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***Spindasis schistacea* (Moore, 1881) – Plumbeous Silverline: A new butterfly record from Himachal Pradesh, India**

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ABSTRACT

The present study provides a first record of the *Spindasis schistacea* (Plumbeous Silverline) butterfly species from the surrounding hills of Balh Valley, Himachal Pradesh, India. The species belongs to family lycaenid reported earlier from various parts of the country such as Karnataka, Maharashtra, Kerala, Delhi, Kolkata and West Bengal, etc. The characteristic feature of the this species includes iridescent blue scale on the upperside hindwing in males, while greyish scale in female. The present study marks its distribution in the northern part of the Indian Himalaya region, and further studies are required to understand its route of migration.

Key words: Butterfly record, new record, *Spindasis schistacea*.

INTRODUCTION

The region of the Indian Himalaya is globally recognized as a biodiversity hotspot (Myers et al. 2000; Kumar et al. 2018). The complex geobotanical landscape provides a unique habitat diversity that occupies higher number of endemic species. The areas also have a huge possibility of butterfly species. This article describes the first record of the *Spindasis schistacea* (Plumbeous Silverline; Moore, 1881) in the hilly state of the Himachal Pradesh, India. This butterfly was earlier recorded in south-west India to north Maharashtra, Kolkata and Delhi (Saji 2020). Kunte (2008) demonstrated this in Indian subcontinent this species is mainly distributed in the deciduous forests of the Western Ghats. The butterflies are identified as potential indicator for biological monitoring in terrestrial environment as the taxon is well characterized, charismatic and very sensitive for

the ecological research (New et al. 1995; koh 2007). In global change biology monitoring of butterfly can helps to understand the connections of changing climate and biological phenomena for making specific prediction in future from the changing environment (Zipkin et al. 2012).

The present record of this species was not documented in earlier studies of this region (deRhe-Philippe 1931; Wynter-Blyth 1940-1947; Arora et al. 2009; Chandel et al. 2014; Kaundil and Mattu 2017; Saji 2020).

MATERIALS AND METHODS

Study area

The present record is a part of opportunistic sighting of the butterfly species in surrounding hilly terrain of Balh Valley, Himachal Pradesh, India (Fig. 2). The study

area is at the top of steep hilly terrain and away from the human habitation. The vegetation at the top of the hill includes the shrubs (viz. *Berberis asiatica* and *Carissa congesta*), grasses and succulent plants.

The toe of the hill and the surrounding area; more towards the hilly terrain have host plants viz. *Combretum indicum*, *Zizyphus nummularia*, *Terminalia chebula* and *Terminalia bellirica*, etc.



Fig. 1. Map showing distribution of *Spindasis schistacea* in India (adapted from: <https://www.ifoundbutterflies.org/sp/832/Spindasis-schistacea>)

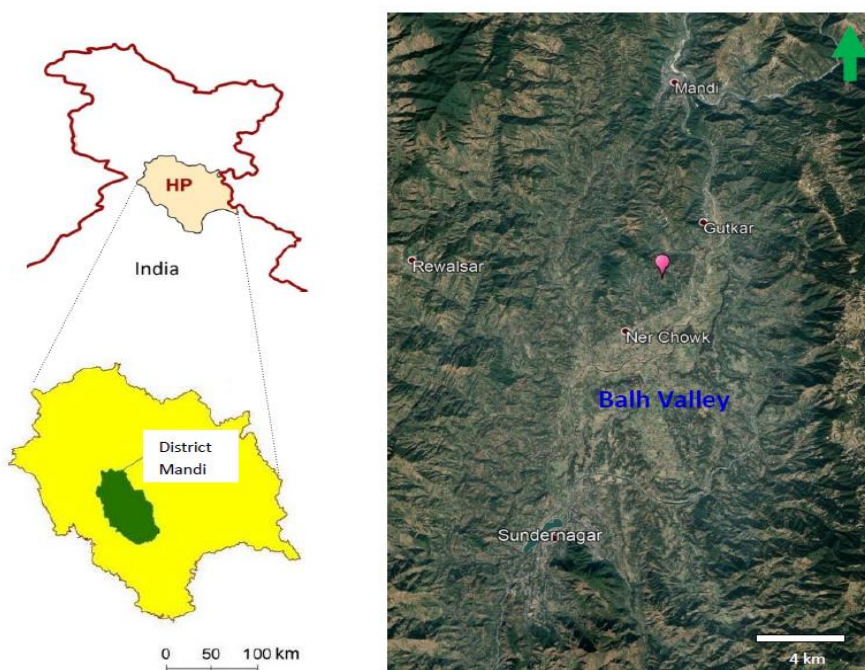


Fig. 2. Map showing sighting location with respect to Himachal Pradesh, India

The present butterfly species was spotted during an opportunistic survey on 1st September 2020. Initially, it was clicked as the *Spindasis vulcanus* (Common Silverline), but more closer look in the photograph

showed the presence of iridescent blue scale on upperside hindwing that further motivated to cross

check with other sub-species of genus *Spindasis*. The available literature and online resources (Sondhi and Kunte 2018; Saji 2020), helped to identify this species as *Spindasis schistacea* (Moore 1881; Plumbeous Silverline), which is a new record from the hilly state of Himachal Pradesh, India.

Description of the species

The *Spindasis schistacea* butterfly is almost 2.8-3.7 cm long that can be distinguished from the other species like *S. vulcanus* from its iridescent blue scale on upperside hindwing in male (Fig. 3) and greyish scale on upperside hindwing in female (Sondhi and Kunte

2018). The species may be the resident or migrated from the south extending its range to the north, which is a matter of further research.



Fig. 3. Top view of the *Spindasis schistacea* (Plumbeous Silverline) in Balh Valley, Himachal Pradesh, India.

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