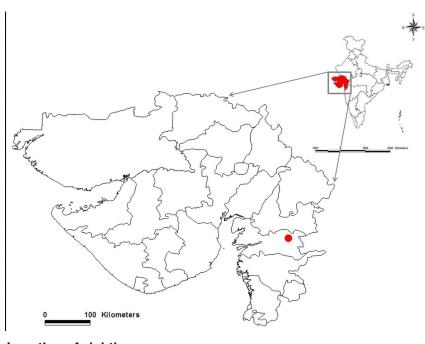
Rediscovery of Red Helen in Gujarat, India

The Papilio is a genus in the swallowtail butterfly family Papilionidae (Vattikonda et al. 2014). Globally, around 210 species of Papilio have been documented (Wu 2001), of which 28 are recorded in India (Varshney & Smetacek 2015). P. helenus is represented by two subspecies, namely, P. helenus helenus (Linnaeus 1758) and P. helenus daksha (Hampson 1988), in India. P. h. daksha prefers moist dense forests and is active at the edges of forest and also in forest clearings (Bhakare & Ogale 2018).

The present rediscovery is based on an opportunistic survey in Narmada District of Gujarat, India. On 5 August 2020, at about 1015 h, one of the authors, Rajdeep Jhala clicked a butterfly nectaring on *Tecoma* flowers at forest colony campus, Rajpipla, Gujarat (21.858325 N, 73.517603 E;



Papilio helenus daksha nectaring on Tecoma flower



Location of sighting

at approximately 148 m). The butterfly exactly matched the description of *P. h. daksha*, i.e. tailed, hindwing with large discal white patches in spaces 5,6 and 7, in the published literature (Bhakare & Ogale 2018). The second encounter with the same species, with another author Ruchi Dave, was on 15 August 2020 at Gora (21.827430 N, 73.736885 E; at approximately 68 m) of Narmada District. Both localities of the sightings are on the periphery of Shoolpaneshwar Sanctuary of Gujarat.

Sanctuary encompasses mixed dry deciduous forest, riverine forest, pockets of moist teak forest and two large water reservoirs. The sanctuary has a vast undulating terrain, lush ever pervading greenery, tall canopy, deep valleys, gentle streams, and waterfalls. All of these are in the Vindhyan and Satpuda mountain ranges.

P. h. daksha is reported as endemic in the peninsular belt by Talbot (1939). In India, it is reported from Andhra Pradesh, Maharashtra, Kerala, Karnataka, and Tamil Nadu (Anon 2022). Bhakare & Ogale (2018) also reported it from Goa.

There is only one report of *P. h. daksha* from Gujarat with location and number of individuals seen 63 years back (Shull 1963). He netted one individual on 25 October 1957 at Ahwa, Dang District of Gujarat and

stated as very rare or accidental. Gaonkar (1996) has listed Red Helen, without location, in his report for which he did field visit to south Gujarat during 1987–88. It is also noteworthy that previously the species was only limited to southern-most of Gujarat, which is part of northern Western Ghats. Hence, this rediscovery also suggests that the geographical range of *P. h. daksha* has extended into Gujarat and this can be the northern-most report of the subspecies in India. Exhaustive study on butterflies may result in more sightings of this rare butterfly of Gujarat.

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