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

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Supplementary material online at <http://www.fcla.edu/FlaEnt/fe944.htm#InfoLink2>

### 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 Jiujiangling, 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 Jiujiangling, 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 línea 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, with-

out 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.

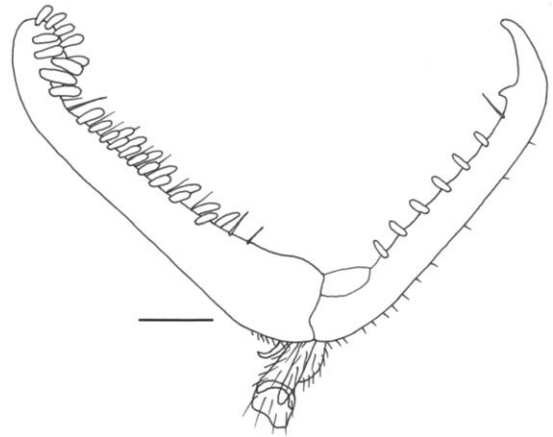


Fig. 1. Chela of holotype of *Dryinus anotaulicus* sp. nov. Scale bar 0.09 mm.

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

SYSTEMATIC ACCOUNTS

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

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

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 pro-tarsus (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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