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Two new iassine leafhopper genera from Ecuador (Hemiptera: Cicadellidae)

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Abstract

Two new iassine leafhopper genera, *Nigrojassus* gen. nov. and *Neotrocnada* gen. nov. (Hemiptera: Cicadellidae) from Ecuador are described and illustrated. *Nigrojassus* gen. nov. is closely related to *Hoplojassus* Dietrich based on the elongate scutellum, arcuate base of the hindwing, leg chaetotaxy and flattened subgenital plate. Two new species, *N. madhurai* sp. nov. and *N. ananthi* sp. nov. are described in the genus. *Neotrocnada* is a monotypic genus with *Neotrocnada napoensis* sp. nov. as type species. Homologies of the highly modified structures of the male genitalia of *Neotrocnada* are assessed based on comparison to other New World genera.

Key words: Iassininae, taxonomy, Auchenorrhyncha, morphology

Introduction

Iassininae is one of the 25 subfamilies of leafhoppers and comprises over 2000 species and 146 genera currently placed in seven tribes (Oman *et al.* 1990; Dietrich 2005, Dai *et al.* 2010). Species of this group are largely arboreal and are most diverse and abundant in tropical forests and savannas, but are also well represented in temperate zones throughout the world. Over the past 50 years, most taxonomic works treating the New World iassine fauna have recognized Gyponinae (=Scarinae) and Iassininae as separate subfamilies, but recent phylogenetic analyses (Dietrich *et al.* 2001, 2005) indicate that these two family-group taxa are closely related. Dietrich (1993) followed Linnavuori and Quartau (1975) in placing Gyponini as a tribe of Iassininae. Blocker (1979) revised the classification of New World Iassininae (*sensu stricto*, excluding Gyponini), but declined to recognize tribes within the subfamily. Thus most New World genera previously included in Iassininae remain unplaced to tribe (Oman *et al.* 1990) although many will key to Iassinini in Dietrich's (2005) key to tribes. More recently only a few additional New World species and genera have been described (Blocker 1982; Blocker and Webb 1990; Dietrich 1993).

In this paper, we describe two new genera *Nigrojassus* and *Neotrocnada* from Ecuador. *Nigrojassus* is closely related to *Hoplojassus* Dietrich and *Neotrocnada* appears to belong to a group comprising the genera *Gargaropsis* Fowler, *Goblinaja* Kramer and *Baldriga* Blocker.

Materials and methods

Morphological terminology follows Davis (1975) and Dietrich (2005) for habitus and genitalia characters except for leg chaetotaxy, which follows Rakitov (1998). Digital photographs were taken using a QImaging Micropublisher 3.3 digital camera mounted on an Olympus SZX12 stereomicroscope.

Holotypes of the new species are deposited in the United States National Museum of Natural History, Washington (USNM), on indefinite loan from the Escuela Politécnica Nacional, Quito, Ecuador. Paratypes are deposited in the Illinois Natural History Survey (INHS) insect collection.