

***Sigmatineurum puleloai* (Diptera: Dolichopodidae), a new species from Pelekunu Stream, Moloka‘i, Hawaiian Islands**

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Abstract

Sigmatineurum puleloai, sp. nov. from the island of Moloka‘i in the Hawaiian Islands is described and illustrated. It is characterized by strong bristles on the middle ventral section of the midleg femur, flattened sternite 4 process, and conspicuous dark pollinose areas on the dorsolateral portions of the abdominal tergites.

Key words: Dolichopodidae, *Sigmatineurum*, Hawaiian Islands

Introduction

An interesting new species of *Sigmatineurum* was found during recent monitoring of pristine stream habitats in Pelekunu Valley, Moloka‘i in the Hawaiian Islands. Pelekunu Stream is one of the few watersheds in the State of Hawai‘i still entirely lacking any introduced fish or amphibian species and is currently protected and managed as the Pelekunu Nature Preserve by The Nature Conservancy of Hawai‘i (TNCH). *Sigmatineurum puleloai*, sp. nov. appears to be quite rare and occurs only in areas of excellent water quality, with only one small, localized population yet found on a single seep habitat adjacent to Pelekunu Stream. Species in the genus *Sigmatineurum* occur throughout the high Hawaiian islands in pristine aquatic habitats in areas of difficult access, where they are usually uncommon. Evenhuis & Polhemus (1994) conducted a comprehensive review of the genus and described four new species while Evenhuis (1997) described three new species and provided an updated key. An additional species from the Kohala Mountain area of Hawai‘i Island was described by Evenhuis (2000). The wing venation of this new species superficially resembles *Sigmatineurum mnemogagne* (Evenhuis 2000b) found in Hanawī Stream, Maui, but the species instead keys to *S. parenti* Evenhuis. *Sigmatineurum puleloai* is the ninth new species of this genus discovered in the past ten years, with future discoveries likely as biologists penetrate into more remote stream areas in the Hawaiian Islands.