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

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A NEW SPECIES OF DRYINIDAE (HYMENOPTERA: CHRYSIDOIDEA) FROM CHINA

ZAIFU XU[1], MASSIMO OLMI[2], ADALGISA GUGLIELMINO[2] AND HUAYAN CHEN[1]
[1]College of Nature Resources and Environment, South China Agricultural University, Guangzhou, Guangdong 510642, P.R. China

[2]Department of Plant Protection, University of Tuscia, I-01100 Viterbo, Italy

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ABSTRACT

Dryinidae (Hymenoptera: Chrysidoidea) are parasitoids of Hemiptera Auchenorrhyncha. The genus *Dryinus* Latreille, 1804, is present in all zoogeographical regions and about 242 species have been described. *Dryinus anotaulicus* **sp. nov**. is described from Jiujialing, Baisha County (Hainan Province, China). A check-list of Dryinidae from Hainan Province, China, is presented, and is accessible online at Supplementary material http://www.fcla.edu/FlaEnt/fe944.htm#InfoLink2.

Key Words: Dryinidae, *Dryinus anotaulicus*, new species, Hainan, China

RESUMEN

Los Dryinidae (Hymenoptera: Chrysidoidea) son parasitoides de Hemiptera Auchenorrhyncha. El género *Dryinus* Latreille, 1804, está representado en todas las regiones zoogeográficas y contiene 242 especies descritas. Se describe por primera vez a *Dryinus anotaulicus* **sp. nov.**, colectado en Jiujialing, Condado de Baisha (Hainan Province, China), y se provee una lista de los Dryinidae de la Provincia de Hainan, China. Esta es accesible como material suplementario en la versión en linea de este artículo en http://www.fcla.edu/FlaEnt/fe944.htm#InfoLink1.

Translation provided by the authors.

Dryinidae (Hymenoptera: Chrysidoidea) are parasitoids of Hemiptera Auchenorrhyncha (Guglielmino & Olmi 1997, 2006, 2007). *Dryinus* Latreille 1804, is found in all zoogeographical regions. About 242 species have been described (Olmi 1999) and the genus was revised by Olmi (1984, 1991, 1993a).

The species of *Dryinus* from China were studied mainly by He & Xu (2002), Xu & He (1994a, 1994b, 1998), Xu et al. (2006, 2007, 2008), Yang (1994) and Yang & Ma (1995).

In 2011 the authors examined additional specimens of *Dryinus* from Hainan Province, China, and have found one new species described herein. The study of the above new material gave the opportunity to present a checklist of Dryinidae from Hainan Province. The checklist is accessible online at Supplementary material http://www.fcla.edu/FlaEnt/fe944.htm#InfoLink2

MATERIALS AND METHODS

The descriptions follow the terminology used by Olmi (1984, 1994, 1999) and He & Xu (2002). The measurements reported are relative, except for the total length (head to abdominal tip, without the antennae). In the descriptions, POL is the distance between the inner edges of the two 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; TL is the distance from the posterior edge of an eye to the occipital carina.

The types of all Oriental species of *Dryinus* were examined.

The material studied in this paper and that in the checklist (Supplementary material http://www.fcla.edu/FlaEnt/fe944.htm#InfoLink2) is deposited in the following collections:

AEIC American Entomological Institute, Gainesville, Florida, USA.

AMNH American Museum of Natural History, New York, USA.

BMNH The Natural History Museum, London, United Kingdom.

BPBM Bernice P. Bishop Museum, Honolulu, Hawaii, USA.

CNC Canadian National Collection of Insects, Ottawa, Canada.

DEI Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany.

ELKU Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka, Japan.

KYC Keizo Yasumatsu's collection, Oonojoshi, Japan.

MCZ Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, USA.

NMNH National Museum of Natural History, Budapest, Hungary.

OLM Department of Plant Protection, University of Tuscia, Viterbo, Italy (Massimo Olmi's collection).

PMA Provincial Museum of Alberta, Edmonton, Alberta, Canada.

RNHL Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands.

SCAU Hymenopteran Collection of South China Agricultural University, Department of Entomology, Guangzhou, Guangdong Province, P.R. China.

TARI Taiwan Agricultural Research Institute (TARI), Department of Applied Zoology, Wufeng, Taichung Hsien, Taiwan.

USNM National Museum of Natural History, Washington, DC, USA.

ZISP Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia.

ZJUC Department of Plant Protection, Zhejiang University, Hangzhou, Zhejiang Province, P.R. China.

ZMK Zoologisk Museum, Kobenhavn, Denmark.

Systematic Accounts

Dryinus anotaulicus **sp. nov.** (Fig. 1)

Material examined: Holotype: Female, CHINA, Hainan Province, Baisha County, Jiujialing, 17-20.VII.2010, Huayan Chen coll. (SCAU).

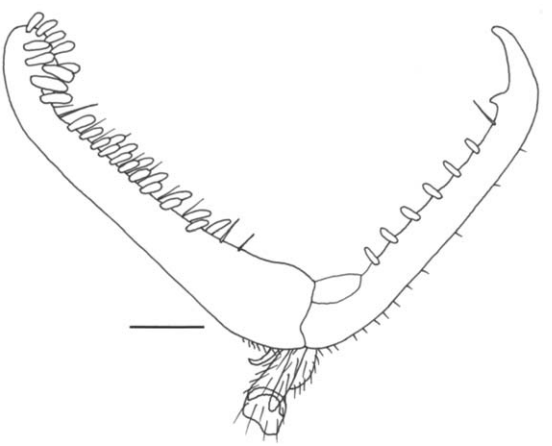

Fig. 1. Chela of holotype of *Dryinus anotaulicus* sp. nov. Scale bar 0.09 mm.

Diagnosis. Female of *Dryinus* without notauli and with enlarged claw not reduced, much longer than arolium, with one only subapical tooth and one row of lamellae, without a broad apical lamella. Because of the above characters, the new species should be included in group 2, according to the systematics of *Dryinus* proposed by Olmi (1993a); see remarks.

Description. Holotype female: Macropterous. Length 3.4 mm. Head black, except mandibles, clypeus and gena testaceous; antenna testaceous; mesosoma black, except lateral margins and posterior collar of pronotum testaceous; metasoma brown; legs testaceous, except hind coxa basally black and club of hind femur partly brown. Antenna clavate; antennal segments in following proportions: 8:6:22:8:7:7:6:6:5:8. Head almost flat, dull, granulated, without longitudinal keels or striae on face, except complete frontal line; occipital carina complete, laterally not reaching eyes; temple distinct; posterior ocelli almost touching occipital carina; POL = 3; OL = 4; OOL = 8; OPL = 0.5; TL = 5; greatest breadth of posterior ocelli shorter than TL (2:5). Pronotum shiny, crossed by one only strong posterior transverse furrow (anterior transverse impression absent); anterior collar and lateral regions unsculptured; disc weakly humped, granulated; posterior collar short, sculptured by longitudinal striae; pronotal tubercle not reaching tegula. Scutum, scutellum and metanotum granulated, not rugose. Notauli absent. Propodeum reticulate-rugose, without longitudinal and transverse keels; dorsal surface longer than posterior surface (22:16). Forewing with three dark transverse bands; distal part of stigmal vein longer than

proximal part (17:7). Hindwing hyaline. Fore tarsal segments in following proportions: 17:3:6:16:25. Enlarged claw not spatulate (Fig. 1), with one large subapical tooth and one row of six lamellae + one bristle. Segment 5 of protarsus (Fig. 1) with two rows of 17 lamellae; distal apex with a group of at least 20 lamellae. Tibial spurs 1/1/1.

Male. Unknown.

Hosts. Unknown.

Etymology. This specific name means that the notauli are absent (*anotaulicus* = without notauli).

Remarks. The world species of *Dryinus* are divided into four groups, according to the following key (Olmi 1993a):

1 Enlarged claw very reduced, approximately as long or slightly longer than arolium . . . . . Group 4

— Enlarged claw not reduced, much longer than arolium 2

2 Enlarged claw without subapical tooth, or with at least 2 subapical teeth; rarely with one only subapical tooth, but then with a very broad apical lamella . . . . . Group 3

— Enlarged claw with one subapical tooth, never with a broad apical lamella 3

3 Notauli at least partly present . . . . . Group 1

— Notauli absent . . . . . Group 2

However, in the Oriental region only groups 1 and 3 have been recorded so far. Group 4 is only present in the Neotropical and Nearctic regions. Group 2 is recorded from all biogeographical regions of the world, except the Oriental region. *Dryinus anotaulicus* is the first Oriental species of *Dryinus* belonging to group 2. This new species is easily recognizable among all Oriental species of *Dryinus* because of the characters presented in the above diagnosis.

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