median area yellow ; scutellum brownish yellow to pale brown ; mediotergite testaceous yellow, more darkened behind. Pleura obscure yellow, the mesopleura extensively more darkened but not forming a distinct stripe ; pleurotergite pale. Halteres with stem yellow, knob brown. Legs with the coxae and trochanters pale yellow ; remainder of legs medium brown, the femora a trifle darker. Wings with a pale brown tinge ; stigma oval, a little darker brown ; veins dark brown. Venation : *Sc* long, *Sc1* ending about opposite four-fifths the length of *Rs*, *Sc2* at its tip ; cell *1st M2* short-quadrate, shorter than any of the veins beyond it ; *m-cu* close to fork of *M*.

Abdominal tergites dark brown ; sternites obscure yellow ; hypopygium more brownish yellow. Male hypopygium with the tergite relatively extensive, the caudal margin with a conspicuous V-shaped notch ; lobes with long coarse setae. Basistyle slender, the ventromesal lobe long and conspicuous, pale, the base glabrous, the outer portion conspicuously hairy ; mesal face of style at near midlength further produced into very low protuberance. A single dististyle, relatively narrow ; on outer face at base with a small oval lobe, the outer portion extended into a slender dagger-like blackened beak, the tip acute. Gonapophyses with mesal-apical lobes relatively stout, simple, blackened.

*Holotype*, ♂, Potrerillos, altitude 3,000 feet, May 15, 1935 (MacSwain).

*Limonia (Limonia) sica* is quite distinct from all other members of the group, the structure of the male hypopygium being very different from that of allied forms, as *L. (L.) acuminata* (Alexander).

### 3. **Limonia (Limonia) trialbocincta** sp. n.

Belongs to the *insularis* group ; antennae with scape light yellow, the pedicel and flagellum black ; front wide, silvery white ; mesonotum brownish black, with a conspicuous white median longitudinal stripe ; legs black, the femoral and tibial tips and a ring on tarsi snowy white ; wings with a strong blackish tinge, restrictedly patterned with darker brown ; abdominal tergites and hypopygium black ; sternites dark, the caudal borders of the segments pale ; male hypopygium with the rostral prolongation of the ventral dististyle long and slender ; gonapophyses with mesal-apical lobes broad, the tips obtuse.

Male. — Length about 6,5 mm. ; wing 8-8,2 mm.

Female. — Length about 7 mm. ; wing 8,5 mm.

Rostrum and palpi black. Antennae with scape light yellow ; pedicel and flagellum black ; basal flagellar segments subglobular, passing through oval to elongate ; flagellar segments with short apical necks ; terminal segment about one-third longer than the penultimate. Front and anterior vertex wide, silvery white ; posterior portions of head dark brown.

Pronotum dark brown. Mesonotal praescutum light brown in front and sublaterally, the borders and extensive posterior portions brownish black ; posterior sclerites of notum brownish black ; a narrow but very conspicuous white longitudinal stripe begins near the anterior end of praescutum, continued caudad on to the merio-tergite ; pleurotergite brownish black, paler on ventral portion. Pleura obscure yellowish brown to brown, sparsely variegated. Halteres black, the extreme base of stem yellow. Legs with the fore coxae dark brown, the remaining coxae a little paler ; trochanters brownish yellow ; femora black, the tips narrowly but abruptly snowy white, the amount subequal on all legs and involving about the distal tenth or twelfth of the segment ; tibiae black, the extreme bases whitened, the tips broadly white, the amount about twice as extensive as the femoral tips ; basitarsi black, the extreme tips and remainder of tarsi with the exception of the outer segments snowy white. Wings with a strong blackish tinge, the costal border and outer radial field a little darker ; narrow, still darker seams at origin of *Rs*, stigma, cord and outer end of cell *1st M2* ; veins dark brown. Venation : *Sc1* ending about opposite three-fifths to two-thirds *Rs* ; *R2* long ; *m-cu* close to fork of *M*. In the paratype, an adventitious crossvein in cell *R3* on one wing only.

Abdominal tergites and hypopygium black ; sternites dark brown, the caudal borders of the segments pale. Male hypopygium with the caudal margin of tergite gently emarginate. Rostral prolongation of ventral dististyle long and slender, pale, gently arcuated, the oval sensory area close to extreme tip. Spinulae of outer dististyle small and relatively sparse. Gonapophyses pale, the mesal-apical lobes broad, with obtuse tips.

*Holotype*, Potrerillos, altitude 3,000 feet, May 20 1935 (MacSwain). *Allotopotype*, ♀, May 25, 1935. Paratopotype, 1 ♂, with the type.

*Limonia (Limonia) trialbocincta* is readily told from *L. (L.) præclara* Alexander, and other generally similar species with white tibial tips, by the abruptly whitened femoral apices, and by the heavily blackened wings.

4. ***Limonia (Dicranomyia) aurantiothorax* sp. n.**

General coloration of thorax light orange-yellow, unmarked; halteres and legs yellow, the terminal tarsal segments infuscated; ovipositor with cerci short.

Female. — Length about 5-5.5 mm.; wing 6-6.2 mm.

Rostrum relatively long, pendant, obscure yellow; palpi pale. Antennae with scape yellow; pedicel and flagellum pale brown to brownish yellow; flagellar segments subglobular to short-oval, the outer segments smaller. Head yellow.

Thorax uniform light orange-yellow. Halteres yellow. Legs yellow, the terminal tarsal segments infuscated. Wings light yellow without markings; veins yellow. Venation: *Sc1* ending opposite origin of *Rs*; cell *1st M2* closed; *m-cu* shortly before fork of *M*; cell *2nd A* narrow.

Abdomen blackened, this color possibly caused by discoloration resulting from included eggs; caudal borders of segments pale. In a paratype, the caudal borders of the tergites are very extensively pale, restricting the dark color to small basal areas. Ovipositor with the genital segment light yellow; cerci short, subequal in length to the hypovalvae.

*Holotype*, ♀ Potrerillos, altitude 3,000 feet, May 5, 1935. (MacSwain). *Paratopotypes*, 2 ♀♀, May 5-June 2 1935 (MacSwain).

*Limonia (Dicranomyia) aurantiothorax* is readily told by the orange-yellow, color of the thorax, in conjunction with the yellow, unmarked wings, and the short cerci.

5. ***Limonia (Geranomyia) carunculata* sp. n.**

General coloration greenish testaceous, the praescutum with a broad cinnamon brown median stripe; femora obscure yellow, the tips broadly clear yellow preceded by a much narrower brown subterminal ring; wings yellow, with a heavy brown pattern, including a heavier costal series, the area at origin of *Rs* and fork of *Sc* single or only slightly separated; *Sc* relatively short, *Sc1* ending about opposite one-third to one-fourth the length of *Rs*; male hypopygium with the caudal margin of tergite convexly rounded; rostral prolongation of ventral dististyle with two long

curved spines from the outer angle of an elevated sclerotized plate ; gonapophyses with mesal-apical lobe long and slender, nearly straight or but gently curved.

Male. — Length, excluding rostrum, about 5,2-5,5 mm. ; wing 6,2-6,5 mm. ; rostrum about 3-3,2 mm.

Female. — Length, excluding rostrum, about 6,5-7 mm. ; wing 7-7,5 mm. ; rostrum about 3,2-3,5 mm.

Rostrum black throughout, elongate, as shown by the measurements ; palpi black. Antennae black throughout ; flagellar segments passing through subglobular and oval to elongate. Head behind gray ; with conspicuous brown setigerous punctures ; the narrow anterior vertex more silvery.

Pronotum yellow above, darkened laterally. Mesonotal praescutum with a broad cinnamon brown median stripe, the lateral portions broadly more greenish testaceous ; posterior sclerites of notum greenish testaceous, the scutal lobes chiefly brown. Pleura pale greenish testaceous. Halteres pale, the knob darkened. Legs with the coxae and trochanters greenish testaceous ; femora obscure yellow, the tips broadly clear yellow, preceded by a much narrower brown subterminal ring ; tibiae and basal segments of tarsi brownish yellow, the terminal tarsal segments darkened. Wings yellow, the prearcular and costal portions more saturated yellow, with a heavy brown pattern, as follows : Five larger costal areas, the third a common one at origin of *Rs* and fork of *Sc*, in cases barely disconnected into separate areas ; cord and outer end of cell *1st M2* seamed with brown ; a series of marginal dark clouds on veins *M3* to *2nd A*, inclusive, the latter large and conspicuous ; a small marginal darkening at midlength of cell *2nd A* ; veins yellow darker in the clouded areas. Venation : *Sc* relatively short, *Sc1* ending about opposite one-third to one-fourth the length of *Rs* ; *m-cu* close to fork of *M*.

Abdominal tergites light brown, the caudal borders of segments paler ; sternites more uniformly yellow ; hypopygium yellow. In the female, the abdominal segments more uniformly pale brown. Male hypopygium with the caudal margin of tergite convexly rounded. Dorsal dististyle a gently curved rod. Ventral dististyle large and fleshy, the rostral prolongation slender ; rostral spines two long and curved, arising close together but separately from the outer angle of an elevated sclerotized plate. Gonapophyses with mesal-apical lobe long and slender, nearly straight to very gently curved, the tip weakly expanded.

*Holotype*, ♂, Potrerillos, altitude 3.000 feet, May 5, 1935 (MacSwain). *Allotopotype*, ♀, altitude 3.500 feet, May 12, 1934 (Brown). *Paratopotypes*, 2 ♂♂, 2 ♀♀, with the allotype; May 12-14, 1934 (Brown).

*Limonia (Geranomyia) carunculata* is closest to *L. (G.) eurygramma* Alexander and *L. (G.) deliciosa* Alexander, differing from all described species in the structure of the male hypopygium. The unusually long yellow femoral tips, in conjunction with the patterns of the wing and praescutum, are likewise distinctive.

#### 6. *Limonia (Geranomyia) fluxa* sp. n.

General coloration gray, the praescutum with three narrow, brownish black stripes; halteres with dark brown knobs; femora brown, the tips narrowly yellow; wings with a weak brown tinge, the prearcular and costal portions more whitened; stigma oval, darker brown; outer radial field weakly infumed; *Sc* short, *Sc1* ending about opposite origin of *Rs*; male hypopygium with the rostral spines arising from a low common tubercle; gonapophyses with the blackened mesal-apical lobes irregularly bilobed.

Male. — Length, excluding rostrum, about 5mm.; wing 5,5 mm.; rostrum about 3 mm.

Female. — Length, excluding rostrum, about 6 mm.; wing 6,5 mm.; rostrum about 3 mm.

Rostrum black, elongate, in male exceeding one-half the length of body; palpi black. Antennae black throughout; flagellar segments subcylindrical. Head brownish black, the anterior vertex and a median stripe on posterior vertex light gray.

Pronotum brownish black. Mesonotal praescutum with the ground color blackish gray, with three narrow but very clearly defined brownish black stripes; lateral borders of sclerite behind the pseudosutural foveae infuscated; posterior interspaces more reddish gray; scutal lobes brown, their mesial portion traversed by a brownish black line, a direct caudal prolongation of the sublateral praescutal stripes; median area of scutum lighter gray; scutellum dark, the posterior border paler; postnotum black, sparsely pruinose. Pleura black, sparsely pruinose, the propleura slightly paler. Halteres with stem pale yellow, knob dark brown. Legs with the fore coxae blackened, the mid-coxae less evidently infumed, posterior coxae light yellow; trochanters obscure yellow; femora brown, the tips narrowly and somewhat vaguely paling to yellow; tibiae and tarsi pale brown, the terminal tarsal segments



darker. Wings with a weak brown tinge, the prearcular and costal portions more whitish; stigma oval, darker brown; wing-tip in outer radial field somewhat infumed; veins brownish black. Venation: *Sc* short, *Sc1* ending opposite origin of *Rs* or approximately *Sc2* at its tip; *m-cu* at fork of *M*.

Abdominal tergites brownish black; sternites obscure brownish yellow, the subterminal segments darker. Male hypopygium with the caudal margin of ninth tergite shallowly emarginate medially. Ventral dististyle much more extensive than the basistyle; rostral prolongation moderately long, its apex obtusely rounded; rostral spines two, of moderate length and gently curved, arising from a low common tubercle near base of prolongation. Gonapophyses with mesal-apical lobe darkened, short and irregularly bilobed, the outer lobe or point longer and more conspicuous than the more obtuse lateral tooth or flange.

*Holotype*, ♂, Potrerillos, altitude 3,000 feet, May 14, 1935 (MacSwain). *Allotopotype*, ♀, May 5, 1935 (MacSwain).

*Limonia (Geranomyia) fluxa* is most similar to *L. (G.) nigripleura* (Alexander) and allies, differing in the coloration of the wings and legs, and especially in the structure of the male hypopygium.

6. a. ***Elephantomyia (Elephantomyia) luteiannulata chiri-quiensis***. subp. n.

Female. — Length, excluding rostrum, about 7.5 mm.; wing 7 mm.; rostrum about 6 mm.

As in the typical form (southern Mexico), differing in colorational details. Yellow femoral rings much wider, being one-half more extensive than the black tips; in the typical form, the black tips are equal to or more extensive than the yellow rings. Dark abdominal rings wide and conspicuous, equalling from one-fourth to nearly one-third the length of the segment.

*Holotype*, ♀, Potrerillos, altitude 3,000 feet, May 25, 1935 (MacSwain).

7. ***Teucholabis (Teucholabis) æquinigra*** sp. n.

General coloration black and yellow; pronotum uniformly yellow; lateral praescutal stripes reaching the lateral margin of sclerite; scutellum and postnotum black; pleura chiefly black; knob of halteres yellow; legs yellow, the tips of femora conspicuously black, the amount subequal on all legs; wings yellow, with two

narrow brown crossbands, the wing-tip paler brown ; abdominal tergites brownish black, sternites dimidiate, brown, the posterior borders yellow ; male hypopygium with spine of basistyle long, with numerous long silken setae ; outer dististyle long and slender, bearing a small lateral spine at near midlength ; aedeagus narrow, the apex produced directly caudad into a black spine.

Male. — Length about 6,5 mm. ; wing 6,5 mm.

Female. — Length about 6 mm. ; wing 5,5 mm.

Rostrum black, a little shorter than the remainder of head ; palpi black. Antennae black throughout ; flagellar segments oval. Head in front polished black, the posterior vertex and occiput paling to obscure yellow.

Pronotum yellow. Mesonotal praescutum with the ground color yellow, with three extensive polished black stripes that are narrowly separated by the interspaces ; lateral stripes extensive, including the broad lateral margins of the praescutum and crossing the suture onto the scutal lobes ; median region of scutum very narrowly pale ; scutellum black, the parascutella paler ; postnotum black, the suture between pleurotergite and mediotergite paler. Propleura yellow ; mesopleura black, the dorsopleural region surrounding the wing-root and the meral region paler. Halteres with stem dusky, the knob light yellow. Legs with coxae and trochanters yellow ; femora light yellow, the tips rather narrowly but conspicuously black, the amount subequal on all legs and including the distal sixth to eighth of the segment ; tibiae obscure yellow, the tips more narrowly brownish black ; basal tarsal segments passing into black. Wings yellow, the prearcular and costal regions a little clearer yellow ; a somewhat sparse brown pattern, including narrow bands at level of origin of *Rs* and at cord, the former extended more basad in cell *Cu* and vaguely broken at vein *M* ; a narrow cloud at outer and of cell *1st M2* ; wing-tip very weakly darkened, best indicated by a darkening of the veins. Venation : *Sc* relatively long, *Sc1* extending approximately to opposite midlength of *Rs*, *Sc2* shortly beyond the origin of the latter ; *R2* slightly oblique ; cell *R2* at margin more than one-half more extensive than cell *R4* ; *m-cu* shortly beyond fork of *M*.

Abdominal tergites brownish black ; sternites dimidiate, dark brown, the caudal half of the segments yellow ; hypopygium black. Sternal setae of male greatly reduced. Male hypopygium with spine of basistyle long, strongly curved at base, the apex a long straight

spine, before this spine with numerous long silken setae ; on outer margin at base of spine with a few microscopic denticles ; mesal margin of basistyle blackened and elevated into a weak flange. Outer dististyle a slender pale rod, a little longer than the spine of basistyle ; on mesal margin at near midlength with a strong lateral spine ; apex of style narrowed into a point. Inner dististyle with outer lobe elongate, its two spinous points thus widely separated by a broad U-shaped incision, the outermost spine a curved hook-like blade ; a small cylindrical lobe near base of outer lobe of style. Aedeagus relatively narrow, the apex produced directly caudad into a gently curved black spine.

*Holotype*, ♂, Potrerillos, altitude 3,000 feet, May 20, 1935 (MacSwain). *Allotopotype*, ♀ May 7, 1935.

*Teucholabis (Teucholabis) aequinigra* is very distinct from the other Neotropical species. Apparently it is closest to *T. (T.) sackeni* Alexander, yet is very distinct in the coloration of the body, legs and wings, and in the structure of the male hypopygium.

#### 8. *Teucholabis (Teucholabis) seposita* sp. n.

General coloration black and yellow ; head dull black ; knobs of halteres weakly yellow ; legs black, the femoral bases narrowly yellow ; wings whitish subhyaline, unmarked except for the small brown stigma ; cell *1st M2* open by atrophy of basal section of *M3* ; male hypopygium with the outer dististyle on mesal face bearing a slender basal spine and a stronger spinous arm beyond midlength.

Male. — Length about 9 mm. ; wing 7.5 mm.

Female. — Length about 9-10 mm. ; wing 7 mm.

Rostrum nearly as long as remainder of head, black ; palpi black. Antennae black throughout ; flagellar segments oval to sub-cylindrical, with long verticils. Head dull black.

Pronotum obscure yellow, darker medially and in front. Mesonotal praescutum obscure yellow, with three confluent polished black stripes, leaving broad areas of the ground in the humeral and lateral portions and before the suture ; lateral stripes continued across the suture and including the lateral half of each scutal lobe, the broad median area yellow ; scutellum dull black, the extreme posterior border more reddish brown ; parascutella reddish ; médiotergite polished black. Pleura black, the pleurotergite more reddish brown to piceous ; a broad, more silvery, longitudinal stripe extending from behind the fore coxae to the base of abdomen. Halteres black, the apex of knob slightly more yellow. Legs with the

fore and middle coxae black, the posterior coxae more reddish ; trochanters brown ; remainder of legs black, the femoral bases narrowly obscure yellow. Wings whitish subhyaline, unmarked except for the small, dark brown stigma ; veins brown, *Sc* and the prearcular veins pale yellow. Venation : *Sc* long, *Sc1* ending about opposite three-fifths the length of *Rs*, *Sc2* some distance from its tip ; *R2* a little longer than *R2 + 3 + 4* ; veins *R4* and *R5* extending generally parallel to one another for virtually their entire length, cell *R2* at margin thus very wide ; cell *1st M2* open by atrophy of basal section of *M3* ; cell *2nd M2* about one-half longer than its petiole ; *m-cu* a short distance beyond fork of *M*.

Abdomen black, the incisures of sternites broadly yellow, of the tergites more narrowly so ; in female, the yellow pattern less contrasted ; hypopygium black. Male hypopygium with the apex of basistyle obtuse. Outer dististyle complex, consisting of a curved rod, provided with long coarse setae, near base on mesal face with a sharp spine ; more distad but also on mesal face with a stronger chitinized arm that is bifid at apex. Inner dististyle short and compact, the outer lobe with conspicuous setae, the inner lobe or beak irregularly bilobed at apex. Aedeagus near apex produced into a powerful curved spine.

*Holotype*, ♂, Potrerillos, altitude 3,500 feet, May 12 1934 (Brown). *Allotopotype*, ♀, altitude 3,500 feet, May 5; 1935 (MacSwain). *Paratopotypes*, 2 ♀ ♀, May 5-14, 1935 (MacSwain)

Among the species of *Teucholabis* with cell *1st M2* open, the present fly is very distinct in the black legs and unmarked wings, as well as in the very different male hypopygium.

8a. ***Gonomyia (Lipophleps) peracuta conifera*** subsp. n.

Male. — Length about 3,5-4 mm. ; wing 3,6-4 mm.

Differs from the typical form in the details of structure of the male hypopygium. Lateral spines of basistyle shorter, stouter at base, more strongly incurved. Dististyle with conical spine shorter, and more slender, only a little longer than the two fasciculate setae at apex of style.

*Holotype*, ♂, Potrerillos, altitude 3,000 feet, May 7, 1935 (MacSwain). *Paratopotypes*, 1 ♂, May 5, 1935 ; 1 ♂, altitude 1,000 feet, February 8, 1934 (Brown). *Paratype*, 1 ♂, Finca de Parada, altitude 4,450 feet, September 12, 1932 (W. K. A. Lawlor).

9. *Erioptera (Empeda) sutrina* sp. n.

General coloration dark brown ; rostrum yellow ; antennae black ; legs brown ; wings grayish, the stigma scarcely indicated ; *Sc1* ending shortly before midlength of *Rs* ; *R2* shorter than  $R2 + 3 + 4$  ; male hypopygium with the outer dististyle blackened, bifid, the inner arm irregularly lobed, bidentate at apex ; inner dististyle pale and narrow.

Male. — Length about 3 mm. ; wing 3,3 mm.

Rostrum obscure yellow ; palpi brownish black. Antennae of moderate length, black. Head dark brownish gray, the front paling to brown.

Pronotum dark brown. Mesonotum almost uniformly dark brown, the caudal border of scutellum very narrowly pale ; lateral pretergites and border of praescutum pale. Pleura brown, the dorsopleural region darker. Halteres dusky, the base of stem yellow. Legs with the coxae pale brownish yellow to yellow ; trochanters testaceous ; remainder of legs brown ; legs with abundant linear scales, additional to the setae. Wings grayish, the prearcular and costal portions a little more yellowish ; stigma scarcely indicated ; veins brown. Venation : *Sc1* ending shortly before midlength of the long, nearly straight *Rs*, the latter subequal to vein *R4* ; *R2* shorter than  $R2 + 3 + 4$  ; *R3* and *R4* generally parallel to one another on the basal portion, thence diverging, so cell *R3* at margin is wider than cell *R2* ; *m-cu* close to fork of *M*.

Abdomen brownish black ; hypopygium slightly paler. Male hypopygium with the outer dististyle blackened, bifid, the outer arm simple, longer, a little expanded on outer third, the tip subacute ; inner arm irregular, the apex bidentate, with a low marginal flange back from the outer tooth ; inner margin of style at near midlength produced into a flattened, roughly triangular point. Inner dististyle a narrow, parallel-sided, pale blade, its apex obtusely rounded. Gonapophyses with the blades very broad and flattened.

*Holotype*, ♂, Potrerillos, altitude 3,000 feet, June 2, 1935 (MacSwain).

*Erioptera (Empeda) sutrina* is quite distinct from the numerous Neotropical species of the subgenus. As usual, the male hypopygium offers the chief characters for distinguishing the species.

**10. *Molophilus (Molophilus) illectus* sp. n.**

Belongs to the *plagiatus* group ; size small (wing, 4 mm. or less); general coloration dark gray ; antennae short, scape black, flagellum light brown ; halteres dusky ; wings with a weak brown tinge ; *R2* in transverse alignment with *r-m* ; male hypopygium with the basal dististyle long and slender, gently curved from the slightly dilated base, the mesal edge with a fringe of long setae and inconspicuous low spines ; phallosomic plate narrow.

Male. — Length about 3 mm. ; wing 3,7 mm. ; antenna about 1,2 mm.

Female. — Length about 3,8 mm. ; wing 4 mm.

Rostrum and palpi black. Antennae (male) with scape black, pedicel and flagellum light brown ; in female, antennae more uniformly darkened ; antennae relatively short, if bent backward about attaining the wing-root ; flagellar segments long-oval. Head gray.

Thorax almost uniformly dark gray, variegated by the restricted white antero-lateral pretergites ; vestiture of mesonotum long and conspicuous. Halteres dusky, the base of stem restrictedly brightened. Legs dark brown. Wings with a weak brown tinge, the base and costal region a little more yellowish ; stigma more infumed but ill-delimited ; veins pale brown. Venation : *R2* in transverse alignment with *r-m* ; petiole of cell *M3* about twice the oblique *m-cu* ; vein *2nd A* sinuous.

Abdomen brownish black, the sternites a trifle brighter. Male hypopygium with the apical beak of basistyle slender, decurved. Outer dististyle with inner arm slender, more dilated on basal half. Basal dististyle a long slender gently curved rod, the extreme base more dilated ; mesal edge of style with a fringe of long curved setae, with interspersed, very low teeth, the setae extending from shortly beyond base of style virtually to apex ; outer face of style with a few scattered spines and spinous setae ; apex of style terminating in a small spine. Phallosomic plate unusually narrow, the apex obtusely rounded, subtended on either side by a pale setiferous lobe. Aedeagus stout.

*Holotype*, ♂, Potrerillos, altitude 3,000 feet, June 21, 1935 (MacSwain). *Allotopotype*, ♀, June 19, 1935.

Closest to *Molophilus (Molophilus) pennatus* Alexander, of Mexico, differing especially in the small size and in the coloration of the body and wings. The hypopygial structure is somewhat

alike in the two species but the details are distinct. In *pennatus*, the stouter basal dististyle is straighter on the basal fourth, thence gently curved, its mesal face with long black spines, additional to long setae, the spines being very different from those of the present fly.

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*Diptera*, t. X, 15-XII-1946  
(Paris, Paul Lechevalier).

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# ENCYCLOPÉDIE ENTOMOLOGIQUE

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