

DATA ON ODONATA, ORTHOPTERA AND MANTODEA FROM LITHUANIA, REPORT OF 2021*POVILAS IVINSKIS, JOLANTA RIMŠAITĖ*

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Introduction

New data are presented on some Hemimetabolous insects from the orders Mantodea, Orthoptera, Odonata, collected in 2020-2021 in Lithuania. Data on some rare, spreading species and species included in Red Data Book are presented in this paper.

Material and Methods

The main data was collected during field investigations by the authors P. Ivinskis (P.I.), J. Rimšaitė (J.R.) in 2020–2021. Various entomological methods were used for collecting the specimens: light trapping with a screen (160W mixed light lamp), automatic traps with 300W solar-type lamps and headlamp "Lumonite", sweeping with nets. The material was identified using identification guides: Kočarek *et al.* (2005), Nielsen (2000). Data on distribution and faunistic follows that mentioned in Boudot *et al.* (2015). Taxonomical treatment and distribution follow the Fauna Europaea database (Heller, 2017; Tol, 2017). The specimens are deposited in the authors collection.

List of localities

Locality	Administrative district	Coordinates (LAT, LONG)
Alsas lakeside	Vilnius mun.	54.76737, 25.30395
Anykščiai	Anykščiai mun.	55.52648, 25.09061
Aukštagirio Miškas f.	Vilnius mun.	54.74331, 25.37300
Gvazdikai	Vilnius mun.	54.75001, 25.37815
Kairėnai	Vilnius mun.	54.73821, 25.39679
Kalniškės	Vilnius district	54.84623, 25.17613
Karpėnų Miškas f.	Akmenė district	56.33484, 22.96051
Perloja	Varėna district	54.21061, 24.38088
Pirčiupių Miškas f.	Varėna district	54.40358, 24.97336
Riešės upė river (1)	Vilnius mun.	54.79049, 25.30845
Riešės upė river (2)	Vilnius mun.	54.78114, 25.32745
Rūdninkų Miškas f.	Šalčininkai district	54.38579, 25.10668
Verkiai	Vilnius mun.	54.75322, 25.30709
Žalieji ežerai preserve	Vilnius mun.	54.78496, 25.33172

List of species

ODONATA

LESTIDAE

***Chalcolestes viridis* (Vander Linden, 1825)**

Kalniškės, 05 10 2021, 2 spec.

COENAGRIONIDAE

***Pyrrhosoma nymphula* (Sulzer, 1776)**

Anyškščiai 12 05 2021, 1 spec.; Kalniškės, 14 06 2021, 1 spec.; Verkiiai, 07 05 2021, 1 spec.

***Nehalennia speciosa* (Charpentier, 1840)**

Verkiiai, 03 06 2021, 5 spec.

AESHNIDAE

***Anax parthenope* (Selys, 1839)**

Žalieji ežerai preserve, 28 06 2021, 1 spec.

GOMPHIDAE

***Ophiogomphus cecilia* (Fourcroy, 1785)**

Aukštągiario Miškas f., 14 08 2021, 1 spec. on forest pathway; Kairėnai, 23 07 2021, 1 spec.; Verkiiai, meadow, 15 06 2021, 1 spec., 23 08 2021, 2 spec.; Riešės upė river (1), 16 08 2021, 3 larvae; Riešės upė river (2), 13 08 2021, 4 larvae.

LIBELLULIDAE

***Leucorrhinia albifrons* (Burmeister, 1839)**

Alsas lakeside, 02 07 2021, 13 spec.; Žalieji ežerai preserve, 28 06 2021, 4 spec.

***Leucorrhinia pectoralis* (Charpentier, 1825)**

Alsas lakeside, 02 07 2021, 2 spec.; Verkiiai, 07 06 2021, 24 spec.

***Orthetrum brunneum* (Fonscolombe, 1837)**

Karpėnų Miškas f., 09 07 2021, 2 ♂, 1 ♀.

ORTHOPTERA

PHANEROPTERIDAE

***Barbitistes constrictus* Brunner von Wattenwyl, 1878**

Gvazdikai, 13–20 07 2021, 15 spec., 07 08 2021, 1 ♀ in mixed forest edge; Pirčiupių Miškas f., 20 07 2021, 3 spec.

ACRIDIDAE

***Bryodemella tuberculata* (Fabricius, 1775)**

Rūdninkų Miškas forest, 12 09 2021, 1 spec. in former military area.

***Podisma pedestris* (Linnaeus, 1764)**

Rūdninkų Miškas forest, 08 2020, 4 spec., 20 07 2021, 2 spec. in former military area, all specimens observed at night.

MANTODEA

MANTIDAE

***Mantis religiosa* Linnaeus, 1758**

Gvazdikai, 1 ♂, 18 08 2021, flew lured by light, at forest edge, 28 08 2021, 1 ♀, in the garden; Perloja, 17 08 2020, 3 adult spec., 20 08 2020, 4 adult spec., 22 08 2020, 18 adult spec., 22 07 2021, 2 juv. specimens were found on *Cytisus scoparius*; Rūdninkų Miškas forest, 15 08 2020, 3 juv., 5 adult spec., 20 07 2021, 16 juv., 12 09 2021, 2 adult spec., found in the heath (at 2 ha area).

Discussion

Odonata species *Nehalennia speciosa*, *Leucorrhinia pectoralis*, *L. albifrons* are protected species and included in the Red Data Book (Rašomavičius, 2021), but in suitable habitats they are not rare.

Orthetrum brunneum was found in surroundings of a quarry. The species is mostly found at sites in early stages of succession, with relatively little bankside and aquatic vegetation (Boudot *et al.*, 2015). In Lithuania they are found in warm habitats, near small streambed ditches, springs in gravel pits, quarries.

First specimens of *Barbitistes constrictus* were found at night using a head lamp. In Vilnius environs specimens of this species were quite often found near light sources.

Bryodemella tuberculata was found in Rūdninkai former military area, open sandy habitat. Their preferred habitat is sparsely overgrown, early-successional heathland and open sandy heaths. This species has been found in this territory for the first time in 2019 (Ūsaitis, 2019).

Rūdninkai former military area is also an important habitat for *Podisma pedestris* in Lithuania, but the area is overgrowing by pines and needs some nature management.

Mantis religiosa was registered in Lithuania in 2008 for the first time, now this species is widespread in the country (Rimšaitė *et al.*, 2017). Most of the data on the spread of this species is collected from the citizen reports, when *M. religiosa* is observed by people in settlements. However, there are very sparse data about *M. religiosa* occurrences in natural habitats. Investigation at night with head lamps show that in some xerothermic habitats the species is abundant. *M. religiosa* was discovered at night sitting on tips of plants and waiting for prey, while juveniles (nymphs) were trying to hide quickly in the bushes.

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Duomenys apie Lietuvos Odonata, Orthoptera ir Mantodea. 2021 metų pranešimas

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Santrauka

Pateikiami duomenys apie retas žirgelių, tiesiasparnių rūšis ir Europinį maldinką. Rūdninkų buvusio poligono teritorijoje rasta gausi europinio maldininko (*Mantis religiosa*) populiacija bei antroji margojo tarkšlio (*Bryodemella tuberculata*) radvietė Lietuvoje. Tiesiasparniai margasis tarkšlys (*B. tuberculata*) ir besparnis skėriukas (*Podisma pedestris*), žirgeliai mažoji nehalenija (*Nehalennia speciosa*), šarvuotoji ir baltakaktė skėtės (*Leucorrhinia pectoralis*, *L. albifrons*) yra įrašyti į Lietuvos raudonąją knygą (Rašomavičius, 2021).

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