

Pterophoridae of the Great Ussuri Island (Khabarovsk suburbs), Russia (Lepidoptera: Pterophoroidea)

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Abstract

12 Pterophoridae species are recorded from the Great Ussuri Island in the Ussuri delta (Khabarovsk suburbs); most of them prefer mesophytous meadows. Two species, *Agdistis adactyla* (Hübner, [1823]) and *Hellinsia inulae* (Zeller, 1852) prefer dryer localities and are not known east from Khabarovsk.

KEY WORDS: Lepidoptera, Pterophoroidea, Pterophoridae, new data, Khabarovsk region, Russia.

Pterophoridae de la Gran Isla Bolshoy Ussuriysky (suburbios de Khabarovsk), Rusia (Lepidoptera: Pterophoroidea)

Resumen

Se registran 12 especies de Pterophoridae de la Gran Isla Bolshoy Ussuriysky (suburbios de Khabarovsk), en el delta del Ussuri; la mayoría de ellos prefieren praderas mesófitas. Dos especies, *Agdistis adactyla* (Hübner, [1823]) y *Hellinsia inulae* (Zeller, 1852) prefieren localidades secas y no eran conocidas del este de Khabarovsk.

PALABRAS CLAVE: Lepidoptera, Pterophoroidea, Pterophoridae, nuevos datos, Khabarovsk, Rusia.

Introduction

The Great Ussuri Island is located in the river Ussuri delta between the river Amur and the river duct formed by the confluence of the river Ussuri and Kazakevichevo branch of the river Amur. The western part (about 1/3) of this island is now a territory of China (named Hēixiāzi Dao), the other part is Russian territory. Different types of meadows from wet flood to xerophytous ones cover the island. Forests (*Salix* sp., *Alnus glutinosa* (L.) Gertn., *Populus* sp., *Quercus* sp., *Ulmus* sp., *Maackia* sp., *Crataegus monogyna* Jacq., *Prunus padus* L.) are scarce and form narrow bands, named “ryolka”. There are several small lakes, narrow river branches and artificial ditches across the island. This island is located a few kilometers to south from Great Khekhtsyur Nature Reserve.

The lepidopteran fauna of the Great Ussuri Island is poorly known. Butterflies were well studied by E. Novomodnyi: KOSHKIN & NOVOMODNYI (2008). The second author, V. Dubatolov, searched moths in different landscapes of the island in 2012-2014, and 2016 using light traps DUBATOLOV (2012). The most interesting records of macromoths were published in different articles concerning Macroheterocera of the Great Khekhtsyur Nature Reserve: DUBATOLOV *et al.* (2013, 2014); VASILENKO *et al.* (2014). Most surprising was discovering the species that prefer South Siberian steppes and xerophytous meadows, like *Eogystia sibirica* (Alpheráky, 1895) (Cossidae), *Mythimna albiradiosa* (Eversmann, 1852) (Noctuidae), and some micros, like *Elethya taishanensis* (Caradja,

1937) (Crambidae); these findings were first for the Khabarovsk Province. The present article contains information about plume-moths of the Great Ussuri Island.

Five species of casebearer moths (Coleophoridae) from the Great Ussuri Island were noted for the first time in the Far East and one species (*Casignetella graminicolella* Heinemann, 1876) - in the Asian part of Russia (ANIKIN, 2015).

List of collecting localities

GUI-1: 48° 24.33' N, 134° 53' E, mesophytous meadow with solitary willow bushes, one side is fringed by reeds.

GUI-1-5: 48° 23.56' N, 134° 52.65' E, mesophytous meadow with single willow bushes.

GUI-2: 48° 23.35' N, 134° 52.38' E, xerophytous meadow with scarce poplars, along the road on embankment.

GUI-3: 48° 22.59' N, 134° 50.48' E, mesophytous meadow at the border between willow bushes and meadow with reeds.

GUI-4: 48° 22.215' N, 134° 49.41' E, xerophytous meadow with scarce poplars, along the road on embankment.

GUI-5: 48° 21.845' N, 134° 48.58' E, forest edge near a wide mesophytous meadow.

ryolka: 48° 24.78' N, 134° 53.56' E, open forest edge near a wide mesophytous meadow.

An annotated list of Pterophoridae of the Great Ussuri island (Khabarovsk suburbs)

Agdistis adactyla (Hübner, [1823])

Material: 1 ♀, 23-24-VII-2012, GUI-1; 1 specimen, 28-29-VII-2016, GUI-1-5.

Distribution: Temperate belt of the Palearctic.

Gillmeria pallidactyla (Haworth, 1811)

Material: 4 specimens, 2-3-VII-2013, GUI-1.

Distribution: Temperate belt of the Palearctic, North America.

Cnaemidophorus rhododactylus ([Denis et Schiffermüller], 1775)

Material: 1 ♂, 2-3-VII-2013, GUI-5.

Distribution: Temperate belt of the Palearctic, North America.

Capperia (?) *jozana* (Matsumura, 1931)

Material: 1 ♀, 18-19-VI-2012, GUI-3; 1 ♂, 28-29-VIII-2012, GUI-1; 1 ♂, 2-3-VII-2013, GUI-4; 1 ♀, 15-16-VIII-2016, "ryolka".

Distribution: Southern regions of the Russian Far East (?); Japan.

Remarks: Status of the species is dubious. Morphological distinguishing characters from *C. trichodactyla* ([Denis et Schiffermüller], 1775) are insignificant. Additional investigations are needed to resolve taxonomic problems in the species group "*trichodactyla*", including DNA comparison.

Fuscoptilia emarginata (Snellen, 1884)

Material: 2 specimens, 5-6-VIII-2013, GUI-4; 5 specimens, 28-29-VII-2016, GUI-1-5; 2 ♂♂, 15-16-VIII-2016, "ryolka".

Distribution: Baikal Region, Transbaikalia, southern regions of the Russian Far East; Mongolia, China, Korea, Japan.

Oidaematophorus iwatensis (Matsumura, 1931)

Material: 1 ♂, 1 specimen 4-5-VII-2012, GUI-1.

Distribution: Southern regions of the Russian Far East; North-Eastern China (Dunbei, or Manchuria), Japan.

Hellinsia albidactyla (Yano, 1963)

Material: 2 ♀♀, 18-19-VI-2012, GUI-3; 1 ♂, 8-9-VI-2013, GUI-5; 1 ♂, 19-20-VII-2016, GUI-1; 1 ♂, 15-16-VIII-2016, “ryolka”.

Distribution: Southern regions of the Russian Far East; China, Korea, Japan.

Hellinsia didactylites (Strom, 1783)

Material: 2 ♂♂, 23-24-VII-2012, GUI-1; 1 ♂, 28-29-VII-2016, “ryolka”.

Distribution: Europe, the Caucasus, Kazakhstan, Middle Asia, Siberia, southern regions of the Russian Far East; North China (Shaanxi, Jilin).

Hellinsia inulae (Zeller, 1852)

Material: 4 ♂♂, 2 ♀♀, 2-3-VII-2012, GUI-2; 2 ♂♂, 18-19-VI-2012, GUI-1; 1 ♂, 7-8-VIII-2012, GUI-1; 17 specimens, 28-29-VIII-2012, GUI-1; 1 ♂, 2-3-VII-2013, GUI-5.

Distribution: North Africa, Europe, Kazakhstan, Middle Asia, South Siberia, southern regions of the Russian Far East; Mongolia, China (Xinjiang, Shandong).

Hellinsia lienigiana (Zeller, 1852)

Material: 1 ♂, 7-8-VIII-2012, GUI-1; 1 ♂, 8-9-VI-2013, GUI-5; 1 ♂, 1 ♀, 5-6-VIII-2013, GUI-4.

Distribution: North Africa, Europe, Transcaucasia (Armenia), Iran, India, South Siberia, southern regions of the Russian Far East; China (Shaanxi, Zhejiang, Fujian, Jiangxi, Shandong, Hunan, Guizhou, Taiwan), Korea, Japan, New Guinea, North and Central America.

Hellinsia nigridactyla (Yano, 1961)

Material: 1 ♂, 18-19.VI.2012, GUI-3; 5 ♂♂, 4 ♀♀, 15-16-VIII-2016, “ryolka”; 1 ♂, 2-3-VII-2013, GUI-5; 1 specimen, 5-6-VIII-2013, GUI-5.

Distribution: Eastern Transbaikalia, southern regions of the Russian Far East; China, Japan.

Emmelia argoteles (Meyrick, 1922)

Material: 1 ♂, 1 ♀, 19-20-VII-2016, GUI-1; 32 specimens, 28-29-VII-2016, “ryolka”.

Distribution: Transbaikalia, southern regions of the Russian Far East; China, Japan.

Conclusion

12 Pterophoridae species have been found in the Great Ussuri Island; but this number is not probably full. At least, 21 Pterophoridae species are known to occur in the Great Khekhtsy Nature Reserve (a few km south from the Great Ussuri Island), 18 of them were mentioned by USTJUZHANIN & KOVTUNOVICH (2007), and 3 species were collected later: *Gillmeria stenoptiloides* (Filipjev, 1927), *Hellinsia distincta* (Herrich-Schäffer, 1855) (SE angle of the Nature Reserve and the neighbouring bog), *H. nigridactyla* (river Chirki valley). One species from the Great Ussuri Island, *H. albidactyla* is still not known from the Great Khekhtsy Nature Reserve.

In general, the most part of the Pterophoridae species from the Great Ussuri Island prefers mesophytous meadows. Only few of them prefer open xerophytous biotopes, like *Agdistis adactyla*, *Hellinsia inulae*; they are not known in more eastern places.

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