# NEW RECORDS OF NOCTURNAL MACROLEPIDOPTERA IN GUDELIAI REGION (ŠALČININKAI DISTRICT, SOUTH EASTERN LITHUANIA)

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## Introduction

Šalčininkai district is located in the south eastern part of Lithuania, close to Belarus border. Forests occupy approximately 44% of the district's territory. Rūdninkų Giria forest complex is one of the largest forests in Lithuania. Part of it (20080,50 ha) has the status of the biosphere polygon since 2004 (State Service for Protected Areas..., 2014). Rūdninkų Giria forest and its various habitats attracted attention of entomologists since the beginning of the XX-th century (Prüffer, 1947; Kazlauskas, 1984, 2004, 2008; Ivinskis, 2004; Švitra *et al.*, 2011, 2013; Ūsaitis, 2011).

The aim of this report is to present new data on interesting records of Macrolepidoptera species collected in this region in 2013 and 2014.

## **Material and Methods**

The studies of nocturnal Macrolepidoptera were carried out in Gudeliai village (54°22'33.4"N, 25°17'0.9"E) in 2013 and 2014. It is a small village (its territory is about 130 ha) located in the eastern part of Rūdninkai Giria forest complex and surrounded by Gudelių Miškas to the north and Kidarų Miškas forest to the east. The river Visinčia and Sėlų Miškas forest adjoins the village in the south. The study site was a characteristic agricultural land in a radius of at least of 150 meters. Moths were collected using Jalas model automatic light trap with a 160 W blended lamp bulb. The studies were carried out continuously from the beginning of April till the end of October.

The material is preserved in the collection of Lithuanian University of Educational Sciences, Lithuania.

## List of species

## **EREBIDAE**

## Tyria jacobaeae (Linnaeus, 1758)

Gudeliai, 08-15 06 2014, 2 spec.

## Diaphora mendica (Clerck, 1759)

Gudeliai, 05–12 05 2013, 2 spec., 12–19 05 2013, 5 spec., 27 04–04 05 2014, 3 spec., 04–11 05 2014, 3 spec., 11–18 05 2014, 1 spec.

## **NOCTUIDAE**

## Staurophora celsia (Linnaeus, 1761)

Gudeliai, 01–08 09 2013, 1 spec., 08–14 09 2013, 6 spec., 17–24 08 2014, 1 spec., 31 08–07 09 2014, 1 spec., 07–14 09 2014, 1 spec.

## Eucarta virgo (Treitschke, 1778)

Gudeliai, 02–09 06 2013, 2 spec., 16–23 06 2013, 6 spec., 23–30 06 2013, 21 spec., 30 06–07 07 2013, 29 spec., 14–21 07 2013, 19 spec., 21–28 07 2013, 9 spec., 04–11 08 2013, 2 spec., 11–18 08 2013, 2 spec., 25 08–01 09 2013, 1 spec., 08–14 09 2013, 9 spec., 14–22 09 2013, 6 spec., 15–22 06 2014, 1 spec., 29 06–06 07 2014, 14 spec., 06–13 07 2014, 4 spec., 13–20 07 2014, 27 spec., 20–27 07 2014, 35 spec., 27 07–03 08 2014, 16 spec., 03–10 08 2014, 4 spec., 07–14 09 2014, 1 spec., 12–19 10 2014, 1 spec.

## Mythimna l-album (Linnaeus, 1767)

Gudeliai, 08-14 09 2013, 1 spec., 07-14 09 2014, 1 spec.

## Mythimna albipuncta (Denis & Schiffermüller, 1775)

Gudeliai, 10–17 08 2014, 6 spec., 17–24 08 2014, 2 spec., 19–26 10 2014, 1 spec.

## Cucullia lucifuga (Denis & Schiffermuller, 1775)

Gudeliai, 04–11 05 2014, 1 spec., 11–18 05 2014, 1 spec.

## Callopistria juventina (Stoll, 1782)

Gudeliai, 20–27 07 2014, 1 spec.

**GEOMETRIDAE** 

## Eupithecia cauchiata (Duponchel, 1831)

Gudeliai, 09–02 06 2013, 2 spec.

## Eupithecia ochridata Schütze & Pinker, 1968

Gudeliai, 13-07 10 2013, 1 spec.

## Eupithecia inturbata (Hübner, 1817)

Gudeliai, 01 09-25 08 2013, 1 spec.

## Spargania luctuata (Denis & Schiffermüller, 1775)

Gudeliai, 01–08 06 2014, 3 spec., 20–27 07 2014, 1 spec., 03 08–27 07 2014, 3 spec., 18–25 05 2014, 1 spec.

#### **Discussion**

Data on twelve interesting species of nocturnal Macrolepidoptera species were obtained during the studies. Of these, only *Eucarta virgo* was registered earlier in Šalčininkai district (Švitra *et al.*, 2011). The latter species is known since 1999 in Lithuania (Švitra *et al.*, 2003), and nowadays it became quite common and numerous in many different habitats. *Tyria jacobaeae* is a protected species in Lithuania (Rašomavičius, 2007), and it was the first record of the species in Šalčininkai district.

Diaphora mendica, Staurophora celsia, Cucullia lucifuga, Eupithecia inturbata and Spargania luctuata are found mainly in singletons in different places of Lithuania, but their distribution is still not sufficiently studied. Mythimna l-album and M. albipuncta are considered to be migratory species (Nowacki, 1998) reaching Lithuania from southern latitudes. Both species are annually registered during the last decade in our country. Callopistria juventina was a very rare species in Lithuania (Kazlauskas, 1984), while it seemed to be a rare migrant during recent years in our country.

Eupithecia ochridata was firstly recorded in Lithuania in 1996 (Dapkus et al., 1999), while E. cauchiata - in 1999 (Kazlauskas, Šlėnys, 2007). Therefore, there were only few data regarding both Eupithecia species in Lithuania up to now.

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## References

- Dapkus D., Švitra G., Uselis V. 1999. Four new for the Lithuanian fauna Geometrid (Lepidoptera, Geometridae) species. *Acta Zoologica Lituanica. Biodiversity* 9 (3): 115–117.
- Ivinskis P. 2004. *Lepidoptera of Lithuania*. Vilnius: Institute of Ecology of Vilnius University.
- Kazlauskas, R. 1984. *Lietuvos drugiai* [Lepidoptera of Lithuania]. Vilnius: Mokslas.
- Kazlauskas R. 2004. New and very rare for the Lithuanian fauna Lepidoptera species collected in 1978–2004. *New and Rare for Lithuania Insect Species*16: 47–50.
- Kazlauskas R. 2008. Lietuvos drugiai [Lepidoptera of Lithuania]. Kaunas: Lututė.
- 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.
- Nowacki J. 1998. *The Noctuids (Lepidoptera, Noctuidae) of Central Europe*. Bratislava: Coronet Books.
- Prüffer J. 1947. Studia nad Motylami Wilenszczyzny. Torun.
- Rašomavičius V. (red.). 2007. *Lietuvos raudonoji knyga* [Red Data Book of Lithuania]. Kaunas: Lututė.
- Švitra G., Dapkus D, Kazlauskas R. 2003. Six new for the Lithuanian fauna Noctuid (Lepidoptera, Noctuidae) species. *Acta Zoologica Lituanica* 13 (3): 268–271.
- Švitra G., Bačianskas V., Ūsaitis T., Lukoševičius D. 2011. Four new and 153 rare for the Lithuanian fauna Lepidoptera species recorded in 2011. *New and Rare for Lithuania Insect Species* 23: 67–93.
- Švitra G., Bačianskas V., Ūsaitis T. 2013. 156 rare for the Lithuanian fauna Lepidoptera species recorded in 1995, 2011–2013. *New and Rare for Lithuania Insect Species* 25: 37–62.
- State Service for Protected Areas under the Ministery of Environment. 2014. Biosphere polygons. Available from http://www.vstt.lt (Accessed October 29, 2014).
- Ūsaitis T. 2011. Rare for Lithuanian fauna Lepidoptera species recorded in 2010. *New and Rare for Lithuania Insect Species* 23: 94–98.

Naujos naktinių makrodrugių rūšių radvietės Gudelių apylinkėse (Šalčininkų raj., Pietryčių Lietuva)

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## Santrauka

Naktinių makrodrugių tyrimai buvo atlikti Gudelių kaime (Šalčininkų raj.) 2013 ir 2014 metais, naudojant Jalas tipo automatinę šviesinę vabzdžių gaudyklę. Tyrimų metu užregistruota 12 drugių rūšių, apie kurias Lietuvoje nėra pakankamai duomenų. Kiekvienai rūšiai nurodyta sugavimo data ir individų skaičius. Surinkta medžiaga yra saugoma Lietuvos edukologijos universitete.

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