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NOTE

A RECORD AFTER 92 YEARS, AND A FIRST REPORT OF THE MOTH **MECODINA METAGRAPTA HAMPSON, 1926 (LEPIDOPTERA: EREBIDAE: AGANAINAE) FROM THE WESTERN GHATS' PART OF** MAHARASHTRA, INDIA

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A RECORD AFTER 92 YEARS, AND A FIRST REPORT OF THE MOTH *MECODINA METAGRAPTA* HAMPSON, 1926 (LEPIDOPTERA: EREBIDAE: AGANAINAE) FROM THE WESTERN GHATS' PART OF MAHARASHTRA, INDIA

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One single specimen of Mecodina metagrapta was collected from Lonavala by light trapping. The specimen was identified as per Hampson (1926). The placement of Mecodina in the family Erebidae and subfamily Aganainae in the present study is as per Zahiri (2012) and Kononenko & Pinratana (2013). The genus Mecodina was first described by Guenée in 1852 on the type species M. lanceola from Sylhet. Hampson (1895) in his third volume on Moths in the Fauna of British India mentioned 12 species of Mecodina i.e., M. cineracea (Butler, 1879), M. analis Swinhoe, 1890, M. placida (Moore, 1879), M. umbrosa (Hampson, 1891), M. subviolacea (Butler, 1881), M. agrestis (Swinhoe, 1890), M. odontophora Swinhoe, 1895, M. albodentata (Swinhoe, 1895), M. hepatica Moore, 1879, M. oxydata Swinhoe, 1895, M. praecipua (Walker, 1865), and M. ruficeps Hampson, 1895 from India. Later in 1926, Hampson described two species of this genus, i.e., M.

aequilinea Hampson, 1926, and *M. metagrapta* Hampson, 1926 from India. After Hampson (1926), there is no record of this species and in his original literature he described this species from Belgaum, Karnataka. Thus, the present paper represents the rediscovery of this moth after a very long gap of 92 years and also reports the first record of this genus and species from Maharashtra.



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Material and Methods

One female specimen was collected by the author in the northern Western Ghats at Lonavala Village, Pune District, Maharashtra, India using a light trap at night. The collected specimen was further processed in the laboratory and identified as per Hampson (1926). The specimen was studied under a Leica EZ 4 E stereozoom microscope and the images were processed with Adobe Photoshop CS Version 8. The identified specimen was labeled, registered and deposited at National Zoological Collection, Zoological Survey of India, Western Regional Centre, Pune, Maharashtra, India (ZSI-WRC). terminology used for describing morphological features is as per Hampson (1926). The distributional records have been verified from Hampson (1895, 1926). The standard procedure given by Robinson (1976) and Zimmerman (1978) are followed to study the genitalia. The survey locality is given under material examined and also shown in Fig. 1. The map of the survey locality was prepared using the open-free access QGIS software.

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Results and Discussion

Superfamily Noctuoidea Latreille, 1809 Family Erebidae Leach, [1815] Subfamily Aganainae Boisduval, 1833 Genus *Mecodina* Guenée, 1852 *Mecodina metagrapta* Hampson, 1926 Descr. Gen. Spec. Noctuinae : 491.

Material examined: ZSI-WRC-L-1808, 23.viii.2017, 01 female, Lonavala, Pune, coll. A.S. Kalawate & party (18.61°N & 73.41°E, elevation 780m).

Description: (Image 1 A) Body reddish-brown tinged with grey; palpi darker red-brown. Fore wing reddish-brown tinged with grey; a slight brown subbasal line from costa to submedian fold; waved brown antemedial line; small whitish discoidal reniform lunule surrounded by dark brown band, with an oblique brown bar from costa; an indistinct waved brown postmedial line, curved outward to vein 4, then curved inward; a dark brown patch from postmedial part of costa to vein 6; a series of dark brown points and fine white line at base of cilia.



Image 1. M. metagrapta A-B - habitus; A - dorsal view, B - ventral view, C - female genitalia. © Aparna S. Kalawate

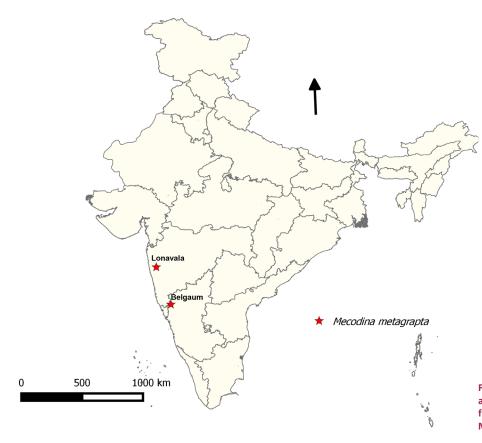


Figure 1. New collection locality and first record of *M. metagrapta* from the Western Ghats' part of Maharashtra.

Hind wing reddish-brown tinged with grey; faint brown medial line and of a postmedial line curved outward to vein 4; a faint whitish subterminal line, curved outward to vein 2, with dark blackish-brown bar on its inner side; base of cilia surrounded by a faint waved brown terminal line and a prominent whitish line. Underside (Image 1B) brown some places tinged with white; whitish discoidal reniform lunule and brown postmedial line on both wings.

Fore wing length: 28mm.

Female genitalia: (Image 1C) Ductus slightly funnel shaped, unsclerotised; corpus bursae elongate, membranous; apophyses longer.

Known distribution until this study: India (Belgaum) (Hampson 1926), Bali, Singapore (Hampson 1926), Java, Sulawesi (Holloway 2005).

References

Hampson, G.F. (1926). Descriptions of New Genera and Species of Lepidoptera Phalaenae of the Subfamily Noctuinae (Noctuidae) in the British Museum (Natural History). Taylor & Francis, London, 491–492pp.

Hampson, G.F. (1895). The Fauna of British India including Ceylon and Burma, Moths - Volume 3. Taylor and Francis, London, 3–7pp.

Holloway, J.D. (2005). The moths of Borneo: Family Noctuidae, subfamily Catocalinae. Malayan Nature Journal 58(1–4): 1–529.

Kononenko, V.S. & A. Pinratana (2013). Moth of Thailand Vol. 3, Part 2. Noctuoidea. An illustrated Catalogue of Erebidae, Nolidae, Euteliidae and Noctuidae (Insecta, Lepidoptera) in Thailand. Brothers of St. Gabriel in Thailand, Bangkok, 625pp.

Robinson, G.S. (1976). The preparation of slides of Lepidoptera genitalia with special reference to Microlepidoptera. *Entomologist's Gazette* 27(2): 127–132.

Zahiri, R. (2012). Molecular Systematics of Noctuoidea (Insecta, Lepidoptera). PhD Thesis. Department of Biology, Turku University, 49pp.

Zimmerman, E.C. (1978). *Microlepidoptera, Insects of Hawaii.* University of Hawaii Press, 1903pp.







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