



## New species of *Horistonotus* Candèze from Brazil (Coleoptera, Elateridae, Cardiophorinae)

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### Abstract

Eight species of *Horistonotus* Candèze (1860), from states of Alagoas and Sergipe, are described and illustrated and a provisional identification key for all Brazilian species of this genus is provided. The described species were collected in the Caatinga, semi-desert tropical woodland, in the Northeastern Region of Brazil. The genus *Horistonotus* is very numerous with more than a hundred species, distributed throughout of North, Central and South America.

**Key words:** Caatinga, descriptions, key, Neotropical, taxonomy

### Introduction

The genus *Horistonotus* Candèze (1860) was established to include 19 species of *Cardiophorus* Eschscholtz (1829) recorded from South America and 20 new species. Additionally, Candèze (*l.c.*) supposed that eight species described by Erichson or LeConte, not studied by him, should belong to this genus. Candèze (*l.c.*) also provided a key for species identification, dividing the genus into two groups, based on claw shapes: simple (with three species, none from Brazil) and toothed (remainder 36 species). During the subsequent years, he described several other species: five from Australia and Tasmania in 1865 [later transferred to *Paracardiophorus* Schwarz (1895)]; two from South America in 1878; five from Central and South America (including two from Brazil) in 1881; and one species from Mexico in 1889. In 1891 catalogued 62 species of *Horistonotus* and divided the genus into three groups according to the geographical distribution: species from United States (14 species), species from Mexico, Antilles and Central America (7 species) and species from South America (41 species) with 23 species recorded from Brazil.

The number of species was increased with Champion (1895) who described 15 species and presented a key to 20 species recorded from Central America. He also divided the genus into four groups of species according to tarsal claws shapes: 1) claws bicuspid, the teeth subequal in length; 2) claws bicuspid, the inner tooth very short and fine; 3) claws sharply or rectangularly dilated from middle to base; d) claws simple.

Schenkling (1925) catalogued 102 species to *Horistonotus*: 63 species from South America, of which 28 are recorded from Brazil. Two decades later, Blackwelder (1944) catalogued 87 species from Mexico, Central and South America, of which 31 are recorded from Brazil. Since Schwarz (1902, 1903) no new species has been described from Brazil. More recently, some other species of this genus were described: Golbach (1979a, 1979b) described one species of *Horistonotus* and presented a key to species recorded from Argentina; Wells (2000) studying the *Horistonotus* from United States and Canada, described two species, proposed some synonymies and presented an identification key to species; Aranda (2009) described two species from Argentina and redescribed another, all presenting simple claws. Additionally, Vats and Chauhan (1993) described one species from India, but this first record of *Horistonotus* outside of the American continent must be confirmed.

The genera *Esthesopus* Eschscholtz (1829) and *Horistonotus* Candèze (1860) are very similar, usually separated by fourth tarsomere cordiform or lamellate in the former (Candèze, 1860; Fleutiaux, 1947). A re-evaluation of the differences between these two genera was presented by Becker (1973). He discussed and illustrated the differences between the Nearctic species of both genera and according to him, *Horistonotus* has: head with secondary