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# FIRST RECORD OF AZANUS UBALDUS (STOLL, 1782) (INSECTA: LEPIDOPTERA: LYCAENIDAE) FROM JHARKHAND, INDIA

## SURAJ KUMAR SINGHA DEO<sup>1</sup>, DEBASISH MAHATO<sup>2</sup> & RISHAV SINGHA DEO<sup>3</sup>

<sup>1</sup>MSc in Zoology, Department of Zoology, Vinoba Bhave University, Hazaribagh, Jharkhand, India 825301

2\*MSc in Zoology, Department of Zoology, St. Xavier's College, Ranchi, Jharkhand, India 8340014

<sup>3</sup> Master in Computer Application, Department of Computer Application, Techno India University, Kolkata, West Bengal, India, 700091

Correspondence E-mail: debasishmahato2017@gmail.com

Reviewer: Peter Smetacek

## **ABSTRACT**

This paper confirms the presence of *Azanus ubaldus* (Stoll,1782) in Jharkhand with photographic documentation.

KEYWORDS Butterfly, First Record, Hazaribagh

## INTRODUCTION

Azanus ubaldus (Stoll,1782) also known as Bright Babul Blue, is a small species of butterfly belonging to the Lycaenidae family. It is found all over India except North East Indian States (Varshney & Smetacek, 2015). Apart from India, it has also been reported from Pakistan, Bhutan, Myanmar and Sri Lanka (Kehimkar, 2016).

It is a resident of arid and semiarid zones with larger stocks of *Acacia* (Schurian, 2016). The flight is strong and continuous, mostly during the months of March-November (Singh, 2010).

During a field study, specimens of *A. ubaldus* were photographed twice by the authors from Hazaribagh town in

Hazaribagh district, Jharkhand, India using a Samsung SM-A207F and Realme Narzo RMX2050 camera.

#### OBSERVATION

The species was first photographed near Hazaribagh Bypass Road (24.021786°N; 85.387961°E) of Hazaribagh town on 25.vi.2022 at 9:26 am. At the time of observation, the butterfly was hiding under a leaf on the ground. The butterfly was seen again and photographed 1.viii.2022 at 10:35 am, 50 metres North-West from the previous sighted place. At that time, it was flying rapidly around and inside the crowns of Babul trees (Acacia nilotica). Specimens were not captured and thus not collected from the study area.

#### DISCUSSION

The butterfly was identified based on tailless hindwing, male with bright violet blue upperside and black border; female with pale blue upperside and broad brown border, lacks a spot in the cell on under forewing, underneath with two black

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tornal spots, two black costal spots and a pale brown, white-edged band (Kehimkar, 2016; Singh, 2011). The study area is a dry deciduous forest that has an elevation of 592 m and was surrounded by *Shorea robusta*, *Madhuca longifera*, *Buchanania lanzan*, *Acacia nilotica*, *Senna sophera*, *Lantana camara* and *Clerodendron infortunatum*.

#### CONCLUSION

A. ubaldus 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 (Mukherjee et al., 2020), Bihar (Karthik et al., 2020), Chhattisgarh (Sisodia, 2019) and Odisha (Mahata & Palita, 2022). Based on photographic evidence we confirm the presence of A. ubaldus in Jharkhand.

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#### REFERENCES

Karthik, S., M. K. Yadav, M. S. Sai & G. Yashaswini. 2020. Study on the Diversity and Abundance of Butterfly Fauna in Pusa, Bihar. *International Journal of Ecology* 

and Environmental Sciences 2(4): 429-434

Kehimkar, I. 2016. *BNHS – Field Guides. Butterflies of India*. Bombay Natural History Society, Mumbai. 410 pp.

Mahata, A. & S. K. Palita. 2022. Butterfly diversity in Koraput district of Odisha, Eastern Ghats, India. *Tropical Ecology*. <a href="https://doi.org/10.1007/s42965-022-00250-0">https://doi.org/10.1007/s42965-022-00250-0</a>.

Mukherjee, K. & A. Mondal. 2020. Butterfly diversity in heterogeneous habitat of Bankura, West Bengal, India. *Journal of Threatened Taxa* 12(8): 15804–15816. https://doi.org/10.11609/jott. 513612.8.15804-15816

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. <a href="https://doi.org/10.1007/s12595-022-00439-0">https://doi.org/10.1007/s12595-022-00439-0</a>

Schurian, K. 2016. Beobachtungen zur Biologie und Ökologie von Azanus ubaldus 1782) (Cramer. auf den Kanarischen Inseln (Lepidoptera: Lycaenidae). Nachrichten des Entomologischen Vereins Apollo, N.F. 37, 41-46.

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. https://doi.org/10.11609/joTT.o2274.1130-9

Singh, A.P. 2011. *Butterflies of India*. OM Books International, Delhi 183 pp.

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Sisodia, A. 2019. Butterflies (Lepidoptera: Papilionoidea) of Chhattisgarh, India. BIONOTES. 21(4) 116-141. https://doi.org/10.6084/m9.figshare.11498 487

Varshney, R.K. & P. Smetacek. (eds.) 2015. A Synoptic Catalogue of the Butterflies of India. Butterfly Research

Verma, S. 2009. Species composition and

New Delhi, 138 pp., 8 pl.

seasonal variation of butterflies in Dalma Wildlife Sanctuary, Jharkhand, India. Journal of Threatened Taxa. 1(5):295-297. https://doi.org/10.11609/JoTT.o2126.295-

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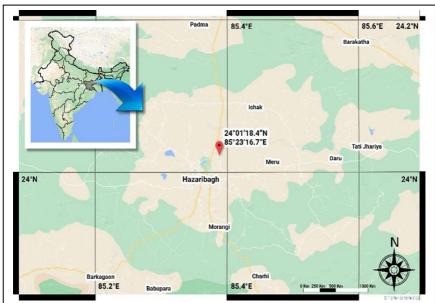


Figure 1: 1st Photograph of Bright Babul Blue taken by the Authors

Figure 2: 2nd Photograph of Bright Babul Blue

Figure 3: Map of the study area where 1st Bright Babul Blue (Azanus ubaldus) was sighted 35