A new species of Ricinulei of the genus Cryptocellus Westwood (Arachnida) from northern Brazil

ANA LÚCIA TOURINHO¹, NANCY F. LO MAN-HUNG² & ALEXANDRE BRAGIO BONALDO²

¹Instituto Nacional de Pesquisas da Amazônia, Coordenação de Pesquisas em Entomologia (CPEN), INPA, Avenida André Araújo, 2936, Aleixo, CEP 69011-970, Cx. Postal 478, Manaus, AM, Brasil. E-mail: amtourinho@gmail.com
²Museu Paraense Emílio Goeldi, Coordenação de Zoologia (CZO), Laboratório de Aracnologia, Av. Perimetral, 1901, Terra Firme, CEP 66077-830, Cx. Postal 399, Belém, PA, Brasil. E-mail: nancylo@terra.com.br; bonaldo@museu-goeldi.br

Abstract

Cryptocellus iaci sp. nov. is described from an adult female collected during a field campaign organized by the World Wildlife Fund to the median Negro River at the Jauaperí river, in the state of Roraima, northern Brazil.

Key words: Neotropics, Brazilian Amazonia, taxonomy, Negro River

Introduction

Ricinulei is one of the smaller orders of Arachnida, with only 66 extant species described in more than 130 years of its taxonomic history (Harvey 2003; Botero-Trujillo & Pérez 2009). The order was once regarded to be the rarest in the class (Mitchell 1969; Harvey 2002, 2003). At least from the point of view of species richness and lineage diversity, the discovery of a new species of Ricinulei can still be considered as remarkable as that of a new bird or monkey. However, it is now known that some species can be quite abundant in Amazonia, especially in some urban forest remnants (Adis et al. 1989; Barreiros et al. 2005). However, most of the species described are known only from few individuals and from single localities. Despite inadequate knowledge of the general distribution patterns of ricinuleids, some species appears to present restricted distributions and consequently are at risk of extinction due to increasing deforestation rates (Harvey 2002).

The taxonomic knowledge of this group has been growing lately. In the last three years several new species of this order have been described (Pinto-da-Rocha & Bonaldo 2007; Tourinho & Azevedo 2007; Platnick & García 2008; Botero-Trujillo & Pérez 2008, 2009; Tourinho & Saturnino, in press). Additionally, the application of a wide suite of methods to capture these animals has also improved sample quality and, consequently, our basic knowledge of their morphology, biology, taxonomy and systematics (Adis et al. 1989; Platnick & Garcia 2008; Tourinho & Saturnino, in press).

In this paper we describe an additional species of Ricinulei from Brazilian Amazonia, based in a single specimen collected during an expedition to a remote area in the Negro River basin, at the Jauaperí River, in the state of Roraima. This is the first Ricinulei species described from the Negro River basin. From a biogeographic and ecological point of view, this region is particularly interesting because several lines of evidence indicate nested endemic areas and a natural complex of flooded insular mosaics with different degrees of isolation, which were formed by the influence of geological factors dramatically affecting the course of the major river basins in the north western South America (Lundberg et al. 1998, Albert et al. 2006). The specimen is deposited at the Instituto Nacional de Pesquisas da Amazônia (INPA), curator Dr. A. L. Henriques. Measurements are given in millimeters.