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NOTE

A FIRST REPORT OF THE BROAD-TAIL ROYAL *CREON CLEOBIS* GODART, 1824 (INSECTA: LEPIDOPTERA: LYCAENIDAE) AND ITS HOST PLANT FROM AGASTHYAMALAI BIOSPHERE RESERVE OF THE SOUTHERN WESTERN GHATS, INDIA

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The Broad-tail Royal *Creon cleobis* Godart, 1824 is an elusive butterfly of the family Lycaenidae occurring in the Indo-Malayan region across India, Indo-China and Southeast Asia. This species was originally described as *Polyommatus cleobis* by Godart (1824) and was subsequently renamed as *Iolaus cleobis* (Hewitson 1862), *Camena cleobis* (de Nicéville 1890), *Creon cleobis* (de Nicéville 1896) and *Pratapa cleobis* (Evans 1927). Although de Nicéville (1890) has reported the range of this taxon to be very imperfectly known, Evans (1927) has reported it from the Himalaya, northeastern India, West Bengal and the Western Ghats. Of the three subspecies recognized under this species (Khranov 2016) so far, only the nominal subspecies *Creon cleobis cleobis* has been reported from India (Baiju 2016).

Broad-tail Royal (BTR) is very rare in the Western Ghats (Kehimkar 2008) and there are only a few records. During the British explorations, this species was recorded only at comparatively higher elevations of the Nilgiris (Hewitson 1862; de Nicéville 1890) and the Palni Hills (Evans 1910) of the Western Ghats. Ugarte & Rodricks (1960) reported it again from the Palni Hills. In this context, it may be noted that Nilgiris and Palni Hills are separated from each other by the 30km wide Palghat gap, which is a major geographic barrier in the Western Ghats. Recently, the butterfly has been reported from the north of the Nilgiris at Goa (Bhambure 2014) and North Canara (Netra Bhat in Baiju 2016); and from the south of the Palnis at Periyar Tiger Reserve of Kerala in the western Cardamom Hills (Baiju 2016). The latter

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sighting made in October 2014 is the first record of BTR from Kerala State. It is not reported from areas further south, from the Agasthyamalai Biosphere Reserve (ABR). On 2 November 2014, adult BTR and its different life stages (egg, final instar and pupa) were sighted between 1,000-1,350m elevation at Peppara Wildlife Sanctuary located in ABR.

The vegetation of the area is southern hill top tropical evergreen forest (Varghese & Balasubramanyan 1999). Two BTR were seen basking on the tip of leaves at the canopy level and chasing each other in a territorial display at the steep streamside above 1,000m. A freshly emerged adult was photographed on 16 November 2014 at 1,350m (Image1). The host plant of the butterfly was identified as *Helixanthera intermedia* (Wight) Danser, a rare parasitic plant belonging to Loranthaceae, endemic to southern Western Ghats (Sasidharan 2011). Eggs were found at the base of the branches or at stem nodes of the plant; and life stages were present in a few of the plants searched. In the study area, *H. intermedia* was found to be locally common between 1,200–1,400m;

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Image 1. Broadtail Royal *Creon cleobis*

only one plant belonging to *Helixanthera* sp. was encountered at a lower elevation even after an intensive search, at 400m. Flowering was observed in May–June, but the presence of life stages of the butterfly was found to be few compared to November. Out of seven plants searched during the period, only one had any butterfly life stages - an egg at the base of a flower. BTR seems to have a peak flight season in the Western Ghats between September and November; almost all the sightings reported from the Western Ghats also belong to this period. The present record becomes second for Kerala and first for ABR, which is significant and has a future scope of study since ABR is located on southernmost tip of the Western Ghats and the site of discovery is further separated by Shencottah Gap, a minor geographic barrier in the Southern Western Ghats.

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