

## *Hypolimnas misippus* (Six Continent Butterfly or Mimic)

Order: Lepidoptera (Butterflies and Moths)

Class: Insecta (Insects)

Phylum: Arthropoda (Arthropods)



**Fig. 1.** Six continent butterfly, *Hypolimnas misippus*.

[[http://www.zimbabweflora.co.zw/speciesdata/insect-image.php?insect\\_id=400280&image\\_id=1](http://www.zimbabweflora.co.zw/speciesdata/insect-image.php?insect_id=400280&image_id=1), downloaded 28 February 2016]

**TRAITS.** Male and female are morphologically different from each other. The upperwings of the male are dark brown to black, with three white spots, two on the forewing and a much bigger white region on the hind wings. These spots give the butterfly its local name, the six continent. The undersides are chestnut coloured, with white markings (Fig. 2). Females are light brown to brownish-orange on the uppersides, the fore wing has a dark front with a white spot and white bar, the hind wing has a dark spot. The underside is pale yellow (Bingham, 1905). The larva is cylindrical with a much darker dorsal line and the head and segments each have two thinly branched long black spines (Fig. 3). The head and legs are brick red in colour, and the pupa is light brown (Kunte, 2006).

**DISTRIBUTION.** Widely distributed in the tropics, native to Africa, Asia and Australia, and introduced to Caribbean islands and northern South America, and occasionally dispersing to the southern USA (Hoskins, 2012). The neotropical range may have been due to transport in slave trading ships (Butterflies and Moths of North America, 2016).

**HABITAT AND ACTIVITY.** *Hypolimnias misippus* is adaptable to varying environments such as savanna, desert, vegetated beaches, acacia scrub and tropical rainforests. This species has a preference for woodlands, open areas and wetlands and are commonly found in small groups. The males perch on bushes with their wings half opened, or bask on the ground in wait of females. Females on the other hand are found fluttering on open ground in search of site to lay their eggs. The species is diurnal and flies from dawn to dusk, and usually rest with their wings closed. Caterpillars are found on plants such as the Acanthaceae (acanthus), Malvaceae (mallow) and Convolvulaceae (morning glory) (Hoskins, 2012). Adults forage on the nectar of *Lantana camara*, *Hyptis suaveolens* and many other flowers (Choudhary, 2016).

**POPULATION ECOLOGY.** This species is somewhat solitary and can occur in small groups. There are two broods per year in India, April to May and September to December. Males usually wait on females by perching on bushes and displaying their features. This species tends to live long due to their anti-predatory behaviour (Choudhary, 2016).

**REPRODUCTION.** A female mates with a male and lays eggs that are either green or white, on the underside of the host leaves. The eggs develop into larvae that hatch within 2-3 days. The larvae, which are the caterpillars, then go through 5 moults for 13-18 days. The caterpillar feeds on the leaves of the plant that they were hatched on. The caterpillar turns into a pupa (chrysalis) where it is dormant and metamorphoses, after which it emerges as a butterfly (Choudhary, 2016).

**BEHAVIOUR.** This species characteristically fly close to the ground, usually in straight lines. Their main defense against predators is mimicry, of another danaid butterfly, *Danaus chrysippus*. That species ingests alkaloids during the larval stage, which protect the butterfly from predator attacks; if the butterfly is eaten, the alkaloids in its body induce vomiting in the predator. Experienced predators do not attack the butterfly, or its mimics (Butterflies and Moths of North America, 2016).

**APPLIED ECOLOGY.** *Hypolimnias misippus* is found in many countries in the tropics and subtropics. It is a very common butterfly that does not pose a threat to any of its host plant species. *Hypolimnias misippus* is not deemed a pest in the USA (Pena, 2013).

## REFERENCES

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Choudhary, V. (2016). Description of Danaid Eggfly-*Hypolimnias misippus*. <http://natureconservation.in/description-of-danaid-eggfly-hypolimnias-misippus/> downloaded 4<sup>th</sup> March 2016.  
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**Fig. 2.** Underside of a male *Hypolimnas misippus*.

[<http://www.learnaboutbutterflies.com/Africa%20-%20Hypolimnas%20misippus.htm>, downloaded 28 February 2016]



**Fig. 3.** Female *Hypolimnas misippus*.

[<https://www.flickr.com/photos/toddalperovitz/3025036674>, downloaded 28 February 2016]



**Fig. 4.** Caterpillar of *Hypolimnas misippus*.

[<http://onenezz.blogspot.com/2010/10/butterfly-with-heart.html>, downloaded 28 February 2016]

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