



## A new species of Brazilian troglobitic harvestman of the genus *Iandumoema* (Opiliones: Gonyleptidae)

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### Abstract

*Iandumoema setimapocu* sp. n. is described from the cave Lapa do Zu, Coração de Jesus, Minas Gerais State, Brazil. The new species is closely related to *Iandumoema uai* Pinto-da-Rocha, 1996 in the subfamily Pachylinae, from which it differs by the following features: Male femur IV straight; the male apophysis on coxa IV directed obliquely backward; eyes depigmented; tubercles on femur IV close to each other, separated by about one diameter; male pedipalpal tibia with ectal setae IiiiI; lack of median setae on ventral plate of penis. *Iandumoema* is the first exclusively troglobitic genus of Opiliones in Brazil that contains two species.

**Key words:** Pachylinae; cave; troglomorphic

### Introduction

Animals which inhabit caves are ecologically grouped into troglloxenes (organisms which are regularly found in cave habitats but must periodically go aboveground to complete their life cycles), troglrophiles (organisms which may complete their life cycles both in subterranean and surface habitats, forming self-sustained hypogean populations genetically connected with epigean ones) and troglobites (species that live exclusively in subterranean habitats) (see e.g., Holsinger & Culver 1988; Trajano 2005). Among the troglobites, arthropods stand out for having many specializations associated to an exclusively subterranean way of life. These include the reduction or loss of tegumentary pigmentation, weak sclerotization of the cuticle, reduction or loss of the eyes and increased length of appendages, amongst others (see e.g., Curtis & Machado 2007).

Cave dwelling harvestmen, including troglobites, troglrophiles and troglloxenes, are quite common in Brazil (Gnaspini & Trajano 1994; Pinto-da-Rocha 1995). Almost all known troglobitic Brazilian harvestmen belong to the family Gonyleptidae (Kury 2003), most of them currently placed in monotypical genera, as is the case of *Pachylospeleus strinatii* Šilhavý, 1974 (Pachylospeleinae); *Giupponia chagasi* Pérez-González & Kury, 2002 (Pachylinae) and *Iandumoema uai* Pinto-da-Rocha, 1996 (Pachylinae). Moreover, there is an undescribed Pachylinae from the State of Santa Catarina (Pinto-da-Rocha *et al.* 2001) and a Tricommatinae, from the State of Minas Gerais (description in progress by A. Kury and A. Pérez-González, E. Trajano pers. comm.). The only troglobitic non-gonyleptid harvestman in Brazil is *Spaeleoleptes spaeleus* H. Soares, 1966 (Escadabiidae), which is also in a monotypic genus.

Intensive collections have recently been made in Brazilian caves as well as other sites that had rarely or never been studied before, because of government concern over the biodiversity of these habitats. An expedition undertaken by Eleonora Trajano and Maria Elina Bichuette, funded by the Brazilian government, yielded