

OCCURRENCE OF THE LITTLE KNOWN DUBIOUS FIVE-RING *YPHIMA PARASAKRA* ELIOT IN GARHWAL HIMALAYA

ARUN PRATAP SINGH* AND TRIBHUWAN SINGH

Entomology Branch, Forest Protection Division, Forest Research Institute (ICFRE),
P.O. New Forest, Dehradun 248006, Uttarakhand, India
*Email: ranoteaps@gmail.com (corresponding author)

ABSTRACT

A survey carried out from Sankri village to Har-ki-Doon valley in Uttarkashi district, Uttarakhand revealed the occurrence of dubious five ring *Ypthima parasakra* Eliot (1987). The identity of the species was confirmed on examination of its male genitalia and its comparison with its congener, the Himalayan five-ring *Y. sakra* Moore (1958). This is the first site specific record of this little-known species from the Garhwal region of Uttarakhand, Western Himalaya, which is otherwise known from Central and Eastern Himalaya, in India. A brief account on the habitat of the species is given.

Key words: Satyrinae, *Ypthima*, male genitalia, uncus, valva, blue pine, temperate forest, Uttarkashi, Western Himalaya

Ypthima parasakra Eliot (1987) is known to occur as three races from Central to Eastern Himalaya in Nepal, Bhutan, India, adjoining parts of South Tibet and Yunnan in China. The nominate one *Y. p. parasakra* Eliot was described from Central Nepal (type locality Larjung). This subspecies has since then been extensively reported from Mustang, Manang and Lantang districts of Nepal (2155-2677 masl- Eliot, 1987; Smith, 1989; Smith, 2006); Bhutan (Eliot, 1987; Gasse, 2013), Sikkim (D' Abrera, 1985) and Arunachal Pradesh (Anon., 2021). The second one *Y. p. menpae* Huang was described from Hanmi in South Tibet, China (Huang, 1999), while the third one *Y. p. mabiloa* Huang was also documented from type locality Xiongdang, China (Huang and Wu, 2003). And, *Y. parasakra* remained to be reported from the Western Himalaya (Kehimkar, 2016; Singh and Sondhi, 2016; Sondhi and Kunte, 2018). A male specimen of *Ypthima parasakra parasakra*, was collected on 02.viii.2019 along the Supin river catchment close to Osla in Uttarkashi district, Uttarakhand (31.11453°N; 78.33553°E; 2543 masl) (Fig. 1). The vegetation comprised mostly blue pine *Pinus wallichiana*; deodar *Cedrus deodara*; kharsu oak *Quercus semecarpifolia*; and *Rubus ellipticus*, *Berberis aristata*, etc. The specimen is kept in Arun P Singh Collection, Forest Research Institute, Dehradun. The identity of the species was confirmed by genitalia dissection. On comparison with its congener Himalayan five-ring *Y. sakra* Moore (1958) from Garhwal (Rose and Sharma, 1999). It was observed that both the species were quite similar except that in *Y. parasakra* the 'uncus'

was longer and thinner (Eliot, 1987). The 'valva' in *Y. parasakra* is axe-like at the distal end and hooked at the apex, while in *Y. sakra* 'valva' is nearly rounded and blunt at apex (Figs. 2, 3). This record from Western Himalaya is significant as it lies 580 km from Mustang,



Fig. 1. Male, *Ypthima parasakra*



Fig. 2. Male genitalia of *Y. parasakra* (UN-Uncus; TEG- Tegumen; AED-Aedeagus; VLV- Valva; SA-Saccus; VIN-Vinculum)

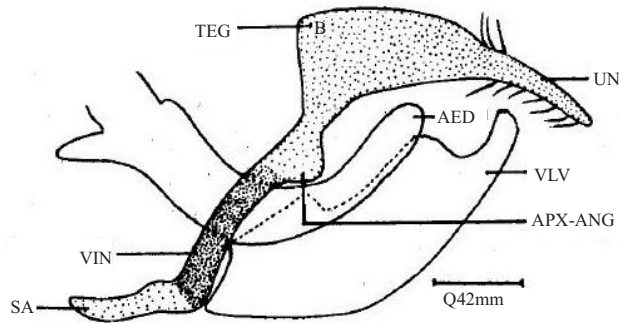


Fig. 3. Male genitalia of *Y. sakra* Moore (W. Himalaya, Rose and Sharma, 1999) (UN-Uncus; TEG- Tegumen; AED-Aedeagus; VLV- Valva; SA-Saccus; VIN-Vinculum)

Nepal, the known western limit in the distribution range of this species in the Himalaya.

REFERENCES

- Anonymous. 2021. *Ypthima para sakra* Eliot, 1987- Dubious five-ring. Kunte K, S Sondhi, P Roy (Chief Editors). Butterflies of India, v. 3.06. Indian Foundation for butterflies. <http://www.ifoundbutterflies.org/sp/2941/Ypthima-parasakra>
- D' Abrera B. 1985. Butterflies of the Oriental Region, Part II, pp. 246-534, coloured figs. Melbourne.
- Eliot J N. 1987. On some butterflies from Nepal, Bhutan and- Thailand. *Tyô to Ga* 38 (1): 21-29.
- Huang H. 1999. Some new butterflies from China 1. *Lambillionea* XCIX: 642-676.
- Huang H, Wu C S. 2003. New and little-known Chinese butterflies in the collection of the Institute of Zoology, Academia Sinica, Beijing-1 (Lepidoptera: Rhopalocera). *Neue Entomologische Nachrichten* 55: 115-143.
- Kehimkar I. 2016. The book of Indian butterflies. BNHS, Oxford University, Delhi Press, 497 pp.
- Rose H, Sharma N. 1999. Butterflies of the genus *Ypthima* Hübner (Lepidoptera: Rhopalocera) from northwestern India. *Zoos' Print Journal* 14, 97-115.
- Singh AP, Sondhi S. 2016. Butterflies of Garhwal, Uttarakhand, western Himalaya, India. *Journal of Threatened Taxa* 8(4): 8666-8697.
- Smith C. 1989. Butterflies of Nepal (Central Himalaya). Tecpress Service L.P., Bangkok, 352 pp.
- Smith C. 2006. Illustrated Checklist of Nepal's Butterflies. Craftman Press, Bangkok, 129 pp.
- Sondhi S, Kunte K. 2018. Butterflies of Uttarakhand- a field guide. Bishen Singh Mahendra Pal Singh (Dehra Dun), Titli Trust (Dehra Dun), National Centre for Biological Sciences (Bengaluru), and Indian Foundation for Butterflies (Bengaluru). x+ 310 pp.

Manuscript Received: June, 2021; Revised: September, 2021;
Accepted: September, 2021; Online Published: February, 2022)
Online published (Preview) in www.entosocindia.org Ref. No. e21173