



<http://dx.doi.org/10.11646/zootaxa.3794.2.8>

<http://zoobank.org/urn:lsid:zoobank.org:pub:FAE0D09E-1473-4FA8-97B5-2D1AAE29D4E1>

The genus *Ademon* Haliday (Hymenoptera: Braconidae: Opiinae) from China, with descriptions of two new species

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Abstract

The species of *Ademon* Haliday (Braconidae, Opiinae) from China are studied. Two new species are described: *A. lechriophodes* sp. nov. and *A. xuthus* sp. nov., and a key to the identification of Old World *Ademon* is provided.

Key words: Parasitoid, Ademonini, taxonomy, key

Introduction

Ademon Haliday, 1833 (Hymenoptera: Braconidae) is a small Holarctic and Afrotropical genus, and contains only six described species: *A. angolanus* Fischer, 1963; *A. decrescens* (Nees 1811); *A. niger* (Ashmead, 1895); *A. ovalis* Fischer, 1965; *A. satanas* Fischer, 1965 and *A. urinator* (de Stefani, 1902) (Fischer, 1987; Wharton *et al.*, 1997; Yu *et al.*, 2012). Members of the genus are probably parasitoids of Ephydriidae (Diptera), but the biology of the new species described in this paper is unknown.

The genus is rarely collected and can be recognized by the following characters: prepectal carina more or less developed ventrally; malar suture absent, crenulate depression above eye present; vein SR1 of fore wing incomplete, not reaching the wing margin and resulting in an open marginal cell; medio-posteriorly scutellum with continuation of lateral elevated area; hind tibia, tarsus and tarsal claws very slender; second metasomal tergite distinctly longer than third tergite, and second metasomal suture distinct.

During the course of a study of the Chinese Opiinae, we examined the specimens in the major insect collections in China, including the collections of the Chinese Academy of Sciences both in Beijing and Shanghai, as well as in our own institution. Two new species of the genus *Ademon* were found in China and described in this paper.

Chen and Weng (2005) described two new species of *Ademon*, *A. amplus* Chen & Weng 2005 and *A. duplus* Weng & Chen 2005. However, these two species were obviously misplaced because their vein SR1 of fore wing is complete, reaching the wing margin; pterostigma oval or wedge-shaped, and third tergite with two or four thorns on the posterior margin. We conclude that the two species described by Chen and Weng (2005) are not members of *Ademon*.

The terminology and measurements used follows van Achterberg (1988); additional sources for descriptions of sculpture and setation are Harris (1979) and Sharkey and Wharton (1997). All descriptions and measurements were made under a Leica microscope with a Leica Image 1000 system and Zeiss Stereo Discovery V8. All figures were made using a digital microscope (VHX-2000C, KEYENCE, OSAKA, Japan). As specified in the material examined section for each species, type and other material are deposited in the parasitic Hymenoptera collection, Zhejiang University, Hangzhou, China (ZJUH).

CU1 : 2-CU1 = 1.0 : 8.0; 2-SR : 3-SR : r-m = 2.1 : 2.5 : 1.0; first subdiscal cell not robust and not widened apically; CU1b absent; m-cu antefurcal, and slightly converging to 1-M posteriorly. Hind wing: SR present basally and only as an unpigmented fold; m-cu absent; 1-M much longer than 1r-m; M+CU : 1-M = 1.0 : 1.3.

Legs. Hind coxa sparsely setose and densely punctate; tarsal claws slender, without basal lobe; length of femur, tibia and basitarsus of hind leg 6.7, 14.4 and 9.4 times as long as their width, respectively.

Metasoma. Length of first tergite 1.1 times its apical width, its surface coarsely and densely punctate, longitudinally rugose and sharply carinate on lateral margin, its dorsal carinae united basally, forming a short median carina medially and not surpassing mid-point of first tergite; spiracle of first tergite very small; laterope large and shallow; dorsope absent; second tergite densely punctate, the punctures tending to coalesce and giving the appearance of longitudinal rugae, second metasomal suture distinct, curved and smooth; third tergite smooth posteriorly, punctures on third tergite as on the second tergite; setae forming a row on third and following tergites; ovipositor hardly surpassing apex of metasoma; sheath densely setose.

Colour. Dark brown; face, clypeal, temple ventrally, mandible (apically brown), prothorax, propleuron anteriorly, mesoscutum, middle and hind coxae and trochanters yellowish-brown; fore coxa and trochanter brownish-yellow; wings membrane subhyaline, pterostigma and veins brown.

Material. Holotype, ♀, China, Zhushan, Hubei province, 28.VIII.1982, Jun-hua He, No. 824887.

Note. This species is similar to *A. decrescens* and *A. lechrilophodes* sp. nov., but can be separated from the latter in having r arising just distad middle of pterostigma, SR1 only present at basal third; propodeum with a short median carina anteriorly, finely punctate, rugose and areolate, the median areola pentagonal and with a longitudinal carina posteriorly; length of first tergite 1.1 times its apical width, its surface coarsely and densely punctate, longitudinally rugose and sharply carinate on lateral margin; and mesoscutum yellowish-brown.

Acknowledgements

We wish to thank Dr. C. van Achterberg (Leiden, The Netherlands) for his suggestion for improving the manuscript and Dr. M. Fischer (Vienna, Austria) for providing some literature. We are also grateful to Dr. John Jennings (Adelaide, Australia) and an anonymous reviewer for their critical review on this manuscript. Funding for this study was provided by the State Key Program of National Natural Science Foundation of China (31230068) and 973 Program (2013CB127600).

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