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A CENTURY LATER THE MANIPUR ARGUS CALLEREBIA SUROIA Tylter, 1914 (LEPIDOPTERA: NYMPHALIDAE: SATYRINAE) RECORDED IN ITS TYPE LOCALITY IN MANIPUR, INDIA

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(LEPIDOPTERA: NYMPHALIDAE: SATYRINAE)
RECORDED IN ITS TYPE LOCALITY IN
MANIPUR, INDIA

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Callerebia (Butler, 1867) is a genus of the subfamily Satyridae in the family Nymphalidae. The genus is restricted to the Sino-Himalayan region - ranging from Kashmir to southwestern China and central China (Bruna et al. 2000). The genus consists of approximately 12 species, composed of medium to medium-large butterflies with a dark brown coloration and a large bipupilled ocellus on the upper forewing. The butterflies of the genus possess small heads and bodies, and a prominent eye in relation to their broad, rounded wings. The hind wings are extended in a more or less prominent lobe at the anal angle. The antennal club is thin, only slightly thickening towards the tip. The markings are very variable but follow a fairly constant arrangement in all the species: the upper ground colour is dark brown to blackish; the forewing has a bi-pupilled apical ocellus; with or without one tornal spot in the upper hindwing; the under hind wings are often covered by whitish scales of different densities, tones and patterns: with or without one or two tornal ocelli in the under hindwing; in addition, some species have a set of up to four post-discal white dots on the under hindwing (Roy 2013).

The Shiruli Kashong Peak (SKP) is located just 7 km away from Shiruli Village and 25 km from Ukhrul Town. The peak is at 25°06'20.04"N and 94°27'23.91"E at 2,763 m above sea level. It is located at Ukhrul District on the eastern part of the Manipur State. The peak and Shiruli Village are bordered by Ukhrul in the west, Langdang Village in the south, Mapur Village in the east, Shai Village in the northeast and Lungshar Village in the north.

During 12–16 July 2016, we conducted a survey on the Lepidoptera fauna of the Shiruli Kashong Peak (25°06'20.04"N & 94°27'23.91"E) between 1,320 m and 2,763 m altitude (Figs. 1 & 2) and surrounding areas. Butterflies were observed at different altitudes of the peak and surrounding areas during the day. Light trapping was done for nocturnal moths at night. During the survey we encountered different species of butterflies and moths. In this present paper we report the sighting of the rare satyrid butterfly Callerebia suroria Tytl er, 1914 after more than a century since Tytl er (1914) describe the species from the same locality, Shiruli Hills, Manipur.
Record of *Callerebia suroia* from Shirui Kashong Peak, Manipur

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*Callerebia suroia* Tytler, 1914

*Callerebia suroia* Tytler, 1914 is only reported from Manipur in India (Varshney & Smetacek 2015). Outside India, the species is reported from northeastern Myanmar (Talbot 1947); Dali, Kunming at Yunnan province of China (Okano & Okano 1985; Huang 2003) and northern Vietnam (Inoyashi 2016). The species *C. suroia* Tytler, 1914 has been subject to several taxonomic revisions. Tytler 1914 described it as a species, distinguishing the species from *C. orixa* by morphological characters, Tytler makes no mention of *C. polyphemus*. Evans (1927), treated *suroia* as the synonym of *Erebia annada polyphemus*. Goltz (1939) treated *suroia* as a subspecies of *C. orixa*. Evans (1932) placed the species in the genus *Erebia* and treated it as a subspecies of *Erebia annada*. This arrangement was followed by Talbot 1947. Later Okano & Okano (1985) reinstated *suroia* as a valid species of *Callerebia* based on the different wing markings and also in the different shape of male genitalia vulva from *C. orixa*. Bruna et al. (2000) considered that *C. polyphemus* was a “widely distributed polytypic species” and thus treated *suroia* as a subspecies of *C. polyphemus* and raised the status of *C. annadina* to a distinct species, because of its sympatric distribution in northwestern Yunnan with *C. suroia*. Huang (2003), however found no difference between the male and female genitalia of *C. annadina* and *C. polyphemus* thus treated *C. annadina* as a subspecies of *C. polyphemus* and *suroia* as a distinct species as originally described. Huang (2003) mentioned that there is no difference in androconia between male *C. suroia* and all the subspecies of *C. polyphemus*, but did find differences in the genitalia. Due to overlapping distributional pattern of *C. suroia* and *C. polyphemus*, separation of these two species is very difficult. The only reliable feature which separates *C. suroia* from *C. polyphemus confusa* is the appearance of fainter and thinner striation on the underside of the hindwing which is usually denser in *C. polyphemus confusa* (Huang 2003).

The detailed description of *C. suroia* is illustrated in Tytler (1914) (Image 3). The appearance of *C. suroia* is also very similar to *C. orixa*. “Upperside of forewing with a much broader orange ocellar ring, especially on the distal side of ocellus; Underside of forewing similar to above (*C. orixa*); hindwing with a sub basal and discal reddish-brown band, tornal ocellus absent, white striae denser and more conspicuous than in *C. orixa*” (Talbot 1947). *C. suroia* can be easily distinguished from all the subspecies of *C. polyphemus* by the more yellowish and broader ring of the forewing subapical ocellus; hindwing underside discal line is always clear; hindwing underside striation is fainter and usually denser than in *C. polyphemus* and *C. ulfi* and distal branch of valve is usually longer than in *C. polyphemus* and always much
longer than in C. ulfi (Huang 2003).

**Sighting of Manipur Argus Callerebia suroia Tytler, 1914**

In this note we report the sighting of *C. suroia* Tytler, 1914 from Shirui Kashong Peak, which is the type locality of the species by Tytler (1914). On 13 July 2016 at around 14:30hr, we found the butterfly flying near the footpath leading to the peak of the summit (25°06'46.48"N & 94°26'56.67"E at an altitude of 2,330m) (Fig. 2). The butterfly settled for some time with open wings on soil (Image 1) and later it flew away and sat on a rock with closed wings (Image 2) and sipping on wet rocks. Later, due to the disturbance by hikers the butterfly flew away towards the cliff. The butterfly is mainly found near the rocks which are surrounded by perennial herbaceous plants like *Roscoea ngainoi* Mao & Bhaumik (Zingiberaceae), *Lililium mackliniae* Sealy (Liliaceae), *Allium* sp. (Amaryllidaceae), *Swertia* sp. (Gentianaceae), *Aconitum* sp. (Ranunculaceae) and many grasses which grow in much colder mountainous regions (Images 4 & 5). The day was quite cloudy with less sunshine and intermittent rain on the peak. The present sighting of the butterfly from Shirui Kashong Hill, Ukhrul District is important and significant because it is the first photographic record of this species after more than a century in India.

**Conclusion**

Some members of the genus *Callerebia* are known to be very local. Thus our sighting of *C. suroia* Tytler, 1914 in Shirui Kashong Peak (where the habitat is well...
protected and undisturbed) gives us an opportunity to understand the ecology of this butterfly. Further studies on the ecology of this butterfly will give us an idea why butterflies of this genus are local which will help us to initiate further steps towards the conservation of habitats of these butterflies.

References


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