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DESCRIPTION OF *ANTEON SERAMENSE* (HYMENOPTERA: DRYINIDAE), A NEW SPECIES FROM INDONESIA

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ABSTRACT

Anteon seramense **sp. nov.** is described from Seram Island (Indonesia). Seram is an island situated in a transition area between the Oriental and the Australian regions. *Anteon seramense* can be distinguished from the related Australian species *A. giluwense* Olmi and *A. chelogyroides* (Perkins) by the different sculpture of the scutum (granulated in *A. seramense*, punctate and unsculptured among punctures in *A. giluwense* and *A. chelogyroides*) and the different distal apex of the protarsal segment 5 (deeply hollow in *A. seramense*, not hollow in *A. giluwense* and *A. chelogyroides*). *Anteon seramense* **sp. nov.** can be distinguished from the related Oriental species *A. heppneri* Olmi and *A. thai* Olmi by the different shape of the protarsal segment 5 (basal part slightly longer than distal part in *A. seramense*, much longer in *A. heppneri* and *A. thai*).

Key Words: Taxonomy, Seram Island, Oriental region, Australian region, Chrysoidea

RESUMEN

Una nueva especie, *Anteon seramense*, es descrita para la Isla Seram (Indonesia). Seram es una isla situada en el área de transición entre las regiones Oriental y Australiana. *A. seramense* puede ser reconocida de las especies australianas más cercanas (*A. giluwense* Olmi y *A. chelogyroides* (Perkins)) por la escultura diferente en el escudo (granulada en *A. seramense*, y puntuada pero sin escultura entre las puntuaciones en *A. giluwense* y *A. chelogyroides*) y diferencias en el ápice distal del segmento 5 del protarso (profundamente cóncavo en *A. seramense*, y no cóncavo en *A. giluwense* y *A. chelogyroides*). *A. seramense* puede ser diferenciada de las especies orientales más cercanas (*A. heppneri* Olmi y *A. thai* Olmi) por la forma diferente del segmento 5 del protarso (la parte basal ligeramente más larga que la distal en *A. seramense*, y mucho más larga en *A. heppneri* y *A. thai*).

Palabras Clave: Taxonomía, Isla Seram, región Oriental, región Australiana, Chrysoidea

Translation provided by the authors.

Dryinidae (Hymenoptera: Chrysoidea) are parasitoids of Hemiptera Auchenorrhyncha (Guglielmino & Olmi 1997, 2006, 2007). They are widely distributed in the world. The biology of this small group of wasps is still poorly known (Guglielmino & Bückle 2003, 2010; Guglielmino et al. 2006; Guglielmino & Virla 1998).

Anteon Jurine 1807 is present in all zoogeographical regions. About 422 species have been described from all continents (Xu et al. 2013). The genus was revised by Olmi (1984, 1991), for the Australian region, and by Xu et al. (2013), for the Oriental region. One hundred and forty-eight species of *Anteon* are known from the Oriental region (Xu et al. 2013) and 75 from the Australian region (unpublished data). The species were studied in the last 20 yr mainly by Olmi (1993,

1998, 2010, 2011), in the Australian region, and Xu et al. (2012a,b, 2013), in the Oriental region. In 2012, we have examined additional specimens of *Anteon* from Indonesia and have found the new species described herein.

MATERIAL AND METHODS

The descriptions follow the terminology used by Olmi (1984), Olmi & Guglielmino (2010) and Xu et al. (2011, 2013). The measurements reported are relative, except for the total length (head to abdominal tip, without the 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 specimen studied in this paper is deposited in the collection of the Natural History Museum of London, UK (BMNH).

Anteon seramense sp. nov. (Fig. 1)

Description

Holotype female. Fully winged. Length 3.1 mm. Head black, except mandible testaceous and clypeus brown; antenna testaceous; mesosoma black; metasoma brown; legs testaceous. Antenna clavate; antennal segments in following proportions: 13:6:6:6:6:6:6:9. Head convex, dull, covered with short hairs (dense between antennal toruli), completely reticulate rugose; frontal line complete; frons with two lateral keels situated around orbits and directed towards antennal toruli; occipital carina complete; POL = 5; OL = 3; OOL = 4; OPL = 6; TL = 5; greatest breadth of posterior ocelli about as long as OL. Pronotum hairy, anteriorly crossed by slight transverse impression, shiny, rugose, except posterior half of posterior surface smooth and unsculptured; pronotal tubercle reaching tegula; posterior surface of pronotum shorter than scutum (9:15). Scutum dull, granulated and with few weak irregular keels. Notauli incomplete, reaching approximately $0.5 \times$ length of scutum. Scutellum shiny, smooth, unsculptured. Metanotum rugose. Propodeum with strong transverse

keel between dorsal and posterior surface; dorsal surface dull, reticulate rugose; posterior surface with two complete longitudinal keels, median area almost completely smooth, shiny and unsculptured and lateral areas reticulate rugose. Forewing hyaline, without dark transverse bands; distal part of stigmal vein much shorter than proximal part (3:9). Protarsal segments in following proportions: 9:3:4:5:15. Enlarged claw (Fig. 1) with proximal prominence bearing 1 long bristle. Segment 5 of protarsus (Fig. 1) with inner side almost rectilinear, basal part slightly longer than distal part (8:7), with one row of approximately 15 lamellae; distal apex with deep furrow evident in ventral view (this furrow contains the distal apex of the enlarged claw when the chela is closed) and about 5 lamellae. Tibial spurs 1/1/2.

Male

Unknown.

Material examined:

HOLOTYPE: Female, INDONESIA, Maluku Islands, Seram Island, Solea, Uncarya, viii. 1987, Malaise trap, M.C. Day (BMNH).

Etymology

The specific name derives from Seram Island.

Remarks.

Seram Island is in a transition area between the Australian and the Oriental regions, so that the new species has to be included in both zoogeographical regions. In the Australian region, *Anteon seramense* is similar to *A. giluwense* Olmi, 1984, and *A. chelogyoides* (Perkins, 1905). The main differences are in the sculpture of the scutum (granulated in *A. seramense*, punctate and unsculptured among punctures in *A. giluwense* and *A. chelogyoides*), the different distal apex of the protarsal segment 5 (deeply hollow in *A. seramense*, not so hollow in *A. giluwense* and *A. chelogyoides* (Figs. 335 and 336 in Olmi 1984)) and the shape of the protarsal segment 5 (basal part slightly longer than distal part in *A. seramense*, much longer in *A. giluwense* and *A. chelogyoides* (Figs. 335 and 336 in Olmi 1984)). In the Oriental region, *A. seramense* is similar to *A. heppneri* Olmi, 1992, and *A. thai* Olmi 1984. The main differences are in the shape of the protarsal segment 5 (basal part slightly longer than distal part in *A. seramense*, much longer in *A. heppneri* (Fig. 1 in Olmi 1992) and *A. thai* (Fig. 261 in Olmi 1984)).

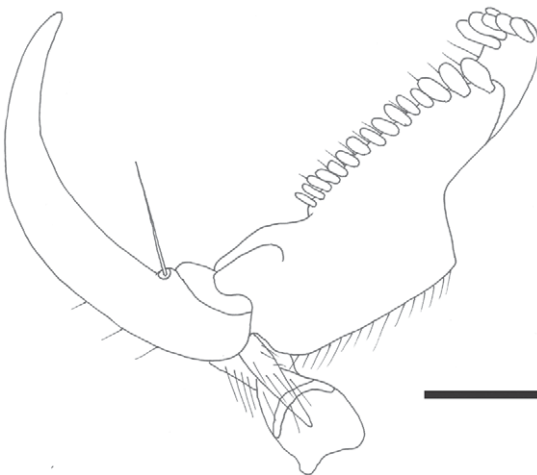


Fig. 1. Chela of holotype of *Anteon seramense* sp. nov. Scale bar: 0.10 mm.

THE KEY TO THE FEMALES OF THE AUSTRALIAN SPECIES OF *ANTEON* PUBLISHED BY OLMÍ (1984) CAN BE MODIFIED TO INCLUDE *A. SERAMENSE* BY REPLACING COUPLET 3 AS FOLLOWS:

3. Distal apex of segment 5 of protarsus in ventral view deeply hollowed to receive distal apex of enlarged claw (Fig. 1); basal part of segment 5 of protarsus slightly longer than distal part (Fig. 1); scutum granulated, not punctate *A. seramense* **sp. nov.**
- Distal apex of segment 5 of protarsus not hollowed (Figs 335, 336 in Olmi 1984); basal part of segment 5 of protarsus much longer than distal part (Figs 335, 336 in Olmi 1984); scutum punctate, unsculptured among punctures 3'
- 3'. Posterior surface of propodeum with median area dull, rugose *A. giluwense* Olmi
- Posterior surface of propodeum with median area smooth, shiny, not rugose *A. chelognoides* (R. Perkins)

THE KEY TO THE FEMALES OF THE ORIENTAL SPECIES OF *ANTEON* PUBLISHED BY XU ET AL. (2013) CAN BE MODIFIED TO INCLUDE *A. SERAMENSE* BY REPLACING COUPLET 22 AS FOLLOWS:

22. Scutum strongly punctate and granulated or not among punctures; punctures very wide, similar to areolae 23
- Scutum finely punctate, smooth, unsculptured among punctures; rarely with few areolae laterally 24
23. Segment 5 of protarsus with basal part slightly longer than distal part (Fig. 1) *A. seramense* **sp. nov.**
- Segment 5 of protarsus with basal part much longer than distal part (Plates 28A, 47C in Xu et al. 2013) 23'
- 23'. Scutum strongly punctate, granulated among punctures *A. heppneri* Olmi
- Scutum finely punctate or strongly punctate and with very wide impressions similar to areolae, not granulated among punctures *A. thai* Olmi

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REFERENCES CITED

- GUGLIELMINO, A., AND BÜCKLE, C. 2003. Description of larval instars of *Neodryinus typhlocybae* (Ashmead, 1893) (Hymenoptera Dryinidae), with remarks on its biology. Mitt. Mus. Naturk. Berlin-D. Entomol. Zeit. 50(1): 143-150.
- GUGLIELMINO, A., AND BÜCKLE, C. 2010. Description of larval instars of *Mystrophorus formicaeformis* Ruthe (Hymenoptera: Dryinidae). Zootaxa 2602: 57-66.
- GUGLIELMINO, A., BÜCKLE, C., AND MOYA-RAYGOZA, G. 2006. Description of the larval instars of *Gonatopus bartletti* Olmi, 1984 (Hymenoptera: Dryinidae). Zootaxa 1226: 51-60.
- GUGLIELMINO, A., AND OLMÍ, M. 1997. A host-parasite catalog of world Dryinidae (Hymenoptera: Chrysidoidea). Contrib. Entomol., Intl. 2(2): 165-298.
- GUGLIELMINO, A., AND OLMÍ, M. 2006. A host-parasite catalog of world Dryinidae (Hymenoptera: Chrysidoidea): first supplement. Zootaxa 1139: 35-62.
- GUGLIELMINO, A., AND OLMÍ, M. 2007. A host-parasite catalog of world Dryinidae (Hymenoptera: Chrysidoidea): second supplement. Boll. Zool. Agr. Bachic., Ser. ii, 39: 121-129.
- GUGLIELMINO, A., AND VIRLA, E.G. 1998. Postembryonic development of *Gonatopus lunatus* Klug (Hymenoptera: Dryinidae: Gonatopodinae), with remarks on its biology. Ann. Soc. entomol. France (N. S.) 34(3): 321-333.
- JURINE, L. 1807. Nouvelle méthode de classer les Hyménoptères et les Diptères, 1. Hyménoptères. Paschoud, Genève, Switzerland: 319 pp.
- OLMÍ, M. 1984. A revision of the Dryinidae (Hymenoptera). Mem. Amer. Entomol. Inst. 37: 1-1913.
- OLMÍ, M. 1991. Supplement to the revision of the world Dryinidae (Hymenoptera: Chrysidoidea). Frustula entomol. (1989), N. S. 12: 109-395.
- OLMÍ, M. 1992. New Dryinidae from Sulawesi and Taiwan (Hymenoptera: Chrysidoidea). Oriental Insects 26: 185-194.
- OLMÍ, M. 1993. Descriptions of new taxa of Dryinidae (Hymenoptera Chrysidoidea). Frustula entomol. (1992), N. S. 15: 19-62.
- OLMÍ, M. 1998. New Embolemidae and Dryinidae (Hymenoptera Chrysidoidea). Frustula entomol. (1997), N. S. 20: 30-118.
- OLMÍ, M. 2010. A contribution to the knowledge of Dryinidae from the Oriental, Nearctic, Neotropical

- and Australian regions (Hymenoptera Chrysidoidea). *Frustula entomol.* (2008), N. S. 31: 11-34.
- OLMI, M. 2011. A contribution to the knowledge of world Dryinidae (Hymenoptera Chrysidoidea). *Frustula entomol.* (2009), N. S. 32: 43-76.
- OLMI, M., AND GUGLIELMINO, A. 2010. Description of *Erwiniinae*, new subfamily of Dryinidae from Ecuador (Hymenoptera: Chrysidoidea). *Zootaxa* 2605: 56-62.
- PERKINS, R. C. L. 1905. Leafhoppers and their natural enemies (Pt. I. Dryinidae). Rept. Work Exp. Station Hawaiian Sugar Planters' Assoc., Div. Entomol. Bull. No. 1(I): 1-69.
- XU, Z., OLMÍ, M., GUGLIELMINO, A., AND CHEN, H. 2011. A new species of Dryinidae (Hymenoptera: Chrysidoidea) from China. *Florida Entomol.* 94(4): 848-852.
- XU, Z., OLMÍ, M., GUGLIELMINO, A., AND CHEN, H. 2012a. Checklist of Dryinidae (Hymenoptera) from Shaanxi Province, China, with descriptions of two new species. *Zootaxa* 3164: 1-16.
- XU, Z., OLMÍ, M., GUGLIELMINO, A., AND CHEN, H. 2012b. Checklist of Dryinidae (Hymenoptera) from Guangdong Province, China, with descriptions of two new species. *Zootaxa* 3231: 1-28.
- XU, Z., OLMÍ, M., AND HE, J. 2013. Dryinidae of the Oriental region (Hymenoptera: Chrysidoidea). *Zootaxa* 3614: 1-460.