

First photographic record of *Ypthima sakra* Moore, 1857 - from Jammu and Kashmir Union territory, India (Lepidoptera: Nymphalidae)

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Abstract

Ypthima sakra Moore, 1857, is photographed first time from Bani area of Jammu and Kashmir, India.

Keywords: Lepidoptera, Nymphalidae, *Ypthima*, India.

Primer registro fotográfico de *Ypthima sakra* Moore, 1857 - del territorio de la Unión de Jammu y Cachemira, India
(Lepidoptera: Nymphalidae)

Resumen

Ypthima sakra Moore, 1857, es fotografiada por primera vez en la zona de Bani de Jammu y Cachemira, India.

Palabras clave: Lepidoptera, Nymphalidae, *Ypthima*, India.

Introduction

The history of the study of Rhopalocera fauna of Jammu and Kashmir dates back to the middle of the 19th century when an Austrian entomologist Vincenz Kollar (1797-1860) explored it and described many new taxa from the region (Kollar, 1844, 1848). During the British rule on the Indian subcontinent (1857-1947), Holland (1896) and Tytler (1926) deserve special mention in this regard. After Independence not much work was done on Rhopalocera fauna of Jammu and Kashmir. Over the last decade, some local researcher and photographers have explored some parts of the UT extensively and not only added to the known distribution of the Rhopalocera (Qureshi et al. 2013a, 2013b, 2014; Sharma & Sharma, 2017a, 2017b, 2018a, 2018b, 2020) but also published so many new records for the UT, e.g. Sharma & Sharma (2017a, 2017b, 2018), Sheikh & Parey (2019a, 2019b), Sharma & Sharma (2020), Sheikh (2021), Singh & Sheikh (2021), Parey & Sheikh (2021), Gupta & Sheikh (2022a), Dar et al. (2022a, 2022b), Sheikh & Gupta (2022), Sheikh & Mishra (2022), Khan & Sheikh (2022), Sheikh & Mishra (2023).

As Gasse (2018) *Ypthima sakra* Moore, 1857 is common in Himalayas from 850 m to 3150 m which is seen from east Uttarakhand to Nepal, also seen Sikkim, northwest Bengal and from Bhutan to Arunachal Pradesh. There are two subspecies one is *Ypthima sakra sakra* Moore, 1857 and another is *Ypthima sakra austeni* (Moore, 1893). *Ypthima sakra austeni* (Moore, 1893) is common in hills of Northeast India, Brahmaputra south up to 2000 m and is not recorded from Tripura. There is no record of this species in Jammu and Kashmir as per Gasse (2018). As per Varshney & Smetacek (2015),

Ypthima sakra austeni (Moore, 1893) is found in Northeast India and *Ypthima sakra sakra* Moore, 1857 is found from Jammu and Kashmir to Sikkim. But there is no published article or paper on this species from Jammu and Kashmir where any photograph can be seen.

Materials and methods

On 19-VI-2022, author has done survey on the Rhopalocera of Bani area of Kathua district of Jammu and Kashmir Union Territory where she found *Ypthima sakra sakra* Moore, 1857 (Figures 1a, 1b) nectarine on *Citrus limon* L. Later on, the first author again found the same species in various parts of Bani tehsil of district Kathua and adjoining areas like Sarthal, Duggan etc. of district Kathua. Author photographed this Rhopalocera with the help of Canon Eos 1300 D, and noted down the coordinates of the area ($32^{\circ}42'42.2''$ N, $74^{\circ}48'57.6''$ E) at an altitude of around 1305 m a.s.l. The study was carried out in Kathua district of Jammu and Kashmir. It is located between 75.5173° E longitude and 32.3865° N latitude. The average annual rainfall is 1360 mm. The study area experiences a sub-tropical climate. The Kathua district has its border with Pakistan, Punjab, and Himachal Pradesh. The vegetation around the sighting was; *Juglans regia* L., *Alnus nitida* Spach, *Citrus sinensis* (L.) Osbeck, *Debregeasia hypoleuca* (Hochst. Ex Steud.) Wedd, 1857 etc.

The identity was confirmed with Evans (1932), Wynter-Blyth (1957), Kehimkar (2016) and Smetacek (2018).



1a



1b

Figures 1a-1b. *Ypthima sakra* Moore, 1857. **1a.** Underwing. **1b.** Upperwing.

Results and Discussion

Ypthima sakra Moore, 1857

Yphthima [sic] *sakra* Moore, 1857, in Horsfield & Moore. *Cat. Lep. Ins. Mus. East India Coy.* I, 236
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Description Adult (Figures 1a-1b): Underside hindwing with two apical dots conjoined but not separated by yellow ring as in *Ypthima nikaea* Moore, [1875]. Three spots in lower area on underside hindwing. Upper side forewing has double pupiled apical eyespot. Upper hindwing has two eye spots near lower tip.

Previous many works done on Rhopalocera of Jammu and Kashmir Himalaya is available in the form of various publications like Sheikh & Parey (2019a, 2019b), Sharma & Sharma (2020), Gupta & Sheikh (2021), Sheikh et al. (2021), Singh & Sheikh (2021), Parey & Sheikh (2021), Dar et al. (2021) and Sheikh & Gupta (2022). These publications have added many new records as well as rediscoveries to the Union territory of Jammu and Kashmir. This current study also coincides with the previous

studies and thus gives the first photographic record of this species for Jammu and Kashmir Union Territory, India.

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