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Redescription of the sun-spider *Mummucina titschacki* Roewer, 1934 (Solifugae, Mummuciidae) with notes on the taxonomy of the genus

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Abstract

Mummucina Roewer, 1934 is the second largest genus in the South American sun-spider family Mummuciidae. The limits of this and other genera are largely unexplored, and the traditional classification system is controversial. In the present contribution, the type species *Mummucina titschacki* Roewer, 1934 is redescribed, aided by scanning electron micrographs and the examination of a series of 72 specimens (including males) from the type locality in Ecuador. Some taxonomic remarks are made.

Key words: Solifuges, *Mummucina*, Ecuador

Resumen

Mummucina Roewer, 1934 es el segundo género más grande de la familia Sur Americana de solífugos Mummuciidae. Los límites de este y otros géneros están muy inexplorados, y el sistema tradicional de clasificación es controversial. En esta contribución, se redescrive a la especie tipo del género, *Mummucina titschacki* Roewer, 1934, con el apoyo de imágenes de microscopía electrónica de barrido y el estudio de 72 especímenes (incluyendo machos) de la localidad tipo en Ecuador. Se hacen algunas observaciones taxonómicas.

Palabras clave: Solífugos, *Mummucina*, Ecuador

Introduction

Solifuges of the family Mummuciidae were first grouped by Roewer (1934), who created the family Ammotrechidae and the subfamily Mummuciinae within it. The need to elevate Mummuciinae to the family rank was suggested by Maury (1980: 60), a nomenclatural act that followed shortly afterwards (Maury 1984). Eight genera, comprising 20 named species, are currently placed in this family: *Mummucia* Simon, 1879, *Gaucha* Mello-Leitão, 1924, *Metacleobis* Roewer, 1934, *Mummucina* Roewer, 1934, *Mummucipes* Roewer, 1934, *Gauchella* Mello-Leitão, 1937, *Cordobulgida* Mello-Leitão, 1938 and *Uspallata* Mello-Leitão, 1938. All of them are monotypic, except for *Mummucia* and *Mummucina* (Harvey 2003; Martins *et al.* 2004; Rocha & Carvalho 2006; Carvalho *et al.* 2010; González-Reyes & Corronca 2013). The largest and most important contribution to the taxonomy of the family was made by Roewer (1934).

Roewer (1934) created the genus *Mummucina* for the species *Mummucina titschacki* Roewer, 1934, described on the basis of a single female from Riobamba, Ecuador. The subsequent inclusion of five additional species into *Mummucina* made it the second largest genus in the family (Mello-Leitão 1943; Lawrence 1954; Kraus 1966; González-Reyes & Corronca 2013). Roewer's (1934) description of *Mummucina titschacki* was vague and many morphological features of the holotype were overlooked (e.g., morphology of propeltidium and opisthosoma). No

Various authors have noted taxonomical difficulties inside Mummuciidae and commented on the need to perform a systematic revision (Maury 1998; Xavier & Rocha 2001; Rocha & Canello 2002; Martins *et al.* 2004; Rocha & Carvalho 2006; Carvalho *et al.* 2010). Although delimitation of species is relatively easy, generic delimitation and assigning species to each genus is a difficult task. For instance, only one out of five species described in the last 15 years, *Mummucina puna*, was assigned to a given genus based on its morphology (González-Reyes & Corronca 2013). In contrast, the other four species were placed into the type genus (i.e., *Mummucia*) as a conservative approach (Xavier & Rocha 2001; Martins *et al.* 2004; Rocha & Carvalho 2006; Carvalho *et al.* 2010). The scope of the present work is presenting a redescription of the type species of *Mummucina*, as a contribution to our knowledge of the baseline morphology of the genus.

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