



## A new species of *Cryptocellus* (Arachnida, Ricinulei) from Oriental Amazonia

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### Abstract

*Cryptocellus tarsilae* n. sp. is described from male and female specimens collected in a small cave at Carajás National Forest, Serra Norte, Pará, Brazil. The new species appears to be similar to *C. peckorum* Platnick & Shadab, 1977 by the moderately expanded metatarsus III, bearing a metatarsal process with a flattened tip. Both males and females of the new species are readily recognizable by the carapace having a posterior median bulge covered by tubercles.

**Keywords:** *Cryptocellus*, Ricinulei, Brazilian Amazon, Neotropics, taxonomy

### Introduction

Ricinulei is the smallest order of Arachnida, with 56 living species (Harvey 2003; Bonaldo & Pinto-da-Rocha 2003) in a single family, Ricinoididae. Despite the low diversity of species, they can be relatively abundant at some Amazonian localities. Adis et al. (1989) found densities of up to 36 specimens per square meter for *Cryptocellus becki*, and up to 10 specimens per square meter for *C. adisi* at Adolfo Ducke Forest Reservation, Manaus, Amazonas State, while Barreiros et al. (2005) founded an average density of 0.7 specimens per square meter for *C. simonis* at Rodrigues Alves Park, Belém, Pará State.

In the present paper we describe a new species of *Cryptocellus* from the Carajás National Forest, which harbors the largest iron ore mine in the world. This is the 57<sup>th</sup> known species of the Order, the 18<sup>th</sup> known to occur in South America, and the second recorded in Brazilian Oriental Amazonia. The few specimens available were collected in a small cave located in a transition area between Amazonian Forest vegetation and the “Canga” (R. Andrade, pers. comm.), on the slopes of a plateau. However, they do not show any troglomorphy and their relationship with the cave is uncertain. The Canga is a landscape of open vegetation that occurs around water-filled depressions in outcrops of iron ore (Morellato & Rosa 1991).

### Material and methods

The general terminology follows Platnick & Shadab (1977), while that of male leg III follows Cokendolpher (2000). Measurements were taken according to Cooke & Shadab (1973) and are given in millimeters. The specimens were covered in clay, and some setae had clay on the apex, giving them the false appearance of being clavate. They were partially cleaned by immersion in 1% pyrophosphate of sodium and exposed to an ultrasound cleaner for about 15 minutes. The type material is deposited in the Museu Paraense Emilio Goeldi, Belém (MPEG, curator: A. B. Bonaldo) and the Museu de Zoologia da Universidade de São Paulo (MZSP, curator: R. Pinto-da-Rocha).