



New species and new records of *Xenelmis* Hinton (Coleoptera: Elmidae) from Southeastern Brazil

BRUNNO HENRIQUE LANZELLOTTI SAMPAIO^{1,2}, MARIA INÊS DA SILVA DOS PASSOS³
& NELSON FERREIRA-JR¹

¹Laboratório de Entomologia, Departamento de Zoologia, Instituto de Biologia, Universidade Federal do Rio de Janeiro. Caixa Postal 68044, 21941-971, Rio de Janeiro, RJ, Brasil

²Pós-graduação em Zoologia, Museu Nacional, Universidade Federal do Rio de Janeiro. E-mail: brunnosampaio@ufrj.br

³Laboratório de Insetos Aquáticos, Departamento de Zoologia, Instituto de Biociências, Universidade Federal do Estado do Rio de Janeiro. Av. Pasteur 458, 20290-240, Urca, Rio de Janeiro, RJ, Brasil

Abstract

The genus *Xenelmis* is found in the Nearctic and Neotropical regions. Currently, seven out of thirteen species are registered from Brazil. Here, two new species of *Xenelmis* from Brazil are described and illustrated—*Xenelmis sinecarina* **sp. nov.** and *Xenelmis granatoides* **sp. nov.** Additionally, *X. granata* and *X. micros* are characterized and illustrated.

Key words: Atlantic forest, Elminae, Neotropical Region, Rio de Janeiro, *Xenelmis*

Introduction

The adults of *Xenelmis* Hinton are characterized by the small body size, strongly convex body, pronotum without transverse or longitudinal impression, and presence of two sublateral carinae on each elytron (Hinton 1936). This genus is known from Nearctic and Neotropical regions, with one and twelve species respectively (Kodada & Jäck 2005). Until now, seven species were recorded from Brazil: *Xenelmis audax* Hinton, *X. comis* Hinton, *X. granata* (Grouvelle), *X. laura* Brown, *X. micros* (Grouvelle), *X. tarsalis* Hinton, *X. teres* Hinton (Segura 2012).

Recently, Manzo (2006) revised this genus and described a new species from Argentina. Except for *X. granata* and *X. micros*, the type material of all known species was analysed to present diagnoses and male genitalia illustrations in the revision. Additionally, the distributional records and a key to all species of *Xenelmis* were provided.

In this article, two new species of *Xenelmis* are described, a new record of *X. micros*, and a characterization of this species and *X. granata* are presented. Also the key of Manzo (2006) is modified to include the new species and different diagnostic characteristics of *X. granata* and *X. micros*.

Material and methods

All specimens were collected in Rio Macaé Basin, in the Atlantic Forest, northern Rio de Janeiro State, in Macaé and Nova Friburgo municipalities, with Surber sampler and preserved in 90% ethyl alcohol or pinned. Male genitalia of dissected specimens were stored in microvials with 90% ethyl alcohol together with the respective specimen or in microvials with glycerin attached to the pinned specimens. Holotypes, paratypes and the examined material of *X. micros* and *X. granata* are deposited in Coleção Entomológica Professor José Alfredo Pinheiro Dutra [DZRJ], Departamento de Zoologia, Universidade Federal do Rio de Janeiro. Morphological terminology of descriptions follows Hinton (1945). Drawings were made with the aid of camera lucida. Male genitalia of new species were drawn based on holotype and habitus photographs of paratypes. Measurements were made on

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