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Short scientific note
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The genus *Anterhynchium* in the Philippine Islands (Hymenoptera: Vespidae, Eumeninae)

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Abstract
A taxonomic study on the genus *Anterhynchium* de Saussure, 1863 from the Philippine Islands is presented. Two species are recorded: *A. astrophilum* Giordani Soika, 1996 and *A. townesi* van der Vecht, 1963. *Anterhynchium astrophilum* is recorded for the first time since its description, *A. flavomarginatum townesi* is raised to species rank (*A. townesi* **stat. nov.**) and its unknown male is described. A key to the species and new distributional records are provided.

Key words: Potter wasps, Vespidae, Eumeninae, *Anterhynchium*, Philippines, key, new records.

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Introduction

Anterhynchium de Saussure, 1863 is an Old World genus of potter wasps, comprising over 40 species worldwide, ranging from sub-Saharan Africa to Australia and islands East of Papua New Guinea (van der Vecht 1963; van der Vecht & Fischer 1972; Nguyen 2015). Three subgenera are recognized: *Anterhynchium* de Saussure, 1863 mainly in Africa with a few species in the Oriental Region, *Dirhynchium* van der Vecht, 1963 in the Oriental and Australian Regions, and *Epiodynerus* Giordani Soika, 1958 from Madagascar and Thailand to Australia and Pacific Islands.

Two species have been recorded from the Philippine Islands, namely *A. astrophilum* and *A. flavomarginatum townesi* (van der Vecht 1963; Giordani Soika 1996), both in the subgenus *Dirhynchium*.

In this paper, based on specimens provided by local collectors and housed in the author's collection, *A. astrophilum* is recorded for the first time since its description, the subspecies *A. flavomarginatum townesi* is raised to specific rank, and its previously unknown male is described; new records and a key to the two species are provided.

Material and methods

The adult morphology and coloration were observed on pinned dried specimens under a Seben Incognita III stereoscopic microscope.

"Body length" indicates the length of head, mesosoma and the first two metasomal terga combined. Metasomal terga, metasomal sterna and flagellomeres are abbreviated as T, S and F respectively.

Measurements were taken using a digital Vernier caliper (accuracy ± 0.02 mm).

Terminology principally follows Yamane (1990).

Acronyms used are as follows:

AEI American Entomological Institute, Utah State University, Logan, Utah;

MSNVE Museo Civico di Storia Naturale, Venezia, Italy.

Genus de Saussure, 1863

Anterynchium de Saussure 1863: 205, name for division I of genus *Rhynchium* Spinola *in* de Saussure 1852: 103 and de Saussure 1855: 175.

Type species. *Rygchium synagroides* de Saussure, 1852, by subsequent designation (van der Vecht 1963: 73).

Key to the species of occurring in the Philippine Islands

1. T1–T2 dorsally smooth and shiny with fine and sparse punctures, preapical margin of T2 with big and dense punctures, T3 entirely coarsely punctate (Fig. 3). Punctation of dorsal face of mesosoma made of large and shallow flat-bottomed punctures. Black pubescence absent on metasoma, present on head and mesosoma but much sparser. Ocellar triangle elevated on internal margins of ocelli (Fig. 2). Metanotum with distinct transverse carina interrupted medially. Dorsal carinae of propodeum developed in a triangular tooth behind metanotum (Fig. 4). Entirely black with pale yellow markings on scape, interantennal area and apical segment of fore tarsus. Wings strongly fuscous with strong purplish effulgence ..... ***A. astrophilum*** **Giordani Soika, 1996**

- All terga entirely covered in small and dense punctures (Fig. 6). Punctation of dorsal face of mesosoma small and deep. Whole body covered with dense black pubescence. Ocellar triangle entirely flat. Transverse carina of metanotum not clearly distinct. Dorsal carinae of propodeum not evident (Fig. 7). Black with reddish-orange scape and yellow spot between antennal insertions, legs more or less reddish-brown. Wings orange with black basal half ..... ***A. townesi* van der Vecht, 1963**

***Anterhynchium* (*Dirhynchium*) *astrophilum* Giordani Soika, 1996**
(Figs 1–4)

Anterhynchium astrophilum Giordani Soika 1996: 41, ♀ - "Is. Filippine: Luzon, Los Baños, Mt. Makiling" (holotype MSNVE).

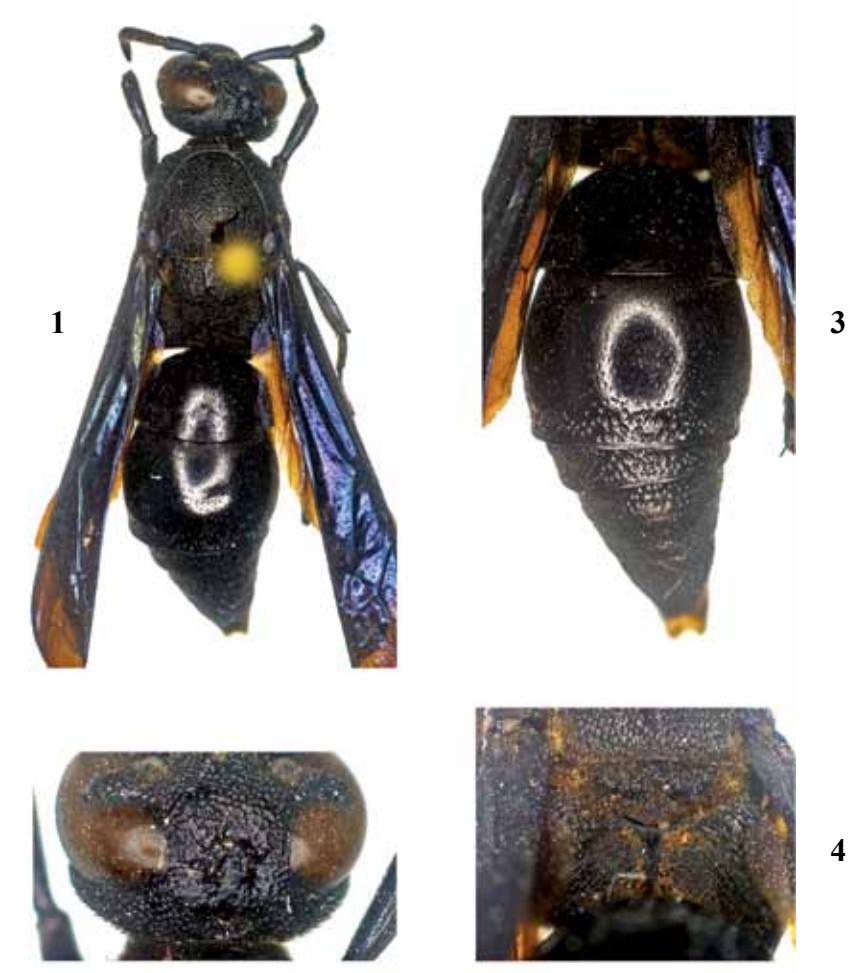
Diagnosis. An easy recognizable species, characterized by the punctation of metasoma, with T1 dorsally entirely smooth with very sparse fine punctures, T2 punctate like previous terga but with very coarse and dense punctures on preapical and lateral margins and T3 entirely coarsely punctate (Fig. 3).
Material examined. Philippines: Luzon, Cagayan, Baggao, Sep 2014, 1 ♀.

Distribution. Philippine Islands: Luzon (Giordani Soika 1996).

***Anterhynchium* (*Dirhynchium*) *townesi* van der Vecht, 1963 stat. nov.**
(Figs 5–10)

Anterhynchium flavomarginatum townesi van der Vecht 1963: 78 (key), 84, ♀ - "Luzon: Los Baños, Laguna" (holotype AEI).

Diagnosis. Easily recognizable from the other Philippine species for the whole metasoma covered in dense small deep punctures (Fig. 6), the absence of dorsal propodeal teeth (Fig. 7), the dense black pubescence and the orange and black wings.



Figs 1-4 – *Anterhynchium astrophilum* Giordani Soika, 1996, ♀. **1**, habitus; **2**, vertex, dorsal view; **3**, metasoma, dorsal view; **4**, mesosoma, postero-dorsal view.

Material examined. Philippines: Luzon, Nagtipunan, Nov 2015, 1 ♂; Mindanao, Compostela, Masara, Aug 2014, 1 ♀; Mindanao, Esperanza, Dec 2014, 1 ♀; Mindanao, Zamboanga, Gutalac, Jun 2015, 1 ♀; Mindoro, Baco, Jan 2015, 1 ♂; Mindoro, Baco, Apr 2015, 1 ♂.

Remarks. van der Vecht (1963) originally described this taxon as a subspecies of *A. flavomarginatum* (Smith). Comparing specimens of *A. townesi* with the typical subspecies, characters that allow to consider *A. townesi* as a distinct species were found [characters of *A. flavomarginatum* in square brackets]: apical margin of clypeus of female truncate with apical teeth more rounded [apical margin weakly emarginated and teeth more pointed laterally], apical punctures of clypeus confluing in shallow irregular striae [punctures not confluing], apical emargination of clypeus of male broader and deeper with more acutely pointed teeth (Fig. 8) [apical emargination shorter and shallow with more rounded teeth], female fovea with dense brown hairs [fovea without hairs], transverse carina of metanotum weak and not forming two perpendicular faces [transverse carina well developed], dorsal carinae of propodeum indistinct and not forming a tooth (Fig. 7) [dorsal carinae of propodeum distinct and forming tooth], posterior face of propodeum more finely and densely striate [largely smooth], punctures smaller and deeper on mesoscutum, scutellum, dorsal faces of propodeum and metasoma [punctures larger and shallower], whole body covered in dense black pubescence [without pubescence], wings orange with black basal half [wings strongly fuscous with purplish reflections], apex of aedeagus not expanded and parallel sided (Fig. 10) [apex of aedeagus expanded].

Description of male. Body length 9–11 mm.
Almost identical to female, from which it differs by: apical margin of clypeus emarginated, distance between apical teeth as large as distance between antennal insertions, emargination 3.4× as wide as deep (Fig. 8), F11 hook-shaped, weakly curved and obliquely truncate at apex, almost reaching base of F9 (Fig. 9), clypeus yellow with black margin and apical fifth, scape reddish-brown with yellow line on ventral face.

Figs 5-10 – *Anterhynchium townesi* van der Vecht, 1963. **5**, habitus, ♀; **6**, metasoma, dorsal view, ♀; **7**, mesosoma, postero-dorsal view, ♀; **8**, head, anterior view, ♂; **9**, antennal apex, lateral view, ♂; **10**, aedeagus, ventral view.

Distribution. Philippine Islands: Luzon (van der Vecht 1963). First records from Mindanao and Mindoro.

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