

Description of *Gonatopus sandovalae* (Hymenoptera: Dryinidae), a New Species from Ecuador

Authors: Guglielmino, Adalgisa, Olmi, Massimo, and Speranza, Stefano

Source: Florida Entomologist, 99(3) : 437-439

Published By: Florida Entomological Society

URL: <https://doi.org/10.1653/024.099.0314>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Description of *Gonatopus sandovalae* (Hymenoptera: Dryinidae), a new species from Ecuador

Adalgisa Guglielmino¹, Massimo Olmi^{2,*}, and Stefano Speranza¹

Abstract

Gonatopus sandovalae sp. nov. (Hymenoptera: Dryinidae) is described from Los Rios Province (Ecuador). *Gonatopus sandovalae* can be distinguished from the related Neotropical species *G. canadensis* (Olmi) and *G. malkini* (Olmi) by the different sculpture of the scutum (with 2 lateral pointed apophyses in *G. sandovalae*; without lateral pointed apophyses in *G. canadensis* and *G. malkini*).

Key Words: taxonomy; Los Rios Province; Neotropical region; Chrysidoidea

Resumen

Se describe la nueva especie, *Gonatopus sandovalae* (Hymenoptera: Dryinidae), obtenida en la provincia de Los Rios (Ecuador). *G. sandovalae* puede ser diferenciada de las especies neotropicales más cercanas (*G. canadensis* (Olmi) y *G. malkini* (Olmi)) por la escultura diferente en el escudo (con dos apófisis laterales agudas en *G. sandovalae*; sin apófisis laterales en *G. canadensis* y *G. malkini*).

Palabras Clave: taxonomía; Provincia de Los Rios; región Neotropical; Chrysidoidea

Dryinidae (Hymenoptera: Chrysidoidea) are parasitoids of Auchenorrhyncha (Hemiptera) (Guglielmino & Virla 1998; Guglielmino & Bückle 2003, 2010; Guglielmino et al. 2013). The biology of this small group of wasps is still poorly known (Carcupino et al. 1998; Guglielmino 2000; Guglielmino et al. 2006, 2008, 2015). The genus *Gonatopus* Ljungh, 1810 is present in all zoogeographical regions. About 441 species have been described from all continents (Olmi & Guglielmino 2013; Guglielmino & Olmi 2014; Olmi & Xu 2015).

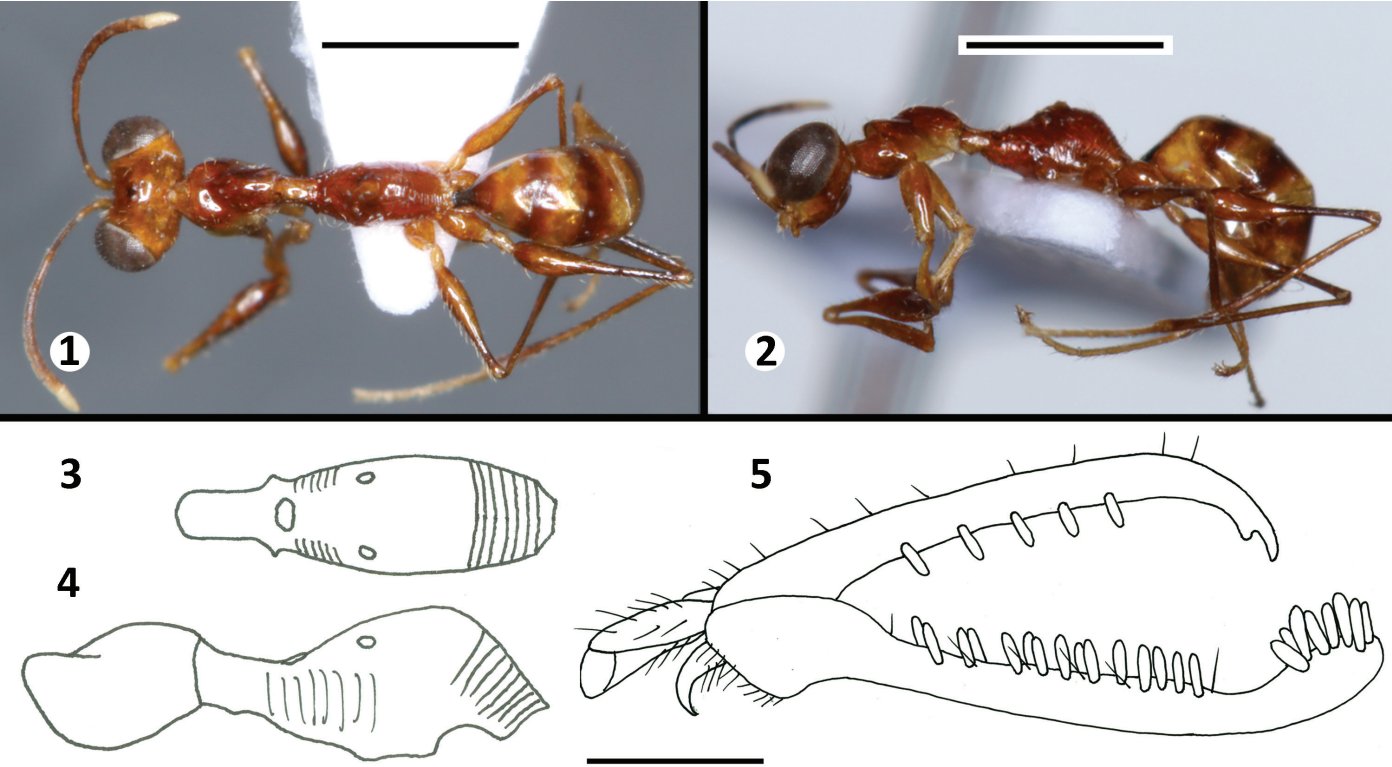
The genus was revised at first at world level by Olmi (1984, 1991) and more recently by Xu et al. (2013) for the Oriental region, Olmi & Virla (2014) for the Neotropics, and Olmi & Xu (2015) for the Eastern Palearctic region. One hundred and twenty-three species of *Gonatopus* are known from the Neotropical region (Olmi & Virla 2014). According to Olmi & Virla (2014), the genus *Gonatopus* is divided into 12 groups. They are distinguished on the basis of the following characters:

- | | | |
|------|--|---|
| 1.— | Fully winged (not found in the Neotropical region) | Group 11 |
| 1'.— | Apterous (Fig. 1) | 2 |
| 2.— | Enlarged claw without subapical tooth, or with 1 very small subapical tooth (Plate 181A in Olmi & Virla 2014) | 3 |
| 2'.— | Enlarged claw with one large subapical tooth (Fig. 5) | 6 |
| 3.— | Distal apex of enlarged claw with group of lamellae (not found in the Neotropical region) | Group 8 |
| 3'.— | Distal apex of enlarged claw without lamellae (Plates 181A, E, 182E–G, 183C, D in Olmi & Virla 2014) | 4 |
| 4.— | Pronotum crossed by strong transverse impression (Plates 181C, D, 182A–D, 183A, B in Olmi & Virla 2014) | Group 7 |
| 4'.— | Pronotum not crossed by transverse impression or slightly impressed (Plates 202, 203A, C in Olmi & Virla 2014) | 5 |
| 5.— | Palpal formula 6/3 | Group 12 |
| 5'.— | Palpal formula different | Group 6 |
| 6.— | Pronotum not crossed by transverse impression or slightly impressed (as in Plate 172B in Olmi & Virla 2014) | 7 |
| 6'.— | Pronotum crossed by strong transverse impression (Fig. 2) | 8 |
| 7.— | Labial palpi 3-segmented | Group 9 (not found in the Neotropical region) |

¹Department of Agriculture and Forestry Sciences (DAFNE), University of Tuscia, Viterbo, 01100 Italy; E-mail: guglielm@unitus.it (A. G.), speranza@unitus.it (S. S.)

²Tropical Entomology Research Center, Via De Gasperi 10, Viterbo, 01100 Italy; E-mail: olmi@unitus.it (M. O.)

*Corresponding author; E-mail: olmi@unitus.it (M. O.)



Figs. 1–5. Female holotype of *Gonatopus sandovalae* sp. nov.: habitus in dorsal (1) and lateral (2) view; scutum, scutellum and metathorax + propodeum in dorsal view (3); mesosoma in lateral view (4); chela (5). Scale bar 1.28 mm for 1 and 2, 0.53 mm for 3, 0.58 mm for 4, and 0.14 mm for 5.

7'.—	Labial palpi 2-segmented.	Group 5
8.—	Enlarged claw without lamellae, with or without bristles or peg-like hairs (Plate 153B, D in Olmi & Virla 2014)	Group 1
8'.—	Enlarged claw with lamellae (Fig. 5)	9
9.—	Labial palpus 2-segmented	10
9'.—	Labial palpus 3-segmented	11
10.—	Maxillary palpus composed of 2–4 segments	Group 2
10'.—	Maxillary palpus 5-segmented	Group 10
11.—	Maxillary palpus 6-segmented	Group 4
11'.—	Maxillary palpus with 4–5 segments	12
12.—	Maxillary palpus 5-segmented	Group 3
12'.—	Maxillary palpus 4-segmented	Group 10

In 2015, we examined additional specimens of *Gonatopus* from Ecuador and found the new species described herein.

Material and Methods

The descriptions follow the terminology used by Olmi (1984), Olmi & Guglielmino (2010), and Olmi & Virla (2014). The measurements reported are relative, except for the total length (head to abdominal tip, except antennae), which is expressed in millimeters. In the descriptions, POL is the distance between the inner edges of the 2 lateral ocelli; OL is the distance between the inner edges of a lateral ocellus and the median ocellus; OOL is the distance from the outer edge of a lateral ocellus to the compound eye; OPL is the distance from the posterior edge of a lateral ocellus to the occipital carina; and TL is the distance

from the posterior edge of an eye to the occipital carina. The material studied in this paper is deposited in the collections of the Pontificia Universidad Católica del Ecuador, Quito, Ecuador (QCAZ).

Results

Gonatopus sandovalae sp. nov. (Figs. 1–5)

DESCRIPTION

Holotype female. Apterous (Fig. 1). Length 3.4 mm. Body testaceous-ferruginous, except petiole black; antenna brown, except segments 1 and 2 testaceous and segment 10 whitish. Antenna clavate;

