

Report of *Donda continentalis* Behounek, Han and Kononenko, 2012 (Lepidoptera, Noctuidae) from India

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ABSTRACT: *Donda continentalis*, Behounek, Han and Kononenko, 2012 (Lepidoptera, Noctuidae) earlier known from south China, Thailand, and Vietnam, is herein reported for the first time from India. The species record from Kerala constitutes a part of significant range extension to the Western Ghats of India. A detailed description of male habitus and genitalia with key diagnostic features is provided.

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KEY WORDS: New record, Western Ghats, range extension, genitalia, pantheine

The subfamily Pantheinae Smith, 1898 comprises morphologically diverse species with the greatest diversity in the Holarctic, Oriental, and Neotropical regions (Behounek *et al.*, 2012). *Donda* Moore, 1882, is a typical oriental genus (Behounek *et al.*, 2012) characterized by light green ground-coloured forewings with three brown patches. The genus was placed in subfamily Catocalinae by Nye (1975). Later Poole in 1989 shifted the genus into the subfamily Ophiderinae. Kobes (1992) transferred the genus into the subfamily Pantheinae of the family Noctuidae. In 2012, Behounek *et al.* revised the genus and listed six species under the genus *Donda*. Out of these species, the taxonomic status of two species is still unclear due to lack of proper description. Later, *D. unispinosa* Bandyopadhyay, Raha and Chandra, 2020 from India (Bandyopadhyay *et al.*, 2019) and *D. hunana* Han, Behounek and Kononenko, 2020 from China (Han *et al.*, 2020) were also described. Joshi *et al.* (2025) listed four species from India. In this study

D. continentalis is reported for the first time from India.

The adult male specimen was collected using the light trap method. A 160-watt mercury vapor lamp was used for the purpose. A plain long white sheet is tied on a rope, and the mercury vapor lamp was placed in front of the white sheet. The collected specimen was killed using a killing jar containing ethyl acetate-soaked cotton. The killed specimen was then pinned and dried under 60-watt incandescent bulb. The dried specimen was neatly labelled and stored in an airtight insect box. The specimen was duly registered and deposited in the insect collections of Entomo Taxonomy Lab, Christ college (Autonomous), Irinjalakuda, Kerala.

The identification of the collected specimen was carried out using the literature published by Behounek *et al.* (2012) and Bandyopadhyay *et al.* (2019). The species-level identification was confirmed by the genitalia analysis as per the

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Robinson method (1976). The last four abdominal segments were removed and soaked in 10 per cent KOH solution overnight. It was then dissected under a microscope and compared with available genitalia data. The images were taken using a camera associated with the Optika SLX2 Stereozoom microscope.

Systematic account

Superfamily: Noctuoidea Latreille 1809

Family: Noctuidae Latreille 1809

Subfamily: Pantheinae Smith 1898

Genus: *Donda* Moore 1882

***Donda continentalis* Behounek, Han and Kononenko, 2012**

Description: Wing expanse 4.3cm (Fig. 1) Antennae filiform; head covered with light green and brown scales; palpi upright, long yellowish with third segment half the length of the second; thorax with light green and brown scales; abdomen yellowish with dorsal tuft of scales; forewing with light green ground colour; a tiny brown patch present on basal area; a large somewhat triangular patch present hanging from costal part of sub basal area and a brown patch on apical part of terminal and sub terminal area; a small brown patch present on

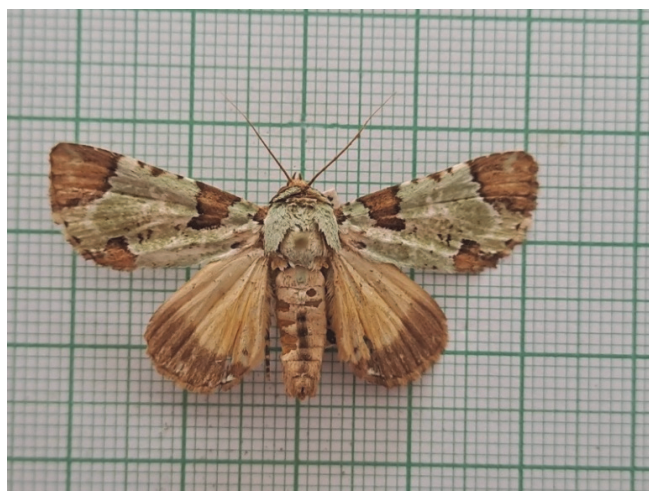


Fig. 1 Habitus of *Donda continentalis*

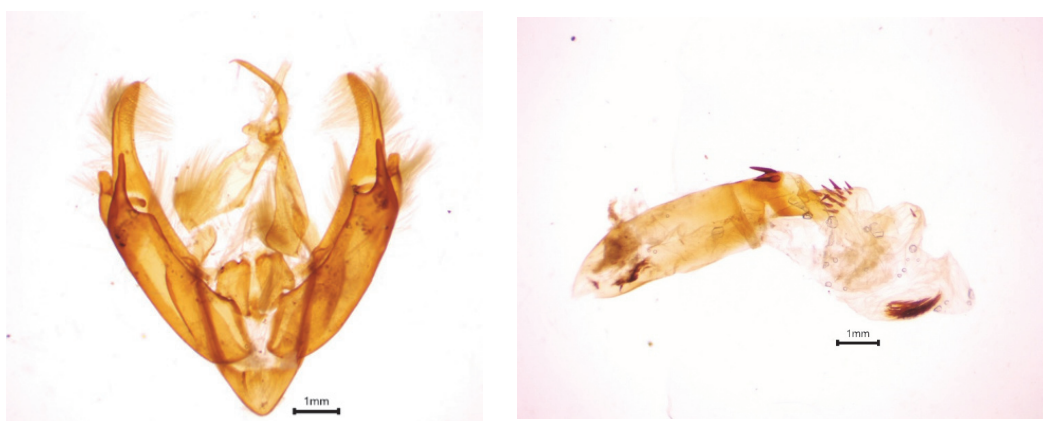


Fig. 2 Male genitalia; Aedeagus of *D. continentalis*

tornal area; slightly more distinct submedial and antemedial lines present. Underside yellowish with two dark bands. Hind wing yellow with broad brown terminal band and with a less distinct medial line. Underside with diffused terminal band and indistinct medial and sub medial wavy lines.

Male genitalia (Fig. 2): Uncus long, basally curved with an apical hook; tegumen broad with peniculus; juxta broad, leaf shaped with wide channel and lateral flaps; valvae long, gradually curved and constricting apically; cucullus setosed; saccus broad U shaped; sacculus long, asymmetric with pointed, slightly curved apical tip; finger-like ventro apical extension present; Aedeagus long with strong spines (Fig. 3); vesica with a patch of spines and two distinct needle-like cornuti.

Material examined: 1 ♂; 30-ix-2024; Shiruvani, Palakkad district, Kerala, India, (10.975N; 76.642E); altitude 960m; Coll. Joslin Treasa Jacob.

Distribution: India [Kerala (New report)], south China, Thailand, Vietnam.

The genus *Donda* includes species that have similar facies and are difficult to be distinguished morphologically. Even though *D. eurychlora* and *D. continentalis* are similar in their external morphology, slight differences on the fascia can be noted. The submedial and antemedial lines on the *D. continentalis* forewing are more visible than in *D. eurychlora*. Also, the medial and submedial lines on the hindwing are distinct in *D. continentalis* than in *D. eurychlora*. Differentiation of these congeners requires careful dissection and analysis of genitalia. The Indian *Donda* species can be identified using the genitalia characters. The juxta of *D. continentalis* species is leaf shaped with a central channel, whereas *D. eurychlora* has lateral flaps and a rod. The shape of juxta and valva can be compared for identification. The species *D. unispinosa* has a comparatively small aedeagus with a single robust spine, whereas *D. continentalis* has 2 distinct spines. The current report of *D. continentalis* from India shows significant range extension of the species to the Western Ghats of India. The presence *D. continentalis* highlights the importance

of the less explored biodiversity of the Western Ghats.

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