

RARE AND NEW LEPIDOPTERA SPECIES FOR LITHUANIA

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Introduction

After examination of newly collected material and material preserved in the collection of Laboratory of Entomology (Nature Research Centre) new and rare Lepidoptera species were determined.

New data on one new and 87 rare Lepidoptera species from 21 families are presented in this paper.

Material and Methods

The majority of data were collected during field investigations by the authors P. Ivinskis (P.I.) and J. Rimšaitė (J.R.), some data – by V. Jusys (V.J.), D. Laurytėnas (D.L.) and R. Guliokas (R.G.). Breeding from larvae, netting, light and wine trapping were used to collect moths. Light trapping with screen (160 W mixed light lamp) and automatic traps with 300 W solar type lamps, pheromone and vine traps were used. The material was identified according Bengtsson *et al.*, 2008, Bengtsson & Johansson, 2011, Slamka, 2010. Data on distribution and faunistics follows Ivinskis, 2004. Taxonomical treatment and distribution follows the Fauna Europaea database (Karsholt & Nieuwenhuis, 2013). The specimens are deposited in the collection of Nature Research Centre, Vilnius. Species new for the Lithuanian fauna are marked with an asterisk (*).

List of localities

Bariūnai, Satkūnai Miškas f.	Joniškis district	56.270750, 23.649083
Beržoras	Plungė district	56.015611, 21.831555
Kaunas Botanical garden	Kaunas municipality	54.868444, 23.911138
Bugieda	Lazdijai district	53.943500, 23.803138
Dysna	Ignalina district	55.316083, 26.794416
Dūkštų Ažuolynas f.	Vilnius district	54.843055, 24.970277
Gerdašiai	Druskininkai municipality	53.945277, 23.880555
Juodkrantė	Neringa municipality	55.522388, 21.115750
Kalniškės	Vilnius district	54.846805, 25.177388
Lapnugaris preserve	Neringa municipality	55.568111, 21.103777
Lindiniškės	Vilnius district	54.784638, 25.237055
Mikytai	Pagėgiai municipality	55.125777, 21.923722
Molvėnai	Trakai district	54.691666, 25.041277
Nagliai reserve, 29 km	Neringa municipality	55.465166, 21.078916
Obelija	Lazdijai district	54.300361, 23.845527
Paneriai	Elektrėnai municipality	54.786055, 24.898638

Perloja	Varėna district	54.207777, 24.375555
Rūdininkai	Šalčininkai district	54.370083, 25.095972
Smėlynė	Vilnius municipality	54.750138, 25.378388
Stojai	Varėna district	54.018611, 24.785277
Užutrakis	Trakai district	54.666777, 24.950583
Ventės Ragas	Šilutė district	55.343611, 21.195250
Žagarė park	Joniškis district	56.358777, 23.269416

List of species

HEPIALIDAE

Pharmacis lupulina (Linnaeus, 1758)

Kalniškės, 27 05 2016, 4 ♂, 1 ♀ (P.I.).

MOMPHIDAE

Mompha ochracella (Curtis, 1839)

Kalniškės, 07 07 2016, 1 spec. (P.I.).

SESIIDAE

Synanthedon vespiformis (Linnaeus, 1761)

Dūkštų Ažuolynas f., 28 06-02 07 2016, 2 spec., 07- 11 07 2016 5 spec.; Kaunas Botanical garden, 18 05 2016, 1 spec. (P.I., J.R.); Mikytai, 25 05-07 07 2016, 2 spec.

Synanthedon soffneri Spatenka, 1983

Kalniškės, 23-27 05 2016, 4 spec. (P.I.).

LIMACODIDAE

Apoda limacodes (Hübner, 1810)

Kalniškės, 22 07 2016, 1 spec. (P.I.)

ZYGAENIDAE

Zygaena ephialtes (Linnaeus, 1767)

Gerdašiai, 05 08 2016, 1 spec. (P.I., J.R.).

PLUTELLIDAE

Rhigognostis hufnageli (Zeller, 1839)

Smėlynė, 10 09 2016, 1 spec. (P.I., J.R.).

GLYPHIPTERIGIDAE

Orthotelia sparganella (Thunberg, 1788)

Kalniškės, 22 07 2016, 1 spec. (P.I.).

ETHMIIDAE

Agonopterix capreolella (Zeller, 1839)

Smėlynė, 20 08 2016, 1 spec. (P.I., J.R.).

TORTRICIDAE

Phtheochroa sodaliana (Haworth, 1811)

Kalniškės, 17 07 2016, 1 spec. (P.I.).

Pandemis dumetana (Treitschke, 1835)

Kalniškės, 22 07 2016, 1 spec. (P.I.).

Spatalistis bifasciana (Hübner, 1787)

Kalniškės, 10 09 2016, 1 spec. (P.I.).

Dichelia histrionana (Frölich, 1828)

Juodkrantė, 24 08 2016, 1 spec. (P.I., J.R.); Kalniškės, 22- 30 07 2016, 2 spec. (P.I.).

***Enarmonia formosana* (Scopoli, 1763)**

Smėlynė, 22 07 2016, 1 spec., 14 08 2016, 1 spec. (P.I., J.R.).

***Pammene regiana* (Zeller, 1849)**

Beržoras, 07 2016 some larvae under the bark of *Acer pseudoplatanus*, imagous 03 05 2016, 1 spec. (P.I., J.R.).

***Cydia cosmophorana* (Treitschke, 1835)**

Perloja, 28 05 2016, 1 spec. (P.I., J.R.).

***Cydia sevellana* (Duponchel, 1836)**

Žagarė park, 2016 04 06-02 07, 3 spec., to pheromone for *Cydia fagiglandana* (P.I., J.R.).

****Grapholita cotoneastri* (Danilevsky, 1968)**

Kaunas Botanical garden, 06 09 2016, about 50 spec., to pheromone for *C. lobaczewskii*.

PTEROPHORIDAE

***Cnaemidophorus rhododactyla* (Denis et Schiffermüller, 1775)**

Kalniškės, 22 07 2016, 1 spec. (P.I.).

PYRALIDAE

***Catoptria fulgidella* (Hübner, 1813)**

Juodkrantė, 25 08 2016, 9 spec. (P.I., J.R.).

***Pediasia fascelinella* (Hübner, 1813)**

Juodkrantė, 25 08 2016, 2 spec. (P.I., J.R.).

***Nephoteryx angustella* (Hübner 1796)**

Smėlynė, 20 08 2016, 1 , 10 09 2016, 1 spec. (P.I., J.R.).

***Dioryctria simplicella* Heinemann, 1863**

Smėlynė, 20 08 2016, 1 spec. (P.I., J.R.).

***Achroa grisella* (Fabricius, 1794)**

Smėlynė, 14 08 2016, 1 spec. (P.I., J.R.).

***Loxostege sticticalis* (Linnaeus 1761)**

Gerdašiai, 27 07 2016, 4 spec. (P.I., J.R.).

***Euzophera pinguis* (Haworth, 1911)**

Obelija, 04 08 2016, 1 spec. (P.I., J.R.).

***Acrobasis obtusella* Hübner 1796**

Stojai, 02 07 2016, 1 spec. (P.I., J.R.).

LASIOCAMPIDAE

***Odonestis pruni* (Linnaeus, 1758)**

Gerdašiai, 27 07 2016, 1 spec. (P.I., J.R.).

SPHINGIDAE

***Agrius covolvuli* (Linnaeus, 1758)**

Bugieda 09 2015, 1 spec. (R.G.); Dysna, 10 09 2016, 3 pupae in potatous field (D.L.); Ventės Ragas, 02 09 2015, 1 egz. (V.J.).

***Laothoe amurensis* (Fischer v. Waldheim, 1830)**

Kalniškės, 08, 13, 22 05 2016, 6 spec. (P.I.).

***Hyles gallii* (Rottemburg, 1775)**

Obelija, 04 08 2016, 9 spec. (P.I., J.R.).

HESPERIIDAE

***Pyrgus alveus* (Hübner 1803)**

Gerdašiai, 05 08 2016, 1 spec. (P.I., J.R.).

LYCAENIDAE

***Lycaena dispar* (Haworth, 1802)**

Kalniškės, 22 06 2016, 1 spec. (P.I.); Lindiniškės, 20 05 2016, 1 spec.; Ventės Ragas, 25 05 2016, 1 spec. (P.I., J.R.).

***Lycaena helle* (Denis & Schiffermüller, 1775)**

Stojai, 06 2016, 7 spec. (P.I., J.R.).

***Aricia eumedon* (Esper, 1780)**

Moluvėnai, 14 07 2016, 1 spec. (P.I., J.R.).

NYMPHALIDAE

***Pararge aegeria* (Linnaeus, 1758)**

Dūkštų Ažuolynas f., 01-17 05 2016, 1 spec., window trap (P.I., J.R.).

***Lopinga achine* (Scopoli, 1763)**

Nagliai rezerve, 16 06 2016, 3 spec. (P.I., J.R.).

DREPANIDAE

***Sabra harpagula* (Esper, 1786)**

Obelija, 04 08 2016, 1 spec. (P.I., J.R.).

GEOMETRIDAE

***Stegania cararia* (Hübner, 1790)**

Stojai, 02 07 2016, 1 spec. (P.I., J.R.).

***Tephрина arenacearia* (Dennis & Shiffermüller, 1775)**

Gerdašiai, 27 07 2016, 1 spec. (P.I.).

***Selenia lunularia* (Hübner, 1788)**

Kalniškės, 27 05 2016, 1 ♀ (P.I.).

***Agriopsis aurantiaria* (Hübner, 1799)**

Kalniškės, 10 10 2016, 1 spec., 25 10 2016, 5 spec., 31 10 2016, 3 spec. (P.I.).

***Campaea margaritata* (Linnaeus, 1767)**

Juodkrantė, 15 06 2016, 3 spec., 24- 25 08 2016, 2 spec. (P.I., J.R.).

***Chloroclysta siterata* (Hufnagel, 1767)**

Dūkštų Ažuolynas f., 02-16 10 2015, 1 spec., wine trap (P.I., J.R.); Kalniškės, 04-11 10 2015, 1 spec., 23 09 2016, 1 spec., 10 10 2016, 2 spec., 15 10 2016, 1 spec. (P.I.); Smėlynė, 10 09 2016, 1 spec. (P.I., J.R.).

***Epirrhoe galiata* (Dennis & Shiffermüller, 1775)**

Juodkrantė, 25 08 2016, 1 spec. (P.I., J.R.).

***Eustroma reticulata* (Dennis & Shiffermüller, 1775)**

Smėlynė, 10 09 2016, 1 spec. (P.I., J.R.).

***Chloroclystis v-ata* (Haworth, 1809)**

Kalniškės, 06- 07 05 2016, 4 spec. (P.I.).

NOTODONTIDAE

***Furcula bicuspis* (Borkhausen, 1790)**

Kalniškės, 26 05 2016, 1 spec., 02 06 2016, 1 spec. (P.I.); Perloja 28 05 2016, 1 spec.

***Drymonia dodonaea* (Dennis & Shiffermüller, 1775)**

Kalniškės, 01-02 06 2016, 3 spec. (P.I.).

***Peridea anceps* (Goeze, 1781)**

Kalniškės, 11-23 05 2016, 3 spec. (P.I.).

NOCTUIDAE

***Cucullia lychnitis* Rambur, 1833**

Paneriai, 08 2016, 10 caterpillars (P.I., J.R.).

***Amphipyra livida* (Denis & Schiffermüller, 1775)**

Kalniškės, 08 08 2016 1 spec., 05 10 2016, 1spec. , 09 10 2016, 1 spec. (P.I.).

***Rhizedra lutosa* (Hübner, 1803)**

Kalniškės, 04-11 10 2015, 1 spec. , 05 10 2016, 1 spec. , 10 10 2016, 1 spec. (P.I.).

***Hydroecia petasitis* Doubleday, 1847**

Obelija, 04 08 2016, 1 spec. (P.I., J.R.).

***Sedina buettneri* (E. Hering, 1858)**

Kalniškės, 23 09 2016, 1spec., 30 09 2016, 1 spec. (P.I.).

***Dryobatodes eremita* (Fabricius, 1775)**

Kalniškės, 10 09 2016, 1 spec. (P.I.).

***Aetheria bicolorata* (Denis & Schiffermüller, 1775)**

Kalniškės, 21 05 2016, 12 spec. (P.I.); Perloja, 28 05 2016, 1 spec. (P.I., J.R.).

***Hadena confusa* (Hufnagel, 1766)**

Kalniškės 02 06 2016, 1 spec., 11 06 2016, 1 spec., 02 07 2016, 1 spec. (P.I.).

***Hadena perplexa* (Denis & Schiffermüller, 1775)**

Perloja, 28 05 2016, 1 spec. (P.I., J.R.).

***Heliophobus kitti* (Schawerda, 1914)**

Perloja, 02 07 2016, 1 spec. (P.I., J.R.).

***Papestra biren* (Goeze, 1781)**

Perloja, 28 05 2016, 1 spec. (P.I., J.R.).

***Nonagria typhae* (Thunberg, 1784)**

Kalniškės, 20 09 2016, 1 spec. (P.I.).

***Mythimna albipuncta* (Denis & Schiffermüller, 1775)**

Kalniškės, 04 08 2016 , 2 spec.; 15 08 2016, 1 spec., 18 08 2016, 1 spec., 31 08 2016, 1 spec. (P.I.); Obelija, 04 08 2016, 46 spec. (P.I., J.R.); Rūdininkai, 03 09 2016, 3 spec. (P.I., J.R.); Smėlynė, 20 08 2016, 2 spec. (P.I., J.R.).

***Hyssa cavernosa* (Eversmann, 1842)**

Obelija, 04 08 2016, 1 spec. (P.I., J.R.).

***Athetis pallustris* (Hübner, 1818)**

Gerdašiai, 27 07 2016, 1 spec. (P.I., J.R.); Obelija, 04 08 2016, 1 spec. (P.I., J.R.).

***Proxenus lepigone* (Moschler, 1860)**

Obelija, 04 08 2016, 2 spec. (P.I., J.R.).

***Xylomoia strix* Mikkola, 1980**

Satkūnai Miškas f., 7 imagoes reared 19–24 03 2016 from the caterpillars, found 06 10 2015 (P.I., J.R.).

***Xylomoia graminea* (Graeser, 1889)**

Perloja, 28 05 2016, 1 spec. (P.I., J.R.).

***Callopietria juvenina* (Stoll, 1792)**

Kalniškės, 21 07 2016, 1 spec. (P.I.); Stojai, 02 07 2016, 1spec. (P.I., J.R.).

***Lithomoia solidaginis* (Hübner, 1803)**

Juodkrantė, 25 08 2016, 1 spec. (P.I., J.R.).

***Agrochola macilenta* (Hübner, 1809)**

Kalniškės, 04-11 2015, 1 spec., 17 10 2016, 1 spec., 23 09 2016, 1 spec., 29 09 2016, 2 spec., 05 10 2016, 3 spec., 10 10 2016, 13 spec., 15 10 2016, 5 spec., 21 10 2016, 1 spec., 25 10 2016, 5 spec. (vine trap), 31 10 2016, 5 spec. (P.I.).

***Brachyloimia viminalis* (Fabricius, 1776)**

Kalniškės, 21 07 2016, 1 spec. (P.I.).

***Celaena haworthii* (Curtis, 1829)**

Rūdininkai, 03 09 2016, 3 spec. (P.I., J.R.).

***Conistra rubiginosa* (Scopoli, 1763)**

Kalniškės, 21 10 2016, 1 spec., 28 10 2016, 1 spec., 31 10 2016, 1 spec. (P.I.).

***Xylena exsoleta* (Linnaeus, 1758)**

Dūkštų Ažuolynas f., 02-16 06 2015, 1 spec., vine trap (P.I., J.R.).

***Dichonia aprilina* (Linnaeus, 1758)**

Dūkštų Ažuolynas f., 19 10-02 11 2015, 1 spec., vine trap (P.I., J.R.); Kalniškės, 20 09 2016, 1 spec., 30 09 2016, 2 spec., 10 10 2016, 1 spec. (P.I.).

***Noctua fimbriata* (Schreber, 1759)**

Obelija, 04 08 2016, 1 spec. (P.I., J.R.).

***Noctua interjecta* Hübner, 1803**

Juodkrantė, 25 08 2016, 1 spec. (P.I., J.R.).

***Noctua janthe* (Borkhausen, 1792)**

Juodkrantė, 24 08 2016, 4 spec.; Lapnugaris preserve, 25 08 2016, 1 spec.; Obelija, 04 08 2016, 15 spec. (P.I., J.R.).

***Noctua janthina* (Denis & Schiffermüller, 1775)**

Obelija, 04 08 2016, 16 spec. (P.I., J.R.).

EREBIDAE

***Coscinia cribraria* (Linnaeus, 1758)**

Juodkrantė, 25 08 2016, 10 spec., 24 08 2016, 2 spec. (P.I., J.R.).

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

Gerdašiai, 24 06 2016, 1 spec. (P.I., J.R.).

***Pelosia obtusa* (Herrich-Schäffer, 1852)**

Gerdašiai, 27 07 2016, 1 spec. (P.I., J.R.); Kalniškės, 22 07 2016, 1 spec., 31 07 2016, 1 spec. (P.I.).

***Tyria jacobaeae* (Linnaeus, 1758)**

Gerdašiai, 24 06 2016, 1 spec.; Perloja, 28 05 2016, 10 spec. (P.I., J.R.).

***Diaphora mendica* (Clerck, 1759)**

Kalniškės 08, 17, 21 05 2016, 3 spec. (P.I.).

***Catocala fulminea* (Scopoli, 1763)**

Kalniškės, 31 07 2016 1 spec., 08 08 2016 1 spec. (P.I.).

***Catocala promissa* (Denis & Schiffermüller, 1775)**

Kalniškės, 23 07 2016, 1 spec. (P.I.).

LYMANTRIIDAE

***Laelia coenosa* (Hübner, 1808)**

Obelija, 04 08 2016, 1 spec. (P.I., J.R.).

Discussion

The large part of rare species mentioned in this list are widely distributed in Lithuania. Species *Rhigognostis hufnageli*, *Nephopterix angustela*, *Xylomoia graminea*, *Noctua janthe* and *N. janthina* seem to be spreading in Lithuania. New localities are reported for *Nephopterix angustela*, *Acrobasis obtusella*, *Xylomoia graminea*, *N. janthe* and *N. janthina*. The species *Synanthedon vespiformis*, *Lycaena dispar*, *L. helle*, *Aricia eumedon*, *Lopinga achine*, *Zygaena ephialtes* and *Tyria jacobaeae* are included in the Red Data Book of Lithuania. *Mythimna albipuncta* is known as migrant, not every year

occurring in Lithuania.

Pammene regiana was found in Lithuania in 2015. This species is distributed in all countries close to Lithuania; we have no data only from Belarus (Karsholt *et al.*, 2013). The host plant of this moth - *Acer pseudoplatanus* was introduced in Lithuania as ornament tree in parks. Now it spreads naturally. Detection of pupae under the bark of old trees is not complicated, but old trees of *A. pseudoplatanus* in Lithuania are quite rare.

Grapholita cotoneastri was found in Lithuania in 2016 using pheromones for *G. loboczewskii*. The species is distributed in Russia, Finland and Latvia (Nupponen & Šulcs, 2016).

Xylomoia strix is recorded from Finland, Estonia, Latvia, Poland, Russia Northwest (Karsholt *et al.*, 2013). Host plant *Equisetum hyemale* in some localities in Lithuania is very abundant, although species was detected only in northern part of Lithuania, close to Latvian border. According R. Haverinen, moths of this species are widely distributed in Estonia and Latvia (pers. comm.).

Acknowledgements

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Reti ir nauji Lietuvos faunos drugiai*P. IVINSKIS, J. RIMŠAITĖ***Santrauka**

Pateikiami duomenys apie 87 retas drugių rūšis ir vieną naują Lietuvos faunos drugių rūšį – *Grapholita cotoneastri* (Danilevsky, 1968) – priklausančias 21 šeimai. Dauguma rūšių plačiai paplitusios Lietuvoje. Rūšims *N. angustela*, *Acrobasis obtusella*, *Xylomoia graminea*, *N. janthe* ir *N. janthina* nurodomos naujos radavietės, o rūšys *Synanthedon vespiformis*, *Lycaena dispar*, *L. helle*, *Aricia eumedon*, *Lopinga achine*, *Zygaena ephialtes* ir *Tyria jacobaeae* įrašytos į Lietuvos Raudonąją knygą. Lapsukiai *Grapholita cotoneastri* pirmą kartą aptikti panaudojus feromonus.

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