

TWO TRYPETIDAE FROM THE MARQUESAS ISLANDS, WITH  
ONE NEW SPECIES (DIPTERA)\*

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INTRODUCTION

The genus *Dacus* Fabricius is one of the most important economically in the Pacific islands, and there are many species that feed in their larval stages in cultivated fruits, causing considerable loss to growers. The genus, in the strict sense as I accept it, is found in Africa, but the subgenus *Chaetodacus* Bezzi is met with throughout the Orient and southward into Australia. Unfortunately many of the species are quite imperfectly understood and considerable doubt exists on the score of distinguishing characters. However, there can be no doubt of the specific distinctness of the species recorded and redescribed below, as it is abundantly differentiated from any allied form in both color and in structure.

I have published a specific synopsis of the genus as far as the species are now known to me<sup>39</sup> but did not include the present one. It will be easy, however, to run it out by means of the characters employed in that paper and it is the only species of the genus which I have seen from the Marquesas. The description below is offered to supplement the original one in which there are unfortunately several omissions of important characters, and I feel that a new subgenus is necessary for its reception.

Genus DACUS Fabricius

Subgenus MARQUESADACUS, new subgenus

This subgenus is distinguished from the others already known by the presence of but one pair of incurved orbitals and their distance from the recurved pair.

*Dacus* (*Marquesadacus*) *perfuscus* Aubertin.

*Chaetodacus perfuscus* Aubertin: Entomologist, vol. 62, p. 173, 1929.

Male and Female

Length, 6.5 mm. to 7 mm. Head reddish yellow, frons darker, with the very narrow frontal orbits greyish white dusted, occiput with a large black triangle on each side above, antennae fuscous, apex of second segment and base of third, especially on inner

<sup>39</sup> Malloch, J. R., Trypetidae: Insects of Samoa, pt. 6, fasc. 7, pp. 253-266, London, 1931.

\* Pacific Entomological Survey Publication I, article 14.

side, reddish yellow; face without black spots, palpi yellow; frontal and vertical bristles black. Thorax glossy black, the only yellow markings consisting of a round spot on metapleura and a large triangle on posterior margin of mesopleura, the prosternum fulvous yellow; abdomen entirely glossy black, even the membrane fuscous. Legs glossy black, fore coxae and femora entirely honey yellow. Wings hyaline, with a well developed black stripe on the costa from apex of subcosta to apex of fourth vein, which does not extend much beyond level of second vein anywhere, and is but slightly widened apically, the dark color traceable along the second vein almost to its base; anal streak rather faint, cross veins not clouded. Calypteres grey. Halteres yellow.

Frons about 2.5 times as long as wide, with but one bristle on each orbit anterior to the pair of recurved bristles on the upper glossy vittae; all four verticals present; face without a marked central elevation in profile. Mesonotum with the usual 4 anterior marginal bristles, 2 notopleurals, 2 prescutellars, 2 postalar and 1 supra-alar; scutellum with 2 bristles, its apex almost transverse, sometimes with a slight elevation in center between the bristles; mesopleura with one hind marginal bristle, pteropleura without a distinct bristle, merely haired. Abdomen with the tergites well differentiated, extensile, and with many setiferous punctures, the fourth visible tergite with the usual more finely haired depressed patch on each side. Legs normal. Cross veins of wing separated by about the length of outer one.

Nukuhiva: Teuanui, Tovii [Toovii], altitude 2,000 feet, October 27, 1929, taken at rest on under side of leaves, 31 specimens, Mumford and Adamson.

Tahuata: Vaitupaahei, altitude 1,750 feet, July 9, 1930, 1 specimen, LeBronnec and H. Tauraa.

Uapou: Hakahetau Valley, altitude 1,000 to 2,000 feet, January 31, 1930, 10 specimens; altitude 1,000 feet, January 22, 1930, 9 specimens; Papaika, December 14, 1929, 11 specimens, R. R. Whitten.

Recorded from Hivaoa, Tahuata, and Nukuhiva, January, 1925.<sup>40</sup>

This species is distinguished from all others of which the descriptions or specimens are known to me by the entirely glossy black color of the dorsum of the thorax and abdomen, including the scutellum and humeri, the color markings of the legs, and the presence of but one pair of fronto-orbital incurved bristles, which are situated very far forward, indicating that it is the upper pair that is lacking.

Unfortunately there are no records of the food habits of the species on any of the specimens, which were collected in general field work.

#### Genus TRYPANEA Schrank

This genus is very widely distributed, being found in all faunal zones and regions.

**Trypanea simplex**, new species (fig. 42).

Male and Female

Length, 4 mm. to 5 mm. A testaceous yellow species, with thorax and abdomen black and covered with dense grey dust which obscures the entire surface, the mesonotum without dark markings, and the wings as in figure 42.

<sup>40</sup> Aubertin, D., and Cheesman, L. E., Diptera of French Oceania: Entomologist, vol. 62, p. 174, 1929.

Frons about 1.5 times as long in center as its width at vertex, much narrowed to anterior margin where it is one-third narrower than at vertex, the orbits each with 5 or 6 bristles; epistome rather sharply produced in center, parafacials linear in profile, height of face not over two-thirds that of back of head; third antennal segment angular at upper apical corner; arista bare; proboscis short and stout; palpi normal; eye obliquely placed; gena not over one-fourth of the eye height. Thorax with the usual 2 pairs of long postsutural dorsocentral bristles; scutellum with 2 strong marginal bristles, decumbent hairs on thorax and abdomen all white or yellowish white. Legs normal, fore femora with some rather long bristles on the apical half of the postero-ventral surface; fore tarsi of male slightly thickened and with a few rather long hairs along the posterior side, those of the female slender and without outstanding posterior hairs. Wings as in figure 44, first vein setulose from proximad of humeral cross vein to its apex above, and on apical fourth below, third bare above and with a few widely spaced fine hairs on basal portion below.

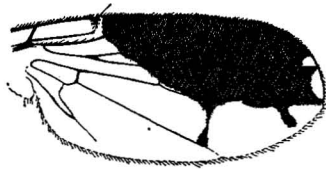


FIGURE 42. Wing of *Trypanea simplex*, new species.

Hivaoa: Atuona Valley, altitude 330 feet, February 25, 1929, holotype female, Mumford and Adamson.

Eiao: coconut plantation, near center, sweeping, October 1, 1929, allotype, A. M. Adamson.

Uahuka: Putiovai, March 23, 1931, paratype female, LeBronnec and H. Tauraa.