

SOME DATA ON CICADOMORPHA AND FULGOROMORPHA (INSECTA, HEMIPTERA) OF LITHUANIA

ALGIRDAS IVANAUSKAS¹, DEIVIDAS VALIŪNAS², POVILAS IVINSKIS³, JOLANTA RIMŠAITĖ⁴

Nature Research Centre, Akademijos 2, LT-08412, Vilnius Lithuania

E-mails: ¹algirdasivanauskas@gmail.com, ²deividas.valiunas@botanika.lt, ³ivinskis@ekoi.lt,

⁴jolanta@ekoi.lt

Introduction

Data on Cicadinea of Lithuania are very scarce. Foreign investigators Vilbaste, 1974, published main data on Lithuanian leafhoppers species. Later Soderman, Rintala, 2009 published data on 18 species new for Lithuanian fauna. Main task of our investigations was collection and identification of Cicadinea as vectors of phytoplasmas. Due to scarcity of data about distribution of Lithuanian leafhoppers we decided to report the obtained records.

Material and Methods

Material was collected in 2011–2012 by A. Ivanauskas; one species was collected by T. Kovera. Leaf hoppers were collected by net-sweeping, in July–September, from a meadow and an orchard in Kaunas, Kaišiadorys and Vilnius districts of Lithuania, where phytoplasma-infected plants had previously been found. The insects were preserved in 90% ethanol. Adult male specimens were identified to species level using the keys of Ossiannilsson (1978; 1981; 1983) and Ribaut (1952) by morphological characters using a stereomicroscope.

List of localities

Kaunas district	Muniškiai	55°01'20.2"N, 23°48'09.3"E;
Kaišiadorys district	Žiežmariai	54°48'50.3"N, 24°26'10.6"E;
Vilnius district	Dvarčionys	54°43'39.1"N, 25°22'27.2"E;
	Mažieji Gulbinai	54°47'14.2"N, 25°17'56.3"E;
Vilnius	Žirmūnai	54°43'38.6"N, 25°17'42.2"E.

List of species

Suborder CICADOMORPHA

APHROPHORIDAE

Aphrophora alni (Fallén, 1805)

Dvarčionys, 25 08 2012, 3 spec.; Mažieji Gulbinai, 30 08 2012, 2 spec; Muniškiai 08 28 2010, 1 spec., 07 08 2012, 2 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Lepyronia coleoptrata* (Linnaeus, 1758)**

Muniškiai, 12 08 2012, 5 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Neophilaenus* sp.**

Muniškiai, 08 09 2010, 7 spec.

***Philaenus spumarius* (Linnaeus, 1758)**

Dvarčionys, 24 08 2012, 8 spec.; Mažieji Gulbinai, 29 08 2012, 9 spec.; Muniškiai, 09 08 2012, 15 spec., 09 09 2010 10 spec.

CICADIDAE***Agallia* sp.**

Muniškiai, 25 08 2010, 6 spec.

***Anaceratagallia ribauti* (Ossiannilsson, 1938)**

Muniškiai, 26 08 2010, 14 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Aphrodes* sp.**

Muniškiai, 27 08 2010, 8 spec., 08 08 2012, 5 spec.; Mažieji Gulbinai, 31 08 2012, 3 spec.

***Arthaldeus pascuellus* (Fallén, 1826)**

Muniškiai, 29 08 2010, 6 spec., 02 08 2012, 4 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Arthaldeus striifrons* (Kirschbaum, 1868)**

Muniškiai, 30 08 2010, 7 spec., 02 08 2012, 9 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Athy sanus* sp.**

Muniškiai, 31 08 2010, 5 spec.

***Balclutha calamagrostis* Ossiannilsson, 1961**

Mažieji Gulbinai, 23 08 2012, 5 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Balclutha punctata* (Fabricius, 1775)**

Muniškiai, 01 09 2010, 3 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Elymana sulphurella* (Zetterstedt, 1828)**

Muniškiai, 02 08 2012, 2 spec.; Mažieji Gulbinai, 23 08 2012, 4 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Errastunus ocellaris* (Fallén, 1806)**

Muniškiai, 03 09 2010, 8 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Euscelis incisus* (Kirschbaum, 1858)**

Muniškiai, 04 09 2010, 35 spec., 11 08 2012, 43 spec. Rare (Vilbaste, 1974).

***Graphocraerus ventralis* (Fallén, 1806)**

Muniškiai, 05 09 2010, 3 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Jassargus (Arrailus) flori* (Fieber, 1869)**

Mažieji Gulbinai, 23 08 2012, 1 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Macrosteles cristatus* (Ribaut, 1927)**

Mažieji Gulbinai, 23 08 2012, 1 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Macrosteles sexnotatus* (Fallén, 1806)**

Muniškiai, 06 09 2010, 18 spec.; Dvarčionys, 24 08 2012, 13 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Macrosteles* sp.**

Muniškiai, 07 09 2010, 5 spec., 02 08 2012, 4 spec.

***Psammotettix alienus* (Dahlbom, 1850)**

Muniškiai, 10 09 2010, 5 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Psammotettix confinis* (Dahlbom, 1850)**

Muniškiai, 02 08 2012, 3 spec.; Mažieji Gulbinai, 23 08 2012, 4 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Psammotettix* sp.**

Mažieji Gulbinai, 23 08 2012, 5 spec.

***Sagatus* sp.**

Muniškiai, 11 09 2010, 5 spec.

***Verdanus (Verdanus) abdominalis* (Fabricius, 1803)**

Muniškiai, 02 08 2012, 3 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Cicadella viridis* (Linnaeus, 1758)**

Muniškiai, 02 09 2010, 2 spec.; Mažieji Gulbinai, 10 08 2012, 4 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Chlorita paolii* (Ossiannilsson, 1939)**

Muniškiai, 02 08 2012, 2 spec.; Mažieji Gulbinai, 23 08 2012, 3 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Edwardsiana* sp.**

Muniškiai, 02 08 2012, 6 spec.; Žiežmariai, 02 08 2012, 4 spec.; Dvarčionys, 24 08 2012, 5 spec.

***Empoasca vitis* (Göthe, 1875)**

Mažieji Gulbinai, 23 08 2012, 2 spec.; Dvarčionys, 24 08 2012, 3 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Eupteryx atropunctata* (Goeze, 1778)**

Dvarčionys, 24 08 2012, 8 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Notus flavipennis* (Zetterstedt, 1828)**

Mažieji Gulbinai, 23 08 2012, 2 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Zygina flammigera* (Fourcroy, 1785)**

Dvarčionys, 24 08 2012, 1 spec. Present in Lithuania (Hoch & Jach, 2013).

****Ledra aurita* (Linnaeus, 1758)**

Vilnius, Žirmūnai, 16 10 2014, 1 spec., captured at light from windows. New species for Lithuania (T. Kovera).

Suborder FULGOROMORPHA**DELPHACIDAE*****Javesella (Javesella) pellucida* (Fabricius, 1794)**

Muniškiai, 02 08 2012, 4 spec.; Mažieji Gulbinai, 23 08 2012, 2 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Xanthodelphax stramineus* (Stål, 1858)**

Muniškiai, 02 08 2012, 2 spec. Widely distributed in Lithuania (Vilbaste, 1974).

***Stenocranus minutus* (Fabricius, 1787)**

Mažieji Gulbinai, 23 08 2012, 12 spec.; Dvarčionys, 24 08 2012, 17 spec. Rare (Soderman, Rintala, 2009).

Discussion

Data on 34 widely distributed and one new for Lithuanian fauna species are presented. Most of the species are common and widespread in Lithuania. *Euscelis incisus* and *Stenocranus minutus* are attributed to category of rare species according to Vilbaste (1974) or Soderman and Rintala (2009), but our investigation show that these two species are abundant. *Ledra aurita* is reported for the first time in Lithuania. This species is widely distributed in European countries (Finland, Denmark, Sweden, Norway, Poland, United Britain Kingdom, Austria, Germany, French, Hungary, Czech, Slovakia, countries in Balkan peninsula, Ukraine, Romania, Moldova) (Hoch & Jach, 2013). The specimens were found on lichen-covered trees, especially oaks, also often they were captured at light. Currently 332 species of Cicadomorpha and Fulgoromorpha are known in Lithuania.

Acknowledgements

Authors are grateful to Dr. Guy Soderman (Helsinki, Finland), Dr. Ivan Tuf (Olomouc, Czech Republic), Mr. Selemonas Paltanavičius and Mr. Tomas Kovéra for identifications and information on some species.

References

- Hoch H., Jach M. 2013. Fauna Europaea: Cicadellidae. Fauna Europaea version 2.6, <http://www.faunaeur.org> (accessed 16 November, 2014).
- Ossiannilsson, F. 1978. The Auchenorrhyncha (Homoptera) of Fennoscandia and Denmark, Part 1: Introduction, infraorder Fulgoromorpha. Scandinavian Science Press LTD, Klampenborg, Denmark.
- Ossiannilsson, F. 1981. The Auchenorrhyncha (Homoptera) of Fennoscandia and Denmark, Part 2: The Families Cicadidae, Cercopidae, Membracidae, and Cicadellidae (excl. Deltocephalinae). Scandinavian Science Press LTD, Klampenborg, Denmark.
- Ossiannilsson, F. 1983. The Auchenorrhyncha (Homoptera) of Fennoscandia and Denmark, Part 3: The Family Cicadellidae. Scandinavian Science Press LTD, Copenhagen, Denmark.
- Ribaut, H. 1952. Homoptères Auchénorhynques. II (Jassidae). In: Faune de France, 57, Paul Lechevalier, Paris.
- Soderman G., Rintala T. 2009. Heteroptera and Auchenorrhyncha (Hemiptera) collected from southeastern Lithuania in 2008. *New and Rare for Lithuania Insect Species* 21: 15–20.
- Vilbaste J. 1974. Preliminary list of Homoptera – Cicadinea of Latvia and Lithuania. *Eesti NSV Tead. Akad. Toimet.* 23: 131–163.

Kai kurie duomenys apie Lietuvos Cicadomorpha ir Fulgoromorpha cikadas

A. IVANAUSKAS, D. VALIŪNAS, P. IVINSKIS, J. RIMŠAITĖ

Santrauka

Publikacijoje pateikiami duomenys apie 34 plačiai Lietuvoje paplitusias ir retas rūšis bei naujų Lietuvos faunai rūšį – *Ledra aurita*. Nurodomos sugavimo vietas, individų skaičius. Duomenys apie *Zygina flammigera* radimą Lietuvoje patvirtina Fauna Europaea skelbtą informaciją. *Ledra aurita* plačiai paplitusi gretimose šalyse, tad šios įdomios rūšies radimas Lietuvoje buvo tikėtinės. Šiuo metu Lietuvoje aptiktos 332 cikadų rūšys. Surinkta medžiaga saugoma Gamtos Tyrimų Centre.

Received 17 November, 2014