

Scaptotrigona marialiceae,
a new species of neotropical stingless bee (Hym.,
Anthophila), from southern Brazil

Scaptotrigona marialiceae,
uma nova espécie de *abelha sem ferrão* (Hym.,
Anthophila), do sul do Brasil

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The genus *Scaptotrigona* Moure is a specialized group of stingless bees, whose distribution ranges approximately from the state of Coahuila (central Mexico) to Buenos Aires (Argentina). As a whole, there are approximately 21 species of *Scaptotrigona*. In Paraná state, the genus is represented by three species [*Scaptotrigona bipunctata* Lepeletier, *S. xanthotricha* Moure, and *S. depilis* Moure]. Of those species, *S. bipunctata* has a wider distribution ranging from Rio Grande do Sul (Brazil) to Peru. In Paraná state, particularly in the plateaus, it is the most frequent and abundant species (ALMEIDA & LAROCA, 2013; SAKAGAMI & LAROCA, 1971). While *S. xanthotricha* occurs in the coastal region of Brazil, from Florianópolis (Santa Catarina state) to Sergipe state (northeastern Brazil), in the coastal region of Paraná, it is relatively frequent and common. The distribution of *S. depilis* ranges from El Beni (Bolívia) province to Buenos Aires (Argentina). In the literature, apparently there is no record of *S. depilis* from Paraná state, however, we have recorded workers collected in Quatro Barras in the metropolitan region of Curitiba (Paraná), although it is not very frequent nor abundant.

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While collecting bees at flowers of a palm tree (*Syagrus romanzoffianum*), in Castro (Paraná), we caught workers of a species that is apparently unknown, and we accordingly describe it as new here. This species is a little similar to *S. tubiba* (Smith), but the workers differ in body size, color, punctation, and pilosity (see MOURE, 1950).

Scaptotrigona marialiceae, new species
(Figs 1-2)

WORKER

DIMENSIONS — Total body length: 5.8 mm, maximum head width: 2.3 mm, forewing length (including the tegula): 5.6 mm.

INTEGUMENTAL COLOR — Black, opaque, with a very weakly marked cream-yellowish band medially at apical margin of clypeus, occupying not more than 1/5 of clypeal length; base of scape yellowish and in the scape-pedicel-flagellum articulation; flagellum with a cream-yellowish stripe, darker near articulation; mandibles dark ferruginous to brownish, at base, and somewhat brownish-ferruginous at apex; clypeus-orbital area, near alveolus, with a diffuse area of yellowish tint; tibiae and the tarsi dark brownish-ferruginous, almost black; wing membrane dark reddish-ferruginous, veins darker; marginal cell membrane a darker area, especially at apex; metasomal terga specially 2-5 black, weakly yellowish dark.

PILOSITY — Clypeus uniformly covered with numerous short, decumbent, cream to whitish plumose setae, as well as the front, where they tend to ferruginous; vertex with some semi-erect black robust setae; gena with short, decumbent, silver, ramified pubescence; whitish ramified pubescence on pronotal lobe; mesonotum bare, but on front margin and lateral margin (backward, beyond the wing bases) rows of scattered semi-erect black setae; these also at posterior margin of mesoscutelum; metanotum, and propodeal flanks, especially surrounding propodeal spiraculum; with whitish, decumbent, ramified pubescence; lower on propodeum a bunch of semi-erect black-reddish setae; uniformly abundant ferruginous setae, on abdominal terga especially 1 to 5, where setae are delicate and decumbent; in the tergum 1, this kind of pubescence apparently more abundant laterally than on disc; vertical surface of tergum 1 bare and shining; tergum 6 nearly covered with whitish, ramified setae and a number of larger black, semi-erect, setae; metasomal sterna, with delicate whitish setae, and ventrally and on mesepisternum darker blackish-ferruginous ones.

SCULPTURING (PUNCTATION) — Clypeus, opaque, uniformly punctate; punctures granulous and piliferous; punctures in clypeo-orbital area, larger, irregularly distributed, interspaces between punctures varies from mere carina to 1-4 times diameter of punctures, and surface shining; at 2/3 of orbit length, diameter of punctures decreases, becoming densely

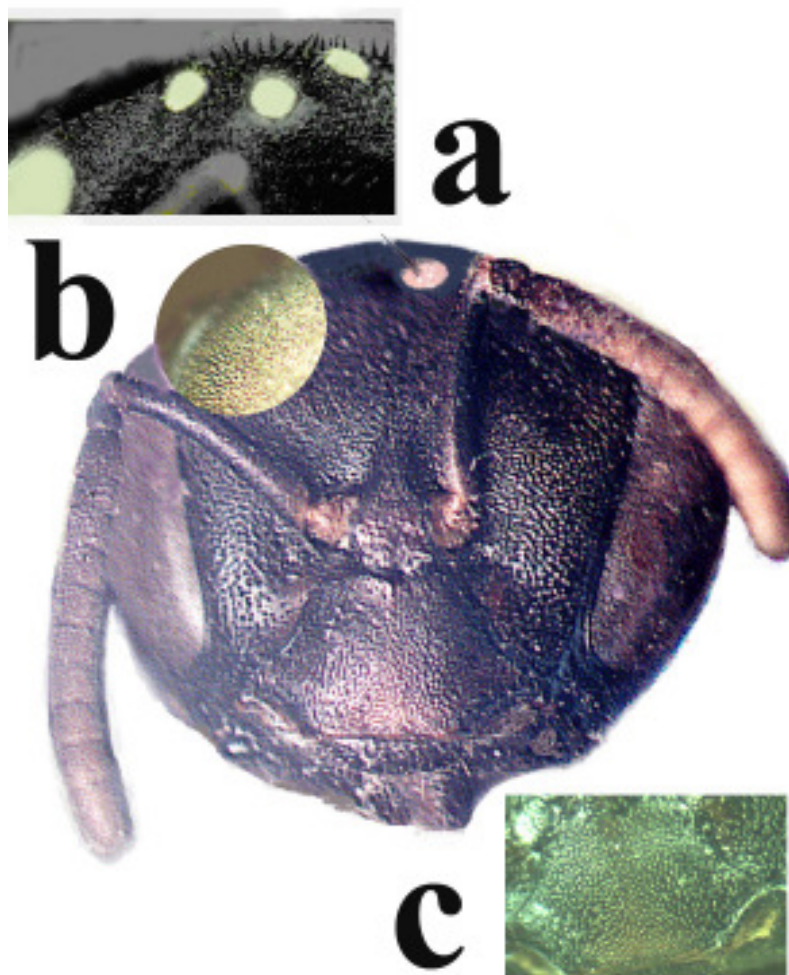


Fig. 1. *Scaptotrigona marialiceae* n. sp. (worker). head. Details — a, semi-erect black setae on the vertex and; b, pilosity of the front [picture (with color distortion), illuminated in order to show the small hairs]; c, hairs of the clypeus (colors distorted).

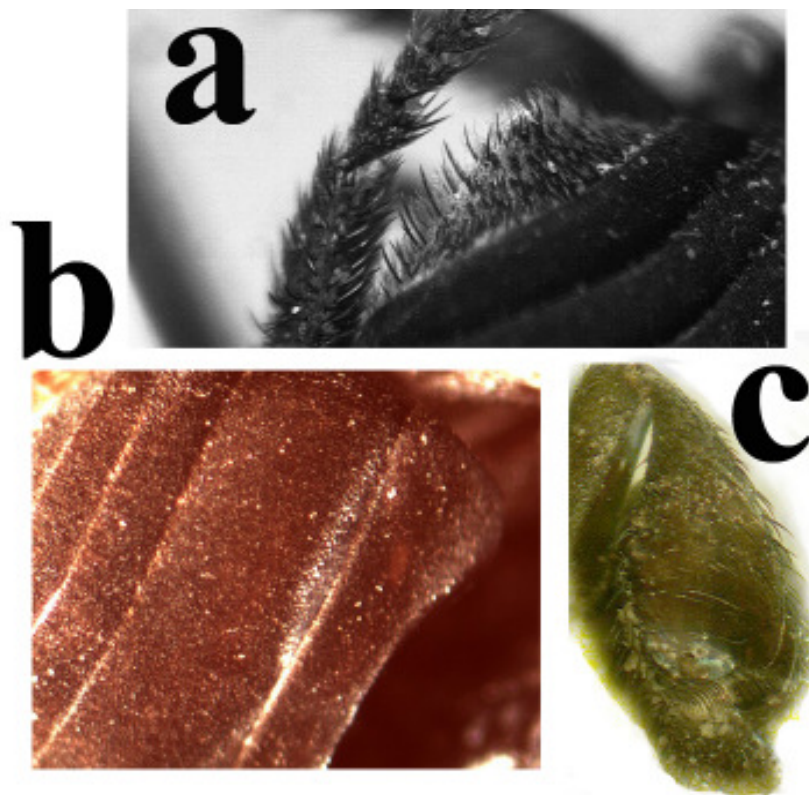


Fig. 2. *Scaptotrigona marialiceae* n. sp. (worker). a, 6th abdominal tergite, with the characteristic yellowish-cream pubescence with black semi-erect setae. b, pilosity covering the abdominal tergites 1 to 5 (photograph with color distortion to show the hairy surface); c, corbiculae.

distributed (interspace generally narrower than diameter of punctures), and surface more opaque; around ocelli, there is a shining area with scattered larger punctures; in vertex larger semi-erect black setae, punctures become larger too; in the mesosoma, uniformly fine granulous; basal area and laterally on propodeum a little shining but also somewhat granulous; the metasomal terga 1 to 5 with fine granulous punctation; vertical plane of the tergum 1, bare and brilliant; in the tergum 6, the piliferous punctures are rougher, particularly those bearing the erect setae.

MEASUREMENTS AND PROPORTIONS — Head wider than long (2.4: 2.0 mm); compound eyes convergent, lower interorbital less than upper, maximum interorbital distance less than eye length (1.4: 1.6: 2.4: 1.4 mm); clypeus more than twice wider than long (1.5: 0.60 mm); eyes

approximately 2.9 times longer than wide (0.5: 1.4 mm); malar area twice diameter of scape (0.2: 0.1 mm); interocelar distance more than twice diameter of medium ocellum and this less than half the ocello-orbital distance (0.5: 0.2: 0.5 mm); intervalveolar distance greater than alveolar diameter and smaller than alveolo-orbital distance (0.3: 0.2: 0.4 mm); scape length approximately 6.5 times its maximum diameter and a little more than half of flagellum and pedicel length (0.9: 0.14: 1.7 mm); pedicel a little longer than its wide [maximum] (0.14: 1.3 mm) and approximately as longer as alveolo-lateral ocellus distance (0.8 mm); first flagellomere long than second flagellomere, and this equal third (0.17: 0.13: 0.13 mm) and diameter of last two equal and a little wider than that of first at its base (0.17: 0.14 mm).

TYPES — HOLOTYPE: worker from: Castro, Paraná/Brasil 18-IV-2004/S. Laroca leg./On flowers of *Syagrus romanzoffianum*. PARATYPES: three workers from Castro, Paraná/Brasil 18-IV-2004/ S. Laroca leg./On flowers of *Syagrus romanzoffianum*. All deposited in the “Museu de Zoologia da Universidade de São Paulo”, São Paulo, SP, Brazil. Plus three workers from Castro, Paraná/Brasil 18-IV-2004/ S. Laroca leg./On flowers of *Syagrus romanzoffianum* deposited in the bee collection of the author (SL).

ETIMOLOGY — The present species is dedicated to student Miss Maria Alice Gonçalves (MsC course of History and Epistemology of Science, of Pontifícia Universidade Católica de São Paulo) (São Paulo, SP, Brazil).

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SUMÁRIO

Descrição de *Scaptotrigona marialiceae*, uma espécie nova de abelha-sem-ferrão (Hym., Anthophila), de Castro, Paraná (sul do Brasil).

KEYWORDS: abelha-neotropical; meliponíneo; Castro; Paraná

SUMMARY

Description of *Scaptotrigona marialiceae*, a new species of neotropical stingless bee (Hym., Anthophila), from Castro, Paraná (southern Brazil).

KEYWORDS: neotropical-bee; meliponine; Castro; Paraná

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