

## A new species of stingless bee (Meliponini) from Bolivia

by

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(Received for publication September 15, 1960)

The three specimens (workers) on which the following description is based are from the Snow Entomological Museum of the University of Kansas. This undescribed species is especially interesting because it occupies an intermediate position between *Plebeia* Schwarz and *Schwarziana*. The latter name was proposed by MOURE (1) to include a rather isolated species, *Trigona quadripunctata* (Lepelletier); it was set apart mainly by its large size (7 mm in length), the finely granulose and dull cuticular surface of its head and thorax, its small scutellum which does not cover or only partially covers the mesal portion of the metanotum, and its large number of hamuli (8). Since the undescribed species is about 6 mm in length, its cuticular surface is between that of *Plebeia* proper and *Schwarziana*, its scutellum resembles that of *Schwarziana*, and it has 7 hamuli, *T. quadripunctata* can no longer be considered as a genus or subgenus distinct from *Plebeia*<sup>1</sup>.

*Trigona (Plebeia) intermedia*, n. sp.

LENGTH: 6 mm

COLORATION: Head black, with median area of clypeus and lower half of interantennal space dark redish; mandibles yellowish with basal area black and distal border dark red; labrum yellowish. Thorax entirely black except for yellow maculations bordering thoracic notum, consisting of a narrow transverse stripe

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<sup>1</sup> Since this paper was written Pe. Jesús S. Moure, in a personal communication, has expressed the opinion that *Schwarziana* should be included in *Plebeia* (which he regards as a genus) as a subgenus.

over posterior half of pronotum and a narrow band bordering sides of mesonotum and extending brokenly over axillae and around posterior margin of scutellum. Legs black, with coxae dark redish and anterior tibiae and tarsae yellowish. Abdomen dark redish to black. Wings of a uniform, rather dull yellowish gray color.

**SCULPTURE AND PUBESCENCE:** Cuticular surface of head and thorax densely punctate (about 40 punctures per ocellar area on frons and about 60 on mesonotum) and polished between punctures; cuticular surface of posterior (medial) portion of propodeum glabrous except for its basal area which is slightly corrugated; first and second metasomal terga shining, punctation very sparse and delicate, slightly stronger along posterior margin of second, remaining metasomal terga smooth and shining basally but with broad, apical, punctate, hairy bands. Head and thorax hairy, with hairs of scutellum longest (length about twice width of flagellum).

**HEAD:** Width 1.2 times length; length of eye 2.6 times breadth; scape not reaching anterior ocellus; third antennal segment as long as fourth; interantennal space 1.6 times width of flagellum; clypeus convex; width of clypeus twice its length; lateral portions of epistomal suture almost straight and diverging anteriorly; length of malar space half width of flagellum; preoccipital carina absent; labrum slightly emarginate; inner third of apex of mandible bidentate; length of glossa greater than length of prementum; hairs of labial palpi and maxillae with straight tips.

**THORAX:** Length of pronotum twice width of flagellum; anterior border of pronotum slightly concave; length of mesoscutum subequal to its width; scutellum short but extending backward enough to cover mesal portion of metanotum as seen from above; width of scutellum 2.2 times its length; distance between lower metapleural suture and second coxa less than half width of flagellum; length of propodeal spiracle four times its width.

**HIND LEGS:** (fig. 1) Shape of tibia triangular with posterior distal extremity produced into an angle; length of tibia 2.7 times its width; corbicula occupying slightly more than half of tibia, with marginal hairs simple; inner surface of tibia with a narrow, bare posterior rim. Length of basitarsus twice its width; posterior margin of basitarsus extending apically further than anterior; inner surface of basitarsus uniformly covered with bristles.

**WINGS:** (fig. 2) Length 6 mm; length of pterostigma 3.9 times its width; length of marginal cell 3.5 times its width; submarginal angle (basal angle of cell first  $R_1$ ) a right angle; vein separating first and second submarginal cells relatively well indicated, that separating second and third very faintly present to virtually absent; base of first median cell non-petiolate, with vein separating first cubital and median cells transversally placed. Hind wing with 6 or 7 hamuli; jugal lobe less than one half as long as vannal lobe.

**ABDOMEN:** Relatively short and wide, subtriangular in cross-section, with dorsal surface slightly convex; gonostylus cylindrical in shape, shorter than width of flagellum.

DIAGNOSTIC CHARACTERS: Especially differentiated from other species of *Plebeia* including the subgroup formerly called *Schwarziana* by the following combination of characters: Cuticular surface of head, thorax, and distal portions of last metasomal segments densely punctate (40 to 60 punctures per ocellar area) and polished between punctures; basal area of propodeum slightly corrugated; 6 or 7 hamuli.

TYPE MATERIAL: Holotype from Yungas del Palmar, Bolivia, June 10, 1950 (Zischka); two paratypes with the same data. The holotype and one headless paratype are in the Snow Entomological Museum of the University of Kansas, the other paratype will be deposited in the collection of Padre J. S. Moure, University of Paraná, Curitiba, Brasil.

### SUMMARY

A new species of stingless bee, *Trigona (Plebeia) intermedia*, occupying an intermediate position between *Plebeia* and *Schwarziana*, is described from Yungas del Palmar, Bolivia.

### RESUMEN

En este trabajo se describe una nueva especie de Melipónido, *Trigona (Plebeia) intermedia*, la cual es intermedia entre los subgrupos *Plebeia* y *Schwarziana*, por lo que se sugiere la eliminación taxonómica del último subgrupo.

### LITERATURE CITED

1. MOURE, P. J. S.  
1943. Abelhas de Batatais (Hym. Apoidea). *Arq. Mus. Paranaense*, 3:1461147.

Fig. 1: outer surface of left hind tibia and basitarsus.

Fig. 2: right fore wing, hairs omitted.

