CONFIRMATION OF SUBSPECIES OF THE COMMON JAY BUTTERFLY *GRAPHIUM DOSON* (LEPIDOPTERA: PAPILIONIDAE) FROM LUCKNOW, UTTAR PRADESH, INDIA

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Abstract

The presence of the Common Jay butterfly *Graphium doson eleius* (Fruhstorfer, 1907) is confirmed in Lucknow, India.

Introduction

Graphium doson (C. & R. Felder, 1864) occurs over most of the Indian subcontinent, from Pakistan (Muhammad & Muhammad, 2019) to Sri Lanka (Woodhouse, 1950) Malaysia and the Philippines (Lewis, 1974). Along this range, there are many described subspecies.

On the Indian subcontinent, there are two described subspecies, *G. d. axionides* (Page & Treadaway, 2014) from the Himalayan foothills and N.E. India and *G. d. eleius* (Fruhstorfer, 1907) from southern India to W. Bengal (Varshney & Smetacek, 2015). Kumar & Singh (2014) reported *G. doson* from Punjab, India; Sharma *et al*. (2019) reported the subspecies *G. d. eleius* from Jammu in Jammu & Kashmir and Kanpur in Uttar Pradesh, based on specimens. They also reported *G. doson* from Lucknow, based on observation of live specimens, but it was not possible to determine the subspecies without examining specimens.

Methodology

One specimen of *G. doson* was collected from Lucknow on 29.vi.2021 by the authors (figure 1). It is deposited in the authors' collection in Lucknow. Examination and comparison of the specimen with material in the Butterfly Research Centre, Bhimtal confirmed that it belongs to the subspecies *eleius*.

Discussion

Sharma *et al*., (2019) pointed out that the new records of *G. doson* from the Indo-Gangetic plain were of the southern Indian subspecies *eleius*, not the Himalayan *axionides*. The closest potential habitat of the subspecies *axionides* to Lucknow is approximately 160 km away in direct line, in the sub-Himalayan tract of Nepal. In Uttarakhand, *P.d. axionides* is restricted to a narrow belt at the foot of the hills in Kathgodam and Haldwani, never ascending the hills or colonizing cities on the Gangetic plain like Rampur in Uttar Pradesh.

G. d. eleius appears to have colonized the Indo-Gangetic plain as far north as Jammu (Sharma *et al*., 2019), Delhi (Gulalia, 2020), and now Lucknow. The species appears to have colonized Lucknow recently, since de Rhe-Philipe (1902) did not record it, while it has been reported in 2018 and 2021 from Lucknow, suggesting that it is not a straggler in the area. It is more than likely that the distribution of the two subspecies *eleius* and *axionides* overlaps in some pockets in the western Himalayan foothills, but these are yet to be discovered.

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Fig.1: *Graphium doson eleius* from Lucknow, Uttar Pradesh