

# New records of butterflies *Prosotas*bhutea and Zenonoida discreta discreta from Nepal

### Introduction

Among the 660 species of butterflies documented in Nepal (Smith 2010), there are several records which have limited data or species which have limited distribution range. Over time, however, with more research and the natural expansion of distribution range of those species, or some other phenomenon like climate change and migration, there are bound to be new records every now and then. Sometimes, species which were only once recorded before can be found again from same area after tens of years while some species which were recorded from only one location can be seen in a completely unexpected location at completely different elevation.





Study area.



Prosotas bhutea. © K.C. Sajan.

Prosotas bhutea (de Nicéville, 1884), commonly known as Bhutya Lineblue, is a small Lycaenidae with wingspan of 25–28 mm (Evans 1932). It was recorded for the first time in Nepal by Colin Smith in Pokhara at 820m amsl in December of 1970 in forest

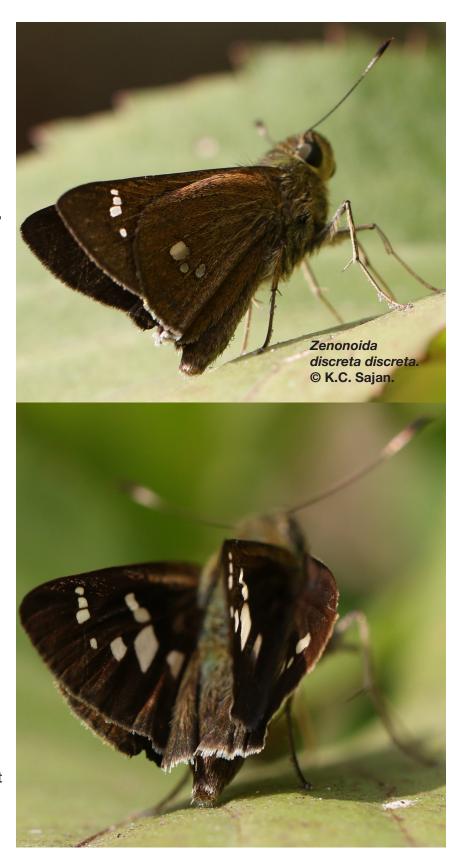
streams (Smith 1989). Most of the *Prosotas* spp. look similar but there are only three tail bearing species in Nepal, viz., *P. nora nora* (C. Felder, 1860), *P. pia marginata* Tite, 1963, and *P. bhutea*, which could look very much alike. The key difference

among these species lies in the structure of bands on under fore wings (UnFW) and the shades of marginal and submarginal spots on under hind wings (UnHW). In P. nora nora, the submarginal and marginal spots on UnHW are equally dark and equally sharp, there is subbasal extension of midcell (MC) band and postdiscal (PD) band extension on sp. 1b of UnFW. On the other hand, in *P. pia marginata*, the HW submarginal marks are more washed out and dimmer than marginal spots, and on FW, the subbasal extension of MC band could be weak or even absent while PD extension on sp. 1b is well present.

Finally, in *P. bhutea*, the most distinguishing character is the complete absence of MC band on sp. 1b of UnFW while PD band is also restricted to v2 but can sometimes appear as a mere dot (Evans 1932), while the UnHW marginal spots and submarginal spots could look like those in *P. pia*. The former character, of course, is only noticeable when the FW is properly raised.

Zenonoida discreta discreta (Elwes & Edwards 1897), commonly known as Himalayan Swift, previously in the genus Polytremis Mabille (1904), is a hesperiid which also has only been recorded from Pokhara before and that too, very recently. Smith (1989, 2011) mentions its presence in Nepal however, no data was available. Sajan (2020) confirmed its presence in Pokhara at 850m amsl. in the month of May 2019. I once again found it in Pokhara at the same spot in the month of November 2020. Later, it was also seen by Piet van der Poel at 1,490m amsl from Astam, Pokhara in October and eventually by me again in Hemja, Pokhara in April, 2021 at 1048 m amsl. Thus, so far this species was endemic to Pokhara in Nepal.

The wingspan of this insect is 34-37mm (Evans 1932). It can most frequently be confused with another similar species *Zenonoida eltola eltola* (Hewitson 1869) commonly known as Yellow-spot Swift but can be differentiated from the latter species by the presence of white cilia on HW tornal area



(Evans 1949) which are yellow/ochraceous on *Z. eltola*.

## **Observations**

Three individuals of *Prosotas bhutea* were encountered on a random photography walk just few meters away from my home in Lakeside, Pokahra (28.2161°N & 83.9633°E) 850 m amsl/ 2789ft. on 24 and 28 January, 2021. Among many *P. pia* fluttering by a forest stream there, I came across two *P. bhutea* which flew away shortly after some shots. I came across another one at the same place on 28 January. Since *Prosotas* are small and they were in such abundant numbers there (almost all were *P. pia marginata*), it is very much possible that I may have ignored some other individuals of *P. bhutea* in that place.

On my trip to Shaktikhor, Chitwan (27.7397°N & 84.6050°E), 410m amsl/1345 ft. in late November of 2020 with my partner Anisha Sapkota, I came across a nice hesperiid butterfly which I was surprised to identify as *Zenonoida discreta discreta*, because it's known to be found at higher altitudes. Van Gasse (2018) indicates that it is mostly found between 750 and 2400m amsl., this is the lowest elevation record of this species so far, and the first record outside Pokhara in Nepal. This new record was from about 81km southeast of the previous records.

### Conclusion

These findings suggest that *P. bhutea* are still found in the habitat and location from where

they were first recorded in Nepal 51 years ago i.e. in 1970, although they fly with their cousins and thus can frequently be missed, and *Zenonoida discreta discreta* might have expanded its distribution to the lowlands or it was always there at first place.

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# K.C. Sajan

House No. 126, Street No. 26, Lakeside, Pokhara, Kaski, Gandaki Province-33700, Nepal. Email: Sajankc143@gmail.com

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For communication, Email: daniel@zooreach.org





