



Occurrence of Danaid Butterflies in Kanha National Park

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ABSTRACT :

The present article deals with the occurrence of danaid butterflies (Lepidoptera : Danaidae) and their host plants found in Kanha National Park, Madhya Pradesh. Six species of the danaid butterflies are found in this park. These are the Plain Tiger, *Danais chrysippus* (Linn.), the Striped Tiger, *Danais genutia* Cramer, the Blue Tiger, *Danais* (Tirumala) *limniace* Cramer, the Common Indian Crow, *Euploea core core* (Cramer), the Great Eggfly, *Hypolimnas bolina* (Linn.) and the Danaid Eggfly, *Hypolimnas misippus* (Linn.) These butterflies are described; their occurrence and food plants are mentioned in the present article.

Key words: Danaid butterflies, host plants, Kanha National Park, Madhya Pradesh

Introduction

The danaid butterflies (Lepidoptera : Danaidae) are a group of ~300 species in the subfamily Danainae whose larvae feed on toxic plants in the family Apocynaceae. (<https://www.danaidhk.com/about-3>). They are also known as the "milkweed butterflies." Because their larvae consume toxic plants during their development, sometimes these toxins are retained in the bodies of adult butterflies. This makes them unpalatable to predators. To warn potential predators of their toxicity, danaids have evolved warning coloration. The wings of these species are conspicuously colored – often striped with bright orange, black, or blue, leading to common like "tiger."

Joshi et al. (2004a, b) have carried out survey of insect faunal composition of Kanha National Park and reported 187 species of insects, out of which 51 species of butterflies, 88 species of moths, 20 species of beetles, 8 species of grasshoppers, 6 species of bugs, 5 species of bees, wasps and ants, 4 species of crickets, 4 species of mantids and one species of termite. Six species of danaid butterflies are found in this Park. These are the Plain Tiger, *Danais chrysippus* (Linn.), the Striped Tiger, *Danais genutia* Cramer, the Blue Tiger, *Danais* (Tirumala) *limniace* Cramer, the Common Indian Crow, *Euploea core core* (Cramer), the Great Eggfly, *Hypolimnas bolina* (Linn.) and the Danaid Eggfly, *Hypolimnas misippus* (Linn.) Literature reveals that the information about these butterflies and their food plants have been mentioned by Evans (1932), Beeson (1941), Browne (1968), Antram, (1986) and Joshi (1992). The present article deals with these six danaid species, *D. chrysippus*, *D. genutia*, *D. limniace*, *E. core core*, *H. bolina* and *H. misippus*.

The Plain Tiger, *Danais chrysippus* (Linn.)



Fig. 1: *Danais chrysippus*

This butterfly is golden brown butterfly with wing expanse varies from 70 to 82 mm. Its fore wings are tawny with a white spotted black apex and white band at terminal. The wing margins are not smooth and do not have black veins. Upper side of hind wings with 3 to 4 small black spot around end of cell. The hind wings of male are provided with pouch.

The status of this danaid species is very common. The plain tiger is found early morning to dusk, often sitting on flowers found primarily on gardens and least common in damp, forested entire areas of Kanha National Park. This species occurs in September-October. The larvae of this butterfly feed on *Asclepius curassavica*, *Calotropis gigantea* and *C. procera*.

The Striped Tiger, *Danais genutia* Cramer



Fig. 2: Danais genutia

The wing expanse of this danaid butterfly varies from 70 to 95 mm. It has tawny fore wings with golden brown colour and broad black veins. Upper side of fore wing has a white bank at the costal terminal end. A black spot or pouch on underside of hind wings also exists at vein V_3 in male.

The status of this butterfly is very common. This danaid butterfly occurs in lightly forested area and scrub jungle. This species is found near nalah in Kisli and Kanha ranges during September-November. The larvae feed on *Ceropeigia aculata*, *C. intermedia*, *Cynanchum Dalhousie* and *Raphistemma pulchellum*.

The Blue Tiger, *Danais (Tirumala) limniace* Cramer



Fig.3: Danais limniace

The wing expanse of this danaid species measures from 90-100 mm. The upper side is black with large irregular white or pale blue markings. The cell of the hind wing is almost entirely white, enclosing a narrow black streak from the upper side. The underside of hind wing in male is provided with a pendulous pouch.

The status of this butterfly is very common. It flies over hedgerows and roadsides in forest areas of Kisli and Kanha ranges in September. Its flight is powerful. Larvae of this species feed on *Asclepias curasavica*, *Calotropis* sp., *Holarrhena antidystrica*, *Hoya* sp., *Marsdenia tenacissima*, and *Wattakaka valubilis*.

The Common Indian Crow, *Euploea core core* (Cramer)



Fig.4: Euploea core core

The wing expanse of this butterfly varies from 85-95mm, above glossy brown with marginal and terminal white spots which are more or less equal but a few at apex of FW decreases in size. The female is with one short whitish-streak, having a spot in the cell UNF.

The status of this species is very common. This butterfly is fond of settling on wet and damp patches, prevalent in all the ranges of Kanha National Park throughout the year. This danaid species fly in very lazy fashion and occurs in enormous numbers in wet jungle. During summer day hours, they settle in herds among shady tree species, shrubs and saplings of miscellaneous trees. Larvae feed on *Cryptolepis elegans*, *C. buchani*, *Ficus bengalensis*, *F. religiosa*, *F. racemosa*, *F. elastica*, *Hemidesmus indicus*, *Holarrhena pubena pubescens*, *Ichnocarpus frutescens*, *Nerium indicum*, *N. oleander*, *N. indicum* and *Streblus asper*.

The Great Eggfly, *Hypolimnas bolina* (Linn.)



Fig. 5: *Hypolimnas bolina* (Male)



Fig. 6: *Hypolimnas bolina* (Female)

The wing expanse of male butterfly of this species varies from 70-110 mm. The male butterfly from above appears black with an iridescent –blue white centered oval patch on the disc of each wing and underside of hind wings does not bear prominent black costal spot at mid-7. The female butterfly is dark brown with outer discal row of small pale yellow or white spots on both wings from the above. Forewings have more or less obscure marginal and inner terminal pale markings. Hind wings are with broad pale yellow or white termen, bearing a dark wavy line or band. Forewings with 2 blue spots at end of cell in wet season forms with a blue- spot discal band of spots. This species mimic to Common Indian Crow, *E. core core*.

The status of this species is common. Generally this butterfly is abundant in the wetter, well-forested parts during rains. The male presents a striking appearance as he opens and closes his wings in the sunshine on a prominent leaf or twig of trees. This species occurs in Kisli, Kanha and Bhaisanghat ranges of Kanha National Park during September to October/November. Larvae feed on *Elatostemma cunneatuns*, *Flcurya interrupta* and *Portulaca oelracca*.

The Danaid Eggfly, *Hypolimnas misippus* (Linn.)



Fig. 7: *Hypolimnas misippus* (Male)



Fig. 8: *Hypolimnas misippus* (Female)

The wing expanse of male butterfly varies from 65-85mm. The male butterfly from the above is black with a white, oval discal patch surrounded by dark iridescent blue on both wings. Underside of Hind wings is with a prominent black costal spot in 7. The margins of hind wings of female butterfly are more waved and the upper side is provided with a prominent black costal spot at mid 7. The female of this species mimic to the Plain Tiger, *D. chrysippus*.

The status of this butterfly is common. This species is found in Kisli, Kanha, Mukki and Bhaisanghat ranges of Kanha National Park, especially during the monsoon months. Larvae feed on *Abutilon* sp., *Hibiscus* sp. and *Portulaca oleracea*.

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