First record of Khasi Common Birdwing from Bankura, West Bengal, India

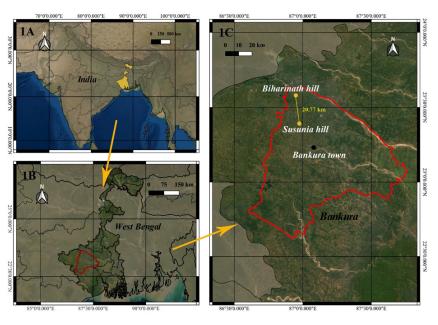
West Bengal, in the eastern zone of India, harbors a heterogeneous landscape comprising parts of four biogeographic zones: Himalaya, Gangetic plains, Indian/Deccan peninsula-Chotta Nagpur plateau, and Coastal zone. Butterflies from different biogeographic zones therefore contribute to the huge diversity of West Bengal with several species sharing multiple zones. Bankura District, situated in the south-west part of West Bengal, links the Gangetic plains on the east and the Chhota Nagpur Plateau on the west (Nandy & Pal 2014). Due to this unique geography, Bankura District houses a rich butterfly diversity. A few significant studies and surveys across villages, hills and forests of Bankura District as well as in Bankura town have cumulatively generated a checklist of more than 120 species of butterflies including species like Papilio helenus and Vagrans egista which had previous records only from



Photographic documentation of the *Troides helena cerberus* sighted at Biharinath, Bankura district © Arka Pal. Inset: The spotted individual is nectaring from *Lantana camara* flowers. © Souparno Roy.



Photographic documentation of the *Troides helena cerberus* sighted at Susunia, Bankura District. © Souparno Roy.



GIS map of the study site prepared using QGIS software (1A-Position of West Bengal in India | 1B-Position of Bankura District in West Bengal | 1C-Positions of Susunia Hill and Biharinath Hill in Bankura).

northern West Bengal (Mukherjee & Mondal 2020; Nayak 2020; Roy et al. 2021). Similarly, in our recent butterfly survey in Susunia and Biharinath (two hills nestled in the north-west of Bankura town), we recorded the first sighting of *Troides helena cerberus* (C. & R. Felder, 1865), Khasi Common Birdwing (Lepidoptera: Papilionidae) which is a new addition to the butterfly diversity of Bankura.

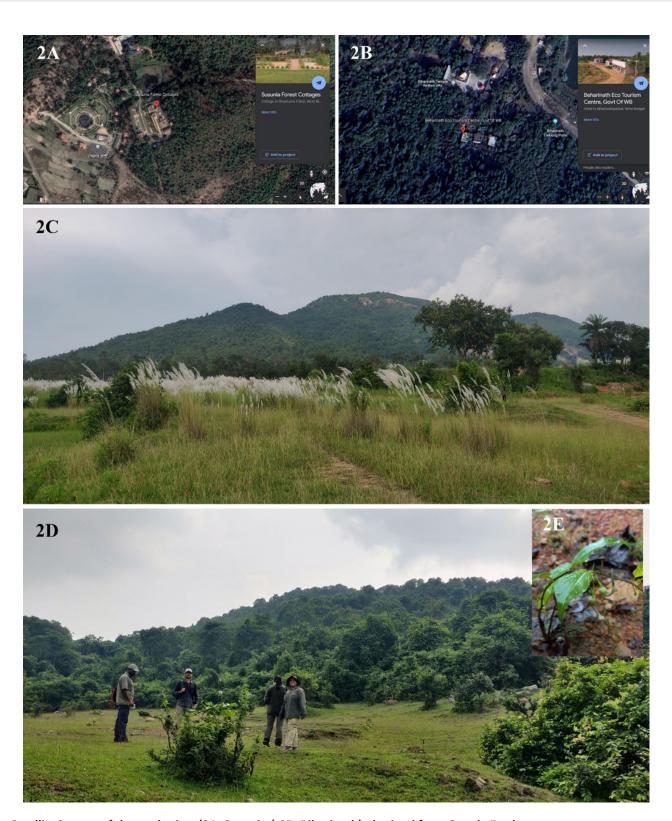
Observation

During a field trip to Bankura in September 2022, *Troides helena cerberus* was first sighted in Susunia on 17 September 2022 at 1000 h. The spotted individual was a female, flying away through the canopy adjacent to Susunia forest rest house (23.39156° N, 86.97452° E, 142m). The hindwings of the individual were torn enough which indicated that it was not freshly emerged. At the time of the sighting, the weather was partly sunny (Temp: 29°C, RH: 69%). The duration of this sighting was so short that only one record shot could be taken before the individual disappeared. On the next day (18 September 2022), a second individual was spotted and photographed at 1122 h in

Biharinath, within the campus of Biharinath Eco-tourism Centre (23.58028° N, 86.9489° E, 147m). It was also a female individual which was nectaring from the wild lantana flowers Lantana camara. The second individual was a bit fresher than the first one (as observed from the wing condition). At the time of the second sighting, the weather condition was cloudy (Temp: 29°C, RH: 85%). In both observations, species identification was confirmed using taxonomic keys from the literature. The aerial distance between the two observation sites was around 21 km.

Till date, within West Bengal, T. h. cerberus has only been reported from the northern region, mostly along Dooars (foothills of eastern Himalaya). This species is well abundant in Buxa Tiger Reserve, Alipurduar District (Sinha et al. 2019), Chilapata Wildlife Sanctuary (pers. obs.) and Gorumara National Park, Jalpaiguri District (Ghatak & Roy 2013). It is also frequently observed in lower elevations of Mahananda Wildlife Sanctuary, Darjeeling and Neora Valley National Park, Kalimpong





Satellite images of the study sites (2A–Susunia | 2B–Biharinath) obtained from Google Earth.

Habitat of the study sites (2C–Susunia © Sarika Baidya | 2D–Biharinath © Arka Pal | 2E (Inset)–Aristolochia indica spotted in Biharinath © Swapna Biswas.

District (pers. obs.). But there is no previous sighting record of this species from the districts of south Bengal. Thus, it is the first record of *T. h. cerberus* from southern Bengal, precisely from the plateau of Bankura District. However, this kind of extension of distribution is highly influenced by the distribution and abundance of host plants (Knops et al. 2002). *Aristolochia indica*, larval host plant of *T. helena*, is well abundant in Biharinath (image 2E) and Susunia region (Mukherjee & Mondal 2020). But, it is not confirmed whether *T. h. cerberus* already has an established population in the studied area or not. In order to validate that a thorough year-long survey is suggested.

Updated distribution of *T. h. cerberus* in India:

Odisha, Andhra Pradesh (Vishakhapatnam District), northern Bihar (Champaran District), Sikkim, West Bengal (Northern West Bengal and Bankura), Arunachal Pradesh, Tripura and the rest of northeastern India (covering Himalaya up to 1,400 m) (Gasse 2018; Anonymous 2022).

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