

## On a Collection of Moths (Lepidoptera) from Narsinghar Wildlife Sanctuary, district Rajgarh, Madhya Pradesh

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Narsinghar Wildlife Sanctuary is one of the important sanctuaries situated in Rajgarh district, a smaller district which lies on the edge of northern edge of Malwa Plateau of Madhya Pradesh. This sanctuary situated between 23°35' and 23°40'N latitudes and 77°2' and 77°10'E. It lies on NH 12 (Jabalpur-Jaipur), about 70 km from Bhopal. It was notified by the Government of Madhya Pradesh on 25.01.1974 and final notification for the constitution of WLS was made on 04.05.1998. The total area of this sanctuary is 57.197 km<sup>2</sup>. The area of the sanctuary is mostly undulating with gravelly and lateritic soil. There are no perennial streams inside the sanctuary, only three tanks viz., Chidikhoh Suryavanshi talab and Matawala talab which carry water throughout the year. The Chidikhoh is the biggest and most useful tank for wild animals, located in the centre of the sanctuary whereas Suryavanshi and Matawala are situated in the southern boundary of the sanctuary, of not much use to wild animals because of disturbance around them.

The forests of the sanctuary are typical mixed dry deciduous type, degraded with poor quality. Tree species like *Acacia catechu* (khar), *Boswellia serrata* (salai), *Anogeissus pendula* (kardhai), *Lannea coromandelica* (moyan), *Terminalia alata* (saja), *Sterculia urens* (kullu), *Lagerstromia parviflora* (lendia) and *Diospyros melanoxylon* (tendu) are predominantly found in this sanctuary. Common shrub species also occur such as *Carissa spinarum* (karonda), *Lantana camara* (lantana), *Santalum album* (chandani) and *Annona squamosa* (sitaphal).

The fauna of the sanctuary is relatively small but rich. Wild fauna like panther, hyena, wild boar, nilgai, sambar, spotted deer, barking deer, jackal, common langur etc. These fauna are almost concentrated around the Chidikhoh tank.

Avifauna of the sanctuary includes peacock which is frequently visible to the observers. Other birds such as egrets, stork, ibis, eagle, kingfisher, lapwing, orioles, hornbill, woodpeckers, wildfowl, partridge, quails, parakeets, etc. are local birds of the sanctuary. Overall, 164 species of birds including migratory birds can be sighted here (Dwivedi, 2003). The commonly available reptilian fauna are cobra, krait, python and tortoise. Apart from the above fauna, no other fauna were reported from this sanctuary.

Field surveys were carried out during the year, 2012-2014 to study the Geometridae fauna of Madhya Pradesh. During the field survey conducted, few moths were collected in the night with the help of light trap installed at Chidikhoh, Andhiyar coupe and near main gate of Narsinghar WLS. The geo-coordinates of the survey localities of the sanctuary were also recorded simultaneously and presented in Table 1. The collected moths were then preserved and identified with the help of available literature, resulted 25 species belonging to 25 genera and 8 families in 5 superfamilies, presented in the Table 2. The Erebidae species outnumber other moth species of Geometridae, Crambidae, Noctuidae, Nolidae, Sphingidae, Bombycidae and Thyrididae. Further, extensive field survey would be adding more moths species of the sanctuary. All species of moths have been recorded and reported for the first time from this sanctuary.

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**Table 1.** Geo-coordinates of survey localities of Narsinghar WLS, Madhya Pradesh.

Locality	Latitude (N)	Longitude (E)
1 Forest Rest House, Narsinghar WLS	23°39.524'	077°05.555'
2 Kotra, Narsinghar	23°35.949'	077°07.560'
3 Narsinghar Fort	23°38.064'	077°63.801'
4 Andhiyar coupe	23°39.524'	077°05.555'
5 Compartment No. 19, Narsinghar WLS	23°38.730'	077°04.660'



Table 2. Moth fauna of Narsingharh Wildlife Sanctuary, district Rajgarh, Madhya Pradesh.

Species	Family	Subfamily
Superfamily: Thyridoidea Herrich-Schaffer, 1867		
1 <i>Banisia lobata</i> Hampson, 1882	Thyrididae	Striglininae
Superfamily: Pyraloidea Latreille, 1809		
2 <i>Parponyx fluctuosalis</i> Zeller, 1852	Crambidae	Acentropinae
3 <i>Pyrausta panopealis</i> Walker, 1859	Crambidae	Pyraustinae
4 <i>Palpita annulifer</i> (Inoue, 1996)	Crambidae	Spilomelinae
5 <i>Pleuroptya balteata</i> Fabricius, 1798	Crambidae	Spilomelinae
Superfamily: Bombycoidea Latreille, 1802		
6 <i>Ocinara</i> sp.	Bombycidae	Bombycinae
7 <i>Psilogramma menephron</i> Cramer, 1780	Sphingidae	Sphinginae
Superfamily: Geometroidea Leach, 1815		
8 <i>Thalassodes quadraria</i> (Guenee, 1858)	Geometridae	Geometrinae
9 <i>Chiasmia fidoniata</i> Guenee, (1858)	Geometridae	Ennominae
10 <i>Hyperythra lutea</i> Swinhoe Stoll, 1781	Geometridae	Ennominae
11 <i>Petalia medardaria</i> Herrich-Schaffer (1856)	Geometridae	Ennominae
12 <i>Antitrygodes cuneilinea</i> Walker (1863)	Geometridae	Sterrhinae
13 <i>Idaea</i> sp.	Geometridae	Sterrhinae
14 <i>Scopula pulchellata</i> Fabricius, 1794	Geometridae	Sterrhinae
15 <i>Traminda mundissima</i> Walker, 1861	Geometridae	Sterrhinae
Superfamily: Noctuoidea Latreille, 1809		
16 <i>Euproctis lunata</i> Walker, 1855	Erebidae	Lymantriinae
17 <i>Lymantria mathura</i> Moore, 1865	Erebidae	Lymantriinae
18 <i>Pandesma anysa</i> Guenee, 1852	Erebidae	Calpinae
19 <i>Grammodes geometrica</i> Fabricius, 1775	Erebidae	Erebinae
20 <i>Ophiusa triphaenoides</i> Walker, 1858	Erebidae	Erebinae
21 <i>Trigonodes hyppasia</i> Cramer, (1777)	Erebidae	Erebinae
22 <i>Carea angulata</i> Fabricius, 1793	Nolidae	Chloephorinae
23 <i>Westermannia superba</i> Hubner, 1823	Nolidae	Westermanninae
24 <i>Chrysodeixis eriosoma</i> Doubleday 1843	Noctuidae	Plusiinae
25 <i>Spodoptera litura</i> Fabricius, 1775	Noctuidae	Noctuinae

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