

Scientific Note

First record of *Centris hyptidis* Ducke, 1908 (Hymenoptera: Apidae: Centridini) in State of Maranhão, Brazil

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Abstract. The unprecedented record of the species *Centris (Paracentris) hyptidis* Ducke, 1908 in the State of Maranhão, Brazil, is documented. A single female was collected during a visit on a *Chamaecrista ramosa* (Vogel) (Fabaceae) flower on an island in the America's Delta, Maranhão (-2.715922, -42.200054), which is deposited in the Bee Collection of the Federal University of Maranhão. Such appointment contributes to the knowledge of the faunal composition of bees in the State of Maranhão, as well as the distribution of the species *C. hyptidis* in Brazilian territory.

Keywords: bees, new distribution, oil collector.

Centridini bees are divided into approximately 250 solitary species occurring in the Neotropical region and part of the Nearctic region (Silveira et al. 2002; Michener 2007; Moure et al. 2012a). Centridini females collect floral oils for food (Neff & Simpson 1981; Buchmann 1987) and nest building (Jesus & Garófalo 2000), making this the tribe with the largest number of floral oil collecting species, accounting for 73% of visits recorded in oil producing plants (Machado 2004), such as plants of the families Malpighiaceae and Krameriaceae.

Centris Fabricius, 1804 and *Epicharis* Klug, 1807 are the only two genera that make up the Centridini tribe, with *Centris* being the genus with the largest number of species, reaching the range of 230 valid species (Moure et al. 2012b). In Brazil, this genus has been documented in several ecosystems, such as dunes and restinga (Albuquerque et al. 2007; Oliveira et al. 2010; Rêgo & Albuquerque 2012; Gostinski et al. 2016), caatinga (Aguiar et al. 2003; Aguiar et al. 2005; Batalha-Filho et al. 2007; Lopes et al. 2010), and cerrado; in the latter, with greater diversity (Ramos et al. 2007; Mesquita et al. 2009; Mesquita & Augusto 2011).

Although apifaunistic sampling are made in Brazil, not all areas of the country are contemplated with such works. Thus, by conducting new research, new occurrences of bees can be recorded in different locations, which is a major factor for the knowledge of existing species in Brazil and elsewhere. In the present work, the unprecedented occurrence of the species *Centris (Paracentris) hyptidis* Ducke, 1908 in the state of Maranhão is documented. According to Vivallo & Melo (2009) and Moure et al. (2012b), the distribution of this species was restricted to the Brazilian Northeast states (except Alagoas, Maranhão and Piauí), Goiás, Minas Gerais and Tocantins (Fig. 1).

A single female (Fig. 2) was collected during a visit on a *Chamaecrista ramosa* (Vogel) H.S Irwin & Barneby var. *Ramosa* flower, in a restinga area on Grande do Paulino Island, Tutóia, Maranhão (-2.715922, -42.200054), between 07:00 and 08:00, on June 25, 2018. The specimen is deposited in the Bee Collection of the Federal University of Maranhão / LEACOL-UFMA.

The new occurrence of *C. hyptidis* mentioned here highlights the importance of conducting further research and inventories of bees, in order to constantly contribute to the updating of Brazilian fauna data. Bees contribute immensely to ecosystem services by pollinating plants,

and there is often a close relationship between these two groups. Bees of the genus *Centris*, for example, have a strong connection with tropical plants of the Malpighiaceae and Krameriaceae families (Buchmann 1987), these invertebrates being important players in the pollination of these plants. Thus, knowing the species of bees in a region and their distribution also contributes to the understanding of the botanical profile presented in that location.

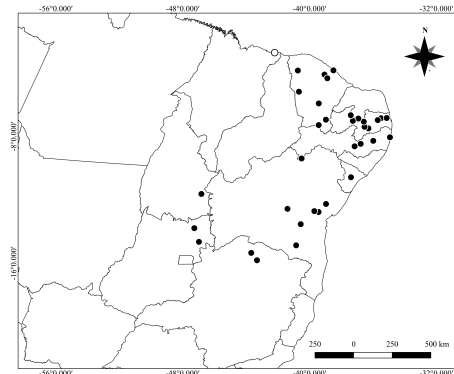


Figure 1. Occurrence of *Centris hyptidis* Ducke, 1908 in the Brazilian states. Black circle: Vivallo & Melo (2009) and Moure et al. (2012b); White circle: new record.

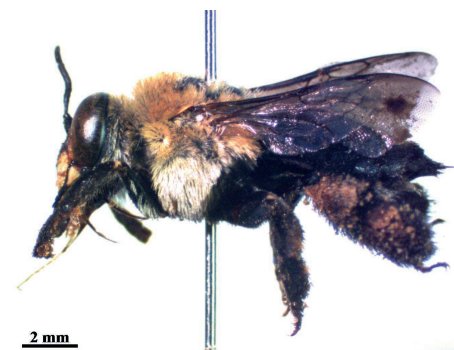


Figure 2. Female specimen of *Centris (Paracentris) hyptidis* Ducke, 1908 in lateral view. Scales in mm.

Centris hyptidis still has distribution restricted to a few Brazilian states, taking into consideration the country's large territory. It is possible that, with future research, new records of this species will be documented in other Brazilian states, and mainly in the states of Alagoas and Piauí, located in the northeast region, just like Maranhão.

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Authors' contributions

Carlos L. Neves Jr. collected the specimen in the field and wrote the manuscript Harryson C. Barros assisted in the collection of the specimen and contributed to the revision of the manuscript; Márcia M. C. Rêgo contributed substantially to the design of the work.

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