

DATA ON NEW SPECIES OF TRUE BUGS (HEMIPTERA: HETEROPTERA) OF LITHUANIAN FAUNA

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Introduction

324 species belonging 31 families are listed in the last published list of Lithuanian true bugs (Stonis *et al.* 2010). Additionally twelve species were added to the list in three recently published papers (Baužys, 2011; 2012; 2013). The recent Catalogue of the Heteroptera of the Palaearctic Region lists approximately 3000 species for Europe (Aukema & Rieger, 1995–2006). Even in Estonia the list of Heteroptera comprises 454 species (Coulianos, 2005). So, the species composition of the true bugs (Heteroptera) in Lithuania is not disclosed completely yet. At least 100 species of true bugs could be found in the country additionally.

In this report we present the records of 17 species of true bugs newly found in Lithuania.

Material and Methods

The material was collected during field research in different districts of Lithuania. The majority of specimens were collected by the authors Romas Ferenca (R.F.) and Vytautas Tamutis (V.T.). Some specimens were collected by Dalius Dapkus (D.D.), Darius Lukoševičius (D.L.), Sigitas Morkūnas (S.M.) and Ovidijus Dumčius (O.D.). The methods for collecting the material were chosen so that information on the specific ecological aspects of the insects could be obtained. Visual searching of soil surface, under the moss, plant debris, bark chips, barks and stem surface was most commonly used. Some species were caught also by using the sweep net, pitfall and barrier (window) traps, sieving of forest litter. The material is deposited in Kaunas Zoological museum.

The classification of true bugs follows Schaefer (2003) and Dietrich (2003). The identification keys suggested by Kerzhner and Jachevskij (1964), Wróblewski (1968), B. Lis (1999) and J. A. Lis (2001) were used.

List of localities

Ignalina district	Ažvinčiai Nat. R.	55°26'54.7"N, 26°03'07.9"E;
Jonava district	Bėčių Miškas f.	55°07'39.5"N, 24°28'45.5"E;
	Santakos Miškas f.	55°05'27.9"N, 24°21'36.0"E;
	Stoškų Miškas f.	55°07'04.1"N, 24°24'24.2"E;
Kaunas	Romainiai	54°55'36.8"N, 23°48'42.3"E;
Kaunas district	Dubravos Miškas f. (1)	54°49'00.0"N, 24°21'00.0"E;
	Dubravos Miškas f. (2)	54°49'59.6"N, 24°04'15.7"E;
	Jiesia Landscape Reserve (1)	54°51'05.2"N, 23°56'25.3"E;
	Jiesia Landscape Reserve (2)	54°51'19.5"N, 23°56'14.7"E;
	Jiesia Landscape Reserve (3)	54°51'15.5"N, 23°56'14.0"E;
	Jiesia Landscape Reserve (4)	54°50'56.1"N, 23°56'22.4"E;
	Kleboniškis	54°56'00.0"N, 23°56'00.0"E;
	Nevėžis Landscape Reserve	54°51'00.0"N, 23°47'00.0"E;
	Braziūkų Miškas f.	54°54'04.3"N, 23°28'44.1"E;
Kazlų Rūda municipality	Marackų Miškas f.	54°46'43.9"N, 23°33'48.8"E;
Neringa municipality	Grobštas Nat. R.	55°17'15.5"N, 20°56'48.1"E;
	Juodkrantė	55°32'00.0"N, 21°06'00.0"E;
	Lapnugaris Nat. R.	55°33'54.3"N, 21°07'43.7"E;
	Nagliai Nat. R.	55°29'22.1"N, 21°08'52.7"E;
	Pervalka env.	55°24'23.6"N, 21°05'17.7"E;
Šakiai district	Juškinės Miškas f.	55°00'44.1"N, 23°27'14.7"E;
	Tervydoniai (1)	55°01'39.3"N, 23°26'32.1"E;
	Tervydoniai (2)	55°01'57.6"N, 23°26'43.0"E;
Šilalė district	Juodžiai	55°34'22.1"N, 22°28'15.5"E;
Tauragė district	Viešvilė Nat. R. (1)	55°09'21.5"N, 22°28'22.8"E;
	Viešvilė Nat. R. (2)	55°08'22.1"N, 22°26'57.9"E;
Utena district	Minčios Miškas f.	55°28'59.7"N, 25°58'51.3"E;
Varėna district	Čepkeliai Nat. R. (1)	54°01'11.0"N, 24°25'24.5"E;
	Čepkeliai Nat. R. (2)	54°00'00.0"N, 24°25'00.0"E;
	Čepkeliai Nat. R. (3)	54°00'00.0"N, 24°25'00.0"E;
	Paskroblio Miškas f.	54°06'03.2"N, 24°16'58.2"E;
Vilnius district	Dūkštų Miškas f.	54°49'39.2"N, 24°57'28.4"E;
	Neris Regional Park	54°49'10.3"N, 24°55'54.5"E.

List of species and notes

SALDIDAE

Salda littoralis (Linnaeus, 1758)

Lapnugaris Nat. R., 27 06 2007, 1 spec.; Nagliai Nat. R., 27 05 2009, 1 spec. (R.F.).

Notes. This halophilous species is widespread throughout Europe in saline soils, mainly sea shores (Wróblewski, 1968).

ARADIDAE

***Aneurus avenius* (Dufour, 1883) (Fig. 1)**

Neris Regional Park, 26-27 05 2003, 4 spec. (R.F.); Kleboniškis, 29 06 2006, 1 spec. (O.D.); Jiesia Landscape Reserve (4), 25 03 2007, 2 spec.; Juodžiai 04 05 2010, 2 spec.; Tervydoniai (1), 05 07 2014, 1 spec. (R.F.)

Notes. This species is widely distributed in Western Palearctic. Occurs under the bark of dead deciduous trees (*Tilia*, *Fagus*, *Quercus*, *Betula*) (Lis, 2001).

***Aradus betulae* (Linnaeus, 1758)**

Čepkeliai Nat. R (1)., 09 06 2004, 1 spec. (R.F.); Dubravos Miškas f. (1), 18 08 1985, 2 spec. (R.F.); Dubravos Miškas f. (2), 24 04 2003, 1 spec. (R.F.); Grobštas Nat. R., 24 05 2006, 1 spec. (R.F.); Juodkrantė, 22 06 1988, 3 spec. (R.F.); Juškinės Miškas f., 06 05 2004, 1 spec. (R.F.); Marackų Miškas f., 29 04 1998, 1 spec. (R.F.); Pervalka env., 23 08 2001, 1 spec. (R.F.); Viešvilė Nat. R. (1), 13 09 2006, 1 spec., Viešvilė Nat. R. (2), 15 05 2007, 1 spec. (R.F.).

Notes. *A. betulae* is distributed in Central and South Europe (Aukema, 2013). This species lives and feeds on the dead wood of standing trees infected by *Fomes fomentarius* (Goßner *et al.*, 2007).

***Aradus brevicollis* Fallen, 1807**

Čepkeliai Nat. R. (2), 17 07 1985, 1 spec. (R. F.).

Notes. This boreal species is distributed in some countries of Europe: Austria, Belarus, Czech Republic, Denmark, Finland, Germany, Hungary, Latvia, Norway, Poland, Russia, Sweden, Ukraine (Aukema, 2013). This species has exceptional attraction to forest fire and needs specific biotopes for survival. May be for this reason *A. brevicollis* is rare in all its distribution range and is protected in some European countries, such as: Denmark, Norway, Sweden (Johansson *et al.*, 2009.).

***Aradus conspicuus* Herrich-Schaeffer, 1835**

Jiesia Nat. R. (1), 20 06 2006, 1 spec. (R.F.).

Notes. *A. conspicuus* is widely distributed in Central and Southern Europe (Aukema, 2013). This flat bug prefers larger dead wood structures, irrespective of the type (lying/standing), in places ranging widely from shaded to sunny (Goßner *et al.*, 2007).

***Aradus signaticornis* R.F.Sahlberg, 1848**

Čepkeliai Nat. R (3)., 3 06 - 29 07 1999, 1 spec. (D.D.).

Notes. This species is known from Belgium, Czech Republic, Finland, French, Germany, Hungary, Latvia, Poland, Russia, Netherlands (Aukema, 2013).

***Aradus truncatus* Fieber, 1860 (Fig. 2)**

Jiesia Nat. R. (3), 10 05 2012, 1 spec. (R.F.).

Notes. This species is distributed throughout Europe from Italy and France to Norway, Sweden, Finland and Karelia (Aukema, 2013; Humala, 2006). It occurs mainly under the bark of deciduous and rarely coniferous trees (Lis, 2001). This species is protected in Fenoskandia (Kotiranta *et al.*, 1998).

COREIDAE

***Gonocerus acuteangulatus* (Goeze, 1778) (Fig. 3)**

Paskroblio miškas f., 03 09 2014, 1 spec., on *Quercus robur* (R.F.)

Notes. This European species distributed in Southern and Central Europe the north border of distribution range of *G. acuteangulus* is Poland and Great Britain (Aukema, 2013). This species feeds on different foodplants: *Buxus*, *Crataegus*, *Quercus*, *Rhamnus*, *Taxus* (Schaefer & Mitchell, 1983).

LYGAEIDAE

***Drymus ryei* (Douglas and Scott, 1865)**

Stoškų Miškas f., 25 02 2014, 2 spec., in the litter of coniferous forest (V.T.).

Notes. This species is widely distributed throughout Europe, occurs on dry soils commonly amongst moss and herbs (Bantock & Botting, 2013). *D. ryei* noted for Lithuania only in Fauna Europaea Web Service (Aukema, 2013) without definite data.

***Scolopostethus pilosus* Reuter, 1875**

Stoškų Miškas f., 25 02 2014, 1 spec. in the litter of coniferous forest (V.T.).

Notes. This species is distributed throughout Europe from Mediterranean countries to Scandinavia, also known in neighboring countries Poland and Latvia (Spungis, 2003, Aukema, 2013)

***Scolopostethus puberulus* Howarth, 1887**

Ažvinčiai Nat. R., 09 01 2014, 1 spec. in the litter of coniferous forest; Minčios Miškas f., 09 01 2014, 1 spec. (V.T.).

Notes. This species is widely distributed throughout Europe (Aukema, 2013), occurs in shaded, damp and mossy habitats (Alexander, 2008).

MIRIDAE

***Atractotomus parvulus* Reuter, 1878**

Ažvinčių Nat. R., 25 07 2013, 2 spec. (V.T.).

Notes. This species is distributed in Southern and Western Europe from Spain, French, Great Britain to Hungary in the east (Aukema, 2013, Goula *et al.*, 2010). This species has been recently discovered in southern part of Norway (Staverløkk *et al.*, 2009). *A. parvulus* is associated with Scots pine (*Pinus sylvestris*). However recently this species has found on Mugo pine (*Pinus mugo*) crowns (Staverløkk *et al.*, 2009).

***Deraeocoris flavilinea* (A. Costa, 1862)**

Jiesia Landscape Reserve (2), 17 06 2000, 1 spec.; Tervydoniai (2), 24 06 2013 1 spec. (R.F.).

Notes. This species is distributed in Southern and Central Europe, in the North up to Sweden (Aukema, 2013). *D. flavilinea* occurs on *Crataegus* plants.

TINGIDAE

***Acalypta carinata* (Panzer, 1806)**

Ažvinčių Nat. R., 09 01 2014, 3 spec.; Bėčių Miškas f., 25 02 2014, 3 spec.; Braziūku Miškas f., 15 10 2010, 1 spec.; Minčios Miškas f., 09 01 2014, 12 spec.; Santakos Miškas f., 25 02 2014, 3 spec.; Stoškų Miškas f., 25 02 2014, 3 spec. (V.T.).

Notes. Eurosiberian species widely distributed in Europe (Aukema, 2013). It occurs in mosses mainly *Sphagnum* and *Abietinella abietina* growing on the tree trunks, prefers humid and shady woodland habitats (Rédei *et al.*, 2004).

***Catoplatys fabricii* (Stål, 1868)**

Dūkštų Miškas f, 01-15 06 2003, 1 spec. (S.M.); Nevėžis Nat. R., 08 05 1988, 1 spec. (D.L.).

Notes. Widespread European species distributed from Spain and Italy in the South to Norway and Sweden in the North. This species prefers open areas, occurs on *Leucanthemum vulgare* (Wahmann *et al.*, 2006).

***Galeatus maculatus* (Herrich-Schäffer, 1838)**

Kaunas, Romainiai, 29 06 2006, 1 spec. (R.F.).

Notes. This species is distributed in Southern and Central Europe (Aukema, 2013). Poland, Kaliningrad region and Belarus are on the northern border of the main

distribution area of *G. maculatus*. This species feeds on Mouse-ear Hawkweed (*Hieracium pilosella*), prefers dry and unshaded areas with sandy or gravel soils covered with sparse vegetation (Büttner, 2002).

***Physatocheila dumetorum* (Herich – Schaeffer, 1838)**

Bėčių Miškas f., 25 02 2014, 1 spec.; Santakos Miškas f., 25 02 2014, 1 spec. (V.T.).

Notes. This species is widely distributed in Southern and Central Europe, to the North as far as Denmark and Poland (Aukema, 2013). Occurs on the trunks of deciduous trees (*Crataegus*, *Prunus*, *Sorbus*) overgrown by moss.

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Fig. 1. *Aneurus avenius*. Photo R. Ferenca



Fig. 2. *Aradus truncatus*. Photo R. Ferenca



Fig.3. *Gonocerus acuteangulatus*. Photo R. Ferenca

Duomenys apie naujas Lietuvos faunai blakių (Hemiptera: Heteroptera) rūšis

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Santrauka

Pateikiami duomenys apie 17 naujų Lietuvos faunai blakių rūšių. Nurodomas kiekvienos rūšies paplitimas Europoje, pateikiami kai kurie duomenys apie šių blakių rūšių biologiją. *Salda littoralis* – pirmoji Lietuvoje aptikta halofilinių blakių rūšis. Žievėblakė *Aradus truncatus* – reta, lokaliai paplitusi rūšis, įtraukta į Rytų Fenoskandijos Raudonąją knygą.

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