

LEPIDOPTERA SPECIES NEW FOR LITHUANIAN FAUNA

POVILAS IVINSKIS, JOLANTA RIMŠAITĖ

Nature Research Centre, Akademijos 2, Vilnius. E-mails: ivinskis@ekoi.lt; jolanta@ekoi.lt

Introduction

After the Catalogue of Lepidoptera of Lithuania appeared (Ivinskis, 2004), new information on Lithuanian microlepidoptera was published by many authors (Dapkus *et al.*, 2007, Ivinskis, 2007, Ivinskis & Rimšaitė, 2006, Kazlauskas, 2008, Kazlauskas & Šlėnys, 2007, Noreika, 2007, Ostrauskas & Ivinskis, 2010a, 2010b, 2010c; Ostrauskas *et al.*, 2008, 2010a, 2010b). New data on 22 Lepidoptera species are presented in this paper.

Material and Methods

The majority of the data was collected by P. Ivinskis (P.I.), J. Rimšaitė (J.R.) and V. Pacevičius (V.P.) during field investigations. Different methods, such as breeding from larvae, netting, pheromone and light trapping were used. Battery traps (8 W blended lamp), screens (160 W mixed lamp), automatic traps with 300 W solar type lamps were used for the light trapping. The material was identified using Bengtsson *et al.*, 2008., Leraut, 2012, Jurivete & Ounap, 2008, Savenkov & Šulcs, 2010. Taxonomical treatment follows that of the Fauna Europaea database (Karsholt & Nieuwerkerken, 2012). The specimens are deposited in the collection of Nature Research Centre (Vilnius, Lithuania).

List of localities

Akmenė district	Kamanos Nature reserve	56°18'35,9"N, 22°38'33,5"E
Alytus district	Punios šilas f.	54°32'32,3"N, 24°04'50,5"E
Neringa t.	Nagliai nature reserve	55°26'31,4"N, 21°04'15,8"E
	Juodkrantė env.,	55°31'20,8"N, 21°06'57,9"E;
Druskininkai district	Gerdašiai, Nemunas river valley	53°56'44,8"N, 23°52'49,4"E;
Joniškis district	Bariūnai	56°15'56,2"N, 23°39'14,9"E;
	Žagarė dendropark	56°21'46,2"N, 23°14'45,9"E;
	Mūšos Tyrelis bog, peat bog	56°13'09,7"N, 23°15'31,7"E;
Jurbarkas district	Viešvilė	55°04'00,8"N, 22°24'11,3"E;
Kaunas	Vilijampolė	54°54'51,4"N, 23°52'48,9"E;
Kaunas district	Raudondvaris	54°56'21,8"N, 23°44'56,2"E;
	Ringovė Entomological preserve	55°02'59,6"N, 23°31'18,1"E;
	Pavejuonis	54°59'46,6"N, 23°43'46,6"E;
Kėdainiai district	Saviečiai, Labūnava Miškas f.	55°09'09,0"N, 23°58'53,6"E;

Kretinga district	Labūnava	55°09'29,1"N, 23°54'49,9"E;
	Kalno Grikštai, Kartenalė entomological preserve	55°51'26,9"N, 21°23'59,2"E;
	Darbėnai, gravel pit	56°02'09,4"N, 21°15'31,3"E;
Lazdijai district	Nemirseta	55°51'27,5"N, 21°05'13,2"E;
Molėtai district	Galadusys lake env.	54°12'03,1"N, 23°24'35,2"E;
Šalčininkai district	Suginčiai	55°19'14,6"N, 25°27'32,6"E;
Šiauliai district	Kernavas lake, peat bog	54°22'49,5"N, 25°06'39,7"E;
Švenčionys district	Agailės Miškas f.	56°07'24,1"N, 22°57'45,6"E;
	Meškerinė, strand of pond	55°02'02,7"N, 25°51'20,6"E;
Ukmergė district	Petrežeris lake strand	55°10'55,7"N, 25°52'04,7"E;
	Dukstyna entomological preserve	55°16'46,1"N, 24°51'00,9"E;
Varėna district	Perlojos Miškas f.	54°12'24,2"N, 24°22'24,6"E;
Vilnius t.	Verkiai	54°44'48,6"N, 25°17'17,1"E;
	Kalniškės	54°50'49,6"N, 25°10'38,3"E;
	Visoriai	54°45'05,47"N, 25°15'39,6"E

Results

ADELIDAE

Nemophora dumerilella (Duponchel, 1839)

Agailės Miškas f., 24 07 1999, 1 spec. (P.I. & J. R.); Meškerinė, 24- 01 08 07 1998, 15 spec., 29 07 1999, 12 spec.; Ringovė, 29 07 1999, 12 spec., 01 08 2000, 3 spec.; Viešvilė, 01 08 2000, 1 spec. All specimens caught in xerothermic sandy habitats.

Nemophora fasciella (Fabricius, 1775)

Pavejuonis, 27 07 2000, 6 spec. (P. I.).

ARGYRESTHIIDAE

Argyresthia (Blastotere) laevigatella Herrich-Schaffer, 1855

Žagarė dendropark, 17 06 2010 2 spec. (P. I.), sweeping on branches of *Larix decidua*.

COLEOPHORIDAE

Coleophora wockeella Zeller, 1849

Saviečiai, Labūnava Miškas f., 22 07 2010, 2 spec. (P. I.).

GELECHIIDAE

Monochroa divisella (Douglas, 1850)

Juodkrantė, 29 06 2009, 1 spec. (P.I. & J. R.).

Mirificarma lentiginosella (Zeller, 1839)

Perlojos Miškas f., 15 08 2008, 2 spec. (P.I. & J. R.).

Gelechia hippophaella (Schrank, 1802)

Darbėnai, gravel pit, 21 06 2011, larvae on *Hippophaes*, 5 imagoes emerged 16 07 2011 (P.I. & J. R.).

Anarsia spartiella (Schrank, 1802)

Juodkrantė, 05 07 2010, 1 spec. (P. I.).

GRACILLARIIDAE

***Phyllonorycter anderidae* (W. Fletcher, 1875)**

Petrežeris lake, 09 2009 mines on *Betula nana*, 8 imagoes emerged 19 02 2010 (P. I.).

INCURVARIIDAE

***Alloclemensia mesospilella* (Herrich-Schäffer, 1854)**

Kalno Grikštai, 03 07 1996, several larvae on *Ribes*, 3 imagoes emerged 22 07 1996 (P.I. & J. R.).

LYONETIIDAE

***Leucoptera spartifoliella* (Hubner, 1813)**

Nagliai nature reserve, 06 07 2010, more than 50 specimens in *Cytisus scoparius* bushes (P. I.).

PYRALIDAE

***Acrobasis obtusella* (Hübner, 1796)**

Galadusys lake env., 19 07 2010, 4 spec. (P. I.).

***Etiella zinckenella* (Treitschke, 1832)**

Kalniškės, 25 07 2011, 1 spec. (P. I.).

***Palpita vitrealis* (Rossi, 1794)**

Nagliai nature reserve, 01 10 2012, 1 spec. (P.I. & J. R.).

SESIIDAE

***Synanthedon soffneri* Špatenka, 1983**

Kalniškės, 02-04 06 2010, 4 spec.; Visoriai, 06 2010, 10 spec., all attracted to pheromon trap. (P. I.).

TISCHERIIDAE

***Captotriche heinemanni* (Wocke, 1871)**

Dukstyna entomological preserve, August of 2008, several mines on *Rubus caesus*; Gerdašiai, mines on *Rubus caesus*, September of 2009, 8 imagoes emerged 01-02 2010; Raudondvaris, August of 2011, numerous mines on *Agrimonia eupatorium*.

TORTRICIDAE

***Acleris effractana* (Hübner, 1799)**

Kalniškės, 26 08 2006, 1 spec. (P. I.); Verkiai, 27 09 - 04 10 2004, 1 spec.

***Acleris kochiella* (Goeze, 1783)**

Saviečiai, Labūnava Miškas f., 24 08 2005, on *Ulmus* sp., 03 09 2005, 1 imago (P. I.).

***Acleris literana* (Linnaeus, 1758)**

Nemirseta, 04 29 - 05 05 2004, 1 spec. (P.I. & J. R.).

***Phiaris obsoletana* (Zetttersedt, 1839)**

Suginčiai, 22 06 1999, 1 spec. (V. P.).

***Epinotia gimmerthaliana* (Lienig & Zeller, 1846)**

Kernavas lake, peat bog, 13 06 2008, 1 spec. (P.I. & J. R.); Mūšos Tyrelis bog, 13 06 2010, 3 spec. (P. I.).

***Strophedra weirana* (Douglas, 1850)**

Juodkrantė env., October of 2010 larvae on *Fagus* sp., 10 imagoes emerged in January-February 2011(P.I.).

Discussion

Twenty two new species for Lithuanian fauna are presented. Data on distribution in surrounding countries are presented according to Jurivete & Ounap (2008), Savenkov & Šulcs (2010) and Karsholt & Nieuwerkerken (2012). *Captotriche heinemanni* is a widely distributed species, known from many European countries, found in the neighbouring country - Estonia. Numerous blotch mines are found very often, but we have never seen imagoes in the same environment. All specimens of *Nemophora dumerilella* were caught on flowers of *Veronica spicata*. This species is widely distributed in Europe, but still is not found in neighbouring countries - Latvia, Finland, Norway. *Nemophora fasciella* is distributed in surrounding countries - Estonia, Poland and Russia (Kaliningrad region), is not found in Latvia. *Alloclementia mesospilella* is widely distributed in Europe, known in all countries surrounding Lithuania. *Argyreathia laevigatella* is trophically associated with *Larix decidua* and distributed in 19 European countries, including Estonia and Latvia. *Phyllonorycter anderidae* is trophically associated with relict plant species *Betula nana* and distributed in 15 European countries, including Estonia, Latvia and Poland. *Leucoptera spartifoliella* is known from 24 European countries, including Belarus, Estonia and Poland. *Coleophora wockeella* is known from the neighbouring Latvia and Poland. Gelechiid moth *Monochroa divisella* is known from neighbouring countries Latvia and Poland as well, *Mirificarma lentiginosella* only from Estonia and Poland, *Gelechia hippophaella* - from Latvia and Poland, *Anarsia spartiella* - only from Poland. Sesiid moth *Synanthedon soffneri* is known from 12 European countries, including Poland and Latvia (Savenkov pers. com.). Leaf roller species *Acleris kochiella* and *Epinotia gimmerthaliana* are known from neighbouring countries Estonia and Latvia, *Acleris literana* - from Latvia, *Acleris effractana* - from Estonia, Latvia and Poland, *Strophedra weirana* - from Poland and *Phiaris obsoletana* - from Estonia and Poland. Pyralid moth *Acrobasis obtusana* is new for Baltic countries, nearest finding is known from Poland. *Etiella zinckenella* and *Palpita vitrealis* are known as migrant species that are very widely distributed in Europe. *Etiella zinckenella* is known also from Latvia and Poland, *Palpita vitrealis* - from Estonia, Latvia and Poland.

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References

- Bengtsson B. A., Johansson R., Palmqvist G. 2008. *Nationalnyckeln till Sveriges flora och fauna. Fjärilar: Käkmalar – säckspinnare. Lepidoptera: Micropterigidae – Psychidae*. ArtDatabanken, SLU, Upsala.
- Dapkus D., Jaroš J., Spitzer K. 2007. New data on microlepidoptera from the Čepkelių raistas bog (southern Lithuania). *New and Rare for Lithuania Insect Species* 19: 29–32.
- Ivinskis P. 2004. *Lepidoptera of Lithuania - Lietuvos drugiai : Annotated catalogue*. Vilnius:Vilniaus universiteto Ekologijos instituto leidykla.

- Ivinskis P. 2007. Lepidoptera species established in Lithuania in the last decade. *Abstracts of 15th European Congress of Lepidopterology, 8-12 September 2007, Erkner (Berlin)*: 58–59.
- Ivinskis P., Rimšaitė J. 2006. The horse-chestnut leafminer (*Cameraria ohridella* Deschka & Dimic 1986) (Lepidoptera, Gracillariidae) in Lithuania. *Acta Zoologica Lituanica* 16 (4): 323–327.
- Ivinskis P., Rimšaitė J. 2008. Records of *Phyllonorycter robiniella* (Clemens, 1859) and *Parectopa robiniella* Clemens, 1863 (Lepidoptera, Gracillariidae) in Lithuania. *Acta Zoologica Lituanica* 18 (2): 130–133.
- Jurivete U., Ounap E. 2008. *Eesti liblikad kataloog. Estonian Lepidoptera catalogue. Tallin.*
- Karsholt O. & Nieuwerkerken E.J. van (eds.) 2012. Lepidoptera, Moths. Fauna Europaea version 2.4., <http://www.faunaeur.org> (Accessed October 10, 2012).
- Kazlauskas R. 2008. New and rare for Lithuania insect species recorded from Merkinė environs in 2008. *New and Rare for Lithuania Insect Species* 20: 39–41.
- Kazlauskas R., Šlėnys P. 2007. Data on new and rare Lepidoptera species for Lithuania, collected in 1987–2007. *New and Rare for Lithuania Insect Species* 19: 33–34.
- Leraut P. 2012. *Moths of Europe. Vol 3. Zygaenids, Pyralids 1.* NAP. Editions. Verrieres-le-Buisson.
- Noreika R. 2007. *Phyllonorycter robiniella* (Clemens, 1859) (Lepidoptera: Gracillariidae) - a new species for the Lithuanian fauna. *New and Rare for Lithuania Insect Species* 19: 35–38.
- Ostrauskas H., Ivinskis P. 2010a. New Lithuanian records of moths captured in beetle traps. *Ekologija* 56 (3–4): 105–109.
- Ostrauskas H., Ivinskis P. 2010b. Records of the tomato pinworm (*Tuta absoluta* (Meyrick, 1917) – Lepidoptera: Gelechiidae – in Lithuania. *Acta Zoologica Lituanica* 20 (2): 151–155.
- Ostrauskas H., Ivinskis P. 2010c. Moths trapped during the search for *Dendrolimus sibiricus* (Lepidoptera, Lasiocampidae) in Lithuania. *Acta Zoologica Lituanica* 20 (4): 232–237.
- Ostrauskas H., Ivinskis P., Būda V. 2008. Moth species caught in traps during the survey of *Cacoecimorpha pronubana* (Hbn.) – Lepidoptera, Tortricidae – in Lithuania. *Acta Zoologica Lituanica* 18 (1): 17–23.
- Ostrauskas H., Ivinskis P., Būda V. 2010a. Moths caught in traps during a survey of *Choristoneura fumiferana* (Clemens, 1865) – Lepidoptera, Tortricidae – in Lithuania. *Acta Zoologica Lituanica* 20 (2): 156–161.
- Ostrauskas H., Ivinskis P., Būda V. 2010b. Moths caught in traps during the survey of *Choristoneura rosaceana* (Lepidoptera, Tortricidae) in Lithuania. *Acta zoologica Lituanica* 20 (3): 242–249.
- Savenkov N., Šulcs I. 2010. *Latvijas taurini katalogs. Latvian lepidoptera catalogue. Tallinn.*

Naujos Lietuvos faunai drugių rūšys

P. IVINSKIS, J. RIMŠAITĖ

Santrauka

Pateikiami duomenys apie 22 naujas Lietuvos faunai drugių rūšis: Adelidae - 2 rūšis, Incurvariidae, Tischeriidae, Gracillariidae, Argyresthiidae, Lyonetiidae, Coleophoridae ir Sesiidae - po 1 rūšį, Gelechiidae – 4, Tortricidae – 6, Pyralidae – 3. Taip pat pateikiami duomenys apie naujų rūšių paplitimą kaimyninėse šalyse.

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