

A CHECK-LIST OF MICROLEPIDOPTERA OF INDIA

(Part-I: Family Pterophoridae)



Avtar Kaur Sidhu¹, Kailash Chandra² and P. C. Pathania³

¹*High Altitude Regional Centre, Zoological Survey of India, Saproon, Solan-173 211, H. P.*

Email: avtarkaur2000@gmail.com

²*Central Zone Regional Centre, Zoological Survey of India, Vijay Nagar, Jabalpur-482 002, M.P.,*

Email: kailash611@rediffmail.com

³*Department of Entomology, Punjab Agricultural University, Ludhiana 141 004, Punjab.*

Email: pathaniapc@yahoo.co.in

Updated till January, 2010

Online version

Zoological Survey of India

Moths of the family Pterophoridae, having plume-like wings in the adults, slender body and long spurred legs, are popularly called 'plume-moths'. Wings are moderately broad, forewing cleft more or less deeply to form two or three feather-like lobes, hind wing also deeply cleft into three lobes. These are very small to medium sized moths which when at rest, spread their wings and position their bodies slightly elevated, on their long legs. The family is represented by 1238 species world over, and in India by 109 species as listed below.

Systematic List

ORDER: LEPIDOPTERA

SUBORDER: GLOSSATA

INFRAORDER: HETERONEURA

DIVISION: DITRYZIA

SUBDIVISION: MICROLEPIDOPTERA

SECTION: TINEINA

SUBSECTION: TINEINA

SUPERFAMILY: PTEROPHOROIDEA Kuznetsov & Stekolnikov, 1979

FAMILY: PTEROPHORIDAE ZELLER, 1841 - Plume Moths

SUBFAMILY : PTEROPHORINAE [ZELLER, 1841]

Genus: *Amblyptilia* Hubner, [1825]

1. *Amblyptilia forcipata* (Zeller, 1867)

Genus: *Buckleria* Tutt, 1905

2. *Buckleria paludum* (Zeller, 1839)

Genus: *Calyciphora* Kasy, 1960

3. *Calyciphora sesamitis* (Meyrick, 1905)

Genus: *Cosmoclostis* Meyrick, 1886

4. *Cosmoclostis auxileuca* (Meyrick, 1907)
5. *Cosmoclostis leucomecola* Fletcher, 1947
6. *Cosmoclostis pesseuta* Meyrick, 1906
7. *Cosmoclostis premnicola* Fletcher, 1932

Genus : *Crombrugghia* Tutt, 1906

8. *Crombrugghia clarisignis* (Meyrick, 1924)
9. *Crombrugghia distans* (Zeller, 1847)

Genus: *Diacrotricha* Zeller, 1852

10. *Diacrotricha fasciola* (Zeller, 1851)

Genus: *Emmelina* Tutt, 1905

11. *Emmelina argoteles* (Meyrick, 1922)
12. *Emmelina monodactyla* (Linnaeus, 1758)

Genus: *Exelastis* Meyrick, 1908

13. *Exelastis atomosa* (Walsingham, 1885)
14. *Exelastis crepuscularis* (Meyrick, 1910)
15. *Exelastis phlyctaenias* (Meyrick, 1911)
16. *Exelastis pumilio* (Zeller, 1873)

Genus: *Gypsochares* Meyrick, 1890

17. *Gypsochares catharotes* (Meyrick, 1907)
18. *Gypsochares kukti* Arenberger, 1989

Genus: *Hellinsia* Tutt, 1905

19. *Hellinsia aruna* Arenberger, 1991
20. *Hellinsia distinctus* (Herrich-Schaffer, 1855)

21. *Hellinsia fletcheri* Arenberger, 1992
22. *Hellinsia fuscomarginata* Arenberger, 1991
23. *Hellinsia lienigianus* (Zeller, 1852)
24. *Hellinsia pectodactyla* (Staudinger, 1859)
25. *Hellinsia shillongi* Kovtunovich, 2003
26. *Hellinsia siniaevi* Kovtunovich, 2003
27. *Hellinsia triadias* (Meyrick, 1907)
28. *Hellinsia umrani* Kovtunovich, 2003

Genus : *Intercapperia* Arenberger, 1988

29. *Intercapperia scindia* Arenberger, 1988

Genus: *Koremaguia* Hampson, 1891

30. *Koremaguia alticola* (Felder and Rogenhofer, 1875)
31. *Koremaguia aurantidactyla* Hampson, 1891

Genus: *Lantanophaga* Zimmerman, 1958

32. *Lantanophaga anellatus* Rose and Pooni, 2003
33. *Lantanophaga pusillidactyla* (Walker, 1864)

Genus: *Megalorhipida* Amsel, 1935

34. *Megalorhipida congrualis* (Walker, 1864)
35. *Megalorhipida defectalis* (Walker, 1864)
36. *Megalorhipida gielisi* Rose and Pooni, 2003
37. *Megalorhipida paradefectalis* Rose and Pooni, 2003

Genus: *Merrifieldia* Tutt, 1905

38. *Merrifieldia caspia* (Lederer, 1870)
39. *Merrifieldia flavus* (Arenberger 1991)

Genus: *Oidaematophorus* Wallengren, 1862

40. *Oidaematophorus harpactes* (Meyrick, 1908)
41. *Oidaematophorus hirosakianus* (Matsumura, 1931)

42. *Oidaematophorus parshuramus* Rose and Pooni, 2003

43. *Oidaematophorus procontias* (Meyrick, 1908)

44. *Oidaematophorus sematias* (Meyrick, 1908)

45. *Oidaematophorus triadias* (Meyrick, 1908)

Genus: *Oxyptilus* Zeller, 1841

46. *Oxyptilus causodes* Meyrick, 1905

47. *Oxyptilus chordites* Meyrick, 1913

48. *Oxyptilus epidectis* Meyrick, 1907

49. *Oxyptilus lactucae* Fletcher, 1920

50. *Oxyptilus regalis* Fletcher, 1909

51. *Oxyptilus regulus* Meyrick, 1906

Genus: *Platyptilia* Hubner, [1825]

52. *Platyptilia cacaliae* Fletcher, 1920

53. *Platyptilia citropleura* Meyrick, 1907

54. *Platyptilia dejecta* Meyrick, 1932

55. *Platyptilia direptalis* (Walker, 1864)

56. *Platyptilia duneraensis* Rose and Pooni, 2003

57. *Platyptilia euctimena* Turner, 1913

58. *Platyptilia exaltatus* (Zeller, 1867)

59. *Platyptilia gonodactylus* (Denis and Schiffermuller, 1775)

60. *Platyptilia ignifera* Meyrick, 1908

61. *Platyptilia isocrates* Meyrick, 1924

62. *Platyptilia molopias* Meyrick, 1906

63. *Platyptilia rhododactylus* (Denis and Schiffermuller, 1775)

64. *Platyptilia sedata* Meyrick, 1932

65. *Platyptilia superscandens* Fletcher, 1940

66. *Platyptilia triphracta* Meyrick, 1932

Genus: *Procapperia* Adamczewski, 1951

- 67. *Procapperia pelecyntes* (Meyrick, 1907)
- 68. *Procapperia orientalis* Arenberger, 1988

Genus: *Pselnophorus* Wallengren, 1881

- 69. *Pselnophorus albitarsellus* (Walsingham, 1900)

Genus: *Pterophorus* Schaffer, 1766

- 70. *Pterophorus elaeopus* (Meyrick, 1908)
- 71. *Pterophorus lacteipennis* (Walker, 1864)
- 72. *Pterophorus leucodactylus* (Walker, 1864)
- 73. *Pterophorus melanopodus* (Fletcher, 1907)
- 74. *Pterophorus nigropunctatus* Arenberger, 1989
- 75. *Pterophorus niveodactyla* (Pagenstecher, 1900)
- 76. *Pterophorus tinsuki* Kovtunovich, 2003

Genus: *Sphenarches* Meyrick, 1886

- 77. *Sphenarches anisodactylus* (Walker, 1864)
- 78. *Sphenarches zanclistes* (Meyrick, 1905)

Genus: *Stenodacma* Amsel, 1959

- 79. *Stenodacma pyrrhodes* (Meyrick, 1889)
- 80. *Stenodacma wahlbergi* (Zeller, 1851)

Genus: *Stenoptilia* Hubner, [1825]

- 81. *Stenoptilia caroli* Arenberger, 1988
- 82. *Stenoptilia petraea* Meyrick, 1907

Genus: *Stenoptilodes* Zimmerman, 1958

- 83. *Stenoptilodes brachymorpha* (Meyrick, 1888)
- 84. *Stenoptilodes taprobanes* (Felder and Rogenhofer, 1875)

Genus: *Tetraschalis* Meyrick, 1887

85. *Tetraschalis deltozela* Meyrick, 1924

86. *Tetraschalis ischnites* Meyrick, 1907

87. *Tetraschalis ochrias* Meyrick, 1907

Genus: *Tomotilus* Yano, 1961

88. *Tomotilus saitoi* Yano, 1961

Genus: *Trichoptilus* Walsingham, 1880

89. *Trichoptilus archeodes* Meyrick, 1913

90. *Trichoptilus bidens* Meyrick, 1930

91. *Trichoptilus paludicola* Fletcher, 1907

92. *Trichoptilus pelias* Meyrick, 1907

93. *Trichoptilus xerodes* Meyrick, 1886

Genus: *Xyroptila* Meyrick, 1908

94. *Xyroptila caminites* Meyrick, 1908

95. *Xyroptila oenophanes* Meyrick, 1908

96. *Xyroptila predator* Meyrick, 1910

97. *Xyroptila tectonica* Meyrick, 1914

98. *Xyroptila vaughani* Fletcher, 1909

SUBFAMILY : DEUTEROCOPINAE GIELIS, 1993

Genus: *Deuterocopus* Zeller, 1852

99. *Deuterocopus alopecodes* Meyrick, 1911

100. *Deuterocopus atrapex* Fletcher, 1909

101. *Deuterocopus dorites* Meyrick, 1913

102. *Deuterocopus fervens* Meyrick, 1913

103. *Deuterocopus planeta* Meyrick, 1908

104. *Deuterocopus ritsemae* Walsingham, 1884

105. *Deuterocopus socotranus* Rebel, 1907

SUBFAMILY : OCHYROTICINAE WASSERTHAL, 1970

Genus: *Ochyrotica* Walsingham, 1891

106. *Ochyrotica connexiva* (Walshingham, 1891)
107. *Ochyrotica concursa* (Walshingham, 1891)
108. *Ochyrotica yanoi* Arenberger, 1988

SUBFAMILY : AGDISTINAE TUTT, 1907

Genus: *Agdistopis* Hampson, 1917

109. *Agdistopis sinhala* (Fletcher, 1909)

References

- Adamczewski, S. 1951. On the systematics and origin of the generic group *Oxyptilus* Zeller (Lep. Alucitidae). *Bull. Brit. Museum Nat. Hist (Ent)*, 1 (5): 310-388, pl. 9-20.
- Arenberger, E. 1985. Contribution to the distribution of the Pterophoridae in Saudi-Arabia. *Fauna Saudia Arabia*, 7: 165-171.
- Arenberger, E. 1995. Microlepidoptera Palaearctica 09. Pterophoridae, Teil 1. Textband 258 S., Tafelband 153 Taf., davon 26 in Farbe.
- Arenberger, E. 2002. Microlepidoptera Palaearctica 11. Pterophoridae II, Teil. Deuterocopinae, Platyptiliinae: Trichoptilini, Oxyptilini, Tetraschalini. 287 S., 96 Tafeln, davon 16 in Farbe.
- Arenberger, E. 2005. Microlepidoptera Palaearctica 12. Pterophoridae III. Platyptiliinae: Platyptiliini Stenoptilia 191 S., 50 Taf.
- Barrett, C.G. 1904. Lepidoptera of the British Isles. Vol.9: 373. London.
- Barnes, W. and Lindsey, A.W. 1921. The Pterophoridae of America, north of Mexico. *Contr. Nat. Hist. Lepidoptera North America*, 4: 280-483, pl. 14.

- Clarke, J.F.G. 1955. *Catalogue of the type specimens of microlepidoptera in the British Mus. (Natural History) described by Edward Meyrick*, Trustees of the British Museum (Natural History), London, Vol. I: 332 pp.
- Clarke, J.F.G. 1971. Lepidoptera of Rapa Island. *Smiths. Contr. Zool.*, 56: 96-97.
- Common, I.F.B. 1970. *Lepidoptera*, In Mackerras, I. M. (ed.). *The Insects of Australia. A Textbook for Students and Research Workers*. 1st edition. Melbourne University Press, Carlton, Australia. xiii + 1029, 765-866 pp.
- Common, I.F.B. 1990. Moths of Australia. I-iv, 1-535, pl.32. Brill, Leiden.
- Diakonoff, A. 1952. Microlepidoptera of New Guinea. Results 3th Archbold Expedition. *Kon. Ned. Akad. Wet., Verh. Natuurk* (2) 44: 1-167.
- Fletcher, T.B. 1910. On the genus *Deuterocopus* Zeller. *Trans. Ent. Soc. London*, 2: 107-141, pl.2.
- Fletcher, T.B. 1921. Life history of Indian Insects, Microlepidoptera. *Memoirs of Department of Agriculture., India* 6: 1-217.
- Fletcher, T.B. 1929. A list of the generic names used for Microlepidoptera. *Memoirs of Department of Agriculture., India* 11: ix + 246 pp.
- Fletcher, T. B. 1931. Catalogue of Indian Insects. Part 20- Alucitidae (Perophoridae). *Calcutta Government of India*. 1-61.
- Fletcher, T.B. 1947. Some species of *Cosmoclostis*. *Proc. Roy. Ent. Soc. (B)* 16: 42-52.
- Gielis, C. 1991. A taxonomic review of the Pterophoridae from Argentina and Chile. *Zool. Verh. Leiden*, 269: 1-164, figs 1-178.
- Gielis, C. 1993. Generic revision of the Superfamily Pterophoroidea (Lepidoptera). *Zool. Verhand., Leiden*, 290: 1-139., figs. 1-241.
- Hampson, G.F. 1905. On three remarkable new genera of Micro-lepidoptera. *Trans ent. Soc. London*, 1905 (2): 245-249.
- Holloway, J.D., Bradely, J.D. and Carter, D.J. 1992. *The Guide to Insects of Importance to Man* (Lepidoptera): 1-21.
- Klots, A.B. 1970. Taxonomists Glossary of Genitalia in Insects. *Munksgasard, Copenhagen Lepidoptera*. pp. 115-139 in Tuxen.

- Kovtunovich, V. N. 2003. New Species of Plum Moths (Lepidoptera, Pterophoridae from India. *Entomological Review, Washington* **83**: 469-473.
- Landry, B. 1987. A synopsis of the Plume-moths of the subfamily Platyptiliinae of Eastern Canada. I-ix, 1-269, pl.22.
- Landry, B. and Gielis, C. 1982. A synopsis of the Pterophoridae of the Galapagos Islands, Ecuador. *Zool. Verhand., Leiden*, 276: 1-42, figs 39.
- Landry, J.F. and Landry, B. 1994. A technique for setting and mounting microlepidoptera. *Journal of Lepidopterists Society*, 48 (3): 205-227.
- Linnaeus, C. 1758. *Systema Natura, Pars Lepidoptera*: 1-824. Ed.X, Holmiae.
- Linnaeus, C. 1761. *Fauna Svecica. Pars Lepidoptera*: 267-371. Stockholmiae.
- Meyrick, E. 1886. On the classification of the Pterophoridae. *Trans. Ent. Soc. London*, 1886: 1-21.
- Meyrick, E. 1894. On a collection of Lepidoptera from upper Burma by Edward Meyrick. *Transactions of the Entomological Society of London* 1: 1-29.
- Meyrick, E. 1905 Descriptions of Indian Microlepidoptera. *Journal of the Bombay Natural History Society*, 16: 580-619.
- Meyrick, E. 1907 Descriptions of Indian Microlepidoptera III. *Journal of the Bombay Natural History Society*, 18: 730.
- Meyrick, E. 1908. Lepidoptera Heterocera (Pyrales): Fam. Pterophoridae. In Wytzman, P. (ed.): *Genera Insectorum*, 100: 1-22, pl.1.
- Meyrick, E. 1908a. New Micro-Lepidoptera from India and Burma. *Records of Indian Museum*. 12: 3295-400.
- Meyrick, E. 1909. Descriptions of Indian Microlepidoptera. *Journal of the Bombay Natural History Society*, 19: 410-607.
- Meyrick, E. 1910. Descriptions of Indian Microlepidoptera. *Journal of the Bombay Natural History Society*, 20: 143-168, 435-462, 706-736.
- Meyrick, E. 1911. Descriptions of Indian Microlepidoptera. *Journal of the Bombay Natural History Society*, 21: 104- 877.
- Meyrick, E. 1912-1916. *Exotic Microlepidoptera*, E. W. Classey, Hampton, Middlesex, 1:1-640.

- Meyrick, E. 1913. Description of Indian Microlepidoptera. *Journal of the Bombay Natural History Society*, 22: 771-781.
- Meyrick, E. 1914. Descriptions of Indian Microlepidoptera. *Journal of the Bombay Natural History Society*, 23: 118-130.
- Meyrick, E. 1916-1923. *Exotic Microlepidoptera*. E. W. Classey, Hampton, Middlesex, 2: 1-640.
- Meyrick, E. 1923-1930. *Exotic Microlepidoptera*. E. W. Classey, Hampton, Middlesex, 3: 1-640.
- Meyrick, E. 1930-1936. *Exotic Microlepidoptera*. E. W. Classey, Hampton, Middlesex, 4: 1-642.
- Meyrick E., 1938. Pterophoridae, Tortricina and Tineina. - *Exploration du Parc National Albert* **14**: 1-28, pl. 1-3.
- Mikkola, K. 1986. Tower spreading, a handy method for provisional field preparation for microlepidoptera. *Nota entomológica*, 66 : 101-102.
- Nye, I.W.B. and Fletcher, D.S. 1991. The generic names of Moths of the world. *Natural History Museum Publications*, 6: 1-368.
- Robinson, G.S. 1976. The preparation of slides of Lepidoptera genitalia with special reference to microlepidoptera. *Entomologists Gazette*, 27 (2): 127-132.
- Robinson, G.S., Tuck, K.R. and Shaffer, M. 1994. *A field guide to the smaller moths of South-East Asia*. Malaysian Nature Society, Malasia 308 pp., pls. 1-32.
- Roonwal, M.L., Mathur, R.N., Bhasin, G.D., Chatterjee, P.N., Sen-Sharma, P.K., Singh, B., Chandra, A., Thapa, R.S. and Krishna, K. 1964. A systematic catalogue of the main identified entomological collection at the Forest Research Institute, Dehradun, Parts 22-38, 537pp.
- Rose, S. and Pooni, H. S. 2003. Taxonomic studies on the superfamily Pterophoroidea (Lepidoptera) from North-west India. *Zoos' Print Journal*, 20(3): 1787-1803.
- Tagestad, A.D. 1974. A technique for mounting microlepidoptera. *Journal of the Kansas Entomological Society*, 47: 26-30.
- Yano, K. 1961. A new genus of Pterophoridae from Japan. *Mushi*, 35: 87-90.

- Yano, K. 1961. On the species of the genus *Nippooptilia* Matsumura from Japan, with description of a new species. *Publ. ent. Lab. Univ. Osaka Pref.* 6: 71-71, pl.18.
- Yano, K. 1963. Taxonomic and biological studies of Pterophoridae of Japan. *Pacific Insects*, 5: 65-209.
- Yano, K., Clarke, G. J. F. and Yoshiyashu, Y. 1996. Insects of Micronesia vol.9, no.3. Lepidoptera : Pterophoridae. *Micronesica* **28** (2): 131-151.
- Zimmerman, E.C. 1978. Microlepidoptera. *Ins. Hawaii*, Vol. 9. University Press of Hawaii, Honolulu. xviii+1903 pp.