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FURTHER ADDITIONS TO THE BUTTERFLY FAUNA OF CHHATTISGARH, INDIA

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Reviewer: Peter Smetacek

There are 159 species of butterflies reported from Chhattisgarh, India. Sisodia (2019) published a checklist with district-wise distribution of reported species from 13 out of 27 districts of Chhattisgarh. At present, there are 28 districts in Chhattisgarh. Jashpur lies in the north-eastern region of Chhattisgarh. It borders Jharkhand to the north and Odisha to the east. The northern side of the district is largely hilly and forested, demonstrating an affinity with the Chota Nagpur plateau, whereas the southern side is mostly lowlands, surrounded by Maikal ranges (Singh, 1971). Regionally, this is better understood as *Hetghat* and *Uparghat*, meaning lowland and highlands respectively (Brett, 1909). Jashpurnagar, the district headquarters, is situated on the steep hills of *Uparghat*. Previously, Sisodia *et al.* (2019) reported a total of 80 species from Jashpur based on previous published records and field surveys conducted in April-May, 2019. For continued monitoring of the area, an onsite capacity building workshop was conducted by A.S. to train potential local surveyors. Members of Jashpur Wildlife Welfare Foundation and N.K. from District Administration, Jashpur were trained on habitat sensing, observation techniques, field data collection techniques, basic identification, taxonomy of butterflies, data management, and ethics in data collection. As a result, three species of butterflies previously unreported from Chhattisgarh were photographed by N.K. subsequent to the last survey. The specimens

were identified using Smetacek ([2016]) and Kehimkar (2008). Following is an annotated list of the three species:

Water Snow Flat *Tagiades litigiosa*
Moeschler, 1878

Specimen Documented: 26.iv.2020,
Collector's Bungalow, Jashpur Nagar (22° 52'
42.936" N 84° 8' 18.732" E), Chhattisgarh;
N.K..

Known Distribution: Andaman & Nicobar Is.;
Himachal Pradesh to North East India;
Maharashtra to Andhra Pradesh and Kerala;
Jharkhand (Varshney & Smetacek, 2015).

Remarks: It is a forest butterfly confined to
hilly areas, rarely leaving the shade of the
forests (Smetacek, [2016] & Wynter-Blyth,
1957). It was observed basking on a hedge in
the garden of the bungalow. It was not
observed subsequently, suggesting that there is
no breeding population in the immediate
vicinity of the site of observation.

Giant Redeye *Gangara thyraxis* (Fabricius,
1775)

Specimen Documented: 03.v.2020 Collector's
Bungalow, Jashpur Nagar (22° 52' 42.936" N
84° 8' 18.732" E), N. K..

Known Distribution: Maharashtra to Kerala;
Andhra Pradesh; Himachal Pradesh to North
East India; Andaman & Nicobar Is.

Remarks: It was found sitting on the ground in
the parking area during the day. Normally
active at dusk and dawn. The present record
helps connect the known distribution of this
species, linking the peninsular Indian
population, recorded from as far north as

Andhra Pradesh and Gujarat with the Himalayan population.

Brown Onyx *Horaga viola* Moore, 1882

Specimen Documented: 5.v.2020 Collector's Bungalow, Jashpur Nagar (22° 52' 42.936" N 84° 8' 18.732" E), N.K..

Known Distribution: South India, Himachal Pradesh to North East India (Varshney & Smetacek, 2015).

Remarks: It was recorded in the evening basking in the sun. The species is rare throughout its distribution. A possible record of this was observed at the same location during the earlier survey, but since there was no photographic confirmation, it was not included in the list at the time. However, this means that there is a resident population in or in the vicinity of the Collector's Bungalow.

Discussion

The new records reported above are not unusual, since known populations exist both south and north of Chhattisgarh. What is interesting is that populations of these and several other species of butterflies, which were previously known to occur in two disjunct zones, are proved to be actually connected, sometimes tenuously, through the Eastern Ghats. Secondly, it appears that the populations linking the Himalayan and southern Indian communities of butterflies are island populations, since species like the Brown Onyx have not been found in other parts of the state so far. On the basis of these and other findings, it might be possible in the future to get a better idea of what the forests of Chhattisgarh should contain, before over-grazing by cattle, lopping for fodder, exploitation of forest resources, and forest fires changed the composition of the forest community. It would be important to understand the original forest community structure of the state so that suitable habitats can be conserved. The tenuous link represented by the Eastern Ghats between Himalayan and southern Indian populations of birds, reptiles, insects and plants should not

broken, for then the populations would be entirely isolated. Even the present island populations of Chhattisgarh can become isolated if the distances between the islands becomes too great. This would result in the stopping of gene flow between southern India and the Himalaya.

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References

- Brett, E.A. 1909. *Central Provinces Gazetteers, Chhattisgarh Feudatory States*. The Times Press, Bombay. 354 pp.
- Kehimkar, I. 2008. *The Book of Indian Butterflies*. Bombay Natural History Society, Mumbai. 497 pp.
- Singh, R. L. 1971. *India, A Regional Geography*. National Geographic Society of India, Varanasi. 992 pp.
- Sisodia, A. 2019. Butterflies (Lepidoptera: Papilionoidea) of Chhattisgarh, India. *Bionotes* 21 (4): 116-141.
- Sisodia, A., N. Kshirsagar & S. Singh. 2019. Three New Lycaenid Butterfly Range Extensions from Chhattisgarh, India. *Bionotes* 21 (3): 73-75.
- Smetacek, P. [2016]. *A Naturalist's Guide to the Butterflies of India, Pakistan, Nepal, Bhutan, Bangladesh and Sri Lanka*. John Beaufoy Publishing Limited, Oxford. 176 pp.
- Varshney, R.K. & P. Smetacek, (eds.) 2015. *A Synoptic Catalogue of the Butterflies of India*. Butterfly Research Centre, Bhimtal and Indinov Publishing, New Delhi. ii + 261 pp., 8 pl.
- Wynter-Blyth, M.A. 1957. *Butterflies of the Indian Region*, Bombay Natural History Society, Bombay. xx + 523 pp., 72 pl.



Fig.1: *Gangara thyrsis*



Fig.2: *Tagiades litigiosa*



Fig.3: *Horaga viola*