

CONFIRMATION OF *PROSOPIS CINERARIA* AS LARVAL HOST PLANT OF THE COMMON GRASS YELLOW BUTTERFLY *EUREMA HECABE* (LINNAEUS, 1758) (INSECTA: LEPIDOPTERA: PIERIDAE) IN INDIA

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The Common Grass Yellow (*Eurema hecabe* (Linnaeus, 1758)) is widespread across Asia, Africa and Australia. In India, *E. hecabe* is a very commonly found butterfly throughout the country. In India, it uses several plants of the family Fabaceae as larval host plants, namely *Acacia*, *Aeschynomene americana*, *Albizia*, *Albizia procera*, *Albizia saman*, *Caesalpinia*, *Caesalpinia mimosoides*, *Caesalpinia pulcherrima*, *Caesalpinia sappan*, *Cassia*, *Cassia fistula*, *Senna tora*, *Mimosa pudica*, *Moullava*, *Moullava spicata*, *Peltophorum pterocarpum*, *Pithecellobium dulce*, *Senna alata*, *Senna obtusifolia*, *Sesbania*, *Sesbania bispinosa*, *Sesbania grandiflora*, *Sesbania sesban*, *Smithia conferta*, *Smithia sensitiva* (Fabaceae) (Nitin *et al.*, 2018).

The present communication reports rearing of *E. hecabe* on *Prosopis cineraria* (Mimosaceae), confirming this plant as larval host plant of Common Grass Yellow butterfly in India.

E. hecabe was found ovipositing on *Prosopis cineraria* saplings grown in Aranya native nursery, Gurugram. The butterfly is commonly found in the region with both the Aravali Biodiversity Park and Aravali Nagar Van being adjacent to the nursery, where *Prosopis cineraria* is

widespread across the region. A freshly laid egg of *E. hecabe* from the aforementioned location was reared under ambient temperature (minimum and maximum temperatures 11–20°C and 24–32°C, respectively) and variable humidity in the months of August–September, 2023. The egg was collected on 26th August and hatched on 28th August (3rd day after ovipositing). The egg hatched on 28th August and presence of a caterpillar in the container was ascertained from the presence of frass. The caterpillar was reared by feeding fresh leaves of *Prosopis cineraria*. A pupa was found on 6th September 2023, 12 days from the date of rearing the egg (Figure 1-6) and an adult *E. hecabe* eclosed on 12th September 2023 (6 days after pupation).

The total duration of the life cycle of *E. hecabe* was 18 days. The observed longer larval and pupal stages in the present study could be due to lower ambient temperature and fluctuating humidity prevalent in the month of September. The above observations confirms *Prosopis cineraria* as larval host plant of *E. hecabe* in India. Looking at the list of larval host plants reported previously (Robinson *et al.*, 2010; Nitin *et al.*, 2018), this is clearly a new record of the larval host plant for *E. hecabe*.

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Fig 1: Eggs of Common Grass Yellow on *Prosopis cineraria*.



Fig 2: Close up of Common Grass Yellow egg



Fig 3: Caterpillar of Common Grass Yellow on *Prosopis cineraria*.



Fig 4: Common Grass Yellow caterpillar 4th instar.



Fig 5: Common Grass Yellow pupa

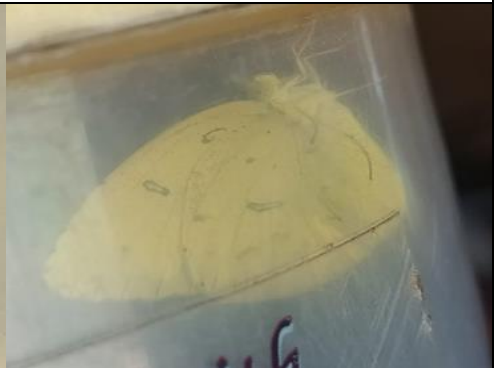


Fig 6: Freshly eclosed Common Grass Yellow.



Fig 7: Upperside of Common Grass Yellow bred on *Prosopis cineraria* .



Fig 8: Underside of Common Grass Yellow bred on *Prosopis cineraria*