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Review of the Neotropical species of *Stauropoctonus* Brauns, 1889 (Hymenoptera: Ichneumonidae: Ophioninae)

ALESSANDRO RODRIGUES LIMA[1], CLAUDIA MARIA JACOBI[2] & ALICE FUMI KUMAGAI[1]

[1]*Departamento de Zoologia, Instituto de Ciências Biológicas, Universidade Federal de Minas Gerais, Brazil.*
E-mail: biolimaufmg@yahoo.com.br; acfk@icb.ufmg.br
[2]*Departamento de Biologia Geral, Instituto de Ciências Biológicas, Universidade Federal de Minas Gerais, Brazil.*
E-mail: jacobi@icb.ufmg.br

Abstract

The taxonomy of Neotropical species of *Stauropoctonus* is reviewed, with redescriptions of *S. bicarinatus* and *S. excarinatus*, the description of four new Brazilian species, *S. amazonensis* **sp. n.**, *S. leotacilioi* **sp. n.**, *S. michelle* **sp. n.**, and *S. rectus* **sp. n.**, and for the first time with a detailed study of the male genitalia of the genus. Additionally, we provide a key to the world *Stauropoctonus* species.

Key words: parasitoids, light trap, Brazil, key

Introduction

Stauropoctonus is a small and infrequently collected genus of Ophioninae which can be easily recognized by some synapomorphic features such as the presence of a transverse mesopleural furrow and the mid and hind trochantelli with distal margins each produced into a sharp curved tooth (Gauld, 1985; 1988). The genus has seven described species with the following distribution (Yu *et al*., 2012): Palaearctic—*S. bombycivorus* (Gravenhorst, 1829) and *S. nigrithorax* Lee & Kim, 2002; Afrotropical—*S. occipitalis* Gauld & Mitchell, 1978; Oriental—*S. townesorum* Gauld & Mitchell, 1981 and *S. torresi* Gauld, 1977; Australian—*S. torresi* Gauld, 1977; Neotropical—*S. bicarinatus* (Cushman, 1947) and *S. excarinatus* (Cushman, 1947). Both Townes (1971) and Gauld (1988) examined specimens of two undescribed species, occurring in Brazil and Bolivia, whose identities are still unknown. Despite some recent improvements in the knowledge of the genus, the descriptions of Neotropical species require further details. Also the *Stauropoctonus* key (Lee & Kim, 2002) need to be revised, since the first step is wrong.

Here we redescribe *S. bicarinatus* and *S. excarinatus*, describe four new Brazilian species and provide a key to all known *Stauropoctonus* species.

Methods

Data on the non-Neotropical species were obtained from previous works (Gauld & Mitchell, 1978; 1981; Gravenhorst, 1829 Lee & Kim, 2002). For Neotropical species, we examined specimens from the following collections: American Entomological Institute (AIE), Gainesville—USA; Smithsonian National Museum of Natural History (NMNH), Washington—USA; Coleção Zoológica Professor Paulo Bührnheim (UFAM), Amazonas—Brazil; Instituto Nacional de Pesquisas da Amazônia (INPA), Amazonas—Brazil; Coleção entomológica das Coleções Taxonômicas da Universidade Federal de Minas Gerais (UFMG), Minas Gerais—Brazil; Coleção Entomológica da Universidade Federal de Lavras (UFLA), Minas Gerais—Brazil; Museu de Zoologia da Universidade de São Paulo, São Paulo—Brazil; and Coleção Entomológica Padre Jesus S. Moure (DZUP), Paraná—Brazil. According to specimen labels, most of them were captured using light traps.

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7 Head with gena in lateral view triangular (Figs 3C; 7C) 8
7' Head with gena in lateral view trapezoidal (Figs 5C; 6C) 9
8 Fore wing vein *3rs-m* 0.68–0.87x as long as vein *M* (between *2m-cu* and *3rs-m*); fore wing vein *cu-a* reaching *M+Cu* opposite of *Rs&M*. (Fig. 3D); propodeum in lateral view evenly rounded (Fig. 3A) . . . . . *S. amazonensis* **sp. n.**
8' Fore wing vein *3rs-m* 1.12–1.37x as long as vein *M* (between *2m-cu* and *3rs-m*); fore wing vein *cu-a* reaching *M+Cu* basad of *Rs&M* (Fig. 7D); propodeum in lateral view abruptly declivous (Fig. 7A) . . . . . *S. michelle* **sp. n.**
9 Scutellum strongly inflated, in lateral view forming two different faces (dorsal and posterior) (Fig. 5D); fore wing marginal cell with a conspicuous pilose proximal region (Fig. 5F); antenna light brown. . . . . *S. excarinatus* (Cushman, 1947)
9' Scutellum weakly inflated, in lateral view evenly rounded (Fig. 6D); fore wing marginal cell with a conspicuous glabrous area anteriorly, reaching two thirds of *Rs+2r* length (Fig. 6F); antenna black. . . . . *S. leotacilioi* **sp. n.**

* Analyzing the original description of *S. nigrithorax* Lee & Kim, 2002 and the *S. bombycivorus* (Gravenhorst, 1829) redescription (Gauld & Mitchell, 1981), and also comparing images of both species, it was not possible to find any character that distinguishes them. The *S. nigrithorax* black mesopleuron and scutellar carina present on the basal 0.2, used by Lee & Kim (2002) to differentiate the species, also occur in *S. bombycivorus*. Based on their original description, *S. nigrithorax* is probably a synonym of *S. bombycivorus*.

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