

**NEW DATA ON 38 RARE FOR THE LITHUANIAN FAUNA  
LEPIDOPTERA SPECIES RECORDED IN 2019**

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**Introduction**

Lepidoptera is one of the most widespread and widely recognizable insect orders in the world. It can show many variations of the basic body structure that have evolved to gain advantages in lifestyle and distribution. We can find more than 180,000 species of Lepidoptera in the world, which belong to 126 families and 46 superfamilies (Mallet, 2007). There are 482 species in Europe, 451 of them being found in the 27 member states. Almost a third of these species (142 species) are endemic to Europe (Van Swaay *et al.*, 2008). Today more than 2500 species of Lepidoptera are known in Lithuania. Every year new and rare species for Lithuania fauna are discovered (Ivinskis & Rimšaitė, 2018).

This article presents new data on 38 rare for Lithuania moth and butterflies species. They were registered in 4 administrative districts of Lithuania. One species - *Chariaspilates formosaria* (Eversmann, 1837) is included in the Red Data Book of Lithuania (Rašomavičius, 2007).

**Material and Methods**

## List of localities

Locality	Administrative district	Coordinates (LAT, LONG)
Braziūkai	Kaunas district	54.901195 , 23.483855
Kaunas	Kaunas district	54.904578 , 23.913688
Laumikoniai	Molėtai district	55.051322 , 25.447034
Paliepės Miškas f. (1)	Varėna district	54.10769 , 24.304256
Paliepės Miškas f. (2)	Varėna district	54.107855 , 24.30469
Paliepės Miškas f. (3)	Varėna district	54.112368 , 24.309553
Plateliai (1)	Plungė district	56.041735 , 21.814796
Plateliai (2)	Plungė district	56.038453 , 21.818643
Puvočiai (1)	Varėna district	54.118689 , 24.305286
Puvočiai (2)	Varėna district	54.117875 , 24.303487
Puvočiai (3)	Varėna district	54.117917 , 24.305896
Puvočiai (4)	Varėna district	54.118796 , 24.305167
Puvočiai (5)	Varėna district	54.120099 , 24.305251

The material was collected in different parts of Lithuania: in Kaunas, Molėtai, Plungė and Varėna administrative districts. Lepidoptera were collected using an entomological net and light trapping at night (500W DRL type bulb lamp was used). The species were

collected by the leading author of this article, Vytautas Inokaitis (V.I.). The geographical coordinates were measured using a Garmin eTrex GPS receiver. The material is deposited in the collection of the Kaunas T. Ivanauskas Museum of Zoology. Species were identified using the following sources: Bleszynski, 1965; Kazlauskas, 1984, 2008; Skou, 1986; Fibiger, 1993; Fajčík, 1998; Špatenka *et al.*, 1999; Buszko, 2000; Laštůvka & Laštůvka, 2001; Ronkay *et al.*, 2001; Mironov, 2003; Ivinskis & Augustauskas, 2004; Hausmann, 2004; Leraut, 2009; Nowacki, 2009. Rarity categories have been established according to the checklist of Lepidoptera of Lithuania (Ivinskis, 2004; Ivinskis & Rimšaitė, 2018).

## List of species

### SESIIDAE

#### *Synansphecchia triannuliformis* (Freyer, 1845)

Braziūkai, 25 06 2019, 1 spec.

### COSSIDAE

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

Laumikoniai, 11 06 2019, 1 spec.

### NYMPHALIDAE

#### *Melitaea britomartis* Assman, 1847

Paliepės Miškas f. (1), 19 06 2019, 4 spec.

#### *Melanargia galathea* (Linnaeus, 1758)

Paliepės Miškas f. (1), 01 07 2019 1 spec.

### GEOMETRIDAE

#### *Stegania cararia* (Hubner, 1790)

Laumikoniai, 11 06 2019, 1 spec.

#### *Isturgia arenacearia* (Denis & Schiffermuller, 1775)

Puvočiai (5), 29 08 2019, 1 spec.; Paliepės Miškas f. (3), 28 08 2019, 1 spec.

#### *Lycia pomonaria* (Hubner, 1790)

Kaunas, 23 03 2019, 1 spec.

#### *Peribatodes secundarius* (Denis & Schiffermüller, 1775)

Kaunas, 09 10 2019, 1 spec.

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

Kaunas, 26 05 2019, 1 spec., 17 08 2019 1 spec.; Plateliai (2), 09 09 2019, 2spec.,

Plateliai (1), 12 09 2019 1 spec.

#### *Chariaspilates formosaria* (Eversmann, 1837)

Puvočiai (1), 19 06 2019, 1 spec.

#### *Rhodostrophia vibicaria* (Clerck, 1759)

Braziūkai, 25 06 2019, 2 spec.

#### *Lythria purpuraria* (Linnaeus, 1758)

Puvočiai (1), 19 06 2019, 1 spec.; Puvočiai (2), 24 07 2019, 1 spec.; Puvočiai (3), 25 07 2019, 1 spec.

### LASIOCAMPIDAE

#### *Gastropacha populifolia* (Denis & Schiffermuller, 1775)

Laumikoniai, 10 06 2019, 1 spec.

NOTODONTIDAE

***Ptilodon cucullina* (Denis & Schiffermuller, 1775)**

Laumikoniai, 12 06 2019, 1spec.

EREBIDAE

***Catocala electa* (Vieweg, 1790)**

Puvočiai (5), 27 08 2019, 1spec.; Puvočiai (4), 26 08 2019, 1 spec.

***Calyptra thalictri* (Borkhausen, 1790)**

Puvočiai (2), 24 07 2019, 6 spec.

***Spiris striata* (Linnaeus, 1758)**

Laumikoniai, 11 06 2019, 1spec.

***Pericallia matronula* (Linnaeus, 1758)**

Puvočiai (1), 19 06 2019, 2 spec.

NOCTUIDAE

***Acronicta cinerea* (Hufnagel, 1766)**

Paliepės Miškas f. (2), 23 07 2019, 1spec.

***Cryphia algae* (Fabricius, 1775)**

Kaunas, 29 07 2019, 2 spec.; 27 07 2019, 3 spec.; 20 07 2019, 1 spec.

***Cryphia ereptricula* (Treitschke, 1825)**

Kaunas, 28 07 2019, 1 spec.

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

Paliepės Miškas f. (2), 23 07 2019, 1 spec.

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

Puvočiai (1), 12 06 2019, 1spec.; Braziūkai, 25 06 2019, 1 spec.; Laumikoniai, 13 06 2019, 1 spec.

***Mesogona oxalina* (Hubner, 1803)**

Kaunas, 02 09 2019, 1spec.; Paliepės Miškas f. (3), 28 08 2019, 1 spec.

***Tiliacea citrigo* (Linnaeus, 1758)**

Kaunas, 05 09 2019, 1 spec.

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

Kaunas, 06 04 2019, 1 spec.; 13 10 2019, 1 spec.

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

Kaunas, 14 09 2019, 1 spec.; 21 09 2019 1 spec.; Plateliai (2), 09 09 2019, 2 spec.; Plateliai (1), 10 09 2019, 4 spec.; 12 09 2019, 3 spec.

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

Puvočiai (5), 27 08 2019, 1 spec.

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

Puvočiai (4), 6 08 2019, 2 spec.

***Chortodes extrema* (Hubner, 1809)**

Braziūkai, 25 06 2019, 6 spec.

***Hadena albimacula* (Borkhausen, 1792)**

Laumikoniai, 12 06 2019, 1 spec.

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

Kaunas, 20 08 2019, 1 spec.; 07 08 2019, 1 spec.; 08 08 2019, 1 spec.; Puvočiai (4) 26 08 2019, 1 spec.

***Mythimna l-album* (Linnaeus, 1767)**

Kaunas, 05 09 2019, 1 spec.; 21 09 2019, 1 spec.; 29 09 2019, 1 spec.

***Noctua interposita* (Hubner, 1790)**

Laumikoniai, 13 06 2019, 1 spec.; Puvočiai (5), 27 08 2019, 2 spec.

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

Kaunas, 17 08 2019, 2 spec.; 30 08 2019, 1 spec.; Puvočiai (2), 24 07 2019, 3 spec.; Puvočiai (3), 25 07 2019, 1 spec.; Puvočiai (5), 29 08 2019, 2 spec.; Puvočiai (4), 26 08 2019, 1 spec.

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

Kaunas, 31 07 2019, 1 spec.; 06 08 2019, 2 spec.; 13 08 2019, 1 spec.; Puvočiai (2), 23 07 2019, 1 spec.; 24 07 2019, 1 spec.; Puvočiai (3), 25 07 2019, 1 spec.

***Agrotis bigramma* (Esper, 1790)**

Plateliai (1), 10 09 2019, 1 spec.

## NOLIDAE

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

Puvočiai (1), 19 06 2019, 1 spec.

**Discussion**

*Ptilodon cucullina* (Denis & Schiffermuller, 1775) is a moth of the family Notodontidae and is a very rare and local species in Lithuania. The first time *P. cucullina* was found in Lithuania was in 1968 (Kazlauskas, 1984, 2008). It is distributed widely from south and central Europe, Asia to Far East (Karsholt & Nieuwerkerken, 2013). *P. cucullina* is a polyphagous species. Larval foodplants are *Acer pseudoplatanus* and *A. campestre* (Jakišć, 2017). Habitats are mixed and deciduous forests, parks and cities with *Acer* trees. The moths are on wing from May to July (Kazlauskas, 1984, 2008).

*Isturgia arenacearia* (Denis & Schiffermuller, 1775) is a moth of the family Geometridae. *I. arenacearia* is rare in Lithuania and until today was recorded just in 7 districts and municipalities: Lazdijai, Pasvalys, Švenčionys, Trakai, Varėna, Vilnius districts and Druskininkai municipality (Kazlauskas, 1984; Ivinskis, 1993, 2004; Ivinskis & Rimšaitė, 2016; Švitra *et al.*, 2016, 2018) This species is xerophilous and is distributed from Europe through Central Asia and Siberia to Japan (Nestorova, 1998). Wingspan of *I. arenacearia* is 21–27 mm. The larvae feed on *Coronilla varia*, *Trifolium* species and various Fabaceae. Adults fly in two generations from June to September (Skou & Sihvonen, 2015).

*Agrotis bigramma* (Esper, 1790) is a moth of the family Noctuidae and this species was recorded in Lithuania in 2016 the first time (Švitra *et al.*, 2016) and can be treated as migrant there. *A. bigramma* is distributed from Southern and Central Europe along the southern shores of the Baltic Sea to China, the Near East and North Africa. Also, it is known from Norway, Sweden, Finland, Great Britain, Ireland, Estonia, Poland and Belarus (Clancy *et al.*, 2012; Karsholt & Nieuwerkerken, 2013; Aarvik *et al.*, 2017). Wingspan of *A. bigramma* is 36–50 mm. Larvae feed on species of Poacea and low density vegetation (Hacker, 2001). The flight period is from July to September. *A. bigramma* is usually found in open, dry and warm habitats (Nowacki, 1998).

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## Nauji duomenys apie 38 retas Lietuvos faunos drugių rūšis

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### Santrauka

Straipsnyje pateikiami duomenys apie 38 retai ir labai retas Lietuvos faunos drugių rūšis. Taip pat pateikiama drugių rūšių informacija su radimo vietomis, koordinatėmis, data ir individų skaičiumi. Drugiai buvo renkami 4 rajonuose ir savivaldybėse. Viena drugių rūšis *Chariaspilates formosaria* (Eversmann, 1837) yra įtraukta į Lietuvos Raudonąją knygą.

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