

## International Journal of Fauna and Biological Studies

# Available online at www.faunajournal.com



## ISSN 2347-2677

## www.faunajournal.com

IJFBS 2020; 7(2): 24-26 Received: 27-02-2020 Accepted: 10-03-2020

## Anisha Sapkota

BSc. Agriculture Agriculture and Forestry University, Rampur, Chitwan, Nepal

## Sajan KC

Independent Researcher Pokhara, Kaski, Nepal

## Surendra Pariyar

Museum Assistant National Trust for Nature Conservation-Annapurna Conservation Area Project, Pokhara, Kaski, Nepal

# First record of *Pantoporia sandaka davidsoni* Eliot, 1969 - Extra Lascar from Nepal

## Anisha Sapkota, Sajan KC and Surendra Pariyar

## Abstract

An individual *of Pantoporia sandaka davidsoni* Eliot, 1969 – Extra Lascar was recorded from Nepal in February 2020 in the premises of Agriculture and Forestry University, Chitwan. The addition of this new record enriches the total number of butterfly species in Nepal while raising the total number of species in the genus *Pantoporia* found in here to 2.

Keywords: butterflies, Nepal, new distribution record

## Introduction

Genus *Pantoporia* (Hübner, 1819) <sup>[7]</sup>, sometimes called the lascars, lies in family Nymphalidae. They have striped patterns of orange and black. There are 17 Pantoporia species found worldwide (Hübner, 1819) <sup>[7]</sup>. *Pantoporia sandaka davidsoni*, the extra lascar, is found in tropical and subtropical Asia. The larvae feed on *Acacia caesia* and *Dalbergia horrida* (Ravikanthachari *et al.*, 2018) <sup>[11]</sup>.

Four subspecies have been reported (Savela) viz. *Pantoporia sandaka sandaka* Eliot, 1969 <sup>[4]</sup> found in Peninsular Malaya, Sumatra, Bangka, Pulo Laut, Borneo; *Pantoporia sandaka davidsoni* Eliot, 1969 <sup>[4]</sup> found in India - Thailand - Hainan, Burma; *Pantoporia sandaka ferrari* Eliot, 1969 <sup>[4]</sup> found in Andaman Islands, and *Pantoporia sandaka michaeli* Tsukada & Kaneko, 1985.

The general distribution of *Pantoporia sandaka davidsoni* is India to Myanmar, Thailand, Laos, Cambodia, Vietnam, Hainan, Tibet, Yunnan, Guangxi (Eliot, 1969) <sup>[4]</sup> and Bhutan (Singh and Chib, 2014) <sup>[14]</sup>.

The history of butterflying in Nepal dates back to General Thomson Hardwick who started studying them in Nepal since 1826. Maj. W.G.H. Gough (1935) [6] attempted to collate a list of butterfly species in Nepal for the first time by recording 150 species. Then after, Maj. Gen. Ramsey accounted 44 species during 1852-67 (Khanal and Smith, 1997) [10]. Later, Lt. Col. F.M. Bailey (1951) [1] issued a list of 365 species. In 1970, a Japanese expedition to Kathmandu and East Nepal came up with a list of 285 species out of which 8 or 10 species or subspecies were new to science (Smith 1994) [15]. V.K. Thapa (1998) [19] later published 656 species of butterflies in Nepal. Similarly, Colin Smith (1978) [16] initially catalogued 567 species in Nepal. In his book 'Butterflies of Nepal (Central Himalaya)' (1994) [15], 643 species of butterflies in Nepal were indexed. Likewise, in his book 'Butterflies of Nepal in Natural Environment (2011a) [17], he mentioned that 660 species plus 30 extra subspecies are found in Nepal. Later on, the addition of Celaenorrhinus nigricans nigricans (de Nicéville, 1885) [2,8] as reported in July 2019 in the midhill regions of Syangja and Kaski district, made the total species count to 661 (KC and Pariyar, 2019a) [8]. However, 2 species which were included in Colin Smith's 'Illustrated Checklist of Nepal's Butterflies (2011b) [18], were omitted in the previous count, so the actual number was 663, and 692 including 29 extra subspecies. A subspecies Danaus chrysippus alcippoides which was previously listed under distinct subspecies was concluded merely as a form (KC and Pariyar, 2019b) [9] bringing down the number of extra subspecies from 30 to 29. However, this number will vastly change after a more full-fledged checklist will be out in the coming days reporting several unreported sightings and amassing those which may have been reported but we were unaware of.

## Methodology

The species was encountered during a random afternoon photography trip to the premises of Agriculture and Forestry University (AFU).

Corresponding Author: Sajan KC Independent Researcher Pokhara, Kaski, Nepal E-mail: sajankcl43@gmail.com The major floral components in and around the location were Mangifera indica, Lantana camara, Mikania micrantha, Mallotus, Clerodendron infortunatum, Zizipus and Dalbergia sissoo. The sighting was recorded capturing photos in Nikon Coolpix B500V 1.0 and Sony Cyber-Shot DSC-HX90V 18.2MP Camera. The Global Positioning System (GPS) details of location and date were recorded on the photos itself. The main identification key is the presence of grey speculum on hind wing upper portion, the region where the lapping over of hindwing and forewing occurs (Eliot, 1969) [4] (Image 7). This area is often concealed when the butterfly is at rest but may be visible when it is about to fly. The other related species lack this grey speculum. A spread specimen of Pantoporia hordonia hordonia is shown for comparison. Similarly, in P. sandaka davidsoni, the marginal inner grey line on forewing next to the orange lines is narrower, often broken into spots; orange line is prominent. The dry season form is characterized by broader orange bands & increased orange shadings along the margins (Seow TL, 2015) [13]. In P. hordonia hordonia, the grey line next to the orange line is thicker and continuous which is more distinct in WSF (Image 1). The butterfly was briefly caught for confirmation impromptu with bare hands, and safely released then after.

## Result and observation



Fig 1: Pantoporia hordonia hordonia (Wet Season Form)



Fig 2: Pantoporia hordonia hordonia (Dry Season Form)



Fig 3: Pantoporia hordonia hordonia (WSF Spread specimen)



Fig 4: Pantoporia sandaka davidsoni (Dry Season Form UpW)



Fig 5: Pantoporia sandaka davidsoni (Ditto Closer Shot)



Fig 6: Pantoporia sandaka davidsoni (Ditto LW)



Fig 7: Pantoporia sandaka davidsoni (Ditto, the grey speculum shown)



Fig 8: Habitat

**Table 1:** Details of Sightings

Image	Location	GPS	Altitude	Environment	Time	Date	No. of individuals found
4, 5,	Agriculture and Forestry	27°39'10.3"N 84°21'12.1"E	162	Near Mango	10:53-	2020.ii.23	1
6, 7	University, Rampur, Chitwan	27.652857, 84.353348	masl.	orchard	10:58 AM	2020.11.23	1

#### Discussions

The record of *Pantoporia sandaka davidsoni* Eliot, 1969 <sup>[4]</sup> has not been reported or mentioned in any literature from Nepal yet. It might have been photographed in the past, but may have been identified as *Pantoporia hordonia hordonia*. This new record hints at many other species which could be new to Nepal but may have been misidentified or not even discovered at all. A more thorough research and proper ID keys regarding the cryptic species could make the list of butterfly fauna in Nepal more full-fledged.

## Acknowledgements

We have never relied on external funds/grants to follow our passions. Even the cameras we carry were gifted by our close ones. We would like to thank Mr. Reijo Härkönen for providing the Sony Cyber-Shot DSC-HX90V 18.2MP back in August 2018, and Mr. Anish Sapkota for providing Nikon Coolpix B500V 1.0. Also, we are grateful to Mr. Piet van der Poel who went though the draft and passed his valuable comments on to us.

## References

- 1. Bailey FM. Notes on butterflies form Nepal. Journal of the Bombay Natural History Society. 1951; 50(1):63-298.
- 2. De Nicéville. Descriptions of some new Indian Rhopalocera J Asia. Soc. Bengal 54 Pt. II. 1885; (2):117-124, 1.2.
- 3. Eliot JN. An analysis of the Eurasian and Australian Neptini (Lepidoptera: Nymphalidae). Bulletin of the British Museum (Natural History) Entomology. Suppl. 1969; 15:35. Retrieved 28 April, 2018.
- 4. Eliot JN. An Analysis of the Eurasian and Australian Neptini (Lepidoptera: Nymphalidae), 1969.
- 5. Eliot JN. New or little known Butterflies from Malaya. Bulletin of the British Museum (Natural History) Entomology. 1959; 7(8):373-374. Retrieved 28 April, 2018.
- 6. Gough WGH. Some Butterflies of Nepal. Journal of Bombay Natural History Society. 1935; 38(2):258-265.
- 7. Hübner. Samml. eur. Schmett, 1819.
- KCS, Pariyar S. New Evidence of Himalayan Smallbanded Flat *Celaenorrhinus nigricans nigricans* (de Nicéville, 1885) from Nepal. International Journal of

- Zoology Studies. 2019a; 4(5):55-57.
- 9. Sajan KC, Pariyar Surendra. First photographic record of *Danaus chrysippus chrysippus* form *alcippoides* (Linnaeus, 1758) from Nepal. International Journal of Fauna and Biological Studies. 2019b; 6(6):26-27.
- 10. Khanal B, Smith C. Butterflies of Kathmandu valley. TAC Press Book, Bangkok, Thailand, 1997, 5.
- 11. Ravikanthachari N, Balakrishnan VC, Churi PV, Kalesh S, Prakash S, Kunte K. Larval host plants of the butterflies of the Western Ghats, India. Journal of Threatened Taxa. 2018; 10(4):11518. doi:10.11609/jott.3104.10.4.11495-11550.
- 12. Savela M. Pantoporia sandaka Butler. Lepidoptera and Some Other Life Forms. Retrieved July 3, 2018.
- 13. Seow TL. Butterfly Circle- A Tribute to Nature's Flying Jewels. 2015. Retrieved 26 February, 2020. http://www.butterflycircle.com/showthread.php?14977-ID-help-please
- 14. Singh IJ, Chib M. A preliminary checklist of butterflies (Lepidoptera: Rhophalocera) of Mendrelgang, Tsirang District, Bhutan. 2014; 6(5):5755-5768. http://www.butterflycircle.com/showthread.php?14977-ID-help-please)
- Smith C. Butterflies of Nepal (Central Himalaya). (Rev. Ed.) Tecpress Service LP. Craftsman Press. Bangkok, Thailand, 1994.
- 16. Smith C. Scientific list of Nepal's butterflies. Journal of Natural History Museum. 1978; 2(1-4):127-173.
- 17. Smith C. Butterflies of Nepal in Natural Environment. Himalayan Map House (P.) Ltd. Basantapur, Kathmandu, Nepal, 2011a.
- 18. Smith C. Illustrated Checklist of Nepal's Butterflies. Rati Majupuria, Balkhu, Kumari Club, Kathmandu, Nepal, 2011b.
- Thapa VK. An inventory of Nepal's insects (Lepidoptera). The World Conservation Union. 1998; 2:125-225.