

New or Little-Known Crane-Flies from the Hawaiian Islands (Tipulidae, Diptera).

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(Presented by Mr. Bryan at the meeting of June 3, 1922.)

The following records are based on a collection of Tipulidae kindly sent to me by Dr. James F. Illingworth. The types and uniques are preserved in the collection of the Bishop Museum, Honolulu. The chief papers dealing with the Tipulidae of the Islands are the following:

Grimshaw, Percy. Fauna Hawaiiensis, vol. III, pp. 6-10; 1901.

Alexander, Charles P. Notes on the Crane-Flies of the Hawaiian Islands. Annals Ent. Soc. Amer., vol. XII, pp. 25-30; 1919.

It now appears that the species of *Limnobia*, *Styringomyia*, and *Trimicra* are more widely distributed than was believed at the time of their original characterization in 1901. The numerous species of *Dicranomyia*, on the other hand, all seem to be endemic. The same is true of the single species of *Gonomyia* known from the Islands.

Limnobia perkinsi Grimshaw.

The following localities are represented:

Oahu: Honolulu, October, 1919 (E. H. Bryan, Jr.).

Fiji: Rewa, March, 1906 (F. Muir).

The species is now known from other Pacific Islands as Samoa and Tahiti. In previous papers, the writer had considered this species as being more properly referable to *Libnotes*. Following the definition of the latter genus as diagnosed by Mr. F. W. Edwards, the present species is to be retained in *Limnobia*.

Dicranomyia stygipennis Alexander.

(*D. brunnea* Grimshaw, preoccupied.)

The following records are available:

Oahu: Kolekole, Waianae, February 29, 1920 (E. H. Bryan, Jr.); Pauoa V., June 17, 1917 (J. C. Bridwell);

Moanalua V., altitude 1200 feet, April 9, 1922 (E. H. Bryan, Jr.).

Maui: altitude 2000 feet, March 19, 1919 (J. A. Kutsche).

Kauai: altitude 4000 feet, April 23, 1919 (J. A. Kutsche);
Kokee, January, 1919 (J. A. Kutsche).

The synonymy of *D. brunnea* with *stygiipennis* is established by a comparison of paratypes of the two. Grimshaw described the wings as being "hyaline," which is certainly not the case. The present species appears to be the most abundant Tipulid in the Islands.

***Dicranomyia grimshawi* Alexander.**

(*D. apicalis* Grimshaw, preoccupied.)

The following localities are represented:

Oahu: Cooke Trail, April 5, 1919 (O. H. Swezey).

Kauai: altitude 4000 feet, April 23, 1919 (J. A. Kutsche);
Kokee, March 30, 1919 (J. A. Kutsche).

***Dicranomyia hawaiiensis* Grimshaw.**

The following locality is added:

Hawaii: Honaunau, June, 1919 (J. G. Stokes).

***Dicranomyia kauaiensis* Grimshaw.**

This very rare crane-fly is represented by material from near the type-station.

Kauai: Summit Camp, September 2, 1920 (O. H. Swezey).

***Dicranomyia foliocuniculator* Swezey.**

Three specimens from the following stations:

Oahu: Cooke Trail, April 5, 1919 (O. H. Swezey); Moanalua V., altitude 1200 feet, April 9, 1922 (E. H. Bryan, Jr.).

***Dicranomyia nigropolita* sp. n.**

General coloration shiny black; anterior part of vertex and a conspicuous ventral area on thoracic pleura silvery white pubescent; wings faintly infuscated, the stigma conspicuous, dark brown; cell *first M*₂ open by the atrophy of *m*.

Male. Length about 3 mm.; wing, 4.6 mm.

Female. Length about 4 mm.; wing, 4.8 mm.

Rostrum and palpi brownish black. Antennae black, the basal flagellar segments subglobular. Head black, the narrow vertex silvery white anteriorly.

Pronotum obscure yellow, blackened medially. Mesonotum shiny black; in some cases the humeral region of the praescutum obscure yellow; lateral margins of the praescutum very narrowly yellowish. Pleura brownish black, shiny, with a conspicuous, ventral, obscure yellow area that is densely covered with a microscopic appressed pubescence that appears like a bloom when viewed obliquely from above; this area extends from behind the fore coxa to dorsal of the mid-coxa. Halteres pale brown, the base of the stem and the knobs yellow. Legs with the fore coxae obscure yellow; mid-coxae yellow, the base extensively infuscated; posterior coxae with the outer face infuscated; trochanters obscure yellow; remainder of the legs black. Wings with a faint brownish tinge; stigma conspicuous, oval, dark brown; veins dark brown. Venation: *Sc* short, *Sc1* ending just before the origin of *Rs*, *Sc2* apparently atrophied; cell *first M2* open by atrophy of *m*; basal deflection of *Cu1* close before the fork of *M*.

Abdomen black, the ventral lobes of the hypopygium brownish yellow.

Habitat.—Hawaiian Islands.

Holotype, male, Kaumuahona, Oahu, November 23, 1919 (E. H. Bryan, Jr.).

Allotype, female, Southeast Koolau Mountains, Oahu, February 11, 1917 (J. C. Bridwell).

Paratypes, female, Wahiawa, Oahu, October 31, 1920 (O. H. Swezey); male, Waihee, Maui, September 4, 1919 (E. H. Bryan, Jr.).

This handsome little fly is readily told by the shiny black coloration and the open cell *first M2*.

***Styringomyia didyma* Grimshaw.**

The following records are available in this material:

Oahu: Central Y. M. C. A., Honolulu, February 16, 1922 (William A. Meinecke); one pair, taken in copula.

Hawaii: Honaunau, August 13, 1919 (O. H. Swezey).

***Trimicra pilipes* (Fabricius).**

Mr. F. W. Edwards believes that most, if not all, of the rather numerous described species of the genus are synonyms or varieties of the common *T. pilipes*. There can be no doubt but that the total number of valid species is much less than has generally been supposed. The Hawaiian records have been listed hitherto as *T. lateralis* Grimshaw. The following observations are available:

Kauai: Kaholuamano, April, 1920 (J. A. Kutsche).

Hawaii: Honaunau, June, 1919 (J. G. Stokes).



Alexander, Charles P. 1923. "New or little-known crane-flies from the Hawaiian Islands (Tipulidae, Diptera)." *Proceedings of the Hawaiian Entomological Society* 5, 249–251.

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