

Two new records of Rhopalocera from Union Territory of Jammu and Kashmir, India (Insecta: Lepidoptera)

Talisma Sheikh & Muhammad Asghar Hassan

Abstract

Chilades parhassius (Fabricius, 1793) and *Choaspes benjamini japonica* Murray, 1875, are first time reported from Jammu and Kashmir Union Territory, India.

Keywords: Insecta, Lepidoptera, *Chilades*, *Choaspes*, Jammu, Kashmir, India.

**Dos nuevos registros de Rhopalocera en el territorio de la Unión de Jammu y Cachemira, India
(Insecta: Lepidoptera)**

Resumen

Chilades parhassius (Fabricius, 1793) y *Choaspes benjamini japonica* Murray, 1875, se citan por primera vez en el Territorio de la Unión de Jammu y Cachemira, India.

Palabras clave: Insecta, Lepidoptera, *Chilades*, *Choaspes*, Jammu, Cachemira, India.

Introduction

In India there are two subspecies of *Chilades parhassius* (Fabricius, 1793): *Chilades parhassius parhassius* (Fabricius, 1793) and *Chilades parhassius minuta* (Evans, 1932) and two subspecies of *Choaspes benjamini* (Guérin-Méneville, 1843): *Choaspes benjamini japonica* Murray, 1875 and *Choaspes benjamini benjamini* (Guérin-Méneville, 1843).

Chilades parhassius parhassius (Fabricius, 1793) has the range extension from Rajasthan to Kerela and eastward to Uttar Pradesh, Himachal Pradesh, and Uttarakhand. While *Choaspes benjamini japonica* Murray, 1875 has the range extension from Himachal Pradesh to Northeast India and *Choaspes benjamini benjamini* (Guérin-Méneville, 1843) has the range extension from Karnataka to Kerela (Varshney & Smetacek, 2015).

Chilades parhassius parhassius (Fabricius, 1793) is uncommon in peninsular and northwestern India. Can be found in Western Ghats but at low elevations from Kerela and Tamil & Nadu, northern part of Karnataka, Telangana, Goa and from Maharashtra up to Gujarat, also found in Rajasthan, Haryana, southern part of Uttar Pradesh, Madhya Pradesh and Chhattisgarh and also distributed to Himachal Pradesh (Shimla at an altitude of 2050 m, fide Wynter-Blyth) and from Nepal where there is an old record from terai. *Chilades parhassius minuta* is recorded in Northwestern India in Punjab east to Chandigarh. There is no record of it from Jammu and Kashmir (Gasse, 2018).

Choaspes benjaminii benjaminii (Guérin-Méneville, 1843) is fairly common in Southwestern Ghats that too above 1000 m i.e., in Kerela, West Tamil Nadu and in Kodagu area of Southwest Karnataka. Whereas *Choaspes benjaminii japonica* Murray, 1875 is fairly common in Himalayas from 300-2700 m, seen West of Kangra in Himachal Pradesh and Eastern part of Uttarakhand, Nepal, Sikkim, Northwest Bengal and from Bhutan to Arunachal Pradesh and the remaining Northeast India but not recorded from Mizoram. There is no record of it from Jammu and Kashmir.

From decade, some researchers have made research in some parts of the Union Territory and have added many new sightings of Rhopalocera fauna of Jammu and Kashmir, India i.e., (Qureshi *et al.*, 2013a, 2013b, 2014; Sharma & Sharma, 2017a, 2017b, 2018a, 2018b, 2020) and many other articles by Sharma & Sharma (2017a, 2017b, 2018), Sheikh & Parey (2019a, 2019b), Sharma & Sharma (2020), Gupta & Sheikh (2021), Sheikh (2021), Singh & Sheikh (2021), Parey & Sheikh (2021), Dar *et al.* (2022a, 2022b), Sheikh *et al.* (2021), Sheikh & Gupta (2022), Sheikh & Mishra (2022a, 2022b), Sheikh & Dar (2022).

Choaspes benjaminii japonica Murray, 1875

On 15-IV-2022, author observed the Rhopalocera in Bani tehsil, and she found the *Choaspes benjaminii japonica* Murray, 1875 (Figure 1) belonging to Hesperiidae family nectarine on flowers of *Melia azedarach* L. for half an hour and later on she found three to four individuals' nectarine on the same tree. The author photographed this Rhopalocera with the help of Canon Eos 1300 D, and noted down the coordinates of the area ($32^{\circ}42'42.8''$ N, $74^{\circ}48'58.1''$ E) at an altitude of around 1350 m a.s.l. The vegetation around was *Alnus nitida* Spach, *Rubus niveus* Thunb, *Rubus ellipticus* Sm., *Berberis lycium* Royle, *Ficus carica* L., *Juglans regia* L., etc.

Chilades parhassius parhassius (Fabricius, 1793)

On 11-V-2022, author has done survey on the Rhopalocera of Bani area of Kathua district (Figure 2) of Jammu and Kashmir Union Territory where she found *Chilades parhassius parhassius* (Fabricius, 1793) (Figure 1) belonging to Lycaenidae family nectarine on *Trifolium repens* where author photographed this butterfly with the help of Canon Eos 1300 D, and noted down the coordinates of the area ($32^{\circ}42'26.7''$ N, $74^{\circ}48'43.8''$ E) at an altitude of around 1350 m a.s.l. After this sighting author found the same species in many areas of Bani like in Duggan, Dalangal, Sida etc. 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; *Rhododendron arboreum* Sm., *Prinsepia utilis* Royle, *Quercus leucotrichophora* A. Camus, *Melia azedarach* L., *Alnus nitida* Spach, *Rubus niveus* Thunb, *Rubus ellipticus* Sm., *Berberis lycium* Royle, etc.

Identification

Identification was done with the help of following to Evans (1932), Wynter-Blyth (1957), Kehimkar (2016) and Smetacek (2018).

Acknowledgments

Author is highly thankful to Department of Zoology, Sunrise University Alwar for providing facilities to carry out the research work. The author is also thankful to Mr. Lovish Garlani for his help in identification of this Rhopalocera.

References

- Dar, A. A., Jamal, K., Shah, M. S., Ali, M., Sayed, S., Gaber, A., Kesba, H., & Salah, M. (2022a). Species richness, abundance, distributional pattern, and trait composition of butterfly assemblage change along an altitudinal gradient in the Gulmarg region of Jammu & Kashmir, India. *Saudi Journal of Biological Sciences*, 29(4), 2262-2269. <https://doi.org/10.1016/j.sjbs.2021.11.066>
- Dar, A. A., Shah, M. S., & Jamal, K. (2022b). Butterfly (Lepidoptera: Heterocera) Fauna of Bangus Valley, Jammu & Kashmir, India. *Entomological News*, 130(3), 308-317. <https://doi.org/10.3157/021.130.0311>
- Evans, W. H. (1932). *The identification of Indian Butterflies*. Loe Books.
- Gasse, P. V. (2018). *Butterflies of the Indian Subcontinent - Annotated Checklist*. http://www.biodiversityofindia.org/images/2/2c/Butterflies_of_India.Pdf
- Gupta, S., & Sheikh, T. (2021). First Record of Spotted Small Flat *Sarangesa purendra* (Moore, 1882) (Lepidoptera: Hesperiidae) from Union Territory of Jammu and Kashmir, India. *Revista Chilena de Entomología*, 47(3), 545-548
- Kehimkar, I. (2016). *BNHS Field Guides: Butterflies of India*. Bombay Natural History Society Bombay.
- Parey, S. H., & Sheikh, T. (2021). *Butterflies of Pirpanjal Range of Kashmir Himalaya*. Corvette Press.
- Qureshi, A. A., Bhagat, R. C., & Bhat, D. M. (2014). Diversity of butterflies (Lepidoptera: Papilionoidea and Hesperioidae) of Dachigam National Park, Jammu and Kashmir, India. *Journal of Threatened Taxa*, 6(1), 5389-5392. <https://doi.org/10.11609/JoTT.o2886.5389-92>
- Qureshi, A. A., Bhagat, R. C., & Pathania, P. C. (2013). Rhopalocera Diversity (Lepidoptera) of District Kupwara from Jammu and Kashmir State (India). *Biological Forum*, 5(1), 100-106.
- Qureshi, A. A., Dar, R. A., Tahir, S. I., & Bhagat, R. C. (2013b). Butterfly-fauna of Gulmarg, Kashmir, J & K State. *IOSR. Journal of Agriculture and Veterinary Sciences*, 2(5), 40-45. <https://doi.org/10.9790/2380-0254045>
- Sharma, S., & Sharma, N. (2018a). New Lycaenid butterfly records from Jammu and Kashmir. *Journal of Threatened Taxa*, 10(7), 11984-11987. <https://doi.org/10.11609/jott.4046.10.7.11984-11987>
- Sharma, S., & Sharma, N. (2018b). New Nymphalid butterfly records from Jammu and Kashmir. *Journal of Threatened Taxa*, 10(11), 12602-12606. <https://doi.org/10.11609/jott.3874.10.11.12602-12606>
- Sharma, S., & Sharma, N., (2017a). Two new species of butterflies from Jammu and neighborhood in Jammu and Kashmir. *Journal of Wildlife Research*, 5(1), 10-13.
- Sharma, S., & Sharma, N. (2017b). New butterfly records from the Jammu Shivalik's in Jammu and Kashmir. *Journal of Threatened Taxa.*, 9(10), 10856-10859. <https://doi.org/10.11609/jott.3180.9.10.10856-10859>
- Sharma, S., & Sharma, N. (2020). On the rediscovery and new additions of Skippers (Lepidoptera: Papilionoidea: Hesperiidae) from Jammu and Kashmir, India. *Revista Chilena de Entomología*, 46(4), 591-599. <https://doi.org/10.35249/rche.46.4.20.05>
- Sheikh, T. (2021). Addition of Chestnut Angle *Odonopilum angulatum* (C. Felder, 1862) to the butterfly fauna of Union Territory of Jammu and Kashmir, India. *Life Sciences Leaflets*, 141, 7-11.
- Sheikh, T., Awan, M. A., & Ali, S. H. (2021). Checklist of Butterflies (Lepidoptera: Rhopalocera) of Union territory Jammu and Kashmir, India. *Records of Zoological Survey India*, 121(1), 127-171.
- Sheikh, T., & Gupta, S. (2022). Rediscovery of white-bordered copper, *Lycaena panava* (Westwood, 1852) (Lepidoptera: Lycaenidae) from Union Territory of Jammu and Kashmir, India. *Life Sciences Leaflets*, 144(2), 01-05.
- Sheikh, T., & Mishra, S. (2022). First report of continental swift *Parnara ganga* (Evans, 1937) (Lepidoptera: Hesperiidae) from Jammu and Kashmir Union Territory, India. *Munis Entomology & Zoology*, 17 (supplement): 1683-1686.
- Sheikh, T., & Parey, S. H. (2019a). Six new records of butterflies (Lepidoptera: Insecta) from Jammu and Rajouri Districts of Jammu and Kashmir Himalaya. *Journal of Wildlife Research*, 7(3): 42-46.
- Sheikh, T., & Parey, S. H. (2019b). New records of butterflies (Lepidoptera: Insecta) from Jammu and Kashmir Himalaya. *Records of Zoological Survey India*, 119(4), 463-473.
- Singh, S., & Sheikh, T. (2021). Rediscovery of Popinjay, *Stibochiona nicea* (Gray, 1846) (Lepidoptera: Nymphalidae: Nymphalinae) from Union Territory of Jammu and Kashmir, India. *Revista Chilena de Entomología*, 47(3), 497-499.
- Smetacek, P. (2018). *A naturalist's guide to the Butterflies of India, Pakistan, Nepal, Bhutan, Bangladesh, and Sri Lanka*. John Beaufoy Publishing.
- Varshney, R. K., & Smetacek, P. (2015). *A Synoptic Catalogue of the Butterflies of India*. Butterfly Research Centre, Bhimtal & Indinov Publishing.
- Wynter-Blyth, M. A. (1957). *Butterflies of the Indian Region*. Bombay Natural History Society.

*Talisma Sheikh
Department of Zoology
Sunrise University Alwar
Rajasthan - 185234
INDIA / INDIA
E-mail: sheikhtass@gmail.com
<https://orcid.org/0000-0002-8112-1562>

Muhammad Asghar Hassan
Institute of Entomology
Guizhou University
Guiyang, 550025
R. P. CHINA / P. R. CHINA
E-mail: kakojan112@gmail.com
<https://orcid.org/0000-0003-2590-5781>

*Autor para la correspondencia / Corresponding author

(Recibido para publicación / Received for publication 21-VIII-2022)

(Revisado y aceptado / Revised and accepted 4-XII-2022)

(Publicado / Published 30-VI-2023)



Figures 1-2. **1.** *Choaspes benjaminii japonica* Murray, underwings. **2.** *Chilades parrhasius* (Fabricius), nectarine of *Trifolium repens*.

Derechos de autor: El autor(es). Este es un artículo de acceso abierto distribuido bajo los términos de la Licencia de Reconocimiento 4.0 Internacional de Creative Commons (CC BY 4.0), que permite el uso, distribución y reproducción sin restricciones en cualquier medio, siempre que se cite al autor original y la fuente. / **Copyright:** The author(s). This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.