

ON THE CONTINUED PRESENCE OF THE REDBREAST *PAPILIO ALCMENOR* (LEPIDOPTERA: PAPILIONIDAE) AND TREEYELLOW *GANDACA HARINA* (LEPIDOPTERA: PIERIDAE) BUTTERFLIES IN KUMAON, UTTARAKHAND

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Butalia *et al.* (2020) reported the presence of *Papilio alcmenor* C. & R. Felder, [1864] in Kumaon, Uttarakhand, after a gap of more than a century. In the subsequent years, the species has been recorded sporadically. On 1.ix.2023, we recorded a male specimen of this species in Tallital market in Bhimtal, Uttarakhand. It is of the *leucocelis* form, which was also recorded in Bhatronjkhana and Mukteshwar by Butalia *et al.* (2020). However, there have not been many sightings of the species, suggesting that although the species is still present in Kumaon, it is not at the density at which it was recorded in 2020. The specimen recorded was curated the same day and deposited in the collection of the Butterfly Research Centre, Bhimtal.

Agnihotri (2022) reported a minor range extension of *Gandaca harina assamica* Moore, [1906] to the Gaula valley. This species, too, appears to have moved into the area recently. On August 16, 2023, the authors recorded around a dozen specimens of this species at the same location in Bhujighat, near Ranibagh,

Uttarakhand, indicating that the species is still present and probably successfully breeding in the area. One voucher specimen was taken and deposited the same day in the collection of the Butterfly Research Centre, Bhimtal. The specimens observed were definitely not part of a migration, since they were flying randomly about the forest canopy. All the individuals were recorded on the western bank of the Ballia Nala, a small stream that is a tributary of the Gaula river. The hillside above the western bank of the stream is covered with dense Sal (*Shorea robusta*) forest, where these butterflies were found. The eastern bank is covered with what Osmaston (1927) classified as Miscellaneous Deciduous Forest, where not a single specimen of this species was found.

REFERENCES

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Figure 1. *Papilio alcmenor* ♂ form *leucocelis*, Bhimtal, 1.ix.2023



Figure 2. *Gandaca harina* ♂, Bhujiaghat, 16.viii.2023