

Scientific Note

Sighting of *Pontia daplidice moorei* (Röber) (Lepidoptera: Pieridae: Pierinae) from Meghalaya, Northeastern India: a new locality record

Avistamiento de *Pontia daplidice moorei* (Röber) (Lepidoptera: Pieridae: Pierinae) en Meghalaya, noreste de la India: un nuevo registro de localidad

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Abstract. The farmland visitor Bath White, *Pontia daplidice moorei* is recorded for the first time in Meghalaya. The butterfly is documented in an opportunistic survey on 17.v.2015 along the Guwahati-Shillong road, near Shangbangla village at an elevation of 520 meters. This record will help in updating the status of butterfly fauna in Meghalaya, India.

Key words: Bath white, *Pontia daplidice moorei*, first record, North-east.

Resumen. El visitante de las tierras de cultivo, *Pontia daplidice moorei*, se registra por primera vez en Meghalaya. La mariposa fue observada el 17 de mayo de 2015 a lo largo de la carretera Guwahati-Shillong, cerca del pueblo de Shangbangla a una altitud de 520 metros. Este registro ayudará a actualizar el estado de la fauna de mariposas de Meghalaya, India.

Palabras clave: Bath White, *Pontia daplidice moorei*, primer registro, noroeste.

The genus *Pontia* Fabricius, 1807 accounts for 5 species and 3 subspecies in India (Varshney & Smetacek 2015). Among them *Pontia daplidice* (Linnaeus, 1758) Bath White has a wide distribution range from western Europe, northern Africa, eastward through west Asia, the western Himalaya in Pakistan and India, the central Himalaya in Nepal and south west China (Kehimkar 2016). In literature, the subspecies *Pontia daplidice moorei* (Röber, 1907) is found to have a distribution of western Himalaya in Pakistan and India, North-east in the eastern Himalaya, the central Himalaya in Nepal as well as in northern Thailand, Laos and Yunnan (Inayoshi 2012; Varshney & Smetacek 2015).

In recent literature, *Pontia daplidice* has distribution range from Jammu and Kashmir to Uttarakhand in India (Kehimkar 2008; Singh 2010) until recently Kehimkar (2016) updated its distribution range to Arunachal Pradesh, owing to the record of Naro & Sondhi (2013) who recorded it from Nagaland and Arunachal Pradesh. The butterfly has also been

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reported from Assam and Manipur in North-east India (Singh & Gogoi 2013). Additional records of this species from Sikkim, West Bengal and Nepal can be presently found in butterflies of India website (<http://www.ifoundbutterflies.org/sp/782/Pontia-daplidice>).

Bingham (1907) and Evans (1932) reported its distribution as Baluchistan (in Afghanistan), east to Chitral (in Pakistan) and Murree (in Kashmir). After these two authors, Talbot (1939) mentioned its distribution as north western Himalaya. Wynter-Blyth (1957) reports its distribution in Baluchistan, Chitral and Peshawar (both in Pakistan), Kashmir, east to Shipki (in Himachal Pradesh). It is also reported from Bhutan (van der Poel & Wangchuk 2007). Inayoshi (2012) reports the distribution of the subspecies in northwest Himalayas, Laos, Tibet, Northern Thailand and Yunnan.

Sighting of *Pontia daplidice moorei* in Shangbangla village. Shangbangla (25°57'5.76" N, 91°51'53.64" E) is a small village situated in Umling panchayat in Ri-bhoi district, Meghalaya. The village is located at an elevation of approximately 540 meters and is a part of the National Highway 40 connecting Assam with Meghalaya, popularly known as GS road. Agriculture is the main source of living of this village and one can easily observe large tracts of agricultural plots on both sides of the highway while travelling from Assam to Meghalaya. The highway has a rich diversity of nectaring plants such as *Chromolaena odorata* (L.) R.M. King & H. Rob., *Ageratum conyzoides* L., *Lantana camara* L., *Aesculus assamica* Griff., etc. that often attracts butterflies and other insects.

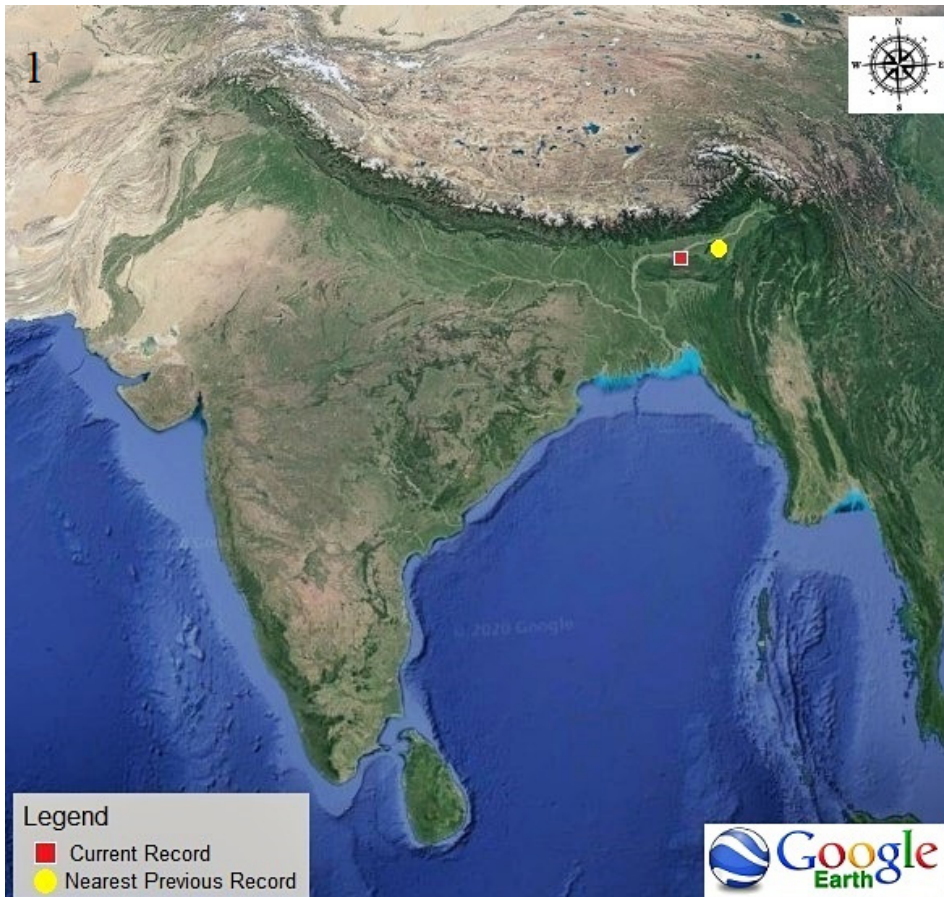


Figure 1. Map showing the new locality of *Pontia daplidice moorei* (Röber, 1907) in Shangbangla village, Meghalaya, India.

The observation on this paper is a part of the butterfly inventory and monitoring program of North-east India, the authors are involved in for the last five years (Bora & Meitei 2014a, 2014b; Bora *et al.* 2014, 2019; Bhowmik *et al.* 2020). On 17.v.2015, we were in a butterfly trip to Meghalaya travelling over the GS road on the National Highway 40. We stopped for a tea break in a stall in the middle of our journey near Shangbangla village. We were observing butterflies in the nearby habitats while enjoying our tea break. At about 07:18 hr (25°57'14.76" N, 91°51'52.92" E), the authors, Sachin Sharma and Atanu Bora spotted a *Pontia* hovering around the nectaring plant, *Ageratum conyzoides* along roadsides. They rushed to their cameras and took few photographs of the butterfly when it finally perched in a nearby bush. It exactly matched the original description of *Pontia daplidice* and photographs illustrated in various literatures (Evans 1932; Wynter-Blyth 1957). The white butterfly with green blotches on the underside of hindwings proved the identity of the species as *Pontia daplidice*, Bath White.

The adult male is white on the upperside having black apex with white spots and lines on the forewing; presence of a broad-black patch at end-cell; underside hindwing with green blotches. Female similar to male, but with a discal spot on upper forewing and two obscure rows of marginal spots on upper hindwing.



Figure 2. (a) and (b). Photographic records of *Pontia daplidice moorei* in Shangbangla village, Meghalaya, India.

Significance of the sighting. 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 (Kunte *et al.* 2012; Sondhi *et al.* 2013). In addition, more publications about faunal and butterfly diversity of the state have come out in the recent times (Alfred 1999; Hatter *et al.* 2004; Bora *et al.* 2014). However, none of these studies record *Pontia daplidice moorei* from the state. The present observation therefore provides a new locality record in its distribution in India and also able to justify the first record of this species in Meghalaya, extending its known range by a distance of 200 km from the nearest previous record.

This new locality record is important in the context of updating the distribution range of this species in India. Multiple records of this species from different states in North-east India clearly indicate that the subspecies might have been overlooked in the past historic works. The butterfly must have been constantly colonising new areas of the country being a farmland visitor. The larvae of the Indian subspecies *Pontia daplidice moorei* were reared by Sharma (2005) successfully on *Lepidium ruderales* Linnaeus (Brassicaceae). Additional records in future surveys will definitely help to map the distribution of this species and subspecies in the Indian subcontinent.

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