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

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Introduction

The most comprehensive publication on Lithuanian true bugs presents 324 species (Stonis *et al*., 2010). In the period 2009–2017 information on additional 45 new species of true bugs was published (Pliūraitė, 2007; Söderman & Dapkus, 2009; Söderman & Rintala, 2009; Baužys 2011, 2012, 2013; Ferenca *et al*., 2014; Markevičiūtė & Rintala, 2015; Markevičiūtė, 2016, 2017; Daubaras *et al*., 2018). Currently Lithuanian fauna consists of 369 species of true bugs. This paper presents information on 11 new species of true bugs in Lithuania.

Material and Methods

Data on new for Lithuania species of true bugs obtained after the revision of the true bugs collection of Kaunas Zoological Museum. Also, the data were complemented by searching for the photographs of these species on the website of nature photographers (https://www.macrogamta.lt/ https://www.inaturalist.org/). The species listed in this publication were collected or observed by Almantas Kulbis (A.K.), Arūnas Juknevičius (A.J., Gintautas Steiblys (G.S.), Gita Balžekaitė (G.B.), Kazimieras Martinaitis (K.M.), Rimas Kuprys (R.K.), Romas Ferenca (R.F.), Saulius Rumbutis (S.R.), Tomas Pocius (T.P.), Vidas Brazauskas (V.B.), Vytautas Tamutis, (V.T.) and Žilvinas Pūtys (Ž.P.).

Taxonomical treatment follows the Catalogue of the Heteroptera of Palearctic region (Aukema & Rieger, 1995, 1996, 1999, 2001, 2006).

List of localities

Locality	Administrative district	Coordinates (LAT, LONG)
Braziūkai	Kaunas distr.	54.901949, 23.483553
Grabuciškės	Kaišiadorys distr.	54.887168, 24.152392
Jiesia	Kaunas mun.	54.853349, 23.937766
Juodkrantė (2)	Neringa mun.	55.546395, 21.120827
Juodkrantė (3)	Neringa mun.	55.561948, 21.128057
Kačerginė	Kaunas distr.	54.934023, 23.711015
Kaunas	Kaunas mun.	54.898654, 23.903549

Nagliai rez.	Neringa mun.	55.471561, 21.095714
Naugardiškė	Kaunas mun.	54.857867, 23.882068
Netoniai	Kaunas distr.	54.938973, 23.725311
Nida (1)	Neringa mun.	55.546395, 21.120827
Nida (2)	Neringa mun.	55.297946, 20.997524
Pažaislis	Kaunas mun.	54.880008, 24.013052
Preila	Neringa mun.	55.354728, 21.016941
Ringovė	Kaunas distr.	55.050344, 23.521698
Smiltynė	Klaipėda mun.	55.718059, 21.097216
Staigūnai	Lazdijai distr.	54.262607, 23.696698
Šilainiai	Kaunas mun.	54.917169, 23.879344
Širvintos	Širvintos mun.	55.037732, 24.953852
Ventė	Šilutė distr.	55.343322, 21.195908
Verkiai	Vilnius mun.	54.746673, 25.289444
Vilijampolė, Kaunas (1)	Kaunas mun.	54.918042, 23.890814
Vilijampolė, Kaunas (2)	Kaunas mun.	54.920794, 23.887319
Vilijampolė, Kaunas (3)	Kaunas mun.	54.921506, 23.886054
Žaliakalnis, Kaunas	Kaunas mun.	54.907358, 23.942529

List of species

COREIDAE

***Ceraleptus lividus* Stein, 1858** (Fig.1)

Jiesia, 06 09 2009, 1 spec. (R.F.); Pažaislis, 16 07 2017, 1 spec. (G.S); Verkiai, 07.06.2020, 1 spec. (Ž.P.).

The species is distributed almost all of Europe except the northern part: Austria, Belgium, Bosnia, Hercegovina, Bulgaria, Byelorussia, Croatia, Czech Republic Denmark, France, Great Britain, Germany, Greece, Hungary, Italy, Luxembourg, Macedonia, Moldavia, Netherlands, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, also in Asia: Armenia, Turkey, Azerbaijan, Georgia, Iran (Dolling, 2006). It occurs in open areas as well as in overexposed forests. Bugs can be found on the ground among dead plant parts, as well as on plants or their flowers. The host plants are various species: (*Trifolium aruense*, *T. campestre*, *T. pratense*, *T. dubium*, *Medicago lupulina*, *M. minima, Echium vulgare, Calluna vulgaris, Rubus sp., Artemisia vulgaris, A. campestris*).

LYGAEIDAE

***Megalonotus antennatus* (Schilling,1829)** (Fig. 2)

Preila, 21 06 2006, 1 spec. (R.F.); Naugardiškė, 04 06 2004, 1 spec. (V.B.).

This species is widespread in Europe as well as in the Caucasus, Kazakhstan, Western Siberia, Eastern Siberia, Korea (Péricart, 2001). It can be found in open habitats in a variety of soil types including forest felling sites, meadows, sparsely growing meadows, as well as in limestone and gravel quarries.

***Philomyrmex insignis* (R. F. Sachlberg, 1848)** (Fig.3)

Nagliai rez. , 05 04 2017, 1 spec. (R.F.).

The species widespread in Central and Northern Europe: Byelorussia, Finland, Germany, Norway, Poland, Russia, also is known in Asia: Kazakhstan, Mongolia, Western and Eastern Siberia (Péricart, 2001; Gierlasiński *et al*., 2020). It occurs in

sunny, dry stands, poorly covered with scots pine (*Pinus sylvestris*). A very important feature of the biotopes is the abundance of lichens of the genus *Cladonia* and lying pine cones, in which they hide and overwinter. (Hebda & Rutkowski, 2019).

***Pionosomus varius* (Wolff, 180)** (Fig.4)

Juodkrantė (1), 06 07 2004, 1 spec.; Nida (1), 08 09 2005, 1 spec. (R.F.); Nida (2), 30 07 2021, 1 spec. (V.T.).

This species widely distributed in Europe from Mediterranean region to Scandinavia, also is known in neighbouring countries: Poland, Byelorussia, Latvia (Péricart, 2001). It is psammophilous species occurs in sand dunes. It has been found in association with several plants: *Erodium cicutarium* and *Cerastium semidecandrum.* In suitable habitats this species forms small populations.

***Platyplax salviae* (Schilling, 1829)** (Fig.5)

Netoniai, 25 05 2007, 3 spec. (R.F.).

This species widespread in South and Central Europe, except Great Britain, Netherlands and Denmark. It is absent in northern Europe – Scandinavian countries as well as Baltic countries Estonia and Latvia (Péricart, 2001). This thermophilic species occurs in meadows. Host plants - various species of sage (*Salvia sp.*).

Fig. 1 *Ceraleptus lividus* (Photo Ž. Pūtys)

Fig. 2. *Megalonotus antennatus* (Photo V. Brazauskas)

Fig. 3. *Philomyrmex insignis* (Photo R. Ferenca)

Fig. 4. *Pionosomus varius* (Photo K. Martinaitis)

Fig. 5. *Platyplax salviae* (Photo K. Martinaitis)

Fig. 6. *Scolopostethus pictus* (Photo Ž. Pūtys)

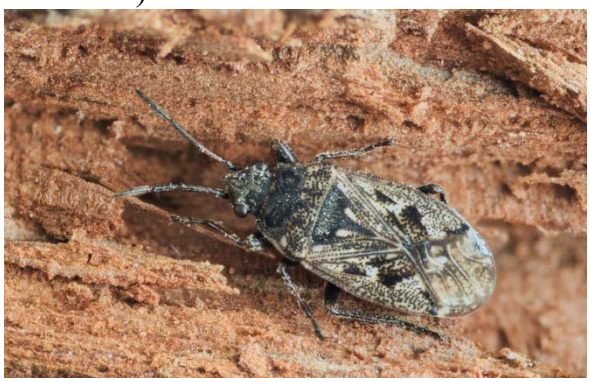

Fig. 7. *Sphragisticus nebulosus* (Photo K. Martinaitis)

Fig. 8. *Nezara viridula* (Photo A. Juknevičius)

Fig. 9 *Rhaphigaster nebulosa* (Photo R. Ferenca)

Fig. 10. *Phytocoris tiliae* (Photo K. Martinaitis)

Fig. 11. *Nagusta goedelii* (Photo K.Martinaitis)

***Scolopostethus pictus* (Schilling, 1829)** (Fig. 6)

Juodkrantė (2), 23 06 2007, 1 spec. (R.F.); Grabuciškės, 07 10 2018, 1 spec., Staigūnai, 29 09 2020, 1 spec. (Ž.P.).

Widely distributed in Europe also known in Caucasus (Georgia, Azerbaijan) and Asia: Turkey, Cyprus, Iran, Israel, Jordan, Lebanon. (Péricart, 2001). Usually it is found in the soil under plant debris in litter piles or compost heaps (Bantock & Botting, 2018).

***Sphragisticus nebulosus* (Fallen, 1807)** (Fig. 7)

Smiltynė, 22 06 2007, 1 spec. (R.F.); Kačerginė, 06 03 2019, 1 spec. (K.M.).

This species widely distributed throughout Europe, also is known in Asia: Turkey, Syria, Russia, Kyrgyzstan, Kazkhstan, China (Péricart, 2001). Recently found in Japan (Hokkaido) (Ban & Souma, 2020). This species is associated with range of plants: *Capsella bursa-pastoris*, *Sisymbrium loeselii*, *S. officinale*, *Oenothera spp*., *Rumex spp. Verbascum thapsus*, *Chenopodium album* (Ban & Souma, 2020).

PENTATOMIDAE

***Nezara viridula* (Linnaeus, 1758)** (Fig. 8)

Širvintos, 10 11 2020, 1spec. (A.J.).

Widely distributed species, it occurs throughout tropical, subtropical and temperate regions of Asia, Europe, Australia and America. The native range of *N. viridula* in Europe historically restricted with a Mediterranean climate. However since 1920 the species has begun to spread in Europe and now it is found in many Central European countries: Germany, Belgium, England, Switzerland, Slovakia, Bulgaria, Hungary, Czech Republic, European Russia part and Finland (Esquivel *et al*., 2018; Bury & Mazepa, 2021; Kment *et al*., 2021).

***Rhaphighaster nebulosa* (Poda, 1761)** (Fig. 9)

Vilijampolė, Kaunas (1), 12 04 2021, 1 spec. (G.B.); Vilijampolė, Kaunas (2) 11 05 2021, 1 spec. (T.P.); Vilijampolė, Kaunas (3), 11 05 2021, 1 spec. (A.K.); Žaliakalnis, Kaunas, 15 09 2021, 1 spec. (R.K.); Kaunas, 26 09 2021, 1 spec. (Anonymous); Šilainiai, Kaunas, 24 10 2021, 1 spec. (S.R.).

This species widespread in Central, and Southern Europe, also Caucasus, and Southwestern Kazakhstan, Southeast and Central Asia and North Africa (Pełka *et al*., 2019; Aksenenko *et al*., 2021).

MIRIDAE

***Phytocoris tiliae* (Fabricius, 1777)** (Fig.10)

Ringovė, 14 09 2017, 1 spec.; Ventė, 31 08 2020, 1 spec. (R.F.).

This species widely distributed throughout Europe and Caucasus, also known in North Africa (Algeria, Morocco), introducted in North America (Kerzhner & Josifov, 1999). This predator species occurs on a range of deciduous trees, feeding on small insects and mites (Bantock & Botting, 2018).

REDUVIIDAE

***Nagusta goedelii* (Kolenati, 1857)** (Fig. 11)

Braziūkai, 15 06 2016, 1 spec. (V.T.).

This species is native to Central Asia, and the Caucasus, also southern European part of Russia, Ukraine, northern parts of the Middle East, Cyprus, and south eastern Europe. At the end of 19 century, *N. goedelii* slowly began to spread westwards. Now this species is known from Hungary, Slovenia, Slovakia, Austria, Czech Republic, France, Italy, Germany (Dorow *et al*., 2018; Cianferoni, *et al*. 2021).

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Naujos Lietuvos faunai blakių (Hetroptera: Hemiptera) rūšys

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Santrauka

Pateikiama informacija apie 11 naujų Lietuvos faunai blakių rūšių. Duomenys surinkti atlikus Kauno T. Ivanausko zoologijos muziejaus rinkiniuose saugomų šio būrio vabzdžių reviziją, taip pat į publikacią įtraukti gamtos fotografų užfiksuoti duomenys (https://www.macrogamta.lt/ https://www.inaturalist.org/).

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