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Dryinidae of the Oriental region (Hymenoptera: Chrysidoidea)

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Abstract

An updated revision of Oriental Dryinidae is presented. Seven subfamilies, 20 genera and 368 species are treated. Eight new species are described: *Aphelopus zonalis* Xu, Olmi & He, sp. nov. (China, Hainan); *Anteon zoilum* Xu, Olmi & He, sp. nov. (China, Yunnan), *Anteon zonarium* Xu, Olmi & He, sp. nov. (China, Yunnan), *Anteon zopyrum* Xu, Olmi & He, sp. nov. (China, Xizang), *Anteon zoroastrum* Xu, Olmi & He, sp. nov. (Malaysia, Malaya), *Esagonatopus sinensis* Xu, Olmi & He, sp. nov. (China, Yunnan), *Gonatopus yunnanensis* Xu, Olmi & He, sp. nov. (China, Yunnan); *Ponomarenkoia ellenbergeri* Olmi, Xu & He, sp. nov. (Myanmar amber). Descriptions, geographic distribution, known hosts, natural enemies and type material of each species are presented, together with illustrations of the main morphological characters and keys to the subfamilies, genera and species. Complete lists of references concerning the Oriental Dryinidae and their hosts are given. New synonymies are proposed for *Aphelopus albiclypeus* Xu, He & Olmi, 1999 (=*A. exnotaulices* He & Xu, 2002, syn. nov.), *A. orientalis* Olmi, 1984 (=*A. albopictoides* Xu & He, 1999, syn. nov.), *A. taiwanensis* Olmi, 1991 (=*A. compresssus* Xu & Yao, 1997, syn. nov.), *A. niger* Xu & He, 1999 (=*A. nigricornis* Xu, He & Olmi, 1999, syn. nov.), *A. penanganus* Olmi, 1984 (=*A. olmii* He & Xu, 2002, syn. nov.), *Anteon cacumen* Xu & He, 1997 (=*A. longwangshanense* Xu & He, 1997, syn. nov.), *A. hilare* Olmi, 1984 (=*A. corax* Olmi, 1984, syn. nov., =*A. javanum* Olmi, 1984, syn. nov., =*A. serratum* Xu & He, 1999, syn. nov.), *A. lankanum* Olmi, 1984 (=*A. planum* Xu & He, 1999, syn. nov.), *A. munitum* Olmi, 1984 (=*A. bauense* Olmi, 1984, syn. nov.), *A. parapriscum* Olmi, 1991 (=*A. alpinum* He & Xu, 2002, syn. nov.), *A. peterseni* Olmi, 1984 (=*A. scrupulosum* He & Xu, 2002, syn. nov.), *A. yuani* Xu, He & Olmi, 1998 (=*A. yuae* He & Xu, 2002, syn. nov.), *Lonchodryinus bimaculatus* Xu & He, 1994 (=*L. niger* He & Xu, 2002, syn. nov.), *L. ruficornis* (Dalman, 1818) (=*L. melaphelus* Xu & He, 1994, syn. nov.), *Dryinus indicus* (Kieffer, 1914) (=*Chlorodryinus koreanus* Móczár, 1983, syn. nov., =*Dryinus masneri* Olmi, 2009, syn. nov.), *D. stantoni* Ashmead, 1904 (=*D. undatomarginis* Xu & He, 1998, syn. nov., =*D. wuyishanensis* He & Xu, 2002, syn. nov.), *Adryinus jini* Xu & Yang, 1995 (=*A. platycornis* Xu & He, 1995, syn. nov.), *Gonatopus nigricans* (R. Perkins, 1905 (=*G. fulgori* Nakagawa, 1906, syn. nov., =*G. insulanus* He & Xu, 1998, syn. nov., *Pseudogonatopus sogatea* Rohwer, 1920, syn. nov.; *P. pusanus* Olmi, 1984, syn. nov.), *G. nudus* (R. Perkins, 1912) (=*G. yangi* He & Xu, 1998, syn. nov.), *G. pedestris* Dalman, 1818 (=*Epigonatopus sakaii* Esaki & Hashimoto, 1933, syn. nov.), *G. rufoniger* Olmi, 1993 (=*Neodryinus hishimonovorus* Xu & He, 1997, syn. nov.), *G. schenklingi* Strand, 1913 (=*G. euscelidivorus* Xu & He, 1999, syn. nov.). New combinations are proposed for *Deinodryinus constrictus* (Olmi, 1998), comb. nov. (from *Anteon*), *Dryinus asiaticus* (Olmi, 1984), comb. nov. (from *Alphadryinus*), *D. barbarus* (Olmi, 1984), comb. nov. (from *Mesodryinus*), *Gonatopus bengalensis* (Olmi, 1984), comb. nov. (from *Agonatopoides*), *G. bicuspis* (Olmi, 1993), comb. nov. (from *Pseudogonatopus*), *G. borneanus* (Olmi, 1984), comb. nov. (from *Agonatopoides*); *G. indicus* (Olmi, 1987), comb. nov. (from *Donisthorpina*), *G. insularis* (Olmi, 1984), comb. nov. (from *Agonatopoides*), *G. lankae* (Ponomarenko, 1981), comb. nov. (from *Pseudogonatopus*), *G. malesiae* (Olmi, 1984), comb. nov. (from *Pseudogonatopus*), *G. nepalensis* (Olmi, 1986), comb. nov. (from *Pseudogonatopus*), *G. pajanensis* (Olmi, 1989), comb. nov. (from *Agonatopoides*), *G. pyrillae* (Mani, 1942), comb. nov. (from *Agonatopoides*), *G. sarawakensis* (Olmi, 1984), comb. nov. (from *Pseudogonatopus*), *G. validus* (Olmi, 1984), comb. nov. (from *Pseudogonatopus*).

Key words: taxonomy, revision, Oriental region, descriptions, hosts, distribution, type material, keys

Introduction

Dryinidae (Hymenoptera: Chrysidoidea), which have thirteen subfamilies, 48 genera and 1722 species in the world, are parasitoids of Hemiptera Auchenorrhyncha (Guglielmino & Olmi, 1997, 2006, 2007). They play important roles in the natural control of these insect pests, and have potential significance as biological control agents (Olmi, 1994, 1999a, 1999b, 2000a).