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Eutrichosomellini (Hymenoptera: Chalcidoidea: Aphelinidae) from India, with description of two new genera

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Abstract

Two new genera and four new species of the aphelinid tribe Eutrichosomellini (Chalcidoidea: Aphelinidae: Aphelininae) are described from India. These are *Umairia* Hayat **gen. nov.**, *Zubairia* Hayat **gen. nov.**, *U. laiba* Hayat **sp. nov.**, *U. zeera* Hayat **sp. nov.**, *Z. mirifica* Hayat **sp. nov.**, and *Eutrichosomella veenakumariae* Hayat **sp. nov.** Two of the species, *U. laiba* and *E. veenakumariae*, are reared respectively from the eggs of *Papilio polytes* L. (Lepidoptera) and cockroach oothecae (Blattodea). Keys to the genera of the tribe Eutrichosomellini, and to the Indian species of *Eutrichosomella* Girault are given.

Key words: Aphelininae, *Eutrichosomella*, *Umairia*, *Zubairia*, new species

Introduction

In the years 2012 and 2013, Dr. K. Veenakumari of the National Bureau of Agriculturally Important Insects, Bengaluru, collected from the Karnataka and Meghalaya States and the Andaman and Nicobar Islands, a large number of specimens of Aphelinidae (in addition to specimens of other chalcidoid families), and forwarded these to me for identification. Among the aphelinids, I found specimens of four species belonging to the tribe Eutrichosomellini (Aphelininae). One of these belongs to an undescribed species of *Eutrichosomella* Girault, and three species were found to belong to two undescribed genera. In this paper, these two new genera and four new species are described.

In a recent paper on the genera of the Aphelininae, Kim & Heraty (2012) provided a key to the genera and discussed the phylogeny of this subfamily based on morphological characters. It is sufficient to note that these authors recognized four genera as belonging to the tribe Eutrichosomellini—*Eutrichosomella* Girault, *Mashimaro* Kim & Heraty, *Saengella* Kim & Heraty, and *Samariola* Hayat. I add two new genera to this tribe, *Umairia* **gen. nov.** and *Zubairia* **gen. nov.**, and give a key for separation of these six genera.

In view of their phylogenetic analysis of the Aphelininae, based on 50 characters, I provide a character state matrix for the two new genera that, incorporates the 50 characters used by Kim & Heraty (2012) and two additional characters (Table 1).

TABLE 1. Character matrix of species of *Umairia* and *Zubairia* based on the 50 characters used by Kim & Heraty (2012). Additional characters used as explained below.

Taxa	Characters																											
	1	2	3	4*	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
<i>Umairia laiba</i>	2	1	1	0	2	1	1	0	1	0	3	1	1	0	1	1	0	?	?	?	2	0	1	1	0	0	2	0
<i>Umairia zeera</i>	2	1	1	0	0	1	1	0	1	0	3	1	1	0	1	1	0	?	?	?	1	0	1	1	0	0	4	0
<i>Zubairia mirifica</i>	2	1	1	2	2	0	1	0	1	0	3	1	1	0	1	1	0	?	?	?	2	0	1	1	1	0	2	0

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