

The genus *Arrhopalites* Börner, 1906 (Collembola, Appendiciphora, Arrhopalitidae) in the Neotropical Region, with description of four new cave species from Brazil

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Abstract

Twenty two known and new Neotropical species of the genus *Arrhopalites* (Collembola: Arrhopalitidae) are revised and diagnosed. The four new cave species from Brazil are described and illustrated and the remaining Brazilian and Mexican species are redescribed and illustrated. Neotropical species are distributed along the Good's biogeographic zones 8, 24a, 27 and 29. Four species described as *Arrhopalites* are replaced in the genus *Pararrhopalites* Bonet & Tellez 1944 based on their morphology. A short discussion is made about the distribution of the genus in the Neotropical Region, and a key for identification of the Neotropical species is provided.

Key words: Collembola, Symphypleona, Arrhopalitidae, Arrhopalites, cave Collembola, Neotropical Region

Introduction

The genus *Arrhopalites* was proposed by Börner 1906 for the Symphypleona with the anal and genital segments separate, with a single bothriothrix on the fifth abdominal segment and lacking capitate tenent hairs. The type species, *Sminthurus caecus* Tullberg 1871, has a single eye behind each antennae but Richards (1968: 21) diagnosed the genus as "...normally fewer than four, rarely eight, eyes on either side of head...". The reduced number of eyes was remarked in the diagnosis of the genus presented by Christiansen and Bellinger (1981, 1998). Thus Katianninae species with a maximum of 2+2 eyes are considered *Arrhopalites*, with up to 4+4 eyes are assigned to *Collophora* and with more than 4 eyes per side are placed in different genera (Betsch, 1980; Bretfeld, 1999; Christiansen and Bellinger, 1981, 1996, 1998). The synapomorphies for the genus are the presence of 2 or fewer lenses in each eye patch, the trochanteral organ present at the third