

CONFIRMATION OF THE REDBREAST BUTTERFLY *PAPILIO ALCMENOR* (LEPIDOPTERA: PAPILIONIDAE) IN UTTARAKHAND, INDIA

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The Redbreast (*Papilio alcmenor* C. & R. Felder, 1864) is a conspicuous butterfly that is found in the Himalaya as well as in China, Indo-China and Hainan. Although not a rare species in the eastern Himalaya, its westernmost record was from Kumaon, Uttarakhand, where Hannington (1910) noted that it "occurs sparingly in May and September up to 7000".

It is not on record who collected the butterflies mentioned by Hannington (1910), nor where the specimens are, if they still exist. In the intervening 110 years, there were no reports of this butterfly from Kumaon. Smith (2006) recorded it from central Nepal and the Kathmandu valley eastwards. So far, it has not been reported from western Nepal.

On 2nd July 2020, a butterfly was observed in Chatola village on the periphery of Mukteshwar forest (1900 m; 29°38'47" N; 79°46'08" E), Nainital district, Kumaon, Uttarakhand. It had been captured by a flower spider. The butterfly was photographed and identified as a male *P. alcmenor*. The upper hindwing has several white markings, which places it as the form *leucocelis* Jordan, 1909.

On 26.viii.2020, a male was photographed in Bhatraunjhan village (29°35'39" N 79°18'05" E; 1540 m), Betalghat block, Nainital district.

On 16.ix.2020, a male was collected in Bhowali market (29°23'24" N 79°30'17" E; 1650 m), Nainital district. On 22.ix.2020, a

worn female was collected near the above location in Bhowali. Both the specimens are in the collection of the Butterfly Research Centre, Bhimtal.

The three males recorded are of three different forms. This suggests that the species is common, with many male individuals so that three randomly sampled males represent three different forms.

These are the first confirmed records of the species from the Himalaya west of central Nepal in over a century and confirms the continued presence of the species in the area. According to Sevastopulo ((1973), it feeds on *Citrus* sp. However, citrus is rather less common at Mukteshwar and Bhowali than at lower elevation in the area. The area around Bhimtal and Nainital has been continuously surveyed for over 70 years by the Smetacek family, but they never recorded the species (Peter Smetacek, *pers. comm.*). Perhaps the butterfly is restricted to some other, possibly wild member of the Rutaceae in the western Himalaya, which restricts its distribution, or perhaps, like *Delias acalis* (Godart, 1819) (Pieridae), it extends its distribution to this area in favourable years and is absent in other years (Panthee, 2019).

References

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Fig.1: *Papilio alcmenor*, Bhatraunjkhana



Fig.2: *Papilio alcmenor*, male, Bhowali

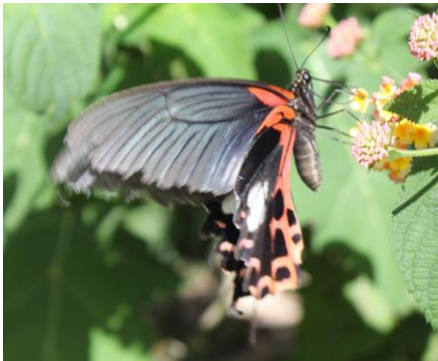


Fig.3: *Papilio alcmenor*, female, Bhowali

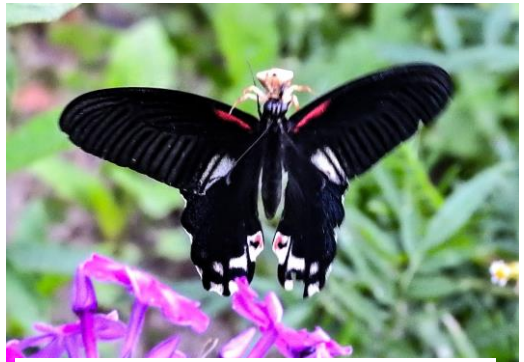


Fig.4: *Papilio alcmenor*, form *leucocelis*, Mukteshwar