

Article



Three new species of *Cylloepus* Erichson (Insecta: Coleoptera: Elmidae) from Southeastern Brazil

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Abstract

The genus *Cylloepus* is found in the Nearctic and Neotropical Regions and currently represented by 52 species. Twenty species are recorded from Brazil, and three of them from Rio de Janeiro State. Here three new species of *Cylloepus* are described—*Cylloepus quinquecarinatus* **sp. nov.**, *Cylloepus nessimiani* **sp. nov.**, and *Cylloepus friburguensis* **sp. nov.** All were collected in the Rio Macaé Basin, Rio de Janeiro State, southeastern Brazil.

Key words: Atlantic forest, *Cylloepus quinquecarinatus* **sp. nov.**, *Cylloepus nessimiani* **sp. nov.**, *Cylloepus friburguensis* **sp. nov.**, Elminae, Neotropical Region, Rio Macaé Basin, Brazil

Introduction

The genus *Cylloepus* Erichson is currently known from two Nearctic and 50 Neotropical species (Kodada & Jach 2005). The genus is recorded from Arizona, USA, to southern Brazil and Argentina. This genus may be distinguished from other Neotropical genera by the gula being not distinctly narrower than submentum or mentum (White & Brigham 2008), and by the prosternal process moderately narrow and the hypomera usually without tomentum (Hinton 1940). Up to now, 20 species of *Cylloepus* have been recorded from Brazil (Passos & Felix 2004), three of which are known from Rio de Janeiro State: *Cylloepus dorvillei* Passos & Felix, *C. reitteri* Grouvelle and *C. typhon* Hinton. However, the Rio de Janeiro record of *C. typhon* was considered doubtful by its author (Hinton 1945).

In this paper three new species of *Cylloepus* are described and illustrated. The morphological terminology in descriptions follows Hinton (1945), and the drawings were made with the aid of a camera lucida. All of the specimens were collected in Rio Macaé Basin, in the Atlantic Forest northern Rio de Janeiro State. They were collected with a Surber square foot sampler and preserved in 80% ethyl alcohol or pinned. The male genitalia of dissected specimens were stored in microvials with 80% ethyl alcohol together with the respective specimen or in microvials with glycerin attached to pinned specimens. Holotypes and some of the paratypes were deposited in Coleção Entomológica Professor José Alfredo Pinheiro Dutra, Departamento de Zoologia, Universidade Federal do Rio de Janeiro [DZRJ], and the remaining paratypes in Museu Nacional do Rio de Janeiro, Universidade Federal do Rio de Janeiro [MNRJ], and Museu de Zoologia de São Paulo [MZSP].