



# Nesidiorchestes hawaiiensis Kirkaldy: new tribal assignment and lectotype designation (Hemiptera: Heteroptera: Miridae: Orthotylinae: Orthotylini)

### MICHAEL D. SCHWARTZ1 & NIKOLAI TATARNIC2

<sup>1</sup>Division of Invertebrate Zoology, American Museum of Natural History, New York, NY USA 10024-5192. E-mail: mschwart@amnh.org

#### **Abstract**

The preponderance of documented morphological evidence presented for *Nesidiorchestes hawaiiensis* Kirkaldy, 1902 argues for its tribal reassignment to the Orthotylini from the Halticini. A lectoype is designated for a male syntype maintained in the Natural History Museum, London.

Key words: Insecta, Hemiptera, Miridae, Taxonomy, Hawaii

#### Introduction

Recent revisionary studies of the orthotyline plant bug fauna of Hawaii have dramatically increased our knowledge of species richness of several genera: *Sarona* (Asquith, 1994), *Nesiomiris* (Gagné, 1997), and *Orthotylus* (Polhemus, 2003, 2004); provided a new genus *Loulucoris* and two new species (Asquith, 1995); and led to a change in the tribal assignment of *Sarona* (Asquith, 1994). In this note we ascertain the generic placement of another Hawaiian endemic, *Nesidiorchestes* Kirkaldy, 1902, and stabilize the concept of its type species, *N. hawaiiensis* Kirkaldy, 1902. The original tribal assignment of *Nesidiorchestes* was the Halticini. In founding his new taxon, Kirkaldy compared *Nesidiorchestes* with *Halticus* and cited a suite of external characters to substantiate the placement and diagnose the genus.

The wide head with a convex vertex and prominent frons, the transverse pronotum, the brachypterous hemelytron, and the hind leg with incrassate femur and long tibia are all features usually associated with species placed in the Halticini. However, the characters given to distinguish *Nesidiorchestes* from *Halticus* — the stout first antennal segment and relatively long labium, — although different from the gracile antennae and short labium of *Halticus*, are likewise features not found in other members of the tribe. Herein we document characters of the genitalia from both sexes, for the first time, which unambiguously require the reassignment of *N. hawaiiensis* to the Orthotylini.

## Material and methods

Bibliographic citations in the generic and species treatment report only the original description and the most recent catalog listings. Here, the orientation of each genitalic structure is included on the illustration or figure caption. Scanning electron micrographs of uncoated and gold-coated preparations were taken with the digital Philips XL30 ESEM. Dorsal habitus photographs were taken with a Microptics-USA photographic system equipped with an Infinity Photo-Optical K-2, 3-lens system and a Nikon D1X digital camera. Scale bars are

<sup>&</sup>lt;sup>2</sup>School of Biological Sciences, University of Sydney, Sydney NSW 2006 Australia E-mail: Nikolai.Tatarnic@austmus.gov.au