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## THE STRATIOMYIDAE (DIPTERA) OF BIMINI, BRITISH WEST INDIES

BY MAURICE T. JAMES<sup>1</sup>

Of the seven species of Stratiomyidae collected by the American Museum expeditions to Bimini, three prove to be undescribed. The types are in the American Museum of Natural History.

### GENUS **SARGUS** FABRICIUS

1798, *Entomologia systematica, supplementum*, p. 549.

#### **Sargus (Pedicellina) lucens** Loew

1866, *Berliner Ent. Zeitschr.*, vol. 10, p. 7 (Centuria VII, no. 11).

South Bimini, June 20, 1950 (Cazier and Rindge), one male; June, 1951 (Cazier, C. and P. Vaurie), one female.

### GENUS **NEMOTELUS** GEOFFROY

1764, *Histoire naturelle des insectes*, vol. 2, p. 542.

#### **Nemotelus wheeleri** Melander

1903, *Psyche*, vol. 10, p. 182.

This species was described from material from Galveston, Texas. The following specimens from South Bimini Island have been compared with topotypical material: May, 1951 (Cazier and Gertsch), four females; June 8, 1950 (Cazier and Rindge), one female; June 13, 1950 (Cazier and Rindge), one male.

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<sup>1</sup> State College of Washington, Pullman.

GENUS **EURYNEURASOMA** JOHNSON

1913, Bull. Amer. Mus. Nat. Hist., vol. 32, p. 51.

*Neurota* CURRAN, 1931, Amer. Mus. Novitates, no. 456, p. 2 (new synonymy).

*Euryneurasoma* and *Neurota* are absolute synonyms, both based on what is obviously the same species and both monotypical. A second species is described in this paper.

**Euryneurasoma slossonae** Johnson

1913, Bull. Amer. Mus. Nat. Hist., vol. 32, p. 51.

*Neurota bicolor* CURRAN, 1931, Amer. Mus. Novitates, no. 456, p. 2; *non Sargus bicolor* Wiedemann, 1830, Aussereuropäische Zweiflügelige Insekten, vol. 2, p. 41 (new synonymy).

The true *Sargus bicolor* Wiedemann is a *Microchrysa* and occurs throughout most of the Neotropical region, from the West Indies and Mexico to southern Brazil, Paraguay, and northern Argentina. Wiedemann's description does not fit *E. slossonae* in several important respects.

I have seen *E. slossonae* from Florida, Bermuda, and Cuba. In the present collection there are the following records: North Bimini, May, 1951 (W. Gertsch), two males; June, 1951 (Cazier, C. and P. Vaurie), one male; June 1, 1950, two males, one female, June 2, 1950, two males, two females, June 3, 1950, two males, five females, and June 4, 1950, one male (Cazier and Rindge). South Bimini, June 12, 1950 (Cazier and Rindge), two males, one female; July, 1951 (C. and P. Vaurie), two males, one female.

**Euryneurasoma maculata**, new species

Morphologically like *slossonae* and differing significantly only in color characters, which are, however, striking. In the male the tomentum of the face is silvery, as in *slossonae*, but denser; that of the mesonotum is likewise silvery and dense, the pile of the sides of the thorax being also silvery. The abdomen is largely white; the first tergum is black, with an irregularly defined whitish spot on each lateral margin; terga 2 to 4 are white, each with a subquadrate black spot on each basal corner, that on the third segment being about half the length of the tergum, that on the second smaller, and that on the fourth somewhat larger; tergum 4, in addition, with a narrow, trans-

verse, bar-like marking at the apex on the median third or fourth; this marking is somewhat variable and may, on the one hand, be interrupted medially or, on the other, expanded laterally towards the laterobasal markings and sometimes confluent with one or both of them; tergum 5 black, with broad lateral and apical margins white. Venter white medially, reddish yellow on the fifth segment and towards the margins of the third and fourth; suggestions of a black spot on each lateral margin of segments 3 and 4. Legs yellow, the middle and hind femora, except their bases and apices, and the hind tarsus beyond the basitarsus blackish. Length, 4–6 mm.

In the female the abdomen is reddish brown, with narrow transverse bars, one on each apical corner and extending inward one-fifth to one-fourth of the width of the segment, on terga 2 to 4, cream-colored; lateral and apical margins of tergum 5 likewise cream-colored.

Normally vein  $R_4$  is present, though, as in *slossonae*, this character is variable. Contrary to Johnson's statement, the presence or absence of this vein, either in *slossonae* or *maculata*, has no relationship to sex.

**TYPES:** Holotype, male, South Bimini Island, Bahamas, British West Indies, July, 1951 (C. and P. Vaurie). Allotype, female, same data. Paratypes: seven males, three females, same data; two females, same data, but July 16 and July 20–31; one male, same data, but August 2–9; one male, one female, same data, but May, 1951 (Cazier and Gertsch); one female, same data, but June 14, 1950 (Cazier and Rindge); 12 males, North Bimini Island, June 3, 1950 (Cazier and Rindge); one female, Gun Cay, Bahamas, June, 1951 (C. and P. Vaurie); one male, Nonsuch Island, Bermuda, 1931.

#### GENUS *EULALIA* MEIGEN

1800, Nouvelle classification, Diptera, p. 21.

#### *Eulalia rufipes* (Loew)

*Odontomyia rufipes* LOEW, 1865, Berliner Ent. Zeitschr., vol. 9, p. 144 (Centuria VI, no. 25).

The following records are from South Bimini: August 10–20, 1951 (C. and P. Vaurie), one female; August 2–9, 1951 (C. and P. Vaurie), two males; May, 1951 (Cazier and Gertsch), one female.

***Eulalia bahamensis*, new species**

In appearance resembling *E. discolorata* (James), but the tomentum of the mesonotum in both sexes is yellow (almost brassy), the face of the male is reddish yellow, and the face and front of the female are greenish yellow, without distinct black spots. The face of the male is narrower than in any Nearctic species of the *hydroleon* (*arcuata*) group or in the European *hydroleon* (Linnaeus). The only other known species of this group that occur in the West Indies and near-by Florida, *E. bermudensis* (Johnson), *E. rufipes* (Loew), and possibly *E. cincta* (Latreille), have a more broadly expanded abdominal pattern.

**MALE:** Face, front except ocellar triangle, and median occipital sclerite reddish yellow; cheeks, oral margin, and lower part of occiput yellow; most of occiput and ocellar triangle black. Head white pilose. Face very narrow, the distance from the middle of the oral margin to the base of the antennae almost as great as the width across the middle of the oral margin (18:19); sides straight, only slightly bowed below. Eyes bare. Antenna reddish yellow, the fourth and fifth segments of the flagellum blackish; style well developed, the last segment (sixth flagellar) acute, about two-thirds of length of fourth flagellar. Proboscis black, the palpi yellow.

Thorax mainly black; scutellum except narrow base, postalar calli, and supra-alar regions, and upper parts of pleura, including the entire propleura and pteropleura, reddish yellow to yellow; tomentum and pile of pleura white, becoming yellow on yellow areas; that of mesonotum yellow, the tomentum of its disc almost brassy. Wings hyaline; venation typical of the group. Legs yellow, yellow-haired; front femur and all tibiae and tarsi somewhat reddish yellow, the middle and hind coxae partly black at base.

Abdomen reddish yellow; a continuous black stripe, one-third to one-fourth of the width of the abdomen, beginning with the median half of the first tergum and ending with a suboval spot on the basal half of tergum 5; this stripe broadest on terga 1 and 4, narrowest on tergum 3; the pattern roughly comparable to that of *E. pilimana* (Loew). Pile mostly yellow; black tomentum on the black areas and somewhat encroaching onto the near-by pale areas of the terga. Length, 12 mm.

FEMALE: Head greenish yellow; ocellar triangle black; a pair of irregularly defined brownish spots on each side, just below the middle of the front; middle of occiput brown. Pale areas of thorax, including coxae, greenish yellow; pale sides of mesonotum complete, extending from the humerus to the postalar callus; those of the pleura more extensive than in the male; scutellum only slightly darkened at the base. Legs presumably as in the male (front pair missing). Abdomen as in the male, but pale coloration greenish yellow. Length, 11 mm.

TYPES: Holotype, male, South Bimini Island, Bahamas, British West Indies, June, 1951 (M. Cazier, C. and P. Vaurie). Allotype, female, same data.

#### GENUS *PACHYGASTER* MEIGEN

1803, in Illiger, Mag. Insektenk., vol. 2, p. 266.

#### *Pachygaster cazieri*, new species

The generic disposition of this species is highly unsatisfactory. I have, however, thought it best to refer it to *Pachygaster*, *sensu lato*, with the full realization that the generic placement will be changed when someone has made a thorough study of this complex. Among the forms known to me, it comes closest to *Chlamydonotum pallipes* Lindner (1951, Rev. de Ent., vol. 22, p. 261), but that species has a more slender thorax and scutellum,  $R_{2+3}$  is almost interstitial with r-m, and the front of the female is broader, fully three times the width of the ocellar triangle. I should refer *P. cazieri* to *Chlamydonotum*, except that I doubt whether *C. pallipes* and the type species, *C. nigreradiatum* Lindner, are congeneric. In Kertész' generic key (1916, Ann. Mus. Nat. Hungarici, vol. 14, pp. 127-140) this species traces to *Praomyia*, but in *P. leachii* (Curtis), the type species, the scutellum is small, without a pre-apical depression or margin, the front and, in large part, the face, are shining, and, among other things, there are color differences. The extent of development of cross vein r-m, a point of difference between *Praomyia* and *Chlamydonotum*, is subject to variation.

MALE: Head black, subshining except frontal triangle and face, which are densely white tomentose. Vertex the width of the ocellar triangle; eyes separated by only a narrow line above the frontal triangle. Eyes bare, divided into an area of larger facets above and smaller ones below. Occipital orbits developed

only below. Antenna, including arista, yellow; flagellum kidney-shaped. Proboscis and palpi yellow.

Mesonotum at broadest slightly broader than the head (50:48) and, to the base of the scutellum, as long as broad (50:50); scutellum robust, its width at the base a little greater than its length (26:21); scutellum with a small though distinct pre-apical depression and a definite margin beset with piliferous denticles. Thorax black; pleura mostly shining, sterna whitish tomentose, mesonotum mostly yellowish tomentose. Legs including coxae wholly yellow; halteres yellow. Wings hyaline; stigma and veins mostly yellow; veins C and R from a point just before cross vein h to the stigma brownish, the color becoming more intense towards the stigma.  $R_4$  well developed; r-m distinctly present, though sometimes very short;  $R_{2+3}$  arising beyond r-m by a distance equal to the length of vein  $R_4$ . Abdomen black, with inconspicuous black and yellowish pile intermixed. Length, 2.5 mm.

FEMALE: Front at vertex 0.28, at base of antennae 0.20, of head width; the distance from each lateral ocellus to the eye margin distinctly less than the distance across the ocellar triangle. Occipital orbits narrow but well developed, keeled; front and occipital orbits with scattered yellow pile. Otherwise, except sexually, as described for the male. Length, 3 mm.

TYPES: Holotype, male, South Bimini Island, Bahamas, British West Indies, June 8, 1950 (Cazier and Rindge). Allotype, female, same data. Paratypes: one female, same data; two males, same data but June 9 and 10; one male, same data but May, 1951 (Cazier and Gertsch).