

Additions to the Catalogue of Lepidoptera of Omsk Region of Russia. Part 2: *Eupithecia* Curtis, 1825 (Lepidoptera: Geometridae)

S. A. Knyazev & V. G. Mironov

Abstract

New data on 19 species of *Eupithecia* Curtis, 1825 from the territory of Omsk Region is given. Five species are new to Omsk Region. Among them, *Eupithecia laquaearia* Herrich-Schäffer, 1848, *Eupithecia orphnata* W. Petersen, 1909, *Eupithecia pernotata* Guenée, 1858, *Eupithecia pusillata* ([Denis & Schiffermüller], 1775), *Eupithecia tantillaria* Boisduval, 1840. The study complements the catalog of Lepidoptera of Omsk Region published in 2020.

KEY WORDS: Lepidoptera, Geometridae, *Eupithecia*, fauna, biodiversity, Omsk Region, Siberia, Russia.

Adiciones al catálogo de Lepidoptera de la Región de Omsk de Rusia. Parte 2: *Eupithecia* Curtis, 1825 (Lepidoptera: Geometridae)

Resumen

Se dan nuevos datos sobre 19 especies de *Eupithecia* Curtis, 1825 del territorio de la región de Omsk. Cinco especies son nuevas para la región de Omsk. Entre otras, *Eupithecia laquaearia* Herrich-Schäffer, 1848, *Eupithecia orphnata* W. Petersen, 1909, *Eupithecia pernotata* Guenée, 1858, *Eupithecia pusillata* ([Denis & Schiffermüller], 1775), *Eupithecia tantillaria* Boisduval, 1840. El estudio cumplimenta el catálogo de Lepidoptera de la región de Omsk publicado en 2020.

PALABRAS CLAVE: Lepidoptera, Geometridae, *Eupithecia*, fauna, biodiversidad, Omsk, Siberia, Rusia.

Introduction

The catalogue of Lepidoptera of Omsk region (KNYAZEV, 2020) included 972 species of Macrolepidoptera. In the first addition (KNYAZEV & PONOMAREV, 2020) 10 species of Macrolepidoptera were added to the fauna of Omsk Region. Some of the materials on Geometridae collected by S. A. Knyazev earlier were transferred to V. G. Mironov for determination. After examining some of the specimens, it was found that several species were not previously recorded in the region. Based on these data, we present a list of new finds below.

Material and methods

Moths were collected by standard method by butterfly net and by using mercury lamps 250W. All specimens deposited in the private collection of Svyatoslav Knyazev (SKO), Omsk, Russia. The mounted specimens were photographed by the camera Canon EOS 5D Mark II with Canon 100 mm USM macro lens.

The data about distribution for each species are use from book “The Geometrid Moths of Europe” (MIRONOV, 2003).

List of species

Eupithecia abietaria (Goeze, 1781)

Material examined: 1 ♂, RUSSIA, Omsk Region, Tarsky district, 0,5 km N of Timshinyakovo vill., 56°57'8.97"N, 74°25'49.51"E, at light, 24-25-V-2020, S. A. Knyazev leg.

Distribution: Europe (except Iceland, Iberian Peninsula, Albania, Greece, and all Mediterranean islands), Caucasus, Transcaucasia (Georgia), Urals, Western and Southern Siberia, Kamchatka, Kuril Islands, Sakhalin, Japan.

Eupithecia absinthiata (Clerck, 1759)

Material examined: 1 ♀♀, RUSSIA, Novovarshevsky district, 3 km E of Novovarshevka vill., river Irtysh, 54°10'0.80"N, 74°45'24.81E, 26-27-VII-2018, S. A. Knyazev leg.; 1 ♂, 1 ♀, RUSSIA, Omsk Region, Russko-Polyansky district, 2 km SE of Buzan vill., 53°54'40"N, 73°57'31"E, at light, 18-IV-2020 and 2-V-2020, S. A. Knyazev leg.

Distribution: Europe (except Iceland, south of Iberian and Balkan peninsulas, Mediterranean islands, European Turkey), Caucasus, Transcaucasia, Urals, Western and Southern Siberia, Sakhalin, Japan.

Eupithecia addictata Dietze, 1908

Material examined: 1 ♀, RUSSIA, Novovarshevsky district, 3 km E of Novovarshevka vill., river Irtysh, 26-27-VII-2018, S. A. Knyazev leg.; 1 ♂, RUSSIA, Omsk Region, Cherlack district, 8,5 km SE of Nikolaevka vill., 54°12'16.95"N, 75°7'55.70"E, 21-22-VI-2018, at light, S. A. Knyazev leg.; 1 ♂, 1 ♀, RUSSIA, Omsk Region, Russko-Polyansky district, 2 km SE of Buzan vill., at light, 11-12-VI-2020, S. A. Knyazev leg.

Distribution: Europe (north-eastern Italy, Austria, Slovakia, Hungary, Macedonia, Greece, western Ukraine, central European Russia), northern Caucasus, Western and Southern Siberia, Altai, Priamurje, Primorje, southern Kuril Islands, China, Korea, Japan.

Eupithecia extraversaria Herrich-Schäffer, 1852

Material examined: 1 ♂, RUSSIA, Omsk Region, Tyukalinsky district, 0,5 km N of Novyi Koshkul' vill., 56°0'11.34"N, 72°20'42.12"E, at light, 24-25-VI-2019, S. A. Knyazev leg; 1 ♀, RUSSIA, Omsk Region, Cherlack district, 2 km N of Malyi Atmas vill., right bank of the river Irtysh, 54°0'48.74"N, 74°56'39.91"E, at light, 7-8-VII-2016, S. A. Knyazev leg.

Distribution: Europe (from Portugal to Southern Ural), North Africa (Morocco), north of Asian Turkey, Caucasus, Transcaucasia, northern Iran, south-western Siberia, Altai.

Eupithecia indigata (Hübner, [1813])

Material examined: 3 ♂♂, RUSSIA, Omsk Region, Omsky district, 2 km SW of Podgorodka vill., dendropark, 55°8'10.38"N, 73°30'42.90"E, at light, 29-IV-2020, S. A. Knyazev & S. M. Saikina leg.

Distribution: Europe (westward to Ireland and Spain, eastward to Urals), Asian Turkey, Caucasus, northern Kazakhstan, Western and Southern Siberia, Altai, Yakutia, Priamurje, Primorje.

**Eupithecia laquaearia* Herrich-Schäffer, 1848 (fig. 1)

Material examined: 1 ♀, RUSSIA, Omsk Region, Cherlack district, 2 km N of Malyi Atmas vill., right bank of the river Irtysh, at light, 7-8-VII-2016, S. A. Knyazev leg.; 1 ♂, Russia, Omsk Region, Russko-Polyansky district, 2 km SE of Buzan vill., at light, 4-5-VII-2020, S. A. Knyazev leg.

Distribution: Europe (from Spain in the west to central European Russia), North Africa (Morocco, Tunisia), Caucasus, eastern Transcaucasia (Talysh Mts.), north of Asian Turkey, Lebanon, Syria.

Eupithecia lariciata (Freyer, 1842)

Material examined: 1 ♀, RUSSIA, Omsk Region, Tarsky district, 0,5 km N of Timshinyakovo vill., at light, 24-25-V-2020, S. A. Knyazev leg.

Distribution: Europe (from Ireland and northern Spain in the west to Urals in the east), Siberia, Priamurje, Primorje, China, Japan, North America.

**Eupithecia orphnata* W. Petersen, 1909 (fig. 2)

Material examined: 1 ♀, RUSSIA, Omsk Region, Cherlack district, 8.5 km SE of Nikolaevka vill., 21-22-VI-2018, at light, S. A. Knyazev leg.

Distribution: Europe (sporadic in Sweden, southern Finland, Poland, Czech Republic, Slovakia, Germany, Spain, France, Italy, Switzerland, Austria, Hungary, Romania, Bulgaria, Macedonia, Albania, Greece, south of European Russia), Asian Turkey, Caucasus, Transcaucasia, northern Kazakhstan, Central Asian mountains, Western Siberia.

**Eupithecia pernotata* Guenée, 1858 (fig. 3)

Material examined: 1 ♂, RUSSIA, Omsk Region, Krutinsky district, 44 km NW of Krutinka vill., 5 km SW of Gulyai Pole vill., 56°13'30.08"N, 70°53'44.58"E, at light, 7-8-VI-2016, S. A. Knyazev leg.; 1 ♀, RUSSIA, Omsk Region, Cherlack district, 2 km N of Malyi Atmas vill., right bank of the river Irtysh, at light, 10-11-VI-2016, S. A. Knyazev leg.

Distribution: Europe (sporadic in France, Italy, Switzerland, Austria, Slovenia, Hungary, Romania, Ukraine, southern Russia), southern coast of Finland (separate population), southern Urals, northern Kazakhstan, Western and Southern Siberia, Priamurje, Primorje, Korea, Japan.

Eupithecia pimpinellata (Hübner, [1813])

Material examined: 2 ♀, RUSSIA, Omsk Region, Tarsky district, 0,5 km N of Timshinyakovo vill., at light, 8-9-VII-2020, S. A. Knyazev & S. M. Saikina leg.

Distribution: Europe (from Portugal eastwards to Southern Urals), North Africa (Morocco), Turkey, Lebanon, Caucasus, Transcaucasia, Siberia, Altai, Mongolia.

Eupithecia plumbeolata (Haworth, 1809)

Material examined: 1 ♀, RUSSIA, Omsk Region, Tarsky district, 0,5 km N of Timshinyakovo vill., at light, 8-9-VII-2020, S. A. Knyazev & S. M. Saikina leg.

Distribution: Europe (from Iceland, Ireland, and northern Spain in the west to Southern Urals in the east), Caucasus, Transcaucasia (Georgia), north-eastern Turkey, mountains of Central Asia (Dzhungarsky Alatau Mts., northern Tien-Shan), Western Siberia, Altai and Saján Mts.

**Eupithecia pusillata* ([Denis & Schiffermüller], 1775) (fig. 4)

Material examined: 1 ♂, 2 ♀♀, Omsk Region, Tarsky district, 4 km N of Samsonovo vill., 57°0'47.38"N, 74°19'49.44"E, at light, 25-VIII-2017, S. A. Knyazev leg.

Distribution: Canary Islands (Gran Canaria), Europe (from Iceland, Ireland, and Spain in the west to Urals in the east), Caucasus, Transcaucasia, north-east Turkey, Southern Siberia, Kamchatka, Sakhalin.

Eupithecia satyrata (Hübner, [1813])

Material examined: 1 ♀, RUSSIA, Omsk Region, Tarsky district, 0,5 km N of Timshinyakovo vill., at light, 24-25-V-2020, S. A. Knyazev leg.

Distribution: Europe (westward to Iceland, Ireland, and southern Spain, eastward to Urals), north-east of Asian Turkey, mountains of Central Asia, Siberia (eastwards to Transbaikalia), North America.

Eupithecia selinata Herrich-Schäffer, 1861

Material examined: 1 ♂, RUSSIA, Omsk Region, Tarsky district, 0,5 km N of Timshinyakovo vill., at light, 24-25-V-2020, S. A. Knyazev leg.

Distribution: Europe (from Spain to Urals), Caucasus, Western and Southern Siberia, Priamurje, Primorje, China, Japan.

Eupithecia suboxydata Staudinger, 1897

Material examined: 1 ♀, RUSSIA, Omsk Region, Cherlack district, 2 km N of Malyi Atmas vill., right bank of the river Irtysh, at light, 17-18-VI-2020, S. A. Knyazev leg.; 1 ♂, RUSSIA, Omsk Region, Russko-Polyansky district, 2 km SE of Buzan vill., at light, 1-VI-2020; 1 ♂, same locality, ex larva, 5-I-2019, S. A. Knyazev leg.

Distribution: South-east of European Russia, Southern Urals, Kazakhstan, Central Asia (Tien-Shan Mts.), Western and Southern Siberia, Altai, Priamurje, Primorje, Mongolia, China, Japan (Hokkaido).

Eupithecia subumbrata ([Denis & Schiffermüller], 1775)

Material examined: 1 ♀, RUSSIA, Omsk Region, Cherlack district, 8.5 km SE of Nikolaevka vill., 54°12'16.95"N, 75°7'55.70"E, 21-22-VI-2018, at light, S. A. Knyazev leg.

Distribution: Europe (from Ireland and eastern Spain in the west to Urals in the east), south-eastern Kazakhstan, Central Asia (Tien-Shan Mts.), Western and Southern Mongolia, north-western China, Mongolia.

**Eupithecia tantillaria* Boisduval, 1840 (fig. 5)

Material examined: 2 ♂♂, RUSSIA, Omsk Region, Tarsky district, 4 km N of Samsonovo vill., at light, 27-28-V-2016 and 17-18-VI-2017, S. A. Knyazev leg.

Distribution: Europe (from Ireland and eastern Spain eastward to Urals), Turkey, Caucasus, western Transcaucasia, Western Siberia, Altai.

Eupithecia trisignaria Herrich-Schäffer, 1848

Material examined: 1 ♂, RUSSIA, Omsk Region, Muromtsevsky district, Petropavlovka vill. vicinities, 56°24'46"N, 75°16'44"E, at light, 14-15-VI-2017, S. A. Knyazev leg.

Distribution: Europe (from Ireland and northern Spain in the west to Southern Urals in the east), Caucasus, western Transcaucasia (Georgia), Western and Southern Siberia.

Eupithecia vulgata (Haworth, 1809)

Material examined: 1 ♂, RUSSIA, Omsk Region, Russko-Polyansky district, 2 km SE of Buzan vill., at light, 18-19-V-2020, S. A. Knyazev leg.

Distribution: Europe (except Iceland, Balears, Sardinia, Sicily, Malta, and Crete), North Africa (Morocco), Turkey, Lebanon, Caucasus, Transcaucasia, northern Iran, eastern Kazakhstan, Central Asia (Tien-Shan Mts., Ghissar Mts to western Pamirs), Western and Southern Siberia, Altai, Priamurje, China (Xinjiang), Mongolia, Korea.

Conclusion

Thus, the fauna of Macrolepidoptera in Omsk Region at this moment includes 987 species. Geometridae family has been replenished with 5 species and includes 262 species.

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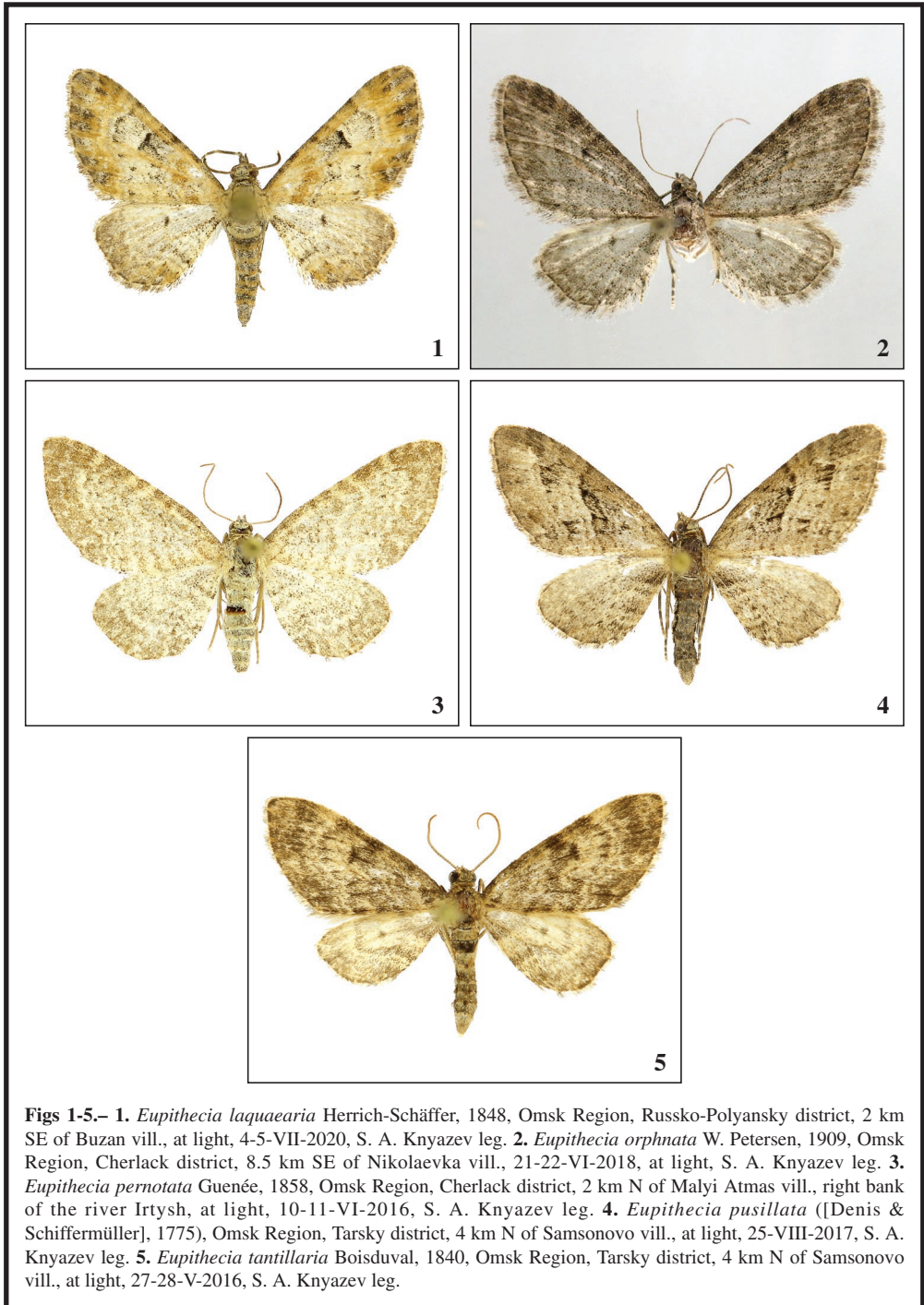
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Figs 1-5.– **1.** *Eupithecia laquaearia* Herrich-Schäffer, 1848, Omsk Region, Russko-Polyansky district, 2 km SE of Buzan vill., at light, 4-5-VII-2020, S. A. Knyazev leg. **2.** *Eupithecia orphnata* W. Petersen, 1909, Omsk Region, Cherlack district, 8.5 km SE of Nikolaevka vill., 21-22-VI-2018, at light, S. A. Knyazev leg. **3.** *Eupithecia pernotata* Guenée, 1858, Omsk Region, Cherlack district, 2 km N of Malyy Atmas vill., right bank of the river Irtysh, at light, 10-11-VI-2016, S. A. Knyazev leg. **4.** *Eupithecia pusillata* ([Denis & Schiffmüller], 1775), Omsk Region, Tarsky district, 4 km N of Samsonovo vill., at light, 25-VIII-2017, S. A. Knyazev leg. **5.** *Eupithecia tantillaria* Boisduval, 1840, Omsk Region, Tarsky district, 4 km N of Samsonovo vill., at light, 27-28-V-2016, S. A. Knyazev leg.