

## SHORT COMMUNICATION

### **Purple Bush-Bean *Macroptilium atropurpureum* (Fabaceae): a new larval host plant for *Euchrysops cnejus* (Fabricius) (Lepidoptera: Lycaenidae) in South Asia**

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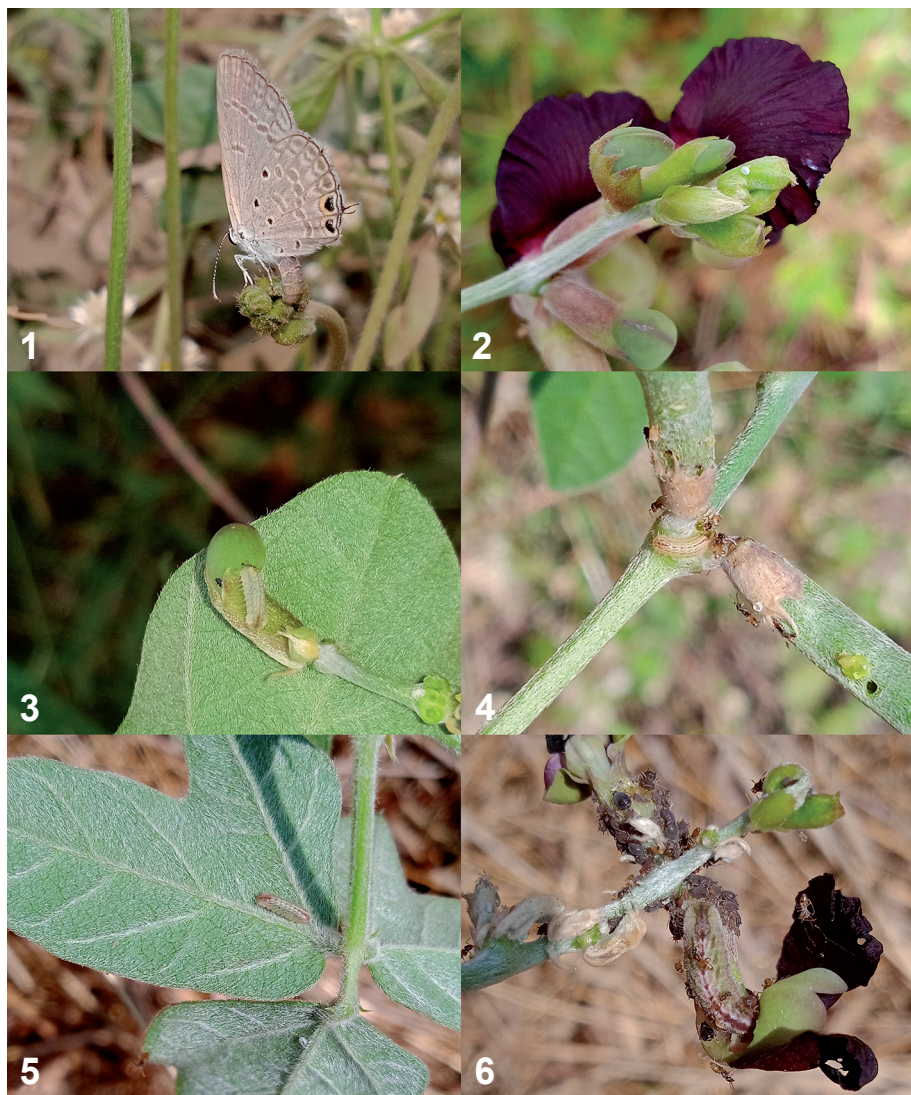
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*Euchrysops cnejus* (Fabricius, 1798) is a small widespread Lycaenidae butterfly, distributed from the Arabian Peninsula, Southern Asia to Southeast Asia and North-eastern Australia to the Pacific countries like Fiji and Samoa (Vane-Wright & de Jong 2003; Feulner *et al.* 2021; Inayoshi 2024). The butterfly widely occurs in India, except for some arid regions (western parts of Rajasthan and Haryana, and southern Punjab) and some states of North-eastern India (Arunachal Pradesh and Mizoram), and is treated as a common butterfly (Varshney & Smetacek 2015; Kehimkar 2016; van Gasse 2021). In the Pune district the status of this butterfly is ‘Abundant’ (Kunte 2001). Members of the family Fabaceae are common hosts plants of *E. cnejus* caterpillars (Robinson *et al.* 2023). *Euchrysops cnejus* is also considered a minor pest of some legume crops (Kunte 2000). In India, the butterfly’s caterpillars develop on *Acacia caesia* (L.) Willd., *Butea monosperma* (Lam.) Taub., *Cajanus cajan* (L.) Millsp., *Canavalia ensiformis* (L.) DC, *Lablab purpureus* (L.) Sweet, *Ougeinia oojeinensis* (Roxb.) Hochr., *Paracalyx scariosus* (Roxb.) Ali, *Phaseolus* L. species, *Pisum sativum* L., *Pueraria phaseoloides* (Roxb.) Benth., *Vigna cylindrica* (L.) Skeels, *V. radiata* (L.) R. Wilczek, *V. trilobata* (L.) Verdc., *V. unguiculata* (L.) Walp., and *V. stipulacea* (Lam.) Kuntze (Wynter-Blyth 1957; Kunte 2000; Nitin *et al.* 2018; Robinson *et al.* 2023; Payra & Bhatt 2024).

*Macroptilium atropurpureum* (DC.) Urb. (Fabaceae) is a perennial legume characterised by climbing/twining stems, deeply lobed trifoliate leaves fine hairy on the upper surface while pubescent on the lower surface, inflorescence a raceme comprising 6–12 often paired flowers on a short rachis, flower ebracteate, wings deep purple brown with a spiralled keel, seed pods linear-cylindrical, acuminate and pubescent (CABI 2018). The legume is native to the Caribbean, North America, Central America and South America. However, siratro has been introduced



**Figs 1–6.** *Euchrysops cnejus*: (1) a female laying eggs on the new flower buds of *M. atropurpureum*, (2) egg of *E. cnejus*, (3) caterpillar of *E. cnejus* feeding on the bud, (4) caterpillar of *E. cnejus* on the young seed pod, (5) caterpillar of *E. cnejus* underneath the leaf, (6) caterpillar of *E. cnejus* associated with ants and aphids. (Photo: A. Payra)

in a few parts of the world as fodder and has naturalized throughout the tropical and subtropical regions (POWO 2024); it has been considered for planting in dry regions in Saudi Arabia (FAO 2022). In some instances, *M. atropurpureum* has become invasive (CABI 2018). *Macroptilium atropurpureum* is closely related to

*Macoptilium lathyroides* (L.) Urb., which has been reported as a host plant for caterpillars of another Lycaenidae, *Leptotes plinius* (Fabricius, 1793), from India (Churi & Kawthankar 2025).

We conducted a year-long entomological survey (January–December 2024) in the Pune district, Maharashtra, which situates partially in the Western Ghats Biodiversity Hotspot, India. During the survey, we encountered several incidents of *Euchrysops cnejus* laying eggs on new flower buds of *M. atropurpureum* and observed several larval instars feeding on the flower buds. First, on 24 January 2024, a female was recorded laying eggs on the flower buds of *M. atropurpureum* near a small waterbody of Warje Tekdi (18.491293°N 73.800661°E, 648 m a.s.l.). In October–December 2024 (6.10.2024; 11.10.2024; 20.10.2024; 14–15.12.2024), we documented four egg laying instances at the same location, several caterpillars of different instars feeding on new flower buds of *M. atropurpureum*, and a few caterpillars underneath the leaves and on a new seed pod (Figs 1–6). The caterpillars were feeding by making holes in the buds, but interestingly there was no evidence of their feeding on the leaves and new seed pods. On 24 November 2024, at Lonkar Wasti Road (18.503063°N 74.159882°E, 560 m a.s.l.), near Tilekar Wadi of Pune district, a single female of *E. cnejus* was spotted laying eggs on the flower buds of *M. atropurpureum*. However, no larval instars were observed.

To date, larval stages of several HesperIIDae and Lycaenidae butterflies have been reported to feed on *M. atropurpureum*: HesperIIDae *Chioides catillus* (Cramer, 1779) from the Nearctic region, *Urbanus proteus* (Linnaeus, 1758) and *Urbanus dorantes* (Stoll, 1790) from the Neotropical region; Lycaenidae *Hemiargus hanno filenus* Poey, 1833 from the Neotropical region, *Jamides bochus* (Stoll, [1782]) from Japan, and *Jamides amaraugae* Druce, 1891 from Australia (Fernández-Hernández 2007; Robinson *et al.* 2023). In Australia, larval stages of *E. cnejus* have been reported to feed on *M. atropurpureum* (Braby 2004; Jenkinson 2012). However, our observations of oviposition and several larval instars of *E. cnejus* feeding on the new flower buds of *M. atropurpureum* constitute the first report of *M. atropurpureum* as a host plant of *E. cnejus* in South Asia.

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