

SHORT COMMUNICATION

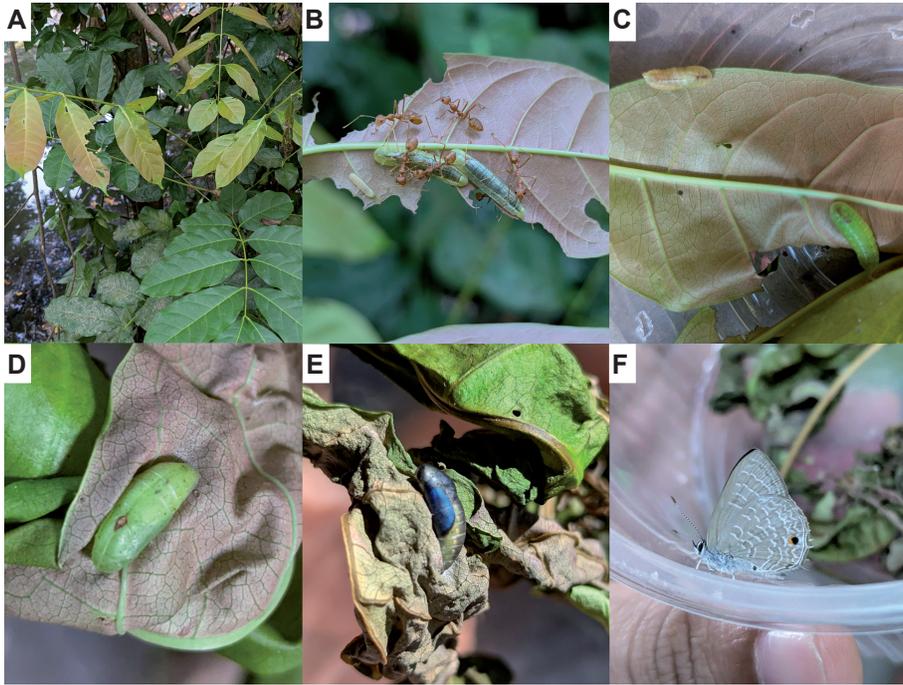
**Hybrid mahogany as a new larval host plant  
of *Anthene emolus* (Lepidoptera: Lycaenidae),  
with ant attendance and notes on immature development**

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Host plant records are fundamental to understanding butterfly ecology, habitat associations and conservation planning, especially for lycaenids where larval development may be influenced by biotic interactions such as ant attendance (Fiedler & Maschwitz 1989; Saarinen 2006). The Palaeotropical genus *Anthene* Doubleday, 1847 (Lycaenidae) is mainly distributed in the Sub-Saharan Africa (Williams 2008), but is also well represented in the Oriental Region and in Australasia (Savela 2024), including numerous small ‘ciliate blues’. One of them, *Anthene emolus* (Godart 1823), is widely distributed across South and Southeast Asia (Corbet & Pendlebury 1992; Kehimkar 2016; Smetacek *et al.* 2025). Across their ranges, *Anthene* species are recorded from multiple larval host families, commonly Fabaceae and also Anacardiaceae, Sapindaceae, Loranthaceae and others (Seki *et al.* 1991; Igarashi & Fukuda 1997; Braby 2000; Ballmer 2008; Robinson *et al.* 2010; Karmakar *et al.* 2018; Nitin *et al.* 2018). In India, Nitin *et al.* (2018) list larval hosts of *A. emolus* as *Mangifera indica* L. (Anacardiaceae), *Combretum latifolium* Blume and *Terminalia paniculata* Roth (Combretaceae), *Cassia fistula* L. and *Saraca asoca* (Roxb.) Willd. (Fabaceae), *Heynea trijuga* (Wight & Am.) Benth. (Meliaceae) and *Litchi chinensis* Sonn. (Sapindaceae). However, the hybrid mahogany (*Swietenia macrophylla* King × *S. mahogany* (L.) Jacq.) has not, to the best of my knowledge, been reported as a larval host of *A. emolus*. Hybrid mahogany is tree of the Neotropical origin, widely planted in India, both as an ornamental plant and as a source of the commercial timber (Francis 2002). Herein, I document larval feeding on the hybrid mahogany in a peri-urban setting in eastern India, with field observations of attendance by the Asian weaver ant *Oecophylla smaragdina* (Fabricius, 1775) and confirmation through rearing to the adult stage.

Observations were made at Chhaygharia, West Bengal, India (23.04637°N 88.43147°E; 15 m a.s.l.), where hybrid mahogany is planted locally as an introduced timber and shade tree (Fig. A). On 6 November 2025, three lycaenid larvae identified



**Figs A–F.** Hybrid mahogany (*Swietenia macrophylla* × *S. mahogani*) as a larval host of *Anthene emolus* in India, with ant attendance and rearing to adult: (A) foliage of the host plant at the observation site; (B) *A. emolus* larva feeding on a young leaf and attended by weaver ants *Oecophylla smaragdina*; (C) collected larvae maintained separately on fresh host leaves under laboratory conditions; (D) green pupa attached to the underside of a hybrid mahogany leaf; (E) dark pupa attached to a dried hybrid mahogany leaf, with the wing pattern of the imminent adult visible through the pupal case; (F) newly emerged adult of *A. emolus*.

as *A. emolus* were observed on young hybrid mahogany leaves; fresh feeding damage was evident near the larvae. The tree was revisited on 7 November 2025, when the smallest (early-instar) larva was no longer present, while the remaining two larvae were still feeding. At that time, both larvae were attended by workers of *O. smaragdina* along active foraging trails on the host plant (Fig. B). To confirm host association, the two remaining larvae were collected for rearing. Each larva was transferred to a separate transparent container and supplied with fresh hybrid mahogany leaves; leaves were replaced regularly to maintain a continuous food source (Figs C–D). Larvae were maintained at the ambient room temperature under natural day–night conditions and checked daily for development.

Under rearing conditions, at least one larva successfully pupated (Fig. E) and a fresh adult *A. emolus* emerged 12 days after collection (Fig. F). The second collected larva pupated but failed to emerge. The emerged adult was examined using standard identification resources and confirmed as *A. emolus* based on diagnostic

wing pattern characters; it was subsequently released at the site of collection. In the field, larvae were observed feeding on young foliage, with weaver ants frequently in close proximity to the larval body and feeding site (Fig. 1B). Such attendance is consistent with the broader pattern of myrmecophily in lycaenids, where larvae provide secretions and may gain protection from predators and parasitoids (Fiedler & Maschwitz 1989; Saarinen 2006). Although the present observations do not test the functional outcome of the association, the repeated presence of *O. smaragdina* workers at the feeding site suggests that ant attendance could facilitate larval persistence on exposed foliage in peri-urban habitats.

This note establishes hybrid mahogany as a larval host of *A. emolus*. While one Meliaceae host (*Heynea trijuga*) is already known for *A. emolus* in India (Nitin *et al.* 2018), the hybrid mahogany represents a distinct, widely planted, non-native arboreal host that may be increasingly encountered in human-dominated landscapes. The widespread planting of *Swietenia* spp. in urban and peri-urban areas, together with the high local abundance and territorial dominance of *O. smaragdina* on trees, could create frequent opportunities for oviposition and larval survival on this host. Targeted surveys across planted *Swietenia* stands, repeated observations of oviposition and early instars, and documentation of larval success with or without ant attendance would help clarify how commonly *A. emolus* exploits hybrid mahogany and whether ants influence host use and survival in modified habitats. Although *A. emolus* is assumed to cause some damage to hybrid mahogany, it can at the same time be much more beneficial by attracting *O. smaragdina* that are already known as successful bio-controllers of the mahogany shoot borer (*Hypsipyla robusta* (Moore, 1886)) (Lepidoptera: Pyralidae), a severe pest of *Swietenia* (Lim *et al.* 2008).

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