

***Ybytyramoan*, a new genus of fireflies (Coleoptera: Lampyridae, Lampyrinae, Photinini) endemic to the Brazilian Atlantic Rainforest, with description of three new species**

LUIZ FELIPE LIMA DA SILVEIRA^{1,2} & JOSÉ RICARDO M. MERMUDES¹

¹*Laboratório de Entomologia, Departamento de Zoologia, Instituto de Biologia, Universidade Federal do Rio de Janeiro, A1-107, Bloco A, Av. Carlos Chagas Filho, 373, Cidade Universitária, Ilha do Fundão, Rio de Janeiro - RJ – Brazil.*

E-mail: silveiralf@hotmail.com

²*Laboratório de Ecologia de Insetos, Department of Ecologia, Instituto de Biologia, Universidade Federal do Rio de Janeiro, A0-113, Bloco A, Av. Carlos Chagas Filho, 373, Cidade Universitária, Ilha do Fundão, Rio de Janeiro - RJ – Brazil*

Abstract

Here we describe a new Photinina genus with three species endemic to Serra dos Órgãos Mountains in Brazil. *Ybytyramoan* gen. nov. occurs in high altitudes, from 980m up to 2000m, and has the following unique set of characters: head abruptly depressed at vertex; lanterns not fully developed, somewhat rounded or anteriorly rounded, straight posteriad, with posterolateral rounded projections (billycock-shaped), at the middle of the abdominal sterna VI and VII; abdominal sternum VIII not covered by VII; phallus and parameres apically toothed. We provide illustrations and a key to the three species in this genus: *Ybytyramoan praeclarum* sp. nov. (type-species), *Y. diasi* sp. nov., *Y. monteirorum* sp. nov.

Key words: Lampyrinae, Photinini, Taxonomy, Endemism, Neotropical

Introduction

The Lampyridae Rafinesque, 1815 include *ca.* 2000 species in 83 genera (Branham 2011), traditionally belonging to eight (Crowson 1972; Lawrence and Newton 1995) or seven subfamilies (Janisova and Bocakova 2012). The most comprehensive species catalogue for the family is still that of McDermott (1966), which is, unfortunately, largely outdated. Lampyridae has a cosmopolitan distribution, and most of its known diversity belongs to the Neotropics and Asian Southeast (Lawrence and Newton 1995). However, Neotropical diversity is underestimated due to a lack of taxonomic work (Lloyd 1978; Silveira & Mermudes 2013). Indeed, lack of taxonomic expertise is one of the main reasons behind taxonomic impediment (de Carvalho *et al.* 2005; Evenhuis 2007). Importantly, the Neotropical region houses several threatened biodiversity hotspots, including Tropical Andes, Amazonia, and Brazilian Cerrado and Atlantic Rainforest biomes (Myers 2000; Fisher & Christopher 2007), many of them with numerous and as yet undescribed species. The Atlantic Rainforest ranks number eight in a list of most-threatened biomes on Earth (Fisher & Christopher 2007), considering parameters of plant and vertebrate biodiversity, as well as human poverty, which relate to nature conservation in complex ways (Adam *et al.* 2004). We recently described *Memoan* Silveira and Mermudes 2013 from the Atlantic Rainforest in Espírito Santo State, Brazil, noting that, despite the severely anthropized environmental conditions, there are still new and important taxa to be described in this biome. Now we propose another new genus from the Atlantic Rainforest based on three new species from the Serra dos Órgãos Mountain Range, Rio de Janeiro State, Brazil.

Material and methods

Area studied. Serra dos Órgãos is the highest region of the Serra do Mar, a montane region in the Tropical Pluvial

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