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

Source: Florida Entomologist, 96(4) : 1556-1558

Published By: Florida Entomological Society

URL: https://doi.org/10.1653/024.096.0438
FIRST SUPPLEMENT TO THE MONOGRAPH OF THE ORIENTAL DRYINIDAE (HYMENOPTERA: CHRYSIDOIDEA): DESCRIPTION OF NEODRYINUS LOHMANI, A NEW SPECIES FROM THAILAND

MASSIMO OLMI1*, ZAIFU XU2 & ADALGISA GUGLIELMINO3
1Tropical Entomology Research Center, Via De Gasperi 10, I-01100 Viterbo, Italy
2College of Natural Resources and Environment, South China Agricultural University, Guangzhou, Guangdong 510640, P.R. China
3Department of Agriculture, Forests, Nature and Energy, University of Tuscia, Via San Camillo de Lellis, I-01100 Viterbo, Italy

*Corresponding author; E-mail: olmi@unitus.it

ABSTRACT

Neodryinus lohmani sp. nov. is described from Thailand. Neodryinus lohmani can be distinguished from the related Oriental species N. phuphayonensis Olmi by the different shape of the dorsal process of paramere (scythe-shaped in N. lohmani; not scythe-shaped in N. phuphayonensis).

Key Words: Taxonomy, Trang Province, Oriental region, Gonatopodinae, key

RESUMEN

Se describe una nueva especie, Neodryinus lohmani, para la Tailandia. N. lohmani puede ser reconocida de la especie oriental más cercana (N. phuphayonensis Olmi) por el aspecto diferente del proceso dorsal del parámero (falciforme en N. lohmani; no falciforme en N. phuphayonensis).

Palabras Clave: Taxonomía, Provincia de Trang, región Oriental, Gonatopodinae, clave

Dryinidae are parasitoids of Hemiptera Auchenorrhyncha (Guglielmino & Bückle 2010; Guglielmino et al. 2006; Guglielmino & Olmi 2013; Guglielmino & Virla 1998).

The genus Neodryinus Perkins 1905 is distributed in all zoogeographical regions (Olmi 1984) and contains 50 species, among which 18 are known from the Oriental region (Olmi 1984, 1991, 1995, 1998, 2008, 2011; Xu et al. 2003, 2013; Xu & He 1996, 1997).

The species of Neodryinus are known as parasitoids of Flatidae, Nogodinidae and Ricaniidae (Guglielmino & Bückle 2003; Guglielmino & Olmi 2013; Xu et al. 2013).

In 2013, after the publication of the monograph by Xu et al. (2013), a specimen of Neodryinus collected in Thailand, Trang Province, was studied, resulting in the new species described below.

MATERIAL AND METHODS

The descriptions follow the terminology of Olmi (1984), Olmi & Guglielmino (2010) and Xu et al. (2011, 2012a, 2012b, 2013). The measurements reported are relative, except for the total length (head to abdominal tip, excluding the antennae), which is expressed in millimetres. In the descriptions POL is the distance between the inner edges of the 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 compound eye; and TL is the distance from the posterior edge of an eye to the occipital carina.

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

Neodryinus lohmani sp. nov. (Fig. 1)

Description

HOLOTYPE male. Fully winged. Length 3.0 mm (paratype 2.8 mm). Head black, except mandible partly testaceous; antenna brown-testaceous, except scape and pedicel testaceous;
mesosoma black; metasoma brown; legs brown, except protibia and protarsus testaceous and first segment of meso- and metatarsus whitish. Antenna filiform; antennal segments in following proportions: 5:4:12:10:9:10:9:7:8. Head granulated and reticulate rugose; frontal line incomplete, shortly present in front of median ocellus; occipital carina absent; temple absent; POL = 7; OL = 2; OOL = 4; greatest breadth of lateral ocellus longer than OL (2.5:2). Scutum dull, granulated. Notauli complete, posteriorly separated; minimum distance between notauli shorter than POL (4:7); in holotype, notauli hardly visible near posterior margin of scutum. Scutellum granulated. Metanotum unsculptured. Propodeum dull, reticulate rugose; dorsal region with two lateral large areolae sculptured by longitudinal keels. Forewing hyaline, without dark transverse bands; distal part of stigmal vein longer than proximal part (15:12). Paramere (Fig. 1) with long, sharp, regularly curved and slightly scythe-shaped distal dorsal process.

Female

Unknown.

Material examined:

| No. | Distal part of stigmal vein longer than proximal part; dorsal process of paramere regularly bent, slightly scythe-shaped (Fig. 1) | Neodryinus lohmani Olmi, Xu & Guglielmino sp. nov. |
|-----|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| —   | Distal part of stigmal vein about as long as proximal part; dorsal process of paramere twisted (Figs. 2 and 3) | N. phuphayonensis Olmi 2008 and N. javanus Roepke 1916. The main difference among these 3 species is the shape of the dorsal process of the paramere: regularly curved and slightly scythe-shaped in N. lohmani (Fig. 1), twisted and not scythe-shaped in N. phuphayonensis (Fig. 2 and N. javanus (Fig. 3)). Following the description of N. lohmani, the key to the males of the Oriental species of Neodryinus published by Xu et al. (2013) can be modified as follows: |
7. Dorsal process of paramere with medial and distal apexes rounded (Fig. 3); frontal line present between antennal toruli .................................................. N. javanus (Roepke)

—. Dorsal process of paramere with medial and distal apexes sharp (Fig. 2); frontal line absent ......................................................................... N. phuphayonensis Olmi

ACKNOWLEDGMENTS

Many thanks to Dr. Martin Schwarz (OLL) for the loan of the specimens studied in the present paper.

REFERENCES CITED

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

GUGLIELMINO, A., BUCKLE, 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 OLMI, M. 2013. An updated host-parasite catalog of world Dryinidae (Hymenoptera: Chrysidoidea). Zootaxa. In press.

OLMI, M. 2008. Descriptions of new species of Dryinidae (Hymenoptera: Chrysidoidea) from Thailand. Oriental Insects 42: 227-235.

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. 1905. Leafhoppers and their natural enemies (Pt. I. Dryinidae). Rept. Work Exp. Sta. Hawaiian Sugar Planters’ Assoc., Div. Entomol. Bull. No. 1(I): 1-69.

ROEPKE, W. 1916. Eine neue Dryinide aus Java (Phanerodryinus javanus n. g. n. sp.). Tijd. Entomol. 59: 287-292.

XU, Z., AND HE, J. 1996. A new species of the genus Neodryinus (Hymenoptera: Dryinidae). Zool. Res. 7: 30-32.

XU, Z., AND HE, J. 1997. Two new species of the genus Neodryinus from China (Hymenoptera: Dryinidae). Acta Zootax. Sinica 22(4): 414-417.

XU, Z., OLMI, M., GUGLIELMINO, A., AND CHEN, H. 2011. A new species of Dryinidae (Hymenoptera: Chrysidoidea) from China. Florida Entomol. 94(4): 848-852.

XU, Z., OLMI, 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., OLMI, 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., OLMI, M. & HE, J. 2003. Three new species of Dryinidae from China (Hym., Chrysidoidea). Entomol. Monthly Mag. 139: 233-236.

XU, Z., OLMI, M., AND HE, J. 2013. Dryinidae of the Oriental region (Hymenoptera: Chrysidoidea). Zootaxa 3614: 1-460.