

## Additions to the Catalogue of Lepidoptera of Omsk Region of Russia. Part 1.

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### Abstract

Ten species of Lepidoptera from the territory of Omsk Region are reported for the first time. Among them, *Scopula flaccidaria* (Zeller, 1852), *Heterothera serraria* (Lienig & Zeller, 1846), *Thera juniperata* (Linnaeus, 1758), *Jankowskia bituminaria* (Lederer, 1853), *Phigalia pilosaria* ([Denis & Schiffermüller], 1775), *Macrochilo cribrumalis* (Hübner, 1793), *Enterpia picturata* (Alphéraky, 1882), *Cucullia fuchsiana* Eversmann, 1842, *Arenostola phragmitidis* (Hübner, 1803), *Clossiana frigga* (Thunberg, 1791). One species – *Thera juniperata* (Linnaeus, 1758) is new to Asia. The study complements the catalog of Lepidoptera of Omsk Region published in 2020.

**Key words:** Russia, West Siberia, Omsk Region, Lepidoptera, Heterocera, Rhopalocera, Biodiversity.

### Introduction

Fauna of Macrolepidoptera of Omsk Region studied well. The catalogue of Lepidoptera of Omsk region (Knyazev 2020) included 972 species of Macrolepidoptera. It included all faunal data up to 2019. During the 2020 field season, we collected extensive material, including species that were not previously recorded in the region. Based on these data, we present a list of new finds below.

### Material and methods

Butterflies and moth were collected by standard method by butterfly net and by using mercury lamps 250W. All specimens deposited in the private collections of Svyatoslav Knyazev (SKO, Omsk, Russia), Konstantin Ponomaryov (KPO, Omsk, Russia) and Zoological Institute of the Russian Academy of Sciences (ZISP, Saint Petersburg, Russia).

## List of species

## Family Geometridae

*Scopula flaccidaria* (Zeller, 1852), fig. 1

**Material examined.** 1♂, Cherlack district, 8.5 km SE of Nikolaevka village, 54°13'6.34"N, 75°8'38.49"E, at light, 7-8.VI.2020, S.A. Knyazev (SKO).

**Remark.** The species was reported from Novosibirsk region by the single specimen (Knyazev et al. 2015). The present record is the second in West Siberia.

*Heterothera serraria* (Lienig & Zeller, 1846), fig. 2

**Material examined.** 7♂, Tara district, 0.5 km N of Timshinyakovo village, 56°57'8.97"N, 74°25'49.51"E, at light, 24-25.V.2020, S.A. Knyazev (SKO).

**Remark.** New to the West Siberian Plain. The species was reported from Salair ridge in the eastern part of Novosibirsk region (Knyazev et al. 2016).

*Thera juniperata* (Linnaeus, 1758), fig. 3

**Material examined.** 3♂, Sedel'nikov district, 8.5 km W of Keizes village, 56°55'12.61"N, 75°34'40.40"E, at light, 13.IX.2020, S.A. Knyazev (SKO).

**Remark.** New to Asia and to the West Siberian Plain. This Holarctic species distributed in Central and Southern Europe including European part of Russia, Caucasus, Turkey, North America (Hausmann, Viidalepp 2012). Specimens collected in forest zone in mixed forest with predominance of *Abies*, *Pinus*, *Betula*, and *Juniperus* in the undergrowth.

*Jankowskia bituminaria* (Lederer, 1853), fig. 4

**Material examined.** 1♀, Cherlack district, 2 km N of Malyi Atmas village, 54°0'55.72"N, 74°56'35.73"E, at light, 14-15.VII.2020, S.A. Knyazev (SKO).

**Remark.** This species was reported from Baraba forest-steppe zone in Novosibirsk region of West Siberia (Vasilenko 2006) but without localities.

*Phigalia pilosaria* ([Denis & Schiffermüller], 1775), fig. 5

**Material examined.** 1♂, Ust-Ishim district, Ust-Ishim suburb, 57°40'12.57"N, 71°10'7.46"E, at light, 17-18.IV.2020, S.A. Knyazev (SKO).

**Remark.** The species was reported from Khanty-Mansi autonomous okrug in West Siberia (Beljaev, Mironov 2019).

## Family Erebidae

*Macrochilo cribrumalis* (Hübner, 1793), fig. 6

**Material examined.** 1♂, Moskalenki district, 2 km N of Proletarskyi village, 55°2'40.59"N, 71°45'6.27"E, at light, 1-2.VII.2020, S.A. Knyazev (SKO).

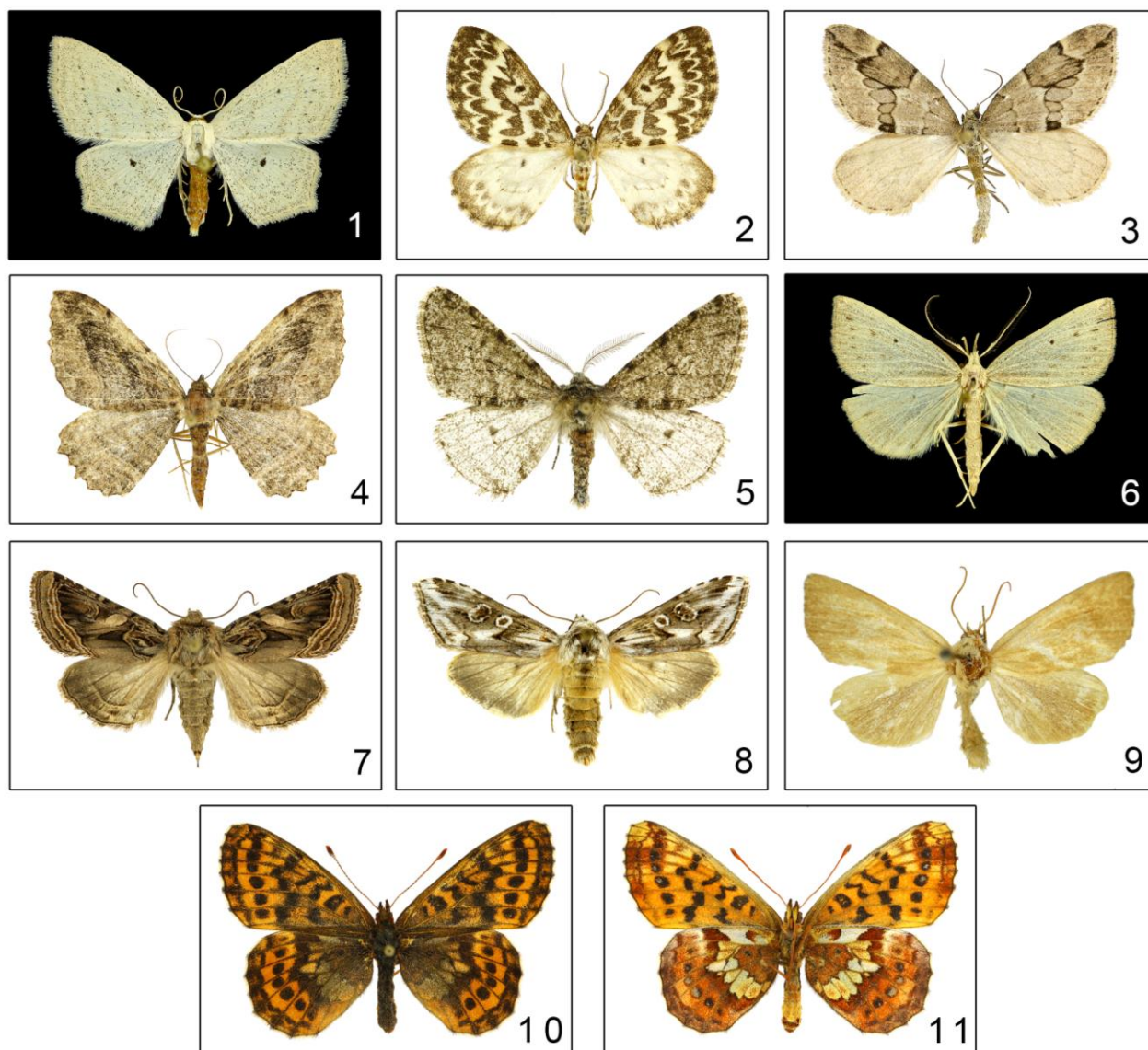
**Remark.** The species was erroneously reported from Omsk region (Knyazev et al. 2019) and excluded from Catalogue of Omsk Lepidoptera (Knyazev 2020). The present record confirms the presence of this species in the region.

## Family Noctuidae

*Enterpia picturata* (Alphéraky, 1882), fig. 7

**Material examined.** 1♀, Cherlack district, 2 km N of Malyi Atmas village, 54°0'55.72"N, 74°56'35.73"E, at light, 17-18.VII.2020; 1♂, Russkaya Polyana district, 2 km SE of Buzan village, 53°54'38.93"N, 73°57'9.98"E, at light, 1.VI.2020, S.A. Knyazev (SKO).

**Remark.** The species was known from Novosibirsk region (Zolotarenko, Dubatolov 2000), and Pavlodar region (Titov et al. 2017) in West Siberia.



**Figures 1–11.** 1 – *Scopula flaccidaria*, Nikolaevka, 7-8.VI.2020 (SKO); 2 – *Heterothesa serraria*, Timshinyakovo, 24-25.V.2020 (SKO); 3 – *Thera juniperata*, Keizes, 13.IX.2020 (SKO); 4 – *Jankowskia bituminaria*, Malyi Atmas, 14-15.VII.2020 (SKO); 5 – *Phigalia pilosaria*, Ust-Ishim, 17-18.IV.2020 (SKO); 6 – *Macrochilo cribrumalis*, Proletarskyi, 1-2.VII.2020 (SKO); 7 – *Enterpia picturata*, Malyi Atmas, 17-18.VII.2020 (SKO); 8 – *Cucullia fuchsiana*, Malyi Atmas, 17-18.VII.2020 (KPO); 9 – *Arenostola phragmitidis*, Omsk, 28.VII.1923 (ZISP); 10 – *Clossiana frigga*, Loskutovo, upperside (SKO); 11 – *Clossiana frigga*, Loskutovo, underside (SKO).

*Cucullia fuchsiana* Eversmann, 1842, fig. 8

**Material examined.** 1♂, Cherlack district, 2 km N of Malyi Atmas village, 54°0'55.72"N, 74°56'35.73"E, at light, 17-18.VII.2020, K.B. Ponomarev (KPO).

**Remark.** Previously this species was reported from Tomsk region and Altai territory (Zolotarenko, Dubatolov 2000) also from North Kazakhstan (Knyazev 2015).

*Arenostola phragmitidis* (Hübner, 1803), fig. 9

**Material examined.** 1♂, Omsk, 28.VII.[1]923, V. Shchuko (ZISP).

**Remark.** The species was reported from Tyumen` and Novosibirsk regions in West Siberia (Zolotarenko, Dubatolov 2000). No modern finds known at this moment. The single specimen from Omsk was found in collection of Zoological Institute RAS (Saint Petersburg) with handwritten label in Russian [28-VII-923, Омскъ, В. Щуко].

## Family Nymphalidae

*Clossiana frigga* (Thunberg, 1791), fig. 10, 11

**Material examined.** 1♂2♀, Tara district, 6 km SW of Tara town, 1,5 km SE of Loskutovo village, 56°51'33.79"N, 74°15'14.62"E, sphagnum bog, 24-25.V.2020, S.A. Knyazev (SKO).

**Remark.** The species distributed in tundra, forest-tundra and the north of the forest zone of the flat part of Eurasia, also inhabits the mountains of southern Siberia, Transbaikalia, the Far East, Mongolia, and North America (Korshunov 2002). The finding of the species in the Omsk region suggests that the species may also be widespread in large bog areas in the southern taiga zone of the West Siberian Plain.

**Discussion**

Finally the total number of Macrolepidoptera in Omsk Region at this moment is 982 species. Geometridae family includes 257 species, Erebidae – 49, Noctuidae – 361, Nymphalidae – 38 species.

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