



New species of *Tapinotaspoides* (Hymenoptera, Apidae, Tapinotaspidini)

GABRIEL A. R. MELO¹ & ANTONIO J. C. AGUIAR²

Laboratório de Biologia Comparada de Hymenoptera, Departamento de Zoologia, Universidade Federal do Paraná, Caixa Postal 19020, Curitiba, Brazil, 81530-980. E-mail: ¹garmelo@ufpr.br; ²ajcaguiar@gmail.com

Abstract

Two new species of *Tapinotaspoides* Moure are described, *T. flavifrons* **sp.n.** from southern Brazil, and *T. septentrionalis* **sp.n.**, from Colombia and Venezuela. Although not closely related, these two species can be distinguished from the other species of *Tapinotaspoides* by the yellow clypeus in the males, and the conspicuous bands of white pubescence on the terga. An identification key to the known species is provided.

Key words: Neotropical, Apinae, open areas, oil bees

Introduction

The species of *Tapinotaspoides* represent conspicuous elements of the Neotropical fauna and are commonly collected in areas covered by open vegetation in South America (e.g., Wittmann & Hoffman 1995; Alves-dos-Santos 1999; Aguiar & Zanella 2005; Gonçalves & Melo 2005). Differently from the remaining genera of Tapinotaspidini, which present structures on the fore and/or mid legs to collect oils from floral glands, females of *Tapinotaspoides* possess specialized hairs on their sterna (Roig-Alsina 1997; Cocucci *et al.* 2000; Melo & Gaglianone 2005). The sternal fringes of long specialized setae are used to collect oil from trichromatic glands on stems and on leaf and flower buds of various plant families (Melo & Gaglianone 2005). Information on nesting biology is known for only one species, *Tapinotaspoides serraticornis* (Friese) (cited as *T. tucumana* (Vachal)), which was studied by Rozen (1984). In this species, the females nest solitarily and dig deep vertical nests on flat ground.

The genus *Tapinotaspoides* was proposed by Moure (1944), having as its type-species *Tetrapedia serraticornis* Friese, 1899. Later, in a generic revision of the group then treated as the Exomalopsini, Michener and Moure (1957) presented diagnoses for most genera now placed in the Tapinotaspidini, including *Tapinotaspoides* which had its status changed to subgenus of *Tapinotaspis* Holmberg. Roig-Alsina (1997), based on phylogenetic analyses for the entire tribe, changed back the status of *Tapinotaspoides* as a separate genus. In the analyses of Roig-Alsina, *Tapinotaspoides* came out either as sister group to *Tapinotaspis* or *Caenonomada*. In an ongoing study of the relationships within the Tapinotaspidini, *Tapinotaspoides* and *Tapinotaspis* are strongly supported as sister-groups, while *Caenonomada* has a basal position as sister-group to the remainder of the tribe (Aguiar & Melo, unpublished).

Taxonomic keys for identification of *Tapinotaspoides* were provided firstly by Michener and Moure (1957), and subsequently by Roig-Alsina (1997), Michener (2000), and Silveira *et al.* (2002). Four species are currently recognized in the genus: *T. serraticornis* (Friese, 1899), *T. tucumana* (Vachal, 1909), *T. rufescens* (Friese, 1899) and *T. nigerrima* (Schrottky, 1909). The present study adds two very distinct species to *Tapinotaspoides*, one of them from areas of dry vegetation in northern South America.