

Additions to the Moth Fauna of Sunderban Biosphere Reserve, India

OLIVE BISWAS¹, SURESH KUMAR SHAH¹, BIPLOB KR. MODAK², BALARAM PANJA³,
SANKARSAN ROY¹, UDIPTA CHAKRABORTI¹ and BULGANIN MITRA¹

¹Zoological Survey of India, M-Block, New Alipore, Kolkata- 53;

²Department of Zoology, Sidho-Kanho- Birsha University, Purulia (West Bengal); and

³Office of the Divisional Forest Officer, 24 Parganas South Division, New Administrative building,
B.K.B. Sarani, Alipore, Kolkata-700027.

Moths are mostly nocturnal and cryptic insect belonging to Order Lepidoptera. Till date, 580 species accounting for nearly 5 percent of Indian moth fauna have been known to occur from West Bengal (Sanyal et al., 2012). The Indian part of Sunderban Biosphere Reserve (SBR) lies between 21°40' and 22°09' N latitude, and 88°01' and 89°06' E longitude and occupies land area 9630 sq km within the state of West Bengal. The knowledge on moth fauna of SBR is still scarce. Recently, Kumar et al. (2014), Mitra et al. (2014) and Biswas et al. (2016 a; 2016 b) have contributed manifold to the existing knowledge on Lepidoptera fauna of SBR. After perusal of above mentioned publications 46 species of moths (Table 1) have been found to occur in SBR.

Regular field surveys were conducted between 2015 and 2016 under the project "Role of Insect Pollinators on the conservation of major mangrove species in Sunderban Islands, West Bengal" funded by MoEF & CC, Govt. of India. This has resulted in getting the information of additional 49 species of moths (marked with * in Table 1) belonging to 45 genera and 14 families. All these species are recorded for first time from SBR. Among the 49 species of moths, 30 species (marked with # in Table 1) are recorded for the first time from West Bengal. Therefore, overall number of moth species including earlier published records and present record from SBR becomes 94 (including *Achaea janata* which was previously misidentified as *Parallelia onelia*) which constitute 17% of the recorded moth fauna of West Bengal.

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Table 1. List of Moths of Sunderban Biosphere Reserve.

Species	Family
1. <i>Azygophleps scalaris</i> (Fabricius, 1775)*#	Cossidae
2. <i>Zeuzera coffeae</i> (Nietner, 1861)*	Cossidae
3. <i>Zeuzera conferta</i> Walker, 1856*#	Cossidae
4. <i>Botyodes asialis</i> Guenée, 1854*	Crambidae
5. <i>Cnaphalocrocis medinalis</i> (Guenée, 1854)	Crambidae
6. <i>Cnaphalocrocis trapezalis</i> Guenée, 1854*	Crambidae
7. <i>Cryptographis indica</i> (Saunders, 1851)	Crambidae
8. <i>Dolicharthria punctalis</i> (Denis & Schiffermüller, 1775)* #	Crambidae
9. <i>Hymenoptychis sordida</i> (Zeller, 1852)	Crambidae
10. <i>Leucinodes orbonalis</i> Guenée, 1854*	Crambidae
11. <i>Nymphula responsalis</i> (Walker, 1865)*	Crambidae
12. <i>Parapovnx fluctuosalis</i> (Zeller, 1852)	Crambidae
13. <i>Parapovnx diminutalis</i> (Snellen, 1880)	Crambidae
14. <i>Pycnarmon abraxalis</i> Walker, 1866*#	Crambidae
15. <i>Sameodes cancellalis</i> (Zeller, 1852)	Crambidae
16. <i>Scirpophaga bisignatus</i> Swinhoe, 1885	Crambidae
17. <i>Scirpophaga incertulas</i> (Walker, 1863)	Crambidae
18. <i>Scirpophaga nivella</i> (Fabricius, 1794)* #	Crambidae
19. <i>Spoladea recurvalis</i> Fabricius, 1775*	Crambidae
20. <i>Syngamia abruptalis</i> (Walker, 1859)	Crambidae

21. <i>Tetridia caletoralis</i> (Walker, 1859)*	Crambidae	66. <i>Hyblaea puera</i> (Cramer, 1777)	Hyblaeidae
22. <i>Ausaris argenteola</i> (Moore, 1858)* #	Drepanidae	67. <i>Kunugia latipennis</i>	Lasiocampidae
23. <i>Achaea serva</i> (Fabricius, 1775)* #	Erebidae	(Walker, 1855)*	
24. <i>Achaea janata</i> (Linnaeus, 1758)* #	Erebidae	68. <i>Streblote siva</i> Lefebvre, 1827*	Lasiocampidae
25. <i>Agylla melana</i> (Moore, 1865)	Erebidae	69. <i>Altha nivea</i> Walker, 1862	Limacodidae
26. <i>Amata cyssea</i> (Stoll, 1782)	Erebidae	70. <i>Thosea cana</i> Walker, 1865	Limacodidae
27. <i>Amata passalis</i> (Fabricius)	Erebidae	71. <i>Thosea tripartita</i> Moore, 1884	Limacodidae
28. <i>Amerila eugenia</i> (Fabricius, 1794)	Erebidae	72. <i>Asota ficus</i> (Fabricius, 1775)*	Noctuidae
29. <i>Amsacta emittens</i> Walker, 1855	Erebidae	73. <i>Asota producta</i> (Butler, 1875)	Noctuidae
30. <i>Amsacta lineola</i> (Fabricius, 1793)	Erebidae	74. <i>Aucha velans</i> (Walker, 1857)	Noctuidae
31. <i>Anua coronata</i> (Fabricius, 1775)	Erebidae	75. <i>Chasmina candida</i> (Walker, 1865)* #	Noctuidae
32. <i>Arctornis submarginata</i>	Erebidae	76. <i>Leucania compta</i> (Moore, 1881)* #	Noctuidae
(Walker, 1855)*		77. <i>Lophoptera costata</i> (Moore, 1885)* #	Noctuidae
33. <i>Argina astrea</i> (Drury, 1773)	Erebidae	78. <i>Paectes subapicalis</i> (Walker, [1858])* #	Noctuidae
34. <i>Artena dotata</i> Fabricius, 1794	Erebidae	79. <i>Prospalta dolorosa</i> (Walker, 1865)* #	Noctuidae
35. <i>Asura undulosa</i> (Walker, 1854)	Erebidae	80. <i>Spodoptera litura</i> (Fabricius, 1775)	Noctuidae
36. <i>Brunia antica</i> (Walker, 1854)* #	Erebidae	81. <i>Gadirtha pulchra</i> (Butler, 1886)* #	Nolidae
37. <i>Caeneressa diaphana</i> (Kollar, 1844)	Erebidae	82. <i>Norraca longipennis</i> Moore, 1881* #	Notodontidae
38. <i>Ceryx godartii</i> (Boisduval, 1829)	Erebidae	83. <i>Eumeta cramerii</i> (Westwood, 1854)* #	Psychidae
39. <i>Cretonotos gangis</i> (Linnaeus, 1763)	Erebidae	84. <i>Canthelea oegnusalis</i> (Walker, 1859)	Pyalidae
40. <i>Cretonotos transiens</i> (Walker, 1855)*	Erebidae	85. <i>Herculia marthalis</i> (Walker, 1859)* #	Pyalidae
41. <i>Eressa discinota</i> Moore	Erebidae	86. <i>Hypsipyla robusta</i> (Moore, 1886)	Pyalidae
42. <i>Ericeia inangulata</i> (Guenee, 1852)	Erebidae	87. <i>Actias selene</i> (Hubner, 1806)	Saturniidae
43. <i>Eudocima hypermnestra</i>	Erebidae	88. <i>Antheraea paphia</i> Linnaeus, 1758	Saturniidae
(Cramer, 1780)* #		89. <i>Acherontia lachesis</i> (Fabricius, 1798)	Sphingidae
44. <i>Eudocima materna</i> (Linnaeus, 1767)* #	Erebidae	90. <i>Hippotion celerio</i> (Linnaeus, 1758)	Sphingidae
45. <i>Grammodes geometrica</i>	Erebidae	91. <i>Theretra latreillii</i> (MacLeay, [1826])*	Sphingidae
(Fabricius, 1775)		92. <i>Theretra silhetensis</i> (Walker, 1856)	Sphingidae
46. <i>Hamodes propitia</i> (Guerin, 1830)* #	Erebidae	93. <i>Micronia aculeata</i> Guenee, 1857*	Uraniidae
47. <i>Homodes crocea</i> Guenee, 1852* #	Erebidae	94. <i>Thyrassia subcordata</i> Walker, 1854	Zygaenidae
48. <i>Hulodes caranea</i> (Cramer, [1780])* #	Erebidae		
49. <i>Ischyja marapok</i> Holloway, 2005* #	Erebidae		
50. <i>Mocis frugalis</i> (Fabricius, 1775)* #	Erebidae		
51. <i>Orgyia postica</i> (Walker, 1855)*	Erebidae		
52. <i>Psichotoë duvauceli</i> Boisduval, 1829*	Erebidae		
53. <i>Spilosoma obliqua</i> Walker, 1855	Erebidae		
54. <i>Spirama retorta</i> (Clerck, 1764)	Erebidae		
55. <i>Thyas honesta</i> (Hübner, 1806)*	Erebidae		
56. <i>Trigonodes hyppasia</i>	Erebidae		
(Cramer, [1779])* #			
57. <i>Utetheisa lotrix</i> (Cramer, 1779)	Erebidae		
58. <i>Utetheisa pulchella</i> (Linnaeus, 1758)	Erebidae		
59. <i>Eupterote hibisci</i> (Fabricius, 1775)	Eupterotidae		
60. <i>Agathia lycanaria</i> (Kollar, 1844)	Geometridae		
61. <i>Cleora determinata</i> Walker, 1860* #	Geometridae		
62. <i>Cleora injectaria</i> (Walker, 1860)* #	Geometridae		
63. <i>Gonodontis clelia</i> (Cramer, [1780])* #	Geometridae		
64. <i>Hyposidra talaca</i> (Walker, 1860)*	Geometridae		
65. <i>Timandra correspondens</i>	Geometridae		
Hampson, 1895* #			

* New record to SBR. # New record to West Bengal.

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- Pudina can treat cough and cold.

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