

A review of the genus *Lamprystica* MEYRICK, 1914, with the description of a new subfamily

(Lepidoptera, Agonoxenidae)

by

ALEXANDR L. LVOVSKY

received 3.II.1996

Abstract: The genus *Lamprystica* MEYR. with 2 species from South-East Asia is reviewed. Because of its unusual features a new subfamily Lamprysticinae is described in the family Agonoxenidae.

Резюме: Ревизован род *Lamprystica* MEYR. с 2 видами из Юго-Вост. Азии. Признаки рода своеобразны, поэтому он выделяется в новое подсемейство Lamprysticinae в семействе Agonoxenidae.

Introduction

At first the genus *Lamprystica* MEYR. was described in the family Glyphipterigidae (MEYRICK, 1914). Later, it was considered to belong to the Oecophoridae (HEPPNER, 1982; MORIUTI, 1982; KAMEDA, 1988). The first two authors have placed it into Stathmopodini, the second one within the Depressariinae. Situation became more complicated when Stathmopodinae and Depressariinae were raised to the level of separate families (MINET, 1986; SINEV, 1992). The genus *Lamprystica* MEYR. has a rather isolated position within the Coleophoromorpha. But in my opinion the complex of features allows to put it in the family Agonoxenidae (table 1).

Table 1: *Lamprystica's* features prevented to put it in some taxa

Taxon	<i>Lamprystica's</i> features
Glyphipterigidae MEYRICK, 1913	Proboscis with scales. Forewings venation: R4 and R5 stalked. Male genitalia with broad and spiny gnathos plate.
Oecophorinae BRUAND, 1849	Male genitalia without uncus, and with broad and spiny gnathos plate. Female ovipositor short.
Amphisbatinae SPULER, 1910	Male genitalia without uncus. In female genitalia ductus seminalis falls into the middle part of ductus bursae.
Stathmopodidae MEYRICK, 1913	Tibiae of hind legs without tufts of long scales. Male genitalia with the broad and spiny gnathos plate and without uncus. In female genitalia bursa without appendix.

Depressariidae MEYRICK, 1883

Very narrow wings. Male genitalia absolutely without uncus and socii. Gnathos plate not double. In female genitalia ductus seminalis falls into the middle part of ductus bursae.

Peleopodidae HODGES, 1974

Very narrow wings. Hind wings with R and M1 not stalked. Male genitalia without bifid uncus. Gnathos plate not double. Female ovipositor short.

Elachistidae BRUAND, 1850

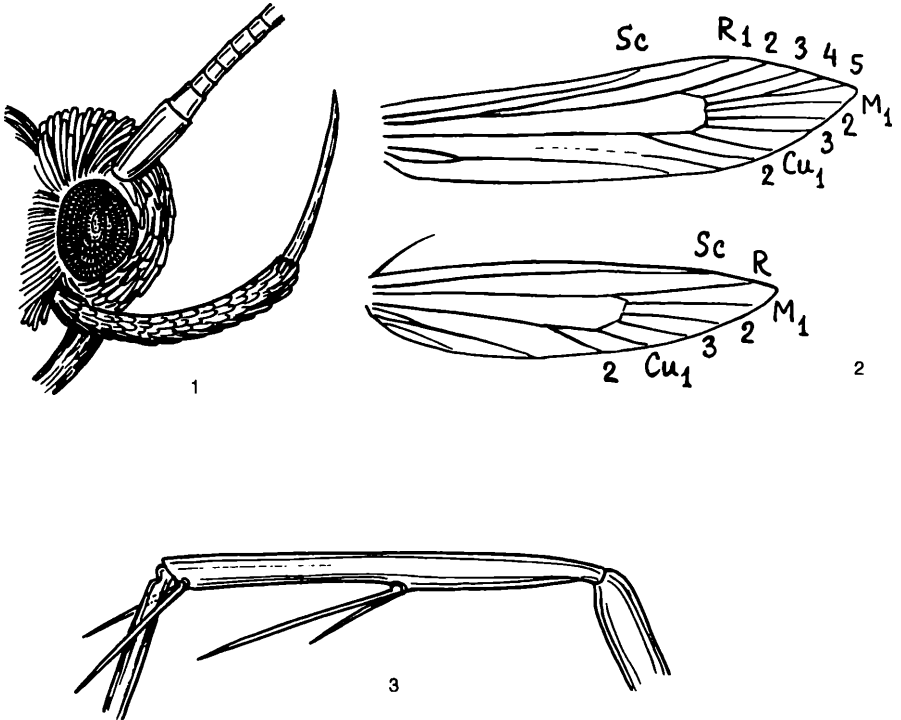
Hind wings with R and M1 not stalked. Male genitalia without bifid uncus and socii.

Blastodacnidae CLARKE, 1962

Hind wings with M1 and M2 not stalked. In male genitalia gnathos not double.

Agonoxenidae MEYRICK, 1926

Fore wings with separate M2 and M3. Hind wings with complete set of veins. In male genitalia uncus absolutely absent.



Figs. 1–3: *Lamprystica igneola* STRINGER: 1 – head, 2 – wing venation, 3 – tibia of hind leg.

Lamprystica MEYRICK, 1914

Supplementa Entomologica 3: 58.

Type species: *Lamprystica purpurata* MEYRICK, 1914 by monotypy.

Head (fig. 1). Antennae are 0.7 of the forewing's length, with very short cilia or without it. The scape without pecten. The proboscis is well developed, covered by scales. The maxillar palpi are rudimentary. The labial palpi are rather long, slender and recurved. Head covered with the appressed scales. Both wings are narrow. The length of fore wings is 4.3–4.5 times exceed their width. The cilia of hind wings is 1.2 times larger than their width. Wings venation (fig. 2). Legs. Hind legs with the second pair of tibial spurs placed near the middle of tibia (fig. 3). Male genitalia (figs. 4–6). Uncus and socii are absent. Gnathal plate flat, rounded or ovate and spiny. The ventral part of rectum is somewhat sclerotized. Aedeagus is thick, with sclerotized broad collar and very long coecum. Female genitalia (fig. 7). Ovipositor is short. Ductus seminalis falls into the middle part of ductus bursae. Corpus bursae with 1 ovate signum formed by the group of sclerotized teeth. Biology is unknown. Flight period is May and July–August.

Distribution

Now the genus has only 2 species, which inhabit South-East Asia.

Key to the Species of *Lamprystica* MEYR.

- 1 (2) Forewing without 2 small yellowish spots at end of cell. Plate of gnathos rounded
L. purpurata MEYR.
- 2 (1) Forewing with 2 small yellowish spots at end of cell. Plate of gnathos ovate..
..... *L. igneola* STRINGER

Lamprystica purpurata MEYRICK, 1914 (figs. 4, 5)

Type locality

Taiwan (Kosempo).

Type material

Lectotype, ♂, in Germany, Eberswalde, Deutsches Entomologisches Institut.

Description

Wing expanse 14–16 mm. Antennae, head and thorax dark brown with a violet-golden metallic lustre. Labial palpi whitish-ochreous, terminal joint suffused with dark brown anteriorly. Abdomen dark fuscous. Forewings elongate, lanceolate, dark-bronzed with a violet-golden metallic lustre. Hindwings and cilia dark fuscous. Male genitalia: gnathos plate rounded, valva rather narrow, with the apex curved dorsally. Female genitalia not investigated.

Biology

Flight period May and July.

Distribution

Taiwan (Formosa): Kosempo, Taihorin, Hoozan.

Material examined

♂, Lectotype, Taiwan, Kosempo, VII.1911, leg. H. SAUTER.

Remarks

Wing expanse of Lectotype 15 mm. The righthind wing is missing. Lectotype has 7 labels: 1 dark red "Lectotypus" and 6 white labels with the inscriptions: "Lectotype 1965, *Lampristica purpurata* MEYR. ♂, selected by A. DIAKONOFF"; "Kosempo, Formosa, VII.1911, H. SAUTER"; "MEYRICK det."; "F 133"; "Gen. No 5874"; "Dtsch. Entomol. Institut Berlin"

Lampristica igneola STRINGER, 1930 (figs. 1–3, 6, 7)

Type locality

Japan.

Type material

In London, The Natural History Museum.

Description

Wing expanse 16–24 mm. The colour and shape of antennae, head, labial palpi, thorax, wings and abdomen are the same as in *L. purpurata* MEYR., except the 2 small yellowish spots, one under another, at the end of the cell in the forewings. Female antennae with a white part in the apical half.

Male genitalia very similar to *L. purpurata* MEYR., but the gnathos plate ovate. Female genitalia is mentioned in the genus description.

Biology

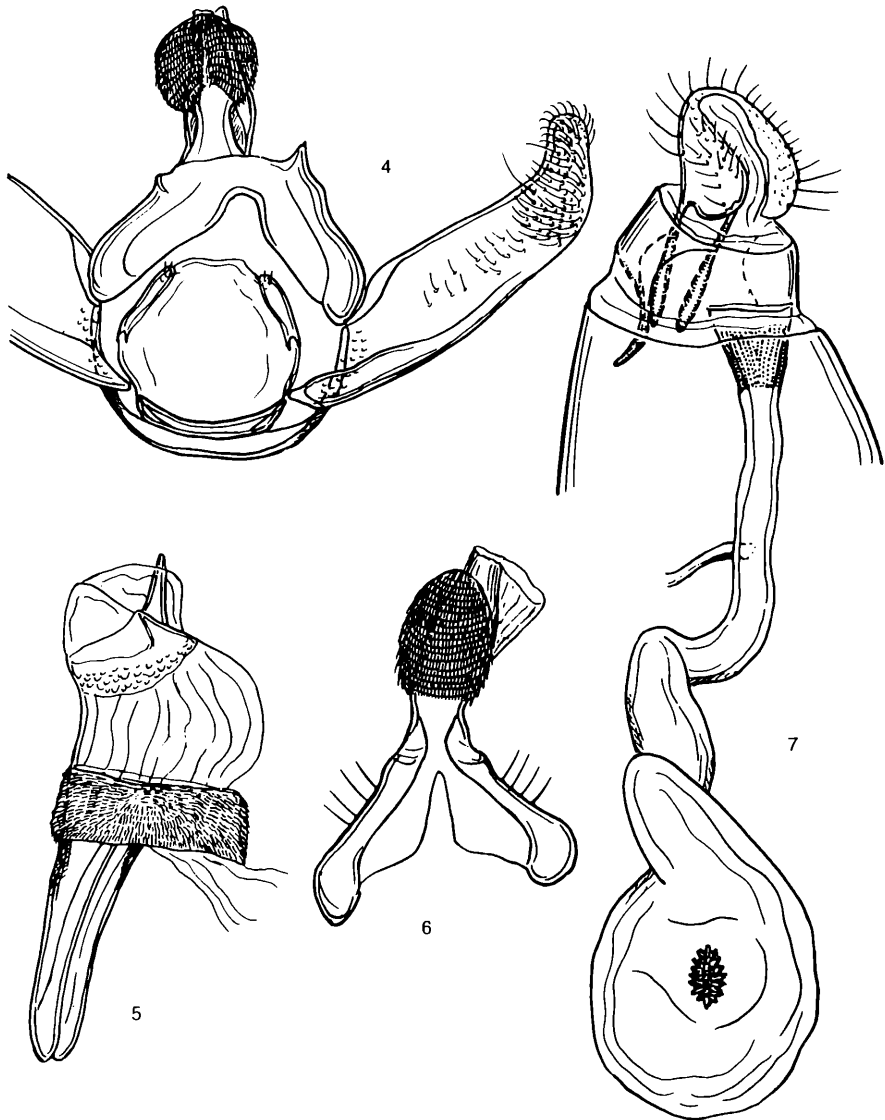
Flight period from the end of June to the end of August. In the end of July 1984 I had the opportunity to collect this species on the island Kunashir (South Kuril Islands). The moths were common on the leaves of bushes in daytime.

Distribution

Japan (Hokkaido, Honsiu, Shikoku); East China (Ichang, Chang Yang); East Russia (Island Kunashir).

Material examined

1 ♂, 1 ♀, Japan, Honsiu, Nagano, 21.VII.1979, 19.VIII.1980, leg. T. SAITO; 3 ♂♂, 1 ♀, East Russia, South Kuril Islands, Kunashir, 8.VIII.1971, leg. JU. KOSTJUK; the same locality, 4 ♀♀, 29.VII.–2.VIII.1984, leg. A. LVOVSKY; 1 ♂, 6 ♀♀, the same locality, 11.–13.VIII.1992, leg. V. ZOLOTUHIN.



Figs. 4–7: Genitalia of *Lamprystica* MEYR.: 4 – male genitalia, 5 – aedeagus, 6 – tegumen and gnathos, 7 – female genitalia; 4, 5 – *L. purpurata* MEYR.; 6, 7 – *L. igneola* STRINGER.

The differences between *Agonoxena* MEYRICK, 1921 and *Lamprystica* MEYRICK, 1914 rather enough to establish a new subfamily for *Lamprystica* MEYR.:

Lamprysticinae subfam. nov.

Type genus: *Lamprystica* MEYRICK, 1914

Diagnosis

The narrow wings are similar with Agonoxeninae, but they differ in venation. Lamprysticinae have the complete set of veins. In Agonoxeninae forewings with M2+M3 fully merged, the hindwings usually with M3+Cu1+Cu2 fully merged (BRADLEY, 1966). In hindwings of Lamprysticinae M1 and M2 are separate, but in Agonoxeninae they are stalked. Male genitalia of Lamprysticinae is absolutely without uncus and socii. Female genitalia with 1 signum.

Acknowledgements

I am grateful to Dr. S. YU. SINEV (Zoological Institute Russian Academy of Sciences, St.-Petersburg) for the valuable consultation and to Dr. R. GAEDIKE (Deutsches Entomologisches Institut, Eberswalde) for the loan of material. The study had financial support from GNTF of Russia (biological diversity), grant N 2.1. 120 br.

References

- BRADLEY, J. D. (1966): A comparative study of the coconut flat moth (*Agonoxena argaula* MEYR.) and its allies, including a new species (Lepidoptera, Agonoxenidae). – Bull. Ent. Res. **56** (3): 453–472.
- HEPPNER, J. B. (1981 [1982]): A world catalog of genera associated with the Glyphipterigidae auctororum (Lepidoptera). – J. New York Ent. Soc. **89** (4): 220–294.
- KAMEDA, M. (1988): Oecophoridae of Hokkaido 1.- Yugato. **114**: 133–139.
- MEYRICK, E. (1914): Pterophoridae, Tortricidae, Eucosmidae, Gelechiidae, Oecophoridae, Cosmopterygidae, Hyponomeutidae, Heliodinidae, Sesiidae, Glyphipterygidae, Plutellidae, Tineidae, Adelidae (Lep.). – Suppl. Ent., Dtsch. Ent. Mus., Berlin-Dahlem **3**: 45–62.
- MINET, J. (1986): Ebauche d'une classification moderne de l'ordre des Lépidoptères. – Alexnor **14** (7): 291–313.
- MORIUTI, S. (1982): Oecophoridae. – Moths of Japan, Tokyo **1**: 245–254.
- SINEV, S. YU. (1992): On the system and phylogeny of the Gelechioidea s. l. (Lepidoptera). – Ent. Obozr. **71** (1): 143–159 (in russian).
- STRINGER, H. (1930): New species of Microlepidoptera in the collection of the British Museum. – Ann. mag. Nat. Hist., London. **6** (34): 415–422.

Address of the author

ALEXANDR L. LVOVSKY
Zoological Institute, Russian Academy of Sciences
Universitetskaja, 1
199 034 St.-Petersburg
RUSSIA

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Atalanta](#)

Jahr/Year: 1996

Band/Volume: [27](#)

Autor(en)/Author(s): Lvovsky Alexandr L.

Artikel/Article: [A review of the genus *Lamprystica* \(Meyrick, 1914\), with the description of a new subfamily \(Lepidoptera, Agonoxenidae\) 427-432](#)