

## Two new records of *Alloxysta* (Hymenoptera: Cynipoidea: Figitidae: Charipinae) from Colombia

Dos nuevos registros de *Alloxysta* (Hymenoptera: Cynipoidea: Figitidae: Charipinae) de Colombia

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**Abstract:** The Charipinae from Colombia has been recently studied. Nine Charipinae species are known to be present in this country: *Alloxysta arcuata* (Kieffer, 1902), *Alloxysta castanea* (Hartig, 1841), *Alloxysta consobrina* (Zetterstedt, 1838), *Alloxysta hansonii* Pujade-Villar, 2011, *Alloxysta obscurata* (Hartig, 1840), *Alloxysta medinae* Ferrer-Suay & Pujade-Villar, 2012, *Alloxysta pilipennis* (Hartig, 1840), *Alloxysta torresi* Ferrer-Suay & Pujade-Villar, 2012 and *Phaenoglyphis villosa* (Hartig, 1841). Here more Charipinae material has been studied from collections made with Malaise traps by the Humboldt Institute in several places of Colombia. In this study, two species are recorded for the first time from Colombia: *Alloxysta mullensis* (Cameron, 1883) and *Alloxysta xanthopa* (Thomson, 1862). Data of the capture of the specimens are given.

**Key words:** Hyperparasitoids. Aphids. Psyllids.

**Resumen:** Los charipinos presentes en Colombia han sido recientemente estudiados. Nueve especies están presentes en este país: *Alloxysta arcuata* (Kieffer, 1902), *Alloxysta castanea* (Hartig, 1841), *Alloxysta consobrina* (Zetterstedt, 1838), *Alloxysta hansonii* Pujade-Villar, 2011, *Alloxysta obscurata* (Hartig, 1840), *Alloxysta medinae* Ferrer-Suay & Pujade-Villar, 2012, *Alloxysta pilipennis* (Hartig, 1840), *Alloxysta torresi* Ferrer-Suay & Pujade-Villar, 2012 y *Phaenoglyphis villosa* (Hartig, 1841). Hemos estudiado más material de Charipinae a partir de colectas realizadas en trampa Malaise por el Instituto Humboldt en diversos lugares de Colombia. En este estudio se citan por primera vez en Colombia las especies: *Alloxysta mullensis* (Cameron, 1883) y *Alloxysta xanthopa* (Thomson, 1862). Se dan datos de la captura de los especímenes.

**Palabras clave:** Hiperparasitoides. Áfidos. Psílidos.

### Introduction

The Charipinae (Hymenoptera: Cynipoidea: Figitidae) is an important subfamily characterized being hyperparasitoids of aphids and psyllids. As hyperparasitoids they have an important impact in the aphid biological control programs. The presence of Charipinae can modify the biological control done by hymenopteran parasitoids of aphid pests in at least three ways: (i) increasing primary parasitoid mortality, (ii) increasing the growth rate of the aphid population indirectly and (iii) increasing the propensity for primary parasitoids to disperse (van Veen *et al.* 2001).

Members of subfamily Charipinae are very small wasps (~1 mm of length) with a worldwide distribution, characterized by a smooth and shiny body. Concretely, *Alloxysta* Förster, 1869 is the most abundant and widely distributed genus in this subfamily. Nowadays, there are 101 *Alloxysta* species considered valid (Ferrer-Suay, person. data). This genus is also present in every biogeographical region. Recently, the fauna of charipines has been studied from collections made with Malaise traps by the Humboldt Institute in several places of Colombia (Ferrer-Suay *et al.* 2012a). In this study, six species were cited for the first time in this country: *Alloxysta*

*arcuata* (Kieffer, 1902), *Alloxysta castanea* (Hartig, 1841), *Alloxysta hansonii* Pujade-Villar, 2011, *Alloxysta obscurata* (Hartig, 1840), *Alloxysta pilipennis* (Hartig, 1840), and *Phaenoglyphis villosa* (Hartig, 1841) and two more were described: *Alloxysta medinae* Ferrer-Suay & Pujade-Villar, 2012 and *Alloxysta torresi* Ferrer-Suay & Pujade-Villar, 2012. *Alloxysta consobrina* (Zetterstedt, 1838) was cited in Colombia in a previous work (Pujade-Villar *et al.* 2010).

Continuing with the Charipinae studies from collections in this country, two more species have been found for the first time in Colombia.

### *Alloxysta mullensis* (Cameron, 1883)

**Diagnosis.** *Alloxysta mullensis* is mainly characterized having closed radial cell being 2.2 times as long as wide, pronotal carinae absent, propodeal carinae present forming a plate, male and female with the beginning of rhinaria in F4, F1 longer than F2, F2 subequal to F3, F3 shorter than F4. It is similar to *A. fracticornis* but they can be differentiated by the relation between F1 and pedicel: F1 subequal to pedicel in *A. mullensis* while F1 longer than pedicel in *A. fracticornis*; proportion between flagellomeres: F1 longer than F2 and F2

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subequal to F3 in *A. mullensis* female but F1-F3 subequal in length in *A. fracticornis* female; without any flagellomere curved in *A. mullensis* male but F3 curved in *A. fracticornis* male.

**Material studied.** (1♀): COLOMBIA. **Bolívar.** Mun. Zambrano, Had. Monterrey, 9°37'N 74°54'W, 70, Malaise, 30-31.vii.1993, coll. F. Fernández & G. Ulloa, M. 3493. IAvH-E 147441.

**Distribution.** Palaearctic and Neotropical (Mexico). New record for Colombia.

**Hosts.** Consult Charipinae Worldwide Catalogue (Ferrer-Suay *et al.* 2012b)

#### *Alloxysta xanthopa* (Thomson, 1862)

**Diagnosis.** *Alloxysta xanthopa* is characterized having completely open radial cell being 2.4 times as long as wide, pronotal carinae present, propodeal carinae forming a plate, and rhinaria beginning in F3, F1 longer than pedicel and slightly longer than F2, F3 longer than F3 and F3 subequal to F4. According with this features this species is easily differentiated from the other *Alloxysta* species.

**Material studied.** (1♀): COLOMBIA. **Norte de Santander.** PNN Tamá, Mun. Toledo. Vda. La Camacha. Pozo Negro, 7°21'N 72°28'W, 2213, Malaise, 21-29.xi.2003, coll. C. Leal, M. 4281. IAvH-E 147453.

**Distribution.** Palaearctic. New record for Colombia.

**Hosts.** Consult Charipinae Worldwide Catalogue (Ferrer-Suay *et al.* 2012b).

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