



## Sighting of *Elymnias panthera* (Lepidoptera: Nymphalidae: Satyrinae) in West Bengal, eastern India

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Many Malayan butterflies have peculiar distributional ranges regarding their penetrance in the Indian Region. Some species have colonized the nearby Andaman and Nicobar Archipelago but they do not occur further north in mainland northern Indo-China and northeastern India, while other species occur in these northern mainland areas without having colonized the Andaman and Nicobar Archipelago. One such interesting example is *Elymnias panthera* Fabricius, 1787, the Tawny Palmfly. The species ranges from southern Thailand southward throughout most of Southeast Asia and Sunda Islands in several subspecific forms (Talbot 1947; d'Abrera 1985; Pinratana 1988). It is represented within Indian limits by *E. p. mimus* Wood-Mason & de Nicéville, 1881, a subspecies endemic to the Nicobar Islands (Evans 1932; Talbot 1947). However, the species does not occur north of Peninsular Thailand either in northern Indo-China or in northeastern India. It is unknown what restricts distributional range of *E. panthera* in Southeast Asia, or of its subspecies to smaller geographic areas within this region.

With this background, we report sighting of *E. panthera* from the Bethuadahari Wildlife Sanctuary near the town of Krishna Nagar (23°23'N & 88°30'E), Nadia District, West Bengal, eastern India. This is a possible range extension of the species by at least 2,000km. While watching butterflies in the sanctuary on 04 February 2008, at 0950 hr, one of us (ABR) spotted an *Elymnias* perched at ~2m off the ground in a

small tree. It flew away after just a single picture was taken (Image 1), so AB was not able to capture the butterfly for closer examination. However, it was striking that, when the butterfly flew, it was missing the distinctive bluish fore-wing apical band and bright orange hind-wing margin of the male or the mimetic orange and black pattern of the female *E. hypermnestra* (Linnaeus, 1763), that is common in this area. On closer inspection of the colour pattern and markings that are evident in Image 1, KK identified the species as *E. panthera* based on a key character that distinguishes *E. panthera* from other *Elymnias*, that its hind-wing underside is marked by six prominent ocelli (Evans 1932; Talbot 1947). In comparison with undersides of other similar *Elymnias* species, the large black-ringed white costal spot is also distinctive (d'Abrera 1985).

Two factors need to be addressed while considering this sighting of *E. panthera* so far outside its known range. The first factor is obviously the huge distance between its previously known range and the new locality from which we are reporting this sighting. Butterfly fauna of the Sikkim-Bengal-Assam region has been reasonably well documented, hence it would seem remarkable if this species has gone unnoticed from this area for ~220 years since its original description. However, we note that *Elymnias* are crepuscular and usually active in dense forests (Talbot 1947), and therefore difficult to locate. Butterfly collectors may also have earlier missed *E. panthera* in this area due to its vague mimetic resemblance on the upper side of the wings to the much commoner *Euploea midamus* Linnaeus, 1758 (Corbet et al. 1992). We suspect that the lack of records for *E. panthera* may perhaps be explained by these behavioral peculiarities and its presumed rarity in these parts. A parallel example that bolsters this suspicion is the recent record and range extension of *E. obnubila* from southern



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Date of publication (online): 26 January 2010

Date of publication (print): 26 January 2010

ISSN 0974-7907 (online) | 0974-7893 (print)

Editor: Maan Barua

### Manuscript details:

Ms # o2280

Received 02 August 2009

Final received 14 September 2009

Finally accepted 08 December 2009

**Citation:** Roy, A.B., U. Ghosh & K. Kunte (2010). Sighting of *Elymnias panthera* (Lepidoptera: Nymphalidae: Satyrinae) in West Bengal, eastern India. *Journal of Threatened Taxa* 2(1): 670-671.

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**Acknowledgments:** We thank Lipika Roy (Divisional Forest Officer, Nadia-Murshidabad Division, Dept. of Forests, Govt. of West Bengal) for facilitating field work.

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Image 1. *Elymnias panthera* in Bethuadahari Wildlife Sanctuary

Mizoram in northeastern India (Kunte 2009).

The second factor is that *Elymnias* usually occur in evergreen and semi-evergreen forests, where several species of palms – their larval host plants – mostly grow (Robinson et al. 2001). The forest in which *E. panthera* was sighted is a deciduous forest in which the West Bengal Forest Department has maintained patches of timber trees and plants of other economic importance since the 1960s. Thus, this was not a typical habitat for *E. panthera*. It is possible that this specimen had been inadvertently imported as an egg or a caterpillar along with an exotic palm from SE Asia. However, as far as we or the local forest department know, palms have not been recently imported in this area from the native range of *E. panthera*. Hence, we report this sighting with a tentative suggestion that this may be a range extension of this species. We are conducting regular butterfly surveys in this and neighboring areas of northeastern India to confirm whether there is a resident population of this species in northeastern India, and to delineate distribution of the species in the region in case more specimens are sighted.

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