



## Reared parasitic wasps attacking hesperiids from Western Ghats (Kerala, India) with description of a new species of *Dolichogenidea* (Hymenoptera: Braconidae) as a larval parasitoid of *Thoressa evershedi* (Evans) (Lepidoptera: Hesperiiidae)

ANKITA GUPTA<sup>1,3</sup> & KALESH. S<sup>2</sup>

<sup>1</sup>National Bureau of Agriculturally Important Insects, Post Bag No. 2491, H. A. Farm Post, Bellary Road, Hebbal, Bangalore 560 024, Karnataka, India

<sup>2</sup>Greeshmam, BN 439, Bapuji Nagar, Medical College Post, Thiruvananthapuram, Kerala, India. E-mail: kaleshs2002in@gmail.com

<sup>3</sup>Corresponding author. E-mail: drankitagupta7@gmail.com

### Abstract

Eight species of parasitic wasps were bred from various stages of five species of hesperiids viz. *Thoressa evershedi* (Evans), *Pelopidas mathias* (Fabricius), *Udaspes folus* (Cramer), *Borbo cinnara* (Wallace) and *Caltoris* sp. inhabiting Western Ghats, Kerala, India. One new species, *Dolichogenidea kunhi* Gupta & Kalesh, is described and illustrated from Kerala, India, and its relationship with closely allied species is discussed. This new species was bred from parasitized larvae of *Thoressa evershedi* (Evans) (Lepidoptera: Hesperiiidae). Microgastrinae braconid species, *Apanteles javensis* Rohwer and *Cotesia erionotae* (Wilkinson) were bred from parasitized larvae of *P. mathias* and *U. folus* respectively. *Brachymeria habui* Özdikmen (Chalcididae) was recorded from pupae of *U. folus*. Two hyperparasitoids, *Eurytoma manilensis* Ashmead (Eurytomidae) & *Pediobius foveolatus* (Crawford) (Eulophidae) were bred from larvae of *B. cinnara*. Egg parasitoid, *Ooencyrtus papilionis* Ashmead (Encyrtidae) and pupal parasitoid *Brachymeria lasus* (Walker) (Chalcididae) was recorded from *Caltoris* sp. Information on the parasitoid distribution, brief diagnosis of each species with a habitus photograph for easy identification, host association, host caterpillars, caterpillar host plants, and taxonomic comments are provided.

**Key words:** *Dolichogenidea kunhi*, new species, *Thoressa evershedi*, *Udaspes folus*, *Pelopidas mathias*, *Borbo cinnara*, *Caltoris*, hesperiidae, parasitoids, skippers, Western Ghats, Kerala

### Introduction

The host-parasitoid relationship pertaining to the species specific diversity has been the most rewarding phenomenon in many successful biological control programmes. The present study is undertaken to contribute to the knowledge of parasitoid association with the hesperiids prevailing in Western Ghats, Kerala, India. Our study is based on estimated 110 specimens of parasitic wasps collected from systematic rearing surveys of Lepidopteran larvae (Hesperiiidae) undertaken during 2010–2011. Hesperiid caterpillars are richly associated with parasitic wasps and *Apanteles* is the most dominant genera reared in caterpillar inventories (Whitfield *et al.* 2009). The host records of the genus *Dolichogenidea* are most often from microlepidoptera, with few exceptions. They specifically attack pyraloids, tortricoids, tineoids, gelechioids (Mason 1981) however there are also some documented reports from Pyralidae, Crambidae majority from Thyrididae, Mimmallionidae, and Elachistidae (Whitfield *et al.* 2009). The only hymenopteran reported from the genus *Thoressa* (Hesperiiidae) is *Agrypon halpee* (Uchida) (Ichneumonidae) from *T. varia* Murray (Yu 2012). In this paper we describe a new species of *Dolichogenidea* attacking larvae of *Thoressa evershedi* (Evans) along with other parasitic wasps parasitizing larvae of *Pelopidas mathias* (Fabricius), *Udaspes folus* (Cramer), *Borbo cinnara* (Wallace) and *Caltoris* sp.

The genus *Dolichogenidea* was described by Viereck (1911) as a subgenus of *Apanteles*. It includes three species-groups of which two are reported from Australasia- the *ultor* group *sensu* Nixon and the *laevigata* group. *Dolichogenidea* and *Apanteles* can be easily confused (Mason 1981, Austin & Dangerfield 1992, Whitfield *et al.*