

***Candeocoris bistillatus*, new genus and new species of Ochlerini from Ecuador (Hemiptera: Heteroptera: Pentatomidae)**

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Abstract

Recent examination of specimens from Ecuador revealed a series of males and females of an undescribed species clearly belonging to the Discocephalinae. The new species presents characteristics similar to genera of both Discocephalini and Ochlerini, preventing an undoubtful placement of the new species within any genus and tribe. We conducted a cladistic analysis to investigate the possible relationships of the new species within Discocephalinae. The new species was recovered as sister-group to the remaining Ochlerini, supporting the proposition of a new genus, so *Candeocoris bistillatus* Roell & Campos, gen. n. et sp. n. are described within Ochlerini. The new genus is recognized for its dark glossy aspect, tumid vertex of head, long and sinuous labrum, base of labium placed close to anterior limit of eyes, thick bristles on meso- and metatibiae, pygophore globose, and laterotergites 9 touching each other. The new species is recognized by a large yellow spot on each corium, yellow spots on each segment of the connexivum, bucculae with anterior tooth, laminar projections on superior layer of ventral rim of pygophore, vesica with a single median projection, and broad gonocoxites 8.

Key words: cladistics, monotypic taxa, Ochlerini, phylogenetic classification

Introduction

Discocephalinae Fieber, 1860 is a Neotropical subfamily of small to medium sized pentatomids, usually with a flattened body and light brown to dark coloration. Discocephalinae is divided into two tribes, Discocephalini and Ochlerini (Schuh & Slater 1995); the first comprises 43 genera and the latter was proposed to include 23 genera previously placed in Halyini (Rolston & McDonald 1979, Rolston 1981) and currently comprises 33 genera. Whereas groupings of genera were suggested for the nominal tribe upon morphological similarity (e.g., Ruckes 1965, Becker & Grazia 1986, Rolston 1990, Fernandes *et al.* 2008), a phylogenetic hypothesis is available for Ochlerini (Campos & Grazia 2006). Due to the absence of a formal description, diagnostic characteristics of Discocephalini are confused with those of the subfamily, i.e., the labium usually arising on or posterior to an imaginary line bisecting head at the anterior limit of eyes, and abdominal trichobothria usually laterad of an imaginary line connecting spiracles (Rolston & McDonald 1979, Rolston, 1981). On the other hand, diagnostic characteristics of Ochlerini are the usually dull black or fuscous color, and the third tarsal segment of females hind legs dorsally flattened or excavated (Rolston 1981, 1992), the latter also was recovered as an unambiguous synapomorphy for the tribe (Campos & Grazia 2006).

We received specimens for identification from the Museo Regionale di Scienze Naturali “La Specola” (MRSN), including males and females of an undescribed species from Ecuador, which, by the placement of labium and trichobothria, clearly belonging to the Discocephalinae. In spite of similarities between the new species and the species of *Priapismus* Distant, 1889 (Discocephalini), i.e. the presence of thick bristles and a long and sinuous labrum bent ventrad anteriorly, characteristics of genitalia, particularly the female genital plates, are more similar to some genera of Ochlerini. Thus, relying only on morphological characters prevents an undoubtful placement of the new species within any discocephaline genus and tribe. In this work we conducted a cladistic analysis to investigate the possible relationships of the new species within Discocephalinae, its phylogenetic placement relative to *Priapismus* and to Ochlerini, and the legitimacy of raising a new monotypic genus.