

Two Genera of Hawaiian Drosophilidae (Diptera)

BY JOHN R. MALLOCH

U. S. Biological Survey, Washington, D. C.

(Presented by E. H. Bryan, Jr., at the meeting of November 4, 1937)

This paper contains the descriptions of a new genus and species, and the description of an already known genus originally described from the Seychelles Islands, recently found in Honolulu.

Tantalia n. gen.

Generic description—This genus belongs to that group in which there are four series of intradorsocentral hairs on the mesonotum, but differs from any of them in having the anterior pair of dorsocentrals as strong as the posterior pair and situated at or very close to the suture, the scutellum convex, narrowed behind and a little longer than its basal width, with the basal pair of bristles close to the base, longer than the dorsocentrals and about 1.5 times as long as the apical pair which latter are at the tip and rather closely placed; the presutural bristle is also longer and stronger than usual; the prescutellar pair of acrostichals are undeveloped; and in the two dark spots on the costal margin of the wing between the apices of the first and second veins there are cross veins connecting the latter with the costal vein, while in the dark spot at the apex of the second vein there is a short spur vein on the hind side of the vein.

Genotype, the following new species.

Tantalia albiovittata, n. sp.

Male and Female.—General color rather dull testaceous yellow, the face in the female, frons in both sexes and a broad central vitta on the mesonotum that extends to the apex of the scutellum densely white dusted; in the male the face is blackened below and the central vitta on the mesonotum does not obscure the yellow ground color on the anterior half. Antennae whitish-yellow in female, darker in male; palpi in female, palpi and prelabrum in male black. Mesonotum with a dark brown or blackish vitta on each side of the white central vitta that extend over lateral edges of the scutellum; a blackish-brown mark on upper edge of the mesopleura and another on center of pleura. Legs yellow. Wings grayish hyaline, with a slight brown cloud over the furcation of second and third veins, three dark brown spots equally spaced on costa from above inner cross-vein to apex of second vein, similarly colored clouds over the cross-veins, a spot on middle of ultimate section of fourth vein, and a small mark on apices of third and fourth veins. Abdomen yellow, with a black or brown fascia on apex of each tergite that is usually broken in center.

Head seen from in front distinctly wider than high, face narrower than either eye, facial carina narrowly rounded. Frons subquadrate, slightly narrowed in front, the orbits moderately differentiated; all four vertical bristles, the upper reclinate orbital pair, and the ocellar pair long and strong; post-vertical pair weaker, about equal in length to the proclinate pair of orbitals, the lower reclinate pair close to base of latter, short and hair-like. Eyes stiff-haired, reniform. Antennae short, arista with 4 strong rays, none distinctly below. Gena almost linear, vibrissae strong.

Mesonotum with four series of intradorsocentral hairs that do not extend behind the posterior pair of dorsocentrals; sternopleurals 2.

Legs normal, all tibiae with preapical dorsal bristle, the mid tibia with an apical ventral spur; fore tarsi of the male shorter and stouter than the others, with irregular erect stiff black hairs above, mid tarsi not so noticeably haired, hind pair normal.

Hypopygium of male with a pair of yellow, boot-shaped, downwardly directed processes and a pair of much smaller blackish spines.

Costa with a pair of fine bristles at apex of first section and with regularly spaced outstanding hairs above and below on the edge of the costal vein in addition to the usual short setulose hairs. Inner cross-vein at middle of the discal cell, outer cross-vein at about 2.5 times its own length from inner and about 1.5 times its length from apex of fifth vein; anal vein and cell distinct.

Length, 1.5 mm.

Type, Waiahole, Oahu, Mar. 28, 1915 (O. H. Swezey); allotype, Olympus, Oahu, 2,000 feet, Oct. 25, 1936 (F. X. Williams); paratypes, Tantalus, Oahu, Mar. 24, 1907 (R. C. L. Perkins). Types in Bishop Museum.

Dettopsomyia Lamb.

Trans. Linn. Soc. London, vol. 16, pt. 4, p. 349 (1914).

This genus was originally described from the Seychelles Islands and the occurrence of the genotype in the Hawaiian islands is particularly noteworthy. Lamb's specimens were damaged and a redescription of his species is given to supplement his description and insure identification of the species.

There are three other species of the genus known from the Netherlands East Indies.

Dettopsomyia formosa Lamb.

Male.—Head black, frons dull, with a narrow stripe along orbit and one on each side of the ocelli, the two latter curving inward in front of ocelli and forming a single line to anterior margin where they connect with a yellowish spot between the antennae; genae largely testaceous-yellow; face silvery dusted, most noticeably so on the upper raised half. Antennae, palpi, and prelabrum black; arista yellow on basal half, black beyond. Thorax black, shiny, mesonotum with two grey dusted vittae that are interrupted along center round the bases of the dorsocentral bristles and setulae, and a gray dusted vitta on each side of these behind the suture; humeri grey dusted; pleura with two grey dusted vittae, one on upper edge and the other on center; scutellum grey dusted on each basal lateral angle and at extreme tip. Legs black, with the following whitish-yellow annuli: at apices of all femora, at bases, near middle, and at apices of all tibiae; tarsi yellow. Wings blackened, most deeply so at subcostal lobe and along the costa, with the following hyaline spots: in subcostal cell, 2 in marginal cell beyond apex of the first vein, the first one comma-like, one in anterior basal cell, 3 in first posterior cell, one near apex of the discal cell, 5 small ones in second posterior cell, and two or three along the posterior side of the fifth vein. Halteres yellow. Abdomen glossy black.

Frons about two-thirds of the head width, quadrate, the ocelli almost midway between vertex and anterior margin; all verticals strong, the inner pair proximad of the outer and almost in line with them; postverticals of

moderate length; ocellars long, proclinate; all orbitals crowded together close to anterior extremity of the orbits, the upper reclinate one strong, the lower one minute, the proclinate one about half as long as the upper reclinate. Antennae rather large, third segment tapered to apex, emarginate above; arista with about 6 rays above and 3 below. Face with a snout-like carina on upper half; gena about one-third as high as eye; vibrissae moderate. Eye a little longer than high, stiff-haired.

Thorax with bristles and hairs almost as in the preceding species, but the scutellum is shorter, more broadly rounded in outline, and the apical pair of bristles are a little longer than the basal pair and all four are more equally spaced on the margin.

Legs without exceptional features.

Wings with a very distinct notch at apex of the first section where it is rather definitely lobed and has a pair of fine bristles; second vein running almost parallel to third, gradually diverging from costa, subangularly bent forward near tip and entering costa at a right angle a little before midway between apex of first and third veins, the marginal cell at its tip about three times as wide as the submarginal at same point; third and fourth veins undulated on apical sections, divergent at tips; inner cross-vein not over one-third from apex of the discal cell, outer one farther from apex of fifth than from inner cross-vein.

Abdomen broadly ovate, flattened.

Length, 1.5 mm.

Honolulu, on window, Jan. 15, 1936 (F. X. Williams).

This species may be a very recent introduction, and its spread will be of interest.