

The Pterophoridae fauna of Laos (Lepidoptera, Pterophoridae)

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The faunistic review on Pterophoridae of Laos is given for the first time; the type localities of habitat and world distribution is indicated (including new data). The information on the collected material is provided. Thus, the plume moths fauna of Laos currently includes 21 species, three of them are still not determined.

Keywords: Lepidoptera; Pterophoridae; plume moths; Laos; distribution; new data

Laos is a predominantly mountainous country covered with dense forests, with a sub-equatorial monsoon climate. The main landscape consists of low hills and mountains with the greatest height of 2830 m. The animal and plant world is characterized by its diversity and variety. There is almost no information about Laos plume moths in the literature. There is only one indication to *Pterophorus elaeopus* (Meyrick, 1908) from Laos (Ustjuzhanin & Kovtunovich, 2010). New materials of plume moths from Laos, collected by Mikhail Omelko, Sergei Murzin and Viktor Sinyaev, served to write the first work on the Pterophoridae fauna of Laos. As a result, 21 species of 16 genera has been revealed.

Materials and methods

In determining the material, we used modern literature (Arenberger, 1995, 1998, 2002, 2010). In difficult cases, for species identification, the material was compared with the collection funds of Pterophoridae in Natural History Museum, UK, London (BMNH). The examined material is deposited in the private collection of P. Ustjuzhanin and V. Kovtunovich.

Annotated list of species

Ochyrotica concursa (Walsingham, 1891)

Steganodactyla concursa Walsingham, 1891: 241. (Type locality: Sri Lanka).

Material: 1 male, Chiang, Tung (Stupa) GH 5km SE Muang Sing, 750m, 26.iii-5.iv.2010, leg. S. Murzin.

Distribution: Sri Lanka, Laos.

Ochyrotica taiwanica Gielis, 1990

Ochyrotica taiwanica Gielis, 1990: 294. (Type locality: Taiwan).

Material: 1 male, Vientiane Prov., Nam-Lik Eco-Village, 18°38'N, 102°19'E, (Figs.1, 2), 06.vii.2017, leg. M. Omelko.

Distribution: Taiwan, Laos.

Deuterocopus socotranus Rebel, 1907

Deuterocopus socotranus Rebel, 1907: 115. (Type locality: Yemen, Sokotra).

Deuterocopus viticola Meyrick, 1911: 104. (Type locality: Sri Lanka).

Deuterocopus triannulatus Meyrick, 1913: 107. (Type locality: Australia).

Deuterocopus deltoptilus Meyrick, 1930: 565. (Type locality: Uganda).

Deuterocopus henrioti Bigot & Boireau, 2006: 16–17. (Type locality: Cote d'Ivoire).

Material: 1 female, Phapet Mts., Khammuan prov., Na Hin (Kaung Kham), 1-7.vi. 2010, leg. S. Murzin; 2 male, 1 female, Vientiane Prov., Nam-Lik Eco-Village, 18°38'N, 102°19'E, 04.vii.2017; 1 female, 14.vi.2017, leg. M. Omelko.

Distribution. Yemen, Oman, Japan. Oriental: India, Sri Lanka, Thailand, Taiwan, Laos, Burma, Indonesia, New Guinea, Australia, Somalia, Uganda, Kenya, Nigeria, Republic of South Africa.

Stenoptilodes taprobanes (Felder & Rogenhoffer, 1875)

Amblyptilia taprobanes Felder & Rogenhofer, 1875: plate 140, fig. 54. (Type locality: Sri Lanka).

Platyptilia brachymorpha Meyrick, 1888: 240. (Type locality: India).

Material: 2 female, Chiang, Tung (Stupa) GH 5km SE Muang Sing 750m, 26.iii-5.iv.2010, leg. S. Murzin.

Distribution: France, Spain, Portugal, Canary Islands, Libya, Finland, Italy, Sicily, Malta, Bulgaria, Greece, Crete, Cyprus, Turkey, Bhutan, Indonesia, Sri Lanka, Thailand, Laos, India, New Guinea, Australia, Hawai'i Islands, Tchad, Sao Tome, Cote d'Ivoire, Nigeria, Tanzania, Kenya, Madagascar, Seychelles, U.S.A., Paraguay, Bolivia.



Figure 1. Nam-Lik Eco-Village. Foto M. Omelko



Figure 2. River Nam-Lik. Foto M. Omelko

Platyptilia farfarella Zeller, 1867

Platyptilus farfarellus Zeller, 1867: 334. (Type locality: Poland).

Platyptilia molopias Meyrick, 1906: 135. (Type locality: Sri Lanka).

Platyptilia petila Yano, 1963: 851. (Type locality: Solomon Islands).

Platyptilia periacta Meyrick, 1910: 411. (Type locality: Cape Town, S. Africa).

Platyptilia claripicta Fletcher, 1910: 400. (Type locality: Seychelles).

Material: 1 male, Nam Pha Noi, Saysomboune prov., 19°00'N, 102°58'E, 30.x.2008, leg. Yu. Bezverhov & V. Sinyaev; 1 male, Xiangkhouang Ban Na Sao, 19°39'N, 102°58'E, 1500m, 05.xi.2008, leg. Yu. Bezverhov & V. Sinyaev.

Distribution: Europe, Asia, Sri Lanka, Laos, Indonesia, Thailand, Malaysia, Philippines, Solomon Islands, Rep. S. Africa, Swaziland, Madagascar, Mauritius, Uganda, Kenya, Tanzania, Malawi, San Tome Isl., Seychelles, Nigerian, Ghana.

Nippoptilia cinctipetalis (Walker, 1864)

Oxyptilus cinctipetalis Walker, 1864: 935. (Type locality: Australia).

Nippoptilia minor Hori, 1933. (Type locality: Japan).

Trichoptilus eochrodes Meyrick, 1935. (Type locality: Hunan, China).

Oxyptilus caryornis Meyrick, 1935. (Type locality: Tien-Mu-Shan, China).

Material: 2 male, Chiang, Tung (Stupa) GH 5km SE Muang Sing 750m, 26.iii-5.iv.2010, leg. S. Murzin.

Distribution: Australia, Japan, Palau, China, Thailand, Laos.

Sphenarches anisodactylus (Walker, 1864)

Oxyptilus anisodactylus Walker, 1864: 934. (Type locality: Sri Lanka).

Pterophorus diffusalis Walker, 1864: 945. (Type locality: Australia).

Sphenarches synophrys Meyrick, 1886: 17. (Type locality: New Hebrides).

Megalorhipida rishwani Makhan, 1994: 353. (Type locality: Surinam).

Material: 1 female, Chiang, Tung (Stupa) GH 5km SE Muang Sing 750m, 26.iii-5.iv.2010, leg. S. Murzin.

Distribution: Nepal, Japan, China, Sri Lanka, India, Taiwan, Thailand, Laos, Vietnam, Malaysia, Indonesia, Solomon Islands, New Guinea, Bismarck Islands, Australia, Cameroun, Seychelles, Reunion Island, Madagascar, Kenya, Tanzania, Zaire, Gambia, Guinea, Nigeria, Tchad, Malawi, Swaziland, Cote d'Ivoire, Ghana, U.S.A., Brazil, Dominica, Grenada, Panama, Virgin Islands, Bahamas, St. Thomas, Puerto Rico, Peru, Paraguay, Fiji Islands, New Hebrides, Tonga Islands, New Caledonia, Palau, Bonin Island, Guam.

Trichoptilus regalis Fletcher, 1909

Oxyptilus regalis Fletcher, 1909: 25. (Type locality: Sri Lanka).

Oxyptilus chordites Meyrick, 1913: 106. (Type locality: Sri Lanka).

Material: 8 ex., Chiang, Tung (Stupa) GH 5km SE Muang Sing 750m, 26.iii-5.iv.2010, S. Murzin; 1 male, Vientiane Prov., Nam-Lik Eco-Village, 18°38'N, 102°19'E, 03.vii.2017, leg. M. Omelko.

Distribution: China, India, Sri Lanka, Laos, Indonesia.

Oxyptilus causodes Meyrick, 1905

Oxyptilus causodes Meyrick, 1905: 582. (Type locality: Sri Lanka).

Material: 2 male, 2 female, Chiang, Tung (Stupa) GH 5km SE Muang Sing 750m, 26.iii-5.iv.2010, leg. S. Murzin.

Distribution: India, Sri Lanka, Thailand, Laos.

Stenodacma pyrrhodes (Meyrick, 1889)

Trichoptilus pyrrhodes Meyrick, 1889: 1113. (Type locality: Australia).

Oxyptilus kinbane Matsumura, 1931: No. 2063. (Type locality: Japan).

Material: 1 male, Chiang, Tung (Stupa) GH 5km SE Muang Sing 750m, 26.iii-5.iv.2010, leg. S. Murzin.

Distribution: Pakistan, Nepal, Korea, Japan, India, Sri Lanka, Thailand, Laos, Vietnam, China, Taiwan, Australia.

***Procapperia* sp.**

Material: 1 female, Chiang, Tung (Stupa) GH 5km SE Muang Sing 750m, 26.iii-5.iv.2010, leg. S. Murzin.

Exelastis atomosa (Walsingham, 1885)

Aciptilia atomosa Walsingham, 1885: 885. (Type locality: India).

Material: 1 female, Chiang, Tung (Stupa) GH 5km SE Muang Sing 750m, 26.iii-5.iv.2010, leg. S. Murzin.

Distribution: India, Nepal, Cambodia, Laos, Ethiopia, Tanzania, Kenya, Swaziland, Madagascar.

Exelastis pumilio (Zeller, 1873)

Mimeseoptilus pumilio Zeller, 1873: 324. (Type locality: USA).

Marasmarcha liophanes Meyrick, 1886: 19. (Type locality: Reunion Island).

Mimaesoptilus gilvidorsis Hedemann, 1896: 8 (not Zeller, 1877). (Type locality: Virgin Islands, St. Croix).

Material: 2 female, Vientiane Prov., Nam-Lik Eco-Village, 18°38'N, 102°19'E, 03-4.vii.2017, leg. M. Omelko.

Distribution: Nepal, Tchad, Gambia, Tanzania, Mali, Zimbabwe, Swaziland, Rep. S. Africa, Seychelles, Reunion Island, Madagascar, Nigeria, Kenya, Philippines, Thailand, Laos, New Guinea, U.S.A., Argentina, Brazil, Ecuador, Colombia, Bolivia, Paraguay, Suriname, Costa Rica, Cuba, Puerto Rico, Guadeloupe, Mexico, Jamaica, Virgin Islands, Fatu Hiva, Guam, Palau.

Diacrotricha fasciola Zeller, 1852

Diacrotricha fasciola Zeller, 1852: 399. (Type locality: Indonesia, Java).

Material: 1 male, Vientiane Prov., Nam-Lik Eco-Village, 18°38'N, 102°19'E, 04.vii.2017, leg. M. Omelko.

Distribution: Indonesia, Philippines, Laos, Taiwan, China, Malaysia, Sri Lanka, India, New Guinea.

Adaina microdactyla (Hubner, [1813])

Alucita microdactyla Hubner, [1813]: pi. 5, figs. 26, 27. (Type locality: Europe).

Pterophorus carphodactylus Stephens, 1834: 374. (Type locality: England).

Adaina montivola Meyrick, 1937: 170. (Type locality: China).

Adaina subflavescens Meyrick, 1930: 568. (Type locality: Indonesia).

Oidaematophorus madecasseus Gibeaux, 1994: 130. (Type locality: Madagascar).

Material: 5 ex., Chiang, Tung (Stupa) GH 5km SE Muang Sing 750m, 26.iii-5.iv.2010, leg. S. Murzin.

Distribution: Ireland, Great Britain, Netherlands, Belgium, Luxemburg, France, Spain, Portugal, Morocco, Norway, Sweden, Finland, Denmark, Germany, Switzerland, Italy, Corse, Sardinia, Malta, Estland, Latvia, Lithuania, Poland, Czechia, Slovakia, Austria, Hungary, Slovenia, Croatia, Romania, Bulgaria, Greece, Russia (European part), Turkey, Israel, Iran, Georgia, Nepal, China, Japan, Madagascar, Vietnam, Indonesia, Malaysia, Philippines, Taiwan, New Guinea, Solomon Islands.

Hellinsia harpactes (Meyrick, 1908)

Pterophorus harpactes Meyrick, 1908: 495. (Type locality: India).

Material: 1 male, Xiangkhouang Ban Na Sao, 19°39'N, 102°58'E, 1500m, 05.xi.2008, leg. Yu. Bezverhov & V. Sinyaev.

Distribution: Nepal, India, Laos.

Hellinsia kuwayamai (Matsumura, 1931)

Pterophorus kuwayamai Matsumura, 1931: No. 2078. - Japan.

Material: 1 male, Xiangkhouang Ban Na Sao, 19°39'N, 102°58'E, 1500m, 05.xi.2008, leg. Yu. Bezverhov & V. Sinyaev.

Distribution: Japan, China, Korea, Taiwan, Laos.

***Hellinsia* sp.**

Material: 1 male, Chiang, Tung (Stupa) GH 5km SE Muang Sing 750m, 26.iii-5.iv.2010, leg. S. Murzin.

Pterophorus elaeopus (Meyrick, 1908)

Alucita elaeopa Meyrick, 1908: 490. (Type locality: India).

Material: 1 male, 2 female, Chiang, Tung (Stupa) GH 5km SE Muang Sing 750m, 26.iii-5.iv.2010, leg. S. Murzin; 7 ex., Xiangkhouang Ban Na Sao, 19°39'N, 102°58'E, 1500m, 05.xi.2008, leg. Yu. Bezverhov & V. Sinyaev.

Distribution: India, Thailand, Laos, Malaysia, Indonesia.

***Pterophorus* sp.**

Material: 1 female, Chiang, Tung (Stupa) GH 5km SE Muang Sing 750m, 26.iii-5.iv.2010, leg. S. Murzin.

Cosmoclostis leucomochla Fletcher, 1947

Cosmoclostis leucomochla Fletcher, 1947: 46. (Type locality: Sri Lanka).

Material: 1 male, Chiang, Tung (Stupa) GH 5km SE Muang Sing 750m, 26.iii-5.iv.2010, leg. S. Murzin.

Distribution. Sri Lanka, Burma, Philippines, Laos.

Discussion

As a result of examining the material on plume moths of Laos, 21 species has been indicated, 20 of them are new for the fauna of the country. There is no doubt that further studies of Laos Pterophoridae will increase their number at least twice.

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