

**RARE FOR THE LITHUANIAN FAUNA LEPIDOPTERA SPECIES
FOUND IN NORTHWEST LITHUANIA IN 2015-2018***MANTAS KAUPYS*

Vilhelmo Berbomo 15-26, LT-92219 Klaipėda, Lithuania.

E-mail: mantaskaupys@gmail.com

Introduction

New data on the fauna of Lepidoptera in Lithuania is published every year. The latest data of the researches in western part of Lithuania are known from Palanga municipality, Klaipėda (Švitra *et al.*, 2017) and Neringa municipality (Ivinskis & Rimšaitė, 2017; Paulavičiūtė *et al.*, 2017). This paper provides information about 71 rare species of Lepidoptera found in 5 districts of the Northwest Lithuania in 2015–2018. Two recorded species – *Parnassius mnemosyne* and *Phibalapteryx virgata* are included in the Red Data Book of Lithuania. The number of individuals found, the date and finding locations with coordinates are given for each species.

Material and Methods

The main amount of data was collected during field trips in 2015-2018. Observations were carried out in 26 locations in Klaipėda, Kretinga, Skuodas, Mažeikiai districts and Palanga municipality. Standard entomological methods were used for the collecting of specimens: sugaring, netting and light-trapping with the help of 500 W blended mercury lamp bulb. Part of data in the research area of Ylakiai was collected using automatic light trap with 250 W blended mercury lamp bulb.

The material was identified using various identification guides (Kazlauskas, 1984, 2008; Koch, 1991; Sterling & Parsons, 2012). Most of the collected specimens are preserved in the private collection of the author.

List of localities

Locality	Administrative district	Coordinates (LAT, LONG)
Antroji Melnragė, dunes	Klaipėda district	55.75702, 21.08331
Aukštkalvių Miškas f. (1)	Kretinga district	55.93288, 21.38807
Aukštkalvių Miškas f. (2)	Kretinga district	55.93274, 21.38657
Būtingė, dunes	Palanga mun.	56.05929, 21.06986
Falsbergo Miškas f.	Mažeikiai district	56.33954, 22.29946
Gedrimai, open pit	Skuodas district	56.29900, 21.88885
Grūšlaukės Miškas f.	Kretinga district	56.05282, 21.42772
Ylakiai	Skuodas district	56.27781, 21.84756
Jautakiai, Venta river valley	Mažeikiai district	56.32042, 22.26012
Kairiai	Klaipėda district	55.62450, 21.17170
Kalnėnai botanical park	Skuodas district	56.29585, 21.81388
Kiškėnai, Mažeikių Miškas f.	Klaipėda district	55.69826, 21.26156
Kražiškiai, Varduva river valley (1)	Mažeikiai district	56.27888, 22.07206

Kražiškiai, Varduva river valley (2)	Mažeikiai district	56.27531, 22.07341
Lapieniškių Miškas f. (1)	Klaipėda district	55.81614, 21.26526
Lapieniškių Miškas f. (2)	Klaipėda district	55.81813, 21.27825
Mažučiai, closed peatbog	Kretinga district	56.02469, 21.23058
Padegimė	Skuodas district	56.12366, 21.93653
Perkūnai (1)	Klaipėda district	55.75625, 21.50549
Perkūnai (2)	Klaipėda district	55.74368, 21.50681
Repšių Miškas f.	Mažeikiai district	56.30503, 22.13414
Sriaupiai, Luknė river valley	Skuodas district	56.21859, 21.34553
Šventoji (1)	Palanga mun.	56.02773, 21.09988
Šventoji (2)	Palanga mun.	56.03063, 21.10214
Šventosios Miškas f.	Kretinga district	56.03147, 21.14186
Viršilai, Gėsalai geomorfological reserve	Skuodas district	56.32870, 21.77513

List of species

NOLIDAE

***Bena bicolorana* (Fuessly, 1775)**

Mažučiai, closed peatbog, 07 07 2018, 1 spec.

***Meganola strigula* (Denis & Schiffermüller, 1775)**

Šventosios Miškas f., 16 06 2018, 1 spec.

***Nycteola degenerana* (Hübner, 1799)**

Aukštkalvių Miškas f. (2), 02 09 2018, 1 spec.; Grūšlaukės Miškas f., 15 04 2018, 2 spec. 16 08 2018, 1 spec.; Šventoji (2), 11 05 2018, spec.; Šventosios Miškas f., 20 04 2018, 1 spec.

***Nycteola revayana* (Scopoli, 1772)**

Lapieniškių Miškas f. (1), 17 07 2018, 1 spec.

DREPANIDAE

***Polyploca ridens* (Fabricius, 1787)**

Ylakiai, 13 05 2018, 1 spec.; Padegimė, 05 05 2018, 1 spec.; Perkūnai (1), 01 05 2018, 4 spec.

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

Perkūnai (1), 08 06 2018, 4 spec.

SATURNIIDAE

***Aglia tau* (Linnaeus, 1758)**

Perkūnai (1), 08 05 2018, 1 spec.

***Saturnia pavonia* (Linnaeus, 1758)**

Grūšlaukės Miškas f., 29 04 2018, 1 spec.; Perkūnai (1), 01 05 2018, 1 spec.; Sriaupiai, Luknė river valley, 13 05 2018, 1 spec.

NOTODONTIDAE

***Clostera anastomosis* (Linnaeus, 1758)**

Antroji Melnragė, dunes, 03 09 2018, 1 spec.; Aukštkalvių Miškas f. (2), 11 07 2018, 1 spec.

***Harpya milhauseri* (Fabricius, 1775)**

Sriaupiai, Luknė river valley, 13 05 2018, 1 spec.

***Pygaera timon* (Hübner, 1803)**

Grūšlaukės Miškas f., 16 05 2018, 1 spec.

COSSIDAE

***Zeuzera pyrina* (Linnaeus, 1761)**

Lapieniškių Miškas f. (1), 17 07 2018, 1 spec.

HEPIALIDAE

***Korscheltellus fusconebulosa* (De Geer, 1778)**

Aukštkalvių Miškas f. (2), 11 07 2018, 1 spec.

PSYCHIDAE

***Canephora hirsuta* (Poda, 1761)**

Aukštkalvių Miškas f. (1), 04 06 2018, 1 spec.

TINEIDAE

***Scardia boletella* (Fabricius, 1794)**

Mažučiai, closed peatbog, 23 07 2018, 1 spec.

CRAMBIDAE

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

Kairiai, 14 10 2018, 1 spec.

LASIOCAMPIDAE

***Gastropacha populifolia* (Esper, 1784)**

Būtingė, dunes, 09 07 2018, 1 spec.

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

Kairiai, 25 08 2018, 1 spec.

PAPILIONIDAE

***Parnassius mnemosyne* (Linnaeus, 1758)**

Šventoji (1), 16 06 2018, 1 spec.

LYCAENIDAE

***Thecla betulae* (Linnaeus, 1758)**

Ylakiai, 28 07 2018, 1 spec.

NOCTUIDAE

***Antitype chi* (Linnaeus, 1758)**

Antroji Melnragė, dunes, 03 09 2018, 1 spec.; Kairiai, 25 08 2018, 1 spec.

***Archanara dissoluta* (Treitschke, 1825)**

Kiškėnai, Mažeikių Miškas f., 19 07 2018, 1 spec.

***Amphipyra berbera* (Rungs, 1949)**

Lapieniškių Miškas f. (1), 17 07 2018, 3 spec.

***Apamea anceps* (Denis & Schiffermüller, 1775)**

Būtingė, dunes, 07 06 2018, 1 spec.

***Apamea lithoxylaea* (Denis & Schiffermüller, 1775)**

Kairiai, 08 07 2018, 3 spec.

***Callopietria juvenina* (Stoll, 1782)**

Šventosios Miškas f., 15 07 2018, 1 spec.

***Chilodes maritima* (Tauscher, 1806)**

Būtingė, dunes, 09 07 2018, 2 spec.; Kairiai, 17 06 2018, 1 spec.; Šventosios Miškas f., 25 07 2018, 1 spec.

***Cryptocala chardinyi* (Boisduval, 1829)**

Aukštkalvių Miškas f. (2), 11 07 2018, 1 spec.; Perkūnai (1), 16 07 2018, 1 spec.

***Cucullia chamomillae* (Denis & Schiffermüller, 1775)**

Kalnėnai botanical park, 09 06 2015, 1 spec.

***Dryobotodes eremita* (Fabricius, 1775)**

Lapieniškių Miškas f. (1), 30 08 2018, 4 spec. 06 09 2018, 1 spec.; Lapieniškių Miškas f. (2), 21 09 2018, 1 spec.

***Eucarta virgo* (Treitschke, 1835)**

Grūšlaukės Miškas f., 16 08 2018, 1 spec.; Kairiai, 17 06 2018, 1 spec.; Lapieniškių Miškas f. (1), 30 08 2018, 1 spec., 06 09 2018, 1 spec.; Lapieniškių Miškas f. (2), 13 08 2018, 1 spec., 21 09 2018, 1 spec.; Kražiškiai, Varduva river valley (2), 22 07 2018, 1 spec.; Mažučiai, closed peatbog, 07 07 2018, 3 spec.

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

Ylakiai, 26 06 2018, 1 spec.

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

Kražiškiai, Varduva river valley (1), 26 05 2018, 1 spec.

***Hyppa rectilinea* (Esper, 1788)**

Antroji Melnragė, dunes, 11 08 2018, 1 spec.; Šventosios Miškas f., 30 05 2018, 1 spec.

***Lenisa geminipuncta* (Haworth, 1809)**

Mažučiai, closed peatbog, 23 07 2018, 1 spec.; Šventosios Miškas f., 25 07 2018, 1 spec.

***Leucania obsoleta* (Hübner, 1803)**

Falsbergo Miškas f., 23 05 2018, 1 spec.; Jautakiai, Venta river valley, 10 06 2018, 2 spec.; Kairiai, 29 05 2018, 2 spec.; Padegimė, 23 05 2018, 1 spec.

***Luteohadena luteago* (Denis & Schiffermüller, 1775)**

Kairiai, 17 06 2018, 1 spec. 08 07 2018, 1 spec.

***Mesogona oxalina* (Hübner, 1803)**

Lapieniškių Miškas f. (1), 30 08 2018, 1 spec.

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

Kairiai, 14 10 2018, 4 spec.; Lapieniškių Miškas f. (1), 13 10 2018, 1 spec.

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

Mažučiai, closed peatbog, 07 07 2018, 1 spec.

***Mythimna straminea* (Treitschke, 1825)**

Kairiai, 08 07 2018, 1 spec.; Mažučiai, closed peatbog, 23 07 2018, 1 spec.

***Naenia typica* (Linnaeus, 1758)**

Aukštkalvių Miškas f. (2), 11 07 2018, 1 spec.; Repšių Miškas f., 04 08 2018, 1 spec.

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

Kairiai, 18 07 2018, 2 spec. 20 07 2018, 1 spec.; Šventosios Miškas f., 25 07 2018, 1 spec.

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

Kairiai, 18 07 2018, 1 spec.; Kiškėnai, Mažeikių Miškas f., 19 07 2018, 1 spec.

***Orthosia miniosa* (Denis & Schiffermüller, 1775)**

Perkūnai (1), 01 05 2018, 1 spec. 08 05 2018, 2 spec.; Perkūnai (2), 14 05 2018, 1 spec.

***Phlogophora meticulosa* (Linnaeus, 1758)**

Lapieniškių Miškas f. (2), 13 08 2018, 1 spec.

***Phragmatiphila nexa* (Hübner, 1808)**

Lapieniškių Miškas f. (1), 06 09 2018, 1 spec.

***Senta flammea* (Curtis, 1828)**

Falsbergo Miškas f., 23 05 2018, 4 spec.; Sriaupiai, Luknė river valley, 13 05 2018, 1 spec.; Šventosios Miškas f., 30 05 2018, 1 spec.

***Sideridis turbida* (Esper, 1790)**

Šventosios Miškas f., 30 05 2018, 1 spec.

***Staurophora celsia* (Linnaeus, 1758)**

Viršilai, Gėsalai geomorfological reserve, 07 08 2018, 1 spec.

***Tiliacea citrago* (Linnaeus, 1758)**

Lapieniškių Miškas f. (1), 30 08 2018, 6 spec., 06 09 2018, 1 spec.; Perkūnai (2), 18 09 2018, 1 spec.

***Xestia stigmatica* (Hübner, 1813)**

Ylakiai, 06 08 2018, 1 spec.

GEOMETRIDAE

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

Kiškėnai, Mažeikių Miškas f., 17 10 2017, 2 spec.

***Acasis viretata* (Hübner, 1799)**

Grūšlaukės Miškas f., 16 05 2018, 1 spec.; Ylakiai, 13 05 2018, 1 spec.; Kairiai, 10 05 2018, 1 spec.

***Apeira syringaria* (Linnaeus, 1758)**

Šventosios Miškas f., 15 06 2018, 1 spec.

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

Lapieniškių Miškas f. (1), 30 08 2018, 1 spec.; Lapieniškių Miškas f. (2), 13 08 2018, 1 spec.

***Catarhoe rubidata* (Denis & Schiffermüller, 1775)**

Kairiai, 17 06 2018, 1 spec.

***Cleorodes lichenaria* (Hufnagel, 1767)**

Grūšlaukės Miškas f., 21 07 2018, 4 spec.; Kiškėnai, Mažeikių Miškas f., 19 07 2018, 1 spec.; Kražiškiai, Varduva river valley (2), 22 07 2018, 1 spec.; Lapieniškių Miškas f. (1), 17 07 2018, 2 spec.; Mažučiai, closed peatbog, 23 07 2018, 1 spec.; Perkūnai (1), 16 07 2018, 3 spec.; Perkūnai (2), 24 07 2018, 1 spec.

***Epirranthis diversata* (Denis & Schiffermüller, 1775)**

Perkūnai (1), 16 04 2018, 3 spec.

***Euphyia biangulata* (Haworth, 1809)**

Kairiai, 17 06 2018, 1 spec., 07 08 2018, 1 spec., 20 08 2018, 1 spec.

***Gagitodes sagittata* (Fabricius, 1787)**

Grūšlaukės Miškas f., 09 06 2018, 1 spec.

***Ourapteryx sambucaria* (Linnaeus, 1758)**

Jautakiai, Venta river valley, 10 06 2018, 1 spec.; Mažučiai, closed peatbog, 07 07 2018, 1 spec.; Sriaupiai, Luknė river valley, 28 06 2018, 1 spec.; Lapieniškių Miškas f. (1), 13 10 2018, 1 spec.

***Perizoma affinitata* (Stephens, 1831)**

Falsbergo Miškas f., 23 05 2018, 1 spec.; Kražiškiai, Varduva river valley (1), 26 05 2018, 1 spec.; Šventosios Miškas f., 30 05 2018, 2 spec.

***Phibalapteryx virgata* (Hufnagel, 1767)**

Kairiai, 17 06 2018, 2 spec.

***Stegania cararia* (Hübner, 1790)**

Aukštkalvių Miškas f. (2), 11 07 2018, 1 spec.

***Triphosa dubitata* (Linnaeus, 1758)**

Aukštkalvių Miškas f. (2), 27 07 2018, 1 spec.; Grūšlaukės Miškas f., 21 07 2018, 1 spec.; Kairiai, 18 07 2018, 1 spec.; Šventosios Miškas f., 15 07 2018, 1 spec.

EREBIDAE

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

Aukštkalvių Miškas f. (2), 11 07 2018, 5 spec.; Grūšlaukės Miškas f., 21 07 2018, 1 spec.; Lapieniškių Miškas f. (1), 17 07 2018, 5 spec.; Perkūnai (1), 16 07 2018, 1 spec.; Perkūnai (2), 24 07 2018, 1 spec.

***Catocala sponsa* (Linnaeus, 1767)**

Aukštkalvių Miškas f. (2), 27 07 2018, 1 spec.; Grūšlaukės Miškas f., 21 07 2018, 1 spec.; Padegimė, 02 08 2018, 1 spec.

***Epatolmis luctifera* (Denis & Schiffermüller, 1775)**

Šventosios Miškas f., 30 05 2018, 1 spec.

***Macrochilo cribrumalis* (Hübner, 1793)**

Būtingė, dunes, 07 06 2018, 1 spec.

***Pelosia obtusa* (Herrich-Schäffer, 1847)**

Grūšlaukės Miškas f., 21 07 2018, 1 spec.; Lapieniškių Miškas f. (1), 17 07 2018, 1 spec. Mažučiai, closed peatbog, 07 07 2018, 1 spec.; Šventosios Miškas f., 15 07 2018, 2 spec.

Discussion

Cleorodes lichenaria until now was considered as very rare species (Kazlauskas, 1984; Ivinskis, 2004). Recent researches has shown that this species is widespread and common throughout the northwest region of Lithuania (Kaupys 2016, 2017). *C. lichenaria* was found in almost every mixed and deciduous forest that was explored from mid-July to early August. This species feeds on lichens, probably because of this reason individual moths were often found in gardens.

Perizoma affinitata – another rare species, which is also more widespread than it was considered until now. Over the last three years, individual moths were observed on the edges of larger forests in Mažeikiai, Skuodas, Kretinga and Klaipėda districts. The larvae of *P. affinitata* feed on seed capsules of *Silene* sp. and *Lychnis* sp. (Kazlauskas, 1984).

According to literature *Catocala promissa* and *Catocala sponsa* inhabit similar habitats – warm oak forests (Wagner, 2018). It was noticed that *C. promissa* in Northwest Lithuania is becoming more common species which is found in various habitats – parks, gardens, deciduous and mixed forests. *C. sponsa* is a rarer species compared to *C. promissa* – individual moths were caught only in larger than 50 hectares forests with oaks (*Quercus*).

Several rare species were observed in Kretinga district. One of them is *Callopietria juvenina* which was found in Šventosios Miškas f. This is a rare species which is mainly known to be found in southern and eastern parts of Lithuania. This fact indicates that the species is successfully expanding its area throughout the country. According to the latest publications, single individuals of *C. juvenina* were recorded in Varėna, Vilnius, Švenčionys districts and Druskininkai municipality (Švitra *et al.*, 2017).

Another important finding is *Epatolmis luctifera* – very rare subboreal relic in the Baltic states (Kazlauskas, 1984). Until this century only few moths were known in Lithuania (Kazlauskas, 2008). According to the latest data, two moths were observed in Plungė district in 2012 (LepiBase, 2018). In 2018, one individual of *E. luctifera* was found during the research in Kretinga district (Fig.1). The species inhabits nutrient-poor, but partially higher growing grasslands, only once cut hay meadows, dry slopes and

similar hot, dry and only extensively used open lands (Wagner, 2018). The larvae polyphagous, feed on various herbaceous plants especially low growing herbs such as *Veronica* sp., *Euphorbia* sp., *Stellaria* sp., *Taraxacum* sp., *Rubus* sp. (Kazlauskas, 2008).



Fig. 1. *Epatolmis luctifera*



Fig. 2. *Palpita vitrealis*

Several rare species have been found in Kairiai military landfill site, two of them are worth mentioning separately. *Palpita vitrealis* is one of them (Fig.2). The first and only

one published finding fact of this species in Lithuania was from Nagliai reserve (Ivinskis, Rimšaitė, 2012). It is a migrant species which primarily inhabits coastal localities (Sterling, Parsons, 2012). *P. vitrealis* is widespread in Europe and is known in the neighboring countries – Estonia, Latvia and Poland (Aarvik *et al.*, 2017).

Another finding is *Phibalapteryx virgata* – very rare species which is included in the Red Data Book of Lithuania (Rašomavičius, 2007). This species inhabits south to west exposed, partly also flat, low growing and warm nutrient-poor grasslands (Wagner, 2018).

During the research in Kairiai other rare species were found, such as *Apamea lithoxylaea*, *Catarhoe rubidata*, *Euphyia biangulata*, *Luteohadena luteago*, *Mythimna albipuncta*, *Noctua janthe*, *N. janthina*.

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Retos Lietuvos faunos drugių rūšys aptiktos šiaurės vakarų Lietuvoje 2015-2018 metais

M. KAUPYS

Santrauka

Straipsnyje pateikiami duomenys apie 2015–2018 metais aptiktas retas drugių rūšis šiaurės vakarų Lietuvoje. Dvi rastos rūšys – *Parnassius mnemosyne* ir *Phibalapteryx virgata* yra įtrauktos į Lietuvos Raudonąją knygą. Kiekvienai rūšiai pateikiamos radvietės, radimo data ir stebėtų individų skaičius.

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