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FIRST RECORD OF *DODONA DIPOEA* HEWITSON, [1866] (LEPIDOPTERA: RIODINIDAE: NEMEOBIINAE) FROM MEGHALAYA, NORTHEASTERN INDIA

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Reviewer: Peter Smetacek

Abstract

The Lesser Punch, *Dodona dipoea dipoea* Hewitson, [1866] is reported for the first time from Meghalaya, India during a field survey in Mawphlang Sacred Grove on 22.xi.2015.

Key words: *Dodona dipoea*, Lesser Punch, Meghalaya, First record, North-east

Introduction

The genus *Dodona* Hewitson, 1861 accounts for about 18 species worldwide, ranging from Pakistan to India, China, Thailand, Laos and Vietnam (Inayoshi & Saito, 2018). India has 7 species of *Dodona* with 6 species in North-Eastern India (Varshney & Smetacek, 2015). The butterflies under this genus are popularly known as Punches.

Mawphlang Sacred Grove is located near Mawphlang village in East Khasi Hills district, 25 km from Shillong city. The grove is also known as Law-Lyngdoh. The sacred grove is located at 25°28'00" N and 91°43'60" E, with an area of less than 100 hectares and elevation of about 1800 meters above mean sea level. In Meghalaya, the local communities have protected small areas of primary forest as sacred groves since time immemorial. The villagers believe that departed souls of ancestors abide in these forests and hence no one collects fruits, flowers, leaves and wood from these forests. The forest of Law-Lyngdoh Sacred Grove is subtropical broadleaf type, although the Khasi Pine *Pinus kesiya*

dominates the surrounding areas (Hajra, 1975).

Observation

On 22.xi.2015, a female of *Dodona* perching on leaf litter inside the sacred grove was noticed with its wings wide open. A few photographs of the species were taken. It then flew and perched on a nearby bush, where it was possible to photograph the underside. It exactly matched the original illustration and description of *Dodona dipoea* as well as the illustration in Wynter-Blyth (1957). The lobed hindwing without tail and narrow bands of white margined by black on underside hindwing proved the identity of the species as *D. dipoea*.

Result and Discussion

Hewitson (1867-1871) described *Dodona dipoea* based on one specimen collected in Darjeeling (collection Atkinson). Evans (1932) described *D. dipoea* with three sub-species, i.e. *D. d. nostia* (Murree-Kumaon), *D. d. dipoea* (Sikkim-Assam) and *D. d. dracon* (which has recently been raised to a good species) (North Myanmar-Dawnas). Wynter-

Blyth (1957) later described it giving the range as “Himalayas and hills of North-East India, and Burma”, with a flight period before and after rains between 4,000 and 8,000 feet (Wynter-Blyth, 1957). The summer brood of the species is relatively small, but species swarms in October and November in forests of Himalyan Oak (*Quercus*) in Nainital district, Uttarakhand (Peter Smetacek, *pers. comm.*). The species is not difficult to encounter in broadleaf forests above 1800 m in the eastern Himalaya although they are usually found singly, since males are territorial. At wet mud, both sexes tend to gather in numbers.

The major historic and taxonomic work on butterflies in Meghalaya was done in Khasi and Jaintia hills in eastern Meghalaya (Butler, 1879; Swinhoe, 1893, 1896; Parsons & Cantlie, 1948; Cantlie, 1952, 1956; Radhakrishnan *et al.*, 1989) and recently in Garo Hills (Sondhi *et al.*, 2013). In addition, more publications about faunal and butterfly diversity of the state have been published (Alfred, 1999; Hatter *et al.*, 2004; Bora *et al.*, 2014). *Dodona dipoea* has never been reported from Meghalaya and hence claiming the first record of this species for the state is justified. We place our record under the nominotypical subspecies, since the subspecies *D. d. dracon* is distinguished by having the tornal lobe in the underside hindwing divided by an ochreous line, which is not present in the female specimen photographed.

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The authors are grateful to Mr. Sathiyam Durai, then PCCF and Member Secretary, Meghalaya Biodiversity Board, Meghalaya Forest Department, India for his kind permission to conduct surveys in protected areas of the state. We would also like to acknowledge Mr. Isaac Kehimkar, who served as the guide of the Short-term Research Grant entitled Butterflies of Meghalaya.

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Fig.1: Habitat of *Dodona dipoea* in Mawphlang Sacred Grove, Meghalaya, India



Fig.2: Underside of *Dodona dipoea*



Fig.3: Upperside of *Dodona dipoea*