A new species of Parapanteles Ashmead (Hymenoptera: Braconidae) from India reared from Abisara echeria Stoll (Lepidoptera: Riodinidae) with key to the Indian Parapanteles species

ANKITA GUPTA¹, BLAISE PEREIRA² & PARESH V. CHURI³

¹National Bureau of Agriculturally Important Insects, Post Bag No. 2491, H. A. Farm Post, Bellary Road, Hebbal, Bangalore 560 024, Karnataka, India
²Blaisinette’ Plot 5, I. C. Colony, Cross Road No. 3, Borivli West, Mumbai 400103. E-mail: blaisepereira@gmail.com
³Ram Mandir trust Bldg, 14/B, 3rd Floor, Sitala Devi Temple Road, Mahim, Mumbai-400016. E-mail: pareshchuri@gmail.com

Abstract

A new species of gregarious endoparasitoid, Parapanteles echeriae Gupta, Pereira & Churi, sp. nov., bred from Abisara echeria Stoll (Lepidoptera: Riodinidae) on host plant Embelia sp. (Myrsinaceae), is described and illustrated from Mumbai, Maharashtra, India. Abisara echeria, commonly known as plum judy, is a small striking butterfly prevalent in Asia. This is the first ever record of a parasitic wasp associated with Abisara. Parapanteles echeriae is distinguished from P. sireeshaae Ahmad & Akhtar in having propodeum with areola 1.2× as long as wide; anterior diagonal carina meeting anterior margin of propodeum in one half; veins r and 2RS of fore wing merging in a smooth curve; yellow coloured legs and tegulae brownish black. A key to the Indian species of Parapanteles is also provided.

Key words: Parapanteles, new species, Abisara echeria, host-parasitoid interaction, India

Introduction

Parapanteles consists of twenty one species worldwide (Yu, et al., 2012), including two species from the Oriental region. Two species, P. sireeshaae Ahmad & Akhtar (2010), a larval parasitoid of Hyposidra successaria (Lepidoptera: Geometridae) associated with host plant Tinospora cordifolia (Ranunculales: Menispermaceae), and P. shivrangiini Sathe & Ingawale (1989) in association with host plant Amaranthus spinosus L., are reported from the Indian region. So far the genus is reported from only two states of India: Andhra Pradesh and Maharashtra. Here, a new species of Parapanteles attacking larvae of Abisara echeria Stoll (Lepidoptera: Riodinidae) from Maharashtra, India is described. An illustrated key to the Indian species of Genus Parapanteles is also provided.

The present study also adds a new host family Riodinidae to the existing world fauna of known hosts for Parapanteles as listed by Valerio et al. (2009).

Material and methods

The specimens examined were reared and collected from Maharashtra, India. Caterpillars were reared in caged containers on the natural host plant. All new type material and specimens are deposited in NBAII. The holotype and paratypes of Parapanteles sireeshaae Ahmad & Akhtar (NPC) were examined, but those of P. shivrangiini are lost and were not able to be examined.

Morphological terminology used in the species description of Parapanteles is that followed by Valerio et al. (2009) and wing venation followed Sharkey & Wharton (1997). The taxonomic literature consulted includes Akhtar et al. (2010), Valerio et al. (2009), Yu et al., (2005), Whitfield (1997), Austin & Dangerfield (1992), Sathe et al. (1989), and Nixon (1965).