

A BROAD LOOK INTO THE PHYLOGENY OF THE ARACHNID ORDER OPILIONES: EVIDENCE FROM A MULTIGENE APPROACH FROM NEARLY ALL OPILIONID FAMILIES

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The phylogenetic relationships among the Opiliones suborders have been the focus of several recent papers that looked at anatomy and/or molecular sequence data for a few selected species. However, little effort has been made to include a broad species sampling within each suborder, with the exception of Cyphophthalmi. Here we present a new analysis of opilionid relationships including ca. 150 species of Opiliones and close outgroups, representing 41 of the currently accepted 45 families. The data analyzed includes complete 18S rRNA, nearly complete 28S rRNA, histone H3, and the two mitochondrial markers cytochrome c oxidase subunit I and 16S rRNA. The data strongly support monophyly of each opilionid suborder, with the exception of Eupnoi, since Caddidae appears polyphyletic or poorly resolved, depending on the analyses. With respect to Laniatores, we provide the first molecular-based broad hypothesis of the relationships of this suborder. This allows us to test the phylogenetic validity of several recently proposed families and to propose polyphyly of the family Triaenonychidae, among other results.

Oral, Tuesday 7th

THE GENUS *CHARINUS* SIMON, 1892 OF THE STATE OF BAHIA (AMBLYPYGI: CHARINIDAE)

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During November of 2002, the Amblypygi expedition was carried out with the intent of collecting not only Amblypygi, but also other arachnids and myriapods from caves and surroundings of a number of espeleological provinces in some municipalities in the state of Bahia, northeastern Brazil. A large quantity of zoological material was collected, including the first troglobite scorpion described from Brazil, *Troglophorulus translucidus* Lourenço, Baptista & Giupponi, 2004. As part of the expedition results, herein we describe two new species of *Charinus* (Amblypygi: Charinidae). With those two new species, Bahia has now five of the nine known *Charinus* species from Brazil. Herein we also describe the previously unknown male of *Charinus mysticus* Giupponi & Kury, 2002 and the unknown female of *Charinus acaraje* Pinto-da-Rocha, Machado & Weygoldt, 2002. *Charinus* sp. n. 1 is described from Chapada Diamantina, Bahia based on eight males and two females being a large-sized species constituting the larger known *Charinus*. This is a troglolife species because individuals are also known for the external environment. *Charinus* sp. n. 2 is described based upon only three males and one young from a cave in Campo Formoso, Bahia. Even though individuals of this species were only found inside the cave, they presented no troglolife characteristics. The external environment is highly unfavorable (caatinga) and this species may be considered relictual and probably a neotroglobite.

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Poster, Monday 6th