

## A NEW RECORD OF *FLOS CHINENSIS* (INSECTA: LEPIDOPTERA: LYCAENIDAE) FROM WESTERN HIMALAYA, INDIA

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### Introduction

*Flos* (Doherty, 1889) is a genus of butterflies in Lycaenidae family. The species of this genus are commonly known as plushblues and are found in the Indo-Malayan Ecozone (Seitz 1912–1927). There are 14 species listed in this genus, half of which are known from India viz. *F. adriana* (de Nicéville, 1883), *F. fulgida* (Hewitson, 1863), *F. asoka* (de Nicéville, 1883), *F. areste* (Hewitson, 1862), *F. chinensis* (C. & R. Felder, 1865), *F. apidanus* (Cramer, 1773) and *F. diardi* (Hewitson, 1862) (Varshney & Smetacek, 2015). The first three species are known to have their distribution in western Himalaya. In this paper, we have documented an addition, Chinese Plushblue *Flos chinensis* (C. & R. Felder, 1865) from the western Himalaya. It is interesting to note here that the central Himalaya in Nepal, have five species i.e. *F. asoka*, *F. adriana*, *F. chinensis*, *F. areste*, and *F. fulgida* (Smith, 1994); out of which, the first three species have been recorded from its neighboring state Uttarakhand, during the past 10 years (Smetacek, 2011; Venkatesh, 2016). So, there is a high probability of the remaining two

specie occurring in Uttarakhand. On reviewing the literature, it became clear that W.C. Hewitson (1863–1878) examined a specimen of this species from North India with missing locality data. Although it was believed by L. de Niceville (1890) that perhaps Hewitson mistook *Flos chinensis* for a similar looking Sikkim species, which he had since described as *Nilasera asoka* (*Flos asoka*, de Niceville, 1883), but the latter is tailed, while the former is tailless. Given as *Amblypodia chinensis* in Evans (1932) with a distribution from Sikkim to Assam. P.v. Gasse (2013) listed it as “Not Rare” from central Nepal to Arunachal and north-east India. Recently Varshney & Smetacek (2015) documented this species from Sikkim to north-east India.

### Observations

A single individual of *F. chinensis* was observed during a butterfly survey at 0930 hours on 18.vi.2017 at Saung village (30.02671 N, 79.95240 E), altitude 1430 m, district Bageshwar, Uttarakhand, (Fig. 1). It was resting on the leaf of a ginger plant, *Zingiber officinale*. We also observed a single individual of Powdered Oakblue, *Arhopala*

*bazalus* (Hewitson, 1862), which was resting on the leaf of Oak species. It indicates that both the species share same habitat. The study area was dominated by Oak species. This species was not sighted during subsequent surveys conducted at the same site during the next two months although we observed *A. bazalus* in the same location. The site of observation is shown in Fig. 2.

#### Conclusion

The discovery of *F. chinensis* leads us to draw conclusions that either it is present in western Himalaya and overlooked during past surveys organized in that area or it is a range extension of this species into the western Himalaya. It is imperative that extensive surveys at likely locations in Uttarakhand should be conducted to determine the status of this species of butterfly so that further efforts can be made to conserve and protect them in this region.

#### References

de Niceville, L. 1890. *The butterflies of India, Burma and Ceylon*. Vol-III (Lycaenidae). The Calcutta Central Press Co. Ltd. 503pp.

Evans, W.H. 1932. *The Identification of Indian Butterflies*. Bombay Natural History Society, Bombay, x+454 pp., 32 pl.

Gasse, P. v. 2013. Annotated checklist of the Butterflies of the Indo-Burmese region (unpublished).

Hewitson, W.C. 1863–1878. *Illustrations of diurnal Lepidoptera, Lycaenidae*. van Vorst, London. x + 229 pp., 107 pls.

Seitz, A. 1912–1927. *Die Indo-Australien Tagfalter. Introduction, Theclinae, Poritiinae, Hesperiiidae*. Grossschmetterlinge der Erde 9: 799–1107, pls. 138–175

Smetacek, P. 2011. Four new Lycaenid records from the Kumaon Himalaya. *Journal of Threatened Taxa*. 3(2): 1555–1558.

Smith, C. 1994. *Butterflies of Nepal*. Revised Edition, Tecpress Service L.P., Bangkok, Thailand, 368 pp.

Varshney, R.K. & P. Smetacek (eds.) 2015. *A Synoptic Catalogue of the Butterflies of India*. Butterfly Research Centre, Bhimtal and Indinov Publishing, New Delhi, ii+261 pp. +8 pls.

Venkatesh, V. 2016. Reporting the occurrence of the Variegated Plushblue *Flos adriana* (Lepidoptera: Lycaenidae: Theclinae) from Garhwal, Uttarakhand extending its known range. *Journal of Threatened Taxa* 8(5), 8829-8830.



Fig.1: A photograph of *Flos chinensis* clicked at Saung Village, Bageshwar.

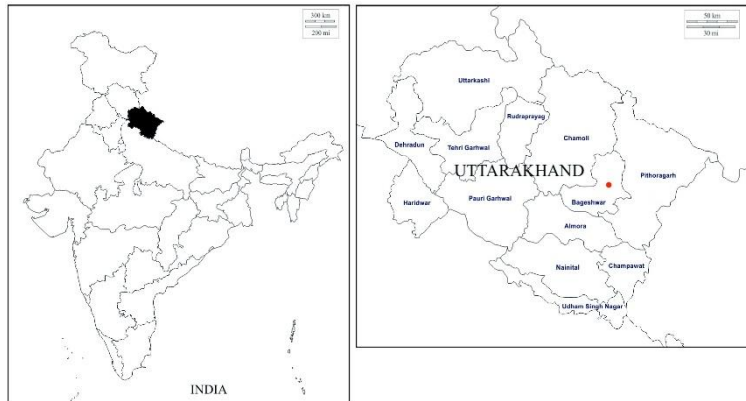


Fig.2: The site where *Flos chinensis* was recorded shown by a red dot in the map.