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A new species of *Iapir* Py-Daniel, Fonseca & Barbosa (Coleoptera: Myxophaga: Torridincolidae) from Brazil with key to species of the genus

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Abstract

The genus *Iapir* is known only from Brazil, currently with five species. This genus is characterized by the lack of a tooth on the hind margin of metatrochanter and a semi-lunar depression prolonged toward apex of the last ventrite on female specimens. Herein we describe an additional species, *Iapir vanini* sp. nov., collected in southeastern Brazil in Santa Teresa (type locality), Castelo, and Domingos Martins municipalities, in Espírito Santo State. The presence of a fringe of setae on the anterior face of front tibiae and on the posterior face of hind tibiae, and the male genitalia with an oblique apex in lateral view and bearing tufts of seta on distal third, distinguish this species from other *Iapir*. A key for identification of the species of *Iapir* is presented.

Key words: Atlantic Rainforest, Espírito Santo State, Neotropical Region

Introduction

Torridincolidae Steffan are a family of small beetles found in hygropetric environments. This family is currently represented by 37 species distributed in seven genera: *Delevea* Reichardt (2 spp.), *Incoltorrida* Steffan (1 sp.), and *Torridicola* Steffan (3 spp.) in the Afrotropical Region; *Satonius* (6 spp.) Endrödy-Younga in the Palearctic Region; and *Claudiella* Reichardt & Vanin (1 sp.), *Iapir* Py-Daniel, Fonseca & Barbosa (5 spp.), and *Ytu* Reichardt (19 spp.) in the Neotropical Region. *Iapir* is very similar to *Claudiella*, sharing characteristics like four abdominal ventrites, with a plastron on the last three, and a semi-lunar depression on the last ventrite (Reichardt & Vanin 1976). *Claudiella* may be diagnosed from *Iapir* by the presence of a tooth on the hind margin of metatrochanter, absent on the former and by the semi-lunar depression which is prolonged on *Iapir* females and simple on *Claudiella*. *Iapir* is recorded only from Brazil, in the states of Espírito Santo, Minas Gerais, Rio de Janeiro, Pará, and Pernambuco. A new species is here described and illustrated, along with a key for the six known species of *Iapir*.

Material and methods

The specimens of this new species were collected in 2011 in Castelo, Domingos Martins, and Santa Teresa municipalities, in Espírito Santo State, Brazil. The material was fixed and preserved in 80–93% ethyl alcohol. Specimens were analyzed using a stereoscopic microscope with 115× zoom. Photos were taken in a stereoscopic microscope with attached camera and combined with the software Combine ZP. Measures of the holotype and four paratypes were taken and variation is presented. Male genitalia were dissected, prepared with heated lactic acid, and mounted on a temporary slide for observation and drawings. After that the male genitalia were stored together with the specimen in microvials with 93% ethyl alcohol. The mouthparts were also dissected and prepared in a

2. Supra-orbital carina fading before the posterior margin of eye; semilunar impression of abdomen dimorphic in male and female (on females the impression is projected medially toward the apex of abdomen) (Figs. 2e, f) *Iapir borgmeieri* (Reichardt & Vanin) [Brazil, Minas Gerais State]
- 2'. Supra-orbital carina reaches the posterior margin of eye; semilunar impression of abdomen similar on males and females 3
3. Hind trochanter with tooth-like projection conspicuous (Fig. 2c); hind wing with RP vein reaching the oblongum cell in the apex of rp-mp₁ vein, near to r₄ (Fig. 2h) *Iapir quadridentatus* Braule-Pinto, Fonseca & Hamada [Brazil, Pernambuco State]
- 3'. Tooth-like projection on hind trochanter present but not conspicuous; hind wing with RP vein reaching the oblongum cell in the middle of rp-mp₁ vein (Fig. 2g) *Iapir trombetensis* (Fonseca, Py-Daniel & Barbosa) [Brazil, Pará State]
4. Pronotum slightly raised medially, forming a keel feebly conspicuous on posterior third *Iapir castalia* (Reichardt) [Brazil, Rio de Janeiro State]
- 4'. Pronotum entirely convex, without raised area forming a keel. 5
5. Hind wing reduced (Fig. 1a); male genitalia with subapical tufts of setae (Fig. 1c) *Iapir vanini* **sp. nov.** [Brazil, Espírito Santo State]
- 5'. Hind wing developed (Fig. 2g, h); male genitalia glabrous *Iapir brütskii* (Reichardt & Costa) [Brazil, Espírito Santo and Rio de Janeiro State]

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