

## NEW OR LITTLE-KNOWN CRANE-FLIES FROM MAURITIUS

(TIPULIDAE DIPTERA)

### PART II

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The first part under this general title was published in the Mauritius Institute Bulletin, vol. 3, pp. 219-226, 8 figs., 1954. Mr. Vinson now has made further interesting collections of these flies from various stations that add materially to our knowledge of the crane-fly fauna of the island. I wish to express my great indebtedness to Mr. Vinson for his continued interest in collecting these fragile and often neglected flies. The general plan and arrangements for the entire series of reports has been outlined in the initial part which may be consulted.

The types will be deposited in the British Museum and paratypes in the Mauritius Institute.

### *Tipulinae*

#### 6, **Ctenacroscelis albovittatus** (Macquart)

*Tipula albovittata* Macquart, 1838, Dipt. exot., 1, pt. 1: 53.

*Tipula brunnea* Bigot, 1859, Ann. Soc. Ent. France, (3) 7: 121, pl. 3, fig. 2.

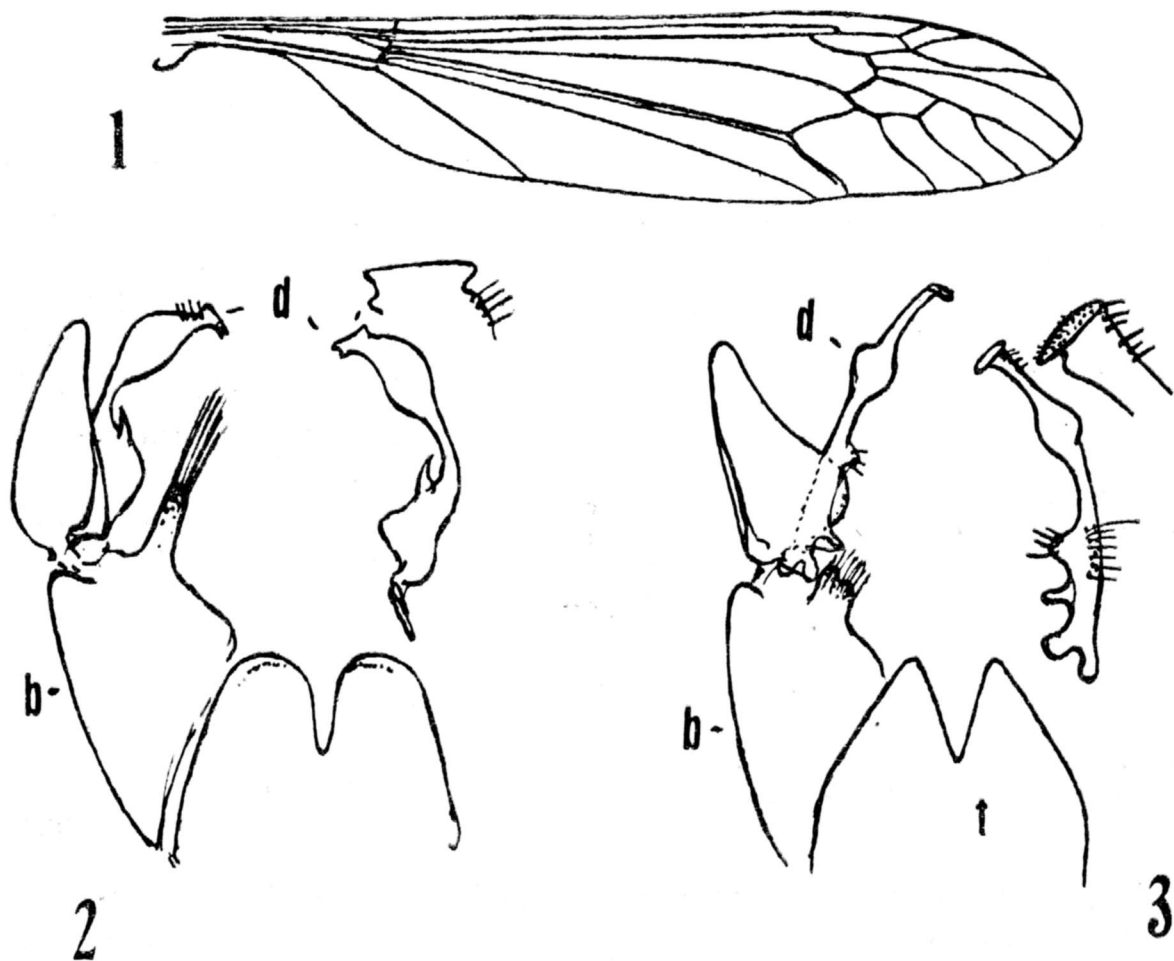
*Tipula rubiginosa* Bigot, 1863, in Maillard, Notes sur l'île de la Réunion, 2, Dipt., p. 37.

The type of *albovittata* was from Mauritius (as "Ile de France"), collected in 1832-1833 by Julien Desjardins. The type of *brunnea* was from Madagascar, taken by Coquerel; that of *rubiginosa* was from the island of Réunion. In addition to its occurrence on the above indicated islands, the species is found in the Comoro Islands and in tropical portions of the African mainland. It may be noted that there are slight differences in the structure of the male hypopygium in continental material and a distinct race may be indicated.

Male hypopygium (Fig. 3) differing from that of *vinsonianus*, sp. n., in certain important respects. Ninth tergite, *t*, with the lobes more narrowed at tips, the median emargination narrowly V-shaped. Basistyle, *b*, with the apical lobe low and broad, relatively inconspicuous. Inner dististyle, *d*, more slender, especially beyond the outer expanded portion, terminating in a flattened lid or caplike structure; no tooth on margin of style.

7. *Ctenacroscelis vinsonianus* sp. n.

Generally similar to *albovittatus* ; thoracic pleura and outer faces of coxae with conspicuous longitudinal brown lines and dashes ; femora brown, the broad tips brownish black, preceded by a narrower yellow ring ; wings relatively narrow, brown, vaguely patterned with yellowed areas ; male hypopygium with the tergal lobes rounded at tips ; mesal



FIGS. 1, 2.— *Ctenacroscelis vinsonianus* sp. n. 1, venation. 2, male hypopygium ;  
*b*, basistyle ; *d*, dististyles ; *t*, tergite.  
 FIG. 3.— *Ctenacroscelis albovittatus* (Macquart), male hypopygium.

face of basistyle near apex with a slender lobe that is tufted with long yellow setae ; inner dististyle with an acute tooth on inner margin at near one-third the length.

*Male*.— Length about 19-20 mm. ; wing 21.5-23 mm. ; antenna about 2 mm.

*Female*.— Length about 23 mm. ; wing 24 mm. ; antenna about 3 mm.

Frontal prolongation of head buffy yellow, narrowly lined above and on sides by darker, the sides of the front beneath the antennal fossae

more extensively darkened ; nasus long and slender ; palpi brownish black. Antennae with the basal segments obscure yellow or brownish yellow, the scape narrowly darker above ; outer flagellar segments more uniformly infuscated ; first flagellar segment about one-half longer than the second, cylindrical outer segments short, suboval to slightly more elongate. Head above with the disk dark brown, including the summit of the low vertical tubercle ; posterior orbits broadly pale ; a conspicuous brown depression just behind the antennal bases.

Pronotum darkened above, yellow on sides. Mesonotal praescutum with the ground interspaces yellowish-brown, with four conspicuous grayish brown stripes that are narrowly bordered by darker brown, the lateral margins pale brown ; scutum brownish-yellow, each lobe with two contiguous grayish-brown areas that are narrowly bordered by darker brown ; a black spot at midline behind the suture ; scutellum pale brown, mediotergite brown, with a narrow darker median vitta, the posterior border elevated into two low tubercles. Pleura and pleurotergite with a narrow brown dorsal stripe extending from the propleura to beneath the wing root, with a broad pale yellow more dorsal stripe occupying the dorso-pleural region, its extreme upper edge again dark brown ; ventral pleurites, dorsal sternopleurite and outer faces of coxae with conspicuous longitudinal brown lines that do not form continuous stripes. Halteres brownish-black, the base of stem restrictedly pale. Legs with the coxae yellow, banded with brown, as described ; trochanters yellow ; femora brown, the broad tips more brownish-black, preceded by a narrower yellow ring ; tibiae brown, the bases narrowly whitened ; tarsi dark brown ; claws (male) bidentate, the basal tooth more acute. Wings (Fig. 1) relatively narrow, brown, the stigma darker brown ; vague but conspicuous yellowed areas before stigma, across outer medial cells, especially  $M_1$ , near outer end of cell  $M$ , and in various parts of cell *1st A* ; some of the veins in outer half of wing very narrowly bordered by yellow ; veins brown, pale in the obliterative field. Venation : *m-cu* at near midlength of vein  $M_3 + 4$ .

Abdominal tergites dark brown, the lateral borders of the proximal seven segments broadly pale buffy-yellow ; sternites chiefly pale, more or less patterned with pale brown ; hypopygium chiefly brownish-yellow. Male hypopygium (Fig. 2) with the tergite, *t*, large, the lobes broadly rounded at tips, separated by a narrow emargination ; setulae of tergite small and inconspicuous, especially near the apices of the lobes. Basistyle, *b*, on mesal face near apex with a slender lobe that bears conspicuous yellow setae, those at apex longer than the lobe, forming a brush. Outer dististyle, *d*, subtriangular in outline, broadest near base, narrowed to the obtuse tip ; inner style with an acute tooth on inner margin at near one-third the length, beyond this point very slender, the outer half again expanded.

*Holotype*, ♂, Mont Cocotte, October 23, 1954 (*J. Vinson*). *Allotype*, ♀, Floréal, July 11, 1953. *Paratopotypes*, ♂♂, April 10, October 9, 1954 (*J. Vinson*).

The present fly is named for the distinguished entomologist, Mr. Jean Vinson, Director of the Mauritius Institute. The differences from *albo-vittatus* have been indicated under the account of that species and in the diagnosis given above.

### *Limoniinae*

#### 8. *Limonia (Limonia) umbrata* (de Meijere).

*Dicranomyia umbrata* de Meijere, 1911, Tijds. voor Ent., 54: 25, pl. 1, fig. 7 (wing).

*Dicranomyia umbrata* de Meijere, 1913, Tijds. voor Ent., 56: 343, pl. 16, figs. 9-10 (male hypopygium).

*Atypophthalmus holopticus* Brunetti, 1911, Rec. Indian Mus., 6: 273.

*Atypophthalmus holopticus* Brunetti, 1912, Fauna Brit. India, Diptera Nematocera, 1: 408-409, pl. 11, fig. 9 (male hypopygium).

*Limonia fissilis* Alexander, 1926, Ann. Ent. Soc. America, 19: 159.

*Limonia (Limonia) umbrata* Alexander, 1950, Rev. de Entomologia, 21: 175.

A wide-spread Palaeotropical species that hitherto had not been recorded from the Ethiopian Region. It occurs in various parts of Tropical America (Cuba, Mexico, Amazonian Peru) and it has been assumed that it reached such places by means of shipping and accidental transport. It is at least possible that its occurrence in Mauritius may be explained in similar manner.

Curepipe, March 14, April 11-20, 1954 ; Floréal, October 13, 1954 (*J. Vinson*).

#### (1). *Limonia (Limonia) vinsoni* Alexander.

*Limonia vinsoni* Alexander, 1954, Mauritius Institute Bull. 3 : 220-221, fig. 1 (wing).

The types of this interesting fly included only females. The male sex has now been discovered and the very distinctive hypopygium is described and figured herewith. Later the species was discovered on Réunion in January 1955 by Messrs. Paulian, Richard, Viette and Vinson.

Male hypopygium (Fig 5) with the tergite transverse, its posterior border gently convex, feebly emarginate on central part ; about five or six setae on either side of midline ; posterior border darkened and slightly thickened. Basistyle, *b*, with the lobe very long, placed on the lower or outer face, with abundant setae of moderate length ; apex of body of style unarmed. Dorsal dististyle, *d*, a nearly straight rod, the short tip acute, surface setuliferous ; ventral style fleshy, a little shorter than the lobe of the basistyle, on mesal face with a compressed blade or flange. Gonapophysis, *g*, distinctive, unequally bilobed at tip, the inner arm shorter, its apex obtuse, the longer outer arm cylindrical, narrowed to an acute point. Aedeagus, *a*, elongate, setiferous on basal half.

Mare Longue, October 25, 1953 ; Les Mares, October 16-18, 1954 ; Mont Cocotte, April 10, October 23, 1954 (*J. Vinson*).

9. *Limonia (Limonia) mauritiana* sp. n.

General coloration yellow, including the rostrum; antennae brownish black; head brownish gray, clearer gray on front and orbits; anterior vertex narrow, only about one-third the diameter of scape; legs brown; wings subhyaline, unpatterned except for the small brown stigma; abdominal tergites darkened medially, obscure yellow on sides, sternites more uniformly yellow.

*Female*.—Length about 5.5 mm.; wing 6 mm.

Most like *Limonia (Limonia) vinsoni* Alexander, differing especially in the darkened legs and entirely unpatterned wings, with other colorational differences.

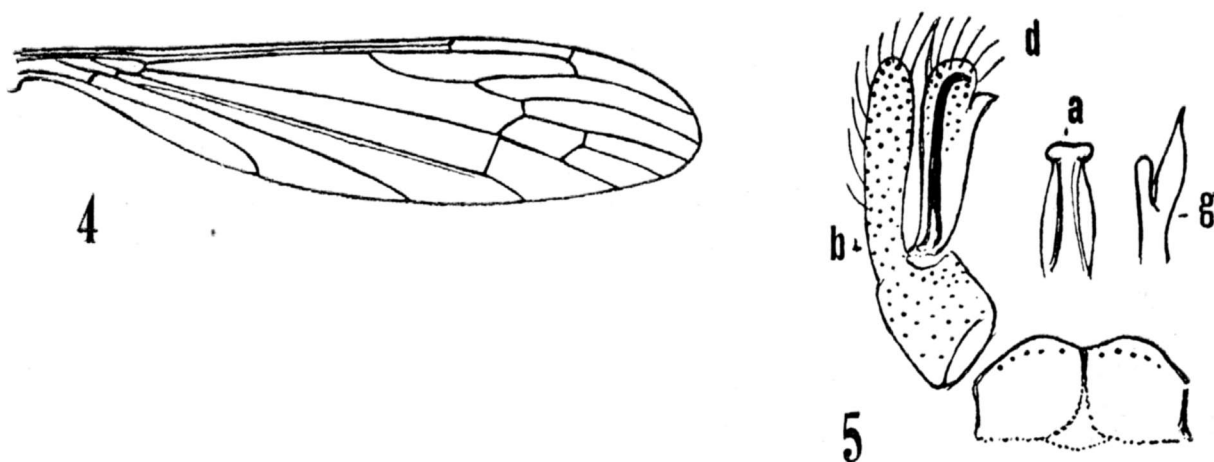


FIG. 4.—*Limonia (Limonia) mauritiana* sp. n., venation.

FIG. 5.—*Limonia (Limonia) vinsoni* Alexander, male hypopygium. *a*, aedeagus; *b*, basistyle; *d*, dististyles; *g*, gonapophysis.

Rostrum yellow; palpi brown. Antennae brownish black; flagellar segments oval, the verticils short. Head brownish gray, clearer gray on front and orbits; anterior vertex narrow, only about one-third the diameter of the scape.

Pronotum and mesonotum obscure yellow, the praescutal humeri slightly more whitened. Pleura and pleurotergite pale yellow. Halteres infuscated, the base of stem pale. Legs with the coxae and trochanters yellow; remainder of legs brown. Wings (Fig. 4) subhyaline, unpatterned except for the very small brown oval stigma; veins brown. Venation:  $Sc_1$  ending near four-fifths the length of  $Rs$ ,  $Sc_2$  near its tip;  $m-cu$  close to fork of  $M$ .

Abdominal tergites darkened medially, obscure yellow on sides, sternites more uniformly yellow. Ovipositor with the cerci very slender, gently upcurved to the acute tips.

*Holotype*, ♀, Mont Cocotte, October 23, 1954 (*J. Vinson*). *Paratype*, 1 ♀.

The only allied regional species so far made known is *Limonia* (*Limonia*) *vinsoni* Alexander which is well distinguished by the coloration of the body, legs and wings.

(2) ***Limonia* (*Dicranomyia*) *albipennis*** (Macquart).

*Limnobia albipennis* Macquart, 1838, Dipt. exot., 1 : 75-76. For remaining synonymy, see under *Limonia* (*Dicranomyia*) *tipulipes* (Karsch), in Part I of these Reports (Mauritius Institute Bull., 1954, 3 : 221).

Macquart's type of *albipennis* was from Réunion (Bourbon), collected in 1832-33 by Bréon. The fly has remained unrecognized since its original definition, but from the description, in conjunction with material from Réunion secured by the recent expedition to the island of Paulian, Richard, Viette and Vinson, there is evidently no question of the identity of the species.

Additional records : Floréal, July 12-21, 1953 ; Mare Longue, October 25, 1953 ; Moka, May 17, 1954 (*J. Vinson*).

10. ***Limonia* (*Dicranomyia*) *mascarensis*** (Alexander).

*Dicranomyia mascarensis* Alexander, 1921, Ann. Mag. Nat. Hist., (9) 8 : 310-311.

The type was from Réunion, collected by Franz Sikora in the early 1890's,

Floréal, July 21-25, 1953 (*J. Vinson*).

Male hypopygium (Fig. 6) with the posterior border of the tergite convexly rounded, with three or four very long setae at and near mid-

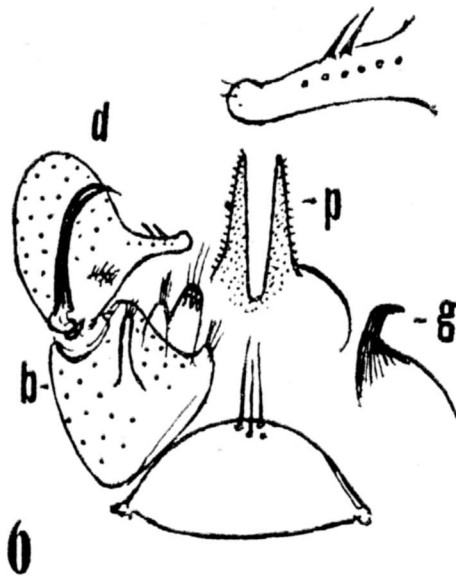


FIG. 6.— *Limonia* (*Dicranomyia*) *mascarensis* Alexander, male hypopygium  
b, basistyle ; d, dististyles ; g, gonapophysis ; p, proctiger.

line, immediately back from the margin. Proctiger, *p*, appearing as a flattened dusky membrane that is extended caudad into two narrow mi-

microscopically setulose lobes that narrow to the acute tips. Basistyle, *b*, stout, with the lobes and lobules unusually developed; ventromesal lobe largest, with an accessory lobule on its face near base, both with apical setae; base of style on mesal face with a smaller tubercle, tipped with relatively few setae; on face of style with a still further long slender fingerlike lobe with a few terminal setae. Dorsal dististyle, *d*, nearly straight on proximal half, the outer part slightly curved, narrowed to an acute spine; ventral style a little more extensive than the basistyle, with relatively sparse setae; rostral prolongation pale, elongate, the apex broadly obtuse; two small rostral spines placed at near midlength of outer margin; a small group of setae near base of prolongation on ventral part. Gonapophysis, *g*, with the mesal-apical lobe slender, blackened, gently curved.

The species belongs to the *tristis* (*liberta*) group of the subgenus.

11. ***Limonia* (*Dicranomyia*) *corallicola* sp. n.**

Size medium (wing, male, 5 mm.); mesonotal praescutum pale, with a single broad cinnamon-brown central stripe; pleura patterned with dark brown; rostrum elongate, dark brown; wings with a weak suffusion; *Sc*<sub>2</sub> preserved, *Sc*<sub>1</sub> subequal in length to *Rs*; cell *M*<sub>2</sub> open by atrophy of *m*; male hypopygium with the dorsal dististyle acute at tip; rostral prolongation of the ventral dististyle short, cleaver-like, with two very unequal spines, the outer one powerful, the inner reduced to a small delicate hair; aedeagus with the outer apical angles produced into pale needle-like spines.

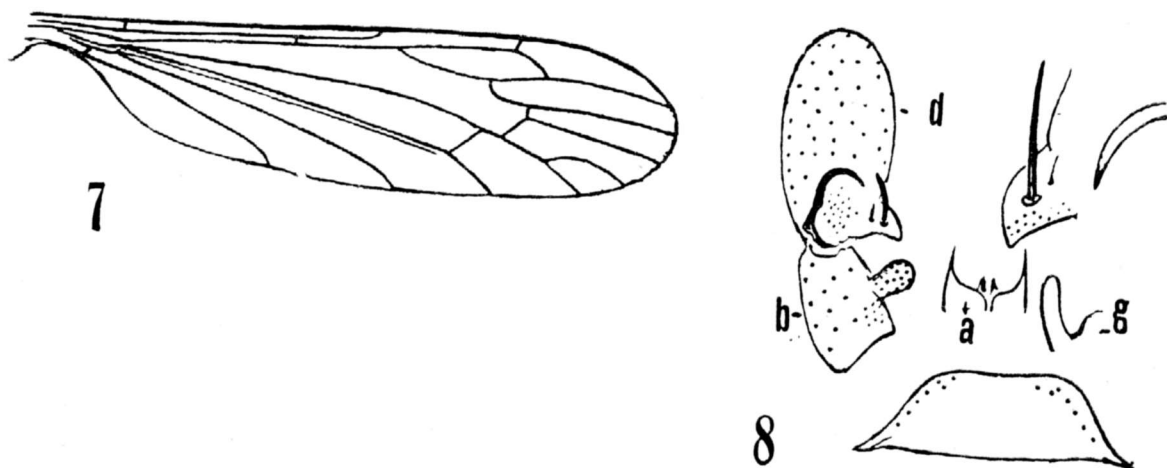
*Male*. - Length about 4.5 mm.; wing 5 mm.

Rostrum dark brown, elongate, approximately one-half the remainder of head; palpi dark brown, relatively short, especially the terminal segment. Antennae with the scape and pedicel pale brown, the former elongate; flagellar segments broken beyond the fourth, the basal ones short-oval. Head above brownish gray; anterior vertex broad, nearly three times the diameter of the scape.

Pronotum whitish gray. Mesonotal praescutum pale yellow, the humeral and lateral parts more whitened; a single broad cinnamon-brown central stripe, the usual lateral pair poorly indicated, heavily pruinose; scutal lobes cinnamon-brown, the central area, with the posterior sclerites of the notum, whitish gray. Pleura and pleurotergite whitened, the former with a large brown discal spot, chiefly on the anepisternum and dorsal sternopleurite, behind reaching the halteres. Halteres white. Legs, with the coxae and trochanters whitened; femora brownish yellow, a trifle darker outwardly; tibiae and tarsi yellow; claws simple. Wings (Fig. 7) with a weak suffusion, stigma not differentiated; veins brown. Costal fringe short and dense. Venation: *Sc*<sub>1</sub> ending shortly before origin

of  $R_s$ ,  $Sc_2$  far retracted,  $Sc_1$  alone subequal in length to  $R_s$ ; cell  $M_2$  open by the atrophy of  $m$ ;  $m-cu$  about one-fourth its length before the fork of  $M$ .

Abdomen brown, more or less variegated by paler; hypopygium pale brown. Male hypopygium (Fig. 8) with the tergite transverse, its posterior border truncate or virtually so; major setae of tergite few in num-



FIGS. 7, 8.— *Limonia (Dicranomyia) corallicola* sp. n. 7, venation. 8, male hypopygium. *a*, aedeagus; *b*, basistyle; *d*, dististyles; *g*, gonapophysis.

ber, about seven on either side, lacking on the midregion. Proctiger appearing as a quadrate median projection, truncate across the apex, patterned with two parallel brown lines. Basistyle, *b*, small, its ventromesal lobe small, oval, with relatively abundant setae. Dorsal dististyle, *d*, a strongly curved sickle, the tip narrowed, acute; ventral style large and fleshy, its area about three times that of the basistyle, provided with relatively sparse and weak setae; rostral prolongation short, cleaver-like, with a very powerful straight black spine at center of disk and with a second very small seta lying more basad. Gonapophysis, *g*, with the mesal-apical lobe slightly expanded at the obtuse tip. Aedeagus, *a*, broad, the outer apical angles produced into pale needlelike spines.

*Holotype*, ♂, Flic en Flac, on coral reef, June 30, 1954 (*J. Vinson*).

The most similar species appears to be *Limonia (Dicranomyia) tokara* Nobuchi (Publ. Seto Marine Biol. Lab., 1955, 4 (2-3), Art. 29: 359-362, figs.), recently described from the Tokara Islands, Ryukyus, Japan, where it inhabits the coral reefs. The present fly differs evidently in the simple claws and in the structure of the male hypopygium, as the proportions of the basistyle and ventral dististyle and the conformation of the rostral prolongation of the ventral style and its armature. Nobuchi figures the aedeagus of his species as being narrow and without the slender apical spines that are found in the present fly.

12. *Limonia (Rhipidia) aoroneura* sp. n.

Belongs to the *morionella* group ; general coloration of thorax brown ; antennae (male) with all flagellar segments excepting the last long-bipectinate ; subterminal tarsal segments whitened ; wings with the outer section of vein  $M_3$  suspended in the membrane ; male hypopygium with the rostral spines of the ventral dististyle arising from a common tubercle.

*Male*. — Length about 4.5-5 mm. ; wing 5-5.5 mm. ; antenna about 1.0-1.2 mm.

*Female*. — Length about 5 mm. ; wing 5 mm.

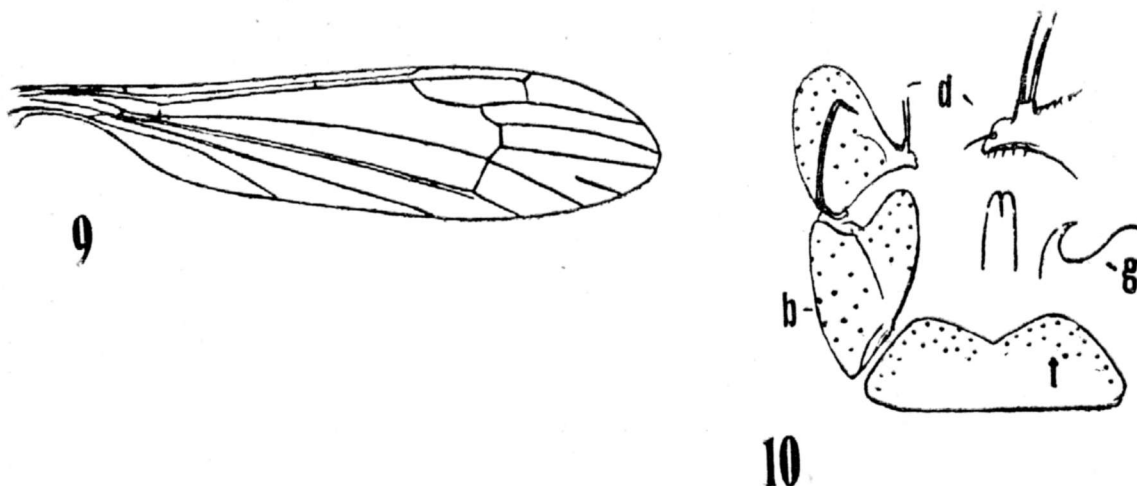
Rostrum relatively long, about two-thirds the remainder of head, light yellow at base, dark brown at tip ; palpi black. Antennae of male brownish black ; flagellar segments, with the exception of the last, long-bipectinate ; branches of first segment about twice the axis, of the succeeding segments longer, the extreme (at midlength of the organ) about three and one-half times the axis ; branches of penultimate segment shorter than the axis ; a single powerful bristle on outer face of each segment opposite the origin of the branches, the latter with conspicuous erect setae over their surface. Antennae of female simple. Head dark brown, sparsely pruinose.

Pronotum brown, paler laterally. Mesonotal praescutum dark brown medially, especially in front, the sides paler brown ; scutal lobes dark brown, scutellum more yellowed ; postnotum yellow, the mediotergite weakly darkened. Pleura with the propleura and mesepisternum infuscated, especially ventrally, the posterior sclerites yellow, sparsely pruinose. Halteres with stem yellow, the outer end, with the knob, brownish black. Legs with the fore coxae infuscated, remaining coxae and trochanters yellow ; remainder of legs dark brown, the subterminal tarsal segments whitened, including especially the end of segment two and most of three ; claws of male with a small basal tooth. Wings (Fig. 9) with a weak dusky tinge, the oval stigma darker brown ; veins brown, those at wing base whitened. Venation :  $Sc_1$  ending close to origin of  $Rs$ ,  $Sc_2$  far retracted,  $Sc_1$  approximately one-half longer than  $Rs$  ; distal section of vein  $M_3$  suspended in the membrane,  $m$  and the basal section of  $M_3$  being atrophied ;  $m-cu$  close to the fork of  $M$ .

Abdomen brown. Male hypopygium (Fig. 10) with the tergite,  $t$ , transverse ; posterior margin with a very broad and shallow emargination, the lobes low ; setae very long and relatively numerous, the longest exceeding one-half the greatest length of the tergite. Basistyle,  $b$ , with the ventromesal lobe large. Dorsal dististyle,  $d$ , only slightly curved, the long acute tip bent at a right angle ; ventral style small, subequal in area to the basistyle ; rostral prolongation with two spines, placed close together at summit of a common tubercle. Gonapophysis,  $g$ , with the mesal-apical lobe gently curved to the acute tip. Aedeagus at apex bilobed by a linear split.

*Holotype*, ♂, Mont Cocotte, October 23, 1954 (J. Vinson). *Allotopotype*, ♀, October 9, 1954. *Paratopotypes*, 7 ♂♂, with the types; *paratypes*, 1 ♂, 1 ♀, Les Mares, October 16-17, 1954 (J. Vinson).

Quite distinct from the other Ethiopian species of the group, including *Limonia (Rhipidia) extraria* Alexander, *L. (R.) incompleta* (Reidel) and *L. (R.) submorionella* Alexander, differing most evidently in the peculiar venation. The suspension in the membrane of the outer section of vein  $M_3$  reminds of the condition found in virtually all species of the Dipterous family Blepharoceridae.



FIGS. 9,10.— *Limonia (Rhipidia) aoroneura* sp. n. 9, venation. 10, male hypopygium. *b*, basistyle; *d*, dististyles; *g* gonapophysis; *t*, tergite.

(4) ***Pseudolimnophila (Calolimnophila) mauritiana*** Alexander.

*Pseudolimnophila (Calolimnophila) mauritiana* Alexander, 1954, Mauritius Institute Bull. 3 : 224-225, fig. 5 (wing), fig. 6 (male hypopygium).

The type was from Mare Longue, taken December 26, 1950, by Vinson. Additional records include Les Mares, October 17, 1954; Mare Longue, October 25, 1953; Mont Cocotte, October 23, 1954; Plaine Champagne, April 16, 1954 (J. Vinson).

13, ***Pseudolimnophila (Calolimnophila) interstincta*** sp. n.

Mesonotal praescutum buffy brown, with a capillary dark brown median stripe, with further isolated darkenings on the praescutum and scutum; antennal pedicel obscure yellow, first flagellar segment very pale yellow; femora infuscated especially outwardly, the extreme tips pale; wings yellow, the central cells washed with brown, with a very heavy and distinct darker brown pattern, including series of about ten areas in both the costal and cubital fields; stigma with abundant trichia.

*Male*.— Length about 8-8.5 mm.; wing 9-10.5 mm.; antenna about 2.2-2.3 mm.

*Female*.— Length about 10 mm.; wing 11 mm.

Rostrum and palpi dark brown. Antennae with scape black, pruinose, pedicel obscure yellow, first flagellar segment very pale yellow, the remainder of organ black; flagellar segments elongate, with conspicuous verticils. Head brownish gray, the posterior vertex with a central brown dash. Pronotum buffy brown, with a capillary dark brown me-

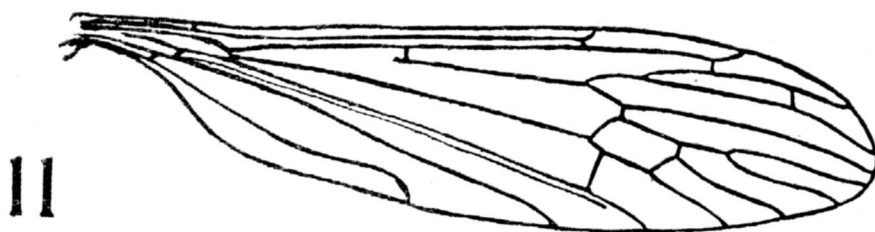


FIG. 11.— *Pseudolimnophila* (*Calolimnophila*) *interstincta* sp. n., venation.

dian stripe and small darkenings opposite the humeri, at lateral borders and sublaterally at the suture; scutum light brown, variegated with darker brown on each lobe, the lateral spot behind the suture more intensely darkened; scutellum brown, yellow pollinose; mediotergite gray with a dark central vitta on the cephalic half and with the posterior angles darkened, the latter being the continuation of a dark dorsopleural stripe that begins on the propleura and extends backward; remainder of pleura obscure yellow; ventral sternopleurite medium brown. Halteres with stem brownish yellow, knob dark brown, paler at apex. Legs with coxae and trochanters obscure yellow, in cases the former slightly patterned with pale brown spots, especially near tips; femora infuscated, especially outwardly, the extreme tips pale; tibiae and tarsi yellowish brown to pale brown; intermediate vestiture of legs appearing as very slender scalelike setae. Wings (Fig. 11) with the ground color yellow, the central cells washed with brown; a heavy brown pattern, including about 10 to 12 costal areas and some 10 circular spots along vein *Cu*; largest costal darkenings at origin of *Rs* and stigma, conspicuously produced behind; still further darkenings at arculus, cord, outer end of cell 1st *M*<sub>2</sub>, and at ends of the anal veins; in the more heavily patterned specimens, these areas are darker and more extensive, the ones at the supernumerary crossvein, fork of *M*<sub>1</sub> + <sub>2</sub> and ends of the anal veins with more or less distinct paler centers; veins light brown, darker in the patterned areas. Stigma conspicuously hairy. Venation: *Sc*<sub>1</sub> ending just beyond the fork of *Rs*, *Sc*<sub>2</sub> near its tip; *Rs* angulated and spurred at origin; supernumerary crossvein in cell *R*<sub>3</sub> at near three-fifths the length of cell; *m-cu* from one-third to one-fourth its length beyond the fork of *M*.

Abdominal tergites, including the hypopygium, dark brown; sternites somewhat paler, with narrow darkened basal rings.

*Holotype*, ♂, Mont Cocotte, April 10, 1954 (*J. Vinson*). *Allotype*, ♀, Les Mares, October 17, 1954. *Paratopotypes*, 3 ♂♂, 1 ♀.

The generally similar *Pseudolimnophila* (*Calolimnophila*) *mauritiana* Alexander has the details of body coloration distinct and with the wing markings much paler and less contrasted.

14. ***Toxorhina* (*Ceratocheilus*) *cocottensis* sp. n.**

Size very large (wing over 8 mm., rostrum 6.5 mm.); general coloration of thorax fulvous, the scutum and central part of mediotergite darkened; halteres yellowish brown; wings dark fulvous, unpatterned; anterior branch of *Rs* long and sinuous, cell *R*<sub>2</sub> widest at base; abdominal tergites bicolored, dark brown, with about the posterior fourth of the segments fulvous.

*Female*.—Length, excluding rostrum, about 11 mm.; wing 8.8 mm.; rostrum about 6.5 mm.

Rostrum black, exceeding one-half the length of body. Antennae black, the apex of the pedicel broadly more fulvous. Head with the anterior vertex and posterior orbits light gray, the central part of vertex brown; no corniculus.

Prothorax, with the mesonotal praescutum and scutum, fulvous, unpatterned; scutum and central part of mediotergite infuscated, the parascutella, lateral and posterior margins of mediotergite, and the pleurotergite fulvous. Pleura fulvous, unpatterned. Halteres yellowish brown. Legs with the coxae and trochanters fulvous yellow; remainder of legs dark brown to brownish black. Wings with a dark fulvous tinge, unpatterned; costal and cubital veins brownish yellow, the remaining veins brown. Venation: *Sc*, ending opposite origin of *Rs*, the latter about two-thirds the basal section of *R*<sub>5</sub>; anterior branch of *Rs* long and sinuous, cell *R*<sub>2</sub> widest at its base; *m-cu* close to the fork of *M*; cell 1st *M*<sub>2</sub> shorter than vein *M*<sub>4</sub>.

Abdominal tergites bicolored, chiefly dark brown, the posterior fourth of the segments fulvous; sternites fulvous yellow; genital shield yellow; cerci long, straight and very slender.

*Holotype*, ♀, Mont Cocotte, April 16, 1955 (*J. Vinson*).

This conspicuous fly is readily told from the two other species of the genus known from Mauritius by the large size and general fulvous coloration of the thorax.

15. ***Toxorhina* (*Ceratocheilus*) *nigropolita* sp. n.**

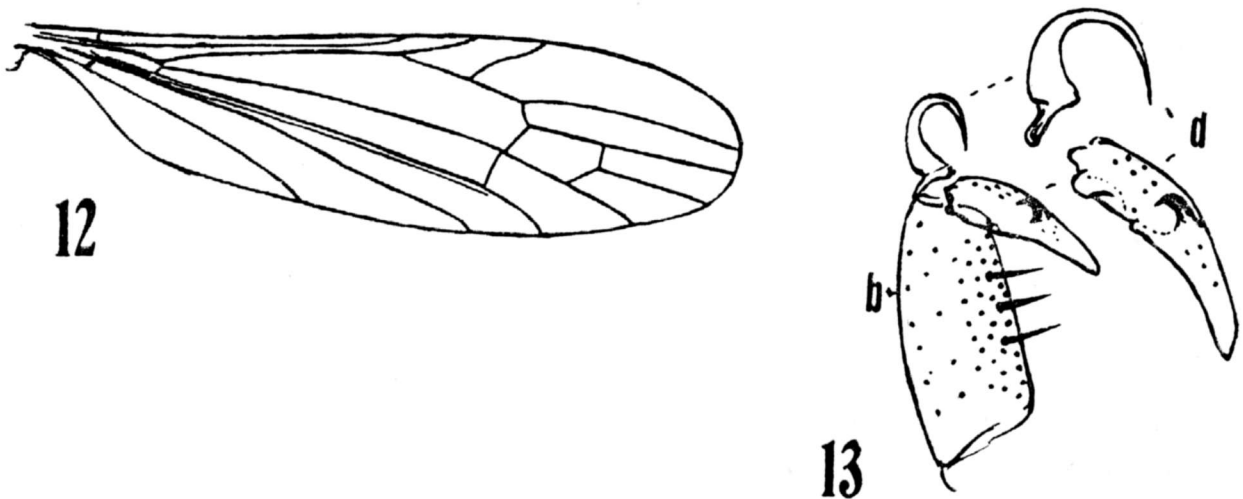
General coloration of head and thorax polished black; halteres pale yellow; wings with a brownish tinge, unpatterned, the base yellow; abdominal segments weakly bicolored, polished black, with less than the posterior half more reddish or piceous; male hypopygium with the mesal face of basistyle conspicuously setiferous; outer dististyle a very strongly curved sickle, gradually narrowed to a needlelike point.

*Male*.—Length, excluding rostrum, about 5.5–5.5 mm.; wing 5.5–5.5 mm.; rostrum about 3.3–3.5 mm.

*Female*.—Length, excluding rostrum about 6 mm.; wing 5 mm.; rostrum about 3.3 mm.

Rostrum black, about two-thirds as long as the wing. Antennae black. Head polished black; anterior vertex relatively broad, about twice the diameter of the scape; no corniculus.

Thorax polished black throughout. Halteres pale yellow. Legs with the coxae black; trochanters yellow; remainder of legs obscure yellow or brownish yellow, appearing darker because of the abundant vestiture. Wings (Fig. 12) with a brownish tinge, without pattern, the



FIGS. 12, 13.— *Toxorhina (Ceratocheilus) nigropolita* sp. n. 12, venation; 13, male hypopygium. *b*, basistyle; *d*, dististyle

base yellow; veins brown, those of the base and less evidently of the costal region more yellowed. Venation: anterior branch of *Rs* subequal to the first section of *Rs*, gently sinuous; *m-cu* close to fork of *M*, in cases a little before or beyond.

Abdominal segments weakly bicolored, polished black, with less than the posterior half of the intermediate segments more reddish or piceous; hypopygium black. Male hypopygium (Fig. 13) with the mesal face of basistyle, *b*, with numerous strong setae, three or four being even stouter; outer face of style with fewer but elongate setae. Outer dististyle, *d*, a very strongly curved sickle, narrowed gradually to a needle-like point; inner style long and slender, especially on outer half, at near midlength with a strong curved spine.

*Holotype*, ♂, Mont Cocotte, October 9, 1954 (*J. Vinson*).

*Allotopotype*, ♀, October 23, 1954. *Paratopotypes*, 8 ♂ ♀, April 10, October 9-23, 1954 (*J. Vinson*).

This species is most similar to *Toxorhina (Ceratocheilus) flavicostata* Alexander, differing in the polished black head and thorax, yellow halteres, unpatterned wings, and in slight distinctions in the male hypopygium.