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New record of a butterfly, common lascar, *Pantoporia hordonia* (Stoll, [1790]), (Lepidoptera: Nymphalidae) form Punjab, India

Narender SharmaDOI: <https://doi.org/10.22271/j.ento.2024.v12.i2b.9300>**Abstract**

Recently, while conducting surveys in Ranjit Sagar Conservation Reserve situated in the Shivalik foot hills of Punjab, a butterfly, Common Lasca, *Pantoporia hordonia* (Stoll, [1790]) (Lepidoptera: Nymphalidae: Limenitidinae) was recorded at Salari Village, of the Conservation Reserve, at an altitude of 571m ASL for the first time and the species is a new addition to the Butterflies of Punjab.

Keywords: Punjab, Nymphalidae, limenitidinae, *Pantoporia hordonia*, Shivalik**Introduction**

Punjab is a state in northern India. Pakistan borders it on the west, Jammu and Kashmir borders it on the north, Himachal Pradesh borders it on the northeast, and Haryana and Rajasthan border it on the south. Shivalik Hills are the undulating hills that stretch along the Northeastern region of the state, at the base of the Himalayas. With a range of 180 meters (590 feet) in the southwest to more than 500 meters (1,600 feet) around the northeast border, its average elevation above sea level is 300 meters (980 feet). Semi-arid regions to the southwest of the state eventually blend into the Thar Desert. The percentage of Punjab's total land covered by forests is just 5.7%. Degradation of habitat is caused by modern agricultural practices, increased transportation networks, urbanization, industrialization, and deforestation. As a result, Punjab has lost a significant amount of its forest and biodiversity today. The remnant small populations are mostly restricted to the state's forest strips, wetland regions, Shivalik foothills, and wildlife sanctuaries.

Ranjit Sagar Conservation Reserve is situated in the Shivalik foothills of Punjab state, having an area of 4608.24 acre. About 20% of the area of the Conservation Reserve is forest, and the remaining 80% is submerged under water. There are some low-lying areas of the forest where water collects during the monsoon, causing water logging.

The diversity of butterflies found in the state of Punjab is still not fully explored. 74 species of butterflies were listed in an inventory of Punjab by Rose and Sidhu (2001) ^[6]; Arora *et al.* (2006) ^[1] while working on Punjab Shivaliks, recorded 74 species from different localities; 41 species of butterflies were listed by Sharma and Joshi (2009) ^[7] from the Dholbaha Dam in Hoshiarpur. For the first time, records of *Elymnias hypermnestra undularis* (Drury), *Euploea mulciber mulciber* (Cramer), and *Megisba Malaya* (Horsfield) from Punjab were made by Sharma *et al.* (2014) ^[12], Sharma (2015, 2017) ^[8, 13, 10]. According to Sharma *et al.* (2015) ^[8, 13], the Kathlaur-Kaushlian Wildlife Sanctuary in Pathankot, Punjab, is home to 40 species under 31 genera. In the same year, 52 species from 41 genera were recorded by Sharma (2015a) ^[9] from Takhni Rehmanpur Wildlife Sanctuary in Hoshiarpur, Punjab. The forest strip along the Sirhind Canal, Mainline in Punjab, is home to 54 species belonging to 37 genera of butterflies (Kumar, 2015) ^[4]. 81 species of 60 genera of butterflies were reported by Singh *et al.* (2016) ^[14] from district Hoshiarpur, Punjab. Pathania *et al.* (2018) ^[5] while studying the butterflies' diversity of Punjab Agricultural University campus, Ludhiana recorded 33 species under 24 genera of 5 families. Sharma and Goswami (2021) ^[11] have recently compiled a list of 134 species found in the state of Punjab.

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The species of the genus *Pantoporia* Huebner is confined to the Asian region commonly known as lascar. The majority of them have orange and black stripes. The genus *Pantoporia* Huebner, is represented by six species from India and the species *P. hordonia* (Stoll) is having two subspecies viz., *P. hordonia cnacalis* (Hewitson) dispersed in Andaman Islands and *P. hordonia hordonia* (Stoll) having distribution from Punjab to north-east India, Maharashtra eastwards to West Bengal and southwards to Kerala. The true home of the widely distributed *Pantoporia hordonia* (Stoll) species is dense forest at low elevations. It is also found infrequently in the plains, some distance from forests, and at elevations of up to 2500 feet in the north and 7000 feet in the south's hills. It flies similarly to other species of the genus *Neptis* Fabricius, but with much less strength, staying low to the ground and landing frequently on low-growing leaves.

Materials and Methods

Study area

The species' habitat is in Salari village, which is 571 meters above sea level and situated in the Ranjit Sagar Conservation Reserve in the Pathankot district of Punjab. Its coordinates are 75°46'25.22" E longitude and 32°24'23.06" N latitude (Map 1). The aquatic environment dominates the Ranjit Sagar Conservation Reserve's flora.

The area's forests are made up of various species, including Phalahi (*Platanus dorientalis*), Sheesham (*Dalbergia sissoo*), Ber (*Zizyphus jujuba*), Dhak/palash (*Butea monosperma*), Simbal (*Salmalia malbarica*), Jamun (*Syzygium cumini*), Amb (*Mangifera indica*), Tun (*Toona ciliata*) and Khair (*Acacia catechu*). The shrubs are such as Gandhala (*Murraya koenaii*),

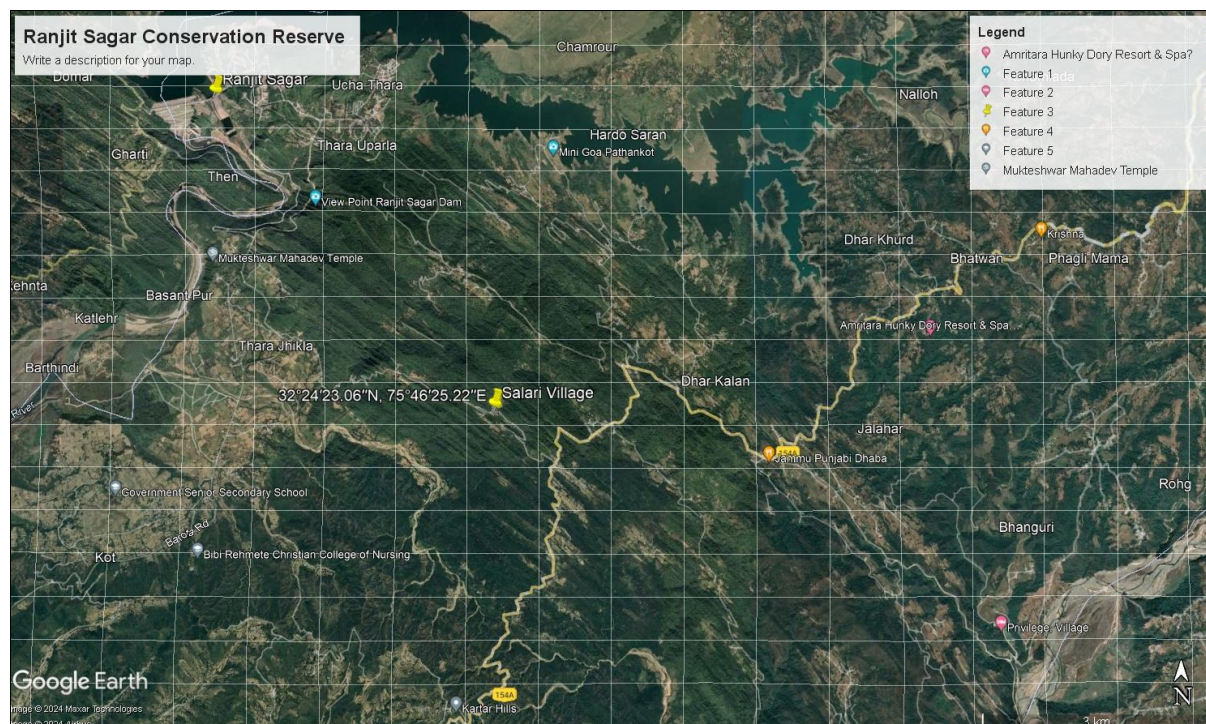
Panwar (*Cassia tora*), Besuti (*Adhatoda vasica*), Mallah (*Zizyphus nummularia*), Vilayti Mehdi (*Dodoneae viscosa*), Jhav (*Artemesia spp.*), Hins (*Capparis decidua*), garuna (*Cassia spinarum*). Congress grass (*Parthenium hysterophorus*), Bhagiarihi booti (*Lantana camara*), and Bhang (*Cannabis sativa*) infested most part of the forests. The most significant component of open spaces is bhabbar grass. They bind soil quite well. The rest of the grass species are mostly fed to cattle.

Methodology

One specimen of *Pantoporia hordonia* (Stoll) was collected from the scrubby habitat at Salari Village, Ranjit Sagar Conservation Reserve, Punjab, in the forenoon of September 13, 2023, by the author while performing a "General Faunistic Survey" of the reserve in the district of Pathankot, Punjab, under the directives of the Zoological Survey of India.

A butterfly net was used to gather the specimen, and the thorax was pinched to kill the specimen. The adult butterfly was kept in an insect folder that had the date, the locality's name, the latitude, longitude, and altitude marked on it. Subsequently, the specimen was relaxed, pinned and stretched in the Zoological Survey of India laboratory at Dehradun. It was then allowed to dry for two to three days in the drying chamber. The adult's dorsal and ventral photos were captured with a digital camera (Nikon DX-80 model). Evans, (1932), Wynter-Blyth (1957) [17] were used to identify the species.

Material examined: Punjab: District Pathankot: Ranjit Sagar Conservation Reserve, Salari Village, 1 example, 13.ix.2024, Coll. N. Sharma.



Map 1: Habitat of *Pantoporia hordonia* (Stoll), Google Map

Results and Discussion

Recently, in the forenoon of September 13, 2023, one specimen of *Pantoporia hordonia* (Stoll) was collected from the scrubby habitat at Salari Village, Ranjit Sagar Conservation Reserve, Punjab, while undertaking "General Faunistic Survey" at Ranjit Sagar Conservation Reserve in the

district Pathankot, Punjab, under the auspices of the Zoological Survey of India. Because they are medium-sized, the species requires less pressure at thorax to kill them. Using the Garmin Orgon 550 GPS, observations were made at the Ranjit Sagar Conservation Reserve at an elevation of 571 meters and 75°46'25.22" E and 32°24'23.06" N.

The genus *Pantoporia* Huebner is reported by maximum number of 6 species i.e., *P. assamica* (Moore), *P. aurelia* (Staudinger), *P. bieti* (Oberthur), *P. hordonia* (Stoll), *P. paraka* (Butler) and *P. sandaca* (Butler) from India.

Evans (1932)^[2] mentioned the species *hordonia* (Stoll) under the genus *Neptis* Fabricius with three subspecies i.e., *Neptis hordonia sinuata* Moore (Sri Lanka), *N. hordonia hordonia* (Stoll) having distribution in South India, Dun to Myanmar and *N. hordonia cnacalis* Hewitson from Andamans. Wynter-Blyth (1957)^[17] also followed Evans (1932)^[2] for the placement of the species, *hordonia* Stoll under the genus *Neptis* Fabricius. and mentioned its distribution from Dehradun to Assam, South India and Myanmar.

Van Gasse (2013)^[16] mentioned the species *hordonia* (Stoll) under the genus *Pantoporia* Huebner. According to Sondhi and Kunte (2018)^[15], this species' range extends from Uttarakhand eastward to the eastern Himalaya, north-east India, and southern India.

Evans (1932)^[2], Wynter-Blyth (1957)^[17], Sondhi and Kunte (2018)^[15] mentioned the species *P. hordonia* (Stoll) as common. However, under the mandate of Zoological Survey of India, survey work (April 2011 to March 2014; April 2022 to February, 2024) had been carried out throughout the state Punjab, only one specimen of the species, *P. hordonia* (Stoll) could be collected from Salari Village, Ranjit Sagar Conservation Reserve, Punjab. Hence, the species has been found rare in Punjab and the species is the new addition to the butterfly list of the state Punjab.



Fig 1: *Pantoporia hordonia* (Stoll), Dorsal Side



Fig 2: *Pantoporia hordonia* (Stoll), Ventral side

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Conclusion

The collection of *Pantoporia hordonia* (Stoll) from Salari Village, Ranjit Sagar Conservation Reserve, Punjab, marks a significant addition to the butterfly fauna of the region. Despite being considered common in other areas according to previous literature, this species is notably rare in Punjab based on extensive survey work. The medium size of these butterflies and their specific habitat requirements likely contribute to their rarity in the region. This finding underscores the importance of ongoing faunistic surveys and conservation efforts to monitor and protect the diversity of butterflies and other species in Punjab and similar regions.

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