

**Article III.**—THE DIPTERA OF KARTABO, BARTICA DISTRICT,  
BRITISH GUIANA, WITH DESCRIPTIONS OF NEW  
SPECIES FROM OTHER BRITISH GUIANA  
LOCALITIES

BY C. H. CURRAN (1934)

Text Figures 1 to 55; 1 Map

INTRODUCTION

Part I of this report is a list of the species of Diptera collected during the last ten years at the Tropical Research Station of the New York Zoological Society under the direction of William Beebe. This is situated at Kartabo, British Guiana, and the collections were all made in the quarter-mile of jungle in which intensive studies have been carried on during the last ten years. For a résumé of the ecological investigations see 'Studies of a Tropical Jungle' by William Beebe, *Zoologica*, VI, No. 1.

Part II is a systematic account of these collections. It should be pointed out that records of Diptera from British Guiana are not numerous, although many species have been described from French Guiana and Venezuela. None of the specimens are from the highlands, all being from comparatively low elevations.

In view of the fact that only a relatively small number of the species occurring in British Guiana are available for study, it seems advisable merely to present synopses of the various families, thus giving some idea of the characters of the species thus far determined. This may be used as a basis for the preparation of a comprehensive treatment of the Diptera of the region in the future.

In the preparation of this report I have been fortunate in receiving the generous coöperation of specialists in several groups, thus rendering the determinations most reliable. Dr. C. P. Alexander has undertaken to report upon the Tipulidae; Dr. Jos. Bequaert,<sup>1</sup> the Tabanidae; Mr. G. S. Walley, the Chironomidae; Mr. S. W. Bromley, the Asilidae, Therevidae and Rhagionidae; while Dr. E. T. Cresson, Jr., has determined many of the Micropezidae.

I wish to express to William Beebe, Director of the Tropical Research Station at Kartabo, and to his Assistant, John Tee-Van, my sincere appreciation of their kindness in permitting me to examine the

<sup>1</sup>Report on Tabanidae will appear as a separate paper.

collections; and also to Dr. Frank E. Lutz, of The American Museum of Natural History, Mr. C. W. Johnson and Dr. Jos. Bequaert, for the loan of material collected in British Guiana.

The types of the new species, unless otherwise stated, are in The American Museum of Natural History, having been donated to the Museum by Dr. Beebe.

## SEPSIDAE

- |  |                                    |
|--|------------------------------------|
| <i>Sepsis carnivora</i> Curran, n. sp. | <i>Sepsis armata</i> Schiner       |
| <i>Sepsis pusio</i> Schiner            | <i>Sepsisia costalis</i> Wiedemann |
| <i>Sepsis haemorrhoidalis</i> Schiner  |                                    |

## CHLOROPIDAE

- Oscinella sulfurihalterata* Enderlein  
*Oscinella mars* Curran  
*Hippelates microcentrus* Coquillett

## EPHYDRIDAE

- Gastrops niger* Williston  
*Ochtheroidea glaphyropus* Loew  
*Psilopa* species

## DROSOPHILIDAE

- |  |  |
|--|--|
| <i>Leucophenga maculosa</i> Coquillett | <i>Curtonotum pantherinum</i> Walker     |
| <i>Stegana antica</i> Curran, n. sp.   | <i>Curtonotum salinum</i> Curran, n. sp. |
| <i>Stegana norma</i> Curran, n. sp.    | <i>Curtonotum hendeli</i> Malloch        |
| <i>Curtonotum taeniatum</i> Hendel     |  |

## CLUSIIDAE

- Sobarocephala guianica* Curran, n. sp.  
*Sobarocephala imitans* Curran, n. sp.

## SAPROMYZIDAE

- |   |  |
|---|--|
| <i>Physegenua ferruginea</i> Schiner      | <i>Pseudogriphoneura luteipennis</i>       |
| <i>Physegenua vittata</i> Macquart        | Curran, n. sp.                             |
| <i>Xenochaetina muscaria</i> Loew         | <i>Pseudogriphoneura claripennis</i>       |
| <i>Xenochaetina flavipennis</i> Fabricius | Curran, n. sp.                             |
| <i>Chaetominettia spinitibia</i> Malloch  | * <i>Pseudogriphoneura scutellata</i>      |
| <i>Chaetominettia latelimbata</i>         | Curran, n. sp.                             |
| Macquart                                  | <i>Griphoneura imbuta</i> Wiedemann        |
| <i>Pseudogriphoneura nigra</i> Curran,    | <i>Minettia geminata</i> Fabricius         |
| n. sp.                                    | <i>Sapromyza ornata</i> Schiner            |
| <i>Pseudogriphoneura diversa</i> Curran,  | <i>Sapromyza eronis</i> Curran, n. sp.     |
| n. sp.                                    | <i>Sapromyza incidens</i> Curran, n. sp.   |
|   | <i>Clusina nigriventris</i> Curran, n. sp. |

## LONCHAEIDAE

- Lonchaea* species No. 1  
*Lonchaea* species No. 2

**DROSOPHILIDAE**

There are representatives of three genera in the collection.

## KEY TO GENERA

- 1.—Apical cell not narrowed apically.....2.  
 Apical cell strongly narrowed apically.....*STEGANA* Meigen.  
 2.—Costa pectinate.....*CURTONOTUM* Macquart.  
 Costa not pectinate.....*LEUCOPHENGIA* Mik.

**LEUCOPHENGIA** Mik***Leucophengia maculosa*** Coquillett

*Drosophila maculosa* COQUILLET, 1895, Proc. Acad. Nat. Sci. Philadelphia, p. 47.

Male, Kartabo, May 14, 1924.

**STEGANA** Meigen

Two species, both unnamed, belong to this genus. They are separable as follows:

- Front flat, almost horizontal, shining brown in front.....*antica*, n. sp.  
 Front convex, wholly brownish red.....*norma*, n. sp.

***Stegana antica***, new species

**FEMALE.**—Length, 4 mm. Face white pollinose; lower half of face and cheeks pale yellow in ground color, the upper half pale brown; posterior orbits, except below, broadly yellowish. Anterior third of front shining dark brown, the upper two-thirds reddish brown with the sides broadly reddish yellow and thinly whitish pollinose. Basal two segments (third segment missing) and the palpi, yellow.

Mesonotum brown or reddish brown, the shoulders whitish yellow; upper half of pleura dull blackish-brown; lower half of thorax pale yellowish.

Legs pale yellowish, the apical half or less of the posterior four femora and the basal third of their tibiae brownish, the femora less extensively blackish below.

Wings brown, becoming gray posteriorly, with only a brown tinge basally.

Abdomen brown, thinly brown pollinose; hair black.

**TYPE.**—Female, Kartabo, May 26, 1924. A second female lacks its head.

***Stegana norma***, new species

Rusty brownish-red, the abdomen brown. Length, 3.5 mm.

**MALE.**—Front hardly twice as long as its width below, widening on its upper half. Face brownish; cheeks yellowish, very narrow. Proboscis and palpi yellow. Third antennal segment black, elongate oval, its base and the first two segments reddish yellow.

The broad longitudinal brown vitta on the pleura is broadly separated from the mesonotum in front of the wings. Lower half of thorax yellowish.

Legs pale yellow, the apical fourth of the front and apical half of the posterior four femora and the basal third or less of the posterior four tibiae, blackish or brown.

Wings brownish, paler posteriorly, cinereous hyaline basally.

Abdomen brownish, brownish red basally at the sides.

**TYPE.**—Male, Kartabo, April 24, 1924.

### CURTONOTUM Macquart

There are four species belonging to this genus, two of them evidently undescribed. The species occurring in British Guiana are separable as follows:

- 1.—Sternopleura with a single bristle. . . . . *gibbum* Fabricius.  
Sternopleura with two bristles. . . . . 2.
- 2.—Sternopleura with a row of stiff, short black hairs along the margin immediately in front of the middle coxae. . . . . 3.  
Sternopleura with inconspicuous very fine, usually yellowish hairs immediately in front of the middle coxae. . . . . *salinum*, n. sp.
- 3.—Abdomen chiefly yellow in ground color. . . . . *murinum* Hendel.  
Abdomen mostly black in ground color. . . . . 4.
- 4.—Costal border of wing brown on apical half or more. . . . . *pantherinum* Walker.  
Brown markings of the wing limited to the apical fourth or less and the posterior cross-vein. . . . . *hendeli* Malloch.

#### Curtonotum gibbum Fabricius

*Helomyza gibba* FABRICIUS, 1805, 'Syst. Antl.,' p. 586.

*Curtonotum taeniatum* HENDEL, 1913, Deutsch. Ent. Zeitschr., p. 629.

Seven males and three females, Kartabo: 1921; June 6, 1923, July 23, 1922; March 30, April, 4, May 12, 21, 1924; October 27, 1920 (No. 20469); November 10, 1920 (No. 20935), and male and female, Bartica, April 25, 30, 1924.

#### Curtonotum pantherinum Walker

*Helomyza pantherina* WALKER, 1849, 'List Dipt. Brit. Mus.,' IV, p. 1090.

Male, Kartabo, 1920; male and female, Kartabo, 1921; female, Kaieteur, February 18, 1921.

#### Curtonotum salinum, new species

In Hendel's key traces to *pantherinum* Walker, but it cannot be that species because Walker says "pedibus fulvis" and "legs tawny," whereas in the present species the legs are quite pale yellowish, the femora each with a brown apical spot above or even a brown band and the tarsi are scarcely darkened apically. Wiedemann's statement ('Ausser. Zweifl.,' II, p. 587) in regard to the color of the legs of *gibbum* leaves no doubt as to the color of the tarsi which are described as "wholly brown." This may be an error except in respect to the anterior tarsi, but it nevertheless eliminates the possibility of the present species being the same. Length, 5.5 to 8 mm. Differs from *hendeli* as follows:

MALE AND FEMALE.—Cheeks narrower; incomplete pollinose frontal vittae usually grayish, rarely partly brown.

Brown spots of the mesonotum much more extensively fused so that the posterior half is mostly brown, with three very narrow pale vittae. In front of the sternopleurals there are only from three to five extremely short fine hairs while the row of setae in front of the middle coxae is very fine and usually yellow, never conspicuous and usually difficult to make out.

The legs are pale yellowish, the femora each with a brown apical band which is often obsolete on its lower half, the posterior tibiae with a corresponding basal band, the first two segments of the posterior four tarsi whitish yellow, the apical segments scarcely darkened, the anterior bristle on the middle femora is very much shorter than the posterior one.

Wings as in *pantherinum*, with luteous-gray tinge, the costal cell, very broad costal border except in the subcostal cell, broadly beyond the apex of the first vein, broad clouds along all the veins (paler on the third and fourth veins along most of their length), the apical and the posterior borders, broadly brown, the spaces between the clouds covering the veins paler; from apical view the pale areas have a whitish tinge. Halteres pale yellowish.

Pollinose band on the second abdominal segment usually broadly interrupted toward the sides, that on the third usually entire although very strongly narrowed by anterior and posterior indentations; on the fourth segment the pale pollen rests on the base of the segment.

TYPES.—Holotype and allotype, male and female (in copula), Kartabo, May 22, 1924; paratypes: 34 specimens of both sexes from Kartabo, Bartica, Bartica District and Kalacoon, March to October (Nos. 24779, 20873, 20234, 20820, H2, H5, H6, H7, A20). In addition there are several damaged specimens. Several of the specimens are from human excrement.

### **Curtonotum hendeli Malloch**

MALLOCH, 1930, Ann. Mag. Nat. Hist., VI, p. 325, *Curtonotum gibbum* HENDEL, 1913, Deutsch. Ent. Zeitschr., p. 624 (not Fabricius).

MALE AND FEMALE.—Length, 7 to 8.5 mm. Head reddish; face and cheeks yellowish, the middle of the face narrowly brownish; broad frontal orbits and median vitta and the narrow, anterior border of the front, reddish yellow. Pollen of the face and narrow frontal orbits rather silvery white, of the occiput, silvery grayish, of the broad vittae extending on either side from the vertex and enclosing the frontal bristles, brown, bordered in front with grayish, the pollen on the ocellar triangle mostly brown. Bristles strong; occipital cilia in a single row, but on the lower half of the occiput there is a second very irregular row of quite short, bristly, black hairs. Proboscis ferruginous; palpi brown. Antennae red, the third segment brown on its apical three-fourths, arista reddish on the basal half, with very long black rays.

Thorax evidently reddish, the pleura and pectus paler, the whole so densely pollinose as to conceal the ground color. Mesonotum gray pollinose but appearing mostly brown because of the brown spots from which each hair rises and these spots form two conspicuous brown vittae toward the middle on the posterior two-thirds and weaker, narrower, sublateral vittae behind on the posterior third to half. Pleura rather whitish pollinose, the numerous hairs on the mesopleura each arising from a brown spot. In front of the two strong sternopleural bristles are from seven to ten coarse black setae while in front of the middle coxae is a row of finer ones. Propleural bristle strong. Scutellum rusty brownish with the free border reddish-yellow.

Legs reddish; anterior four tarsi with the basal two segments whitish yellow; middle femora with a very long, strong apical bristle in front and behind.

Wings lightly grayish with the usual luteous tinge, the apical fifth and the posterior cross-vein broadly, blackish brown, paler in the middle of the cells. Costal bristles long and stout, few in number.

Abdomen shining brownish, the sides and venter more or less reddish; second segment with the narrow base, broadened to form large lateral triangles, third with interrupted fascia occupying almost the basal half toward the middle, less sublaterally and more laterally and ventrally, grayish pollinose; fourth segment with a gray band rather similar to that on the third but it is usually interrupted sublaterally, leaving a pair of broadly separated spots; fifth segment gray pollinose with the apex, broad middle line widening basally, and transverse, basal lateral triangles, bare. Hair black.

Six males and three females, Kartabo, March 25, 26, May 8, 1924 (human excrement); two males, Kartabo, March 6, 1924.

In Hendel's key this traces to *gibbum* Fabricius but differs in the abdominal maculation and the color of the wings. Fabricius' statement, "alis fusco striatis," indicates clearly that the present species cannot be *gibbum*.

#### CLUSIIDAE

Two underscribed species belonging to the genus *Sobarocephala* are the only representatives of this family.

#### *Sobarocephala guianica*, new species

FEMALE.—Length, 5 mm. Face white, the sides, cheeks, and lower third of the occiput, yellowish, the occiput above and the front, rusty yellow; front with a broad, ferruginous fascia above the antennae. Face and front broad, the former distinctly narrowed at the middle; ocellar triangle and a large triangle on either side behind the upper part of the eyes, brownish. Bristles black, those on the lower half of the occiput yellow. Proboscis and palpi rusty yellow, the latter black-haired. Antennae orange, the large third segment with a brown spot surrounding the base of the brown arista which bears long, sparse pubescence.

Mesonotum rusty reddish, with three black vittae on the median half which are broad in front, narrow on the median portion and fused on the posterior third; there is a small, blackish spot above the notopleura and a large one above the wings. Hair and bristles black; two dorsocentrals. Pleura, pectus and coxae pale shining yellow, the hair yellow, the sternopleura and mesopleura each with a black bristle. Scutellum black, the sides and lower surface rusty reddish; four or six black bristles, the apical pair strong.

Legs rusty yellow, black haired.

Wings yellowish; brown on almost the apical half and in the cubital cell. Upper squamal lobe brownish, with brown fringe. Halteres yellow.

Basal one and one-half abdominal segments reddish yellow, the tergites elsewhere bronze-blackish; with long appressed black hair, the seventh and following segments (ovipositor) yellow, the venter also yellow, with black hair; first dorsal segment with yellow hair.

TYPE.—Female, Kartabo, October 27, 1920 (No. 20477).

This species differs from *dorsata* Czerny by the black markings of the thorax, rusty yellow metanotum, yellow anterior tarsi, etc.