

## THREE NEW LYCAENID BUTTERFLY RANGE EXTENSIONS FROM CHHATTISGARH, INDIA

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### Introduction

Jashpur district is situated in north-eastern Chhattisgarh, bordering Jharkhand and Odisha to the east. The area occupies the southernmost part of the Chota Nagpur plateau and the landscape is dotted with small hillocks. The region supports mixed tropical deciduous forest with Sal (*Shorea robusta*) as dominant vegetation. It is watered by the Eeb river, which is a tributary of the Mahanadi. Previously, the butterflies of the state were surveyed by Chandra *et al.* (2014), who also compiled earlier data from Jashpur and other districts, reporting a total of 137 species from Chhattisgarh.

Opportunistic surveys for butterflies were undertaken between 9<sup>th</sup> April, 2019 to 21<sup>st</sup> May, 2019 by the authors in Badalkhol Wildlife Sanctuary, Ranidah, Kailash gufa, Gullu, Deshdekha, Damera, Sogda Ashram and Jashpur Nagar town. The paths followed on foot were randomly chosen and the main criterion for choosing suitable paths was the likelihood of encountering butterflies along the way. The survey resulted in the documentation of 80 species of butterflies.

In the present paper, three species discovered during the present survey, namely *Horaga onyx* (Moore, 1858), *Rapala varuna* (Horsfield, [1829]) and *Chilades parrhasius* (Fabricius, 1793) are reported from this area,

extending their known distribution to Chhattisgarh, India.

The specimens were identified with the help of the photographs using Smetacek ([2016]) and Bhakare & Ogale (2018).

### Common *Onyx Horaga onyx*

Specimens observed: 2 exs.: 11.iv.2019 and 18.iv.2019 Collector's Bungalow, Jashpur Nagar (22° 52' 42.936" N 84° 8' 18.732" E).

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

Remarks: This is usually a forest butterfly (Smetacek ([2016]); Bhakare & Ogale (2018)), so its appearance in the Collector's Bungalow is remarkable, since the closest forest is about 2 km away (22° 53' 15" N 84° 07' 16" E). The second specimen observed was not photographed. It was attracted to a neon tubelight on the verandah of the Collector's Bungalow on 18<sup>th</sup> April, 2019 at 8:20 pm. There are two subspecies of this butterfly on the mainland of India, *H. o. onyx* from Himachal Pradesh to N.E. India and *H. o. cingalensis* from Maharashtra to Kerala (Varshney & Smetacek, 2015). The difference can best be observed on the upperside. Since the upperside of the present individuals was

not observed, the sub-specific status remains to be assigned to the Chhattisgarh population in due course.

**Indigo Flash** *Rapala varuna*

Specimens documented: 4 exs.: 18.iv.2019; 17.iv.2019 at Collector's Bungalow, Jashpur Nagar (22° 52' 42.936" N 84° 8' 18.732" E), 18.v.2019 at Kailash Gufa stream (23° 04' 12" N 83° 33' 40" E) and 20.v.2019 Vedic Vatika, Jashpur Nagar (22° 52' 23" N 84° 09' 18" E). Known Distribution: Himachal Pradesh to Uttarakhand; Maharashtra to Kerala, West Bengal; Andaman & Nicobar Island (Andamans), Sikkim to North East India (Varshney & Smetacek, 2015).

Remarks: This is a common butterfly, its presence overlooked is unusual. There are three sub-species of this butterfly from the mainland of India, *R. v. grisea* from Himachal Pradesh to Uttarakhand; *R. v. lazulina* from Maharashtra to Kerala and West Bengal; and *R. v. gebenia* from Sikkim to North East India. The difference between these requires physical comparison between specimens of the different subspecies. Since no specimens of this species were taken in the present study, subspecific status cannot be assigned to the Chhattisgarh population.

**Small Cupid** *Chilades parrhasius*

Specimens documented: 20.v.2019 at Alori village's streamside, Kubdibathan, Manora block, en route to Gullu (22°56'25.3"N 83°58'25.2"E).

Known Distribution: Rajasthan to Kerala, eastwards to Uttar Pradesh; Himachal Pradesh and Uttarakhand (Varshney & Smetacek, 2015).

Remarks: The current record represents an eastward extension to the global distribution of this species. In the current scenario of global warming, eastward extensions of South Asian fauna are very unusual, since most recent range extensions follow a trend of east

to west extension of range (Panthee *et al.*, 2018; Smetacek 2016; 2011; 2005; 2004; 2002; 1994).

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Fig. 1: *Chilades parrhasius*



Fig. 2: *Horaga onyx*



Fig. 3: *Rapala varuna*