

AMERICAN MUSEUM NOVITATES

Number 425

Published by
THE AMERICAN MUSEUM OF NATURAL HISTORY
New York City

June 28, 1930

59.57, 72 A (7/8)

NEW AMERICAN ASILIDÆ (DIPTERA)

By C. H. CURRAN

Descriptions of twenty new species of Asilidæ from Arizona, Panama, and Brazil are given in the following pages, and in most cases keys to the genera are presented. In some cases, owing to the incompleteness of descriptions, it has been found impossible to include all the species in the key, and as a result, reference to the older descriptions will be necessary before deciding that forms which do not trace out satisfactorily are new.

The types of the new species are in The American Museum of Natural History.

Deromyia litoralis, new species

Black, the legs mostly reddish; thorax gray pollinose with three blackish vittæ; abdomen brownish black, with broad gray fasciæ. Length, 16 to 20 mm.

MALE.—Head densely whitish pollinose, the front and occiput grayish except along the orbits. Hair and bristles white, the ocellar, postocellar, and palpal bristles black; second antennal segment with black, bristly hair. Face a little longer than wide. Palpi shining black. Antennæ reddish or brownish red, the upper surface more or less broadly brown; third segment slightly longer than the basal two segments combined, with three or four very fine pale yellow hairs basally near the upper edge of the inner surface. Proboscis shining black.

Thorax gray pollinose, the mesonotum with brownish-yellow tinge. The median vitta abbreviated posteriorly, divided by a slender, paler, median line, the outer vittæ abbreviated in front and behind and narrowly divided at the suture. Humeri brownish red in ground color, with two black bristles; hair and bristles of the mesonotum black, a few pale hairs immediately in front of the scutellum. Scutellum with one pair of bristles. Pleura with very fine, whitish pile; trichostical bristles black.

Coxæ black, gray pollinose, with white hair and fine bristles. Femora reddish, broadly brown antero-dorsally for most of their length. Anterior four tibiæ reddish, their apices black, the anterior surface brown on median half; posterior tibiæ black with the base broadly yellowish. Tarsi black; first segment except the apical fifth, basal half of the second and basal third or less of the third, reddish yellow. Claws wholly black; pulvilli reddish yellow. Hair of femora and tibiæ white; bristles and most of the tarsal hair black.

Wings pale grayish, hyaline basally on a little more than the basal half of the anterior three-fifths. Squamæ luteous, with obscure whitish hairs. Halteres reddish yellow.

Abdomen black in ground color, brown pollinose, with broad bands of grayish pollen on the apices of the segments, the lateral margins and venter wholly gray; second segment with a gray band at the basal fourth which is produced posteriorly in the middle and sometimes is very broadly united with the posterior fascia leaving a blackish spot on either side. The pale bands are successively narrower on the segments from the base to the apex of the abdomen. Hair of the dorsum black; on the first segment, entire lateral margins of the abdomen, the venter and genitalia, pale yellowish. First segment with about five black bristles on either side.

FEMALE.—Ovipositor short, shining black above, the apex reddish; sides broadly, and the under surface, brownish-gray pollinose.

TYPES.—Eight males and fifteen females, Bruja Point, Canal Zone, January 25, 1929 and ten females, Patilla Point, January 15 and February 1, 1929, (Curran). The holotype, male, and allotype, female, were taken at Bruja Point.

This species, in color and shape, bears a strong resemblance to many of the species of *Asilus*, etc. I do not know of any closely related species in the genus *Deromyia*, and cannot compare it with allied species. On account of its dark color it stands out by itself in the genus.

Deromyia litoralis occurs on the hot sands along the coast-line, in the neighborhood of trees, where it is found in open spaces among the fallen leaves. I found no specimens in the shade and rarely observed them on open stretches of sand, and then only when there were leaves in the near vicinity. They sit upon little piles of sand and are very wary, flying at the slightest sudden movement. The only specimen observed feeding was devouring a damsel-fly but these insects were not found to be common in this habitat, so other insects probably furnish most of their diet.

SAROPOGON Loew

The key which I present below is an enlargement of that published by Back in 1909 and includes three additional species.

1. Scutellum with normally long bristles.....4.
Scutellum without long bristles (they are not more than half as long as the scutellum).....2.
2. Abdomen metallic bluish.....*pulcherrima* Williston.
Abdomen black or reddish.....3.
3. Disc of scutellum bare; four short black marginal bristles.....*aridus*, n. sp.
Disc of scutellum with short hairs.....*abbreviatus* Johnson.
4. Abdomen black.....5.
Abdomen mostly reddish.....7.
5. Bristles of the coxæ black.....6.
Bristles of the coxæ white.....*dispar* Coquillett.
6. Scutellum with two black bristles.....*purus*, n. sp.
Scutellum with four whitish-yellow bristles.....*combustus* Loew.
7. Venter black.....8.

- Venter reddish on more than the basal half. 11.
8. Wings brownish or blackish. 9.
- Wings hyaline. *coquilletti* Back.
9. Femora without black vitta above. 10.
- Femora with broad black vitta above. *dispar* Coquillett.
10. Scutellum with two bristles. *purus*, n. sp.
- Scutellum with four bristles. *combustus* Loew.
11. Wings entirely hyaline. 12.
- Wings brown along the veins. *luteus* Coquillett.
12. Mesonotum gray pollinose. *semiustus* Coquillett.
- Mesonotum yellowish-gray pollinose, with three brown vittæ. *hyalinus* Coquillett.

***Saropogon aridus*, new species**

Black, the head and thorax silvery-gray pollinose. Length, 12 mm.

MALE.—Hair and bristles of the head black; postvertical bristles pale yellowish. Second antennal segment reddish brown, enlarged apically, almost as long as the first; third segment missing.

Mesonotum probably with broad, obscure darker vittæ but stained on the disc so that it is impossible to decide; clothed with very short black bristly hair, the lateral and posterior borders with somewhat longer pale yellow hair. Collar of bristles on prothorax pale yellow, becoming black on the sides; bristly hairs on side of pronotum pale yellow; hair of propleura black. Scutellum with an incomplete transverse median groove, without hair and with two marginal bristles on either side: the bristles are about half as long as the scutellum and three of them are black, the other pale yellow. Trichostical bristles and hair mixed black and pale yellow, the pleura otherwise bare.

Legs shining black; coxæ gray pollinose, the anterior pair with short bristly hair which is black anteriorly and pale yellow on the sides; posterior four with fine, pale yellow hair. Femora, tibiæ and coxæ with black hair and bristles, the posterior tibiæ with abundant, short suberect whitish hair on apical half of ventral surface.

Wings cinereous hyaline, brownish along the anterior border on more than the basal half; fourth posterior cell narrowly open. Squamæ with white border. Halteres reddish yellow.

Abdomen shining black, clothed with very short, appressed long yellow hair which becomes black on apical third of the abdomen, the sides of the basal three segments with white hair. Venter pale brown pollinose and yellow pilose basally, becoming black and with black hair apically. Genitalia shining black, black-haired.

HOLOTYPE.—Male, Back Dike Prospect, Sierritas, Arizona, July 26–29, 1916, (F. E. Lutz).

***Saropogon purus*, new species**

Blackish, the male with very broad brown wings, the female with yellowish-brown wings and reddish abdomen and legs. Length, 11.5 to 13 mm.

MALE.—Head with grayish (?) pollen, the hair and bristles wholly black; antennæ brownish red, the first and third segments partly brownish; first two segments of nearly equal length, the third longer than the basal two combined.

Thorax brownish; mesonotum with the sides and posterior border broadly reddish; pleura brownish-golden pollinose, the posterior border of the mesonotum and the scutellum with somewhat paler pollen. Hair and bristles wholly black; scutellum bare except for the single pair of black marginal bristles.

Legs dark brownish red; anterior femora except the apex, basal two-thirds of the middle pair and basal third of the posterior pair blackish; tarsi more or less darkened apically. Coxæ reddish-brown pollinose and with black bristly hairs.

Wings brown, very broad; fourth posterior cell broadly open at apex. Squamæ with yellow border and fringe. Halteres reddish yellow.

Abdomen metallic greenish black, with short, sparse black hair. Venter black, the apices of the basal four or five sternites broadly reddish. Genitalia shining black.

FEMALE.—Face and anterior half of the front with yellowish white pollen, the orbits whitish; posterior orbits silvery on more than the lower half, occiput with yellowish-brown pollen; posterior third of front shining black. Head with yellowish hair and bristles; palpi black-haired. Antennæ as in the male but with yellow hair and bristles.

Thorax black; pleura largely reddish above; sides of mesonotum reddish and with pollen similar in color to that on the pleura; pronotum brownish-red pollinose, scutellum reddish basally. Hair and bristles reddish yellow.

Legs pale orange; coxæ and trochanters black or brown, the former with yellowish pollen and bristles, tips of tarsi brownish.

Wings yellowish brown, narrower than in male.

Abdomen pale orange, shining, yellow-haired, at most the extreme lateral margins of the tergites black. Venter shining blackish, all but the apical two incisures broadly reddish. Genitalia mostly black.

TYPES.—Holotype, male, and allotype, female, Kits Peak Rincon, Baboquivari Mts., Arizona, August 1–4, 1916, (F. E. Lutz).

TARACTICUS Loew

There are five North American species of *Taracticus* before me. Since no key to the species has been published I present the following.

1. Mystax composed of white or pale yellowish bristles and hairs. 2.
Mystax composed of black bristles and hairs. *nigrimystaceus* Williston.
2. Third antennal segment swollen apically, clavate. *vitripennis* Bellardi.
Third antennal segment not swollen apically. 3.
3. Mesonotum with rather shining black vittæ. 4.
Mesonotum wholly pollinose. *ruficaudus*, n. sp.
4. Legs mostly reddish. 5.
Legs black, the knees narrowly reddish. *nigripes* Williston.
5. Median black vittæ coriaceous and destitute of hair. *similis* Williston.
Median black vittæ faintly coriaceous and bearing yellow hairs.

octopunctatus Say.

Taracticus ruficaudus, new species

Black, the legs and apical two abdominal segments reddish. Length, 11.5 mm.

FEMALE.—Face and lower half of occiput pale yellow, the front and upper half of the occiput brownish-yellow pollinose. Hair and bristles pale yellowish or whitish.

Antennæ black, the apical two segments reddish-brown pollinose; third segment very long, the spine situated a little beyond the apical third of the upper surface.

Thorax brownish-ochreous pollinose, the pleura somewhat paler; pile and bristles yellowish. Mesonotum with a pair of narrow, very obscure darker vittæ and a spot on either side posteriorly. Scutellum shining brown, its border gray pollinose, its disc strongly roughened.

Legs reddish; coxæ black, grayish-white pollinose and pilose; apices of tarsal segments brownish. Hair and bristles yellowish.

Wings luteous on more than the basal half except posteriorly, grayish apically. Squamæ and halteres reddish yellow.

Abdomen shining black, with moderately fine punctures; hair very short and yellowish, on the sides and venter longer and whitish. Second to sixth segments with a transversely triangular yellowish-white, pollinose spot, the sides of the first segment broadly covered with similar pollen. Apical third of the sixth and the whole of the following segments reddish. Venter gray pollinose.

HOLOTYPE.—Female, Mud Springs, Santa Catalina Mts., Arizona, July 17–20, 1916, (F. E. Lutz).

DAMALIS Fabricius

Only two species of *Damalis* have been described from America: *divisus* Walker, from Brazil, and *occidentalis* Williston, from Mexico. It is not certain that *divisus* belongs to the genus so that there may be but one described species from America. During a collecting trip to Arizona in 1916, Dr. F. E. Lutz secured two males of an undescribed species and these represent the first record of the genus from the United States. The two North American species are separable as follows:

- a. Middle and hind femora strongly swollen apically and bearing black hair.
occidentalis Williston.
- b. Middle and hind femora not unusually swollen apically and bearing pale yellowish hair. *americanus*, n. sp.

Damalis americanus, new species

Black in ground color, the legs brownish red and reddish yellow. Length, 7.5 mm.

MALE.—Head cinereous pollinose and white pilose, the front without pile; ocellar tubercle with short yellow hair; occipital cilia not differentiated. Basal two antennal segments brownish red; third brown, elongate oval, pointed at apex; style not quite as long as antenna.

Thorax black; yellowish-gray pollinose; mesonotum with a pair of broad, widely separated dorsal vittæ and a spot on either side behind the suture. Pile pale yellowish, a broad, incomplete, medianly interrupted fascia of black pile across the posterior third of the mesonotum; posterior border of the mesonotum, scutellum wholly, upper half of metanotum and most of the pleura, with gray pollen and whitish pile. Humeri and posterior calli reddish brown.

Legs varying from reddish brown to brownish red with extensive reddish coloration, the tarsi reddish yellow. Coxæ black, cinereous pollinose and white pilose. Pile white; yellowish on the broad apices of the femora.

Wings cinereous hyaline, a little brownish basally in front. Halteres pale yellow. Basal three abdominal segments dull brown, gray laterally, the first with some gray pollen dorsally; apical segments gray with the apices brown in the middle. Pile whitish, brown on the second and third segments except laterally, the disc without pile. Venter gray pollinose and pale yellow pilose. Genitalia shining reddish yellow, the apex black, pile pale yellow.

TYPES.—Holotype, male, and one male paratype, Back Dyke Prospect, Sierritas, Arizona, July 26–29, 1916, (F. E. Lutz).

***Bathropsis basalis*, new species**

Figure 1

Black, only the halteres yellow; wings brownish in front to beyond the middle. Length, 6.5 to 7.5 mm.

MALE.—Face, front and the broad posterior orbits on the lower three-fourths, silvery pollinose, the occiput with brownish-yellow pollen. Pile and bristles whitish;

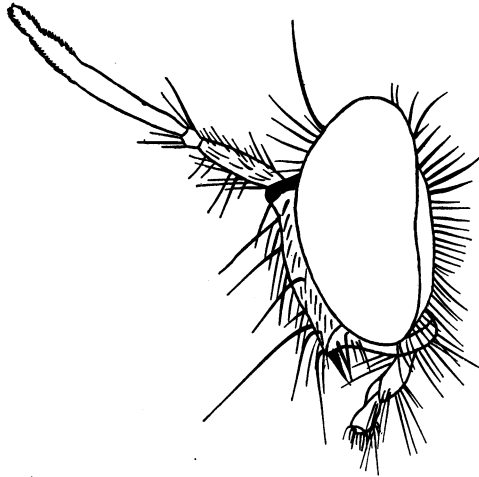


Fig. 1. *Bathropsis basalis*, new species. Profile of head.

frontal pile and bristles black, the upper occipital cilia yellow; facial bristles arranged in two rows, black in color. Antennæ shining black, black-haired; third segment brownish pollinose, without spine at apical third of upper edge; terminal segment wider than long and not well separated. Proboscis and palpi shining black.

Mesonotum and scutellum with golden, appressed, pubescent-like hair, the lateral margins with black hair; bristles black. Scutellum with about eight very fine, short, upwardly directed yellow marginal bristles. Pleura grayish-white pollinose, a large spot covering most of the mesopleura and part of the sternopleura, black; pteropleura and lateral swellings of the metapleura yellowish-brown pollinose; trichostical bristles and hair black. Metanotum with brownish pollen, and black bristly hair on the slopes. Pile of humeri and pleura pale yellow.

Coxæ grayish pollinose and whitish pilose. Legs yellowish and yellowish-white pilose; posterior femora and tibiæ dorsally, posterior tarsi wholly and the apical two or three segments of the anterior four tarsi, black-haired. Bristles yellowish, black on the posterior tibiæ and tarsi.

Wings grayish hyaline, yellowish brown on the anterior half to beyond the middle, the marginal cell hyaline basally. Squamæ pale yellow apically and with short white fringe. Halteres pale yellow.

Abdomen rather coarsely punctured, with very short, appressed hair; base and dorsum black-haired on first four segments, the sides, increasingly more widely so on each segment, golden-haired, the apical two segments without black hair. Venter brownish, dull, with fine, cinereous pile. Genitalia small. The black pile on the abdomen may be considerably reduced in extent. Bristles brownish yellow.

FEMALE.—Differs only sexually.

TYPES.—Holotype, male, Barro Colorado Island, Canal Zone, February 18, 1929; allotype, female, Barro Colorado, February 15, 1929. Paratypes: two males, same data as holotype and one male, Patilla Point, Canal Zone, February 1, 1929, (Curran).

I found this species only in the woods. The specimens from Barro Colorado Island were taken along streams while the specimen from Patilla Point was in a partial clearing through which a stream runs in the wet season.

The only other species included in this genus is *peruviana* Hermann. It has the wings hyaline and a spine at the apical third of the third antennal segment.

***Protichisma albibarbis*, new species**

Differs from *longimanus* Hermann in having the face entirely white pilose, the four pairs of bristles black. Length, about 8 mm.

FEMALE.—Head pale yellowish pollinose, the posterior orbits broadly white on the lowest three-fourths. Vertex shining brown except in the middle. Pile pale yellowish; occipital cilia black; ocellar bristles brownish yellow. Palpi and base of proboscis yellowish, the former black-haired. Antennæ black, the first segment yellow, almost as long as the third; hair and bristles black.

Thorax blackish or brownish, the mesonotum with very short, appressed golden pile. Scutellum with extremely short pale hair arising from moderately large punctures; no bristles. Pleura brownish or brownish red, thickly white pollinose, the pile white; trichostical bristles mostly black. Bristly hair on the slopes of the metanotum black.

Legs reddish or brownish yellow, the hair and bristles yellow; bristles on femora and tarsi and the hair on the upper surface of the femora and tarsi, black. Coxæ brownish; yellow pilose and whitish pollinose.

Wings cinereous hyaline, the base broadly hyaline. Squamæ with brown border and yellowish fringe. Halteres yellow.

Abdomen blackish, with appressed, very short golden-yellow hair, the fourth and fifth segments, except the broad base of the fourth, with black hair. Venter paler

than the dorsum, cinereous pollinose, yellow-haired, the apical sternite with black hair.

In this genus the abdomen is clavate, the second and third segments being narrowed.

HOLOTYPE.—Female, France Field, Canal Zone, January 18, 1929, (Curran).

The specimen described above is teneral and it is not possible to be sure of the colors. The abdomen appears luteous but it would normally be blackish and the legs may normally be darker than described. The specimen was taken in mangrove swamp and inhabits trails or clearings.

EUMECOSOMA Schiner¹

1. Legs wholly black or only the knees narrowly reddish.....2.
At least the basal half of the anterior tibiæ yellowish.....3.
2. Face of male golden yellow above, white below; of female yellow on sides, black in middle.....*metallescens* Schiner.
Face of both sexes pale yellow or whitish.....*hirsutum* Hermann.
3. Legs partly black.....4.
Legs wholly yellowish.....*pleuritica* Wiedemann.
4. Anterior femora mostly yellowish.....5.
Anterior femora practically all black.....*shropshirei*, n. sp.
5. Anterior four tibiæ pale or only a little darkened apically.....6.
Anterior four tibiæ blackish on apical third or more.....*gibbum*, n. sp.
6. Posterior tarsi black.....*staurophora* Schiner.
Posterior tarsi yellow.....*tarsalis*, n. sp.

***Eumecosoma shropshirei*, new species**

Figure 2

Black, the legs partly reddish yellow. Length, 7.5 to 9 mm.

MALE.—Head golden pollinose, the vertex laterally and central part of the occiput appearing black in most lights. Bristles black; hair pale yellowish, almost white on the lower half of the occiput; bristles along the oral margin often yellowish: face swollen just above the oral margin. Palpi and proboscis black. Antennæ black, with black hair and bristles, third segment almost twice as long as the basal two combined, with an elongate-oval, grayish-white area near the lower apical edge.

Thorax with yellowish-brown pollen in front and along the very broad middle line; inside each humerus with a large, rather golden, pollinose triangle. Pile of dorsum black; sparse on the scutellum which bears a pair of black bristles. Pleura cinereous-white pollinose, with a very broad yellowish band extending from the notopleural region to the front coxæ and a brownish band from the pteropleura to the middle coxæ; metanotum brown pollinose. Mesopleura with several black bristles behind, the trichostical bristles black above, yellow below; fine hair on the pleura pale yellowish.

Coxæ black, gray pollinose and yellow pilose; anterior four trochanters and immediate bases of all the femora reddish. Femora shining black, with reddish tips. Anterior four tibiæ reddish yellow, with about the apical third blackish, the posterior

¹*E. dichroma* Bigot (Brazil) is not included.

pair more or less reddish at the base. Tarsi black, the immediate bases of the basal four segments of the anterior four, reddish. Hair and bristles mostly black; on the posterior surface of the anterior four tibiae and the ventral surface of the anterior four femora, reddish yellow, the posterior femora with a few reddish bristles basally on ventral surface.

Wings cinereous hyaline, broadly darker apically. Squamæ pale brownish, with blackish fringe. Halteres yellowish.

Abdomen bronze-black, with short, appressed black hair; sides of the basal four segments with yellowish hair and fine bristles. Venter brown, thinly pollinose, yellow-haired. Genitalia small, black.

FEMALE.—Differs only sexually; abdomen more spatulate.

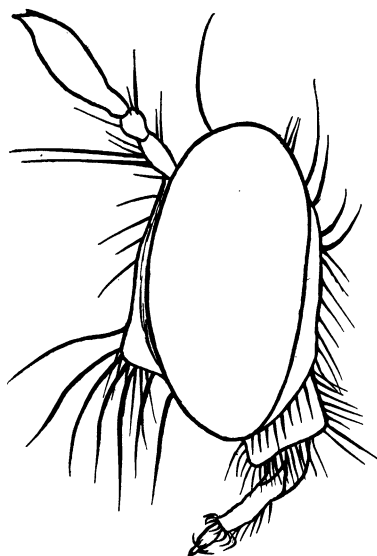


Fig. 2. *Eumecosoma shropshirei*, new species. Profile of head.

TYPES.—Nine males and five females, Canal Zone. Two males and one female, Fort Sherman, February 5, 1929; seven males and four females, Barro Colorado Island, December 22, 25, 26, 1928 and January 7 and 10, 1929, (Curran). The holotype, male, and allotype, female, were taken on December 22, 1928.

This species differs from *pleuritica* Wiedemann in having the legs largely black and from other species in having the anterior femora almost all black.

Specimens were captured only along streams, both on the Island and at Fort Davis. The insects sit on leaves of low plants in wait for prey, but I did not observe any of them feeding.

***Eumecosoma gibbum*, new species**

Black; legs partly reddish yellow; wings infumated; mesonotum strongly convex. Length, 6 to 8 mm.

MALE.—Face and front brown pollinose but appearing dull black in some views; occiput brownish-gray pollinose, usually appearing black. Hair and bristles on lower half of the face and on the occiput, whitish; upper orbital cilia black; bristles on upper half of face and the ocellar bristles, black; front without hair. Palpi black, yellow-haired, the apical bristle black. Proboscis black, yellow-haired, with a pair of black bristles on the under surface near the middle. Antennæ black with black hair and bristles; third segment with thin brownish pollen, the brownish-gray sensory area on the inner side occupying almost half the segment.

Thorax metallic black, subopalescent, black-haired dorsally; strongly convex, the scutellum convex and with a strongly marked marginal groove, with scattered hair on the disc and about eight weak marginal bristles. Pleura gray pollinose in front, brownish yellow on the middle and brown on almost the posterior half; hair and bristles yellowish, sometimes a few of the trichostical bristles black; hair on metanotal slopes black.

Coxæ and trochanters reddish yellow, the former pale yellow pollinose and with yellow hair. Femora reddish yellow on basal half or more, blackish apically except the tips; anterior four tibiæ reddish yellow on basal third to three-fifths, the posterior pair with less than the basal fifth reddish; tarsi wholly black. Hair yellow on under surface and base of the femora except apically on ventral surface, black above except basally; posterior femora with silvery-white hair above when viewed from the base. Tibiæ black-haired, the anterior pair with reddish or pale golden pubescence below, the posterior pair with abundant, erect, rather short yellow pile. Bristles of the legs black, rather fine.

Wings infusated, a little paler basally. Squamæ with brown fringe. Halteres reddish yellow.

Abdomen rather dull black, the segmental articulations and sides of the basal segment shining. Hair extremely short, black; on the sides longer and yellowish. Venter brown pollinose and pale yellowish pilose. Genitalia small, shining black.

FEMALE.—Face silvery or silvery white, often brownish yellow above; bristles usually black although two or three pairs near the oral margin are often yellowish or white.

TYPES.—Eighteen males and eighteen females, Barro Colorado, Canal Zone, between December 22, 1928, and February 21, 1929, (Curran), and November 11, 1923, (F. E. Lutz). The holotype, male, and allotype, female, in coitu, were taken on January 10, 1929.

This species is readily recognized by the largely black anterior tibiæ, half reddish-yellow femora, color of facial pile and shape of the thorax. It is found entirely along streams, sitting on the leaves of low plants. It was not observed feeding although was seen darting after small moths and dolichopids.

Eumecosoma tarsalis, new species

Black, the legs mostly reddish yellow; wings tinged with brown. Length, 5 to 6.5 mm.

MALE.—Face, anterior half of front and the broad posterior orbits on the lower three-fourths, white pollinose, somewhat silvery; posterior half of front and the occiput with brownish yellow, somewhat golden pollen. Hair white; occipital cilia yellowish, ocellar bristles and one or two pairs in the mystax black. Palpi black; proboscis brown or black. Antennæ black, black-haired, third segment yellowish-brown pollinose, the sensory area occupying most of the inner surface and grayish pollinose.

Mesonotum shining with greenish opalescence and brownish pile, the bristles black. Scutellum flat above, bare, with a pair of black bristles and sparse black hair on the margin. Pleura thinly brownish pollinose above and whitish below, the pile white; trichostical pile very pale yellowish.

Coxæ black, cinereous pollinose and pale yellow pilose. Femora reddish yellow, the posterior pair with a little more than the median half black. Tibiæ reddish yellow, the posterior pair black except the apices. Tarsi reddish yellow, the apical segment brown. Hair and bristles of the legs yellow, the apical bristles on the anterior and posterior femora, three long anterior bristles on the posterior four tibiae, the dorsal hair and bristles and the anterior bristles on the anterior four tarsi, black.

Wings tinged with brown. Squamæ with yellow border and fringe. Halteres yellow.

Abdomen dull black, in some views metallic, with short black hair, the sides, apical segment and venter with pale yellow hair. Each segment with a single yellow bristle laterally, the first segment with two. Venter reddish brown or brownish red.

FEMALE.—Differs only sexually.

YPES.—Eight males and eleven females, Barro Colorado Island, December 22, 1928, to February 18, 1929, and one male and female, Fort Sherman, Canal Zone, February 5, 1929, (Curran). The holotype, male, and allotype, female, were taken on Barro Colorado Island on January 9, 1929.

This species most closely approaches *staurophora* Schiner but is distinguished by the reddish-yellow tarsi. Its habits are the same as outlined for the preceding species.

CEROTAINIA Schiner

Four of the species contained in the Museum collection are herein described as new. The genus is known only from America.

TABLE OF SPECIES

- | | |
|--|-------------------------------|
| 1. Mesopleura swollen and very prominent..... | 2. |
| Mesopleura of ordinary form..... | 6. |
| 2. Wings with yellow tinge..... | <i>xanthoptera</i> Wiedemann. |
| Wings with brown tinge..... | 3. |
| 3. Hair of anterior half of thorax extremely short and inconspicuous; legs wholly black in both sexes..... | <i>minima</i> , n. sp. |
| Hair of thorax longer, very conspicuous; tibiae of male usually yellow..... | 4. |

4. Face brownish-yellow pollinose.....5.
- Face cinereous-white pollinose.....*albipilosa*, n. sp.
5. Mesonotum with brownish-golden pile.....*jamaicensis* Johnson.
- Mesonotum with yellowish and black pile.....*macrocera* Say.
6. Abdomen about two and a half times as long as the thorax.....7.
- Abdomen almost four times as long as the thorax, slender.....9.
7. Hair of thorax and abdomen pile-like and thick.....8.
- Hair extremely short and appressed.....*bella* Schiner.
8. Basal half of wing brown.....*dasythrix* Hermann.
- Wings hyaline.....*leonina* Hermann.
9. First antennal segment only three times as long as the second; anterior tibiae and tarsi silvery pilose.....*argyropus* Schiner.
- First antennal segment at least four times as long as the second.....10.
10. Mesonotum partly yellow-haired.....11.
- Mesonotum wholly black-haired.....*unicolor* Hermann.
11. Sides of abdomen with reddish-brown pollen.....12.
- Abdomen wholly black.....13.
12. Ocellar triangle with six bristles.....*violaceithorax* Arribalzaga.
- Ocellar triangle with two bristles.....*rhopalocera* Arribalzaga.
13. Wings hyaline, the apex with deep grayish spots.....*marginata* Hermann.
- Wings hyaline or tinged with brown, not spotted apically.....14.
14. At least the anterior tibiae very broadly yellow or brownish yellow.....16.
- Legs black or brown, at most the knees yellowish brown.....15.
15. Antennae black-haired.....*argyropyga* Hermann.
- Antennae largely yellow-haired.....*propinqua* Schiner.
16. Ground color of the abdomen concealed by silvery or golden hair.....17.
- Ground color never concealed by pale pile.....18.
17. Basal two abdominal segments densely silvery pilose; ocellar tubercle with two bristles.....*argyropasta* Hermann.
- Third to fifth segments golden-yellow pilose; ocellar tubercle with four bristles.....*aurata* Schiner.
18. Tibiae and tarsi yellow; wing veins pale brown.....21.
- Tibiae and tarsi at most brownish yellow; veins dark brown or black.....19.
19. Bristles of the posterior legs black.....20.
- Bristles of the posterior legs yellow.....*debilis* Hermann.
20. Third antennal segment almost as long as the first or longer.....22.
- Third antennal segment little more than half as long as the first.....*feminea*, n. sp.
21. Fine hair of face and front black.....*flavipes* Hermann.
- Fine hair of face and front yellow.....*willistoni*, n. sp.
22. Tarsi black; third antennal segment not longer than the first.....*brasiliensis* Schiner.
- Anterior four tarsi reddish, the apical segment brown; third antennal segment one-fourth longer than the first.....*willistoni*, n. sp.

***Cerotainia minima*, new species**

Related to *macrocera* Say but the hair of the mesonotum in the male is extremely short in front and not visible in some lights. Hair of posterior half of mesonotum and scutellum appressed and silvery white; female with the black presutural band very broad and reaching the humeri or wholly without such band. Length, 4 to 5.25 mm.

MALE.—Face and front dark brown pollinose; posterior orbits very broadly gray pollinose. Hair and bristles black; pile white on lower half of occiput. Palpi with yellow hair. Proboscis and antennæ black-haired.

Thorax metallic black, the posterior half and scutellum with conspicuous silvery-white, appressed hair; anterior border and mesopleura yellow-haired; pleura white-haired and cinereous white pollinose on the lower half; mesopleura with coarse punctures, strongly swollen. Bristles on mesonotal slopes stout and black. A broad black-haired fascia in front of the suture.

Legs black; tibiæ and broad base of tarsi, brown; coxæ very thinly gray pollinose; bristles and hair of legs yellow, black on dorsal surface of femora and tibiæ.

Wings tipped with brown. Squamæ gray, with whitish fringe. Knob of halteres reddish yellow.

Abdomen black, with greenish reflections, coarsely punctured, the apices of the segments shining, apical segment broadly bordered with reddish below, the apices of the two preceding segments reddish laterally. Hair extremely short, black on the dorsum, white on the sides and venter; venter brown.

FEMALE.—Differs sexually. The black presutural band may be present or almost obsolete and there may be very little red on the abdomen apically. The pile on the posterior half of the mesonotum and scutellum is yellow and not conspicuous.

TYPES.—One male and ten females from Barro Colorado Island, Canal Zone, December 19, 1928, to January 4, 1929, and one female, Coroza, January 16, 1929, (Curran). The holotype, male, and allotype, female, are from Barro Colorado Island, January 3, 1929.

Cerotainia albipilosa, new species

Related to *macrocera* Wiedemann but the abdomen of the male bears white pile dorsally, that of the female blackish; face cinereous white pollinose. Black, the tibiæ and tarsi reddish or brownish red. Length, 7 to 8 mm.

MALE.—Head ashy-white pollinose and whitish pilose, the bristles poorly differentiated. Antennæ black, black-haired; third segment brown pollinose. Palpi black.

Thorax finely punctured, with subappressed silvery-white hair, the hair on the pleura mostly erect. Pleura and coxæ cinereous pollinose.

Legs black; tibiæ usually reddish, the posterior pair sometimes reddish brown, except at base and apex; basal three or four tarsal segments reddish. Hair white, silvery and abundant on tibiæ and tarsi. Bristles scarcely differentiated.

Wings tinged with brown. Squamal border and fringe pale yellow. Halteres reddish yellow.

Abdomen thickly punctured, the sides of the apical three segments broadly reddish. Pile white, appressed, very conspicuous in most views. Venter brownish red; brown pollinose. Genitalia reddish.

FEMALE.—Pollen and pile of head with slight yellow tinge; pile of mesonotum shorter, rather tawny. Hair of abdomen very short, black, white on the sides and venter.

TYPES.—Holotype, male, Black Mountains, North Carolina, June; allotype, female, Valley of Black Mountains, N. C., July 9, 1906, (W. Beutenmuller). Paratypes: three males and one female, Valley of Black Mts., N. C., June 24–30, July 15 and August 9, (Beutenmuller).

In both sexes the whitish pollinose face will at once separate this species from *macrocera* Say. *C. macrocera* has the face brownish-yellow pollinose and the male has more erect, largely black, pile on the mesonotum and black pile on the dorsum of the abdomen.

***Cerotainia feminea*, new species**

Related to *brasiliensis* Schiner but the third antennal segment is not much more than half as long as the first. Black, the legs partly reddish yellow. Length, about 5.5 mm.

FEMALE.—Head brownish-yellow pollinose, the occiput sub-shining above, with reddish pollen. Bristles black, a few of those along the oral margin pale; pile of face and lower half of the occiput whitish, of the front and upper half of the occiput black. Palpi and proboscis black, yellow-haired, the latter with a pair of black bristles near the middle of the lower surface. Antennæ black, very long, the third segment unusually short; hair and bristles black.

Mesonotum and scutellum shining black, with extremely short, appressed, brown hair, in front with a yellow-haired fascia. Scutellum with about eight short bristly hairs on the margin. Pleura brownish-yellow pollinose, yellow-haired; mesopleura with one or two black bristles behind.

Legs black; coxæ grayish-yellow pollinose and pale yellow pilose. Anterior four tibiæ brownish, all the tibiæ broadly reddish at the base; basal segment of anterior tarsi, base of the second segment, and the base of the first and second segments of the posterior four tarsi, reddish. Hair yellowish, black on the upper surface of all the femora, posterior four tibiæ and on all the tarsi; bristles black, yellow on anterior tibiæ, posterior surface of the middle tibiæ and the basal segment of the anterior four tarsi.

Wings tinged with brown. Squamæ luteous, the fringe very short and yellowish. Halteres yellow.

Abdomen shining black, finely punctured, with extremely short black hair; sides narrowly and the venter with yellow hair; no bristles on the sides of the segments. Venter brown and with brown pollen.

HOLOTYPE.—Female, Corozal, Canal Zone, January 22, 1929, (Curran).

***Cerotainia willistoni*, new species**

Related to *flavipes* Hermann, but at once separated by the yellow hair on face and front. Black, the tibiæ and tarsi yellow in the male; in the female the tibiæ are partly reddish brown and the tarsi are tinged with brown above. The female is distinguished from *brasiliensis* Schiner by the extensively yellow tibiæ, longer third antennal segment, etc. Length, 7.5 mm.

MALE.—Head brownish-yellow pollinose, the front and occiput a little darker than the face; posterior orbits more gray below. Pile yellowish; bristles on the face and ocellar triangle and the orbital cilia black. Antennæ very long, blackish, thinly brown pollinose; third segment one-fourth longer than the first, the under surface of the apical half gray pollinose.

Thorax shining black; mesonotum with thick, appressed golden pile, the pile sparse on the anterior and broad posterior border and scutellum, the latter with about

eight erect marginal hairs. Pleura cinereous-yellow pollinose and yellow pilose, the mesopleura with a fine black bristle posteriorly.

Coxæ and femora black, the former gray pollinose and yellow pilose, the femora with reddish-yellow apices, yellow-haired, the upper surfaces with brownish hair. Tibiæ and tarsi reddish yellow; apical segment of the tarsi, and upper surface of the posterior tibiæ at the apex, brown; hair yellow; bristles on upper surface of posterior tibiæ and tarsi, black, the hair black on the apical segment of the tarsi and upper surface of the hind ones. Posterior tibiæ ventrally with dense, erect, short, whitish pile.

Wings strongly tinged with brown, slightly paler basally. Squamæ and their fringe yellow. Halteres reddish yellow.

Abdomen shining black, finely punctured; with very short hair which is brown on the dorsum and yellow on the sides and venter; no bristles except very fine ones on the sides of the first segment. Venter brownish red, brown pollinose, the apices of the sternites yellow.

FEMALE.—Pile of mesonotum yellowish brown; the anterior and posterior borders broadly pale golden-yellow-haired. Anterior four tibiæ shining reddish brown on their posterior surface, the posterior pair reddish brown except on the broad base and apex. Posterior tarsi brownish dorsally, the anterior ones with brownish tinge.

TYPES.—Holotype, male, Chapada, Brazil; allotype, female, Chapada, November. Paratypes: three males and four females, Chapada, and one female, Santarem, Brazil, all from the Williston Collection.

ATOMOSIA Macquart

The key is far from complete and many species described from South America are omitted. All the forms recognized from the United States are included.

TABLE OF SPECIES

- | | |
|---|-------------------------------|
| 1. Border of scutellum without bristles on the entire margin..... | 2. |
| Border of scutellum with bristly hairs on the entire margin..... | |
| | <i>venustula</i> Arribalzaga. |
| 2. Anterior femora and tibiæ not wholly pale yellow..... | 3. |
| Anterior femora and tibiæ wholly pale yellow..... | 13. |
| 3. Posterior tibiæ and tarsi with dense silvery hair..... | 4. |
| Posterior tibiæ without dense silvery hair dorsally..... | 5. |
| 4. Two ocellar bristles..... | <i>tibialis</i> Macquart. |
| Four or six ocellar bristles..... | <i>argyrophora</i> Schiner. |
| 5. No longer dorsocentrals among the appressed hair of the mesonotum..... | 6. |
| Dorsocentral hairs or bristles always present..... | 7. |
| 6. Collar with very stout bristles..... | <i>armata</i> Hermann. |
| Collar with fine hair..... | <i>nuda</i> Hermann. |
| 7. Thorax and abdomen metallic bronze-green..... | <i>metallesceus</i> Hermann. |
| Thorax and abdomen black..... | 8. |
| 8. Hair of face and palpi wholly black..... | <i>melanopogon</i> Hermann. |
| Hair of face and palpi yellow or white..... | 9. |

9. Scutellum with two bristles..... 21.
Scutellum with four bristles..... 10.
10. Ocellar tubercle with at most four bristles..... 11.
Ocellar tubercle with six or more bristles..... 12.
11. Posterior femora reddish with the apical half black..... 22.
Posterior femora blackish with only the base and apex reddish brown..... 20.
12. Ocellar tubercle with six bristles..... *setosa* Hermann.
Ocellar tubercle with numerous bristles..... *beckeri* Jænnicke.
13. Tarsi wholly black..... 27.
At least the basal two segments of the tarsi not black..... 14.
14. Ocellar tubercle with two bristles..... 15.
Ocellar tubercle with six or more bristles..... *anonyma* Williston.
15. Posterior calli partly or wholly reddish yellow..... 17.
Posterior calli black..... 16.
16. Posterior tibiæ wholly yellow..... *sayi* Johnson.
Posterior tibiæ broadly black at apex..... 23.
17. Apical three segments of posterior tarsi, and apical third of hind tibiæ, brownish, the femora wholly pale..... 23.
Only the apical segment of the tarsi brown..... 18.
18. Posterior femora brownish apically..... *soror* Bigot.
Posterior femora wholly reddish or yellowish..... 19.
19. Posterior tibiæ wholly yellow..... *mucida* Osten Sacken.
Posterior tibiæ with apex broadly brown..... *punctifera* Hermann.
20. Vertex shining black..... *geniculata* Wiedemann.
Vertex with ochreous pollen..... 26.
21. First antennal segment more than twice as long as the second.... *glabrata* Say.
First antennal segment not twice as long as the second..... *similis* Bigot.
22. Front above and middle of face brownish-golden pollinose.... *frontalis*, n. sp.
Front and face white pollinose..... *glabrata* Say.
23. Front shining black on median third for the whole length..... *coxalis*, n. sp.
Front pollinose on anterior half or with a linear median shining vitta..... 24.
24. Apical two or three tarsal segments brownish..... 25.
Only the apical tarsal segment brownish..... *rufipes* Macquart.
25. Posterior calli wholly black..... 28.
Posterior calli reddish yellow..... *eupoda* Bigot.
26. Face golden yellow..... *macquarti* Bellardi.
Face white..... 29.
27. Posterior calli yellow..... *nigra* Bigot.
Posterior calli black..... *panamensis*, n. sp.
28. Posterior femora black on apical third..... *tenuis*, n. sp.
Posterior femora wholly reddish yellow..... *lineata*, n. sp.
29. Ocellar tubercle with two black bristles and two white hairs.....

melanopogon Hermann.

Ocellar tubercle with only the two black bristles; apical tarsal segment black-haired..... *puella* Wiedemann.

***Atomosia panamensis*, new species**

Related to *nigra* Bigot but the posterior femora are black except on their base and apex; anterior four legs yellow, the tarsi black. Length, 7 mm.

FEMALE.—Head brownish-yellow pollinose, the face and lower third of the posterior orbits white. Hair and bristles white or pale yellowish; ocellar bristles black. Antennæ short, black, the third segment with a thorn at the apical fifth and a very small terminal style; first segment with yellow hair below, little more than twice as long as the second segment.

Thorax black, the lateral margins, anterior border of the humeri, and the pleura, gray pollinose. Pronotum and a narrow prescutellar band with reddish-brown pollen; pronotal bristles fine, whitish. Mesonotum and scutellum with very short brassy-yellow pile, the scutellum with six fine marginal bristles of the same color; bristles on sides of mesonotum black. Pile of pleura pale yellow; metanotal slopes with yellow pile.

Coxæ black, gray pollinose. Legs yellowish; tarsi black; posterior femora black except the base and apex, their tibiæ black on the apical third. Hair and bristles pale yellowish, many of the bristles reddish yellow; posterior tibiæ on dorsal surface of the apical third, and the upper surface of their tarsi with black hair and bristles, the other tarsi with whitish hair and black bristles above.

Wings tinged with dark brown, paler basally. Border and fringe of squamæ yellow. Halteres pale yellow.

Abdomen shining black, with very short black hair, the apices of the segments with somewhat longer yellow hair on the posterior border and with a band of pale hair at the base: these bands are visible only in certain lights; lateral margins and venter yellowish haired. Venter brown, gray pollinose.

HOLOTYPE.—Female, Barro Colorado Island, Canal Zone, January 8, 1929, (Curran).

***Atomosia melanopogon* Hermann**

HERMANN, 1912, Abh. Kaiserl. Leop.-Carol. Deutsch. Ak. der Naturf., XCVI, p. 144.

I have three specimens which I place here. The males have the bristles and hair of the face black and agree with the description. The female, however, has the hair white, thus agreeing with *puella*. In both sexes there are four or six hairs and bristles on the ocellar tubercle and the apical three tarsal segments bear white hair above, the posterior tarsi with the basal two segments black-haired above. The ocellar bristles may be all whitish or four of them may be black, and only one pair is strong.

Hermann described the species from Texas. The specimens before me are from Arizona, Colorado, and Iowa.

***Atomosia frontalis*, new species**

Related to *glabrata* Say but the front is golden pollinose except on the sides of the anterior half. Black, the legs largely reddish and yellow. Length, 6 mm.

MALE (?).—Head brownish-golden pollinose, sides of front on anterior half,

sides and lowest fourth of the face, the cheeks and lower half of the occiput with whitish pollen. Hair whitish; bristles pale yellow. Basal two antennal segments shining black, with yellow hair and bristles, the first segment about three times as long as the second; third segment missing.

Mesonotum and scutellum shining black, with short, appressed white hair; scutellum with two short, yellowish bristles on either side, the mesonotum with a black and yellowish bristle laterally. Pleura cinereous-white pollinose, the mesopleura mostly shining; hair pale yellow, the mesopleural bristle rusty yellow.

Coxæ black, densely cinereous pollinose and pale yellow pilose. Femora reddish, the anterior four ferruginous on the upper surface for most of their length, the posterior pair blackish on the subapical half. Tibiæ reddish with the apical fourth or more shining brown. Tarsi dark brown, the basal segment mostly reddish. Hair and bristles pale yellow, the posterior tibiæ with abundant erect, white pile below.

Wings grayish, pale yellowish brown on basal half except posteriorly. Border of squamæ pale yellow, the hair whitish. Halteres pale yellow.

Abdomen shining black; thickly punctate; tips of segments narrowly cinereous pollinose; hair extremely short, yellowish brown; first segment with three or four, second with two pale yellowish bristles on either side.

The venter has been destroyed so that it is not possible to describe the under surface of the abdomen or determine the sex.

HOLOTYPE.—Male (?), Chapada, Brazil, (Williston Collection).

***Atomosia coxalis*, new species**

Black, slender, legs, including the coxæ, yellow; front shining black except on the broad sides of the anterior third. Length, 6 to 7 mm.

MALE.—Face, sides of front below, cheeks and lowest sixth of the occiput white pollinose; occiput with brown pollen, the front and a large area between the vertex and neck shining black. Hair and bristles white; a pair of ocellar bristles, and the orbital cilia, black. Antennæ elongate, the third segment more than twice as long as the first, the first about three times as long as the second; hair and bristles black.

Thorax black, the posterior calli reddish; hair of mesonotum and scutellum very short, appressed, white or pale yellow; scutellum with one pair of strong black bristles. Pleura cinereous white pollinose, the hypopleura brown; mesopleura with small oval shining black spot in the middle and with a long black bristle behind; hair pale yellow. Humeri shining black.

Legs, reddish yellow; coxæ white pollinose; pile and bristles yellow, black on the dorsal surface of the posterior tarsi. Apical sixth of the posterior tibiæ and the apical two segments of the tarsi brown, the third segment sometimes brownish red.

Wings cinereous hyaline, brownish at the apex. Squamæ and fringe and the halteres pale yellow.

Abdomen shining black, the tips of the segments gray pollinose; pile very short, appressed, pale yellowish; longer on the sides and venter. First segment with two or three, the second with a single yellowish bristle on either side. Venter brownish red, pale pollinose.

FEMALE.—Differs only sexually.

TYPES.—One male and seven females from Corumba, Brazil, (Williston Collection). The holotype, male, and allotype, female, were taken in April.

This is a slender species and is readily recognized by the yellow coxæ.

***Atomosia lineata*, new species**

Related to *coxalis* Curran but the coxæ are black in ground color and there is only a slender median line of black in front of the ocellar tubercle. Length, 7.5 mm.

MALE.—Head silvery-white pollinose; occiput with brown pollen; a large rectangular area below the vertex and the posterior half of the front, shining black. Hair and bristles white; occipital cilia, ocellar bristles and hair of antennæ black. Antennæ black; second segment brown, about one-third as long as the first; third segment missing.

Thorax black, the mesonotum and scutellum with extremely short, appressed white hair, the bristles black; one pair of scutellars. Humeri shining, posterior calli brown. Pleura grayish pollinose, the mesopleura with a large, oval bare spot in the middle and a strong whitish bristle behind; pile pale yellow.

Legs yellow; coxæ black, whitish pollinose and pilose, their apices yellow; apical sixth of posterior tibiæ and apical two tarsal segments brown; hair and bristles yellowish, black only on the upper surface of the posterior tarsi and the apical two segments of the anterior four.

Wings cinereous hyaline, broadly tinged with brown apically. Squamæ and fringe pale yellow, the halteres of the same color.

Abdomen black, finely punctured; apices of segments narrowly gray. Pile very short, appressed, very pale yellowish; sides of first to fourth segments with one or more whitish bristles. Venter brownish, cinereous pollinose; apices of segments pale.

FEMALE.—Differs only sexually.

TYPES.—Holotype, male, allotype, female, and two female paratypes, Corumba, Brazil, May, (Williston Collection).

This species differs from *eupoda* Bigot in being more slender and in having the posterior calli black.

***Atomosia tenuis*, new species**

Related to *coxalis* Curran but the coxæ are black, the middle of the front broadly pollinose behind the ocellar tubercle, posterior femora black on apical half, etc. Length, 7 mm.

MALE.—Head white pollinose and pilose; occiput above the neck, and the slopes of the front behind the ocellar tubercle, shining black. Occipital cilia, ocellar bristles and those on the lower surface of the basal antennal segment yellow. Antennæ brown; first segment black, yellowish haired on basal two-thirds of lower surface. Antennæ long, the third segment twice as long as the first, the brownish-gray pollinose sensory area occupying more than the apical half of the inner surface; first segment more than three times as long as the second; hair black.

Thorax black; mesonotum and scutellum with short, brassy yellow pile and bristles; scutellum with a fine bristle on either side. Pleura gray pollinose, a large spot on the mesopleura and a smaller one on the pteropleura shining black. Pleural pile white; trichostical hairs and the single fine bristle on the posterior border of the mesopleura pale yellow.

Coxæ black, cinereous-white pollinose and white pilose. Trochanters and femora reddish yellow, the posterior femora black on the apical half except the tip. Anterior four tibiæ and basal three segments of their tarsi, reddish yellow; posterior tibiæ black with the basal fourth reddish, posterior tarsi and apical two segments of the

anterior four, brown, the basal two segments of the posterior tarsi yellow. Hair and bristles yellow, black on the dorsal surface of the posterior tarsi and apex of the posterior tibiae.

Wings cinereous hyaline. Squamæ and halteres yellow.

Abdomen shining black, very finely punctured; pale yellow-haired above, the sides and venter white-haired; first and second segments each with three bristles on either side, the third with one. Apices of segments gray pollinose. Venter brown, cinereous pollinose; apices of sternites yellow.

HOLOTYPE.—Male, Chapada, Brazil, (Williston Collection).

This species is quite slender, the abdomen scarcely widening apically. It has longer pile than either *coxalis* or *lineata*.

PANAMASILUS, new genus

Related to *Laphria* Meigen, but the face is not gibbous below, the abdomen is more elongate, the legs long and slender and the body less hairy. Head longest below, the face very gently convex, with rather bristly hairs on its whole length. Antennæ three-segmented, the apical segment longer than the basal two combined and with a small apical pit on the outer side in which is a tiny style. Scutellum rather flat, haired on apical two-thirds and with six to eight pairs of marginal bristles; humeri without bristles; metanotal slopes not haired. Legs long, the femora very slightly clavate; anterior tibiae without apical spur. Wings long; venation as in *Laphria*.

Abdomen long, with almost parallel sides; genitalia of moderate size.

GENOTYPE.—*Panamasilus xylota*, new species.

Panamasilus xylota, new species

Figure 3

Large, rusty reddish; head, mesonotum, and basal fasciæ on the abdominal segments black in ground color. Length, 19 to 30 mm.

MALE.—Head densely ochre-yellow pollinose, the middle of the occiput with thinner, gray pollen. Pile and bristles of the face bright yellow. Ocellar and vertical bristles black. Palpi and proboscis black. Antennæ reddish.

Dorsum of thorax black, the posterior border of the mesonotum reddish. Posterior part of pronotum, humeri, a vitta extending back from the inner ends of the humeri to behind the inner ends of the suture, the suture broadly, posterior border of the mesonotum and all but the border of the scutellum, bright yellow pollinose; hair and bristles black. Pleura with yellow pollen and pile, the humeri also pale pilose. Trichostical bristles reddish.

Legs rusty reddish, the femora paler basally, hair and bristles reddish. Pulvilli long. Claws mostly black.

Wings yellowish brown, the squamæ of the same color and with reddish fringe. Halteres reddish, with brown knob.

Abdomen opaque, the black fasciæ subopaque, not nearly reaching the sides of the segments and emarginate in the middle posteriorly. Hair reddish, short, mostly black on the black fasciæ; each segment with two or three reddish bristles on either side. Venter brownish red.

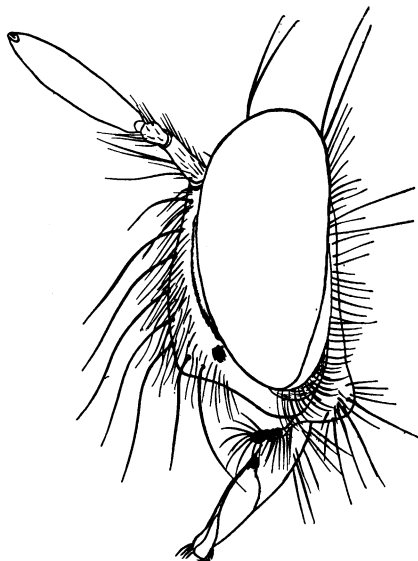


Fig. 3. *Panamasilus xylota*, new species. Profile of head.

FEMALE.—Differs only sexually; the black abdominal fasciæ are less emarginate posteriorly.

TYPES.—Four males and three females, Barro Colorado Island, Canal Zone, December 24, 1928 to January 10, 1929, (Curran); one female, Barro Colorado Island, November 9–10, 1923, (F. E. Lutz); two males and one female, Barro Colorado Island, July 26, 29, and August 1, 1924, (N. Banks). The holotype, male and allotype, female, were taken on December 24, 1928.

I found this species only along the trails, where it sat on low bushes or plants in wait for prey. A specimen taken on January 9 was feeding on a winged ant. When disturbed the insect flies a short distance and alights on another plant. Its flight appears to be silent, as I observed no buzzing sound.

