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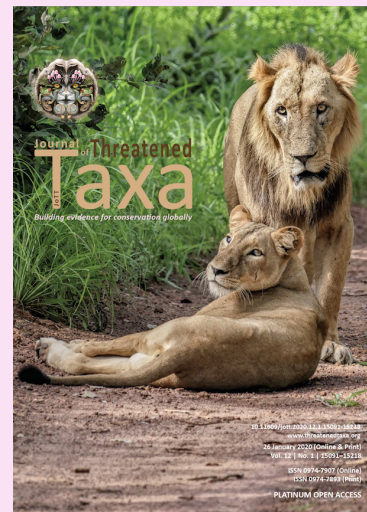
### NOTE

### ADDITIONS TO KNOWN LARVAL HOST PLANTS OF BUTTERFLIES OF THE WESTERN GHATS, INDIA

Deepak Naik & Mohammed S. Mustak

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## Additions to known larval host plants of butterflies of the Western Ghats, India

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The Western Ghats is rich in butterfly diversity, consisting of 336 species in six families (Nitin et al. 2018). Butterfly diversity largely depends on host plants and their supporting habitat (Knops et al. 1999). Host plants are essential for the butterfly's lifecycle because caterpillars usually feed on a narrow set of plants that are acceptable based on nutritional and chemical requirements. Documentation of larval host plants is essential for conservation management and ecological studies of butterfly diversity. Compared to other parts of India, the larval host plants of Western Ghats butterflies are well documented (Gunathilagaraj et al. 1998; Kunte 2000, 2006; Kalesh & Prakash 2007; Kehimkar 2008; Nitin et al. 2018). In addition, a recent survey showed that there are 834 plant species used as hosts by 320 species of butterflies in the Western Ghats (Nitin et al. 2018). Even though host plants are well documented for the Western Ghats, knowledge of site-specific preferences still needs to be investigated.

Our previous studies documented 172 species of butterflies and recorded host plants from southwestern Western Ghats located in Dakshina Kannada, Karnataka (Naik & Mustak 2015, 2016). Besides these studies, there are no reports of host plants from the study region.

Our current study observed four new host plants in the families Poaceae, Rhamnaceae, and Fabaceae, which are used by four different species in three butterfly families, namely Hesperidae, Pieridae, and Lycaenidae.

From 2016–2018, we recorded the host plants of butterflies by observing their early stages and successfully rearing caterpillars in the lab to confirm plant identifications. Butterflies were determined by using field guides (Kunte 2000; Kehimkar 2008; Kunte et al. 2018), while plants were identified by using the floras of Udupi and Dakshina Kannada (Bhat 2003, 2014) and confirmed with the help of experts.

### Family Hesperidae

***Pelopidas agna agna* (Moore, 1866) Bengal Obscure Branded Swift:** *Pennisetum* sp. Rich. (Poaceae) (Image 1) is a new record for the Western Ghats. Perennial or annual grass, tall, erect with narrow, flat or convolute leaves, commonly seen in cultivated land, reported in Kollamogaru, Sullia, in September 2016. Studies by Kalesh & Prakash (2015) and Nitin et al. (2018) earlier reported *Axonopus compressus* (Sw.) P. Beauv. (Poaceae) as a host plant.

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Image 1 - *Pennisetum* sp. (Rich.)



Image 2 - *Ventilago maderaspatana* (Gaertn.)

#### Family Pieridae

***Eurema andersonii shimai* (Yata & Gaonkar, 1999) Sahyadri One-spot Grass Yellow:** *Ventilago maderaspatana* (Gaertn.) (Rhamnaceae) (Image 2) is a new record for the Western Ghats. It is a large woody climber often seen in moist mixed deciduous and semi-

evergreen forests, reported in Bantaje Reserve Forest, Puttur, and Kollamogaru, Sullia, in October 2017. In addition to the above species, previous studies reported *Ventilago goughii* Gamble (Rhamnaceae) (Yata & Gaonkar 1999; Nitin et al. 2018) as the host plant in the Western Ghats.

#### Family Lycaenidae

***Rapala manea schistacea* (Moore, 1879) Bengal Slate Flash:** *Senna tora* (L.) Roxb. [syn. *Cassia tora* L.] (Fabaceae) (Image 3) is a new host-plant record for the Western Ghats. An annual herb with yellow flowers, leaves up to 10cm long with 2–4 leaflets, it was a common weed in Kudremukh Wildlife Sanctuary, Belthangady, in November 2018. Numerous other reported host plants include *Mangifera indica* L. (Anacardiaceae) (Robinson et al. 2010), *Combretum indicum* (L.) DeFilipps (Combretaceae), *Acacia caesia* (L.) Willd., *A. megaladena* (Desv.), *A. pennata* (L.) Willd., *A. torta* Craib (Roxb.) (Fabaceae), *Averrhoa bilimbi* L. (Oxalidaceae), *Antidesma acidum* (Retz.), *A. ghaesembilla* (Gaertn.) (Phyllanthaceae), *Ziziphus* sp. (Mill.) (Rhamnaceae), *Sorbaria sorbifolia* (L.) A.Braun (Rosaceae), *Camellia sinensis* (L.) Kuntze (Theaceae) (Wynter-Blyth 1957; Kunte 2000), *Mimosa invisa* (Mart.), *Saraca asoca* (Roxb.) de Wilde (Fabaceae), *Clerodendrum infortunatum* L. (Lamiaceae), *Urena lobata* L. (Malvaceae), *Lepisanthes tetraphylla* (Vahl) Radlk (Sapindaceae) (Saji et al. 2018), and *Lantana camara* L. (Verbenaceae) (Nitin et al. 2018) from various parts of the Western Ghats.

***Cheritra freja butleri* (Cowan, 1965) Sahyadri Common Imperial:** *Bauhinia phenicea* Wight & Arn. (Fabaceae) (Image 4) is a newly reported host plant for the Western Ghats. Large climbing shrub, leaves orbicular and deeply bifid, lobes acute, often seen in semi-evergreen forests, reported in Thodikana, Sullia, in December 2017 and Someshwara Wildlife Sanctuary, Karkala. In addition to the above new host plant, *Saraca asoca* (Roxb.) de Wilde (Fabaceae) (Bell 1919; Wynter-Blyth 1957), *Xylia xylocarpa* (Roxb.) Taub. (Fabaceae), (Davidson et al. 1896; Bell 1919; Wynter-Blyth 1957; Robinson et al. 2010), *Cinnamomum camphora* (L.) J.Presl, *C. macrocarpum* (Hook.F.), *C. verum* (J.Presl) (Lauraceae), *Ixora* sp. L. (Rubiaceae) (Wynter-Blyth 1957), and *Lepisanthes tetraphylla* (Vahl) Radlk. (Sapindaceae) (Saji & Ogale 2018) were reported as host plants in the Western Ghats.

Image 3 - *Senna tora* (L.) Roxb.Image 4 - *Bauhinia phenicea* Wight & Arn.

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