

Bugs R All

Newsletter of the
Invertebrate Conservation & Information Network of South Asia (ICINSA)

Some observations on the life cycle of the Great Eggfly *Hypolimnys bolina* Linnaeus 1758

Butterflies are a widely recognized group of insects, admired for their beauty and vibrant colours, making them popular among nature enthusiasts. They are highly sensitive to environmental factors such as temperature, humidity, rainfall, and the availability of larval host plants (Ribeiro & Freitas 2012).

Due to their dependence on specific plants for food and sheltering throughout their life cycle, butterflies are often used as indicators of habitat disturbance and environmental change (Kunte 1997; Padhye et al. 2006). Their abundance is a sign of a thriving ecosystem, as they play a crucial role in the food chain as both predators and prey (Blair 1999; Mennechez et al. 2003). Additionally, butterflies are considered umbrella species in



Host plant *Sapindus mukorossi* and Great Eggfly caterpillar.



Caterpillar.



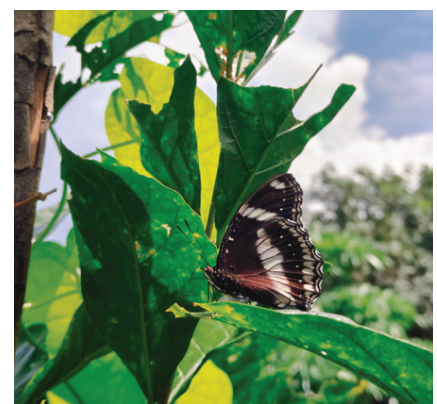
Caterpillar character: Dark brown in colour and orange colour head.



Pupa.



Adult emerged from the pupa.



Adult released into natural environment.

Great Eggfly life cycle – caterpillar to adult. © Arockianathan Samson.

Bugs R' All

Newsletter of the
Invertebrate Conservation & Information Network of South Asia (ICINSA)



Host plant *Sapindus mukorossi*. © Arockianathan Samson.

conservation planning, where their protection can also safeguard other species within the same habitat (Betrus et al. 2005).

In this study, we observed the life cycle of the Great Eggfly *Hypolimnas bolina* Linnaeus, 1758, from caterpillar to adult stages, as well as its host plants in Bhopal, Madhya Pradesh, India. This species is widely distributed across southeast Asia (Clarke & Sheppard 1975) and

its behaviour offers insights into habitat-specific interactions and ecological health.

On 28 August 2024, we observed a caterpillar feeding on *Sapindus mukorossi* (commonly known as Reetha). Due to heavy rainfall, we collected the caterpillar and placed it in a plastic container with leaves and sticks to create a safe environment for further development. By 29 August 2024, the caterpillar had formed a pupa, and on 4 September 2024 at 1030 h, an adult Great Eggfly emerged. We released the butterfly into the natural environment.

While this study has some limitations, such as missing the egg and caterpillar stages, it provides valuable insights into the host plant, identification of the Great Eggfly's caterpillar and pupa structure, and the metamorphosis period from pupa to adult (6 days). This observation offers a foundation for future studies on the life cycle of the Great Eggfly.

References

Betrus, C.J., E. Fleishman & R.B. Blair (2005). Cross taxonomic potential and spatial transferability of an umbrella species index. *Journal of Environmental Management* 74(1): 79–87.

Blair, R.B. (1999). Birds and butterflies along an urban gradient: surrogate taxa for assessing biodiversity. *Ecological Applications* 9(1): 164–170.



Bugs R All

Newsletter of the
Invertebrate Conservation & Information Network of South Asia (ICINSA)

Clarke, C. & P.M. Sheppard (1975). The genetics of the mimetic butterfly *Hypolimnas bolina*. *Philosophical Transactions of the Royal Society of London (B)* 272(917): 229–265.

Kunte, K.J. (1997). Seasonal patterns in butterfly abundance and species diversity in four tropical habitats in northern Western Ghats. *Journal of Biosciences* 22(5): 593–603.

Mennechez, G., N. Schtickzelle & M. Baguette (2003). Metapopulation dynamics of the bog fritillary between a continuous and a highly fragmented butterfly: Comparison of demographic parameters and dispersal landscape. *Landscape Ecology* 18(3): 279–291.

Padhye, A.D., N. Dahanukar, M. Paingankar, M. Deshpande & D. Deshpande (2006). Season and landscape wise distribution of butterflies in Tamhini, Northern, Western Ghats, India. *Zoos' Print Journal* 21(3): 2175–2181.

Ribeiro, D.B. & A.V. Freitas (2012). The effect of reduced impact logging on fruitfeeding butterflies in central Amazon, Brazil. *Journal of Insect Conservation* 16(5): 733–744.

Arockianathan Samson¹, Hemant Bajpai² & Zainab Khan¹

¹ Bombay Natural History Society, Vulture Programme, Vulture Conservation Breeding Centre, Bhopal, Madhya Pradesh 462044, India.

² Bombay Natural History Society, Vulture Programme, Vulture Conservation Breeding Centre, Pinjore, Haryana 134102, India.

Email: ¹a.samson@bnhs.org (corresponding author).

Citation: Samson, A., H. Bajpai & Z. Khan (2025). Some observations on the life cycle of the Great Eggfly *Hypolimnas bolina* Linnaeus 1758. *Bugs R All* #288, In: *Zoo's Print* 40(3): 06–08.

Bugs R All is a newsletter of the Invertebrate Conservation and Information Network of South Asia (ICINSA)



zooreach
Zoo Outreach Organisation

