ISSN 0375-1511

Rec. zool. Surv. India : **113**(Part-3): 105-107, 2013

SIGHTING OF *LIBYTHEA MYRRHA* GODART (LEPIDOPTERA: LIBYTHEIDAE) IN PUNJAB, INDIA

NARENDER SHARMA*, P. KUMAR AND P. C. TAK
Zoological Survey of India, Northern Regional Centre
218 Kaulagarh Road, Dehradun-248 195
*Email : narender@scientist.com

Libytheidae is a small family of butterflies characterized by enormous prolongation of the palpi giving an appearance of a beak in front of head and hence commonly known as the "Beaks". The members of this family have small and angular fore wings, and reduced fore legs in males but fully developed in females.

This family is closely related to the family Lycaenidae. However, different workers have given different taxonomic treatment to this family for example de Niceville (1886) classified it as a subfamily Libytheinae under the family Lemoniidae; Evans (1932) and Arora *et al*., (2009) incorporated it as a genus *Libythea* Fabricius under family Erycinidae; Wynter-Blyth (1957) included it as a subfamily Libytheinae under family Erycinidae; while Haribal (1992) and Kehimkar (2008) treated it as a separate subfamily Libytherinae under the family Nymphalidae.

It is represented by a single genus *Libythea* Fabricius. The type genus *Libythea* is represented by 12 species through out the world (Varshney 2010). The different species of *Libythea* are generally uniform in size, peculiar and strongly falcated outline, and in colouration except the specific distinction in the markings of the upperside. Their size usually varies from a little under two inches to a little over two inches in expanse. The upperside is brown with some tawny or whitish markings on wings and the variations in these markings are the diagnostics for different species. The underside is clouded and striated with similar protective colouration, varying in tone in each species but uniform in style throughout the genus.

Of these 12, only four species, *viz*., *Libythea myrrha* Godart, *L. lepita* Moore, *L. celtis* Laicharting, and *L. narina* Godart occur in India Kehimkar (2008), while Varshney (2010) included *L. geopffroyi* Godart also along with these four species.

DISTRIBUTION

In India, *Libythea myrrha* Godart 1819 is distributed between about 3,000' and 9,000'in the NW Himalayas; Kullu to Assam & Sikkim; Northeast; Western India (Bombay); and South India (higher hills) (de Niceville 1886; Bingham 1905; Evans 1932; Wynter-Blyth 1957; Haribal 1992; and Kehimkar 2008). *Elsewhere*: Burma (now Myanmar), China, Upper Tenasserim, Java, Borneo, Malayan Subregion, and Ceylon (now Sri Lanka). It is found around streams in forest and settles very readily on damp patches. It is wary and easily frightened and if disturbed flies off rapidly but not far, either returning soon or settling at the end of a twig where it exactly resembles a leaf.

The species is easily recognized by upper forewing cell tawny streak joined to spot beyond, making a continuous club-like making and apical spots joined to form a band. upper hindwing has broad yellow band touching the base. Hindwing costa and termen are straight on either side of apex (Photo).

Libythea myrrha Godart at Kathlaur-Kaushlian Wildlife Sanctuary, Pathankot, Punjab

Recently, while conducting 'General Faunistic Survey' of Punjab under the mandates of the Zoological Survey of India in districts, *viz*., Kapurthala, Amritsar, Gurdaspur, Pathankot, Hoshiarpur and Rupnagar (Ropar) (3-20 November 2011), we came across one example of the species *Libythea myrrha* Godart in scrubby habitat at Kathlaur-Kaushlian Wildlife Sanctuary (KKWLS) in District Pathankot, Punjab in the forenoon of 11th November 2011. Observations were made in the compartment nos. 5&6 of the sanctuary with GPS reading on Oregon 550 GPS of Garmin make N 32º 14.936'; E 075º26.967'; Accuracy 10'; Elevation 852'.

The sanctuary is primarily a riverine ecosystem. The vegetation of the sanctuary is mainly comprised of grasses such as: Sarkanda, Kana, Kahi (*Saccharum spontaneum*, *S. officinalis*, *S. munja*, etc); young plantations of the trees, *viz*., Khair (*Acacia catechu*), Shisham (*Dalbergia sissoo*), Kikar (*A. nilotica*), Amla (*Emblica officinalis*), Bamboo (*Bambusa bambos* and *Dendrocalamus strictus*), Amrud (*Psidium guvava*), Safeda (*Eucalyptus* hybrid), Willow (*Salix* sp.); and a variety of shrubs, herbs and weeds.

Material examined: India: Punjab: Distt. Pathankot: Compartment nos. 5&6 of KKWLS, 1♂ (Regd. No. A-11088), 11.xi.2011, Coll. P.C. Tak & party. The material has been deposited in the National Zoological Collection (NZC), ZSI, Dehradun.

According to Wynter-Blyth (1957) the species in the Himalayas is reported only to fly up to circa 5000' and in NW Himalayas its range is between c. 3000' and 9000'. However, during the present survey it was recorded at the altitude of 852' only.

Further, although butterfly fauna of Punjab have been studied from different localities by the workers such as: Rose and Sidhu (2001); Arora *et al*., (2006); Sharma and Joshi (2009); including a checklist of butterflies of Punjab available on the website of Punjab ENVIS Centre and also the above quoted workers. But none of them have made any mention of this species in their studies, therefore, the present record of *Libythea myrrha* Godart from KKWLS (Distt. Pathankot) can be treated as an addition to the butterfly fauna of Punjab.

ACKNOWLEDGEMENTS

Authors are thankful to Dr. K. Venkataraman, Director, Zoological survey of India, Kolkata for encouragement throughout. Our sincere thanks are also due to Sh. P.T. Bhutia, Officer In-charge, Northern Regional Centre, Zoological Survey of India, Dehradun for facilities. Thanks are also due the Chief Wildlife Warden, Punjab for necessary permission to undertake the General Faunistic Survey work and DFO, Pathankot for various courtesies.

REFERENCES

Arora, G. S., Mehta, H. S., Walia, V. K. and Thakur, M. S. 2006. BUTTERFLIES: 587- 609. In: Jerath, Neelima, Puja & Chadha Jatinder (Editors). 2006. *Biodiversity in the Shivalik Ecosystem of Punjab, India*. Punjab State Council for Science and Technology, Chandigarh.

Arora, G. S., Mehta, H. S. and Walia, V. K. 2009.*Handbook on Butterflies of Himachal Pradesh* : 1-160. (Published by the Director, *Zool. Surv. India*, Kolkata.

Bingham, C.L. 1905. *The fauna of British India including Ceylon and Burma, Butterfly-Vol-I.* Taylor and Francis Ltd., London. 511pp.

De Niceville, L. 1886. *The butterflies of India, Burma and Ceylon. Vol-II. Nymphalidae, Lemoniidae, Libythaeinae, Nemeobinae.* The Calcutta Central press Co. Ltd. 332pp.

Evans, W.H. 1932. *The identification of Indian Butterflies. (2nd Edition).* The Bombay Natural History Society, Mumbai, India. 454pp.

Haribal, M. 1992. *The Butterflies of Sikkim Himalaya and Their Natural History*. Published by Sikkim Nature Conservation Foundation (SNCF), Gangtok, Sikkim. 217 pp.

Kehimkar, I. 2008. *The book of Indian Butterflies*. Bombay Nat. Hist. Soc., Oxford Univ. Press. 497.

Rose, H.S. and Sidhu, A.K. 2001. Inventory of the butterflies of Punjab (Lepidoptera: Rhopalocera). *Bionotes*, 3(2): 43-44.

Sharma, G. and Joshi, P. C. 2009. Diversity of Butterflies (Lepidoptera : Insecta) from Dholbaha dam (Distt. Hoshiarpur) in Punjab Shivalik, India. *Biological Forum*, **1**(2): 11-14.

Varshney, R.K. 2010. *Bharat Ki Titliyan* (Butterflies of India) [in Hindi]: i-xii, 1-195. (Published by the Director, *Zool. Surv. India*, Kolkata.

www.punenvis.nic.in: Checklist of Butterflies of Punjab, Punjab ENVIS Centre: State Environment Issues.

Wynter-Blyth, M.A. 1957. *Butterflies of the Indian region.* Bombay Natural History Society, Bombay. 523pp.

Manuscript received : 17-05-2012; *Accepted* : 23-10-2013