More new records of spider wasps from Colombia (Hymenoptera, Pompilidae)

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Abstract

Aporinellus Banks, Austrochares Banks and Dicranoplius Haupt are new generic records for Colombia, as well as the species Dipogon ariel Banks, Evagetes peruana Banks, and Euplaniceps notabilis (Smith). Five new combinations are formally endorsed: Aimatocare argentinica (Banks), comb. n.; Aimatocare longula (Banks), comb. n.; Aimatocare imitator (Evans), comb. n.; Aimatocare impensa (Evans), comb. n.; Aimatocare vitrea (Fox), comb. n. Although these names have been used in Pompilidae, no formal nomenclatural act had been proposed. The presence of Chirodamus paramicola Roig-Alsina, previously reported with uncertainty, is confirmed. Finally, a new combination for Euplaniceps notabilis (Smith), comb. n. is proposed based on molecular phylogenetics and morphological data. The Colombian fauna of Pompilidae sums up to 38 genera and approximately 150 species.

Keywords

New combination, Pepsinae, Pompilinae
Introduction

The mostly solitary spider wasps (Hymenoptera: Pompilidae) are a widespread group of more than 1,000 species in four subfamilies and 60 genera in the Neotropics (Fernández 2000, Hanson and Wasbauer 2006). Despite some recent progress in the taxonomic study of Neotropical pompilids (e.g. Rodriguez et al. 2010, Waichert et al. 2012, Waichert et al. 2015), their nomenclature and systematics remains incipient. As a result, several genera lack identification keys and urge taxonomic revision, and many species remain to be described.

With the growing anthropogenic pressures on the Neotropical forests, one of the main concerns is the loss of biodiversity, which increases the need of prioritizing taxonomic studies in these areas. The authors are currently engaged in the monograph of spider wasps from Colombia, including keys to subfamilies, tribes, genera and species of several genera. This endeavor favored the publication of new genera and species records (Castro-Huertas et al. 2014). Because we are approaching the completion of the book’s manuscript, it is desirable to publish some additional new records of genera and species, as well as relevant nomenclatural acts, as a separate note from the forthcoming book.

To date, the fauna of spider wasps from Colombia has 150 known species, belonging to 38 genera and four subfamilies.

Methods

Examined specimens. The specimens are deposited in the Entomological collection at Instituto Alexander von Humboldt, Villa de Leiva, Colombia (IAvH-E), Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá, Colombia (ICN), Entomological Collection of the Museo Javeriano de Historia Natural, Pontificia Universidad Javeriana, Bogotá, Colombia (MPUJ) and Museo Entomológico Universidad del Valle, Cali, Colombia (MUSENUV). Dicranoplius Haupt specimens from the Utah State University Entomology Collection, Logan, UT (EMUS) were examined.

Results

The following species and genera are reported for the first time in Colombia.

Subfamily Pompilinae

Aporinellus Banks

Aporinellus aff. medianus Banks, 1917

Comments. This is the first record of the genus for Colombia and northern South America. The known distribution of Aporinellus is worldwide, except Australia (Evans 1966). The studied specimens probably belong to an undescribed species that will be studied elsewhere.

_Austrochares_ Banks

_Austrochares aff. mexicanus_ Dreisbach, 1966


Comments. This is the first record of the genus for Colombia and northern South America. _Austrochares_ was previously known from Mexico to Argentina, including Brazil, Chile, and Peru (Evans 1969). The studied specimen keys out to _A. mexicanus_ in Evans’s (1969) key, but it probably belongs to an undescribed species that will be further studied elsewhere.

_Dicranopilus_ Haupt

_Dicranopilus aff. areatus_ (Taschenberg, 1869)


Comments. This is the first record of the genus for Colombia. _Dicranopilus_ is restricted to the Neotropics, to both temperate and tropical South America. It was previously known from Trinidad south to Argentina (Evans 1969). The studied specimens key out as _D. areatus_ in Evans’s (1969) key, but they belong to an undescribed species, which will be described elsewhere.

_Euplaniceps_ Haupt

_Euplaniceps notabilis_ (Smith, 1860), comb. n.

_Aporus_ (Aporus) _notabilis notabilis_ (Smith, 1860), Mem. Am. Entomol. 20: 52.


**Specimen data.** See Rodriguez et al. (2015), Appendix S1.

**Comments.** This is the first record of this species for Colombia. *Euplaniceps notabilis* was previously recorded from Mexico to Costa Rica (Evans 1966). The new combination is proposed based on molecular phylogenetic analyses (Rodriguez et al. 2015), which included *A. notabilis* (labeled “Euplaniceps sp.”, voucher PO484) in the *Euplaniceps* clade, sister to the Antillean *Drepanaporus*. This species had previously been included in the genus *Odontaporus* by Bradley (1944) based on the presence of a tooth in the margin of the inferior mandible and bare eyes. Bradley (1944) did not mention the presence of this tooth in many *Euplaniceps* species (see Colomo de Correa 1998). Evans (1966) included this species in *Aporus* based mainly on the second submarginal cell receiving only one recurrent vein. This character is very variable even within *Euplaniceps* species (JR pers. obs.), where the second submarginal cell can receive one or two recurrent veins, with the second recurrent vein sometimes being interstitial with the second intercubital vein. Moreover, females of *A. notabilis* do not have a v-shaped spatium frontale as all other *Aporus*, but a flattened area between the antennal alveoli on the same plane as the clypeus which is found in many *Euplaniceps* species (see Colomo de Correa 1998). Finally, the male genitalia have parameres with parallel-side edges and truncated apex, which is a diagnostic character of *Euplaniceps* males. The two subspecies, *A. n. notabilis* and *A. n. pulchritarsis*, are herein included in *Euplaniceps*.

**Evagetes Lepeletier**

**Evagetes peruana** (Banks, 1947)

**Specimen data.** Boyacá. 22♂, SFF Iguáque, Cabaña Chaina, [5°25’N, 73°27’W], 2,600 m, malaise, 9–26 Sept 2002, A. Roberto (IAvH-E).

**Comments.** This is the first record of this species for Colombia and east of the Andes. *Evagetes* is most diverse in the Holarctic region, having South American species occurring west of the Andes (Argentina, Chile and Peru) (Evans 1966; Fernández 2000). This species was previously known from Trujillo, Peru (Banks 1947).

**Priochilus Banks**

**Priochilus formosum hondurensis** Dreisbach, 1950

**Specimen data.** Vichada. 1♀, Centro Gaviotas, 170 m, 17 Oct 1989, F. Fernández leg. (ICN).

**Comments.** Fernández (2000) cited the occurrence of *P. formosum hondurensis* Dreisbrach, 1950 in Colombia (Orinoco region), without providing specimen data
and/or specimen voucher. We add a female specimen to this species’ range. *Priochilus formosum hondurensis* is known from females only and had been known from Honduras to Costa Rica (Evans 1966).

*Priochilus imperius* Banks, 1944

**Specimen data.** Meta. 1♀, RNN La Macarena, Caño La Curía, 580 m., 25 Dec 1986, F. Fernández leg. (ICN).

**Comments.** Fernández (2000) reported the species from Bolivia, Brazil, Ecuador, Colombia (Meta) and in Peru (*apud* Evans 1966). Additionally, the Catalogue of Life (www.catalogueoflife.org) has added Chile to *P. imperius* list of occurrences. Specimen data and/or specimen voucher are not provided by Fernández (2000), making record questionable. Here we record a female specimen from Colombia. *Priochilus imperius* was described based on specimens from Bolivia, British Guiana, Ecuador, Peru, and Surinam (Banks 1944).

Subfamily Pepsinae

*Aimatocare* Roig-Alsina

**Note.** Roig-Alsina (1989) established the genus *Aimatocare* for the *Chirodamus argentinicus* species-group, as delimited by Evans (1968), but did not propose new combinations for the newly established genus. Herein, we formalize the following nomenclatural acts: *Aimatocare argentinica* (Banks), *combin. n.*; *Aimatocare imitator* (Evans), *combin. n.*; *Aimatocare longula* (Banks, 1946), *combin. n.*; *Aimatocare impensa* (Evans), *combin. n.*; and *Aimatocare vitrea* (Fox), *combin. n.*

*Aimatocare longula* (Banks, 1946)

**Specimen data.** Cauca. 1♀, Morales, El Pomarrosos, Finca El Recuerdo, [2°48′34.5″N, 76°37′15.8″W], 1,600 m, by hand, 12 Sept 2013, D. Caraball (MUSENUV).

**Comments.** This is the first record of this species for Colombia. It was previously known from Bolivia, Brazil and Peru (Fernández 2000).

*Chirodamus* Haliday

*Chirodamus paramicola* Roig-Alsina, 1984

**Specimen data.** Cundinamarca. 1♀, PNN Chingaza, 3,400 m, hand collection, Nov 1988, G.D. Amat (MPUJ).
Comments. Roig-Alsina (1984) recognized five species mostly from southern South America, with one species, *C. paramicola*, in Venezuela and Colombia. The holotype and paratypes are from the Venezuelan Andes, and the single specimen from Colombia was collected in Nariño (southwestern Colombia) and deposited in London without further study. We found a new specimen from Chingaza Park, which slightly differs from the type series by having different fore leg coloration. The Colombian specimen studied here comprises a possible geographical and morphological bridge between the Merida (Venezuela) and Nariño specimens.

**Dipogon Fox**

**Dipogon ariel** Banks, 1946

**Specimen data. Boyacá.** 1♀, SFF Iguaque, Cabaña Chaina, [5°25'0"N, 73°7'0"W], 2,600m, malaise, 10 Jun 2001, 28 Jun 2001, P. Reina (IAvH-E).

Comments. This is the first record of this species for Colombia. *Dipogon ariel* was previously known from Ecuador (Banks 1946).

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