

NEW DATA ON 63 RARE MOTH (LEPIDOPTERA) SPECIES FOR THE LITHUANIAN FAUNA

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Introduction

The first data on Lithuanian Lepidoptera were published by Carl Eduard von Eichwald (1795–1876) who was a professor of Vilnius University. In his work, *Zologia specialis*, 1830, he mentioned some moth species, including five species of Microlepidoptera (Ivinskis, 2003). Through the 1970' and 1980' numerous articles dealing with Lithuanian Microlepidoptera were published by Povilas Ivinskis, Vladimir Ivanovich Piskunov, Mikhail Kozlov, Saulius Pakalniškis, Giedrius Švitra and Ričardas Kazlauskas (Aarvik *et al.*, 2017). More important works have been published by Povilas Ivinskis (1993, 2004). The Lepidoptera in Lithuania are not fully investigated. The last catalogue of Lithuanian Lepidoptera includes 2423 species (Aarvik *et al.*, 2017). This article present new data on 63 rare and very rare species of moths (Lepidoptera) registered in 14 administrative districts and municipalities of Lithuania.

Material and Methods

The material was collected in different parts of Lithuania: in Druskininkai municipalities, Akmenė, Ignalina, Jonava, Jurbarkas, Kaišiadorys, Kaunas, Panevėžys, Šakiai, Šiauliai, Širvintos, Švenčionys, Tauragė and Varėna administrative districts. Lepidoptera were collected using an entomological net and light trapping at night (160W–500W DRL type bulb lamps were used). The major part of material was collected by the authors of this report Brigita Paulavičiūtė (B.P.) and Vytautas Inokaitis (V.I.). The rest species were collected by Vitalijus Bačianskas (V.Ba.), Vaida Paznekaitė (V.P.) and Romas Ferencas (R.F.). The material was identified by Brigita Paulavičiūtė.

The geographical coordinates were measured using a Garmin eTrex GPS receiver. The material is deposited in the collection of the Kaunas T. Ivanauskas Zoological Museum. Species were identified using the following sources: Hannemann, 1964; Traugott-Olsen & Nielsen, 1977; Zaguliaev *et al.*, 1978; Danilevskij *et al.*, 1981; Razowski, 1990; Emmet, 1996; Gielis, 1996; Huemer & Karsholt, 1999, 2010, 2013; Elsner *et al.*, 1999; Razowski, 2001; Emmet & Langmaid, 2002; Sruoga & Ivinskis, 2005; Tokár *et al.*, 2005; Slamka, 2006, 2008; Bengtsson & Johansson, 2008, 2011; Gaedike, 2015. Rarity categories have been established according to the checklist of Lepidoptera of Lithuania (Ivinskis, 2004).

List of localities

Locality	Administrative district	Coordinates (LAT, LONG)	
Astruvkos Miškas f.	Širvintos district	54.99084	24.66472
Babtų Miškas f.	Kaunas district	55.07223	23.87741
Bitvano Miškas f.	Kaunas district	55.04250	23.98972
Braziūkai	Kaunas district	54.90156	23.48392
Dūdiškės	Varėna district	54.14128	24.15669
Dūdiškės Miškas f.	Varėna district	54.14167	24.15389
Gaižiūnų Miškas f.	Jonavos district	55.01833	24.33556
Gaižuvėlės Miškas f.	Kaunas district	55.07542	23.58013
Ginučiai	Ignalina district	55.39400	25.98667
Jonava	Jonava district	55.07208	24.28594
Kalviai	Jurbarkas district	55.07222	23.35582
Karmėlavos Miškas f.	Kaunas district	54.93556	24.10444
Kaunas (1)	Kaunas mun.	54.90500	23.91361
Kaunas (2)	Kaunas mun.	54.92222	24.03778
Kamanos Nat. R.	Akmenė district	56.31140	22.64631
Kamšos Miškas f.	Kaunas district	54.90636	23.79827
Klebonišio Miškas f.	Kaunas district	54.93639	23.93000
Lokėnėlių Miškas f.	Jonava district	55.09626	24.36227
Lomankos Miškas f.	Kaunas district	54.97457	23.70014
Nevėžis landscape Pres.	Kaunas district	54.96275	23.80052
Pakretuonė	Švenčionys district	55.26856	26.04114
Pilėnų Miškas f.	Kaunas district	54.96278	24.03388
Rumšiškės	Kaišiadorys district	54.87946	24.18798
Slydžiai	Šiauliai district	55.83249	23.15750
Šilelis	Kaunas district	54.93834	23.75944
Tervydoniai	Šakiai district	55.02797	23.44917
Veliuona	Jurbarkas district	55.07526	23.29680
Viečiūnų Miškas f.	Druskininkai mun.	54.05111	24.06667
Viešvilė Nat. R. (1)	Jurbarkas district	55.12028	22.41750
Viešvilė Nat. R. (2)	Jurbarkas district	55.09608	22.40831
Viešvilė Nat. R. (3)	Tauragė district	55.13208	22.42167
Viešvilė Nat. R. (4)	Tauragė district	55.17874	22.45894
Viešvilė Nat. R. (5)	Tauragė district	55.15869	22.47425
Vilkariai	Švenčionys district	55.24553	25.71846
Vosniūnai Miškas f.	Panevėžys district	55.90114	24.70846

List of species

NEPTICULIDAE

***Stigmella zelleriella* (Snellen, 1875)**

Viešvilė Nat. R. (1), 29 07 2008, 1♂ (B.P.).

ADELIDAE

***Nematopogon pilella* (Denis & Schiffermüller, 1775)**

Dūdiškės, 20 05 2017, 1♂ (V.Ba.).

BUCCULATRICIDAE

***Bucculatrix demaryella* (Duponchel, 1840)**

Braziūkai, 30 05 2010, 1♂ (B.P.).

GRACILLARIIDAE

***Caloptilia betulicola* (M. Hering, 1928)**

Gaižuvėlės Miškas f. 05 05 2017, 1♂ (V.Ba.); Jonava, 28 07 2017, 1♀ (V.P.).

YPONOMEUTIDAE

***Swammerdamia caesiella* (Hübner, 1796)**

Babtų Miškas f., 14 05 2017, 1♂ (V.Ba.).

YPSOLOPHIDAE

***Ypsolopha scabrella* (Linnaeus, 1761)**

Kleboniškio Miškas f., 16 09 2016, 1 spec. (V.I.).

TORTRICIDAE

***Aethes francillana* (Fabricius, 1794)**

Kaunas (2), 16 07 2017, 1♀ (V.I.).

***Aethes rubigana* (Treitschke, 1830)**

Kaunas (1), 20 07 2017, 1 spec. (V.I.), 24 07 2017, 1♂ (V.I.).

***Aethes triangulana* (Treitschke, 1835)**

Kaunas (1), 21 06 2017, 1 spec. (V.I.).

***Cochylidia moguntiana* (Rössler, 1864)**

Gaižiūnų Miškas f., 26 07 2016, 1♂ (B.P.).

***Cochylis atricapitana* (Stephens, 1852)**

Ringovė entomological Pres., 04 08 2009, 1♂ (B.P.).

***Cochylis dubitana* (Hübner, 1799)**

Kaunas (2), 16 07 2017, 1♀ (V.I.).

***Acleris cristana* (Denis & Schiffermüller, 1775)**

Lomankos Miškas f., 08 05 2016, 1♀ (V.I.).

***Acleris ferrugana* (Denis & Schiffermüller, 1775)**

Braziūkai, 30 06 2010, 2♂ (B.P.); Karmėlavos Miškas f., 10 04 2017, 1 spec. (V.I.);
Kaunas (2), 07 07 2017, 3♂ (V.I.), 25 07 2017, 2 spec. (V.I.).

***Acleris laterana* (Fabricius, 1794)**

Kalviai, 28 09 2017, 4 spec. (V.I.); Karmėlavos Miškas f., 23 09 2017, 1 spec. (V.I);
Pakretuonė, 12 08 2017, 1 spec. (V.P.); Tervydoniai, 14 08 2007, 1 spec. (R.F.);
Viešvilė Nat. R. (2), 01 08 2008, 1 spec. (B.P.); Viešvilė nat. R. (5), 21 08 2007, 1
spec. (B.P.).

***Acleris notana* (Donovan, 1806)**

Kaunas (2), 16 07 2017, 1♂ (V.I.).

***Acleris rufana* (Denis & Schiffermüller, 1775)**

Kaunas (2), 22 03 2017, 1 spec., 07 07 2017, 1♂ (V.I.).

***Acleris sparsana* (Denis & Schiffermüller, 1775)**

Veliuona, 28 09 2017, 1♀ (V.Ba.).

***Eana incanana* (Stephens, 1852)**

Kaunas (1), 05 07 2016, 1♂ (V.I.); Lokėnėlių Miškas f., 07 07 2017, 1♂, 1♀ (V.I.);
Viečiūnų Miškas f., 07 07 2017, 1♀ (V.P.); Jonava, 28 07 2017, 1♀ (V.P.).

***Eana penziana* (Thunberg, 1891)**

Slydžiai, 24 07 2011, 1♀ (B.P.); Viečiūnų Miškas f., 10 07 2017, 1♀ (V.P.).

***Cnephasia asseclana* (Denis & Schiffermüller, 1775)**

Kamšos Miškas f., 28 06 2017, 1♀ (B.P.); Kaunas (1), 29 06 2016, 1♂, 18 07 2017, 1♀, 20 07 2017, 1 spec. (V.I.); Kaunas (2), 07 07 2017, 1♀ (V.I.); Lokėnėlių Miškas f., 07 07 2017, 1♀ (V.P.).

***Cnephasia incertana* (Treitschke, 1835)**

Kaunas (1), 09 06 2016, 1♀ (V.I.).

***Dichelia histrionana* (Frölich, 1828)**

Kaunas (1), 09 08 2016, 1 spec. (V.I.); Lomankos Miškas f., 30 07 2018, 1♂ (B.P.); Viešvilė Nat. R. (1), 31 07 2008, 2 spec. (B.P.); .

***Hedya dimidiana* (Clerck, 1759)**

Nevėžis landscape Pres., 20 06 2017, 1 spec. (B.P.).

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

Ginučiai, 26 06 2009, 1♀ (B.P.).

***Epinotia granitana* (Herrich-Schäffer, 1851)**

Kaunas (2), 06 06 2017, 1♂. (V.I.), det. B.P.

***Epinotia sordidana* (Hübner, 1824)**

Karmėlavos Miškas f., 23 09 2017, 2 spec. (1♀) (B.P.).

***Eucosma metzneriana* (Treitschke, 1830)**

Braziūkai, 30 05 2010, 1♂ (B.P.); Lokėnėlių Miškas f., 24 05 2016, 1 spec. (V.I.).

***Gravitarmata margarotana* (Heinemann, 1863)**

Dūdiškės, 20 05 2017, 2 spec. (V.I.); Šilelis, 20 04 2018, 2 spec. (V.I.); Viečiūnų Miškas f., 03 05 2018, 3 spec. (V.I.).

***Ancylis achatana* (Denis & Schiffermüller, 1775)**

Lokėnėlių Miškas f., 07 07 2017, 1♂ (V.P.).

***Ancylis tineana* (Hübner, 1799)**

Gaižuvėlės Miškas f., 28 06 2017, 1♀ (V.I.).

***Cydia coniferana* (Saxesen, 1840)**

Braziūkai, 30 07 2009, 1♂ (B.P.).

***Dichrorampha aeratana* (Pierce & Metcalfe, 1915)**

Nevėžis landscape Pres., 20 06 2017, 1♂ (B.P.).

OECOPHORIDAE

***Harpella forficella* (Scopoli, 1763)**

Tervydoniai, 11 07 2017, 1 spec. (R.F.); Pakretuonė, 12 08 2017, 1 spec. (V.P.).

DEPRESSARIIDAE

***Luquetia lobella* (Denis & Schiffermüller, 1775)**

Kaunas (1), 04 06 2016, 3 spec., 09 06 2016, 1 spec.; 14 06 2016, 1♀, 17 06 2016, 1 spec. (V.I.).

***Agonopterix assimilella* (Treitschke, 1832)**

Pilėnai Miškas f., 08 05 2016, 1♂ (V.I.).

***Agonopterix ciliella* (Stainton, 1849)**

Kaunas (1), 03 04 2017, 1♂ (V.I.).

***Agonopterix purpurea* (Haworth, 1811)**

Bitvano Miškas f., 05 09 2016, 1♂ (V.I.); Lomankos Miškas f., 08 05 2016, 1♂ (V.I.).

***Depressaria douglasella* Stainton, 1849**

Veliuona, 28 09 2017, 1♂ (V.Ba.).

***Depressaria emeritella* Stainton, 1849**

Braziūkai, 18 05 2010, 1 spec. (B.P.); Karmėlavos Miškas f., 23 09 2017, 3 spec. (B.P).

***Depressaria olerella* Zeller, 1854**

Kamanos Nat. R., 01 08 2000, 1♂, 1♀ (B.P.); Karmėlavos Miškas f., 23 09 2017, 1♀ (B.P.).

***Depressaria pulcherrimella* Stainton, 1849**

Karmėlavos Miškas f., 01 05 2006, 1♀ (V.I).

GELECHIIDAE

***Monochroa sepicolella* (Herrich-Schäffer, 1854)**

Braziūkai, 18 05 2010, 1♂, 30 05 2010, 2♂ (B.P.);

***Carpatolechia epomidella* (Tengström, 1869)**

Vosniūnai Miškas f., 06 06 2017, 1♂ (V.Ba.).

***Chionodes luctuella* (Hübner, 1793)**

Gaižuvėlės Miškas f., 28 06 2017, 2 spec (1♂) (V.Ba.); Viešvilė Nat. R. (2), 13 06 2007, 1♂ (B.P.).

***Cosmardia moritzella* (Treitschke, 1835)**

Kaunas (2), 06 06 2017, 1♀ (V.I.);

***Neofaculta infernella* (Herrich-Schäffer, 1854)**

Vosniūnai Miškas f., 06 06 2017, 1♂ (V.Ba.).

ELACHISTIDAE

***Elachista apicipunctella* Stainton, 1849**

Vilkariai, 30 05 2017, 1♂ (V.Ba.).

***Elachista subalbidella* Schläger, 1847**

Vilkariai, 30 05 2017, 2 spec. (1♂) (V.Ba.).

COLEOPHORIDAE

***Coleophora frischella* (Linnaeus, 1758)**

Viešvilė Nat. R. (3), 03 09 2008, 1 spec. (B.P.), Pakretuonė, 12 08 2017, 1♀ (V.P.).

***Coleophora clypeiferella* O. Hofmann, 1871**

Jonava, 04 08 2017, 1♀ (V.P.).

MOMPHIDAE

***Mompha sturnipennella* (Treitschke, 1833)**

Jonava, 22 08 2017, 1♂ (V.P.).

PYRALIDAE

***Synaphe punctalis* (Fabricius, 1775)**

Viešvilė Nat. R. (4), 28 07 2008, 2 spec. (B.P.).

***Dioryctria simplicella* Heinemann, 1863**

Viečiūnų Miškas f., 10 07 2017, 3♀ (V.P.); Viešvilė Nat. R. (3), 13 06 2007, 1♀ (B.P.).

***Assara terebrella* (Zincken, 1818)**

Kaunas (2), 19 06 2017, 1 spec. (V.I.); Viečiūnų Miškas f., 10 07 2011, 1 spec. (V.I.).

***Phycitodes binaevella* (Hübner, 1813)**

Braziūkai, 30 06 2010, 1♂; 21 06 2011, 2 spec. (B.P.); Jonava, 13 07 2017, 1♂ (V.P.).

***Scoparia basistrigalis* Knaggs, 1866**

Jonava, 30 06 2017, 1♂ (V.P.); Rumšiškės, 25 07 2004, 1♀ (B.P.).

***Eudonia laetella* (Zeller, 1846)**

Kaunas (1), 12 07 2017, 2 spec. (V.I.).

***Eudonia truncicolella* (Stainton, 1849)**

Pakretuonė, 12 08 2017, 1 ♀ (V.P.).

***Eudonia mercurella* (Linnaeus, 1758)**

Jonava, 04 09 2017, 1 ♀ (V.P.).

***Catoptria permiaca* (Petersen, 1924)**

Astruvkos Miškas f., 12 07 2016, 1 ♀ (V.I.); Kaunas (2), 25 07 2017, 1 ♀ (V.I.).

***Catoptria verellus* (Zincken, 1817)**

Tervydoniai, 23 08 2008, 1 spec. (R.F.).

***Diasemia reticularis* (Linnaeus, 1761)**

Kaunas (1), 31 05 2018, 1 spec. (V.I.).

Discussion

This article presents data on 63 rare and very rare moths of Lithuania. Species *Nematopogon pilella*, *Swammerdamia caesiella*, *Cydia coniferana*, *Luquetia lobella*, *Agonopterix purpurea*, *Chionodes luctuella*, *Mompha sturnipennella* are considered to be very rare species in Lithuania (Ivinskis, 2004).

Carpatolechia epomidella (Tengström, 1869) species is known from the north-eastern Europe. Moths wingspan is 17-18 mm. Forewing grayish mottled with many fuscous scales and with blackish brown spots: costal spots at base and at three-quarters, subcostal spot at one third, black streak in fold, one discal streak inconspicuous, a second discal streak pointing towards black dot in cell; black spots along termen. The adults occur from June to early July. *C. epomidella* is restricted to bogs and moors (Huemer & Karsholt, 1999). The larva has been recorded on *Ledum palustre* L. (Svensson, 1993).

C. epomidella was mentioned as found in Latvia (Savenkov *et al.*, 1996) and Estonia (Jürivete, 2003) (Ivinskis, 2004). It is abundantly reported (107 specimens) from the Čepkelių Raistas bog (Southern Lithuania) (Dapkus *et al.*, 2007). In the Nordic-Baltic Checklist of Lepidoptera (Aarvik *et al.*, 2017) *C. epomidella* is indicated as not found in Lithuania. According to available data, we can say, that *C. epomidella* is known in Lithuania since 2007 (Dapkus *et al.*, 2007).

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Nauji duomenys apie 63 retas drugių (Lepidoptera) rūšis Lietuvos faunai

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Santrauka

Straipsnyje pateikiami duomenys apie 63 retas ir labai retas drugių rūšis Lietuvoje. Kiekvienai rūšiai pateikiamos sugavimo vietos, data, individų skaičius, rinkėjai.

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