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Article



# A new species of *Nemapalpus* Macquart (Diptera, Psychodidae, Bruchomyiinae) from caverns in Minas Gerais State in southeastern Brazil

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#### Abstract

A new species of *Nemapalpus* Macquart collected in caverns in the state of Minas Gerais, southeastern Brazil, is described and named *Nemapalpus spinosus* **sp. nov.** A current list of the western hemisphere species of the genus is provided.

Key words: taxonomy, Neotropical region, Diamantina, species list

### Introduction

*Nemapalpus* Macquart is one of three genera of Bruchomyiinae (Psychodidae) and is easily recognized by having 14 antennal flagellomeres and wing vein CuA<sub>2</sub> short, whereas Bruchomyia Alexander (Neotropical genus) and Eutonnoira Alexander (African genus) have more than 20 flagellomeres and CuA<sub>2</sub> long (Barretto & D'Andretta 1946). A majority of the described species of Nemapalpus are distributed in the southern hemisphere (Quate & Alexander 2000) with no extant species known to occur above 28° N (Williams 2003). Three fossil species have been described from Baltic Amber from the Palearctic region, and another species was described from Dominican Amber from the Neotropical region (Wagner 2006). In a review of extant species of Nemapalpus, Williams (2003) cited 29 species worldwide and included in his checklist all 19 western hemisphere species recognized by Quate & Alexander (2000). Of those 19 species, 18 are distributed in the Neotropical region with only one species (N. nearcticus Young) from the Nearctic region. The key to the Nemapalpus males of the Americas provided by Quate & Alexander (2000) omitted two species: 1) N. pallipes Shannon & Pontes, because this species is known only from females and, according Fairchild (1952), the taxonomic status of this species is debatable; and 2) N. moralesi de Leon, which, according to Fairchild (1952), is poorly known and is probably a synonym of N. arroyoi de Leon. Two species previously described from the Neotropical region were not included in the revision prepared by Quate & Alexander (2000) or in the checklist of Williams (2003): Nemapalpus multisetosus Alexander, 1979 from Ecuador; and Nemapalpus youngi Wagner, 1999 from the Dominican Republic. In addition, three Neotropical species were described by Santos et al. (2009) after 2003, all of them from the state of Espírito Santo, Brazil: Nemapalpus brejetubensis Santos, Falqueto & Alexander; Nemapalpus capixaba Santos, Falqueto & Alexander; and Nemapalpus espiritosantoensis Santos, Falqueto & Alexander. In the present paper, we describe a new species of Nemapalpus collected from caverns in Minas Gerais State, Brazil, and we provide an updated checklist of the western hemisphere species of Nemapalpus.

## Material and methods

Specimens were collected with HP light traps (Pugedo *et al.* 2005) between May 2010 and July 2011 in two caverns in the municipality of Diamantina, Minas Gerais State, Brazil: Cavern Monte Cristo (18°17'49"S;