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Description of the male genitalia of *Belminus rugulosus* Stål and *Belminus corredori* Galvão & Angulo, and comments on the holotype of *Parabelminus yurupucu* Lent & Wygodzinsky (Hemiptera: Heteroptera: Reduviidae: Triatominae: Bolboderini)

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Abstract

The male genitalia of *Belminus rugulosus* Stål and *Belminus corredori* Galvão & Angulo are described and illustrated for the first time. Comments on the holotype of *Parabelminus yurupucu* Lent & Wygodzinsky are presented (Hemiptera: Heteroptera: Reduviidae: Triatominae: Bolboderini). A discussion on previous data in the literature on male genitalia of species of *Belminus* Stål is provided.

Key words: male genitalia, Bolboderini, taxonomy, Neotropical Region

Introduction

The Triatominae are of great medical importance, because several species have been recognized as real or potential vectors of the protozoan *Trypanosoma cruzi* (Chagas, 1909), the etiological agent of Chagas disease (Lent & Wygodzinsky 1979). The subfamily currently includes five tribes, including Bolboderini, containing four genera and 13 species. *Belminus* Stål, 1859 is the most speciose genus, with eight valid species (Galvão *et al.* 2003, Sandoval *et al.* 2007, Schofield & Galvão 2009).

Among the taxonomical tools for systematic refinement in Triatominae, studying the male genitalia has been confirmed for this purpose, particularly through several papers from H. Lent and J. Jurberg on this subject (*e. g.*, Lent & Jurberg 1984) (Galvão 2003).

Among the species of *Belminus*, Herrer *et al.* (1954), furnished brief descriptions and a few figures of the male genitalia of *Belminus peruvianus* Herrer, Lent & Wygodzinsky, 1954 and of *B. costaricensis* Herrer, Lent & Wygodzinsky, 1954, Martinez & Carcavallo (1976) provided a description of a male of *B. rugulosus* Stål, 1859, which they named the “allotype male” of the species, with no mention of any other specimen.

Lent & Wygodzinsky (1979) commented that the male genitalia of *B. peruvianus* and *B. costaricensis* were similar to each other and also to the generic description of *Belminus* that they furnished. Lent & Jurberg (1984) redescribed the male genitalia of *B. peruvianus* in greater detail and compared the characteristics of the male genitalia of Bolboderini genera.

Belminus pittieri Osuna & Ayala, 1993 was described based on a single female (Osuna & Ayala 1993), with no further records of this species.

Other descriptions of male genitalia with accompanying figures have been presented by the following authors: *B. laportei* Lent, Jurberg & Carcavallo, 1995 by Lent *et al.* (1995); *B. ferroae* Sandoval, Pabón, Jurberg & Galvão, 2007 and *B. herreri* Lent & Wygodzinsky, 1979 by Sandoval *et al.* (2007); and a comparative table of phallic structures of Triatominae genera [also including the process of the pygophore], furnished by Jurberg *et al.* (1998).

separated; 6—endosoma process possibly present; 7—conjunctiva process present or absent; and 8—shape and structure of the median distal process [“vesica” *sensu* authors].

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