



# FIRST RECORD OF VARIABLE TAWNY RAJAH, *CHARAXES BERNARDUS HIERAX* (INSECTA: LEPIDOPTERA: NYMPHALIDAE) FROM UTTAR PRADESH, INDIA

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## ABSTRACT

Confirmatory record of Variable Tawny Rajah (*Charaxes bernardus hierax*) from Uttar Pradesh, India.

Keywords: Confirmatory record, Uttar Pradesh, Variable Tawny Rajah.

## INTRODUCTION

Tawny Rajah, *Charaxes bernardus* (Fabricius, 1793) has 3 subspecies, *Ch. b. agna* (Moore, 1878); *Ch. b. hemana* (Butler, 1870) and *Ch. b. hierax* (C. & R. Felder, 1867). *Charaxes bernardus* is a beautiful butterfly species that can be found in a vast region encompassing India, China, Indomalaya, and Indonesia. Its subspecies, *Charaxes bernardus hierax*, is equally stunning and can be spotted in Southeast and Southwest Asia. In India, the range of *Charaxes bernardus hierax* spans from Sikkim to Northeast India, and it includes the Andaman Islands (Varshney & Smetacek, 2015; Gasse, 2018; Evans, 1932; Wynter-Blyth, 1957). In a recent study, (Kumar et.al., 2020), reported Tawny Rajah for the first time from Kumaon range, Uttarakhand.

Robinson et al. (2001) conducted a comprehensive study on the larval hosts of *Charaxes bernardus*, a butterfly species, and identified four plant species that serve as suitable hosts. These plant species include *Miliusa tomentosa*, *Tamarindus indica*, *Bauhinia racemosa*, and *Adenantha pavonina*. The natural range of *Miliusa tomentosa* is the Indian Subcontinent. It's a tree that mostly grows in tropical biomes that experience seasonal dryness. *Tamarindus indica*, on the other hand, is a leguminous tree species that is widely distributed in Africa, South Asia, and Southeast Asia. *Bauhinia racemosa* is a flowering tree that is native to India and other parts of Southeast Asia, while *Adenantha pavonina* is a tropical tree species native to Southeast Asia. Of these four plant species, *Tamarindus indica* and *Bauhinia racemosa* are found in close proximity to the Bhinga Range Forest Office in Shravasti, Uttar Pradesh, India, making them an ideal habitat for the growth and development of *Charaxes*

*bernardus* larvae. By providing a rich source of food for the larvae, these plant species play a critical role in the survival and population growth of *Charaxes bernardus* and its subspecies in the region.

### **OBSERVATION**

A single individual was photographed by Prateek Kashyap on 29.vi.2022 at 12:17 PM, near the Bhinga Forest Range Office, Bhinga, Shravasti, Uttar Pradesh, India (27°43'12.1"N 81°56'16.6"E).

### **DISCUSSION**

We believe that the remarkable existence of this species in Shravasti is mainly due to the consistently favorable weather and the minimal human intervention in the area. The species might have always been present in small numbers in the surveyed area, but it went unnoticed until now due to inadequate surveys conducted at inappropriate times or locations. The species has unique physical characteristics, including vibrant colors and intricate patterns on its wings, which make it a fascinating subject for study and observation. The butterfly's population is highly sensitive to minor variations in atmospheric and environmental conditions, such as temperature, precipitation, humidity, and other factors. Therefore, it's crucial to preserve the natural habitat of this species and take measures to minimize human impact so that future generations can witness the beauty of this winged wonder.

### **CONCLUSION**

*Charaxes bernardus hierax* is the first member of the species ever recorded from Uttar Pradesh, India.

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Figs: The Upperside & Underside of *Charaxes bernardus hierax*

**REFERENCES**

1. Evans, WH, The identification of Indian butterflies (2nd edition). - Bombay Natural History Society. 1932, 1-454.
2. Gaden S. Robinson, PR. Ackery, IJ. Kitching, GW. Beccaloni, LM. Hernández, Hostplants of the moth and butterfly caterpillars of the Oriental Region. Natural History Museum, London. 2001, x+744 pp.
3. Gasse, PV, Butterflies of the Indian Subcontinent - Annotated Checklist. 2018, [http://www.biodiversityofindia.org/images/2/2c/Butterflies\\_of\\_India.pdf](http://www.biodiversityofindia.org/images/2/2c/Butterflies_of_India.pdf).
4. Kumar,S., Singh. PJ, Balmiki.S., Bilal.K, New Record of Tawny Rajah *Charaxes bernardus* (Insecta: Lepidoptera: Nymphalidae) from Kumaon, Uttarakhand, India - Bionotes 22 (4). 2020, 207-208.
5. Varshney, RK.; Smetacek, P, A Synoptic Catalogue of the Butterflies of India. - Bhimtal & Indinov Publishing. 2015, 1-261.
6. Wynter-Blyth, MA, Butterflies of the Indian Region. - Bombay Natural History Society. 1957, 1-523.

