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NEW DIPTERA IN THE AMERICAN MUSEUM OF NATURAL HISTORY

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During the identification of several small collections of Diptera many undescribed forms have come to light. For the most part these have been placed aside until such time as the groups to which they belong may receive more detailed consideration, but descriptions of a few of them have been prepared and are presented at this time. The types of the new species are in The American Museum of Natural History.

Chironomidæ

Crictopus abana, new species

Closely allied to *C. flavibasis* Malloch but readily distinguished by the wholly brown or blackish tarsi in the female and wholly black abdomen in the male; from *brunnicans* Walley, to which it traces in Walley's key (Can. Ent., LX, p. 21, 1928), it is readily distinguished by the yellow pleura and abdominal venter. Length, 2 mm.

MALE.—Head brown; large, basal antennal segment shining black. Thorax shining black, very lightly gray-dusted, the humeri, sides of mesonotum in front of the wings and upper third of the pleura, yellowish; mesopleura brown. Anterior coxæ and all the trochanters, yellowish; tibiæ white with less than the basal fifth and apical sixth black; front tarsi wholly and apical segment of the other tarsi, black, the tips of the tarsal segments brownish, the posterior four tarsi otherwise white; femora shining black. Pale parts of legs white-haired. Wings rather whitish. Halteres pale yellow. Abdomen dull black, the first segment wholly, tips of the second to fifth segments and their lateral margins, shining black. Genitalia white.

FEMALE.—Very different in coloration. Face, area about base of antennæ and the basal two or three antennal segments, yellowish; mesonotum with a pair of wide yellow vittæ; pleura yellow, the pectus and a spot on the mesopleura brown; scutellum more or less yellowish brown; posterior four femora reddish on basal two-fifths; tarsi brown, somewhat paler basally; first abdominal segment reddish yellow, the segmental apices not conspicuously shining; venter pale yellow, the apical sternite black; valves of ovipositor white.

HOLOTYPE.—Male, Birtle, Manitoba, Canada, May 26, 1928. ALLOTYPE.—Female, Birtle, May 21. PARATYPES.—Two males and two females, Birtle, May 21, 1928. All collected by R. D. Bird.

Paratypes are deposited in the Canadian National Collection, Ottawa, Canada.

There is another female taken at the same place on May 24 which has a length of 3 mm., the antennæ wholly brown and each abdominal segment with a subquadrate yellowish spot on either side. It agrees in many respects with *flavibasis* Malloch, but evidently represents an undescribed species.

Stratiomyidæ

Chrysochlora Latreille

The following table separates the described species belonging to this genus.

- | | |
|--|-------------------------------|
| 1. Front with black vitta or largely black..... | 2. |
| Front yellow, at most the ocellar triangle brown..... | 10. |
| 2. Face yellowish, at least below..... | 3. |
| Face blue or green (Mexico)..... | 9. |
| 3. Front purplish..... | <i>annulipes</i> Walker. |
| Front partly yellowish..... | 4. |
| 4. Scutellum yellowish, the base black; mesonotum always vittate..... | 5. |
| Scutellum black, the apex broadly yellowish or the thorax not vittate..... | 8. |
| 5. Second abdominal segment without a median pale vitta..... | 6. |
| Second segment with median pale vitta..... | <i>pluricolor</i> Bigot. |
| 6. Wings with dark cloud at middle and near apex..... | <i>willistoni</i> , n. sp. |
| Wings evenly clouded on apical half, at least in front..... | 7. |
| 7. Costal border evenly brown; segments without median black spots (Guiana).
<i>castanea</i> Macquart. | |
| Costal border not noticeably darker than apical half of wing; segments each with
a median black spot..... | <i>femoralis</i> , n. sp. |
| 8. Thorax vittate (Cuba)..... | <i>quadrilineata</i> Bigot. |
| Thorax not vittate (Galapagos)..... | <i>fasciata</i> Thomson. |
| 9. Front with two yellowish spots anteriorly (Venezuela)..... | <i>maculiventris</i> Rondani. |
| Front wholly metallic..... | <i>purpurea</i> Walker. |
| 10. Pleura and pectus wholly yellow..... | <i>incompleta</i> , n. sp. |
| Pleura and pectus in part brownish or black..... | 11. |
| 11. Pectus in part black..... | 12. |
| Pectus wholly pale, scarcely darker than pleura..... | <i>varia</i> , n. sp. |
| 12. Costal border of wings broadly and evenly brown..... | <i>similis</i> Macquart. |
| Costal border luteous or not evenly brown..... | 13. |
| 13. Wings with median and apical brown spot on anterior half..... | <i>vespertilio</i> Fabricius. |
| Wings evenly luteous in front..... | <i>pulchra</i> Williston. |

Chrysochlora willistoni, new species

Similar in appearance to *vespertilio* Fabricius, but the median third of the front shining black. Length, 12 mm.

FEMALE.—Head yellow, the lateral two-fifths of the occiput and the median third of the front, except above and below, black; occiput grayish pollinose, hair short, pale yellowish; face receding on lower third, prominent in middle; median third of front raised, convex, depressed across lower fifth. Antennæ reddish, the third segment with six conspicuous annules, the style black. Proboscis brownish.

Thorax subshining black; mesonotum with a pair of rather narrow, broadly separated, yellow vittæ and the side margins, interrupted immediately behind the humeri and more broadly behind the suture, reddish yellow. Scutellum reddish yellow, its base black. Prothorax entirely, a large spot on the meso-, sterno- and pteropleura and another on the hypopleura, reddish yellow. Pile very short, yellow, partly black on the dorsal black vittæ.

Legs yellowish, the femora and coxæ more reddish.

Wings luteous, with a roundish preapical spot and another at the middle of the wing in front, brown, the apical and posterior fourth grayish brown, more evident along the veins.

Abdomen banded black and yellow, the black bands basal, that on the second segment narrower than the yellow, on the fourth wider, the black bands triangularly produced in the middle to the posterior border of the segments; first segment with a transverse blackish spot, fourth black with a large, semicircular median apical spot which reaches to the basal fourth of the segment.

HOLOTYPE.—Female, Chapada, Brazil. PARATYPES.—Two females, Chapada. Williston Collection.

This species was recognized by Dr. Williston as distinct from any of those already described.

***Chrysochlora incompleta*, new species**

Yellow, with black and ferruginous markings on thorax and abdomen. Length, 15 mm.

FEMALE.—Head yellowish, the lateral two-fifths of the occiput and the ocellar triangle black; pile short, yellowish, black on the upper three-fourths of the front, front slightly concave on lower half, gently convex above; face most prominent below. Antennæ reddish, the apical three annuli of the third segment and the arista, brown. Proboscis reddish yellow.

Mesonotum with a rather narrow, anteriorly tapering entire median black vitta, and on either side behind the suture a broad, posteriorly tapering black stripe, in front of the suture with an obscure brownish stripe on either side, basal third of scutellum shining black; pile short, yellow, black on the black stripes behind the suture.

Legs yellow; middle and hind coxæ exteriorly and the apical third of the posterior femora brown.

Wings cinereous hyaline, with a conspicuous brownish spot at the stigma, the costa luteous, the apical fourth and broad posterior border grayish.

Abdomen ferruginous, the first segment with a large, quadrate yellow spot on either side, the second to fourth with increasingly broad, transverse triangular spots on apex of either side, the spots narrowly separated from each other, becoming more convex anteriorly on the apical segments. Fifth segment yellow with a basal ferruginous spot in the middle. Pile black, yellow on the yellow triangles. Venter wholly yellow.

HOLOTYPE.—Female, Rio de Janeiro, Brazil. Williston Collection.

***Chrysochlora varia*, new species**

Head yellowish, abdomen varying from ferruginous to black, with yellow bands; wings with darker preapical and stigmal spots; pectus wholly pale. Length, 12 to 13 mm.

MALE.—Head yellowish, the ocellar triangle and lateral two-fifths of the occiput shining blackish; front rather narrow, widening slightly below, the lower three-fifths flat or very slightly concave, the upper part convex, with a low swelling on either side, black-haired, the head elsewhere with short yellowish pile; face receding on lower fifth, straight above. Antennæ reddish, the tip of the third segment and the arista brown. Proboscis yellow.

Thorax rusty yellowish, the mesonotum with three moderately narrow black vittæ, the outer two abbreviated in front and behind and narrowly interrupted at the suture; notopleura and a short, narrow stripe on the mesopleura, shining brown. Scutellum yellow, the base black.

Legs yellowish, the posterior four femora somewhat darker on apical third.

Wings luteous on anterior half, with a brownish subapical cloud and a slight browning about the stigma, elsewhere grayish brown.

Abdomen ferruginous or black, each segment broadly yellowish or reddish apically, the pile black, yellow on the pale parts of the basal four segments.

FEMALE.—The abdomen is black, the first segment, base of second except the sides, most of the second segment, leaving a narrow, transverse fascia which is very strongly, triangularly widened laterally and the apex of the third, rusty reddish.

HOLOTYPE.—Male, Bartica District, British Guiana. **ALLOTYPE.**—Female, British Guiana, February 12, 1913, (H. S. Parish). **PARATYPE.**—Male, Bartica District.

The difference in coloration of the two sexes may be only a variation which may occur in either sex.

Chrysoclora femoralis, new species

Blackish, ferruginous and yellow; abdomen with a median series of small, black spots. Length, 16 mm.

MALE.—Head yellowish, front brownish red, with a brown median vitta extending more than halfway to the antennæ; ocellar tubercle and lateral two-fifths of the occiput black. Face and front black-haired. Front almost evenly convex, moderately wide; face prominent, gently convex, strongly so on lower edge. Proboscis ferruginous. Antennæ reddish, the arista brown.

Prothorax yellow; mesonotum olive-brown, with a median black spot posteriorly and a broad shining black vitta on either side, the humeri, notopleura and posterior calli yellow; pile yellow, black on the black parts behind the suture and on the black basal third of the scutellum. Pleura mostly yellowish, a black spot in front, another on the anterior border of the pteropleura, the metanotum and pectus also black.

Legs, including the coxæ, yellow; basal half of the posterior four femora black or brown.

Wings brownish, with a hyaline vitta on the basal half extending from the alulet to just behind the discal cell, in front of a deeper, yellowish-brown color.

Abdomen ferruginous, the apices of the segments broadly yellowish or reddish, the yellow fasciæ narrowed in the middle and at the sides; in the middle with a deep black vitta composed of a black spot on each segment, the sides of each segment with a subtriangular black spot; first segment with an entire black fascia. Apical three sternites each with a broad, transverse black spot.

HOLOTYPE.—Male, Rio Frio, Magdalena, Columbia, July 18, 1927, (G. Salt).

***Cyphomyia abana*, new species**

Related to *auriflamma* Wiedemann but readily distinguished by the pale pilose face, much wider vertex and the fact that the front is very convex immediately in front of the ocelli instead of being depressed. Length, 13 mm.

FEMALE.—Head yellow, yellow-haired; proboscis, palpi and antennæ black. Front wide, broadening posteriorly, practically bare, in profile strongly convex above; a conspicuous depression on either side of the ocelli, much higher than the posterior orbits at the vertex which is broad and rounded. Antennæ black-haired, third segment longer than head, with almost parallel sides, pointed apically. Ocellar triangle brownish.

Thorax steel-blue, black-haired dorsally and on the hypopleura and upper border of the pteropleura; with sparse long hair on the dorsum. Pleura with whitish-yellow hair.

Legs black, black-haired; basal segment of the tarsi yellowish with black apex, the hair largely yellow.

Wings blackish brown. Squamæ black; halteres yellow.

Abdomen steel-blue, black-haired.

TYPES.—Holotype, female, and paratype, female, Amazon, Brazil.

***Cyphomyia regularis*, new species**

Related to *auriflamma* Wiedemann, but at once distinguished by the wholly yellow face and the absence of a deep groove separating the vertex and posterior orbits. Length, 13 mm.

FEMALE.—Head pale yellowish, the ocellar spot brown, palpi, proboscis and antennæ black. Front rather evenly convex, the median depression shallow, a longitudinal depression on either side of the ocelli, the vertex at point of junction with the posterior orbits conspicuously depressed; pile fine, short, blackish behind the ocelli, elsewhere on head yellowish. Antennæ black-haired, third segment missing.

Thorax black, black-haired dorsally, a few pale hairs in the middle in front; pleura whitish haired. Humeri reddish; pleura with reddish tinge posteriorly. Hypopleura and the pteropleura black-haired above.

Legs brown, black-haired; basal segment of all the tarsi and the base of the following segment reddish yellow and mostly yellow-haired.

Wings blackish brown; squamæ brown; knob of halteres yellow.

Abdomen metallic blue with purplish reflections, black-haired.

HOLOTYPE.—Female, Rio de Janeiro, November, (Williston Collection).

***Cyphomyia sulcifrons*, new species**

Related to *auriflamma* Wiedemann from which it is distinguished by the presence of a deep longitudinal groove extending from the ocelli almost to the antennæ. Length, 11 mm.

FEMALE.—Head whitish yellow, the posterior orbits wide, angulate behind; front at vertex much higher than the orbits, strongly convex between the groove and eye; face reddish brown; the sides with white hair, the middle and posterior orbits below, black-haired; front wholly bare; ocellar triangle black. Antennæ black, the basal segments black-haired; third segment tapering from near base, as long as the head. Proboscis and palpi black.

Thorax blue-black, mesonotum and scutellum short black-haired, an obscure, narrow median vitta on the anterior half of the mesonotum, a short vitta projecting forward from the base of the scutellum on either side, and the pleura, pale yellow-haired. Humeri and apical fourth of scutellar spines reddish yellow. Pteropleura above, and the hypopleura, black-haired.

Legs brown; basal segment of all the tarsi wholly and the basal half or more of the second segment, whitish. Legs black-haired, the pale parts of the posterior four tarsi with whitish hair.

Wings blackish brown; squamæ and knob of halteres brown.

Abdomen metallic blue, wholly black-haired.

HOLOTYPE.—Female, La Buena, Ventura, Vera Cruz, Mexico.

This species differs from *auriflamma* female, not only in the shape of the front but in having the frontal hair so short as to be inconspicuous, it being short but very conspicuous in *auriflamma*, which also has wholly yellow hair on the occiput below the eyes.

Bombyliidæ

Heterostylum xanthobasis, new species

Wings cinereous hyaline, the base broadly yellowish, bordered with pale brownish. Length, 8 to 12 mm.

MALE.—Head blackish in ground color, cinereous pollinose, the front and face cinereous yellow pollinose; face and cheeks yellow in ground color. Pile yellow, becoming white on the lower half of the occiput and on the cheeks; a few blackish hairs on the ocellar triangle. Proboscis shining black, almost half as long as the body. Antennæ black, the basal two segments grayish ochreous pollinose, the first with yellow, the second with black hairs; style not twice as long as wide, obtusely pointed.

Thorax black, the sides of the mesonotum and the pleura with grayish pollen, the pleura sometimes largely reddish in ground color. Pile yellowish, white on the pleura and pectus. Scutellum reddish.

Legs reddish, the apices of the femora narrowly, the apical four segments of the anterior four tarsi and the posterior tibiæ and tarsi wholly, brown.

Abdomen reddish, with a median black spot on the base of the second and third segments and broad blackish fasciæ on the remaining segments; pile yellowish, a few black hairs towards the sides of the apical segment.

FEMALE.—Front blackish in ground color, except anteriorly with scattered black hairs.

HOLOTYPE.—Male, Sevillano, June 20, 1927. ALLOTYPE.—Female, Sevillano, May 26, 1927, (N. 342). PARATYPES.—Male, female, Sevillano, Sept. 20, 1927 and Nov. 14, 1927; two males, Clenaga, Nov. 14, 1926. All collected by G. Salt. Both localities are in Magdalena Province, Colombia.

In one specimen the spots are greatly widened on the basal segments so as to form incomplete fasciæ.

Empididæ***Drapetis deceptor*, new species**

Shining black, the halteres yellow; similar to *pilosa* Melander but at once distinguished by its yellow halteres. Length, 1.75 mm.

MALE.—Face linear; palpi with brownish yellow hair; posterior orbits gray pollinose. Antennæ black, the second segment with weak bristle below; third segment one and one-half longer than wide, tapering, the arista apical. Thorax with long, black bristly hair in addition to the extremely short subappressed hair; pteropleura gray pollinose. Legs black; without conspicuous bristles, each femur with a weak preapical anteroventral bristle; tarsi reddish brown. Wings slightly cinereous, the veins brownish luteous; anterior crossvein beyond middle of discal cell; squamal fringe white. Abdomen with short, appressed yellowish hair. Genitalia small, not cleft, suboval from lateral view, the valves not fringed, the right valve bare, the left haired.

HOLOTYPE.—Male, Birtle, Manitoba, Canada, May 22, 1928, (R. D. Bird).

***Rhamphomyia birdi*, new species**

Entirely black, the wings gray; posterior tibiæ and tarsi swollen; legs with abundant hair. Length, 3 mm.

MALE.—Face and occiput with grayish pollen; eyes contiguous for a long distance; proboscis a little more than half as long as head-height; antennæ black, the third segment three times as long as wide, strongly narrowed on basal fourth, thence gradually tapering, the style about as long as the basal width of the third segment. Hair black.

Thorax moderately gray pollinose, the hair long, black, the scutellum with six or eight marginal hairs. Hypopleural hair black.

Legs black, the posterior tibia swollen on apical fourth, the first segment of the posterior tarsi much swollen, thicker than the tibia, largest in the middle. Femora with normal hair, that on the posterior pair longer; tibiæ and tarsi with abundant, long hair dorsally.

Wings grayish; anterior section of discal crossvein short, the venation normal. Squamæ and fringe brown. Halteres with brownish-red stems.

Abdomen thinly brownish gray pollinose, tapering from the base, black-haired. Genitalia small, the filament slender, straight, mostly hidden.

FEMALE.—Front gray pollinose; legs simple and with short hair; abdomen tapering.

TYPES.—Holotype, male, and allotype, female, Birtle, Manitoba, Canada, May 26, 1928. Paratype, male, Birtle, May 21, 1928. All collected by R. D. Bird. Paratype in Canadian National Collection.

The paratype has most of the posterior part of the discal crossvein evanescent.

***Rhamphomyia luteiventer*, new species**

Black, the legs, halteres and venter yellow; pile on sides of abdomen yellow. Length, 4 mm.

MALE.—Face and occiput thickly gray pollinose; eyes contiguous for considerable distance on the front; hair black. Proboscis as long as head-height. Antennæ long,

the third segment tapering from near the base, a little more strongly so on the basal fourth, the style half as long as basal width of third segment.

Thorax gray pollinose, with brownish tinge dorsally; hair in definite rows, moderately long; scutellum with four marginal bristles; hypopleural hair bristle-like.

Legs reddish yellow, rather slender, the tarsi brown from the apex of the first segment, the second segment of the posterior pair mostly obscure reddish. Hair wholly black, the front coxæ with a single row of hairs in front on outer side.

Wings cinereous hyaline, the venation normal. Squamæ yellowish, with yellowish fringe; knob of halteres pale yellow.

Abdomen brownish pollinose, the sides more grayish; dorsally with short black hair, on the sides with longer, fine, yellow hair. Venter pale yellow, the apical one or two sternites brown, the hair yellow. Genitalia of moderate size, the filament reddish, large on basal half, the apical half slender.

HOLOTYPE.—Male, Birtle, Manitoba, Canada, June 22, 1928, (R. D. Bird).

Phoridæ

Aphiochæta catana, new species

Belongs to the group in which the proboscis is chitinized and projecting; differs from related species in possessing long and strong preapical bristles on middle and posterior tibiæ. Length, 1.35 mm.

FEMALE.—Black, moderately shining. Two pairs of supra-antennal bristles; four pairs of orbitals, the lower pair well in from the orbit and convergent, the upper pair obliquely divergent; preocellars and ocellars strong, the verticals much weaker. Palpi large, yellow, with black bristles; proboscis brown, tapering, chitinized. Antennæ black.

Mesonotum with three pairs of bristles in addition to the two pairs on the notopleura, the hair appressed, very short; scutellum with two bristles; pleura thinly grayish pollinose posteriorly.

Legs reddish; middle coxæ, upper surface, base and apex of posterior femora, their tibiæ except on lower basal half and the tarsi wholly reddish brown to blackish; middle tibiæ with two anterodorsal setæ on basal third; posterior tibiæ with a row of about ten posterodorsal setæ.

Wings grayish; third costal section hardly half as long as second; costal fringe moderately short. Halteres pale yellow.

Abdomen when viewed from behind with the disc brownish-gray pollinose; sides and apex with obscure brownish hair.

HOLOTYPE.—Female, Birtle, Manitoba, Canada, March 23, 1928, (R. D. Bird).

Most nearly related to *proboscidea* Melander and Brues, but that species has a short preapical bristle on the posterior tibiæ

Sepsidæ

Paratoxopoda varicoxa, new species

Related to *villicoxa* Duda but differs from it in lacking erect or suberect hair on the front coxæ. Length, 7 mm.

FEMALE.—Face, cheeks and antennæ orange-red, proboscis and front brown, the latter with steel-blue reflections; occiput black with slight greenish tinge. Arista brown.

Thorax greenish black, faintly grayish pruinose, the scutellum brown pollinose; humeri brown. Obscure hair on pleura yellowish.

Legs brown; posterior four coxæ and broad base of posterior femora, reddish. Hair black; more abundant on the apices of the front coxæ than in most species, but not erect nor as abundant as in *villicoxa* Duda.

Wings cinereous hyaline, the costal cell blackish. Squamal border and fringe brown; halteres brownish red.

Abdomen black, the basal two segments reddish. Apical segments with greenish reflection, the fifth and following segments polished.

HOLOTYPE.—Female, Memeh Town, Liberia, August 29, 1926, (J. Bequaert).

This species and *villicoxa* Duda are separable from all the described species in the genus by the absence of the apical bristle on the anterior coxæ. The female of *villicoxa* possesses abundant, short, fine, erect and suberect hairs on the apical third of the anterior coxæ but in *varicoxa*, while the hairs are more numerous than in other species, they are less abundant than in *villicoxa* and none of them are erect.

PLATYTOXOPODA, new genus

Differs from the genera in the family in having the oral margin produced so that the head is longest below, the oral opening very large. Lower edge of head horizontal, straight, the vibrissal angles less prominent than the oral margin, bearing two or three vibrissæ: facial carina very broad, gently convex, not conspicuous; parafacials and cheeks linear. Front with pair of moderately strong orbitals, the ocellars as long as orbitals, postocellars of equal length with the single pair of verticals, long and strong. Antennæ almost as long as the face, the third segment tapering to a rounded point, slightly over twice as long as wide. Thorax not punctured or shagreened, thinly pollinose, the pleura with fine yellowish pile; propleural bristle absent; humeral strong; two notopleurals, two supra-alars and two pairs of dorsocentrals; one pair of scutellars. Anterior tarsi broadened, narrowing from the tip of the first segment to the base; middle femora broadly hollowed above just beyond the middle, thickened before the middle; posterior femora and tibiæ each with a row of six bristles above. Wings as in *Toxypoda* Macquart. Abdomen slightly constricted at base of second segment.

GENOTYPE.—*Platytoxopoda bequaerti*, new species.

In many respects this genus shows affinities to certain of the Ortaliidæ, but it is without question a sepsid. The Sepsidæ may be separated from allied families by the presence of a long bristle arising from the lower corner of the posterior spiracle of the thorax, a character found also in the family Rhopalomeridæ, but in that family the occiput is concave or flattened while in the Sepsidæ the posterior orbits are always convex. We find therefore that the Sepsidæ have the head more or less rounded and almost as long as high while in the Rhopalomeridæ the head is almost twice as high as long and the vertex is excavated. Moreover, there are many other differences. In a few of the smaller sepsids the bristle is yel-

lowish and less easily seen but it is always present; the use of this character eliminates the Piophilidæ from the family Sepsidæ and furnishes a ready means of recognition for members of the family.

***Platytoxopoda bequaerti*, new species**

Black, the face and anterior half of the cheeks brownish red. Length, 6 to 6.5 mm.

FEMALE.—Ocellar triangle large, reaching to the base of the antennæ, shining, with a narrow, median longitudinal groove; orbits shining, the orbital bristle situated in a shallow depression; the front elsewhere dull black; occiput thinly gray pollinose.

Thorax rather thinly gray pollinose, the disc of the mesonotum and the scutellum brown. Propleural hairs yellow.

Legs blackish; hair black; front coxæ with two short, apical bristles in front, otherwise almost bare; middle and hind coxæ rather silvery; middle tibiæ swollen on apical third and with a row of three to five ventral bristles.

Wings cinereous hyaline, the veins brownish yellow; basal fourth of costal cell and the humeral cell, brown. Squamæ brown, with brownish yellow fringe; halteres blackish.

Abdomen with thin grayish pollen, the hair black, inconspicuous on the disc. Ovipositor projecting, bright reddish.

HOLOTYPE.—Female, Mbagá, Belgian Congo. PARATYPES.—Two females, Kasonsero, Congo. All collected by Dr. J. Bequaert.

***Themira maculitarsis*, new species**

Very similar to *malformans* Melander and Spuler but the middle tarsi are white and black, the front legs are differently shaped, etc. Black; halteres and squamæ yellow, the squamal fringe white. Length, 3.25 mm.

MALE.—Almost wholly shining black. Cheeks brownish red on upper half. Pleura behind thinly gray pollinose; hair of thorax black. Anterior femora strongly concave on basal half anterodorsally and on subapical two-fifths posteroventrally; before the apical concavity with an apically forked process which is flat and about one and one-half times as long as wide, situated on the anteroventral surface, on the posteroventral edge with a smaller, triangular, slightly curved, process; at the base of the anteroventral surface, a moderately long bristle, ventrally on the basal half a row of fine bristly hairs, dorsally on the apical half a row of five or six bristly hairs. Anterior tibiæ greatly deformed, increasing in width to a little beyond the middle, where they are strongly and abruptly narrowed on the anterior edge, beyond which point they are gently concave to the apex, at the corner preceding the constriction with a long, black spine which extends almost to the apex of the tibia. First segment of the anterior tarsus slightly longer than the following segment, armed at the apex with a long black bristle and one or two short ones, the second segment inserted at the middle of the under surface of the first segment, which is pubescent before the point of insertion, bare beyond. Middle femora gently curved, convex in front, on the apical third of the posterior surface with an oblique row of fine, apically curved ciliate hairs; middle tibiæ with very short, erect, fine hair dorsally; basal two-thirds of first, half of second, third of third and fourth of fourth tarsal segments whitish, the middle tarsi otherwise black. Posterior legs simple.

Wings cinereous hyaline. Squamal fringe white.

Abdomen widening apically from base of third segment, the sides of the fifth tergite produced downwards to form a long, strap-like, more or less deformed lobe either side which bears an apical fringe of very long, coarse black hairs which are more or less matted together and most of which are as long as the abdomen. The posterior forceps are thick and of uneven form.

HOLOTYPE.—Male, Birtle, Manitoba, Canada, July 7, 1928, (R. D. Bird).

Differences in the shape of the front and middle legs, the genitalia, and the color of the middle tarsi separate the species from *malformans* which has wholly yellow middle tarsi.

Ortaliidæ

Rivellia abana, new species

Figure 1

Wings markings very similar to *viridis* var., Hendel ('Gen. Ins.,' Fasc., 157, Fig. 15) but the first basal cell is mostly brown on the basal half and there is a small brown triangle in the apex of the marginal cell. Length, 3.5 to 4 mm.

Face, front, cheeks and palpi reddish, the front opaque; ocellar triangle and a shining spot on either side above, ferruginous, the orbits and face white pollinose, the broad oral margin and cheeks shining. Hair of front and upper half of the occiput black, on lower half of occiput and cheeks, yellow. Proboscis black, clypeus brown. Antennæ reddish yellow, the third segment brown apically; arista black.



Fig. 1. *Rivillia abana*, new species. Wing.

Thorax æneous; propleura white pollinose; mesonotum, a triangle on the mesopleura and the metanotum, moderately white pollinose. Hair black dorsally, whitish on the pleura. Broad apical margin of scutellum shining black, the dorsal surface pollinose.

Legs black; coxæ reddish or reddish brown; trochanters, knees broadly, and all the tarsi, reddish.

Abdomen bronze-black, the first segment and the apical two greenish. Hair black.

TYPES.—Holotype, female, allotype, male, Plum Farm, June 6. Paratypes: one male, eleven females, Baky Island, June 5; two females, Plum Farm, June 6, 7. All collected by T. D. A. Cockerell. The localities are in New Caledonia.

Trypaneidæ

Ensina conficta, new species

Figure 2

Related to *E. longirostris* Thomson but with two hyaline spots in the marginal cell, one beyond the apex of the cell and one at the tip of the wing; differs from *cratericolla* Grimshaw in the anterior crossvein being situated behind the hyaline spot and more extensively brown wings. Length, 3 mm.

MALE AND FEMALE.—Head reddish yellow, whitish pollinose; occiput black in ground color; front not pollinose except laterally; oral margin shining; three pairs of black and one of white frontals; ocellars, verticals and two or three occipital cilia black, the postocellars and two pairs of occipital cilia white; projection above neck with three pairs of short, white bristles. Proboscis more than twice as long as head-height, palpi sometimes with brown apices. Antennæ reddish, the third segment a little darkened apically; arista brown, pubescent.



Fig. 2. *Ensina conflictia*, new species. Wing.

Thorax thickly gray pollinose, yellow-haired, the dorsal pteropleural bristles black; two scutellars.

Legs reddish; femora, except their broad apices, black; posterior four coxæ and apical one or two tarsal segments reddish brown.

Wings hyaline, with brown markings generally as in figure 2. There is considerable variation in the extent of the brown markings although those on the border of the wing are constant: in the brown field there may be indications of two or three additional hyaline spots.

Abdomen gray pollinose, with a double row of large, subshining brown spots dorsally, the spots more or less fused on basal segment. Hair sparse, pale, the third and fourth segments each with one or two black bristles on either side apically. Ovipositor polished black, with reddish apical segments.

TYPES.—Holotype, male, allotype, female, six males and four female paratypes, Baky Island, June 5, and one male, Dge, June 6, (T. D. A. Cockerell). Both localities are in New Caledonia.

Tachinidæ

Erycia deckeri, new species

Related to *myoidea* Desvoidy but there are only three sternopleurals and the ultimate section of the fourth vein is not bowed inwards, but straight; in my key (Can. Ent., LIX, p. 15) traces to complete 14, where it differs from both species by having the knob of the halteres black. Length, 7.5 mm.

FEMALE.—Black, with whitish pollen. Head grayish-white pollinose, the frontal orbits almost bare above, at their middle a little more than half as wide as the reddish-brown frontal vitta; seven or eight pairs of frontals, the two upper pairs reclinate, the lower three below the base of the antennæ, strongly diverging below; front one-fifth wider than greatest width of eye. Face strongly and evenly retreating in profile; vibrissæ almost level with oral margin, three or four bristly hairs above them; cheeks one-sixth as wide as eye-height. Palpi brown. Antennæ black, reaching almost to the vibrissæ, the third segment with almost parallel sides, hardly three times as long as wide, its apex angular above, rounded below; arista thickened to beyond the middle, its basal segment not twice as long as wide.

Thorax and scutellum rather thickly pollinose, the four vittæ distinct; bristles typical of the genus; four pairs of scutellars, the apical cruciate pair suberect. Three pairs of sternopleurals.

Legs black; middle tibiæ with one strong and one weak anterodorsal bristle; posterior tibiæ with seven anterodorsal bristles.

Wings cinereous hyaline; apical crossvein straight or almost so; a single basal bristle on base of third vein above and below. Squamæ pale yellowish; halteres with brown knob. From dorsal view the basal third of the abdominal segments appears thickly whitish pollinose, the pollinose bands broadly interrupted in the middle; from anterior view the pollen extends thinly to the apical fourth of the segments except towards the sides, which remain black from all views. Second segment with pair of discals and marginals and a long lateral marginal; third with pair of discals and row of marginals, fourth with discal and submarginal row, the marginal row weak.

HOLOTYPE.—Female, Ames, Iowa, August 18, 1928, (Geo. C. Decker), parasite of *Papaipema nebris* Guenée.

