

# Article



# Two new species of the genus *Plumaroides* Brothers, 1974 (Hymenoptera: Chrysidoidea, Plumariidae) from Argentina

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#### **Abstract**

Two new species of the genus *Plumaroides* Brothers, 1974 from Catamarca and La Rioja provinces of Argentina *P. aquilus* Diez & Fidalgo, **sp. nov.** and *P. tapilophus* Diez & Fidalgo, **sp. nov.** are described and illustrated. A key to separate males of five known species of *Plumaroides* is provided.

Key words: Plumariidae, Plumaroides, taxonomy, Argentina

#### Introduction

Plumariidae belong to the superfamily Chrysidoidea (Hymenoptera: Aculeata), and are distributed in xeric regions of southern Africa and South America, with maximal diversity in the latter. Plumariid wasps are represented by seven genera, *Myrmecopterinella* Day, 1977 and *Myrmecopterina* Bischoff, 1914 occur in southern Africa, *Plumarius* Philippi, 1873, *Maplurius* Roig-Alsina, 1994, *Plumaroides* Brothers, 1974, *Mapluroides* Diez, Fidalgo & Roig-Alsina, 2007, and *Pluroides* Diez, Roig-Alsina & Fidalgo, 2010 in South America (Brues 1924; Bradley 1972; Brothers 1974; Day 1977; Roig-Alsina 1994; Diez *et al.* 2007, 2010; Brothers 2011). The knowledge of this family is based mainly on males since females are rarely collected. These wasps have nocturnal habits and show extreme sexual dimorphism with apterous females and winged males.

*Plumaroides* was originally described from Catamarca province, Argentina (Brothers 1974), and it is distributed in Salta, San Juan, Mendoza and Santiago del Estero provinces. This genus is the most specious after *Plumarius*, with three species described: *P. andalgalensis* Brothers, 1974 *P. brothersi* Diez & Roig-Alsina, 2008, and *P. tiphlus* Diez, 2008.

Plumariid wasps have a strong sexual dimorphism. Females are apterous, prognathous, have a flattened body and short legs with strong spiniform setae and stout femora. *Myrmecopterina*, *Plumarius* and *Plumaroides* are the only genera for which females are known (Evans 1966, Brothers 1985, Diez 2008). Currently the female *P. tiphlus* was attributed to Bethylidae (Quintero & Cambra 2010); this is still under discussion and further studies on morphology and molecular biology will determine the correct position of this specimen.

In this contribution, two new species are described and illustrated, *Plumaroides aquilus* **sp. nov.**, and *P. tapilo-phus* **sp. nov.**, and a key for males of the five known species is provided.

## Methods

Specimens were collected at night with a camping lantern provided with a fluorescent light ("U" tube, 360 degrees bright light), and placed on a white sheet spread on the ground. Adult males were collected in alcohol and then chemically dried.

Specimens are deposited in: Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", Buenos Aires, Argentina (MACN), Instituto Fundación Miguel Lillo, Tucumán, Argentina (IFML), Museo de La Plata, La Plata, Argentina (MLP).