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New species of *Eidmanacris* Chopard, 1956 from Brazil (Orthoptera: Phalangopsidae: Luzarinae)

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Abstract

With 15 described species, *Eidmanacris* is one of the largest Luzarinae genera from South America. In Brazil, 12 species occur in two large biomes, the Atlantic Forest and Cerrado. Here, we describe four new species of *Eidmanacris* from Brazil: *E. bernardii* Nihei & de Mello, n. sp., *E. papaveroi* Nihei & de Mello, n. sp., *E. simoesi* Nihei & de Mello, n. sp., and *E. eliephae* Nihei & de Mello, n. sp., from Cerrado (*E. bernardii* n. sp.), and the other from Atlantic Forest. The type material is deposited in the Museu de Zoologia da Universidade de São Paulo (MZSP) and the Zoology Department Insect Collection (Coleção de Insetos do Departamento de Zoologia), Botucatu campus of São Paulo State University, UNESP.

Key words: Grylloidea, Phalangopsidae, Taxonomy, new species, cricket

Resumo

Com 15 espécies descritas, *Eidmanacris* é um dos maiores gêneros de Luzarinae da América do Sul. No Brasil, ocorrem 12 espécies em dois grandes biomas, a Mata Atlântica e o Cerrado. Aqui descrevemos quatro novas espécies de *Eidmanacris* do Brasil: *E. bernardii* Nihei & de Mello, n. sp., *E. papaveroi* Nihei & de Mello, n. sp., *E. simoesi* Nihei & de Mello, n. sp., and *E. eliephae* Nihei & de Mello, n. sp., do Cerrado (*E. bernardii* n. sp.) e as demais da Mata Atlântica. O material tipo está depositado no Museu de Zoologia da Universidade de São Paulo (MZSP) e na coleção de Insetos do Departamento de Zoologia da Universidade Estadual Paulista, UNESP, campus de Botucatu.

Palavras-chave: Grylloidea, Phalangopsidae, Taxonomia, novas espécies, grilo

Introduction

The South-American genus *Eidmanacris* Chopard, 1956 stands as the largest genus of Luzarinae in Brazil, where occur 12 of 15 described species (Eades *et al.*, 2015). *Eidmanacris* species are found in forests and open areas, inhabiting the litter and natural cavities, as burrows, bounds, crevices and caves (Souza-Dias *et al.*, 2015a). Its habit is defined as straminicolous and cavicolous (Desutter-Grandcolas, 1995a).

Desutter-Grandcolas (1995b) revised *Eidmanacris* and proposed five putative synapomorphies that support its monophyly: the formation of a median projection and a double row of bristles on the glandular metanotum of males, originating from the anterior border of metanotum, and the structure of the cylindrical vertical formations, with open apex; the inflated aspect of pronotum, resulting from the swelling of dorsal disc and elevation of lateral lobes, and features of the male genitalia structure: pseudopiphillic arms (referred to as "épine latérale") clearly separated from genitalia, and rather mobile, and the ectophillic arc reduced and opened, shifted to the back of the genitalia.

According to Desutter (1990), *Eidmanacris* belongs to the C-group of Luzarinae. This group was firstly proposed to include *Eidmanacris* and four other genera, based on characters of male genitalia. Posteriorly, several