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Nectarinella manauara, new species and record of the genus from
Brazilian Amazonia (Hymenoptera, Vespidae, Polistinae)



Orlando Tobias Silveira*, José Nazareno Araujo dos Santos-Junior

Museu Paraense Emílio Goeldi, Coordenação de Zoologia, Belém, PA, Brazil

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ABSTRACT

Nectarinella manauara **sp. nov.** is described, representing the first record of the genus from Brazilian Amazonia. Its description raises richness for *Nectarinella* from two to three species, and extends the range of characteristics for the genus, especially in terms of body size and color patterns. Discovery of the new species may shed new light into the knowledge of phylogenetic relationships between *Nectarinella* and other closely related genera.

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Introduction

Nectarinella Bequaert, 1938, is a small Neotropical genus of swarming polistine social wasps with only two previously described species. It was created as a subgenus of *Chartergus* Lepelletier, 1836, for a species from Panama described by Dover (1925) as *Nectarina championi*. More recently, the taxon was raised to the genus level by Richards (1978). Part of the past instability in genus level assignment of *Nectarina championi* was of a nomenclatural nature, related to problems involving the taxonomic “meaning” of names like *Chartergus* and *Parachartergus* von Ihering, 1904, rather than a question of properly acknowledging the phylogenetic affinities of the species (see Bequaert, 1938, 1944). *Nectarinella* is part of the *Pseudopolybia-Leipomeles* epiponine clade, more closely related to *Chartergellus* Bequaert, 1938 (Carpenter, 1991; Wenzel and Carpenter, 1994). The genus presents palpal formula 5–3 and nest architecture of the astelocytarous type (Richards, 1978). Characteristics of the male genitalia of *Nectarinella* (and other related genera) were studied by Carpenter and Mateus (2004). The Mesoamerican species was the sole known representative of the genus until the publication of the paper by Mateus and Noll (1997) describing *Nectarinella xavantinensis* from Mato Grosso State in central Brazil. This widely disjunct distribution of the genus suggested that representatives could be found in regions in-between

in the South American continent. The new species here described, from central Brazilian Amazonia, fulfills that expectation, as well as extends the range of characteristics for the genus, especially in terms of body size and color patterns.

Material and methods

The new *Nectarinella* species was compared to specimens of both *Nectarinella championi* (Costa Rica, Rio Grande, 8/xii/1990, Carpenter & Wenzel; MPEG) and *Nectarinella xavantinensis* (Brazil, Mato Grosso, Nova Xavantina, 06/xi/1997, Mateus & Noll; MPEG). Paratypes of the latter species (MZSP) were also examined. The specimens were studied using ZEISS SV-11 and LEICA MZ-16 dissecting stereomicroscopes; photographs were made using a LEICA DFC-420 digital camera coupled to those microscopes. The following ratios are used in description of proportions of some body parts: H/WCL (height and width of clypeus); POL:OOL (postocellar and ocello-ocular distances); L/WMS (length and width of mesoscutum).

Abbreviations for specimen repositories are as follows: Instituto Nacional de Pesquisas da Amazônia (INPA); Museu Paraense Emílio Goeldi (MPEG); Museu de Zoologia da Universidade de São Paulo (MZSP).

Results

Nectarinella manauara **sp. nov.**
(Figs. 1–4)

* Corresponding author.

E-mail: orlando@museu-goeldi.br (O.T. Silveira).



Figs. 1–4. *Nectarinella manauara* sp. nov. (1) Head, anterior view; (2) posterior view, red arrow points to vestigial occipital carina; (3) mesosoma, dorsal view, (4) lateral view; (5) head of *N. championi*, posterior view, red arrow points to vestigial occipital carina; (6) head of paratype of *N. xavantinsis*, anterior view; approximately same scale as (5).

Holotype: female, Brazil, Amazonas, Manaus, Reserva Ducke, 24.ix.1981, J. A. Rafael (INPA).

Description (Female). Very small, wing length 4.3 mm. Head (Figs. 1 and 2) wider than high; palpal formula 5–3; mandible outer surface largely flattened; clypeus wider than high, ratio H/WCL 0.75, lateral margin sinuate, performing above a continuous regular curve, and very narrowly separated from eye, apex narrow, weakly truncate, almost rounded, ventro-lateral indentation shallow, corresponding adjacent inner lobe weakly prominent; tentorial pit as close to antennal socket as to eye margin; interantennal area roundly and strongly bulging; ocelli forming an equilateral triangle, widely separated from eyes (POL:OOL a fraction less than 0.5); malar space wide (Fig. 1); occipital carina vestigial, developed as weak dorsal or dorso-lateral remnants (Fig. 2, red arrow); gena in lateral view narrowing above; pronotum (Figs. 3 and 4) very short, with lateral fovea located far below and close to ventral angle, fovea bordered in front by a short, low, but quite sharp margin; pronotal dorsal carina obtuse, not at all sharp, not strongly projecting forward, but otherwise quite well-developed and descending laterally to near the fovea (Figs. 3 and 4); pronotal anterior margin

with a narrow lamella and with short central retreating sector; mesoscutum (Fig. 3) nearly circular, wider than long, ratio L/WMS 0.8, with distinct margin laterally opposite tegula; mesopleuron without mesepisternal sulcus (Fig. 4); scutellum as a swollen transversal block with posterior surface vertical; metanotum completely vertical, barely visible from above, posterior margin with a shallow, curved contour; propodeum vertical, central area flat without forming noticeable cavity, but with lateral extremities slightly swollen; propodeal valve rather wide (not at all linear), with rounded subtriangular shape; hind wing with 1cu1 much shorter than cu-a.

Sculpture. Integument of head and mesosoma generally smooth and shining, with variably scattered medium-sized punctures; metasoma duller with fine, regular, dense punctuation; clypeus with very sparse and shallow medium-sized punctures, frons with a slightly more pronounced pattern, with punctures more deeply impressed, similar patterns observable on mesoscutum (often separated there by 1–2 diameters) and scutellum, mesopleuron also similar with denser punctuations on scrobal sulcus; metanotum smooth, unpunctured; propodeum

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