



The non-Amazonian species of the Brazilian wandering spiders of the genus *Phoneutria* Perty, 1833 (Araneae: Ctenidae), with the description of a new species

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Abstract

The five non-Amazonian species of the medically important spider genus *Phoneutria* Perty, 1833 are taxonomically reviewed, including the description of a new species, *P. eickstedtae* sp. nov. from Brazil. *Phoneutria keyserlingi* (F.O. Pickard-Cambridge, 1897) and *P. pertyi* (F.O. Pickard-Cambridge, 1897), currently listed as junior synonyms of *P. nigriventer* (Keyserling, 1891), are revalidated and a modern redescription of *P. pertyi* is presented. *Phoneutria luederwaldti* Mello-Leitão, 1927, also currently listed as junior synonym of *P. nigriventer*, is considered *nomen dubium* as the faded condition of the juvenile holotype does not allow an accurate species identification. The non-Amazonian *Phoneutria* are mainly restricted to Atlantic rainforest and forest fragments in the Cerrado in Brazil. *Phoneutria nigriventer* also occurs in northern Argentina and was introduced to Uruguay. A modified taxonomic key allows an identification of all eight *Phoneutria* species.

Key-words: armed spider, banana-spider, taxonomy, Neotropical, Brazil

Introduction

In Brazil, species of the genus *Phoneutria* Perty, 1833 are known as "aranha-armadeira", or armed spiders, whereas they are called "Brazilian wandering spiders" or "banana-spiders" in English speaking countries. They are medium- to large-sized spiders, ranging from 17 to 48 mm in total body length and reaching up to 180 mm with stretched legs. The genus is responsible for a large number of spider bites in Brazil (Ministério da Saúde 1998) and is the main agent in most areas (Antunes & Málague 2004). The venom has neurotoxic action (Brazil & Vellard 1925, 1926) and many investigations have been carried out analysing its components and the epidemiology of bites (Bücherl 1953; Trejos *et al.* 1971; Rezende *et al.* 1991; Cordeiro *et al.* 1992, 1993; Diniz *et al.* 1993; Figueiredo *et al.* 1995; Herzig *et al.* 2002, 2004; Florez *et al.* 2003; Richardson *et al.* 2006).

The genus *Phoneutria* was originally diagnosed by the recurved median row of eyes (Perty 1833). Many authors did not consider this character sufficient to distinguish the genus from *Ctenus* Walckenaer, 1805 (Walckenaer 1837; Simon 1897; Strand 1916) whereas others accepted it as valid (F.O. Pickard-Cambridge 1897; Mello-Leitão 1936; Bücherl *et al.* 1964; Lehtinen 1967; Bücherl 1969a). Finally, Mello-Leitão (1936) considered the presence of dense prolateral scopulae on the pedipalp tibiae and tarsi of males and females as diagnostic character of the genus, a feature that is still used to distinguish it from other genera. A recent cladistic analysis supported the monophyly of *Phoneutria* based on 1) the presence of tarsal and tibial pedipalp scopulae; 2) the defensive display with erect position of the body and lateral movements; 3) the median position of epigynal pockets; and 4) the simple copulatory ducts that are equal to or shorter than the spermathecae (Simó & Brescovit 2001).