



## A new South American species of *Centris* (*Heterocentris*) Cockerell, 1899 with a key to the species with horn-like projections on the clypeus (Hymenoptera: Apidae: Centridini)

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### Abstract

The genus *Centris* Fabricius, 1804 is one of the more diverse lineages of solitary bees in the Neotropical Region with more than 250 described species. Here *Centris ceratops* **new species** is described from a tropical dry forest in northern Colombia (Colosó, Department of Sucre), thus increasing the number of known species to four in which the females possess a horn-like projection on the clypeus. This group of bees belongs to a small monophyletic group within *C.* (*Heterocentris*). Along with the description of this new species, diagnosis, pictures and a key to identify the species of females with modified clypeus are also provided.

**Key words:** Oil-bees, Taxonomy, Neotropical Region

### Introduction

*Centris* (*Heterocentris*) Cockerell, 1899 is a small group of species distributed throughout the Neotropical Region except Chile, but including some of the Caribbean islands (Moure *et al.*, 2007). This subgenus is a monophyletic group (Vivallo & Melo, in preparation) in which species are identified by a combination of the following characters: females: upper inner mandibular carina elevated near the base, labrum usually large and with a notch in the middle of the distal edge; middle and mainly hind coxae covered with long, coarse and simple hairs of rounded apices; ventral surface of mesosoma with long and simple hairs with hook-like curved tips; secondary pygidial plate abruptly truncate, and apical margins of T4 and T5 with large flattened, spiniform setae. The males of this subgenus have the latero-posterior margin of T1 projected backward; forming a lobe covered with plumose hairs with dark apices bent parallel to the surface of the tergum. This subgenus is composed of eight species, some of them widely distributed (from Mexico to Argentina) and locally abundant, while other species are relatively rare, known only from a few specimens (Table 1). Despite being a small group, some of the most morphologically modified species within the genus are found in females of this subgenus. The morphological modifications observed in some species of this lineage are in the mandible, labrum and especially in the clypeus, which can be normally convex, as found in *Centris analis* (Fabricius, 1804), *C. labrosa* Friese, 1899 and *C. terminata* Smith, 1874, strongly convex, short and wide as in *C. difformis* Smith, 1854, or with one or two horn-like projections of diverse sizes, shapes and apices, as in *C. adunca* Moure, 2003, *C. bicornuta* Mocsáry, 1899 and *C. cornuta* Cresson, 1865. The anatomical diversity observed in females is not found in males, which are comparatively homogenous in morphological terms. In this paper a new species of the latter lineage is described from a single female specimen collected in northern Colombia.