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Description of *Dryinus laotianus* (Hymenoptera: Dryinidae), a new species from Laos

Massimo Olmi^{1,*}, Zaifu Xu², and Adalgisa Guglielmino³

Abstract

Dryinus laotianus sp. nov. is described from Hua Phan Province (Laos). *Dryinus laotianus* can be distinguished from the related Oriental species *D. mansus* Olmi and *D. stantoni* Ashmead by the different sculpture of the scutum (punctate and unsculptured among punctures in *D. laotianus*; granulated or partly reticulate rugose in *D. stantoni*; completely reticulate rugose in *D. mansus*).

Key Words: taxonomy, Hua Phan Province, Oriental Region, Chrysoidea

Resumen

Se describe la nueva especie *Dryinus laotianus*, obtenida en la provincia de Hua Phan (Laos). *D. laotianus* puede ser diferenciada de las especies orientales más cercanas (*D. mansus* Olmi y *D. stantoni* Ashmead) por la escultura diferente en el escudo (puntuada pero sin escultura entre las puntuaciones en *D. laotianus*; granulada o bien en parte rugosa en *D. stantoni*; completamente rugosa en *D. mansus*).

Palabras Clave: Taxonomía, Provincia de Hua Phan, región Oriental, Chrysoidea

Translation provided by the authors.

Dryinidae (Hymenoptera: Chrysoidea) are parasitoids of Hemiptera Auchenorrhyncha. The biology of this small group of wasps is still poorly known (Guglielmino & Bückle 2003, 2010; Guglielmino et al. 2006; Guglielmino & Virla 1998).

The genus *Dryinus* Latreille 1804 is present in all zoogeographical regions. About 293 species have been described from all continents (Guglielmino & Olmi 2013, 2014; Olmi et al. 2011; Olmi & Guglielmino 2011; Olmi & Virla 2014).

The genus was revised at first at world level by Olmi (1984, 1991), more recently by Xu et al. (2013) for the Oriental region and by Olmi & Virla (2014) for the Neotropics. Forty seven species of *Dryinus* are known from the Oriental region (Xu et al. 2013). In 2014, we examined additional specimens of *Dryinus* from Laos and found the new species described herein.

Materials and Methods

The descriptions follow the terminology used by Olmi (1984), Olmi & Guglielmino (2010) and Xu et al. (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 material

studied in this paper is deposited in the collection of the Oberösterreichisches Landesmuseum, Linz, Austria (OLL).

Results

Dryinus laotianus sp. nov. (Figs. 1 and 2)

Description

Holotype female. Fully winged. Length 6.0 mm. Head black, except mandible, clypeus, gena, face near clypeus and shortly along orbits, ventral side of head around mouth ferruginous; antenna testaceous; mesosoma black, except lateral margins and posterior collar of pronotum testaceous; metasoma brown; legs testaceous, except distal extremities of tibiae darkened, part of metacoxa and outer side of club

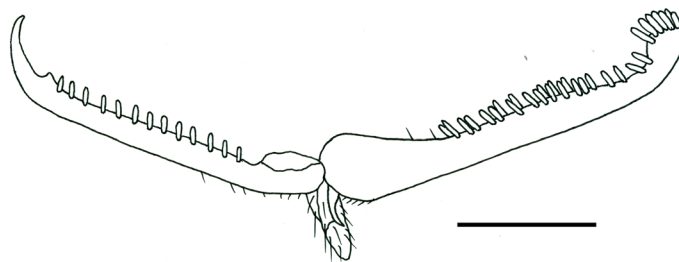


Fig. 1. Chela of holotype of *Dryinus laotianus* sp. nov. Scale bar 0.24 mm.

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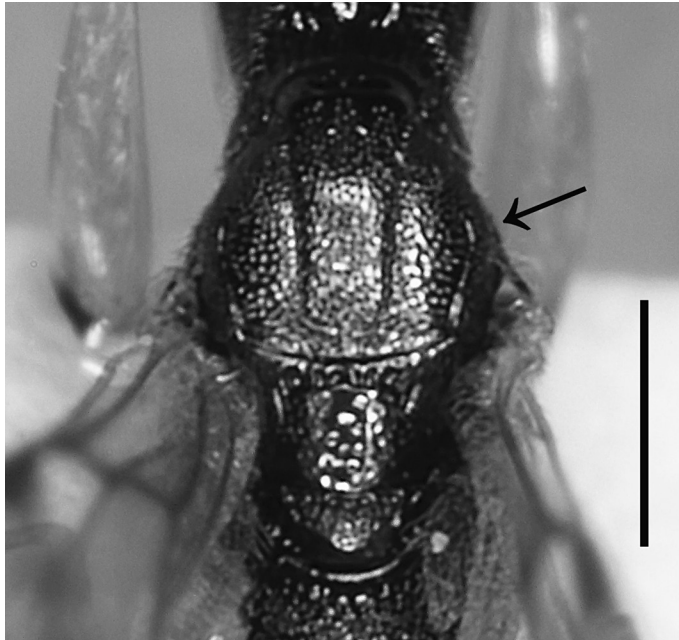


Fig. 2. Part of mesosoma of holotype of *Dryinus laotianus* sp. nov. (scutum indicated by an arrow). Scale bar 0.56 mm.

of metafemur brown. Antenna clavate; antennal segments in following proportions: 10:6:50:27:22:10:8:7:6:9; rhinaria present on segments 5–10. Head slightly swollen, shiny, strongly punctate and sculptured by irregular striae; frontal line complete; occipital carina complete; POL = 3; OL = 4; OOL = 8; OPL = 2; TL = 8; greatest breadth of posterior ocelli about as long as POL. Pronotum shiny, punctate, unsculptured among punctures, with some longitudinal keels on lateral regions and posterior transverse furrow, crossed by two transverse impressions, anterior impression very weak and posterior one strong; disc humped; posterior collar short; pronotal tubercle not reaching tegula. Scutum (Fig. 2) shiny, punctate, unsculptured among punctures, strongly punctate near posterior margin. Notauli incomplete, reaching about 0.9 length

of scutum. Scutellum and metanotum shiny, punctate, unsculptured among punctures. Metapleura dull, rugose. Propodeum dull, reticulate rugose, without longitudinal keels on posterior surface; dorsal surface more than twice as long as posterior surface (35:15). Fore wing with two dark transverse bands; distal part of stigmal vein longer than proximal part (23:7). Protarsal segments in following proportions: 28:3:7:22:32. Segment 3 of protarsus produced into hook. Enlarged claw (Fig. 1) with one strong subapical tooth and one row of 13 lamellae. Segment 5 of protarsus (Fig. 1) with two rows of 23 lamellae; distal apex with about 19 lamellae. Tibial spurs 1/1/2. Male: Unknown.

Type material

HOLOTYPE 1 female, LAOS: Hua Phan Province, Phou Pan, Ban Saleui, 20° 13' 30" N 103° 59' 26" E, 1350–1900 m, 28.VI.2013, C. Holzschuh and locals (OLL).

Etymology

The specific name derives from Laos.

Remarks

The characters distinguishing the new species are the following: head and mesosoma partly black or brown; antennal segments 4–5 not broader than other segments; posterior ocelli not touching occipital carina; pronotum partly black, humped, with distinct posterior collar; scutum punctate, unsculptured among punctures; metapleuron without shiny and unsculptured area; dorsal surface of propodeum more than twice as long as posterior surface; segment 1 of protarsus slightly longer than segment 4. *D. laotianus* is close to *D. stantoni* Ashmead 1904 and *D. mansus* Olmi 1992. The main differences among these three species regards the sculpture of the scutum (punctate and unsculptured among punctures in *D. laotianus*; completely reticulate rugose in *D. mansus*; granulated and occasionally with posterior surface reticulate rugose in *D. stantoni*). Following the description of *D. laotianus*, the key to the females of the Oriental species of *Dryinus* published by Xu et al. (2013) can be modified by replacing couplet 27 as follows:

- 27. Scutum punctate, unsculptured among punctures (Fig. 2) *D. laotianus* sp. nov.
- Scutum granulated or completely or partly reticulate rugose 27'
- 27'. Scutum completely granulated, or at most with posterior surface reticulate rugose *D. stantoni* Ashmead
- Scutum completely reticulate rugose *D. mansus* Olmi

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