Description of Dryinus laotianus (Hymenoptera: Dryinidae), a New Species from Laos

Authors: Olmi, Massimo, Xu, Zaifu, and Guglielmino, Adalgisa

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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, Chrysidoidea

**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 més 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, Chrysidoidea

**Translation provided by the authors.**

Dryinidae (Hymenoptera: Chrysidoidea) 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

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†Tropical Entomology Research Center, Via De Gasperi 10, Viterbo, 01100 Italy
‡Department of Entomology, South China Agricultural University, Guangzhou, Guangdong 510640, P. R. China
§Department of Agriculture, Forests, Nature and Energy, University of Tuscia, Viterbo, 01100 Italy
*Corresponding author; E-mail: olmi@unitus.it

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Fig. 1. Chela of holotype of *Dryinus laotianus* sp. nov. Scale bar 0.24 mm.
of scutum. Scutellum and metanotum shiny, punctate, unsculptured among punctures. Metapleurae 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° 26’ 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; metapleurum 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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References Cited

Ashmead WH. 1904. Descriptions of new genera and species of Hymenoptera from the Philippine Islands. Proceedings of the United States National Museum 28: 127-158.

Guglielmino A, Bückle C. 2003. Description of larval instars of Neodyrinus typshocybae (Ashmead, 1893) (Hymenoptera Dryinidae), with remarks on its biology. Mitteilungen aus dem Museum für Naturkunde in Berlin - Deutsche Entomologische Zeitschrift 50: 143-150.

Guglielmino A, Bückle C. 2010. Description of larval instars of Mystrophorus formicaeformis Ruthe (Hymenoptera: Dryinidae). Zootaxa 2602: 57-66.

Guglielmino A, Bückle C, Moya-Raygoza G. 2006. Description of the larval instars of Gonatopus bartletti Olmi, 1984 (Hymenoptera: Dryinidae). Zootaxa 1226: 51-60.

Guglielmino A, Olmi M, Bückle C. 2013. An updated host-parasite catalogue of world Dryinidae (Hymenoptera: Chrysidioidea). Zootaxa 3740: 1-113.

Guglielmino A, Olmi M. 2013. Revision of the extant Nearctic species of Dryinus Latreille 1804 group 1 (Hymenoptera: Dryinidae), with description of a new species from the USA. Zootaxa 3691 (5): 577-590.

Guglielmino A, Olmi M. 2014. Description of a new species of Dryinus Latreille from Madagascar. Journal of the Kansas Entomological Society 87: 265-268.

Guglielmino A, Virla EG. 1998. Postembryonic development of Mystrophorus formicaeformis Ruthe (Hymenoptera: Dryinidae). Zootaxa 2602: 57-66.

Guglielmino A, Olmi M, Bückle C. 2013. An updated host-parasite catalogue of world Dryinidae (Hymenoptera: Chrysidioidea). Zootaxa 3691 (5): 577-590.

Guglielmino A, Olmi M. 2014. Description of a new species of Dryinus Latreille from Madagascar. Journal of the Kansas Entomological Society 87: 265-268.

Guglielmino A, Virla EG. 1998. Postembryonic development of Mystrophorus formicaeformis Ruthe (Hymenoptera: Dryinidae). Zootaxa 2602: 57-66.
Olmi M. 1992. New Dryinidae from Sulawesi and Taiwan (Hymenoptera: Chrysidoidea). Oriental Insects 26: 185-194.
Olmi M, Guglielmino A. 2010. Description of Erwiniinae, new subfamily of Dryinidae from Ecuador (Hymenoptera: Chrysidoidea). Zootaxa 2605: 56-62.
Olmi M, Guglielmino A. 2011. Revision of fossil species of Dryinus belonging to lamellatus group, with description of a new species (Hymenoptera, Dryinidae). ZooKeys 130: 505-514.

Olmi M, Guglielmino A, Vollaro M. 2011. Revision of fossil species of Dryinus belonging to constans group, with description of a new species (Hymenoptera: Dryinidae). Zootaxa 2981: 43-55.
Olmi M, Virla EG. 2014. Dryinidae of the Neotropical Region (Hymenoptera: Chrysidoidea). Zootaxa 3792 (1): 1-534.
Xu Z, Olmi M, He J. 2013. Dryinidae of the Oriental region (Hymenoptera: Chrysidoidea). Zootaxa 3614 (1): 1-460.