New Records of Two-Winged Flies (Insecta: Diptera) from O‘ahu, Hawaiian Islands

NEAL L. EVENHUIS
Hawai‘i Biological Survey, Bernice Pauahi Bishop Museum, 1525 Bernice Street, Honolulu, Hawai‘i 96817-2704, USA; email: neale@bishopmuseum.org

WILLIAM D. PERREIRA
P.O. Box 61547, Honolulu, Hawai‘i 96839-1547, USA

DANA ANNE YEE
P.O. Box 61547, Honolulu, Hawai‘i 96839-1547, USA

Recent collected material of Diptera from various localities on O‘ahu has resulted in two new state records, one new island record, and range extensions. All material is deposited in the Bishop Museum (BPBM).

Cecidomyiidae
Winwertziinae
Heteropezini
Neostenoptera sp. New state record
This unusual heteropezine paedogenetic cecidomyiid was collected from a three fairly widely separated localities on O‘ahu, so it may have been established for some time but just not collected previously. Given its extremely small size (1–2mm), it can easily be overlooked in general collecting samples (cf. Plakidas 2017). The provenance and species identification remain unknown. Originally described from an Afrotropical Copal specimen (Meunier 1901, 1902), the genus has since been found extant represented by species from the Congo (Gagné 1979) and the southeastern and eastern United States (Plakidas & Ferro 2016). This marks the first record of the genus from the Hawaiian Islands. Using the key in Plakidas (2017) it easily keys to Neostenoptera Meunier, but it does not key to either of the described species and may be new.


Xylomyidae
Solvea sp. Range extension
Since the first record of this genus and family in the Hawaiian Islands (Evenhuis 2016), more specimens have been collected on O‘ahu extending the range from the middle of the island to both the northern and southern portions. Its native provenance and species identity remain unknown.


Asilidae

Leptopteromyia mexicanae Martin, 1971

New island record

This small leptogastrine asilid that mimics wasps (Fig. 1) was originally reported from Maui (Howarth et al. 2012: 166) from a 2011 collection, but efforts to re-collect it from the island after the original record proved fruitless (M.T. Fukada, pers. comm. Jun 2013). Recent collecting on O‘ahu, however, show that it has made it to this island. Given its small size, it may have been overlooked in general collecting and may be present on other islands as well. It is a predator on small soft-bodied invertebrates such as plant and leaf-hoppers and inhabits tall grassy areas where it perches on grass blades awaiting prey to ambush.

**Chloropidae**

*Tylopterna* sp.  

**New state record**

*Tylopterna* was originally described (Bezzi 1916) from the Philippines based on a single male specimen described as *Tylopterna monstrosum* Bezzi, 1916. It was originally treated in “Ortalidae” [= Ulidiidae] but was transferred to Chloropidae by Sabrosky (1951). The male
has a distinctive flattened face and a wing with a unique erect protuberance in open cell m1 (Fig. 2). Females collected with the males are dimorphic and do not have modified features in the wing and the head is compressed to a substantially lesser degree. This genus is currently under revision by the senior author and will result in a number of new species and synonymies. It is listed here now to record the new state record in a timely manner.


**ACKNOWLEDGMENTS**

The Atherton Family Foundation, the Dana Anne Yee Foundation and the City and County of Honolulu, Department of Parks and Recreation are thanked for providing funding to support the collecting efforts of WDP and DAY. The following individuals are thanked for providing permission to collect on lands under their auspices: Gary Daneau, Hawaii Polo Club for providing access to Makaleha Stream; Chad Higaki, Superintendent of the Ted Makalena Golf Course for providing access to Ted Makalena Golf Course; Cynthia King and Ryan Peralta, State of Hawaii, Department of Land and Natural Resources, for providing access to state lands on O‘ahu; Michele Nakota and Stan Oka, City and County of Honolulu, Department of Parks and Recreation for providing access to Foster Botanical Garden.

**REFERENCES**


