DATA ON BEETLE (COLEOPTERA) SPECIES NEW TO LITHUANIAN FAUNA

ROMAS FERENCA[1], VYTAUTAS TAMUTIS[1 2], VYTAUTAS INOKAITIS[1], KAZIMIERAS MARTINAITIS[1]

[1]Kaunas T. Ivanauskas Zoological Museum, Laisvės al. 106, LT-44253, Kaunas, Lithuania.
E-mail: agagutta@gmail.com, entomol@zoomuziejus.lt
[2]Aleksandras Stulginskis University, Studentų 11, Akademija, Kaunas distr., LT-53361, Lithuania. Email: dromius@yahoo.com

Introduction

The species composition of beetles (Coleoptera) is not completely known in Lithuania. The last catalogue of Lithuanian Coleoptera includes 3597 species of beetles, additionally 1390 species are considered as expected to occur in the country (Tamutis *et al*., 2011). During the five year period after publication of above mentioned calalogue, 104 species of beetles have been found in the country for the first time (Ferenca *et al*., 2011, 2013; Nagrockaitė *et al*., 2011; Tamutis, 2012; Ivinskis *et al*., 2013, 2014, 2015; Monsevičius 2013; Tamutis & Barševskis, 2014). Assuming this tendency endures, we can hope that the mission of the catalogue to encourage faunistic study in the country will be achieved. Here we present the data on beetle species newly recorded in Lithuania and contribute the knowledge on Lithuanian Coleoptera fauna.

Material and Methods

The material was collected using windows traps, Barber's traps, light traps with 150 W blended mercury lamp bulb and sweeping net as well. Some specimens were collected by sifting the forest litter.

The majority of the species was collected by the authors: Romas Ferenca (R.F.), Vytautas Tamutis (V.T.), Vytautas Inokaitis (V.I.) and Kazimieras Martinaitis (K.M.). Two specimens were collected by Aleksandras Meržijevskis (A.M.).

The specimens were identified following the keys of Assman (2004), Besuchet (1971) and Lohse (1964).

All the specimens are preserved in the collection of Kaunas T. Ivanauskas Zoological museum.

List of localities

Ąžuolynė	Jonava district	55.129722, 24.480277
Ažvinčiai Nat.R.	Ignalina district	55.447222, 26.068055
Braziūkai env.	Kaunas district	54.901666, 23.484444
Jiesia landscape pr. (1)	Kaunas district	54.856666, 23.934166
Jiesia landscape pr. (2)	Kaunas district	54.856944, 23.931666
Jiesia landscape pr. (3)	Kaunas district	54.847777, 23.932222
Jiesia landscape pr. (4)	Kaunas district	54.853333, 23.939444

Jiesia landscape pr. (5)	Kaunas district	54.853611, 23.939166
Juodkrantė env.	Neringa municipality	55.555000, 21.127500
Juškinės Miškas f.	Šakiai district	55.019444, 23.462777
Karmėlavos Miškas f. (1)	Kaunas district	54.960277, 24.110277
Karmėlavos Miškas f. (2)	Kaunas district	54.963333, 24.115833
Kaunas	Kaunas district	54.905000, 23.913611
Kriūkai	Šakiai district	55.068888, 23.391111
Minčios Miškas f.	Ignalina district	55.484722, 25.980555
Naujenėlė	Kalvarija municipality	54.360833, 23.181388
Pilėnų Miškas f.	Kaunas district	54.963611, 24.035555
Punios Šilas f.	Alytus district	54.543055, 24.087500
Školkampio Miškas f. (1)	Kazlų Rūda municipality	54.879444, 23.575555
Školkampio Miškas f. (2)	Kazlų Rūda municipality	54.879722, 23.575833
Tervydoniai tsh. (1)	Šakiai district	55.027777, 23.444444
Tervydoniai tsh. (2)	Šakiai district	55.026944, 23.446111
Vilkija	Kaunas district	55.046111, 23.558055

List of species

CARABIDAE

***Calathus cinctus* Motschulsky, 1850**

Tervydoniai (1), agricultural land, wheat stubble, 20 08 2015, 1 ♂ (R.F.); Juškinės Miškas f., grassland of forest edge, 28 08 2016, 1 ♀ (R.F.).

Comments. The distribution of this species is still not known completely (Aleksandrowitcz, 2012) because of comparatively new taxanomic status of this taxa. *C. cinctus* was regarded as synonym of *C. mollis* (Marsham, 1802) (Vereschagina, 1984) and established as a good species only in 1990 (Aukema, 1990). The presence of *C. mollis* in almost whole Europe was noted in the Catalogue of Palaearctic Coleoptera (Hovorka & Scaky, 2003), however *C. cinctus* is noted only for western and southern part of Europe. The controversial pattern of distribution ranges of these two species are presented in the check list of Russia and adjacent lands (Kryzhanowskij *et al*., 1995) and in a well-known interactive database "Fauna Europaea" (Vigna Taglianti, 2014). Indeed the trustworthy data on the presence of *C. mollis* in Lithuania is still missing, because old records of these species in the territory of Lithuania (Ogijewicz, 1933) are not confirmable (the specimens are lost). Assuming the new knowledge of distribution of these species in Europe, we suggest attribution of previous records of *C. mollis* to *C. cinctus*, as the distribution of later species in territory of Lithuania is proved by our recent findings. Both specimens were found in open area with loamy soils. The photos of habitus and male genitalia of our specimen are presented in Fig. 1–2.

***Platyderus rufus* (Duftschmid, 1812)**

Juodkrantė, 10 09 2014, 1 ♂ (R.F.).

Comments. Only 2 species: *Platyderus depressus* (Audinet-Serville, 1821) syn. *ruficollis* (Marsam, 1802) and *P. rufus* have been reported for Central European countries (Hovorka & Sciaky, 2003). *P. depressus* reaches further to the north, where it has been detected in the Netherlands (Aukema & Baars, 1986) and in southern Norway (Skartveit *et al*., 2000), while the distribution range of *P. rufus* reaches Slovak and Czech Republics (Hůrka, 1996), southern Poland (Burakowski *et al*., 1973) and north-western

Ukraine (Aleksandrowitcz, 2014). So, the finding of this species in the territory of our country was quite unexpected. Our specimen was found in the sand of shady shore of Curonian lagoon. The habitus of the specimen is presented in Fig. 3.

PTILIIDAE

***Pteryx suturalis* (Heer, 1841)**

Minčios Miškas f., 19 06-25 07 2013, 1 spec., 25 07-28 08 2013, 1 spec. caught using windows traps, in *Pinetum vaccinio-mirtyllosum* stand (V.T.); Ąžuolynė, 24 02 2014, 1 spec. in litter of *Pinetum vaccinio-mirtyllosum* stand (V.T.).

Comments. This species is widespread in almost all the Europe from Mediterranean basin to Fennoscandia reaching beyond to the extreme Northern provinces (Johnson, 2004; Polilov, 2014) *P. suturalis* is regarded as typical dweller of rotting wood and forest litter (Burakowski *et al*., 1978), as eudominant species it was found in decaying birch (*Betula* spp.) wood (Sawoniewicz, 2013).

***Ptinella aptera* (Guérin-Ménéville, 1839)**

Ažvinčiai Nat. R., 09 01 2014, 1 spec. in litter of *Pinetum vaccinio-mirtyllosum* stand (V.T.).

Comments. Like the previous species, it is widely distributed in Europe (Johnson, 2004; Polilov, 2014), recently found in the North American continent (Sörensson, 2003), but still not registered in north-eastern part of the region as well as in the eastern Baltic countries. The preference of this species in decaying wood is well known (Jonsell & Hansson, 2011;Sawoniewicz, 2013). We suppose that both these species of Ptiliidae should be widely distributed in Lithuanian forests.

STAPHYLINIDAE

***Lordithon speciosus* (Erichson, 1840)**

Ažvinčiai Nat.R., 25 07-28 08 2013, 1 spec., caught using windows traps, in *Pinetum vaccinio-mirtyllosum* stand (V.T.).

Comments. This eurosiberian, boreo-mountaine species is known throughout the whole norhern and middle Europe, but is still not recorded from several countries (Smetana 2004; Schuelke, 2014). It is considered a relic species of primeval coniferous forests (taiga) in central Europe and is in the lists of threatened species in some countries (Geiser, 1992; Pawlowsky, 2008).

***Atheta europaea* Likovsky, 1984**

Minčios Miškas f., 29 05-19 06 2013, caught using windows traps, *Pinetum vaccinio-mirtyllosum* stand, 1 spec. (V.T.).

Comments. *A. europaea* is insufficiently known species in Europe. Till now it was reported only from several European countries (Smetana, 2004; Silfverberg, 2010). Our specimen was identified by Viktor B. Semenov (Institute of Medical Parasitology and Tropical Medicine of E.I. Martsinovsky, Moscow, Russia).

ELATERIDAE

***Danosoma conspersum* (Gyllenhal, 1808)**

Karmėlavos Miškas f. (2), 25 07 2005, 1 spec. (V.I.), Školkampio Miškas f. (1), 31 08 2016, 2 spec. (K.M.), Školkampio Miškas f. (2), 1 spec. (R.F.) (Fig. 4).

Comments. It is a boreal Eurasian species distributed from Scandinavian peninsula to Russian Far East and Korean peninsula (Cate, 2007). It's range reaches extreme northern provinces in Sweden and Finland (Lundberg & Gustavsson, 1995). The Bialowezha forest is the most southern area of records of this species (Burakowski *et al*., 1985). The larvae are carnivorous, live under the bark of dead coniferous, rarely deciduous trees or

in the rotten wood of its stumps and trunks situated in well sun exposed areas (Tarnawski & Buchholz, 2008).

DASYTIDAE

***Danacea pallipes* (Panzer, 1793)**

Jiesia landscape pr. (1), 09 06 2016, 1 spec. (R.F.) (Fig. 5).

This species is distributed in the southern and Central Europe, northward to southern part of Sweden and Estonia (Lundberg & Gustavsson, 1995; Silfverberg, 2010). The larvae of this species develop in dead wood of maple (*Acer platanoides*) in the larvae tracks of *Allosterna tabacicolor* (Constantin, 1989).

COCCINELLIDAE

***Oenopia impustulata* (Linnaeus, 1767)**

Jiesia landscape pr. (2), 18 05 2016, 1 spec. (R.F.) (Fig. 6).

This species is distributed in Southern and Central Europe, north to Poland (Canepari, 2014). It is registered here for the first time for the eastern Baltic region and Fennoscandia.

MELANDRYIDAE

***Phloiotrya subtilis* (Reitter, 1897)**

Punios Šilas f., 27 06 2008, 1 spec. (R.F.).

Coments. This species is distributed in the eastern part of Europe, from Poland to Croatia and Serbia, also known in the western part of Russia (Nikitsky, 2014). The larvae feed on dead, partly rotten wood trunks and branches, infected by fungi. Larvae of this species occur mainly on hazel, also were found in the rotten wood of beeches, oaks, alders and willows.

TENEBRIONIDAE

***Mycetochara obscura* (Zetterstedt, 1838)**

Minčios Miškas f., 19 06-25 07 2013, caught using windows traps in *Pinetum vaccinio-mirtyllosum* stand 1 spec. (V.T.).

Coments. This species is distributed mainly in Northern Europe: Fenoscandia, northen part of Russia, Estonia and Latvia (Silferberg, 2010; Fattorini, 2014; Telnov, 2004), also known in Poland (Burakowski *et al*., 1987).

Larvae develop in wood of oak, birch and spruce infected by fungi, under the bark in the larvae tracks of longhorn beetles (Cerambycidae).

OEDEMERIDAE

***Ischnomera caerulea* (Linnaeus, 1758)**

Pilėnų Miškas f., 01 06 2015, 1 spec. (V.I.).

Coments. This species is widespread in Europe from the Mediterranean sea to the southern Scandinavia (Lundberg & Gustvasson, 1995; Silfverberg, 2010; Vazquez – Albalate, 2014).

The larvae occur on the trunks of dead deciduous trees, especially in places damaged and without bark.

***Ischnomera cyanea* (Fabricius, 1792)**

Karmėlavos Miškas f. (1), 28 04 2015, 1 spec. (V.I.).

Coments. This species is distributed mainly in the southern and central Europe north to Denmark and southern Sweden (Lundberg & Gustvasson, 1995; Silfverberg, 2010; Vazquez – Albalate 2014).

It is associated with the decayed wood of deciduous trees: oak, elm, beeches, maple, poplars, willow and chestnut. Larvae has two-year development cycle.

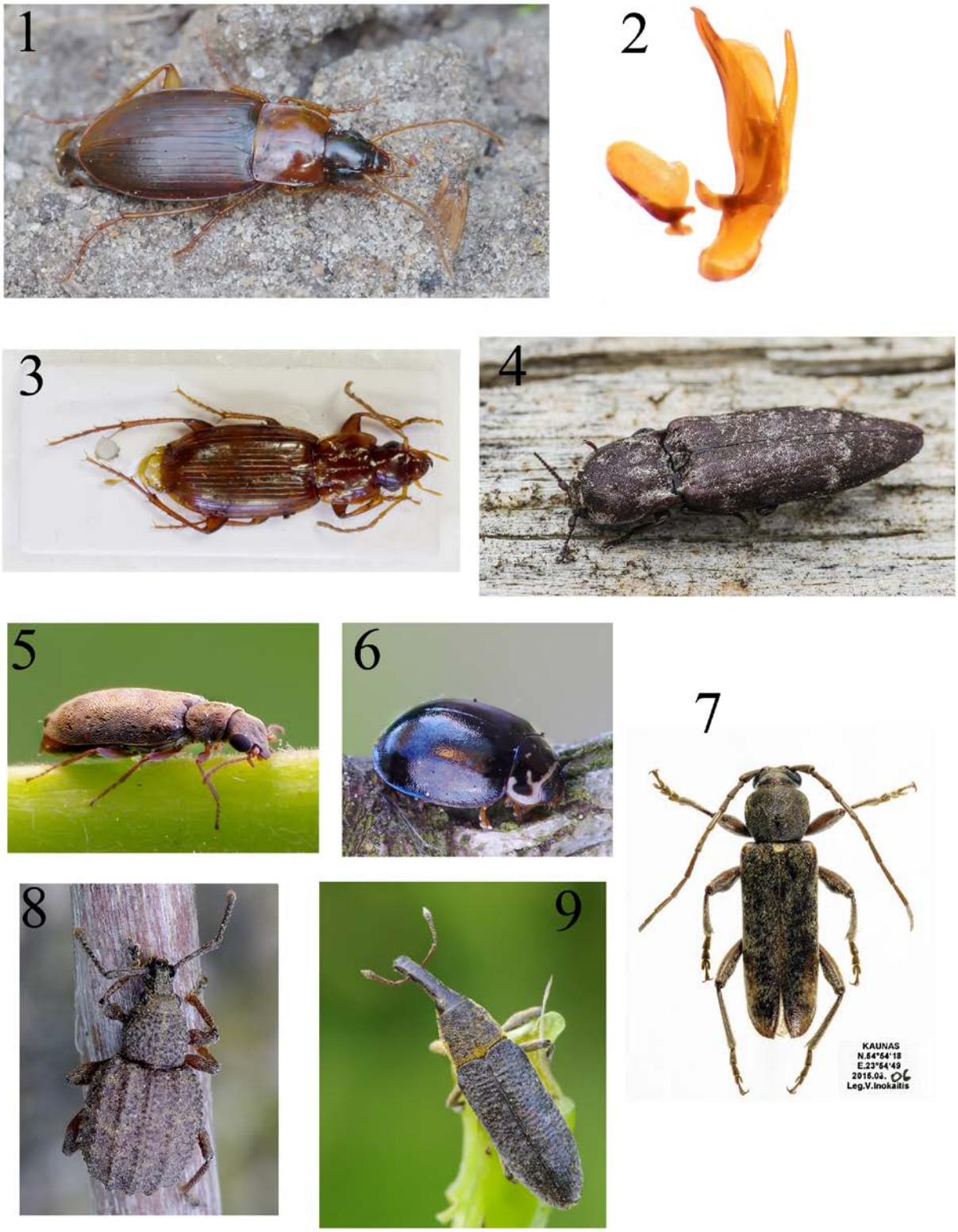

Fig. 1–9: 1. *Calathus cinctus* (photo R.Ferenca); 2. *C.cinctus* genitalia (photo V.Tamutis); 3. *Platyderus rufus* (photo R.Ferenca); 4. *Danosoma conspersum* (photo K.Martinaitis); 5. *Danacea pallipes* (photo R.Ferenca); 6. *Oenopia impustulata* (photo R.Ferenca); 7. *Trichoferus campestris* (photo K.Martinaitis); 8. *Otiorhynchus porcatus* (photo R.Ferenca); 9. *Lixus pulverulentus* (photo R.Ferenca).

SCRAPTIIDAE

***Cyrtanaspis phalerata* (Germar 1847)**

Minčios m., 19 06-25 07 2013, caught using windows traps, *Pinetum vaccinio-mirtyllosum* stand, 1spec. (V.T).

Comments. The distribution range of this European species covers the territory of central Europe (Leblanc *et al*., 2008), reaches southern Sweden (Lundberg & Gustavsson, 1995), Finland, Karelia, Estonia, Latvia (Silfverberg, 2010), but seems to be rare and sporadic in the whole range (Geiser, 1992; Kubisz *et al*., 2014). This species is regarded as forest species, occurring on wood edges and in light spaces in tree stands (Kubisz *et al*. 2014), probably occurs all over our country.

CERAMBYCIDAE

***Trichoferus campestris* (Faldermann, 1835)**

Kaunas, 19 08 2012, 1 spec., 01 08 2013, 1 spec., 28 07 2014, 2 spec., 06 08 2015, 1 spec. (V.I.) (Fig. 7). Caught using light trap.

Comments. *T. campestris* is native to eastern Asia (e.g., Far East, Japan, Korean peninsula, most of P. R. China, Mongolia, Souther Ural, Central Asia, Armenia, and southern part of European Russia (Grebenikov *et al*., 2010). Over the last forty years it has spread in many European countries westward to Sweden, Poland, France (Dascălu *et al*., 2013), was also detected in North America (Grebenikov *et al*., 2010). This species is polyphagous on both deciduous trees and conifers (Iwata & Yamanda, 1990). The larvae develop under the bark and in the wood of healthy trees (Dascălu *et al*., 2013). *T. campestris* is included in the list of quarantine species in Europe (EPPO, 2015). The identification of our specimens was confirmed by M. L. Danilevsky (A.N. Severtsov Institute of Ecology and Evolution Russian Academy of Sciences, Moscow).

ATTELABIDAE

***Lasiorhynchites olivaceus* (Gyllenhal, 1833)**

Jiesia landscape pr. (3), 26 05 1985, 1 spec. (R.F.); Jiesia landscape pr. (4), 04 06 2005, 1 spec. (A.M.); Jiesia landscape pr. (5), 24 06 2005, 1 spec. (R.F.); Vilkija, 17 05 1997, 1 spec. (A.M.).

This species is distributed in the southern and central parts of Europe, reaching north to Denmark, southern Sweden. (Burakowski *et al*., 1987; Silfverberg, 2010; Biondi, 2014). Larvae develop in the young shoots of oaks.

CURCULIONIDAE

***Ceutorhynchus canaliculatus* C. Brisout, 1869**

Braziūkai env., 30 05 2012, 1 spec., xerothermic habitat with sparse vegetation, on *Berteroa incana* (V.T.).

Comments. This species was previously known only from the central and south-eastern part of Europe (Burakowski *et al*., 1993; Colonnelli, 2014), but it has recently been recorded also in the southern part of Russia and western Siberia (Legalov, 2009; Arzanov, 2015).

***Ceutorhynchus pumilio* (Gyllenhal, 1827)**

Kriūkai, 30 07 2000, 1 spec. (R.F.).

Comments. This species is widely distributed in Western Europe, its range reaches Ukraine and Poland in the east (Colonnelli, 2014). The larvae of this monophagous species feed on seeds of *Teesdalia nudicaulis* (Burakowski *et al*., 1993). This is the first record of this species in the Baltic countries.

***Mogulones raphani* (Fabricius, 1792)**

Braziūkai env., 19 06 2012, 3 spec., moist meadow, on *Symphytum officinale* (V.T.)

Comments. This species is widespread in Central Europe, eastward to Romania and Ukraine (Colonnelli, 2014). Larvae feed on stems and root collar of *Symphytum officinale* (Burakowski *et al*., 1993). This is the first record of this species in the Baltic countries.

***Otiorhynchus porcatus* (Herbst, 1795)**

Tervydoniai (2), in plantation of strawberries, 26 04 2014, 1♀, 25 05 2014, 1♂ 1♀ (R.F.).

Comments. This species is widely distributed in Western Europe, its range reaches Finland and Poland in the east (Magnano, 2014), it is also introduced in North America (Majka & Maclvor, 2009). *O. porcatus* occurs in open areas, was observed feeding on the leaves of *Primula officinalis, Convallaria maialis*, *Fragaria vesca* and *F. grandiflora* (Burakowski *et al*., 1993). This is the first record of this species in the Baltic countries (Fig. 8).

***Lixus pulverulentus* (Scopoli, 1763)**

Naujenėlė, 09 06 2015, 1 spec. (R.F.) (Fig. 9).

Comments. This species is widely distributed in Europe (Talamelli, 2014), known in Turkey (Avgin & Colonnelli, 2011) and northwards in Sweden (introduced) (Lundberg & Gustavsson, 1995), its range reaches Iran in the east (Ghahari & Legalov, 2011). It has been recently recorded in Kaliningrad region (Alekseev *et al*., 2015). This species developes on *Malva silvestris*, *Althaea officinalis*, *Vicia faba*, *Cirsium arvense*, *C. palustre*. Adults feed on leaves, flowers and young shoots. Female lays eggs inside the stems. The larvae feed in the core, which is transformed. The pupal stage continues about two weeks. Imago overwinters in the withered stem or in the soil (Burakowski *et al*., 1993).

Acknowledgements

Authors are grateful to Ph. Dr. Mikhail L. Danilevsky for the help identifying the specimens of *T. campestris* and Dr. Viktor B. Semenov for the help identifying the specimen of *A. europaea.*

References

Aleksandrowitcz O. R. 2012. Distribution of *Calathus cinctus* Motschulsky, 1850 (Coleoptera, Carabidae) in East Europe. In: Anisjutkin L. N. et al. (Eds) *Materials of 14 Congress of the Russian Entomological Society, Saint-Peterburg.*

Aleksandrowitcz O.R. 2014. *Ground beetles (Coleoptera: Carabidae) of West part of Russian Plane. Fauna, zoogeography, ecology*. LAP LAMBERT Academic Publishing. [Александрович О. 2014. Жужелицы (Coleoptera: Carabidae) запада лесной зоны Русской равнины. Фауна, зоогеография, экология, фауногенез].

Alekseev V. I., Bukejs A., Drotikova A. M., Rozhina V. I. 2015. Contribution of the knowledge of beetles (Insecta: Coleoptera) in the Kaliningrad Region. 5. *Zoology and Ecology* 25(3): 247–256.

Arzanov Y. G. 2015. A revised checklist species of the Curculionoidea (Coleoptera, excluding Scolytinae) of Rostov Oblast and Kalmykia, the southern part of European Russia. *Journal of insect biodiversity* 3(12): 1–32.

Assman T. 2004. Shodrini. In: Freude H., Harde K. W., Lohse G. A. & Klauznitzer B. (Eds) *Die Käfer Mitteleuropas. Bd. 2. Adephaga 1. Carabidae (Laufkäfer)*, Spectrum – Verlag (Heidelberg/Berlin), 2 Auflage: 283–297.

Aukema B. 1990. Taxonomy, life history, and distribution of three closely related species of the genus *Calathus* (Coleoptera: Carabidae). *Tijdschift voor Entomologie* 133(2): 121–141.

Aukema B.; Baars M. A. 1986. *Platyderus ruficollis* (Marsham, 1802), a new Dutch carabid beetle from the island of Texel (Coleoptera). *Entomologische Berichten* (Amsterdam): 462: 19–20.

Avgin S. S., Colonnelli E. 2011. Curculionoidea (Coleoptera) from southern Turkey. *African Journal of Biotechnology* 10(62): 13555–13597.

Besuchet C. 1971. Ptiliidae. In: Freude H., Harde K. W., Lohse G. A. (Eds) *Die Käfer Mitteleuropas. Bd. 3. Adephaga 2, Papilicornia, Histeroidea, Staphylinoidea* 1, Goecke & Evers, Krefeld: 311–334.

Biondi S. 2014. Fauna Europaea: Attelabidae. In: Alonso-Zarazaga M.A. (Ed) Fauna Europaea: Coleoptera. *Fauna Europaea version 2.6*. Available at http://www.fauna-eu.org [accessed 13 October 2016].

Burakowski B., Mroczkowski M., Stefanska J. 1973. Chrząszcze – Coleoptera. Biegaczowate — Carabidae. *Katalog Fauny Polski*, XXIII, 2, Warszawa.

Burakowski B., Mroczkowski M., Stefanska J. 1978. Chrząszcze – Coleoptera. Histeroidea i Staphylinoidea prócz Staphylinidae. *Katalog Fauny Polski*, XXIII, 5, Warszawa.

Burakowski B., Mroczkowski M., Stefanska J. 1985. Chrząszcze – Coleoptera. Buprestoidea, Elateroidea i Cantharoidea. *Katalog Fauny Polski*, XXIII, 10, Warszawa.

Burakowski B., Mroczkowski M., Stefańska J. 1987. Chrząszcze– Coleoptera. Cucujoidea *Katalog Fauny Polski*, XXIII, 14 Warzawa.

Burakowski B., Mroczkowski M., Stefańska J. 1993. Chrząszcze – Coleoptera. Ryjkowce – Curculionidae, część 1. *Katalog Fauny Polski*, XXIII, 19, Warszawa.

Cate P. C. 2007. Elateridae. In: Löbl I, Smetana A (Eds) *Catalogue of Palaearctic Coleoptera, Vol. 4*: *Elateroidea – Cucujoidea*. Apollo Books, Stenstrup, Denmark, 89–207

Canepari C. 2014. Fauna Europaea: Coccinellidae. In: Audisio P. (Ed) Fauna Europaea: Coleoptera. *Fauna Europaea version 2.6*. Available at http://www.fauna-eu.org [accessed 09 October 2016].

Colonnelli E. 2014. Fauna Europaea: Curculionidae. In: Alonso-Zarazaga M.A. (Ed) Fauna Europaea: Coleoptera. *Fauna Europaea version 2.6*. Available at http://www.fauna-eu.org [accessed 08 October 2016].

Constantin R. 1989. Descriptions des larves d'Enicopus pyrenaeus Fairmaire et de Danacea pallipes (Panzer). Contribution à l'étude de la biologie et de la systématique larvaire des Melyridae (Coleoptera). *Nouvelle Revue D'Entomologie* 6(4): 387–405.

Dascălu M.-M., Serafim R., Lindelöv Å. 2013. Range expansion of Trichoferus campestris (Faldermann) (Coleoptera: Cerambycidae) in Europe with the confirmation of its presence in Romania. *Entomologica Fennica* 24: 142–146.

EPPO (European and Mediterranean Plant Protection Orgnization) 2015. A2 *List of pests recommended for regulation as quarantine pests* (version 2015-09). Available at https://www.eppo.int/QUARANTINE/listA2.htm [accessed 18 October 2016].

Fattorini S. 2014. Fauna Europaea: Tenebrionidae. In: Audisio P. (Ed) Fauna Europaea: Coleoptera. *Fauna Europaea version 2.6*. Available at http://www.fauna-eu.org [accessed 10 October 2016].

Ferenca R., Ivinskis P., Meržijevskis A., Rimšaitė J., Karalius S. 2011. Twenty Beetle (Insecta: Coleoptera) species new for the Lithuanian Fauna. *New and Rare for Lithuania Insect Species* 23: 15–29.

Ferenca R., Tamutis V., Kinduris R. 2013. New records of rare false blister beetle (Coleoptera: Oedemeridae) species in Lithuania. *New and Rare for Lithuania Insect Species* 25: 10–18.

Ghahari H., Legalov A.A. 2011. Contribution to the knowledge of Curculionidae (Coleoptera) from Kurdistan province (Western Iran). *Amurina zoological journal* 3(4): 345–348.

Geiser R. 1992. Rote Liste gefährdeter Kurzflügleartiger (Staphylinoidea) und Stutzkäferartiger (Histeroidea). *Schriftenreihe Bayerisches Landesamt für Umweltschutz* 111: 118–122.

Grebenikov V. V., Gill B. D., Vigneault R. 2010. Trichoferus campestris (Faldermann) (Coleoptera: Cerambycidae), an Asian wood-boring beetle recorded in North America. *The Coleopterists Bulletin* 64: 13–20

Hovorka O., Sciaky R. 2003. Carabidae: Harpalinae, Sphodrini, Dolichina. In: Lobl I, Smetana A. (eds) *Catalogue of Palaearctic Coleoptera, Vol. 1: Archostemata – Myxophaga – Adephaga*. Apollo Books, Stenstrup, 529–530.

Hůrka K. 1996. *Carabidae of the Czech and Slovak Republics*. Illustrated key. Zlin 565

Ivinskis P., Rimšaitė J., Meržijevskij A. 2013. Data on beetle (Coleoptera) species new for Lithuanian fauna. *New and Rare for Lithuania Insect Species* 25: 18–24.

Ivinskis P., Rimšaitė J., Meržijevskij A. 2014. Data about new beetle (Coleoptera)species found in Lithuania. *New and Rare for Lithuania Insect Species* 26: 31–36.

Ivinskis P., Rimšaitė J., Meržijevskij A. 2015. New species and new records of rare species of beetles (Coleoptera) from Lithuania. *New and Rare for Lithuania Insect Species* 26: 24–34.

Iwata R., Yamanda F. 1990. Notes on the biology of Hespherophanes campestris (Faldermann) (Col., Cerambycidae), a draywood borer in Japan. *Material and Organismen* 25: 305–313

Johnson C. 2004. Ptiliidae. – In: Löbl I. & Smetana A. (eds), *Catalogue of Palaearctic Coleoptera, Volume 2*. Apollo Books, Stenstrup: 122–131.

Jonsell M., Hansson J.. 2011. Logs and stumps in clearcuts support similar saproxylic beetle diversity: Implications for bionergy harvest. *Silva Fennica* 45(5): 1053–1064.

Kryzhanovskij O.L., Belousov I.A., Kabak I.I., Kataev B.M., Makarov K.V. & Shilenkov V.G. 1995. *A check list of the ground beetles of Russia and adjacent lands (Insecta, Coleoptera, Carabidae)*. Pensoft Publishers, Sofia-Moscow: 276

Kubisz D., Iwan D., Tykarski p. 2014. Tenebrionoidea: Tetratomidae, Melandryidae, Ripiphoridae, Prostomidae, Oedemeridae, Mycteridae, Pythidae, Aderidae, Scraptiidae. Critical check list, distribution in Poland and metaanalysis. *Coleoptera*

Poloniae, Vol. 2. University of Warsaw – faculty of Biology, Natura optima dux Foundation, Warszawa, 470.

Leblanc P., Levey B., Horák J. 2008. Family Scraptidae Mulsant, 1856. In: Löbl I., Smetana A. (Eds) *Catalogue of Palaearctic Coleoptera, Vol. 5: Tenebrionoidea*. Apollo Books, Stenstrup, Denmark: 459–466.

Legalov A. A. 2009. New records of the weevils (Coleoptera: Curculionidae) from Novosibirsk province. *Far Eastern Entomologist* 193: 7–8.

Lohse G. A.. 1964. Staphylinidae I (Micropeplinae bis Tachyporinae). In: Freude H., Harde K. W., Lohse G. A. (Eds) *Die Käfer Mitteleuropas. Bd. 3. Adephaga 2, Papilicornia, Histeroidea, Staphylinoidea 1*, Goecke & Evers, Krefeld: 5–264.

Lundberg S., Gustavsson B. 1995. *Catalogus Coleopterorum Sueciae*. Natural History Museum, Stockholm, 302 pp.

Magnano L 2014. Fauna Europaea: Otiorhynchus. In: Alonso-Zarazaga M.A. (Ed) Fauna Europaea: Coleoptera. *Fauna Europaea version 2.6.* Available at http://www.fauna-eu.org [accessed 08 October 2016].

Majka Ch. G., Maclvor J. S. 2009. *Otiorhynchus porcatus* (Coleoptera: Curculionidae): a European root weevil newly discovered in the Canadian Maritime Provinces. *Journal of the Acadian Entomological Society* 5: 27–31.

Monsevičius V. 2013. New and little known for the Lithuanian fauna species of beetels (Coleoptera), found in 2002, 2011-2012. *New and Rare for Lithuania Insect Species* 25: 24–30.

Nagrockaitė R., Tamutė B., Tamutis V. 2011. New and rare beetle (Coleoptera) species from Curonian spit (Lithuania). *New and Rare for Lithuania Insect Species* 23: 34–38.

Nikitsky N. 2014. Fauna Europaea: Melandryidae. In: Audisio P. (Ed) Fauna Europaea: Coleoptera. *Fauna Europaea version 2.6*. Available at http://www.fauna-eu.org [accessed 10 October 2016].

Novák V., Pettersson R., 2008. Subfamily Alleculinae Laporte, 1840. In: Löbl I., Smetana A. (Eds) *Catalogue of Palaearctic Coleoptera, Vol. 5: Tenebrionoidea*. Apollo Books, Stenstrup, Denmark: 319–339

Ogijewicz B. 1933. Pryczynek do znajomósci chrząszczy (Adephaga i Palpicornia) okolic Wilna i Trok. *Prace Towarzystwa Przyjaciół Nauk w Wilnie*. T. 7. Wilno.

Pawlowski J. 2008. Relic beetles (Coleoptera) of the Carpathian primeval forest. *Roczniki Bieszczadzkie* 16: 317–324.

Polilov A. 2014. Fauna Europaea: Ptiliidae. In: Audisio P. (Ed) Fauna Europaea: Coleoptera. *Fauna Europaea version 2.6*. Available at http://www.fauna-eu.org [accessed 17 October 2016].

Sawoniewicz M. 2013. Beetles (Coleoptera) ocurring in decaying birch (Betula spp.) wood in the Kampinos National Park. *Forest Research Papers* 74(1): 71–85.

Schuelke M. 2014. Fauna Europaea: Staphylinidae. In: Alonso-Zarazaga M.A. (Ed) Fauna Europaea: Coleoptera. *Fauna Europaea version 2.6*. Available at http://www.fauna-eu.org [accessed 08 October 2016].

Silfverberg H. 2010. Enumeratio renovata Coleopterorum Fenoscandiae, Daniae et Baltiae. *Sahlbergia* 16 (2): 1–144.

Skartveit J. og Ødegaard F. og Solhøy T. 2000. Platyderus ruficollis (Marsham) (Coleoptera, Carabidae) new to Scandinavia. *Norwegian Journal of Entomology* 47: 197–198.

Smetana A. 2004. Staphylinidae: Phloeocharinae, Olisthaerinae, Tachyporinae, Trichophyinae, Aleocharinae. In: Löbl I., Smetana A. (Eds) *Catalogue of Palaearctic Coleoptera, Vol. 2: Hydrophiloidea – Histeroidea – Staphylinoidea*. Apollo Books, Stenstrup, Denmark: 122–131

Sörensson M. 2003. New records of featherwing beetles (Coleoptera: Ptiliidae) in north America. *The Coleopterists Bulletin* 57(4): 369–381.

Talamelli F. 2014. Fauna Europaea: Curuclionidae. In: Alonso-Zarazaga M.A. (Ed) Fauna Europaea: Coleoptera. *Fauna Europaea version 2.6*. Available at http://www.fauna-eu.org [accessed 17 October 2016].

Tamutis V., Tamutė B., Ferenca R. 2011. A Catalogue of Lithuanian beetle (Insecta: Coleoptera). *Zookeys* 121, Sofia.

Tamutis V. 2012. New and rare (insufficiently known) beetle species found in the litter of coniferous and mixed forests in Lithuania. *New and Rare for Lithuania Insect Species* 24: 7–17.

Tamutis V., Barševskis A. 2014. A faunistic review of ground beetles of Lebiinae Bonelli, 1810 (Coleoptera: Carabidae) of Lithuania. *Entomologica Fennica* 25: 66–86.

Tarnawski D., Buchholz L. 2008. Sprężykowate –Elateridae. Część ogólna oraz pod rodziny: Agrypninae, Negastrinae i Diminae. *Klucze do oznaczania owadów Polski, cz. XIX, z. 34a*. Toruń.

Telnov D. 2004. Checklist of Latvian Beetles (Insecta: Coleoptera). In: Telnov D. (Ed). *Compendium of Latvian Coleoptera*. vol. 1. Riga.

Vazquez – Albalate X. 2014. Fauna Europaea: Oedemeridae. In: Audisio P. (Ed) Fauna Europaea: Coleoptera. *Fauna Europaea version 2.6*. Available at http://www.fauna-eu.org [accessed 11 October 2016].

Vereschagina T. H. 1984. Carabids of the genus *Calathus* Bon. (Coleoptera, Carabidae) of the fauna of the USSR. *Revue d'Entomologie de l'URSS* 53(4): 751–767.

Vigna Taglianti A. 2014. Fauna Europaea In: Alonso-Zarazaga M.A. (Ed) Fauna Europaea: Coleoptera. *Fauna Europaea version 2.6*. Available at http://www.fauna-eu.org [accessed 20 October 2016].

Duomenys apie naujas Lietuvos faunos vabalų (Coleoptera) rūšis

R. FERENCA, V. TAMUTIS, V. INOKAITIS, K. MARTINAITIS

Santrauka

Pateikiami duomenys apie 21 naują Lietuvos faunos vabalų rūšį. Keturiolika iš jų buvo įtrauktos į Lietuvos vabalų katalogą kaip ieškotinos Lietuvoje, o likusios 7 – pirmą kartą minimos Lietuvos entomologų publikacijose.

Pateikiama informacija apie invazinę Rytų Azijos ūsuočių rūšį *Trichoferus campestris* (Faldermann, 1835). Ši rūšis, Europoje pirmą kartą rasta 1967 m. Ukrainoje ir Pietų Rusijoje, pastaraisiais metais plačiai išplito daugelyje Europos šalių.

Received: 24 October, 2016