

New records of Noctuoidea (Insecta: Lepidoptera) from the South of West Siberia

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Abstract

The article presents 13 species of Noctuoidea superfamily from Omsk and Novosibirsk regions of Russia. 6 species are new to Omsk region, 8 species are new to Novosibirsk region. 4 species are new to the Russian part of the West Siberian Plain, among them, *Schrankia balneorum* (Alphéraky, 1880), *Spodoptera exigua* (Hübner, 1808), *Leucochlaena fallax* (Staudinger, 1870), *Mythimna anderreggii* (Boisduval, 1840).

Keywords

Russia, West Siberia, Omsk Region, Novosibirsk Region, Lepidoptera, Heterocera, Noctuoidea, Lymantriidae, Erebiidae, Noctuidae, Biodiversity

Introduction

The fauna of the Noctuoidea of the Omsk region was revised in the catalog of Lepidoptera of the Omsk region (Knyazev 2020). The data on the noctuids of the Novosibirsk region were systematized at the beginning of the 21st century (Zolotarenko and Dubatolov 2000) and then slightly supplemented. During the field season of

2022, we received new data on the distribution of Noctuoidea in the Omsk and Novosibirsk regions. Several species were new to the fauna of the regions, and some of them were found in Siberia for the first time. These data formed the basis for the present work.

Material and methods

All material processed within the framework of this article was collected on the territory of Omsk and Novosibirsk regions in 2022 by S.A. Knyazev, V.V. Ivonin, S.M. Saikina. Specimens were collected by using mercury lamps 250W. All specimens deposited in collections of Svyatoslav Knyazev (SKO, Omsk, Russia) and Vadim Ivonin (VIN, Novosibirsk, Russia). A list of species made in accordance with the system of the Catalog of Lepidoptera of Russia (Sinev, 2019).

Below is the list of data localities presented in alphabetical order with geographical coordinates.

Omsk Region:

Achairskiy – Omsky district, 4 km N of Achairskiy vill., 54°38'46.60"N, 73°59'32.42"E;

Chichigin ravine – Gor'kovsky district, 7 km WSW of Oktyabr'skoye vill., Chichigin ravine, 55°31'38.69"N, 73°29'0.38"E;

Elita – Omsk district, eastern suburbs of Omsk City, Elita Gardens, 55°1'57.63"N, 73°32'52.09"E;

Ermak – Novovarshavsky district, Ermak vill., 53°56'33.01"N, 75°0'50.49"E;

Gorsky ravine – Gor'kovsky district, 3 km N of Lezhanka vill., Gorsky ravine, 55°29'46.81"N, 73°27'46.00"E;

Krasnyi Oktyabr' – Cherlacksy district, Krasnyi Oktyabr' vill., 54°06'59"N, 75°01'01"E;

Maryanovka – Maryanovsky district, 2 km N of Maryanovka vill., 54°59'25.29"N, 72°36'41.68"E;

Rechnik – Omsky district, 4 km E of Omsk City, Rechnik gardens, 55°2'51.16"N, 73°33'59.92"E;

Samsonovo – Tarsky district, 4 km N of Samsonovo vill., 57°0'47.38"N, 74°19'49.44"E;

Tatarka (Fig.1) – Cherlacksy district, 1 km N of Tatarka vill., 53°58'34.47"N, 75°2'17.44"E;

Timshinyakovo – Tarsky district, 0,5 km N of Timshinyakovo vill., 56°57'8.97"N, 74°25'49.51"E;

Tleusai – Russko-Polyansky district, 8 km SW of Khlebodarovka vill., river Tleusai, 53°42'7.53"N, 73°25'11.71"E.

Novosibirsk Region:

Berezovskiye Skaly – Maslyaninsky district, 6 km N of Berezovo vill., 54°33'07.58"N, 84°02'09.43"E;

Chany (Fig.2) – Chany district, Tagan vill., lake Chany, 54°57'37.40"N, 77°18'54.85"E;

Chebachye (Fig.3) – Karasuk district, Alybai boundary, lake Chebachye, 53°42'46.77"N, 78°09'37.98"E;

Karasuk – Karasuk district, Karasuk town suburbs, 53°43'01.68"N, 78°06'37.16"E;

Khorosheye (Fig.4) – Karasuk district, Khorosheye vill. vicinities, 53°36'04.08"N, 78°26'22.09"E;

Osinovka (Fig.5) – Karasuk district, Osinovka vill. vicinities, 53°42'39.49"N, 77°42'38.01"E;

Polyanovo – Tshistoozernyi district, steppe near Polyanovo vill., 54°33'07.70"N, 75°52'40.01"E;

Shelkovitshikha – Novosibirsk district, 2,5 km N of Shelkovitshikha rail station, right bank of the river Inya, Berezka gardens, 55°00'17.35"N, 84°51'25.09"E;

Tanaev Pond – the border of Novosibirsk and Kemerovo Regions, SE bank of Tanaev pond, 54°45'39.88"N, 85°01'05.98"E.



Figure 1. Habitat of *Schrankia balneorum*, *Allophyes oxyacanthae*, *Helicoverpa armigera*, *Spodoptera exigua*, *Cirrhia tunicata*. Omsk region, Chelracksky district, 1 km N of Tatarka vill., 2.IX.2022, photo by S.A. Knyazev.



Figure 2. Habitat of *Helicoverpa armigera*, *Conistra rubiginea*. Novosibirsk region, Chany district, Tagan vill., lake Chany, 18.IX.2022, photo by S.A. Knyazev.



Figure 3. Habitat of *Allophytes oxyacanthae*, *Helicoverpa armigera*, *Hydraecia osseola*, *Cirrhia tunicata*. Novosibirsk region, Karasuk district, Alybai boundary, lake Chebachye, 9.IX.2022, photo by V.V. Ivonin.



Figure 4. Habitat of *Acronicta cinerea*, *Allophyas oxyacanthae*, *Helicoverpa armigera*, *Conistra rubiginea*, *Cirrhia tunicata*, *Leucochlaena fallax*. Novosibirsk region, Karasuk district, Khorosheye vill. vicinities, 17.VII.2022, photo by V.V. Ivonin



Figure 5. Habitat of *Eublemma minutata*. Novosibirsk region, Karasuk district, Osinovka vill. vicinities, 15.VII.2022, photo by V.V. Ivonin

Results

Family Lymantriidae

Teia dubia (Tauscher, 1806)

Figure 6

Material examined. Omsk Region: 1♂, Krasnyi Oktyabr', 24.IX.2022, O.N. Kholodov (SKO).

Remark. New to Omsk Region. In West Siberia this species was previously known from Novosibirsk Region, Altai territory and Pavlodar Region (Ivonin et al. 2013; Titov et al. 2017).

Family Erebidae

Shrankia balneorum (Alphéraky, 1880)

Figure 7

Material examined. Omsk Region: 2♂, Tatarka, 21-22.IX.2022, at light, S.A. Knyazev, S.M. Saikina (SKO).

Remark. New to Omsk Region and West Siberia. On the territory of Russia this species is distributed in Crimea, Caucasus and South Ural (Sinev 2019).

Eublemma minutata (Fabricius, 1794)

Material examined. Novosibirsk Region: 1♂, Osinovka, 12.VII.2022, at light, V.V. Ivonin (VIN).

Remark. New to Novosibirsk Region where it is locally distributed on the southwest of the region. More common in the neighbor Omsk Region (Knyazev 2020).

Catocala helena Eversmann, 1856

Figure 8

Material examined. Omsk Region: 1♂, Elita, 18.VIII.2022, at light, S.M. Saikina; 1♂, Elita, 19.VIII.2022, S.A. Knyazev, S.M. Saikina (SKO).

Remark. New to Omsk Region. This nemoral species was found on South Ural and in European part of Russia some years ago. The single record was known also in West Siberia, in Novosibirsk (Knyazev et al. 2021). The specimens were collected by us in the gardens on the eastern edge of the City of Omsk. One specimen was collected near artificial plantings of *Ulmus pumila* – the main foodplant of the species.

Family Noctuidae

Acronicta cinerea (Hufnagel, 1766)

Figure 9

Material examined. Novosibirsk Region: 1♂, Karasuk, 04.VIII.2022, 7♂3♀, Khorosheye, 15.07.2022, 2♂, same locality, 01.VIII.2022, at light, V.V. Ivonin (VIN).

Remark. New to Novosibirsk Region. In West Siberia this species is also distributed in Tyumen' (Zolotarenko and Dubatolov 2000) and Omsk (Knyazev 2020) regions.

Allophyes oxyacanthae (Linnaeus, 1758)

Material examined. Omsk Region: 5 specimens, Tatarka, 1-2.IX.2022, 20-21.IX.2022, at light, S.A. Knyazev, S.M. Saikina (visual registration); 1 specimen, Maryanovka, 20-21.IX.2022, at light, S.A. Knyazev, S.M. Saikina (visual registration); **Novosibirsk Region:** 7♂, Karasuk, 04.IX.2022; 2♀, Chebachye, 06.IX.2022; 1♂, same locality, 22.IX.2022; 1♂, Khorosheye, 21.IX.2022, at light, V.V. Ivonin (VIN).

Remark. New to Novosibirsk Region. Previously this species was known from Omsk Region only in West Siberia where it is common and widely distributed (Knyazev 2020).

Helicoverpa armigera (Hübner, 1808)

Material examined. Omsk Region: 1 specimen, Timshinyakovo, 22.IX.2022, at light, S.A. Knyazev (visual registration); 3 specimens, Maryanovka, 20-21.IX.2022, at light, S.A. Knyazev, S.M. Saikina (visual registration); numerous specimens, Tatarka, 10-11.IX.2022, 21-22.IX.2022, at light, S.A. Knyazev, S.M. Saikina (visual registration); **Novosibirsk Region:** 1 specimen, Chany, 17-18.IX.2022, at light, S.A. Knyazev (visual registration); 1♀, Karasuk, 07.IX.2022; 3♂2♀, Chebachye, 06.IX.2022, 22.IX.2022; 2♂3♀, Khorosheye, 05.IX.2022, 21.IX.2022; 2♂, Shelkovitshikha, 28.VII.2016, at light, V.V. Ivonin (VIN).

Remark. New to Novosibirsk Region. In West Siberia this widely distributed species was known from Altai territory (Zolotarenko and Dubatolov 2000) and from Omsk Region (Knyazev 2020).

Spodoptera exigua (Hübner, 1808)

Figure 10

Material examined. Omsk Region: 1♂, Maryanovka, 20-21.IX.2022, at light, S.A. Knyazev, S.M. Saikina (SKO); 2♂1♀, Tatarka, 21-22.IX.2022, at light, S.A. Knyazev, S.M. Saikina (SKO); 1♂, Krasnyi Oktyabr', 20-21.IX.2022, O.N. Kholodov (SKO).

Remark. New to Omsk Region and to Siberia. General distribution of this species in Russia is in European part and on the Far East (Sinev 2019). The nearest known locality is in Pavlodar Region in Kazakhstan (Titov et al. 2017).

***Hydraecia osseola* (Staudinger, 1882)**

Figure 11

Material examined. Novosibirsk Region: 1 ♀, Chebachye, 06.IX.2022, at light, V.V. Ivonin (VIN).

Remark. New to Novosibirsk region. This species was reported from West Siberia (Kononenko 2005) with the reference to the paper on West-Siberian Noctuidae (Zolotarenko and Dubatolov 2000) but in the cited work no mention of *H. osseola*. The nearest known localities in West Siberia are in Pavlodar Region of Kazakhstan (Titov et al. 2017).

***Cirrhia tunicata* (Graeser, 1890)**

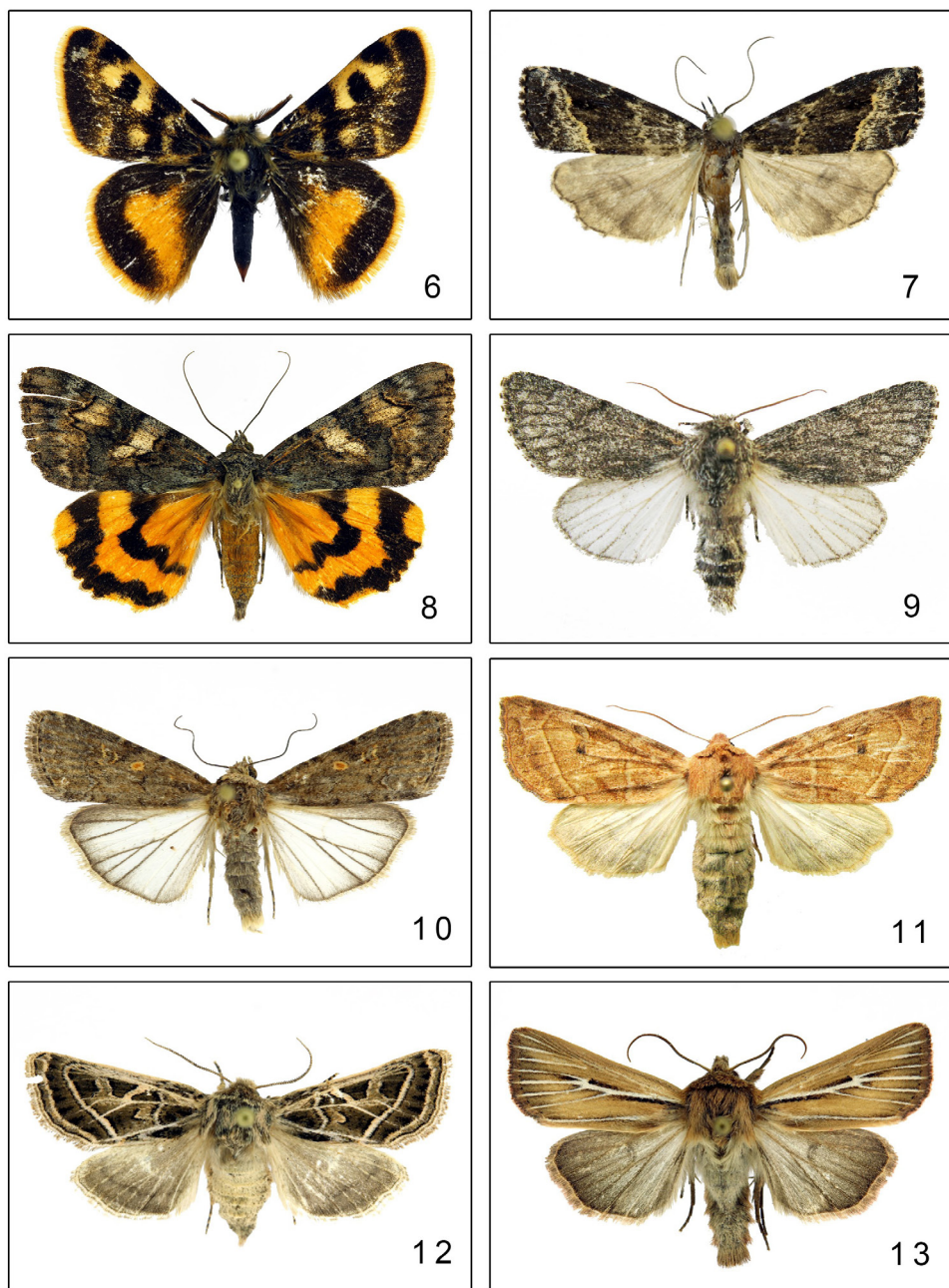
Material examined. Omsk Region: numerous specimens, Rechnik, 5.IX.2021, S.A. Knyazev, S.M. Saikina (visual registration); 2 specimens, Maryanovka, 20-21. IX.2022, at light, S.A. Knyazev, S.M. Saikina (visual registration); 3 specimens, Tatarka, 1-2.IX.2022, at light, S.A. Knyazev, S.M. Saikina (visual registration); **Novosibirsk Region:** 1 ♀, Karasuk, 04.IX.2022; 1 ♀, Chebachye, 6.IX.2022; 1 ♂ 1 ♀, Khorosheye, 05.IX.2022; 1 ♂ 1 ♀, same locality, 21.IX.2022, at light, V.V. Ivonin (VIN).

Remark. New to Novosibirsk Region. In West Siberia this species was reported from Omsk Region (Knyazev 2020) and from Pavlodar Region (Titov et al. 2017).

***Conistra rubiginea* ([Denis & Schiffermüller], 1775)**

Material examined. Omsk Region: 1 specimen, Achairskiy, 26.IV.2021, at light, S.A. Knyazev (SKO); 1 specimen, Gorskiy ravine, 16.IV.2022, at light, S.A. Knyazev, S.M. Saikina (SKO); 3 specimens, Chichigin ravine, 28-29.IV.2022, at light, S.A. Knyazev, S.M. Saikina (SKO); 1 specimen, Maryanovka, 20-21.IX.2022, S.A. Knyazev, S.M. Saikina (visual registration); **Novosibirsk Region:** 1 ♂, Chany, 17-18.IX.2022, S.A. Knyazev (SKO); 2 ♂, Polyanovo, 11.V.2022; 1 ♂, Khorosheye, 05.IX.2022; 1 ♂, Beryozovskiye skaly, 19.V.2022; 1 ♂, Tanaev pond, 30.IV.2022, at light, V.V. Ivonin (VIN).

Remark. New to Novosibirsk Region. This species was previously known from Kurgan (Zolotarenko and Dubatolov 2000) and Omsk (Knyazev 2020) regions of West Siberia, also in Pavlodar Region in Kazakhstan (Titov et al. 2017).



Figures 6–13. 6 – *Teia dubia*, Krasnyi Oktyabr', 24.IX.2022 (SKO); 7 – *Schrankia balnearum*, Tatarka, 21–22.IX.2022 (SKO); 8 – *Catocala helena*, Elita, 18.VIII.2022 (SKO); 9 – *Acronicta cinerea*, Khorosheye, 15.07.2022 (VIN); 10 – *Spodoptera exigua*, Maryanovka, 20–21.IX.2022 (SKO); 11 – *Hydraecia osseola*, Chebachye, 06.IX.2022 (VIN); 12 – *Leucochlaena fallax*, Ermak, 16.VIII.2021 (SKO); 13 – *Mythimna anderreggii*, Tleusai, 14.V.2022 (SKO).

***Leucochlaena fallax* (Staudinger, 1870)**

Figure 12

Material examined. Omsk Region: 1♀, Ermak, 16.VIII.2021, at light, A.A. Sal`nik (SKO); **Novosibirsk Region:** 1♀, Khorosheye, 24.08.2022, at light, V.V. Ivonin (VIN).

Remark. New to Omsk and Novosibirsk Regions, also new to the Russian Part of the West Siberian Plain. The species is distributed in Russia in Volga-Don region, Lower Volga and South Ural (Sinev 2019). The nearest known locality is in Pavlodar Region in Kazakhstan (Titov et al. 2017).

***Mythimna anderreggii* (Boisduval, 1840)**

Figure 13

Material examined. Omsk Region: 2♂1♀, Tleusai, 14.V.2022, at light, S.A. Knyazev, K.B. Ponomarev (SKO, KPO).

Remark. New to Omsk Region and to the Russian part of the West Siberian Plain. The species is distributed in Russia from European Part to South Ural and also in Altai mountains (Sinev 2019). The nearest known locality is in Pavlodar Region in Kazakhstan (Titov et al. 2017).

Conclusion

The total number of Macrolepidoptera in Omsk Region at this moment is 997 species. Noctuidae family of Omsk Region has been replenished with 3 species and now includes 367 species, Erebidae – 50 species, Lymantriidae – 14 species. The number of Noctuidae and Erebidae species in Novosibirsk Region has been replenished with 8 species and now includes 438 species.

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