

Additions to the Catalogue of Lepidoptera of Omsk Region. Pyraloidea.

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The list of 19 species of Pyraloid moths new to the fauna of Omsk Region is given. 13 of them are new to the West Siberia and 5 are recorded from the Asian part of Russia for the first time, namely, *Insalebria serraticornella* (Zeller, 1839), *Pseudophycita deformella* (Möschler, 1866), *Epischnia prodromella* (Hübner, 1799), *Ratasa alienalis* (Eversmann, 1844), *Pyrausta rectefascialis* Toll, 1936. The second record of *Krombia bimedia* (Filipjev, 1924) in Russia is given.

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Keywords

Microlepidoptera, Pyraloidea, Pyralidae, Crambidae, Omsk Region, West Siberia, new records

Introduction

The fauna of Pyraloidea of Omsk region was presented by 66 Pyralidae and 94 Crambidae species (Knyazev 2022). It was firstly revised by Knyazev et al. (2014) and slightly supplemented later (Knyazev et al. 2016; Knyazev et al. 2017; Knyazev et al. 2019; Knyazev and Ponomarev 2019). New materials on rare and little-known taxa were revealed in our collections recently. It turned out that in these collections there are a number of species that have not been previously recorded in the study area.

Materials and methods

All material processed within the framework of this article was collected on the territory of the Omsk region in the period from 2013 to 2022 by S.A. Knyazev, S.M. Saikina, V.V. Rogalev and A.A. Sal`nik at the light of HWL-250 and HSL-250 lamps. Identification of the material was carried out mainly basing on study of the preparations of male and female genitalia using modern keys and taxonomic revisions for individual families or genera. The most part of specimens stored in private collection of S.A. Knyazev (Omsk, Russia), some specimens stored in the Laboratory of Insect



Taxonomy of Zoological Institute of the Russian Academy of Sciences (St. Petersburg, Russia).

Collecting sites:

Ataichye – Cherlacksky district, 9 km NE of Dzhartargul' vill., lake Ataichye, 54°27'14,64"N, 75°40'0,39"E;

Berezovka - Azovsky district, Berezovka vill. vicinities 54°47'52.81"N, 73° 4'0.91"E;

Bolshoi Atmas – Cherlacksky district, 3,5 km N of Bolshoi Atmas vill., 54°6'22.15"N, 74°56'28.85"E;

Buzan – Russko-Polyansky district, 2 km SE of Buzan vill., 53°54'46,46"N, 73°57'51,32"E (Fig. 1);

Ebeity – Moskalensky district, 6 km W of Gvozdevka vill., lake Ebeity, 54°35'27.89"N, 71°47'5.37"E;

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

Gulyai Pole – Krutinsky district, 44 km NW Krutinka vill., 5 km SW Gulyai Pole vill., 56°13'30,08"N, 70°53'44,58"E;

Nikolaevka - Cherlacksky district, 8.5 km SE of Nikolaevka vill., 54°12'16,95"N, 75°7'55,70"E;

Kamyshino – Okoneshnikovsky district, 4,5 km NW of Kamyshino vill., 54°43'35.33"N, 74°50'7.52"E;

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

Krasnyi Oktyabr` - Cherlacksky district, Krasnyi Oktyabr` vill. vicinity, 54°06'59"N, 75°01'01"E;

Omsk - Omsk City, 54°59'33"N, 73°16'20"E;

Petropavlovka – Muromtsevsky district, 1 km W of Petropavlovka vill., 56°24'13,74"N, 75°15'47,94"E;

Tatarka - Cherlacksky district, 2 km N of Tatarka vill., 53°58'58,47"N, 75°2'1,22"E (Fig. 2);

Timshinyakovo – Tarsky district, 0.5 km N of Timshinyakovo vill., 56°57'8,97"N, 74°25'49,51"E;

Ul`zhai – Cherlacksky district, 6 km SE of Nikolaevka vill., lake Ul`zhai, 54°13'48.02"N, 75° 6'51.61"E;

Verkhneilyinka – Cherlacksky district, 2 km NW of Verkhneilyinka vill., 54°33'30.61"N, 74°14'26.02"E.





Figure 1. Steppe on the South of Omsk Region, Russko-Polyansky district, 2 km SE of Buzan vill., 22.VI.2018, photo by S.A. Knyazev.



Figure 2. View on the Irtysh river from the right bank, Cherlacksky district, 1 km N of Tatarka vill., 5.VI.2022, photo by S.A. Knyazev.

Result

A list of species arranged in accordance with the system of the Catalog of Lepidoptera of Russia (Sinev 2019) is given below.

Family Pyralidae

Insalebria serraticornella (Zeller, 1839)

Figure 3

Material examined. 19, Buzan, 16-17.VIII.2020, S.A. Knyazev; 1°, Nikolaevka, 7-8.VI.2020, S.A. Knyazev; 19, Kamyshino, 17-18.VIII.2021, S.A. Knyazev and S.M. Saikina (SKO).

Remark. The species distributed in European part of Russia to the southern Urals (Sinev 2019). New to the Asian part of Russia and to Omsk Region.



Psorosa nucleolella (Möschler, 1866)

Figure 4

Material examined. 1°, Tatarka, 20-21.VI.2022, S.A. Knyazev and S.M. Saikina; 1°, 1°, 1°, Tatarka, 21-22.IX.2022, S.A. Knyazev and S.M. Saikina (SKO); 4°, Krasnyi Oktyabr`, 21-22.IX.2022, O.N. Kholodov; 1°, Buzan, 14.IX.2020, S.A. Knyazev; 1°, Buzan, 26-27.V.2021, S.A. Knyazev and S.M. Saikina; 1°, Khlebodarovka, 1-2. VI.2021, S.A. Knyazev and S.M. Saikina (SKO)

Remark. The species distributed in European part of Russia from Crimea to southern Urals and in Siberia from Altai to Trans-Baikal Territory (Sinev 2019). New to the Western Siberia and to the Omsk Region.

Etiella zinckenella (Treitschke, 1832)

Figure 5

Material examined. 20, Buzan, 14.IX.2020, S.A. Knyazev (SKO).

Remark. The species distributed in European part of Russia to the southern Urals, in Tyva Republic, Krasnoyarsk and Primorye territories (Sinev 2019). New to the Western Siberia and to the Omsk Region.

Pseudophycita deformella (Möschler, 1866)

Figure 6

Material examined. 10⁻¹9, Tatarka, 20-21.VI.2022, S.A. Knyazev and S.M. Saikina (SKO).

Remark. In Russia the species is distributed in Middle Volga, Volga-Don and Lower Volga regions, western Caucasus and southern Urals (Sinev 2019). New to the Asian part of Russia and to the Omsk Region.

Epischnia prodromella (Hübner, 1799)

Figure 7

Material examined. 1o, Buzan, 14-15.IX.2018, S.A. Knyazev (SKO).

Remark. The species is widespread in European part of Russia from Crimea to southern Urals (Sinev 2019). New to the Asian part of Russia and to the Omsk Region.

Asalebria venustella (Ragonot, 1887)

Figure 8

Material examined. 19, Tatarka, 5.VI.2022, S.A. Knyazev and S.M. Saikina (SKO).

Remark. In Russia the species is locally distributed in Middle Volga and Volga-Don regions, southern Urals, Altai, Tyva and Buryatia (Sinev 2019). New to the Western Siberia and to the Omsk Region.

Seeboldia korgosella Ragonot, 1887

Figure 9



Material examined. 2°, 10-11.VI.2018, Ul`zhai, S.A. Knyazev; 2°29, Verkhnelyinka, 1.IX.2020, S.A. Knyazev; 19, Berezovka, 6-7.VIII.2021, S.A. Knyazev; 19, Buzan, 16-17.VIII.2020, S.A. Knyazev (SKO).

Remark. In Russia the species is known from Volga region, southern Urals and Trans-Baikal Territory (Sinev 2019). New to the Western Siberia and to the Omsk Region.

Ratasa alienalis (Eversmann, 1844)

Figure 10

Material examined. 28 specimens, Buzan, 22-26.IV.2020, 30.IV.2022, S.A. Knyazev; 5 specimens, Ebeity, 9.V.2022, S.A. Knyazev and S.M. Saikina (SKO).

Remark. The species is locally distributed at the south of European part of Russia to southern Urals (Sinev 2019). New to the Asian part of Russia and to the Omsk Region.

Assara terebrella (Zincken, 1818)

Material examined. 1d, Gulyai Pole, 7-8.VI.2016, S.A. Knyazev (SKO).

Remark. Amphipalearctic species distributed in European part of Russia to southern Urals and in Eastern Siberia to the Far East (Sinev 2019). New to the Western Siberia and to the Omsk Region.

Ephestia animella K. Nupponen Junnilainen, 1998

Material examined. 1°, Omsk, Lukashevicha str., 18-19.VI.2013, V.V. Rogalev; 19, Bolshoi Atmas, 31.V.2021, S.A. Knyazev and S.M. Saikina (SKO).

Remark. The species is known from southern Urals, Altai, Buryatia and Khabarovsk Territory (Sinev 2019). New to the Western Siberia and to the Omsk Region.

Ephestia elutella (Hübner, 1796)

Material examined. 19, Omsk, Irtyshskaya naberezhnaya str., in the flat, 19.II.2021, S.A. Knyazev (SKO).

Remark. Widespread in European part of Russia and at the Far East (Sinev 2019). New to the Western Siberia and to the Omsk Region.

Family Crambidae

Euchromius jaxartella (Erschoff, 1874)

Material examined. 19, Ataichye, 30.VI.2021, S.A. Knyazev (SKO).

Remark. In Russia the species is known from Lower Volga, Eastern Caucasus, southern Urals and Tyva Republic (Sinev 2019). New to the Western Siberia and to the Omsk Region.

Euchromius ocellea (Haworth, 1811)

Material examined. 19, Timshinyakovo, 22.IX.2022, S.A. Knyazev (SKO); 19, Krasnyi Oktyabr`, 21-22.IX.2022, O.N. Kholodov (SKO).

Remark. Widespread in European part of Russia, also known from Trans-Baikal Territory (Sinev



2019). New to the Western Siberia and to the Omsk Region.

Scoparia ancipitella (La Harpe, 1855)

Material examined. 20, Petropavlovka, 10-11.VII.2021, S.A. Knyazev and S.M. Saikina

Remark. Widespread in Russia from Karelia to Primorye Territory. In Siberia this species was previously known from the south of Krasnoyarsk Territory only (Sinev 2019). New to the Western Siberia and to the Omsk Region.

Eudonia murana (Curtis, 1827)

Material examined. 1d, Petropavlovka, 10-11.VII.2021, S.A. Knyazev and S.M. Saikina (SKO).

Remark. Widespread in Russia from Kola peninsula to Khabarovsk Territory (Sinev 2019). New to the Omsk Region.

Eudonia pallida (Curtis, 1827)

Material examined. 19, Petropavlovka, 10-11.VII.2021, S.A. Knyazev and S.M. Saikina (SKO).

Remark. The species is distributed in European part of Russia, in Buryatia and Trans-Baikal Territory (Sinev 2019). New to the Western Siberia and to the Omsk Region.

Krombia bimedia (Filipjev, 1924)

Figure 11

Material examined. 1d', Ul`zhai, 28-29.V.2019, S.A. Knyazev (SKO)

Remark. This is the second record of species in Russia. It was previously known only from Minusinsk in the southern part of Krasnoyarsk Territory (Filipjev, 1924). New to the Western Siberia and to the Omsk Region.

Pyrausta rectefascialis Toll, 1936

Figure 12

Material examined. 1°, Omsk City, Lukashevitsha str., at light, VI-VII.2016, V.V. Rogalev (SKO).

Remark. A little known species similar and partially sympatric to *P. cingulata* (Linnaeus, 1758) but different from it genetically and in some external features. In Russia it is distributed in European part of Russia to southern Urals (Sinev 2019). New to the Asian part of Russia and to the Omsk Region.



Figure 3. *Figures 3-12. 3* - Insalebria serraticornella, Nikolaevka, 7-8.VI.2020, S.A. Knyazev; 4 - Psorosa nucleolella, Tatarka, 21-22.IX.2022, S.A. Knyazev, S.M. Saikina; 5 - Etiella zinckenella, Buzan, 14.IX.2020, S.A. Knyazev; 6 - Pseudophycita deformella, Tatarka, 20-21.VI.2022, S.A. Knyazev, S.M. Saikina; 7 - Epischnia prodromella, Buzan, 14-15.IX.2018, S.A. Knyazev; 8 - Asalebria venustella, Tatarka, 5.VI.2022, S.A. Knyazev, S.M. Saikina; 9 - Seeboldia



korgosella, Verkhnelyinka, 1.IX.2020, S.A. Knyazev; **10** – Ratasa alienalis, Buzan, 22.IV.2020, S.A. Knyazev; **11** – Krombia bimedia, Ul`zhai, 28-29.V.2019, S.A. Knyazev; **12** – Pyrausta rectefascialis, Omsk, VI-VII.2016, V.V. Rogalev.

Ostrinia latipennis (Warren, 1892)

Material examined. 19, Ermak, 30.VI.2020, A.A. Sal`nik (SKO).

Remark. This species was previously known in Russia from the south of Krasnoyarsk Territory, Buryatia, Trans-Baikal Territory and the Far East (Sinev 2019). New to the Western Siberia and to the Omsk Region.

Conclusion

Thus, the list of Pyraloidea of the Omsk Region is supplemented with 19 species. The total number of species comprises 77 for Pyralidae and 102 for Crambidae. Further research should significantly extend our knowledge about the composition of the regional fauna.

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References

Filipjev NN (1924) Microheterocera des Minussinsk Bezirks. I. Jahrbuch des Martjanov'schen Staatsmuseums 2 (3): 1–61. [In Russian]

Knyazev SA (2022) Catalogue of Lepidoptera of Omsk Region (Russia). Microlepidoptera. Families: Eriocraniidae, Nepticulidae, Opostegidae, Adelidae, Prodoxidae, Incurvariidae, Psychidae, Tineidae, Roeslerstammiidae, Bucculatricidae, Gracillariidae, Yponomeutidae, Argyresthiidae, Plutelliidae, Acrolepiidae, Glyphipterigidae, Ypsolophidae, Lyonetiidae, Bedelliidae, Ethmiidae, Depressariidae, Elachistidae, Parametriotidae, Scythrididae, Chimabachidae, Cryptolechiidae, Oecophoridae, Batrachedridae, Coleophoridae, Momphidae, Blastobasidae, Autostichidae, Cosmopterigidae, Gelechiidae, Pterophoridae, Epermeniidae, Choreutidae, Galacticidae, Tortricidae, Pyralidae, Crambidae. Acta Biologica Sibirica 8: 17–87. https://doi.org/10.5281/zenodo.7690616

Knyazev SA, Ivonin VV, Vasilenko SV (2016) New and interesting findings of butterflies and moths (Insecta, Lepidoptera) in Omsk and Novosibirsk Provinces. Amurian Zoological Journal 8 (4): 254–272. [In Russian]

Knyazev SA, Ivonin VV, Sinev SYu, Lvovsky AL, Dubatolov VV, Vasilenko SV, Ustjuzhanin PYa, Ponomaryov KB, Sal`nik AA (2017) New records of Lepidoptera from the South of West Siberian Plain. Ukrainian Journal of Ecology 7 (4): 169–173. http://dx.doi.org/10.15421/2017_177

Knyazev SA, Ivonin VV, Ustjuzhanin PYa, Vasilenko SV, Rogalyov VV (2019) New data on Lepidoptera of West Siberian Plain, Russia. Far Eastern Entomologist 386: 8–20. https://doi.org/10.25221/fee.386.2

Knyazev SA, Ponomarev KB (2019) The first record of *Titanio normalis* (Hübner, 1796) (Lepidoptera, Crambidae) in Asian part of Russia. Amurian Zoological Journal 11 (2): 141–143. [In Russian]

Knyazev SA, Sinev SYu, Dubatolov VV, Ustjuzhanin PYa (2014) Pyralid-moths (Lepidoptera,



Pyraloidea) of Omsk Region. Amurian Zoological Journal 6 (4): 375-397. [In Russian]

Sinev SYu (Ed) (2019) Catalogue of the Lepidoptera of Russia. Edition 2. Zoological Institute RAS, St. Petersburg, 448 pp. [In Russian]