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Cover: Green Sea Turtle *Chelonia mydas* watercolour by Elakshi Mahika Molur.



A record of Chestnut-and-Black Royal *Tajuria yajna istrodea* De Nicéville, 1887 (Lepidoptera: Lycaenidae) from Arunachal Pradesh, India

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Tajuria yajna (Doherty, 1886) is an Indo-Malayan butterfly species commonly known as Chestnut-and-Black Royal, belonging to the family Lycaenidae. The genus *Tajuria* Moore, (1881) consists of nearly 50 species globally, of which only 15 species are known from India. *T. yajna* comprises five subspecies, of which two are reported from India, viz., *yajna* and *istrodea* (Schröder 2006; Varshney & Smetacek 2015). According to the Indian Wildlife (Protection) Amendment Act 2022, *Tajuria yajna* has been categorized under both Schedule I and II, reflecting its status as a critically endangered species necessitating rigorous conservation measures. Moreover, the subspecies *T. y. yajna* is listed as Critically Endangered under the Red Book Data of the Indian Butterflies (Gupta & Mondal 2005). *T. y. yajna* has been reported from Mussoorie-Kumaon, Uttarakhand, (Evans 1925; Varshney & Smetacek 2015) and Yunnan (Huang & Xue 2005). Whereas, according to Evans (1925), the status of subspecies *T. y. istroidea* is rare and distributed from Sikkim-Assam, Manipur & Meghalaya (Van Gasse 2021; Varshney & Smetacek 2015), West Bengal (Darjeeling) (Kehimkar 2008), Nepal (Van der Poel &

Smetacek 2022), Bhutan (Van Gasse 2021), Vietnam, and Laos (<https://yutaka.it-n.jp/lyc4h/8h030010.html>). However, Varshney & Smetacek (2015) and Kehimkar (2008) state its distribution from Sikkim-Arunachal Pradesh. Although, there are no verifiable scientific reports or photographic evidence confirming the presence of this species in Arunachal Pradesh. The other three subspecies of *T. yajna*, viz., *selangorana* is reported from Thailand (Pendlebury & Corbet 1933) and ssp. *ellisi* is from Burma and Thailand (Evans 1925; Ek-Amnuay 2012) whereas *cato* is confined to Malaysia (Druce 1895).

During our opportunistic field survey, a single individual of *T. yajna istroidea* was encountered in an ecotone region where the human habitat area and the forest edges are separated by a flowing stream. The individual was photographed (Image 1–4) on 22 January 2021 at 11:47 h in the village of Buddha Mandir (27.21178 °N; 96.99120 °E), Vijaynagar Circle, District Changlang, Arunachal Pradesh (Figure 1). The individual was encountered sun-basking on a tree about 3–4 m above the ground level near the stream. After 5–6 min it

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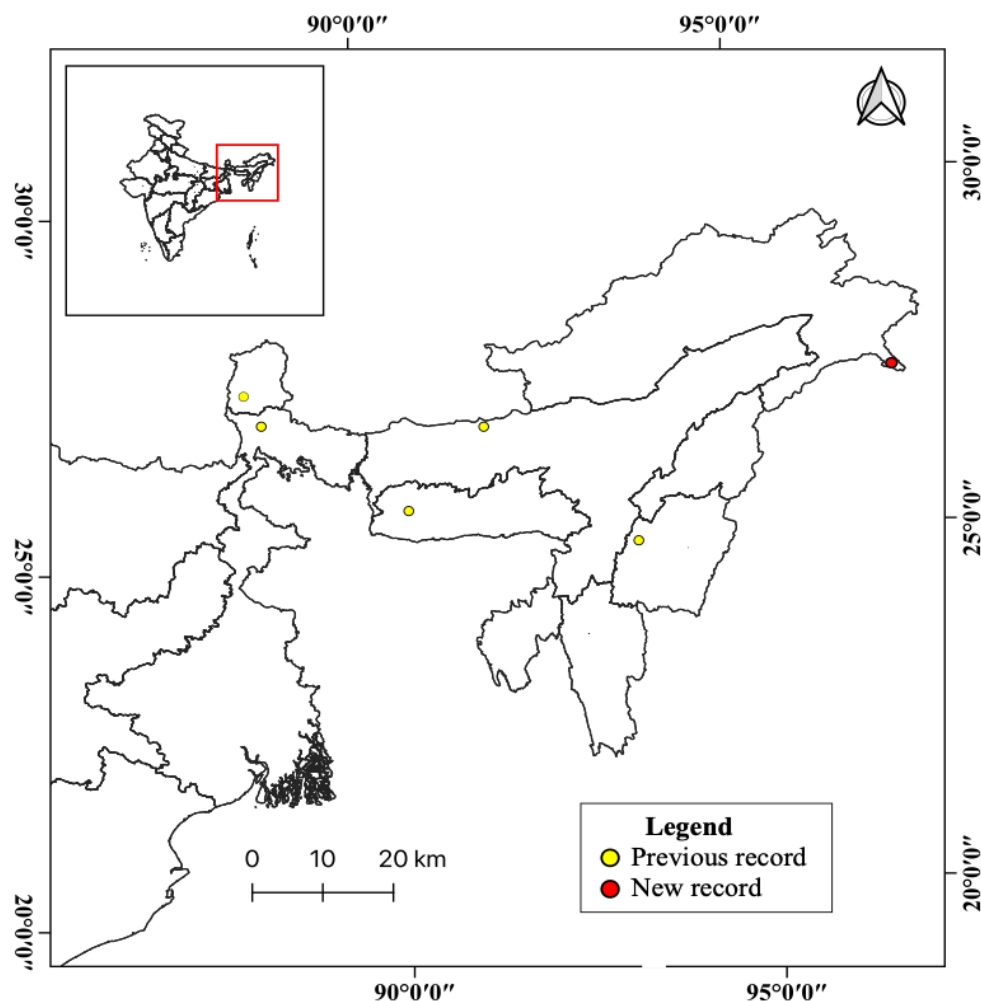


Figure 1. Records of *Tajuria yajna istroidea* de Nicéville, 1887 from India.

settled on the ground for about 1–2 min and flew away to the jungle. It looked like a predator had attacked this butterfly because its hindwing was half broken and its flight was slow and trembling still its discal band was clearly recognised. Consecutive surveys were done thrice a week around the same location for two subsequent years but no new observation has been made, which may indicate it is rare in the region. The species is known to fly at 1,430–1,740 m from May to October (Kehimkar 2008), but we encountered this species at 1,239 m in January during the peak season of winter in Vijaynagar. It is possible that to escape from the cold temperature at higher elevations this species flies to the lower elevations to find the more favourable temperature for its survival. The species was identified using de Nicéville (1889), Evans (1925), and Kehimkar (2008).

T. y. istroidea can be morphologically distinguished from *T. y. yajna* by its broader wings and the distinctly curving discal band on the underside of the forewing.

The band on the wings of *t. y. yajna* is more fragmented, with a shorter area between the vein and a zigzag pattern on the hindwing that is considerably shorter compared to *T. y. istroidea* (Evans 1925).

Das et al. (2018) documented that regarding species biodiversity, Arunachal Pradesh is the most diverse state among the Indian Himalayan states. Moreover, Arunachal Pradesh is renowned for being a significant part of the Indo-Burma hotspot, known for its rich biodiversity of flora and fauna. Despite being rich in biodiversity at the global level the region has been poorly studied. However, in recent years, many biologists have conducted extensive research and made numerous discoveries of new species from the state. The earlier detailed review of literature on the taxonomy of butterflies from Arunachal Pradesh (Evans 1912; Betts 1950; Arora & Mondal 1981; Bhattacharya 1985; Gupta & Shukla 1988; Borang et al. 2008; Gogoi 2012; Srinivasan et al. 2012–2013; Sondhi & Kunte 2014, 2016; Sethy

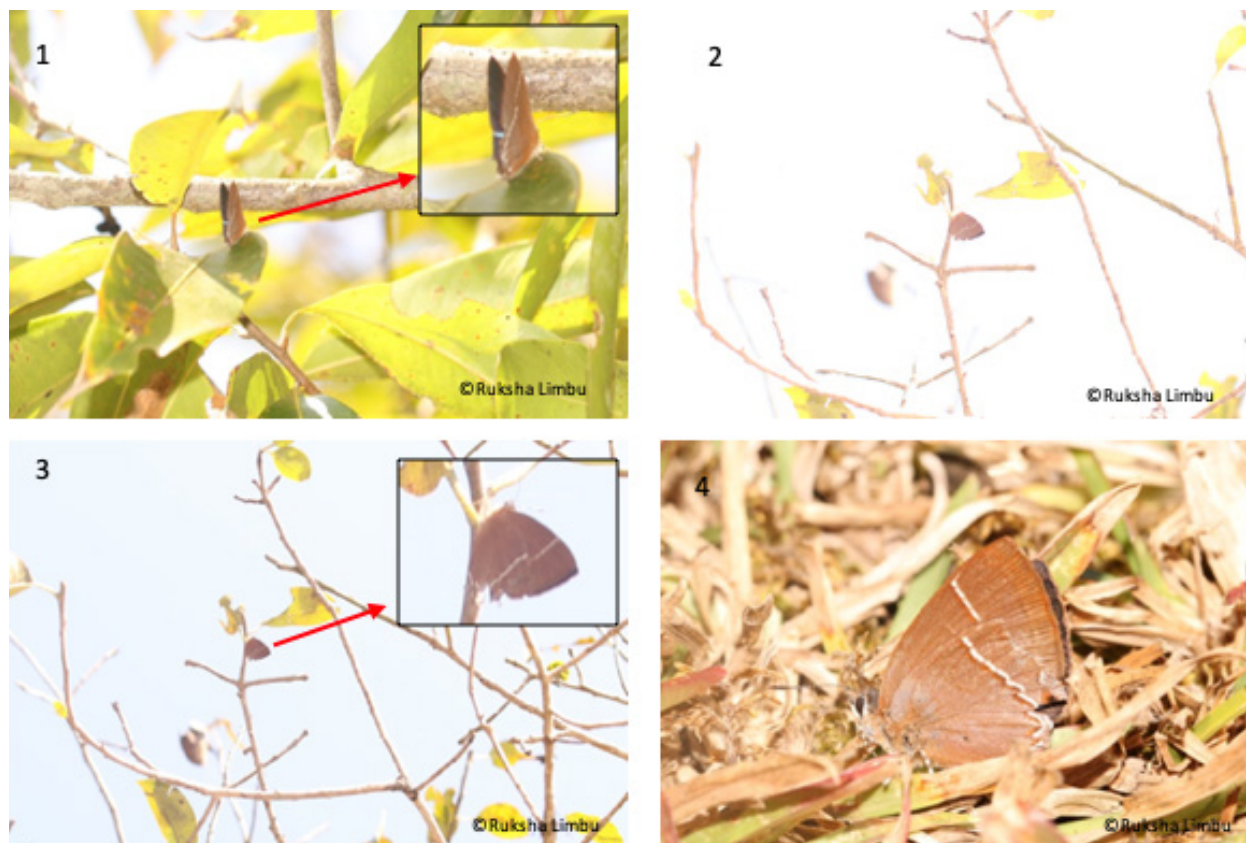


Image 1–4. Photograph of *Tajuria yajna istroidea* de Nicéville, 1887 from the village Buddha Mandir of Vijaynagar District Changlang, Arunachal Pradesh, India on 22 January 2021.

et al. 2014; Singh 2015, 2017; Durairaj & Sinha 2015; Kehimkar 2016; Singh & Das 2016; Sharma & Goswami 2021) revealed no published report of *T. y. istroidea* from Arunachal Pradesh till date. Therefore, the current study reports the first sighting with photographic evidence of *Tajuria yajna istroidea* from Arunachal Pradesh.

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