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Nota científica

First record of the ant genus *Myrcidris* (Formicidae: Pseudomyrmecinae) from Colombia

Primer registro del género *Myrcidris* (Formicidae: Pseudomyrmecinae) para Colombia

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Abstract: The genus *Myrcidris* and its only described species, *M. epicharis* are registered for the first time from Colombia. The possible distribution throughout the Amazon watershed of the genus *Myrcidris* and its obligate relation with ant-plant *Myrcia* are discussed.

Key words: Ants. Biodiversity. Amazon.

Resumen: Se registra por primera vez el género *Myrcidris* y su única especie descrita, *M. epicharis* para Colombia. Se discute el posible distribución del género *Myrcidris* a través de la cuenca Amazonas y su relación obligada con la planta-hormiga *Myrcia*.

Palabras clave: Hormigas. Biodiversidad. Amazonas.

Introduction

Members of the subfamily Pseudomyrmecinae (Hymenoptera: Formicidae) are one of the most conspicuous arboreal ants in tropical and subtropical regions (Ward 1990, 1991, 2001). Currently, three genera are recognized in this subfamily: *Myrcidris* Ward, restricted to South America (Ward 1990), *Pseudomyrmex* Lund, distributed from southern United States to northern Argentina, and *Tetraponera* F. Smith, 1952 with Paleotropical distribution.

The genus *Myrcidris* Ward was recently described from a single species, *M. epicharis* Ward, 1990, from the Brazilian Amazon (Ward 1990). The genus can be distinguished from other members in the subfamily by the presence of: antennae 11-segmented, single proximal tooth on the basal margin of the mandibles, and mid and hind basitarsal sulci well developed (for queen, male and other worker characters see Ward 1990). In this paper, I record for the first time the genus *Myrcidris* and its only described species, *M. epicharis*, from Colombia.

All measurements are those used by Ward (1990) to describe the *M. epicharis* holotype and made using a Nikon stereomicroscope at 80X magnification with ocular micrometer. All of the following measurements are expressed in millimeters: HW, head width: maximum width of head, including the eyes, measured in full-face dorsal view. HL, head length: midline length of head proper, from the anterior clypeal margin to the midpoint of a line drawn across the posterior margin of the head. EL, eye length: length of compound eyes, measured with the head in full-face, dorsal view. PL, petiole length. PH, petiole height.

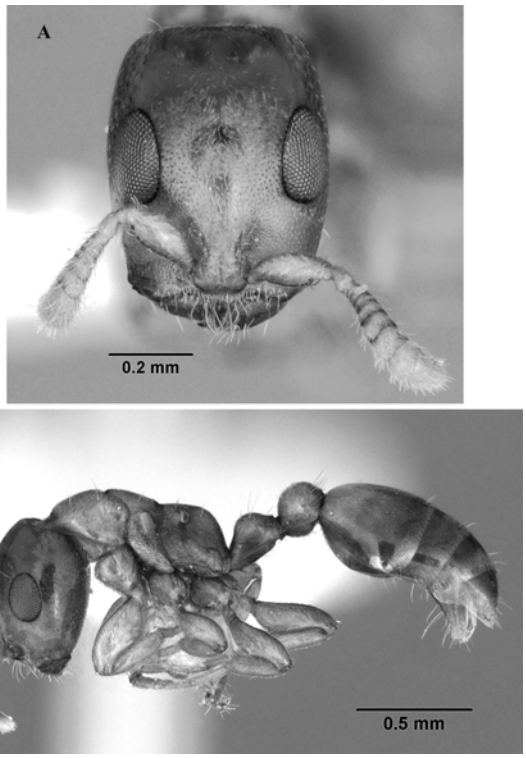

Figure 1. *Myrcidris epicharis*, worker from near Manaus, Brazil. **A**. Head. **B**. Lateral view. These photographs were taken from www.antweb.org, with permission by Brian Fisher. Specimen: CASENT0010810. Photograph by: April Nobile. The pictures here are of *M. epicharis* from Manaus (Brazil) and not the single specimen from PNN Amacayacu (Colombia).

Subfamily Pseudomyrmecinae
Tribe Pseudomyrmecini

Myrcidris epicharis Ward, 1990 (Fig. 1)
Material examined: 1 worker. COLOMBIA. **Amazonas**. PNN Amacayacu. San Martín. 70°18'W 03°46'S. 150m. 5-19-nov-2001. Malaise trap. D. Chota leg. [IAvH-M.2763]. Deposited and preserved in EtOH, in the Insect Collection of the Instituto "Alexander von Humboldt", Colombia.

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Discussion

This specimen from PNN Amacayacu (Amazonas, Colombia) is *M. epicharis* since it has 11 funicular segments, different from the other genera and species of the subfamily Pseudomyrmecinae (*Pseudomyrmex* and *Tetraponera*) whom have12 funicular segments (Ward 1990). *M. epicharis* Ward collected in Colombian Amazonian is very similar those populations from Manaus (Brazil), sharing all characters listed in Ward (1990), however I emphasize these conspicuous characters in it: head notably longer than broad; first funicular segments exceeding in length the next three segments combined; second and third funicular segments weakly fused; mesosoma dorsum with 11 erect hairs and fine pilosity moderately on scapes, petiole and pospetiole. A few measurements taken in the Colombian specimen are HL 0.77; HW 0.55; EL 0.26; PL 0.30; PH 0.22.

In Colombia, the subfamily Pseudomyrmecinae was, until now, represented by the genus *Pseudomyrmex* with 32 species (Fernández and Sendoya 2004) out of the 200 species recorded for the New World (Ward and Downie 2005). However, intensive sampling in different regions in Colombia has made possible the collection of the second Neotropical genus of this subfamily. Other ants previously known only from Brazil that have been reported recently from Colombia include *Heteroponera angulata* (Guerrero-F, and Olivero-G., 2007). A complete list of ants shared between Brazil and Colombia is given in Fernández and Sendoya (2004).

The ant genus *Myrcidris* is represented by two species: *M. epicharis* known only from a few localities near Manaus in the Brazilian Amazon and now from the Amazon in Colombia, and one undescribed species from Guyana (Ward unpublished). The presence of the genus in these three regions suggests that it is of Amazonian origin and its distribution throughout the Amazon watershed may be related to the distribution of the plant *Myrcia* sp. that the ants have been reported to inhabit. Although the *Myrcidris* specimens from Colombia and Guyana (Ward pers. comm.) were not collected on *Myrcia*, this genus of plants includes several domatia-bearing species and it has been recorded from Brazilian, Colombian (PNN Amacayacu, four species: Prieto-C, pers. comm.) and Amazonian Guyana.

Since the myrmecophytes, in particular domatia-bearing plants, are very common in the Neotropics (Davidson and Mackey 1993) and the Amazon has been registered date of ants inhabiting plants (Fonseca and Ganade 1996), it is possible that an obligate relationship exists between *Myrcidris* and *Myrcia*, as that among some species of *Pseudomyrmex* and species of plants of the genera *Acacia*¸ *Triplaris* and *Tachigali* (Ward 1993, 1999). In addition, there are several collections of colonies of *M. epicharis* living in *Myrcia* sp. from the vicinity of Manaus, Brazil (Ward 1990, Ward pers. comm.); and some convergent similarities of *M. epicharis* with the species of *Tachigali*-inhabiting *Pseudomyrmex concolor* complex, between these the specialist association with plants (Ward 1990).

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