

Some Stratiomyidae (Diptera) from Okinawa and Guam

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THE PRESENT PAPER is based on the study of a collection of Stratiomyidae from Okinawa and from Guam and the neighboring island of Rota, and now preserved in the United States National Museum and the California Academy of Sciences.

SPECIES FROM OKINAWA

Wallacea albiseta de Meijere

Wallacea albiseta de Meijere, 1907, Tijds. v. Ent., 50: 236.

Material examined: Okinawa, June to August, 1945 (W. D. Field, F. N. Young, G. E. Bohart, C. L. Harnage), 9 females, 19 males.

This widely distributed species has been misdetermined as *W. argentea* Doleschall by Brunetti and other authors.

Oplodontha rubrithorax (Macquart)

Odontomyia rubrithorax Macquart, 1838, Diptères exotiques nouveaux ou peu connus, vol. 1, pt. 1, p. 185.

Material examined: Okinawa, July to September, 1945 (F. N. Young, W. D. Field, R. Bohart), seven males, two females.

Sargus mactans Walker

Sargus mactans Walker, 1860, Proc. Linn. Soc. London, 4: 97.

Material examined: Chizuka, Okinawa, July to September, 1945 (G. E. Bohart, C. L. Harnage), one male; two females.

Ptecticus okinawae new species

Male: Head mainly yellow, with golden pile; frontal callus whitish; occiput black, subshining, with whitish pollen toward the orbits. Antenna structurally as in *P. aurifer* (Walker), yellow, the flagellum dulled with whitish pollen; arista brownish-yellow at extreme base, otherwise black. Mesonotum, scutellum, and postscutellum brownish with bluish to violaceous reflections, paler laterally; thorax otherwise reddish-yellow, the areas adjoining the sutures paler; pile golden except a tuft of short black hairs above the base of each haltere. Halteres yellow; legs uniformly reddish-yellow, the middle and hind femora with slight bluish reflections; pile of legs yellow. Wing venation as in *aurifer*; anterior part of wing as far apicad as vein R₄ and enclosing and extending beyond the discal cell yellow; wing apex and posterior half of wing uniformly grayish and contrasting with the yellow area; veins yellow in yellow area, brownish-black in gray area. Abdomen reddish-yellow in ground color but with large, poorly defined areas taking in all but posterior and lateral margins of terga one to four and of sterna four and five, brownish-black, with bluish to violaceous reflections; pile of first five terga mostly short, black; lateral and apical margins of these terga, as well as entire venter and genital segments, with golden pile. Genitalia reddish-yellow. Length, 14 mm.

Holotype: Male; Chizuka, Okinawa; July to September, 1945 (G. E. Bohart, C. L. Harnage); California Academy of Sciences.

Related to *P. aurifer* (Walker), but easily distinguishable by the lack of contrast between the gray area of the apex and of the

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posterior half of the wing; in *aurifer*, the apex is distinctly darker and this area is sharply defined from both the anterior yellow and the posterior gray areas. In size, *aurifer* is normally larger (17 to 22 mm. in length), the upper parts lack the bluish reflections, and the fifth abdominal segment, though variable, is marked with black. I can find no structural differences; the genitalia seem to be identical.

Ptecticus australis Schiner

Ptecticus australis Schiner, 1868, Novara Reise, Diptera, p. 65.

Originally described from the Nicobar Islands, this species has been recorded from Ceylon, Siam, Malaya, and various Indian localities by Brunetti, and I have seen it from Palawan, Philippine Islands. One female and five males from Chizuka, Okinawa, July to September, 1945 (G. E. Bohart, C. L. Harnage), represent a form with the hind legs somewhat paler than in the typical form; the tibia and base of the basitarsus are brown rather than black, though these areas distinctly contrast with the yellow of the hind femur and the white of the remainder of the hind tarsus. Otherwise, I note no significant difference from Indian and Philippine specimens.

Ptecticus tenebrifer (Walker)

Sargus tenebrifer (Walker), 1849, List of the specimens of Dipterous insects in the collection of the British Museum, pt. 3, p. 517.

This common Oriental and southeastern Palaearctic species is represented by a long series of males and females from Chizuka, Okinawa.

SPECIES FROM GUAM AND ROTA

Paracechorismenus guamae new species

Female: Head shining black. Vertex two-fifths head width, narrowing to the nearly

parallel-sided front; front at narrowest equal to distance from anterior ocellus to the antennal insertion. Face with a few whitish hairs and with conspicuous whitish-tomentose orbits. Head profile essentially as in *intermedius* Kertész, except that the ocellar triangle is not quite so prominent. Antennae yellow, the flagellum above and the arista brownish-black; arista 1.65 length of rest of antenna. Proboscis yellow. Measurements of holotype in micrometer units ($85 = 1$ mm.): Width of head, 50; of vertex, 20; of front at narrowest part, 13; front, anterior ocellus to antennal insertion, 13; length of antenna excluding arista, 12; of arista, 20.

Thorax black, subshining; mesonotum and scutellum with conspicuous, rather dense, golden tomentum; posterior area of mesopleuron with similar yellow tomentum. Legs uniformly yellow, at most slightly darkened toward apices of tarsi. Halteres yellow. Wing venation typical; wings slightly clouded; heavy veins brown; veins inclosing discal cell, except at base, and those radiating from it, weak and unpigmented.

Abdomen black; pile mostly black, inconspicuous, that on fifth tergum and laterally on third and fourth terga somewhat longer and yellowish. Ovipositor yellow.

Length, 1.75 to 2.5 mm., mostly about 2 mm.

Male: Front narrower than in the female, at narrowest 0.18 to 0.20 head width and 0.65 to 0.70 distance from anterior ocellus to antennal insertion. Tomentum of mesonotum and scutellum longer but more scattered than in the female, tending more to whitish but with golden tomentum definitely intermixed and usually predominating. Genitalia yellow. Otherwise, as described for the female.

Holotype: Female, Guam, January 12, 1938 (R. G. Oakley); resting on *Ochrosia* fruits; Guam no. 1206; Lot no. 38-14973; U. S. National Museum type no. 59339. *Allotype*: Male, Point Oca, Guam, May,

1945 (G. E. Bohart, J. L. Gressitt). *Paratypes*: Seventeen females, fourteen males, same data as holotype; seven females, five males, same data as allotype; one male, one female, Point Oca, Guam, December 20, 1945 (Gressitt); one male, Asan, Guam, December 16, 1945 (Gressitt); two females, Point Oca, near Agana, Guam, May 27, 1945 (Gressitt), at lights; one female, Point Riti-dian, Guam, June 28, 1945 (Bohart & Gressitt); two females, one male, Namru 2, Guam, May 7, 1945 (Gressitt).

In Kertész' key (Mus. Nat. Hungarici Ann. 14: p. 163, 1916), this species does not run past the first couplet, since the antennal flagellum is distinctly darkened above, but the arista is much longer than the rest of the antenna and the legs are almost unicolorous. The relationship is probably closest to *P. intermedius* Kertész, from Formosa, but in that species the antenna is wholly yellow, the femora are darkened on the apical third, and the mesonotal pile, anteriorly and on the swellings behind the suture, is blackish.

Wallacea albiseta de Meijere

Wallacea albiseta de Meijere, 1907, Tijd. v. Ent., 50: 236.

Material examined: Point Oca, Guam, May, 1945 (G. E. Bohart, J. L. Gressitt), two females, one male.

Cephalochrysa infuscata new species

Female: Head about 1.65 times as wide as high. Front at upper corner of eyes about one-third head width, narrowing gradually to the face, which is nearly parallel-sided on its lower part; front metallic bluish with lavender reflections, finely punctured and with fine pale hairs arising from the punctures, except along the narrow median line where it is slightly raised and glabrous, and more particularly at the anterior extremity of this line, where the glabrous areas are expanded into an inverted V; frontal callus entire, forming

a transverse band which is biarcuate above, as a result of the V-shaped glabrous area; the callus whitish above, brownish below as it merges into the brownish-black of the face. Occipital orbits broad above, blue with lavender reflections and with punctures as on the front, becoming narrow and blackish below. Comparative measurements in micrometer units ($30 = 1$ mm.), based on holotype: Head width, 69; head height, 42; width of front, upper angle of eyes, 23; width of front, upper margin of callus, 20; width of face, 15; maximum width of occipital orbit, 9. Occiput black, with bluish reflections above. Antennae reddish-yellow; proboscis pale yellow.

Mesonotum and scutellum chiefly metallic blue, with violet reflections and with short, appressed pale pile; humeri and notopleural margin yellow, however, and postalar calli and apex of scutellum reddish-yellow, the postalar calli with black hair. Postscutellum and upper pleural areas largely metallic blue; lower pleural areas largely black but becoming yellowish in irregular and variable areas on the pteropleura and sternopleura.

Coxae, femora, hind tibia, upper surface of hind tarsus, and basal half of front and middle tibiae, especially above, blackish; all these segments usually paler basally and apically; legs otherwise yellow or yellowish. Wings infuscated, especially through the discal cell and thence along the anterior part of the apical half of the wing, the stigma the darkest; veins blackish.

Abdomen distinctly broader than the head or thorax, metallic green to blue above, with violet or purple reflections, especially on the sides or ventrally.

Length, 6–7.5 mm.; of holotype, 7 mm.

Male: Eyes, as usual, broadly contiguous. Legs more extensively pale than in the female but with the middle and hind femora, the basal half of the middle and hind tibiae, and the hind tarsi, particularly above, blackish. Wings infuscated as in the female. Ab-

domen distinctly narrower than head; pile more prominent, particularly anteriorly; venter with an extensive yellow median area on segments one to three. Genitalia yellow.

Holotype: Female, Guam, on *Ochrosia* fruit, July 25, 1938 (R. G. Oakley); Guam no. 1205; Lot no. 38-14972; U. S. National Museum type no. 59338. *Allotype*: Male, same data. *Paratypes*: One male, five females, same data; one female, Guam, December, 1945 (R. M. Bohart); one male, one female, Point Oca, Guam, June 6 and 14, 1945 (G. E. Bohart, J. L. Gressitt), at light; one female, Mt. Santa Rosa, Guam, May 16, 1945; one female, native forest near Sabana, Rota Island, 1,200 ft., June 19, 1946 (H. K. Townes).

The infuscated wings, the darkened legs,

and, in particular, the infuscated hind tarsi, and the V-shaped glabrous area on the front of the female will readily distinguish this species from all others known to me. The female of *Cephalochrysa hovas* (Bigot), the genotype, has the front more coarsely punctured except on a raised area next to the median suture; this area is broad and prominent, however, and does not expand below as in *infuscata*. *C. hovas* has been recorded from Hawaii, but the determination may be erroneous. No raised glabrous area occurs on the front of the other Oriental species, *C. chrysidiformis* (Lind.), *C. maxima* (de Meij.) and its variety *demeijerei* (Lind.), or *C. stenogaster* James, or in any of the known American species.