

# Bugs & ALL

Newsletter of the  
Invertebrate Conservation & Information Network of South Asia (ICINSA)

## First distribution record of the rare Anomalous Nawab from Jharkhand, India



*Polyura agrarius* (Swinhoe, 1887), from Tagore Hills, Ranchi, Jharkhand, India.  
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The butterfly *Polyura agrarius* (Swinhoe, 1887) is commonly known as Anomalous Nawab. The name is based on its resemblance to the Common Nawab *Polyura athamas*, which was described before the discovery of this species. It belongs to the brush-footed butterflies of the subfamily Charaxinae under the family Nymphalidae. The genus *Polyura* contains 26 morphologically delineated species (Smile 1982), and is

restricted to the Indo-Malayan and Australasian ecozones (Toussaint et al. 2015).

*Polyura agrarius* (Swinhoe, 1887) has been reported to have a localized distribution in India with records from southern to central, western (Gujarat) to northern (Uttarakhand, Punjab, and Himachal Pradesh), and northwestern (Rajasthan) to northeastern (Sikkim and Arunachal Pradesh) parts

of the nation (Kehimkar 2016; Mehra et al. 2017; Smetacek 2017). This species shares same distribution and habitats with *Polyura athamas* (Smetacek 2017). The males of this fast-flying butterfly species are highly territorial and exhibit patrolling, fighting and hill-topping behaviour. They are attracted to faeces and carrion while both sexes are attracted to over-ripened fruits and plant sap (Kehimkar 2016; Smiles 1982; Smetacek

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**Distribution of Anomalous Nawab in the Indian subcontinent including the present report from Tagore Hill in Ranchi, Jharkhand (location icon in red). (Anonymous 2024).**

2017). It is a rare species; nevertheless, its status has not been assessed by the IUCN Red List till date (Kehimkar 2016; Smetacek 2017).

One point of disagreement among lepidopterists has been *Polyura agrarius's* ordered status. The species was first reported by Swinhoe (1887) from Mhow and Assirghur in Madhya Pradesh, India. This

species was placed under the genus *Charaxes* by Swinhoe (1887). A few lepidopterists, including Evans (1932) and Wynter-Blyth (1957), addressed the species status of this specimen. *P. agrarius* was preferred to be considered a subspecies of *P. bharata* Felder, 1867 (then *P. athamas* Drury, 1773). The taxonomic puzzle of this enigmatic species continued for more

than a century until recent molecular studies by Toussaint et al. (2015) confirmed the identity of *P. agrarius*. The present study reports a new distributional record for this species from Ranchi in Jharkhand, India, which expands its distribution range in the country.

On 25 March 2023, during a field study, one specimen of *P. agrarius* was recorded from Tagore Hill situated in the Ranchi District of Jharkhand, India. It was photographed using Canon EOS 77D with Canon 55–250 mm lens at 1121h.

The butterfly was perching on a leaf of an Indian Date Tree *Phoenix sylvestris*. The specimen was not collected. It was identified on the basis of two small pale-yellow dots present in the sub-apical region of the forewing. Width of pale green band across both wings is very variable.

The study area Tagore Hill also known as Morabadi Hill is



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situated in 23.4003 N & 85.3394 E in Morabadi, Ranchi, Jharkhand. It has an elevation range of 615–702 m, average elevation of 640 m. The area is rocky hill with moist deciduous forest, the temperature varies 0.6–43.4 °C & the average annual rainfall in the area is 1,316.1 mm with a range of 1,001–1,600 mm (Singh et al. 2011).

*Polyura agrarius* (Swinhoe, 1887) was hitherto not reported from Jharkhand (Verma 2009; Singh 2010; Patra et al. 2022). Although, it has been recorded earlier from the neighbouring states of West Bengal (Samanta et al. 2019), Chhattisgarh (Sisodia 2019) and other states of India like Madhya Pradesh (Mehra et al. 2017).

There is a significant difference between the habits and habitat of Ranchi (specifically, the Tagore Hills) and West Bengal. As a result, this record is also filling the distributional gap between Chhattisgarh and West Bengal. And it will expand the distributional range of *Polyura agrarius*. Based on the photographic evidence, we confirm the presence of *Polyura agrarius* in ‘the land of forests’, Jharkhand State.

## References

- Anonymous (2024).** *Charaxes agrarius* Swinhoe, [1887] – Anomalous Nawab. In Kunte, K., S. Sondh & P. Roy (Chief Editors). *Butterflies of India*, v. 4.12. Published by the Indian Foundation for Butterflies. <https://www.ifoundbutterflies.org/charaxes-agrarius>. Accessed on 14.vi.2024.
- Evans, J.H. (1932).** *The Identification of Indian Butterflies*. Bombay Natural History Society, Mumbai, 454 pp.
- Kehimkar, I. (2016).** *Butterflies of India*. Bombay Natural History Society, Mumbai, 348 pp.
- Mehra, D., J.S. Flora & V. Sharma (2017).** A new locality record of the rare Anomalous Nawab *Polyura agrarius* (Swinhoe 1887) (Lepidoptera: Nymphalidae: Charaxinae) from central India. *Journal of Threatened Taxa* 9(6): 10358–10360.
- Patra, D., S. Roy, S. Chowdhury, A. Hossain, P. Shit & S. Biswas (2022).** A preliminary study of butterfly diversity in hilly terrains of Ghatsila, Jharkhand, India. *Proceedings of the Zoological Society* 75(1): 262–268.
- Samanta, S., D. Das & S. Mandal (2019).** First record of the rare Anomalous Nawab *Polyura (Charaxes) agrarius* (Swinhoe 1887) (Lepidoptera: Nymphalidae: Charaxinae) from Purulia, West Bengal, India. *BugsRAll #174*, In: *Zoo's Print* 34(7): 29–32.
- Singh, A.P. (2010).** Butterfly diversity in tropical moist deciduous sal forests of Ankua Reserve Forest, Koina Range, Saranda Division, West Singhbhum District, Jharkhand, India. *Journal of Threatened Taxa* 2(9): 1130–1139.
- Singh, T.P., A.L. Koppa & A.B. Mazumdar (2011).** Climatological summaries of States Series no. 17: Climate of Jharkhand: Ranchi District. Indian Meteorological Department, Pune, India. 134–140.
- Sisodia, A. (2019).** Butterflies (Lepidoptera: Papilionidea) of Chhattisgarh, India. *Bionotes* 21(4): 116–141.
- Smetacek, P. (2017).** *A Naturalist's Guide to the Butterflies of India*. Prakash Books India Pvt. Ltd., New Delhi, 176 pp.
- Smiles, R.L. (1982).** The taxonomy and phylogeny of the genus *Polyura* Billberg (Lepidoptera: Nymphalidae). *Bulletin of the British Museum (Natural History) Entomology* 44(3): 115–237.
- Swinhoe, C. (1887).** On the Lepidoptera of Mhow, central India. *Proceedings of the Zoological Society of London* 1886(4): 421–465.
- Toussaint, E.F.A., J. Moriniere, C.J. Muller, K. Kunte, B. Turlin, A. Hausmann & M. Balke (2015).** Comparative



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molecular species delimitation in the characteristic Nawab butterflies (Nymphalidae, Charaxinae, Polyura). *Molecular Phylogenetics and Evolution* 91: 194–209.

**Verma, S. (2009).** Species composition and seasonal variation of butterflies in Dalma Wildlife Sanctuary, Jharkhand, India. *Journal of Threatened Taxa* 1(5): 295–297.

**Wynter-Blyth, M.A. (1957).** *Butterflies of the Indian Region*. Bombay Natural History Society, Mumbai, India, 523 pp.

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