CRITICAL ECOSYSTEM

Western Ghats Special Series

RANGE EXTENSION OF MALABAR TREE NYMPH IDEA MALABARICA (MOORE) (LEPIDOPTERA: NYMPHALIDAE) TO NORTHERN WESTERN GHATS OF MAHARASHTRA AND A REVIEW OF DISTRIBUTION RECORDS

Manoj Jadhav¹ & R.M. Sharma²

Zoological Survey of India, Western Regional Centre Pune, Maharashtra 411044, India ¹jadhav.manoj83@gmail.com (corresponding author), ²rmsharma53@yahoo.in

While surveying insects on the outskirts of Bhimashankar Wildlife Sanctuary near Dimbhe Dam (19°5'23"N & 73°44'31"E at 662m) on 14 April 2012, our attention was caught by a group of three butterflies hovering over *Lantana* flowers near a stream with their slow and floating flight. One of them was collected using an insect net and preserved (Image 1). It was identified as a Malabar Tree Nymph *Idea malabarica* (Moore) on the basis of literature, especially Evans (1932), Wynter-Blyth (1957), Kunte (2000) and Kehimkar (2008).

Family: Nymphalidae Subfamily: Danainae *Idea malabarica* (Moore) 1877

Material examined: 1 ex, 14.iv.2012, near bridge on

road to Dimbhe Dam, Pune District, Maharashtra, coll. Manoj Jadhav (Z.S.I. W.R.C., Pune, Registration No. Ent.02/1110).

Wing span: 112 mm.

Idea malabarica (Moore) is reported as confined to wet evergreen forests with heavy rainfall areas south of Goa to southern

Western Ghats up to Kerala and is endemic to this area (Evans 1932; Wynter-Blyth 1957; Larsen, 1987; Kunte 2000; Rangnekar 2007; Kehimkar 2008; Sharma & Borkar 2008). Largest among milkweed butterflies, unmistakable due to its slowest flight among Indian butterflies, prefers wetter forests between 300–1200 m in the hills (Wynter-Blyth 1957).

Barring a single record of Ghosh et al. (1990) from Raigarh District as a new report for Maharashtra State, no further records of *Idea malabarica* from any of the districts



Image 1. Idea malabarica Moore captured at Dimbhe, Pune District

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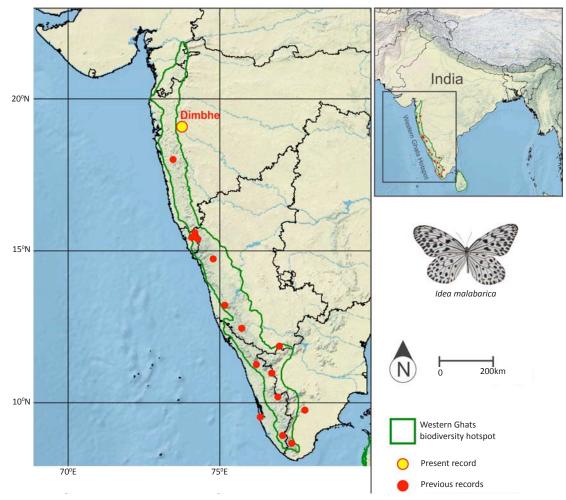


Image 2. Map of Western Ghats depicting distributional records of Idea malabarica Moore

Sno	State	Locality	Latitude	Longitude	Reference
1.	Maharashtra	Poladpur, Raigarh	17.985°N	73.466⁰E	Ghosh et al. (1990)
2.		Dimbhe, Pune Dist.	19.089°N	73.743°E	Present record
3.	Goa	Bhagwan Mahaveer Wildlife Sanctuary, Molem	15.373°N	74.258⁰E	http://en.wikipedia.org/wiki/Bhagwan_ Mahaveer_Sanctuary_and_Mollem_National_Park
4.		Bondla Wildlife Sanctuary, Phonda	15.437°N	74.076ºE	Borkar & Komarpant (2004)
5.		Brahma Karmali, Sattari	15.569°N	74.162ºE	Rangnekar (2007)
6.	Karnataka	Myristica Swamp, Uttara Kannada	14.711°N	75.730⁰E	Ali et al. (2004)
7.		Coorg (Kodagu)	12.426°N	75.730⁰E	Kunte (2008)
8.		Kudremukh National Park	13.183°N	75.148ºE	Radhakrishnan & Palot (2007)
9.	Tamil Nadu	Siruvani Forest	10.95°N	76.716⁰E	Arun (2003)
10.		Kalakkad-Mundanthurai Tiger Reserve	8.65⁰N	77.375°E	Dunston & Raj (2005)
11.		Selichandhai, Madurai	9.724⁰N	77.806⁰E	Alagumurugan et al. (2011)
12.	Kerala	Krishnapuram Grama Panchayatha, Alappuzha	9.497⁰N	76.338ºE	Radhakrishnan (2000)
13.		Puyankutti Forest, Idukki	10.166°N	76.916⁰E	Arun & Azeez (2003)
14.		M.E.S. Mampad College, Mallapuram	11.238ºN	76.196⁰E	Palot & Abdurahman (2003)
15.		Aralam Wildlife Sanctuary	11.85°N	75.966⁰E	Sreekumar & Balakrishnan (2001)
16.		Kulathupuzha Reserve Forest, Kollam	8.908⁰N	77.056ºE	Ghosh & Chaudhary (1986)

Table-1. Indicating state wise distributional records of Idea malabarica Moore

Range extension of Malabar Tree Nymph

of Maharashtra, northern Western Ghats is available (Gaonkar 1996; Kunte 1997 & 2001; Rane & Ranade 2004; Padhye et al. 2006; Gaikwad et al. 2009; Sharma 2009; Aland et al. 2011). Padhye et al. (2012) presented latitudinal distribution of *I. malbarica* in Western Ghats. But it's occurrence in the range of 18– 20 ^oN latitude is not yet reported.

Butterflies have specific habitat requirements depending upon their feeding and reproduction needs (larval host plants). Earlier, *Idea malabarica* was considered a monophagous species feeding on *Aganosoma cymosa* (Apocynaceae) but Susanth (2005) reported *Parsonsia spiralis* (Apocynaceae) as its new larval host plant. Nevertheless, it is not yet known out of two known host plants, which one is being used by the butterfly to survive in this area. However, it can be said with certainty that the sacred groves in the vicinity must include both host plants.

The record of *Idea malabarica* from Dimbhe, Pune District of northern Western Ghats, Maharashtra extends its known range significantly northwards from Raigarh (about 275km) and southern Western Ghats or Goa (about 530km). A distribution map (Image 2, Table 1) for *Idea malabarica* in Western Ghats is provided based on the published records (Ghosh & Chaudhary 1986; Ghosh et al. 1990; Radhakrishnan 2000; Sreekumar & Balakrishnan 2001; Arun 2003; Arun & Azeez 2003; Palot & Abdurahman 2003; Borkar & Komarpant 2004; Ali et al. 2004; Dunston & Raj 2005; Radhakrishnan & Palot 2007; Rangnekar 2007; Kunte 2008; Alagumurugan et al. 2011).

The occurrence of Malabar Tree Nymph, an endemic butterfly of southern Western Ghats in the new geographical area is interesting to study: the factors which made the species extend its range to a considerable degree; to explore whether the butterfly is using other species of Apocynaceae as food plant in the study area and finding new areas conducive for its survival.

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