

A Current List of the Moths (Lepidoptera) of West Bengal

SURESH KR. SHAH, APURVA DAS, RITAM DUTTA and BULGANIN MITRA

Zoological Survey of India,
New Alipore, Kolkata- 700053.

Email: skshah082@gmail.com

(Contd. from vol. 20, no. 2, p. 52)

	Family SPHINGIDAE	
	Subfamily Macroglossinae	
908.	<i>Acosmyex anceus</i> (Stoll, 178)	944. <i>Macroglossum pyrrhosticta</i> (Butler, 1875)
909.	<i>Acosmyex anceus subdentata</i> Rothschild & Jordan, 1903	945. <i>Macroglossum troglodytus</i> (Boisduval, 1875)
910.	<i>Acosmyex naga</i> (Moore, 1857)	946. <i>Macroglossum variegatum</i> Rothschild & Jordan, 1903
911.	<i>Acosmyex omissa</i> Rothschild & Jordan, 1903	947. <i>Neogurelca hyas</i> hyas (Walker, 1856)
912.	<i>Ampelophaga khasiana</i> Rothschild, 1895	948. <i>Nephele didyma</i> (Fabricius, 1775)
913.	<i>Ampelophaga rubiginosa</i> Bremer & Grey, 1853	949. <i>Nephele hespera</i> (Fabricius, 1775)
914.	<i>Ampelophaga thomasi</i> Cadiou & Kitching, 1998	950. <i>Pergesa acteus</i> (Cramer, 1779)
915.	<i>Cechenena lineosa</i> (Walker, 1856)	951. <i>Rhagastis acuta</i> (Walker, 1856)
916.	<i>Cechenena minor</i> (Butler, 1875)	952. <i>Rhagastis confusa</i> Rothschild & Jordan, 1903
917.	<i>Cephonodes hylas</i> (Linnaeus, 1771)	953. <i>Rhagastis gloriosa</i> (Butler, 1875)
918.	<i>Dahira tridens</i> (Oberthür, 1904)	954. <i>Rhagastis lunata</i> (Rothschild, 1900)
919.	<i>Daphnis hypothous</i> (Cramer, 1780)	955. <i>Rhagastis olivacea</i> (Moore, 1872)
920.	<i>Daphnis nerii</i> (Linnaeus, 1758)	956. <i>Rhagastis velata</i> (Walker, 1866)
921.	<i>Deilephila elpenor</i> (Linnaeus, 1746)	957. <i>Theretra alecto</i> (Linnaeus, 1758)
922.	<i>Deilephila rivularis</i> (Boisduval, 1875)	958. <i>Theretra clotho</i> (Drury, 1773)
923.	<i>Elibia dolichus</i> (Westwood, 1848)	959. <i>Theretra latreillei</i> (MacLeay, 1827)
924.	<i>Eupanacra busiris</i> busiris (Walker, 1856)	960. <i>Theretra latreillei lucasii</i> (Walker, 1856)
925.	<i>Eupanacra malayana</i> (Rothschild & Jordan, 1903)	961. <i>Theretra lyctetus</i> (Cramer, 1775)
926.	<i>Eupanacra moseri</i> (Gehlen., 1930)	962. <i>Theretra nessus</i> (Drury, 1773)
927.	<i>Eupanacra mydon</i> (Walker, 1856)	963. <i>Theretra oldenlandiae</i> (Fabricius, 1775)
928.	<i>Eupanacra perfecta</i> (Butler, 1875)	964. <i>Theretra silhetensis</i> (Walker, 1856)
929.	<i>Eurypteryx bhaga</i> (Moore, [1866])	
930.	<i>Gurelca hyas</i> (Walker, 1856)	Subfamily Smerinthinae
931.	<i>Hayesiana triopus</i> (Westwood, 1847)	965. <i>Agnosia orneus</i> (Westwood, 1848)
932.	<i>Hippotion boerhaviae</i> (Fabricius, 1775)	966. <i>Ambulyx liturata</i> Butler, 1875
933.	<i>Hippotion celerio</i> (Linnaeus, 1758)	967. <i>Ambulyx maculifera</i> (Walker, 1866)
934.	<i>Hippotion velox</i> (Fabricius, 1793)	968. <i>Ambulyx matti</i> (Jordan, 1923)
935.	<i>Hyles livornica</i> (Esper, 1780)	969. <i>Ambulyx sericeipennis</i> Butler, 1875
936.	<i>Lepchina tridens</i> Oberthür, 1904	970. <i>Ambulyx substrigilis</i> (Westwood, 1848)
937.	<i>Macroglossum aquila</i> (Boisduval, 1875)	971. <i>Amplypterus mansoni</i> (Clark, 1924)
938.	<i>Macroglossum assimilis</i> (Swainson, 1821)	972. <i>Amplypterus panopus</i> (Cramer, 1779)
939.	<i>Macroglossum belis</i> (Linnaeus, 1776)	973. <i>Anambulyx elwesi</i> (Druce, 1882)
940.	<i>Macroglossum bombylans</i> (Boisduval, 1875)	974. <i>Callambulyx rubricosa</i> (Walker, 1856)
941.	<i>Macroglossum glaucoptera</i> (Butler, 1875)	975. <i>Clanis bilineata</i> (Walker, 1866)
942.	<i>Macroglossum gyrans</i> (Walker, 1856)	976. <i>Clanis phalaris</i> (Cramer, 1777)
943.	<i>Macroglossum insipidainsipida</i> Butler, 1875	977. <i>Craspedortha porphyria</i> (Butler, 1876)
		978. <i>Cypa decolor</i> (Walker, 1856)
		979. <i>Leucophlebia lineata</i> Westwood, 1848
		980. <i>Marumba bengalensis</i> Hampson, 1912
		981. <i>Marumba cristata</i> (Butler, 1875)

982.	<i>Marumba dyras dyras</i> (Walker, 1856)	1017.	<i>Electraglaia isozena</i> (Meyrick, 1918)
983.	<i>Marumba indicus</i> (Walker, 1856)	1018.	<i>Isodemis illiberalis</i> (Meyrick, 1918)
984.	<i>Marumba spectabilis</i> (Butler, 1875)	1019.	<i>Terthreutis bulligera</i> Meyrick, 1928
985.	<i>Parum porphyria</i> (Butler, 1876)		Family URANIDAE
986.	<i>Polyptychus dentatus</i> (Cramer, [1777])		Subfamily Auzeinae
987.	<i>Rhodoprasina floralis</i> (Butler, 1877)	1020.	<i>Decetia pallida</i> Moore, 1888
988.	<i>Sataspes infernalis</i> (Westwood, 1848)	1021.	<i>Decetia torridaria</i> (Moore, 1867)
	Subfamily Sphinginae		Subfamily Epipleminae
989.	<i>Acherontia lachesis</i> (Fabricius, 1798)	1022.	<i>Epiplema ruptaria</i> Moore, 1883
990.	<i>Acherontia styx</i> (Westwood, 1847)		Family ZYGAENIDAE
991.	<i>Agrius convolvuli</i> (Linnaeus, 1758)		Subfamily Chalcosiinae
992.	<i>Apocalypsis velox</i> Butler, 1877	1023.	<i>Agalope basiflava</i> (Moore, 1879)
993.	<i>Megacorma obliqua</i> (Walker, 1856)	1024.	<i>Agalope eronioides</i> (Moore, 1879)
994.	<i>Meganoton analis</i> (Felder, 1874)	1025.	<i>Agalope glacialis</i> (Moore, 1872)
995.	<i>Psilogramma menephron</i> (Cramer, [1780])	1026.	<i>Agalope hyalina</i> (Kollar, 1844)
	Family SYMMOCIDAE	1027.	<i>Anesia aliris</i> (Doubleday, 1847)
996.	<i>Indiospastus epenthetica</i> (Meyrick, 1931)	1028.	<i>Anesia sanguiflava</i> (Drury, 1773)
	Family THYRIDIDAE	1029.	<i>Arbudas bicolor</i> Moore, 1879
	Subfamily Siculodinae	1030.	<i>Cadphises maculata</i> (Moore, 1865)
997.	<i>Hypolamprus striatalis</i> (Swinhoe, 1885)	1031.	<i>Cadphises moorei</i> Butler, 1875
998.	<i>Microbelia intimalis</i> Moore, [1888]	1032.	<i>Campylotes atkinsoni</i> Moore, 1879
999.	<i>Rhodoneura emblicalis</i> Moore, 1888	1033.	<i>Campylotes histrionicus</i> Westwood, 1839
	Family TINEIDAE	1034.	<i>Chalcophaedra zuleika</i> (Doubleday, 1847)
	Subfamily Hapsiferinae	1035.	<i>Chalcosia pectinicornis</i> argentata Moore, 1879
1000.	<i>Rhinophyllis dasychirias</i> Meyrick, 1936	1036.	<i>Cyclosia midama</i> (Herrich-Schäffer, [1853])
	Subfamily Meessinae	1037.	<i>Cyclosia papilionaris</i> venaria (Fabricius, 1775)
1001.	<i>Oxylychna euryzona</i> Meyrick, 1920	1038.	<i>Erasmia pulchella</i> Hope, 1840
	Subfamily Myrmecozelinae	1039.	<i>Eterusia aeedea</i> (Clerck, 1759)
1002.	<i>Latypica albofasciella</i> (Stainton, 1859)	1040.	<i>Eterusia aeedea edocla</i> (Doubleday, 1847)
	Subfamily Nemapogoninae	1041.	<i>Eterusia lativitta</i> Moore, 1879
1003.	<i>Hyladaula perniciosa</i> Meyrick, 1926	1042.	<i>Eterusia raja</i> Moore, 1859
	Subfamily Teichobiinae	1043.	<i>Gynaurocera papilionaria</i> Guérin-Méneville, 1831
1004.	<i>Dinochora clytozona</i> Meyrick, 1924	1044.	<i>Histia nivosa</i> Rothschild, 1896
	Subfamily Tineinae	1045.	<i>Milleriana adalifa</i> (Doubleday, 1847)
1005.	<i>Crypsithyris liaropa</i> Meyrick, 1924	1046.	<i>Philopator basimaculata</i> Moore, 1866
1006.	<i>Tinea immolata</i> Meyrick, 1931	1047.	<i>Phlebohecta fuscescens</i> (Moore, 1879)
	Family TORTRICIDAE	1048.	<i>Pidorus glaucoptis</i> (Drury, 1773)
	Subfamily Olethreutinae	1049.	<i>Pidorus miles</i> (Butler, 1881)
1007.	<i>Aterpia mensifera</i> (Meyrick, 1916)	1050.	<i>Soritia pulchella</i> (Kollar, 1844)
1008.	<i>Cryptophlebia encarpa</i> (Meyrick, 1920)	1051.	<i>Soritia shahana</i> (Moore, 1865)
1009.	<i>Loboschiza</i> sp.	1052.	<i>Trypanophora semihyalina</i> Kollar, [1844]
1010.	<i>Phaecasiophora pertexta</i> (Meyrick, 1920)		Subfamily Procridinae
1011.	<i>Sorolopha camaroensis</i> (Meyrick, 1936)	1053.	<i>Arachotia flaviplaga</i> Moore, 1879
	Subfamily Tortricinae	1054.	<i>Balataea postvitta</i> (Moore, 1879)
1012.	<i>Archips euryplintha</i> (Meyrick, 1924)	1055.	<i>Clelea discriminis</i> Swinhoe, 1891
1013.	<i>Archips hemixantha</i> (Meyrick, 1918)	1056.	<i>Inope fuliginosa</i> (Moore, 1879)
1014.	<i>Clepsis humana</i> (Meyrick, 1912)	1057.	<i>Lophosoma quadricolor</i> (Walker, 1856)
1015.	<i>Clepsis melissa</i> (Meyrick, 1908)	1058.	<i>Thyrassia subcordata</i> (Walker, 1854)
1016.	<i>Cnephiasitis dryadarcha</i> (Meyrick, 1912)		

Summary

The present work is based on published information which comprise a list of 1058 species belonging to 36 families of moths from West Bengal. The family Geometridae contains maximum number 342 species belonging to 184 genera under 6 subfamilies. Overall, at present the number of species and families has been raised from earlier record of 710 species under 16 families by Sanyal et al. (2012).

Acknowledgements: The authors are thankful to the Director, Dr. Kailash Chandra, Zoological Survey of India, for providing facilities to carry out the work. Authors also thank to the Additional Director, Shri K. C. Gopi, Zoological Survey of India, for his constant encouragement and support.

References

- Arora, G.S. 2000. Studies on some Indian Pyralid species of economic importance. *Rec. Zool. Surv. India, Occ. Paper No. 181*: 1- 169 pp.
- Beccaloni, G., Scoble, M., Kitching, I., Simonsen, T., Robinson, G., Pitkin, B., Hine, A. & Lyal, C. (Eds.) 2003. The Global Lepidoptera Names Index (Lepindex). World Wide Web electronic publication. <http://www.nhm.ac.uk/entomology/lepinde>. (Accessed on October- November 2017).
- Bell, T.R.D. & Scott, F.B. 1937. *Fauna of British India, including Ceylon and Burma. Moths. Vol V*. Taylor & Francis, London.
- Bhattacharya, D.P. 1997a. Fauna of West Bengal (Part 7). *State Fauna series 3*: 225-246. Zoological Survey of India, Kolkata.
- Bhattacharya, D.P. 1997b. Fauna of West Bengal (Part 7). *State Fauna series 3*: 319-408. Zoological Survey of India, Kolkata.
- Biswas, O., Shah, S.K., Mishra, P., Mallick, K. & Mitra, B. 2015. Taxonomic account of Erebidae (Lepidoptera: Noctuoidea) pests of Tea gardens of West Bengal, India. *J. Ent. & Zool. Studies*, 3(5): 185-192.
- Biswas, O., Modak, B.K., Mazumder, A. & Mitra, B. 2016a. Moth (Lepidoptera: Heterocera) diversity of Sunderban Biosphere Reserve, India and their pest status to economically important plants. *J. Ent. & Zool. Studies*, 4(2): 13-19.
- Biswas, O., Chakraborti, U., Roy, S., Modak, B.K., Shah, S.K. & Panja, B. 2016b. First record of *Amerila eugenia* (Fabricius, 1794) [Lepidoptera: Erebidae: Arctinae] from Eastern India. *Ent. & Appl. Sci. Lett.*, 3: 6-9.
- Biswas, O., Shah, S.K., Modak, B.K., Panja, B., Roy, S., Chakraborty, U. & Mitra, B. 2017a. Additions to the moth fauna of Sunderban Biosphere Reserve, India. *Bionotes*, 19(2): 58- 59.
- Biswas, O., Shah, S.K., Modak, B.K. & Mitra, B. 2017b. Description of one new species of genus *Ramila* Moore, 1867 (Lepidoptera: Crambidae: Schoenobiinae) from Indian Sunderbans with a revised key to the Indian species. *Oriental Ins.*, 51: 1-8.
- Chandra, K. & Nema, D.K. 2007. Insecta: Lepidoptera: Heterocera. In: *Fauna of Madhya Pradesh including Chhattisgarh. State Fauna Series 15 (Part: I)*, Zoological Survey of India: 347- 418.
- Ghosh, S.K. & Chaudhury, M. 1997a. Fauna of West Bengal (Part 7). *State Fauna series 3*: 247-273. Zoological Survey of India, Kolkata.
- Ghosh, S.K. & Chaudhury, M. 1997b. Fauna of West Bengal (Part 7). *State Fauna series 3*: 689-704. Zoological Survey of India, Kolkata.
- Gupta, I.J. 1997a. Fauna of West Bengal (Part 7). *State Fauna series 3*: 409-428. Zoological Survey of India, Kolkata.
- Gupta, I.J. 1997b. Fauna of West Bengal (Part 7). *State Fauna series 3*: 533-612. Zoological Survey of India, Kolkata.
- Hampson, G.F. 1892, 1894, 1896. *Fauna of British India, including Ceylon and Burma. Moths. Vol I-II*. Taylor & Francis, London.
- Mandal, D.K. & Ghosh, S.K. 1997. Fauna of West Bengal (Part 7). *State Fauna series 3*: 491-532. Zoological Survey of India, Kolkata.
- Mandal, D.K. & Maulik, D.R. 1997. Fauna of West Bengal (Part 7). *State Fauna series 3*: 613-687. Zoological Survey of India, Kolkata.
- Meyrick, E. 1912-1916. *Exotic Microlepidoptera*, 1:1-640.
- Meyrick, E. 1916-1923. *Exotic Microlepidoptera*, 2: 1-640.
- Meyrick, E. 1923-1930. *Exotic Microlepidoptera*, 3: 1-640.
- Meyrick, E. 1930-1936. *Exotic Microlepidoptera*, 4: 1-642.
- Meyrick, E. 1937. *Exotic Microlepidoptera*, 5: 1-160.
- Nieuwerken et al. 2011. Order Lepidoptera Linnaeus, 1758. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness. *Zootaxa*, 3148: 212- 221.
- Nuss, M., B. Landry, R. Mally, F. Vegliante, A. Tränkner, F. Bauer, J. Hayden, A. Segerer, R. Schouten, H. Li, T. Trofimova, M. A. Solis, J. De Prins & Speidel, W. 2003-2017. Global Information System on Pyraloidea.

- www.pyraloidea.org. (Accessed on October, November and December 2017).
- Sanyal, A.K., Alfred, J.R.B., Venkataraman, K., Tiwari, S.K. & Mitra, S. 2012. Insecta: Lepidoptera: 767-801. In: *Status of Biodiversity of West Bengal*. Zoological Survey of India, Kolkata.
- Sebastopol, D.G. 1945. A list of Heterocera of Calcutta. *J. Bengal Nat. Hist. Soc.*, 19: 113-129.
- Sebastopol, D.G. 1956. Notes on the Heterocera of Calcutta. *J. Bombay Nat. Hist. Soc.*, 54(1): 153-155.
- Shah, S.K. & Mitra, B. 2015. Moth (Insecta: Lepidoptera) fauna and their insect predators associated with the Tea gardens and the surrounding natural ecosystem environs in Northern West Bengal, India. *J. Zool. Studies*, 2(6): 1-5.
- Shah S.K., Mitra, B., Mallick, K. & Bhattacharya, M. 2016. Moths of Kolkata Metropolitan Region. *ENVIS Newslett.*, 22(1): 2-7.
- Shah, S.K., Mitra, B., Das, A. & Mishra, P. 2017. A report on Moth Fauna (Insecta: Lepidoptera) in Neora Valley National Park, West Bengal, India. *J. Environ. & Sociobiol.*, 14(2): 179-186.

(Concluded).

Research Note

ON SOME INSECTS ASSOCIATED WITH *ALBIZIA LEBBECK* TREE AT SOLAPUR, MAHARASHTRA

S. R. ALAND

Department of Zoology, Walchand College of Arts and Science, Solapur - 413 006 (Maharashtra).

Survey and observations were made on the insects associated with a plant, *Albizia lebbeck* on the campus of the Walchand College of Arts and Science (17.8 N, 75.92 E) at Solapur (Maharashtra), from January to March 2018. The survey was carried out during morning and evening hours.

A total of six insect species were recorded during this short span of study. The list of recorded insect fauna is as follows:

1. Cow bug (*Oxyrachis* sp.)
2. Ant [unidentified]
3. Semilooper [unidentified]
4. Weevil (*Mylocerus* sp.)
5. Long horned beetle (*Aeolesthes holosericea*)
6. Moth *Inderbella* sp.

The caterpillar of *Inderbella* sp. is known as a serious pest of more than 30 crops. The larva bores into the trunk or branches of about 15 to 25 cm deep. The tunnel created is empty in the day time, is filled with caterpillar during the night. It damages the bark of the tree resulting in the dieback of the stem. Frass is visible in the effected areas.

Mamalayya et al. (2009) studied incidence of a beetle *Aeolesthes holosericea* on *Samanea saman* and *Albizia lebbeck* trees at Kolhapur, Maharashtra.

Reference

- Mamalayya, A. B., Aland, S. R., Gaikwad, S. M. & Bhawane, G. P. 2009. Incidence of a beetle *Aeolesthes holosericea* on *Samanea saman* and *Albizia lebbeck* trees at Kolhapur, Maharashtra. *Bionotes*, 11 (4):133.

Camel Milk Foreign Demand Spurs Prices

UK supermarkets stock it; the US has camel milk farms in some states, even the Netherlands has one, and e-tailers source it in powder form from as far away as India. It might be a fad, but the foreign demand for camel milk has spurred prices and brought smiles to camel herders in Rajasthan and Gujarat. A pack of five 20g sachets of camel milk powder is listed for \$21 (Rs 1,440) on Amazon.com. Manufacturing units in Bikaner, Kutch and Surat claim to spend Rs 400 per litre to process the milk. As the price is high, retail packs are small even in India. While milk is sold in 200ml cartons, the powder is available in 200g and 500g packs.

Although the milk is not popular outside camel-rearing communities in India, demand has soared because of its claimed health benefits. Remember Virmaram Jat from Barmer? When he fathered a child at the age of 88, in 2006, he credited his virility to a daily diet of camel milk. A year later, 90-year-old Nanuram Jogi, also from Rajasthan, broke his record and confessed he was partial to camel milk, too.

The milk is low in fat, contains five times the vitamin C and 10 times as much iron as cow milk, and does not cause allergies. It is also said to benefit people with diabetes, joint pain and some other diseases. Director of the Bikaner-based National Research Centre on Camel, said, "Recent research has shown positive results of this milk on those suffering from autism, diabetes and stunted growth. Advanced research is underway."

Rajasthan made the Camel as its state animal in 2014, had led to restrictions on its slaughter. Widespread smuggling to Bangladesh has also reduced.