



Heteragrion denisye sp. nov. (Odonata: Zygoptera: Heteragrionidae), a notable species from Serra da Canastra, Minas Gerais, Brazil

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Abstract

Heteragrion denisye sp. nov. (Zygoptera: Heteragrionidae) is described and diagnosed on specimens collected near a Vereda (i.e. palm swamp) area of the National Park of Serra da Canastra, Minas Gerais, Brazil (-20.2323, -46.6085, 1305 m, 25 x 2018, Vilela, Koroiva, Nobrega & Lera leg.). This species is unique within the genus and it is easily distinguished from congeners due to its blue coloration pattern and cerci morphology, which is robust and presents a reduced apical portion, longer on most *Heteragrion* species.

Key words: dragonfly, Neotropical, damselfly, taxonomy, Cerrado

Introduction

The Neotropical genus *Heteragrion* was established by Selys (1862) to include 13 species. The genus currently comprises 53 valid species (excluding synonyms and dubious names), of which 28 are recorded for Brazil (Lencioni 2005, 2017). There are 18 *Heteragrion* species recorded for the southeastern region of Brazil (Lencioni 2017), 12 of them described within the last 30 years: *H. petiense* Machado, 1988; *H. muryense* Costa & Santos, 2000; *H. gracile* Machado, 2006; *H. mantiqueirae* Machado, 2006; *H. tiradentense* Machado & Bedê, 2006; *H. brianmayi* Lencioni, 2013; *H. freddiemercuryi* Lencioni, 2013; *H. rogerytaylori* Lencioni, 2013; *H. johndeaconi* Lencioni, 2013; *H. cyane* Machado & de Souza, 2014; *H. thais* Machado, 2015 and *H. cauei* Ávila-Júnior, Lencioni & Carneiro, 2017.

Here, we describe *H. denisye*, another species with unique coloration and cerci morphology, based on a specimen collected in the Serra da Canastra National Park, Minas Gerais state, Brazil.

Materials and methods

The specimens were collected during an expedition to the Serra da Canastra National Park, Minas Gerais state, Brazil (Fig. 1), in November 2018 (Licence Number: 54386-6). Specimens were stored in absolute ethanol under -5°C. A second expedition to the locality in April 2019 was not successful on finding another specimen.

We followed Garrison *et al.* (2010), Lencioni (2013, cerci morphology) and Bota-Sierra & Novelo-Gutiérrez (2017) for body morphology terminology. All measurements are in mm; total length and length of the abdomen include cerci. Photographs were taken with a Leica MZ16 stereomicroscope at the Herpetology Lab of the Universidade Federal de Minas Gerais (UFMG) (see Acknowledgments) and a scanner Epson Perfection V600 Photo.

Abbreviations for structures used throughout the text are as follows: S1–10: abdominal segments 1 to 10, FW: forewing, HW: hindwing, Px: postnodal crossveins, BP: basal portion of cerci, MP: medial portion of the cerci (not to be confused with Media Posterior vein in the wings), AP: apical portion of the cerci. For wing venation, we followed Riek & Kukalová-Peck (1984).