



## A new species of the bee genus *Centris* from Peru (Hymenoptera: Apidae)

FERNANDO CÉSAR VIEIRA ZANELLA<sup>1</sup> & FELIPE VIVALLO<sup>2</sup>

<sup>1</sup>Unidade Acadêmica de Ciências Biológicas, Universidade Federal de Campina Grande Caixa postal 64, 58700-970, Patos, PB, Brazil, E-mail: fcvzanella@gmail.com

<sup>2</sup>Departamento de Zoología, Pontificia Universidad Católica de Valparaíso, Casilla 4059, Valparaíso, Chile. Lab. Biol. Comparada Hymenoptera, Programa de Pós-Graduação em Entomologia, Universidade Federal do Paraná, Caixa postal 19020, 81531-980, Curitiba, PR, Brazil. e-mail: fvivallo@yahoo.com

*Centris* (*Paracentris*) Cameron is one of the more diverse subgenera within the bee genus *Centris* (Moure *et al.* 2007), being broadly distributed in the Neotropical Region, and showing an amphitropical distribution pattern (Michener 1979). The sixteen South American species of *Centris* (*Paracentris*) (Zanella 2002; Moure *et al.* 2007) occur in different biomes of the continent; such as low altitudes and valleys of Central Chile and Argentina (Roig-Alsina 2000; Vivallo *et al.* 2003), high altitudes of the Andes (they are specially diverse in this region) and with a few species in the low mountain chains and plains of Eastern Brazil (Zanella 2002). The subgenus was recently revised by Zanella (2002) and a new species from Central Peru is described here, which augments that revision.

General morphological terminology follows Michener (2007), and the morphology of the oil-collecting apparatus follows Neff and Simpson (1981) and Snelling (1984). Antennal flagellomeres are indicated as F1, F2, etc.; metasomal terga and sterna, respectively, as T1 to T7, and S1 to S8. All measurements are given in millimeters (mm). The thoracic width was measured including the tegulae, in dorsal view. The mandibular teeth are numbered from apical to basal, and maxillary palpomeres from basal to apical.

Photographs were taken using a camera Leica DFC 500 attached to a stereomicroscope Leica MZ16 and images were treated using Auto-Montage Pro (Syncroscopy) at *Taxon line*, Rede Paranaense de Coleções Biológicas of the Universidade Federal do Paraná (UFPR), Curitiba, PR, Brazil.

### *Centris* (*Paracentris*) *ancashsumaq* new species

(Figures 1–4)

**Diagnosis.** This species is unique among South American *Centris* (*Paracentris*) by its intense bluish metallic reflections on the metasoma, the dark pilosity all over the body and by its dark wings with bluish-violaceous iridescence. The male of this new species is unknown, but probably has a similar coloration on the metasoma and wings, but with the disc of clypeus and labrum yellow, a character found in most species of the subgenus.

**Description.** *Holotype Female. Measurements:* approximate body length: 13.5; head width: 5.0; forewing length: 11.4; thoracic width: 6.3; scape length: 0.3; F1 length: 1.0; F2 length: 0.2; F3 length: 0.3; upper interocular distance: 2.6; lower interocular distance: 2.7; mandible length: 2.3; mandible basal width: 0.9; labrum length: 1.1; labrum width: 1.5; middle ocellar diameter: 0.3; ocellular distance: 0.6. **Coloration:** integument predominantly black. Legs, T1, except narrow apical band, basal half of T2 and metasomal sterna dark reddish brown. Metasomal terga dark with strong bluish metallic reflections. Wings dark with bluish-violaceous iridescence. **Pubescence and surface sculpture:** pubescence dark brown to black, including scopae and prepygidial and pygidial fimbriae. Integument densely and uniformly punctured on paraocular area and frons, smooth and shiny areas in front of middle ocellus and between the lateral ocelli and compound eyes. Clypeus with setigerous punctures (distance between punctures wider than puncture diameters), with a smooth median longitudinal band, wider than middle ocellus, slightly narrower in upper fourth. Labrum with similar punctation, but slightly less dense and relatively uniform, without smooth band. Metasomal terga densely punctated, punctures slightly scattered on base of T2 and dorsal surface of T1. **Structure:** Maxillary palpus 5-segmented, second palpomere subequal in length to the third (relative lengths: 2~3>4>1>5). Mandible with four teeth, the second the smaller (relative sizes: 1>4>3>2); apical tooth normal, without basal expansion; acetabular carina ending at the basis of 3<sup>rd</sup> tooth; trimmal