

New or Little-Known Tipulidae from the Hawaiian Islands (Diptera)

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I am indebted to Dr. Francis X. Williams for the privilege of studying three species of crane-flies that he has reared from the pupal condition and will discuss elsewhere. One of the species has never been described although it has been in my collection for some years. A second form is evidently an introduced fly whose native home is in Eastern Asia. The third species has not been reported since its original definition in 1919. The types and representative specimens have been returned to Dr. Williams and will be placed in the collection of the Hawaiian Entomological Society.

***Limonia (Dicranomyia) jacobus* (Alexander).**

Dicranomyia jacobus Alexander, Ann. Ent. Soc. America, 12: 28-29, 1919.

Oahu: Manoa Valley, Waihi-iki, May 9, 1937; ex pupae, wet boulders. Same station, May 16, 1937; ex wet rock. Waihi-nui Falls, February 18, 1939; wet bank. Hering Valley, emerged August 19, 1933; subaquatic. All collected by F. X. Williams.

There are very slight differences in the structure of the ventromesal lobe of the basistyle of the male hypopygium from typical material from Maui but I must consider the flies as being conspecific.

***Limonia (Dicranomyia) casei*, sp. n. Fig. 1.**

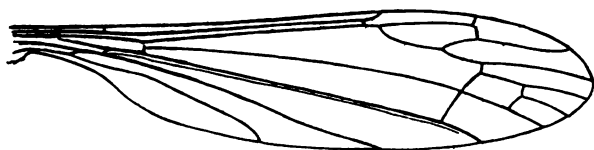


Fig. 1. *Limonia (Dicranomyia) casei*, sp.n.; venation.

General coloration gray, the praescutum with three distinct dark brown stripes; pleura pale, variegated with darker; femora yellow basally, passing into light brown at tips; wings subhyaline, unpatterned except for the oval brown stigma; abdominal tergites dark brown, the posterior borders conspicuously obscure yellow to produce a ringed appearance.

Female.—Length about 6-6.5 mm.; wing, 6.3-6.5 mm.

Rostrum and palpi brownish black. Antennae with scape and pedicel dark brown; flagellum black; flagellar segments oval, the outer ones a trifle more elongate. Head light gray; anterior vertex narrow, a little less than the diameter of scape.

Pronotum brownish gray. Mesonotal praescutum yellowish gray with three distinct dark brown stripes; posterior sclerites of notum blackened, pruinose, the posterior border of scutellum somewhat paler. Pleura pale, variegated with darker, including major black areas on the sternopleurite and meron, with less evident darkenings on the anepisternum and propleura, leaving the posterior pleurites chiefly silvery. Halteres pale. Legs with the fore coxae weakly infuscated, the remaining pair pale yellow; trochanters yellow; femora yellow basally, passing into light brown at tips; tibiae and tarsi obscure yellow to pale brownish yellow, the outer tarsal segments dark brown. Wings (Fig. 1) subhyaline, unpatterned except for the oval brown stigma; veins pale brown. Venation: Sc_1 ending opposite origin of R_s , Sc_2 close to its tip; cell $1st\ M_2$ closed; $m-cu$ at or very close to fork of M .

Abdominal tergites dark brown, the posterior borders conspicuously obscure yellow to testaceous yellow, producing a ringed appearance; sternites more uniformly pale, the basal lateral portions with dark triangles. Ovipositor with cerci slender but strongly curved.

Hab. Oahu.

Holotype, ♀, Nuuanu Valley, May 4, 1915 (*A. H. Case*).

Paratypes, 2 ♀ ♀, Waihi-iki Stream, Manoa Valley, June 7, 1936 (*F. X. Williams*); 1 ♀, Lulumahu, streamside, issued from pupa, May 14, 1937 (*F. X. Williams*).

Most similar to *Limonia (Dicranomyia) hawaiiensis* (Grimshaw), differing especially in the coloration of the body, legs and wings. I have had the description in my files for several years while awaiting the receipt of more material.

Erioptera (Meterioptera) bicornifer Alexander.

Erioptera (Erioptera) bicornifer Alexander, Ann. Ent. Soc. America, 14: 116, 1921

Oahu: Honolulu, April 12-18, 1931 (*F. X. Williams*); ex mud.

Unquestionably an introduced species. Widely distributed in Eastern Asia, from the Ussuri country in eastern Siberia, throughout Korea into the major islands of Japan.