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Invertebrate Conservation & Information Network of South Asia (ICINSA)

Newsletter of the

New record of lesser-known Single Silverstripe *Lethe ramadeva* (Lepidoptera: Nymphalidae: Satyrinae) from Sikkim Himalaya, India



Lethe ramadeva in Lachen Valley, North Sikkim
photographed on 05 July 2021. © Tamding Chewang Lachenpa.

In the last decade, systematic studies on butterflies have been carried out in spatially different sites across the Sikkim-Darjeeling Himalaya, covering a wide geographical range, with studies being carried out in all major protected areas, and agriculture-based land-use systems of the region

(Pradhan & Khaling 2020; Sharma et al. 2020). These have led to the rediscovery of a few species, namely, *Symbrenthia silane*, *Lethe margaritae*, *Neptis nycteus*, and *Lethe nicetella* in the landscape after almost 100 years (Kunte 2010; Rai et al. 2012; Dewan et al. 2018), and in addition a new species

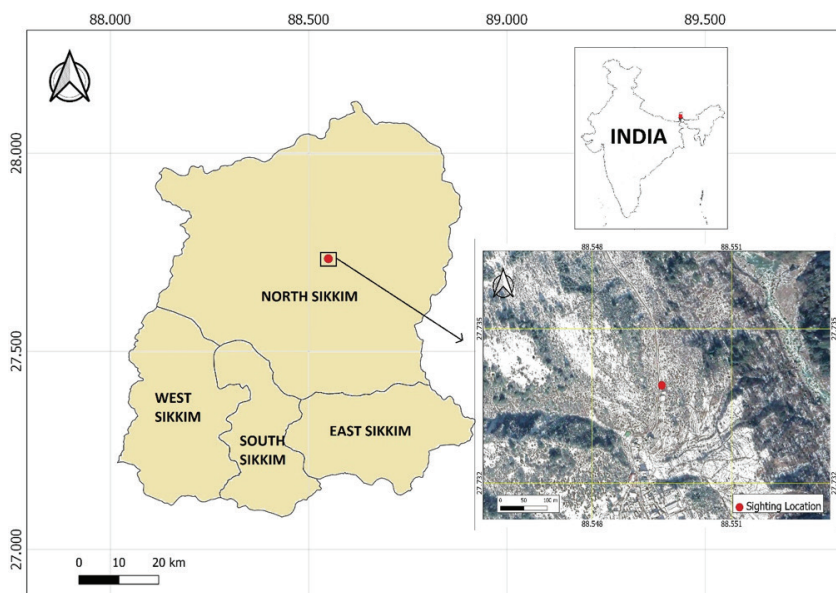
Tajuria illurgioides has only recently been reported from the region (Sherpa 2021). These recent studies indicate that rediscovery of extremely rare species, and discovery of unreported species are still possible from the landscape.

In Sikkim, 691 species of butterflies have been

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Map showing the current sighting location of *Lethe ramadeva* in Lachen Valley, North Sikkim, India.



Landscape view of the Lachen Valley, North Sikkim. © Tamding Chewang Lachenpa.

recorded so far (Sharma et al. 2020; Sherpa 2021), out of which the genus *Lethe* is represented by 36 species (Haribal 1992), which includes *Lethe ramadeva*. However, this species has not been recorded in Sikkim, which is an integral part of the Himalaya biodiversity hotspot, ever since its discovery (de Nicéville 1887). *Lethe ramadeva*, commonly known as Single Silverstripe is protected under Schedule I of the Wildlife Protection Act 1972 in India, but has not been assessed by IUCN. It was first described from Sikkim (de Nicéville 1887), based on a male individual obtained from Otto Moller's collection for the month of August 1886 from the "interior of Sikkim", yet the precise location of the collection site is unknown (de Nicéville 1887).

Historically, in addition to Sikkim, this species has been known to occur in the adjoining Darjeeling Himalaya (de Nicéville 1894), Bhutan

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Table 1. Comparison of morphological characters of *Lethe ramadeva* with closely allied *Lethe baladeva*.

Morphological character	<i>Lethe baladeva</i>	<i>Lethe ramadeva</i>
Expanse	55–65mm	60–70mm
Under Forewing	Four white straight bands	Four straight bands
Eyespots	Equal sized near margin not reaching the inner edge	Equal sized near margin between two bands, not reaching the inner edge
Under Hindwing	Two silvery bands and marginal eyespots	One central band and marginal eyespots
Note: Based on descriptions provided by Kheimkar (2016).		

(de Nicéville 1894), and has recently been photographed in Arunachal Pradesh (www.ifoundbutterflies.org) in India. The species has been reported to be active from June–August (de Nicéville 1894), yet very little is known about their habitat requirements, while details on its host plants are hitherto unknown. The butterfly was first sighted by the author on 05 July 2021, near a motorable road that leads to Gurudongmar Lake, in Lachen Valley, North Sikkim and was subsequently identified as *Lethe ramadeva* based on the photographs and description of the species (de Nicéville 1887; Kheimkar 2016).

The photographs of the sighted individual were also sent to experts for confirmation of its identity. *Lethe ramadeva* differs from closely allied *Lethe baladeva* in some morphological characters.

The current sighting took place at around 1330 h in a forest edge (27.7339°N & 88.5495°E), at an elevation of 2,720 m, and approximately 5 m from a motorable road. The photographed individual was basking on the leafy undergrowth of the forest, whose vegetation is characterized by *Acer* sp., *Hippophae salicifolia*, *Salix* sp., and *Artemisia vulgaris*.

Three more individuals were observed flying over *Acer* and *Salix* trees. On 7 July 2021, the author again sighted the species, suggesting it to



Habitat of *Lethe ramadeva* in Lachen Valley, North Sikkim.
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be fairly common in the locality, and highly active near the forest edge between 1200 h and 1400 h. *Lethe ramadeva* was sighted flying in tandem with Chumbi Wall *Chonala masoni* on both occasions.

The precise type locality of the species is unknown, while in the absence of other distribution records from Sikkim, the closest published locality record for this species is in Tonglu (Elwes & Moller 1888), which is a part of modern-day Darjeeling, about 90 km (linear distance) from the current sighting location.

Thus, in the absence of newer records of *Lethe ramadeva* from Sikkim, we conclude that the current sighting of a live individual from Lachen Valley, North Sikkim is the first record of the species probably after 135 years in the Himalayan state of Sikkim, India.

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