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## FIRST DISTRIBUTIONAL RECORD OF THE RARE BLUE MORMON (PAPILIO POLYMNESTOR) FROM GUMLA DISTRICT (JHARKHAND, INDIA)

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*Papilio polymnestor* are large swallowtail butterflies called Blue Mormons (CN) are often seen in Sri Lanka and Southern India (Varshney and Smetacek, 2015). Furthermore, it is the "state butterfly" of the Indian state of Maharashtra. Its wingspan is between 120 and 150 mm. According to reports, it is India's fourth-largest butterfly (Rashid, 2015). There is a shimmering blue tint to the rear wings. Aside from the buff-colored female form of *P. polymnestor parinda* Moore from Sri Lanka, it resembles the latter species quite a bit. There are few reports from India, and the larvae mostly consume Rutaceae plants (Revathy and George, 2013).

This study presents a new distribution record of *Papilio polymnestor*, also known as the Blue Mormon, from the Gumla District in the Indian state of Jharkhand. This record increases the distribution range of the species both in the state as well as in the nation.

In the Gumla District of Jharkhand, India, on May 28, 2023, 3 to 4 specimens of Papilio polymnestor were discovered during a field research in Dhodhritoli (23.043945747131314, 84.53754669567401; height 679 m). Perched on a leaf of a Citrus limon tree, were the butterfly. The butterflies were captured using insect net. The captured insects were morphologically studied except one, which was collected and sacrificed in a killing jar saturated with ethyl acetate (Kumar et al., 2022). For the purpose of the insect's DNA barcoding, a hind leg was extracted and kept in 70% alcohol (will be reported later). With voucher number SXCRAN-ENT-0523S13, the insect isolate has been submitted to the ICRI (Insect Collection, Record and Identification), Entomology Section of the Department of Zoology, St. Xavier's College, Ranchi, The specimen was morphologically examined, and the insect was recognized by following the butterfly identification keys (Smetacek, 2016; Kehimkar, 2016). The butterfly specimen had wingspan of 125.2 mm. The forewing's upperside is black, and its pale blue discal band gets narrower as it approaches the apex. Black transverse stripes run along the veins of this pale blue band. The underside of the forewing is opaque, displaying an elongated dark red mark near the base of the cell. Onethird of the hind wing's top surface is black, while the

remaining portion is light and features a row of marginal dots, a row of black submarginal spots, and a row of black discoidal spots. There is no tail on the hind wings. There are five sporadic, tiny crimson spots at the base of the wings' underside. The head, thorax, and abdomen are all consistently blackish brown in color (Revathy and George, 2013).

The forewing has twelve veins, each radiating from a large, closed discal cell that has many veins radiating from it.

Blue Mormons, or *Papilio polymnestor*, have not before been documented from Gumla, Jharkhand. There was a lot of scattered information about the said butterfly's discovery in Jharkhand. Blue Mormon was identified by Das *et al.* (2023) among 76 species from Ranchi, Jharkhand's Rock Garden, a preserved location. The blue Mormon was sighted, according to Singh and Ahmad, in Jharkhand's Palkot Wildlife Sanctuary. The butterfly was discovered in the Ankua Reserve Forest in the Kolna Range, Saranda Division, West Singhbhum District, Jharkhand, according to Singh (2010). We confirm the presence of *Papilio polymnestor* from the Dhodhritoli region in the Gumla District of Jharkhand State based on the morphological parameters examined.

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Figure 1: Photograph of the butterfly isolate submitted to ICRI, Entomology section, Department of Zoology, St. Xavier's College, Ranchi (No. SXCRAN-ENT-0523S13).

From Tagore Hills, Ranchi, Jharkhand, India.

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