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Article



A new species of *Mydrosoma* Smith with a key to Brazilian species of the genus and a discussion on the classification of the Dissoglottini (Hymenoptera: Colletidae)

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Abstract

Mydrosoma sabarensis sp. n. is described from the Atlantic Forest Domain of southeastern Brazil. Two females and one male were collected on flowers of *Serjania* sp. (Sapindaceae) in the state of Minas Gerais. An additional female is from Domingos Martins, Espírito Santo state. The female *M. sabarensis* is about 12 mm long, robust, with predominantly black pubescence but with a wide transverse band of white hairs on the anterior margin of the mesoscutum and yellow lateral bands on T2–T4. The male, about 11 mm long, has pale-fulvous pilosity on the mesosoma and marginal bands on T1–T4, with terga blackish pubescent basally. A key to the five species of *Mydrosoma* known to occur in Brazil is presented and the classification of the Dissoglottini is discussed. Aspects of foraging and of possible mimicry are also discussed.

Key words: Atlantic Forest, Cerrado, Diphaglossinae, mimicry, Neotropics, taxonomy, new species, wild bee

Introduction

Dissoglottini (Colletidae, Diphaglossinae) is a Neotropical taxon composed of rare bee species found in tropical and temperate regions from Argentina to Mexico (Michener 1986). Species of Diphaglossinae are frequently crepuscular and the only species of *Mydrosoma* for which foraging individuals have been observed seems to be vespertine (Michener 1986).

The latest systematic study of Dissoglottini was that of Michener (1986), who divided the tribe into three genera—*Ptiloglossidia* Moure, 1953 (including only one species, from Argentina), *Mydrosomella* Michener, 1986 (now including two species from Argentina and southern Brazil—Graf & Urban, 2003) and *Mydrosoma* Smith, 1879, distributed from the Brazilian state of Santa Catarina, in the south, to Sinaloa, in México. Melo (in Silveira *et al., 2002*), however, pointed out that *Ptiloglossidia* might be just a derived lineage of *Mydrosoma* and presented new synapomorphies for *Mydrosoma* + *Ptiloglossidia*. Based upon these considerations, the two genera were synonymized by Urban *et al.* (2007).

Ten species were considered to belong to *Mydrosoma* (including *Ptiloglossidia*) by Urban *et al.* (2007), to which another one was added by Packer (2007). Of these 11 species, four are known to occur in Brazil, *M. aterrimum* (Friese, 1925), *M. longitarse* (Friese, 1925), *M. micheneri* Packer, 2007 and *M. opalinum* (Smith, 1862). An additional species is described below from the Brazilian Atlantic Forest Domain and a discussion is provided on the classification of the tribe and its involvement in mimicry complexes with other bees.