



New familial assignments for three species of Neotropical harvestmen based on cladistic analysis (Arachnida: Opiliones: Laniatores)

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Abstract

We herein propose transfer of the two monotypic genera *Globibunus* (type-species *G. rubrofemoratus* Roewer, 1912) and *Rivetinus* (type-species *R. minutus* Roewer, 1919) to the subfamily Zamorinae (Agoristenidae) and *Ramonus* (type-species *R. conifrons* Roewer, 1956), previous placed in Agoristenidae, to the Prostyginae (Cranidae) based on several characteristics of male genitalia. These transfers are corroborated by a cladistic analysis, which also recovered the three currently recognized agoristenid subfamilies.

Key words: Systematics; taxonomy; Neotropical fauna; Agoristenidae; Cranidae

Introduction

A few years ago, we visited the Senckenberg Museum (Frankfurt am Main, Germany) to examine type materials for systematic reviews in progress of many Neotropical harvestmen groups, such as Gonyleptidae and Cranidae. Our purpose was to examine the male genitalia of those species which, for the most part, had not been described by Roewer and other researchers until late in the 20th century (for some exceptions on Laniatores see Roewer 1949, figs. 75, 92 and the works of the couple B.A.M. and H.E.M. Soares starting with Soares 1972, figs. 14–23). Among the examined species, we found that *Globibunus rubrofemoratus* Roewer 1912, currently placed in Cranidae and *Rivetinus minutus* Roewer, 1919, without familial assignment (Kury 2003), have agoristenid-like male genitalia. Similarly, we verified that *Ramonus conifrons* Roewer, 1956, placed in Zamorinae (Agoristenidae) by Kury (1997), does not possess male genitalia with such characteristics and therefore should be removed from that family. Since we had the type material of these three species at hand and their descriptions are poor by modern standards, we here present detailed redescriptions. We also present a hypothesis of relationship for these three species based on a cladistic analysis using a modified version of the data matrix available for Agoristenidae (Kury 1997).

Agoristenidae was proposed by Šilhavý (1973) and characterized as gonyleptomorphic harvestmen with first legs strikingly short and thin; high number of tarsal segments of distitarsi; and projections in the frontal part of prosoma. It comprised two subfamilies, Agoristeninae (eight genera, nine species) and Leiosteninae (one monotypic genus). Fifteen years later, González-Sponga (1987) added a third subfamily, Angelininae. Kury (1993) corrected the spelling of that subfamily to Angelinae, and in 1997 proposed the monophyly of the family based on a cladistic analysis. In the same paper, Kury proposed the synonymy of *Angela* González-Sponga under *Leptostygnus* Mello-Leitão, thus expanding the concept of Leiosteninae and proposed a new subfamily, Zamorinae (two genera, three species). Representatives of Zamorinae have a cranid facies, thus having a very different aspect from the other agoristenids, but genitalic features that are typically agoristenid-like.