NEW DATA ON LEPIDOPTERA SPECIES IN LITHUANIA

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Introduction

The investigation of Lithuanian Lepidoptera has a long but uneven history starting in 1830 by recording of some species from Vilnius environs (Eichwald, 1830). Since then a few comprehensive accounts were published (Palionis, 1932; Prüffer, 1947; Kazlauskas, 1984; Ivinskis, 1993, 2004; Ivinskis & Augustauskas, 2004, etc.). Besides, some detailed works on Microledidoptera were published by Ivinskis *et al*. (1985), Sruoga & Ivinskis (2005), Diškus & Stonis (2012), etc. The last catalogue of Lithuanian Lepidoptera includes 2885 species (Ivinskis & Rimšaitė, 2018). However, the published knowledge about many species of Lithuanian Lepidoptera, especially Microlepidoptera, is still scanty. Most detailed report of distributional data of all Lithuanian Lepidoptera was provided by P. Ivinskis (2004).

The aim of this report is to provide new distribution data on Lepidoptera species reported from 4 administrative districts in Lithuania.

Material and Methods

Adult moths were collected by attracting them to mercury-vapour light and swept from low vegetation during daytime and in the evening before sunset. The leaf mines and moths were collected by Dominyka Kvašinskaitė (D.K.) and Virginijus Sruoga (V.S.). Adult specimens and leaf mines were examined using a Euromex Stereo Blue stereomicroscope. Genitalia for identification purposes were prepared following the methods described by Robinson (1976) and Sruoga & Ivinskis (2005). The male genital capsule was stained with fuchsin and female genitalia with chlorazol black (Direct Black 38/Azo Black). The genital morphology was examined using Novex B microscope. The identification of leaf-mines was based on the collected leaf-mine samples, which were very specific and were identified using several sources(Diškus & Stonis, 2012; Pitkin *et al*., 2019; Ellis, 2020; Edmunds, 2022 and Stonis *et al*., 2022). The geographical coordinates were obtained using Google Maps webpage (http://maps.google.com/).

List of localities

Locality	Administrative district	Coordinates (LAT, LONG)
Alytus (1)	Alytus distr.	54.43031, 24.03601
Alytus (2)	Alytus distr.	54.38672, 24.06626
Ariogala	Raseiniai distr.	55.23212, 23.57380
Kabinės	Alytus distr.	54.44129, 23.93286

Kernavė	Širvintos distr.	54.88690, 24.83166
Panemunininkai	Alytus distr.	54.49471, 24.04592
Puvočiai	Varėna distr.	54.12110, 24.29999
Vidzgiris Botanical Reserve	Alytus distr.	54.38448, 24.00712

List of species

NEPTICULIDAE

***Johanssoniella acetosae* (Stainton, 1854)**

Alytus (1), 20 08 2022, 13 leaf mines on *Rumex acetosa* L.; 23 09 2022, 4 empty leaf mines on *R. acetosa* L.; Panemunininkai, 20 08 2022, 17 leaf mines on *R. acetosa* L. (D.K.).

***Stigmella carpinella* (Heinemann, 1862)**

Vidzgiris Botanical Reserve, 25 07 2022, 1 empty leaf mine on *Carpinus betulus* L. (D.K.).

OPOSTEGIDAE

***Pseudopostega auritella* (Hübner, 1813)**

Kabinės, 28 06 2022, 1 ♂ (D.K.).

LYONETIIDAE

***Lyonetia clerkella* (Linnaeus, 1758)**

Alytus (2), 23 07 2022, 1 empty leaf mine on *Betula pendula* Roth; 19 07 2022, 2 empty mines on *Malus domestica* Borkh.; Kabinės, 23 07 2022, 5 empty mines on *Cerasus vulgaris* Mill.; 11 08 2022, 2 empty mines on *C. vulgaris* Mill. (D.K).

ELACHISTIDAE

***Elachista pullicomella* Zeller, 1839**

Kernavė, 03 06 2016, 1 ♂ (V.S.).

***Elachista consortella* Stainton, 1851**

Puvočiai, 16 09 2021, 1 ♀ (V.S.).

***Elachista exactella* (Herrich-Schäffer, 1855)**

Kernavė, 03 06 2016, 2 ♀ (V.S.).

EREBIDAE

***Callimorpha dominula* (Linnaeus, 1758)**

Ariogala, 14 07 2012, 1 ♂ (V.S.).

Discussion

In this report we provided new distributional data for 8 Lepidoptera species from South-Eastern and Central Lithuania. These species are widely distributed in Europe, however, data on its distribution in Lithuania are scarce.

Johanssoniella acetosae is a rare species in Lithuania, earlier was known from 10 administrative districts (Diškus & Stonis, 2012). This is the first record for Alytus administrative district. Previously this species was known as *Enteucha acetosae* (Johansson *et al*., 1990; Puplesis, 1994; Puplesis & Diškus, 2003; Ivinskis, 2004; Ivinskis & Rimšaitė, 2018), but recently was transferred to the genus *Johanssoniella* Koçak (Stonis *et al*., 2018).

Stigmella carpinella is a rare species in Lithuania, earlier was known from 8

administrative districts (Diškus & Stonis, 2012; Skorb *et al*., 2018). This is the first record for Alytus administrative district.

Pseudopostega auritella is a rare species in Lithuania, earlier was known from 5 administrative districts (Ivinskis, 2004; Ivinskis & Rimšaitė, 2018). This is the first record for Alytus administrative district.

Lyonetia clerkella is not rare species in Lithuania. Although it is known throughout the country, the exact distributional data are scarce (Ivinskis, 2004; Ivinskis & Rimšaitė, 2018). Recently, *L. clerkella* was found mining leaves of *Betula pendula* in Lithuania (Skorb, 2021). This is the second record of this host plant in Lithuania and the first for Alytus administrative district.

Elachista pullicomella is not rare in Lithuania (Sruoga & Ivinskis, 2005), but still was known only from 13 administrative districts (Sruoga & Ivinskis, 2011). This is the first record for Alytus administrative district.

Elachista consortella is rare species in Lithuania, earlier was known from 8 administrative districts (Sruoga & Ivinskis, 2005; Ostrauskas *et al*., 2010a, b; Paulavičiūtė *et al*., 2017; Seletytė & Sruoga, 2017). This is the first record for Varėna administrative district.

Elachista exactella is very rare and locally distributed species in Lithuania. Previously was known only from 4 localities in coastal region of the country (Sruoga & Ivinskis, 2005, 2011). This new record from Širvintos administrative district is the southernmost finding of *E. exactella* in Lithuania.

Callimorpha dominula is rare species in Lithuania. Although it is known throughout the country, the exact distributional data are scarce (Ivinskis, 2004; Ivinskis & Rimšaitė, 2016, 2018). This is the first record for Raseiniai administrative district.

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Nauji duomenys apie Lietuvos drugius (Lepidoptera)

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Santrauka

Straipsnyje pateikti nauji paplitimo duomenys apie 8 mažai ištirtas ir retas Lietuvos faunos drugių rūšis. Iš viso registruotos 8 naujos radvietės keturiuose Lietuvos rajonuose. Nurodytos kiekvienos rūšies aptikimo vietos, datos, individų skaičius ir rinkėjas.

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