A new species of *Brasilycus* (Coleoptera: Lycidae) from Peru

MILADA BOCAKOVÁ¹ & ELYNTON ALVES DO NASCIMENTO²

¹Department of Biology, Faculty of Education, Palacky University, Purkrabska 2, CZ-77140 Olomouc, Czech Republic, E-mail: milada.bocakova@upol.cz

²Departamento de Engenharia Ambiental, Universidade Estadual do Centro-Oeste, PR 153, Km 7, Riozinho, 84500-000, Irati, Paraná, Brazil

Abstract

*Brasilycus peruanus* sp. nov. is proposed as new to science. Photographs of the habitus, antenna, pronotum, and aedeagus of the single specimen are presented. This new species represents the first record of the genus *Brasilycus* from Peru and is the fourth species in the genus recorded from South America.

Key words: Taxonomy, *Brasilycus*, new species, Neotropical Region

Introduction

*Brasilycus* Nascimento et Bocakova, 2010 is a small lycid genus of the tribe Calopterini. It is most obviously distinguished in having small and irregular elytral cells, in contrast to the large rectangular to square cells of *Lycomorphon* Pic and *Falsocaenia* Pic. The genus currently consists of three species from Brazil and Bolivia (Nascimento & Bocakova 2010). A specimen was discovered and identified as a new species by the first author when sorting through presumed specimens of *Falsocaenia* from the Museum and Institute of Zoology in Warsaw.

Phylogenetic relationships of *Brasilycus* have never been tested, as the genus was described after the phylogenetic analysis of the Calopterini was completed (Bocakova 2005) and generic revision of the Calopterini accomplished (Bocakova 2003). External male morphological characters support close relationships of *Brasilycus* to *Lycomorphon* Pic and *Falsocaenia* Pic. On the basis that the females of both *Brasilycus* and *Lycomorphon* are unknown and may be larviform, while *Falsocaenia* females are fully winged, *Lycomorphon* may be considered to be a sister group of *Brasilycus*. As *Brasilycus* species are rare in lycid communities in southern America, this genus was not addressed in recent studies on phylogeny and origins of neoteny in the Lycidae (Bocak et al. 2008; Bocak & Bocakova 2008).

Herein, we present a description of a new species of *Brasilycus* and provide photographs of pronotum, antennae, aedeagus, and the habitus.

Material and Methods

The specimen was examined under an Olympus SZX 12 stereoscopic microscope, with magnification up to 90×, and illuminated by Olympus KL1500 LCD fibre optic illuminator. Photographs of external and internal morphological characters were taken using an attached Olympus Camedia 5060 digital camera. The photographs were processed in Helicon Focus software, combined from 2-3 original pictures focused in different layers. Humeral width was measured across both elytra in dorsal view. Eye diameter was measured at the widest point, interocular distance at the narrowest point. The measurements are in millimeters and were taken using an ocular micrometer. Male genitalia were dissected after the abdomen was boiled in 10% KOH solution.

Abbreviation.

ZMPA—Museum and Institute of Zoology of the Polish Academy of Sciences, Warsaw.