Annotated key to the genera of Mymaridae (Hymenoptera: Chalcidoidea) in Argentina

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Abstract

A key to the genera of Mymaridae occurring in Argentina is given, and information on the 178 determined and several undetermined species in 35 genera is provided, including data on their distribution and host associations. New host records are provided for several species of Anagrus Haliday and Gonatocerus Nees. The genus Kikiki Huber & Beardsley is recorded for the first time from the New World, and the genera Australomymar Girault, Camptopteroides Viggiani, Gahanopsis Ogoblin, Myrmecomymar Yoshimoto, and Pitolymar Annecke & Doult are reported for the first time from Argentina. Eucleruchus Ogoblin, syn. nov. is synonymized under Cleruchus Enock, and its type species E. neivai Ogoblin is transferred to Cleruchus as C. neivai (Ogoblin), comb. nov.

Key words: Argentina, Mymaridae, fairyflies, egg parasitoid

Introduction

The Mymaridae (fairyflies or mymarids) is a family of minute wasps containing more than 1400 species in 103 genera (Noyes 2005). Mymarids range from 0.2 to about 4.0 mm (average 0.5–1.0 mm) in length. Most mymarids can be easily distinguished from other members of Chalcidoidea by the following combination of characters: head with trabeculae and associated sutures on vertex and on face lateral to each torulus; toruli generally closer to the eyes than to each other; forewing marginal vein with a hypochaeta; venation usually greatly reduced, terminating within the first two-fifths of wing (except in Arescon Walker, Australomymar Girault, Borneomymar Huber, Eustochomorpha Girault, Kikiki Huber & Beardsley, Kroekella Huber, and Myrmecomymar Yoshimoto) and without postmarginal vein (except in Borneomymar and Eustochomorpha); hind wing narrow and stalked basally (except membrane extending to the base of the hind wing in Anagroidea Girault, Australomymar, and Eubroncus Yoshimoto, Kozlov & Triapitzin); scutellum often subdivided into anterior and posterior parts; antenna at least as long as head plus mesosoma, usually much longer, distinctly clavate in females and filiform in males.

Mymaridae is cosmopolitan and species are found in all terrestrial habitats, from the deserts to rainforests, grasslands, ponds, and in a wide altitudinal range (Huber 1997, 2006; Noyes 2005). They are internal parasitoids of insect eggs; apparently most of them are solitary egg parasitoids but there are gregarious species. The primary hosts are Coleoptera (especially Curculionidae, Chrysomelidae, and Dytiscidae), Hemiptera (Cicadellidae, Delphacidae, Cercopidae, Miridae, Membracidae, Tingidae, etc.), Psocoptera, Odonata (Anisozygoptera and Zygoptera), and some Orthoptera. Because some of their hosts are agricultural or forest pests, mymarids are considered beneficial insects, and several species have been used successfully in classical biological control programs against insect pests (Clausen 1940). Huber (1986) reviewed the history,