

OCCURRENCE OF *ELYMNIAS HYPERMNESTRA UNDULARIS* (DRURY) (LEPIDOPTERA: SATYRIDAE) AT ROPAR WETLAND, PUNJAB, INDIA

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Butterflies belonging to the genus *Elymnias* Hübner are commonly known as Palm Butterflies. These are often brightly colored and generally resemble Danaines, which they mimic in one or both the sexes. This genus differs from other satyrine genera in having a hind wing pre-discoidal cell (Bingham 1905; Evans 1932; Talbot 1947; Pinratana 1988; Eliot 1992). It is represented by 11 species in India, of which three species—*Elymnias hypermnestra* (Linnaeus), *E. malelas* (Hewitson) and *E. patna* (Westwood)—are reported from northwestern India. However, in an inventory of 54 satyrine species from northwestern India, Rose & Sharma (1998) included only one species, *E. hypermnestra*, represented by two subspecies viz., *E.h. undularis* (Drury) and *E.h. caudata* Butler in India.

Distribution: In India, the subspecies *E.h. undularis* is found from Dun to northern Myanmar while *E.h. caudata* occurs in southern India.

Sharma (1998) reported this subspecies from Paonta Sahib, Himachal Pradesh, which was the western limit of its known distribution. Mackinnon & de Niceville (1897) mention that this subspecies is not common in northwestern India (Mussoorie and Dehradun, below 909m elevation).

Recently, while conducting a ‘General Faunistic Survey’ of Punjab under the mandate of the Zoological Survey of India in the districts of Kapurthala, Amritsar, Gurdaspur, Pathankot, Hoshiarpur and Rupnagar (Ropar) in 2011, two specimens of *Elymnias* were collected from the vicinity of village Katli, Ropar wetland (Ramsar Site No. 1161) on 17 November 2011) 31°01.067’N & 076°32.325’E, accuracy 6.09m, elevation 243m. The specimens are deposited at Zoological Survey of India, Northern Regional Centre, Dehradun.

Phoenix sylvestris (Linn.) Roxb., the only species of family Palmae, which is also known as Wild Date-Palm or Jungli Khajoor, occurs along roadsides and forests in Ropar.

The species was not seen in other districts, viz., Kapurthala (4–6 November, 6 localities); Amritsar (7 November, 3 localities); Gurdaspur (8 November, 2 localities); Pathankot (9–11 November, 8 localities); and Hoshiarpur (12–15 November 2011, 10 localities) of Punjab that were surveyed during the same month.

Material examined: Reg. no. A-11250, 1 male, 17.xi.2011, Ropar Forest Rest House, Ropar District, coll. P.C. Tak & party; Reg. no. A-11249, 1 female, 17.xi.2011, Katli Village, Ropar Wetland, (coll. P.C. Tak & party).

The presence of this subspecies at Ropar Wetland appears to be a westward extension to its known distributional range, >160km west of Paonta Sahib by road.

Remarks: This species exhibits strong sexual dimorphism and its females when flying alongside individuals of *Danaus genutia* (Cramer) and *Danaus*



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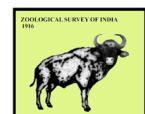




Image 1. *Elymnias hypermnestra undularis* (Drury) (Female) at Ropar Wetland

chrysippus (Linnaeus) present an excellent example of mimicry. Sharma (1998) while studying the taxonomy of the family Satyridae of north-western India observed that in *E. hypermnestra undularis*, the predorsal cell of the hindwing has an additional prominent vein in the specimens collected from Paonta Sahib, Himachal Pradesh, which has also been noticed in the specimens examined in the present study. However, earlier workers such as Bingham (1905), Evans (1932), Talbot (1947), Pinratana (1988) and Eliot (1992) though they studied the predorsal cell of hindwing, did not make mention of any additional vein in the predorsal cell of the hind wing.

Besides, the additional obscure black androconial patch near the base of space 1A+2A on the upperside of forewing in *E. hypermnestra*, mentioned by Eliot (1992) in specimens from the Malay Peninsula could not be observed in the specimens of *E. hypermnestra undularis* collected from Paonta Sahib and Rupnagar.

The presence of the following secondary sexual characters of the male: a nacreous area on the underside of the forewing; a similar corresponding area in the costal region of the dorsal surface of hindwing; and possession of one pair of hair tufts as reported by Pinratana (1988) and Eliot (1992) in *E. hypermnestra* have also been seen in *hypermnestra undularis*.

In the key to the genera of butterflies of the Malay Peninsula, Eliot (1992) has mentioned that the veins Cu1a and M₃ of hindwing approximated at their origin at the lower end of the cell. In fact, Cu1a and M₃ are wide apart at their origin in the specimens examined.

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