

## New data on little known species of click beetles (Coleoptera: Elateridae) in Lithuania

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Tamutis V., Ferenca R., Ivinskis P., Mulerčikas P. 2010. New data on little known species of click beetles (Coleoptera: Elateridae) in Lithuania. *Baltic J. Coleopterol.*, 10(1): 45 – 60.

The study is devoted to the new faunistic data on the little known click beetles (Coleoptera: Elateridae) in Lithuania. The data of long term faunistic investigations of authors as well as material stored in the natural museums of Lithuania and private collections have been examined. The results of re-examination and new information about distribution of 28 species of click beetles in Lithuania are presented in this article. The presented information includes exact label data and number of specimens, the places of collections as well as maps of distribution and comments about habitats of 28 species of click beetles. One species *Ctenicera cuprea* (Fabricius, 1775) is removed from the list of Lithuanian beetles.

Key words: Coleoptera, Elateridae, fauna, distribution, Lithuania

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### INTRODUCTION

Works designed to investigation of click beetles in Lithuania are not numerous. The first data about click beetles of Lithuania (Vilnius environs) we can find in the publication of B. Ogijewicz (1939). Some data of click-beetles are mentioned in other faunistic works: Lentz 1879, Heyden 1903, Mazurowa & Mazur 1939, Pileckis 1960, 1963, 1976, Lešinskas & Pileckis 1967, Zajančkauskas & Pileckis 1968, Strazdienė 1976, 1988, Bercio & Folwaczny 1979, Pileckis & Monsevičius, 1982, Pileckis & Jakaitis 1982, Gaidienė 1993. The main comprehensive data on Lithuanian elaterids have

been presented in the monograph „Lietuvos fauna. Vabalai I.“ (Pileckis & Monsevičius 1995). 65 species of click beetles are mentioned in this monograph and 34 of them are presented as rare and very rare in Lithuania. More recent works which deal with „rare” or „very rare“ click-beetles species analysis are scattered in various publications: Monsevičius 1997, Ivinskis et al. 1998, Pankevičius 2000, Šablevičius 2000, Tamutis & Zolubas 2001, Ferenca et al. 2002, 2006, 2007, Ehnström et al. 2003, Ferenca 2003, 2004, Tamutis 2005, Tamutis et al. 2007, Tamutis & Ferenca 2006, Žiogas & Zolubas 2005, Rašomavičius 2007, Vaivilavičius 2008, Inokaitis 2009. The aim of this

study was to examine the material of rare or little click beetles collected by the authors as well as kept in the collections of T. Ivanauskas Zoological Museum, Ecological Institute, Vilnius University Zoological Museum, personal collection of Aleksandras Meržijevskis, and also to get more information about the distribution of these species in Lithuania.

## MATERIAL AND METHODS

The material was collected mainly using transect counting method, some individuals have been caught using different traps (vine, light, pitfall or pheromone), hand-searching, sampling under bark of old logs, tree stumps and leaf litter.

The biggest part of specimens was collected by Romas Ferencas (R.F.), Vytautas Tamutis (V.T.) and Povilas Ivinskis (P.I.). Some specimens were collected by Aleksandras Meržijevskis (Al.M.), A. Manikas (A.M.), A. Kaulinis (A.K.), Brigita Palavičiūtė (B.P.), Paulius Zolubas (P.Z.), Alvyra Patapavičienė (A.P.), Bronius Jakaitis (B. J.), Dalius Dapkus (D.D.), Elena Gaidienė (E.G.), Giedrius Švitra (G.Š.), Henrikas Ostrauskas (H.O.), Saulius Pakalniškis (S.P.), Rimantas Pankevičius (R.P.), Vidmantas Monsevičius (V.M.), Vytautas Uselis (V.U.), Vytautas Inokaitis (V.I.), Bronius Šablevičius (B.Š.) and Edgaras Živatkauskas (E.Ž.).

Commonly accepted nomenclature (Stibick 1979) was used in this paper. To defer to some authors (Stibick 1979, Silfverberg 2004, Telnov 2004, Cate 2007) *Drapetes mordelloides* (Host, 1789) (previously attributed to the Troscidae, subfamily Lissomidea) is attributed to Elateridae in consonance with P. Cate (2009). Classification of chorotypes is made according to A. Vigna Taglianti *et al.* (1999) on the basis of H. Silfverberg's (1998) publication concerning zoogeographical analysis of click beetles in Northern Europe.

Materials are deposited in the followings collections:

[TIZM] – Tadas Ivanauskas Zoological Museum; [EI] – Ecological Institute; [Al.M.] – Aleksandras Meržijevskis; [V. I.] – Vytautas Inokaitis

The following abbreviations are used throughout the paper:

env. – environment; f. – forest; spec. – specimen(s); Nat. R. – Nature reserve; Bot. R. – Botanical Reserve; Bot.-Zoo. R. – Botanical – Zoological Reserve; Land. R. – Landscape Reserve; Ent. R. – Entomological Reserve; Telm. R. – Telmological Reserve; Geo. R. – Geomorphological Reserve; Hydr. R. – Hydrographical Reserve.

Meaning of marks in the maps:

● -- new data; ◆ - - published data; ◇ - unconfirmed data.

## RESULTS AND DISCUSSIONS

During the current research the material of 331 specimens of Elateridae belonging to 19 genus and 28 species have been examined and 209 new finding facts have been registered. Most of findings are concentrated in Kaunas district (54 findings), however the circumstance doesn't indicate the best living conditions for little known elaterids in this region. Most likely the fact was determined by greater activity of coleopterologists in this area.

## LIST OF SPECIES

### *Drapetes mordelloides* (Host, 1789)

Chorotype: Palearctic

Kaun.: Dubravos miškas f.<sup>1</sup>, 12 08 2000 (1, in the pheromone trap for *Ips typographus*, P.Z.), [TIZM].

This species is very rare in Lithuania (Pileckis & Monsevičius 1995) and neighbouring countries (Tsinkevich & Aleksandrovich 2002; Barševskis 2005); it is included in the list of indicator species of natural forest habitats (Ehnström *et al.* 2003).

Only one finding has been known earlier in Čepkeliai Nat. R. (Ferenca 1988, Monsevičius 1997)(Fig.1).

***Lacon fasciatus* (Linnaeus, 1758)**

Chorotype: Palearctic

Var.: Alkūnės kampo Geo. R., 11 04 1984 (1, under bark of dead pine trunk, R.F.), [TIZM].

This species is very rare in Lithuania, associated with decaying wood (Pileckis & Monsevičius 1995), has been found only in two places in Jurbarkas and Šalčininkai districts before (Pileckis & Jakaitis 1982, Ferenca 2004) (Fig.2).

***Crepidophorus mutilatus* (Rosenhauer, 1847)**

Chorotype: Central European

Kaun.t.: “Vytauto parkas” park, 07 07 2009 (1, on the trunk of old, hollow oak tree, Al.M.), [Al.M.].

Only one older than 90 years record of this species is known in Lithuania from A. Palionis’ cards (Pileckis 1960, 1976, Pileckis & Monsevičius 1995, Ferenca 2006). The single specimen of this species with the label ‘Kauno G. t. s., 03 05 1927’ is deposited in the zoological museum of Vilnius University. The new finding of *C. mutilatus* shows that the species is still populating in the Kaunas’ parks.

***Athous vittatus* (Fabricius, 1792)**

Chorotype: European -Mediterranean

Kaun.: Dubravos miškas f.<sup>2</sup>, 08 06 1962 (2, E.G.), Jiesios Land. R., 09 05 1984 (1, R.F.), 12 05 1985 (1, R.F.), 18 05 1985 (2, R.F.), 14 05 1986 (2, R.F.), 27 05 1986 (1, R.F.), 15 05 1988 (1 R.F.), Noreikiškės env.<sup>1</sup>, 30 05 1985 (1, R.F.), Pajiesio miškas f., 14 05 1999 (1, R.F.); Kamšos Bot.-Zoo. R., 22 05 1992 (5 V.T.), 12 06 1995 (1, V.T.), Margininkai env., 11 06 1994 (2, V.T.); Ked.: Pašilių miškas f., 18 05 1994 (3, R.F.); Zar.: Jaskoniškių miškas f., 06 05 2004 (1, R.F.); Kais.: Strėvininkų miškas f., 23 05 2007 (1, R.F.); Maz.: Varduvos Land. R., 01 07 1991 (1 V.M.), Ramoniškė env., 29 06 1991 (1, V.M.), Žibikai env., 18 05 1998 (1, V.M.); Akm.: Avižliai env., 09 06 1993 (1, V.M.), [TIZM]; Kup.: Drūlenai env., 27

05 1991 (2, R.P.), [EI]; Kaun.: Gervėnupis env., 04 06 1996 (1, Al.M.), Kais.: Kruonis env., ??? 1973 (1, Al.M.), [Al.M].

This sylvan click beetle lives in deciduous and mixed forests. To this day only few records of *A. vittatus* have been documented in Lithuania (Heyden 1903, Pileckis 1960, Pileckis & Monsevičius 1995, Šablevičius 2000, Ferenca 2006, Vaivilavičius 2008) (Fig. 3). All examined individuals have been collected in the mixed forests or its edges and their distribution is sporadic.

***Harminius undulatus* (DeGeer, 1774)**

Chorotype: Holarctic

Kaiš.: Pravieniškių miškas f., 04 06 1989 (1, Al.M.), 25 05 1996 (1, Al.M.), 20 06 2006 (1, Al.M.), [Al.M.]; Kup.: Mirabelio miškas f., 12 06 1992 (1, R.P.); Var.: Stojų miškas f., 16 05 – 06 06 2008 (2, in the light trap, P.I.), [EI]; Maz.: Varduvos Land.R., 01 07 1991 (1, V.M.), Akm.: Kamanų Nat. R., 10 06 2003 (1, V.M.); Kaun.: Dubravos miškas f.<sup>1</sup>, 13 07 2000 (1, in the pheromone trap for *Ips typographus*, P.Z.); Taur.: Viešvilės Nat.R., 21-28 06 2004 (1, in the light trap, V.U.); Kelm.: Bulavėnai env. 03 08 2007 (1, E.Ž.), [TIZM].

This species is rare in Lithuania, associated with decaying wood (Pileckis & Monsevičius 1995); it has been known only from few finding places before in Jurbarkas (Pileckis & Jakaitis 1982), Švenčionys (Ferenca et al. 2002) and Kupiškis districts (Pankevičius 2000) (Fig. 4).

***Denticollis rubens* Piller & Mitterpacher, 1783**

Chorotype: Central European

Kais.: Pravieniškių miškas f., 11 06 1994 (1, Al.M.), [TIZM].

For the first time this species has been noted for Lithuania by B. Ehnström et al. (2003), but there isn’t any information about finding place, except the one point on the map. This species is very rare and officially protected in Latvia (Barševskis 2005); as indicator species is included in the list of natural forest habitats (Ehnström et al. 2003).

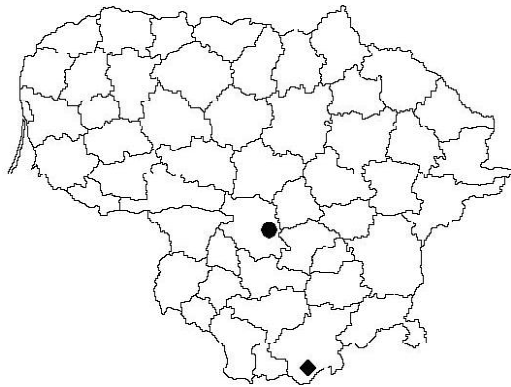


Fig. 1. Distribution of *Drapetes mordelloides* in Lithuania

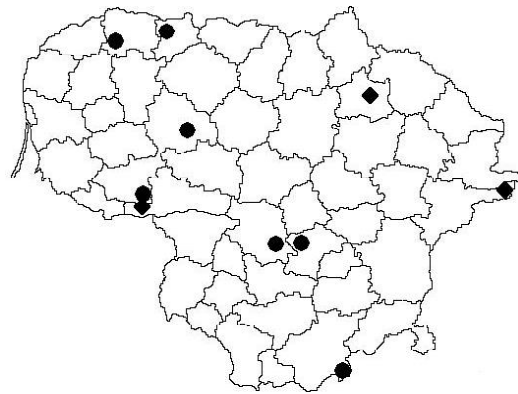


Fig. 4. Distribution of *Harmonius undulatus* in Lithuania

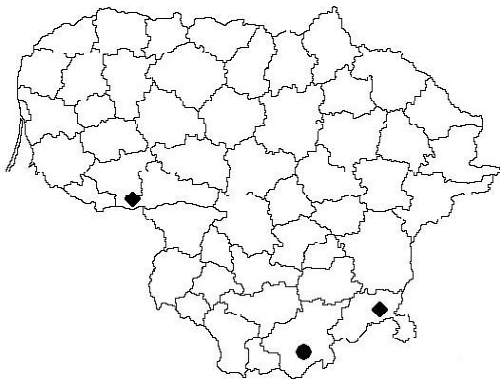


Fig. 2. Distribution of *Lacon fasciatus* in Lithuania



Fig. 5. Distribution of *Cidnopus pilosus* in Lithuania

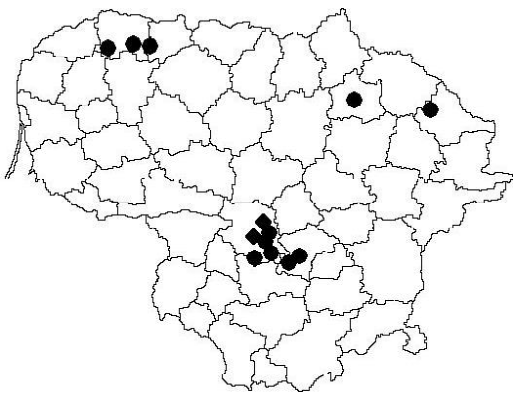


Fig. 3. Distribution of *Athous vittatus* in Lithuania

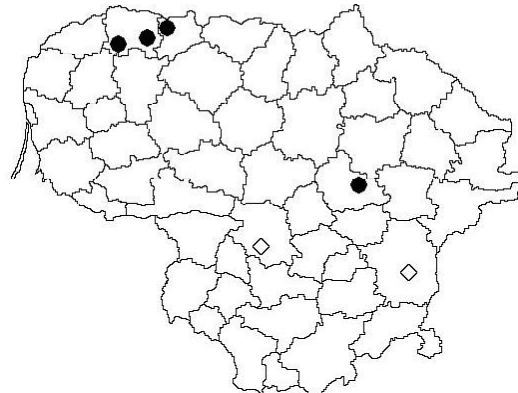


Fig. 6. Distribution of *Limonius minuta* in Lithuania

***Cidnopus pilosus* (Leske, 1785)**

Chorotype: Europe -Mediterranean

Kaun.: Netoniai env., 22 05 2002 (1, R.F.), 25 05 2007 (2, R.F.), [TIZM].

To this day only few older than 80 years records of *C. pilosus* have been documented in Lithuania before (Pileckis 1960, Pileckis & Monsevičius 1995, Ferenc 2006) (Fig. 5). The species is local and sporadic in Lithuania as well as in Latvia and described as very rare (Barševskis 2005). It is worth to notice that all information published before has been based on A. Palionis cards' data. The authors of the current article can not confirm this data as the specimens of *C. pilosus* collected by A. Palionis are lost.

***Limonius minuta* (Linnaeus, 1758)**

Chorotype: Sibero-European

Ukm.: Vaisgėlišio miškas f., 25 06 1978 (1, G.Š.); Maz.: Varduvos Land.R., 01 07 1991 (1, V.M.), Žibikai env., 18 05 1998 (1, V.M.); Akm.: Kamanų Nat. R., 20 07 1992 (1, V.M.), 31 05 2002 (1, V.M.), 28 06 2003 (1, V.M.), 12 05 1993 (3, R.F.), [TIZM].

This very rare species in Latvia (Barševskis 2005) populate mainly in open, sandy slopes with poor vegetation (Mertlik, 2008). To this day only few older than 80 years records of this species have been documented in Lithuania (Ogijewicz 1939, Pileckis 1960, Pileckis & Monsevičius 1995, Ferenc 2006) (Fig. 6). However the re-examination of the specimens of *L. minuta* in B. Ogijewicz' collections, which are deposited in the zoological museum of Vilnius University, revealed that they were misidentified instead of *Cidnopus sp.* Most likely these specimens were untypical small exemplars of *C. aeruginosus* (Olivier, 1790). Another finding fact mentioned in A. Palionis' cards can't be confirmed as the specimen is lost. Consequently, findings facts of *Limonius minuta* presented in this paper are the only reliable in Lithuania.

***Hypnoidus riparius* (Fabricius, 1792)**

Chorotype: Holarctic

Salc.: Visinčia Hydr.R., 19 06 1985 (1, bank of river, R.F.); Cur.Sp.: Naglių Nat. R., 07 07 2003 (1, on the littoral, R.F.), [TIZM]; Kup.: Mirabelio miškas f., 24 04 1993 (1, R.P.), [EI]; Mol.: Aiseto Land. R., 07 07 1994 (1, on the littoral, V.T.), [TIZM].

This species is rare and little known in Lithuania, occurs in the wet, open habitats, mostly on the littoral (Pileckis & Monsevičius 1995). Only two findings have been known from Vilnius district (Ogijewicz 1939, Ferenc 2004) (Fig. 7).

***Ctenicera pectinicornis* (Linnaeus, 1758)**

Chorotype: Palearctic

Ut.: Utena env., 09 08 1967 (1, E.G.), Antalė env., 18 05 1982 (2, A.K.); Mol.: Molėtai env., 19 07 1972 (1, E.G.); Kaun.: Girionys env., 29 06 1969 (1, E.G.), Dubravos miškas f.<sup>2</sup>, 17 05 1984 (1, R.F.), Karčiupio miškas f., 16 05 2004 (1, B.P.), Akademija env., 17 06 1995 (1, moist meadow, V.T.), 25 05 1997 (1, moist meadow, V.T.), 25 05 2006 (1, moist meadow, V.T.); Kais.: Pravieniškių miškas f., 09 05 1986 (1, R.F.); Sak.: Tervydoniai env., 21 06 1987 (1, R.F.), 25 05 2003 (2, R.F.); Ked.: Pašilių miškas f., 18 05 1994 (1, R.F.), Akm.: Kamanų Nat. R.<sup>2</sup>, 12-13 05 1993 (7, R.F.), 07 08 1998 (1, V.M.); Maz.: Tučiai env. 16 05 1998 (1, V.M.); Villn.t.: Nemėžis env. 12 06 1969 (1, anonymous), [TIZM]; Jurb.: Liepgirių miškas f., 25 05 1982 (1, B.J.), [specimen is lost]; Kup.: Strančių miškas f. 18 05 1991 (1, R.P.), Vizgiūnai env., 15 06 1991 (1, R.P.); Taur.: Skaudvilė env., 06 06 2004 (1, P.I.), [EI]; Kais.: Kruonis env., 16 05 1982 (1, Al.M.), [Al.M.].

This widespread species is associated with moist, natural meadows and forest edges (Tarnawski & Buchholz 2008). In Lithuania this species is considered as not rare (Pileckis & Monsevičius 1995), but only few findings have been registered before (Heyden, 1903, Ogijewicz 1939, Zajančauskas & Pileckis 1968, Ferenc 2006) (Fig. 8). Consequently, this species is widely distributed in Lithuania, but not abundant and only single individuals have been found.

***Actenicerus sjaelandicus* (Müller, 1764)**

*Ctenicera cuprea* (Fabricius, 1775) (Monsevičius 1988) (misidentification).

Vidm. Monsevičius (1988) recorded *Ctenicera cuprea* (Fabricius, 1775) basing on specimen from Čepkelių Nat. R., (southern part of Lithuania). Later this species as rare for Lithuania has been noted by S. Pileckis and Vidm. Monsevičius (1995). Re-examination of the specimen showed that it was misidentified instead of *Actenicerus sjaelandicus* (Müller, 1764). This was untypical exemplar of *A. sjaelandicus* with blue metallic hue on the surface of pronotum and elytra. In consequence, *Ctenicera cuprea* should be excluded from Lithuanian fauna.

***Anostirus castaneus* (Linnaeus, 1758)**

Chorotype: Palearctic

Kaun.: Dubravos miškas f.<sup>2</sup>, 15 05 1981 (1, R.F.), Dubravos miškas f.<sup>1</sup>, 17 05 1996 (20, in the pheromone trap for *Ips typographus*, P.Z.); Sak.: Tervydoniai env., 17 05 1998 (1, R.F.); Kais.: Strėvinių miškas f., 18 05 2006 (2, R.F.); Prien.: Gojus f., 16 04 2009 (1, R.F.); Siau.: Slydžiai env., 20 08 1995 (1, caught in flight, V.T.); Akm.: Kamanų Nat. R., 04 05 1996 (1, V.M.), [TIZM]; Kaun. t.: „Ažuolynas“ park, 01 06 1989 (1, Al.M.); Kais.: Pravieniškių miškas f., 05 05 2008 (1, Al.M.) [Al.M.]; Kup.: Drūlėnai env., 04 11 1990 (2, R.P.); Zar.: Kalviškių Geo.R., 01 07 2004 (1, P.I.), [EI].

This species has been noted as very rare for Lithuania by S. Pileckis and Vidm. Monsevičius (1995) basing on the report of F. Lentz (1879) and probably on specimen from Jonava district collected by S. Pileckis. The numerous later records scattered in various publications (Tamutis & Zolubas 2001, Ferenc et al. 2006, 2007, Šablevičius 2003, 2004, Inokaitis 2009) and new records in this article (Fig. 9) show that this species is not very rare in Lithuania.

***Paraphotistus impressus* (Fabricius, 1792)**

Chorotype: European

Mol.: Urkio Telm. R., 19 06 1964 (1, E.G.); Kaun.: Dubravos miškas f.<sup>2</sup>, 11 09 1968 (1, E.G.), 16 07 1973 (1, E.G.), Meištinės miškas f., 19 05 1985 (1, R.F.), Liudvipolio miškas f., 04 05 1986 (1, R.F.); Var.: Ratnyčios miškas f., 07 06 1995 (2, pine forest, in the pitfall trap, V.T.), Čepkelių Nat. R., 15 05 1999 (1, D.D.); Cur.Sp.: Grobšto Nat. R., 24 05

2006 (1, R.F.); Sak.: Juškinės miškas f., 05 07 2007 (1, R.F.); Jurb.: Liepgirių miškas f., 18 05 1980 (1, B.J.), Kalnėnų miškas f., 15 06 1955 (2, pine forest, in the pitfall trap, V.T.); Akm.: Kamanų Nat. R., 30 06 1997 (1, V.M.), 15 08 1997 (1, V.M.), [TIZM]; Kup.: Drūlėnai env., 01 06 1991 (1, R.P.); Anyk.: Šimonių miškas f., 16 06 2000 (1, R.P.); Pan.: Vosniūnų miškas f., 16 06 2000 (1, R.P.), [EI].

This boreomontan species is viewed as rare in Lithuania (Pileckis 1970, Pileckis & Monsevičius 1995) and has been known only from few finding places in Curonian Spit (Pileckis 1963, Bercio & Folwaczny 1979, Žiogas & Zolubas 2005), Ignalina district (Strazdienė 1988) and Čepkelių Nat. R. (Monsevičius 1997) (Fig. 10).

***Paraphotistus nigricornis* (Panzer, 1799)**

Chorotype: Holarctic

Kaun.: Dubravos miškas f.<sup>2</sup>, 16 07 1973 (1, E.G.), [TIZM].

This species is rare and little known in Lithuania. There were only few finding facts in Lithuania (Bercio & Folwaczny 1979, Strazdienė 1988, Monsevičius 1997, Ferenc 2006) (Fig. 11).

***Calambus bipustulatus* (Linnaeus, 1767)**

Chorotype: Sibero-European

Kais.: Gojaus miškas f., 30 08 1981 (1, Al.M.); Kaun.: Jesios Land. R., 19 05 2007 (1, Al.M.), [Al.M.], 30 05 2006 (1, R.F.), 14 05 2008 (1, R.F.), [TIZM].

This species is very rare in Lithuania (Pileckis & Monsevičius 1995) as well as in other European countries (Baševskis 2005, Danish Red Data book 1997, Dietze 2004, Irurzun & Sınchez-Ruiz 2005). There are only few records in Kaunas surroundings (Heyden 1903, Ivinskis et al. 1998; Ferenc et al. 2002, Ferenc 2004) (Fig. 12). The short note (without detailed data of findings) about distribution of this species in Jiesios landscape reserve has been given in the article “Vabzdžiai ir moliuskai Kauno ir Kaišiadorių rajonų saugomose teritorijose“ Vaivilaičius (ed.) (2008).

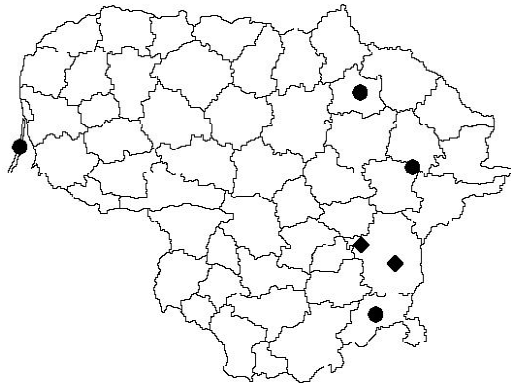


Fig. 7. Distribution of *Hypnoidus riparius* in Lithuania

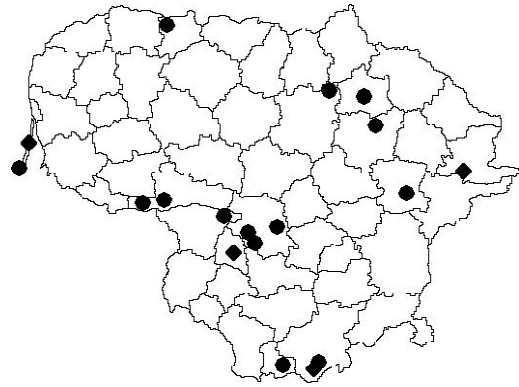


Fig. 10. Distribution of *Paraphotistus impressus* in Lithuania

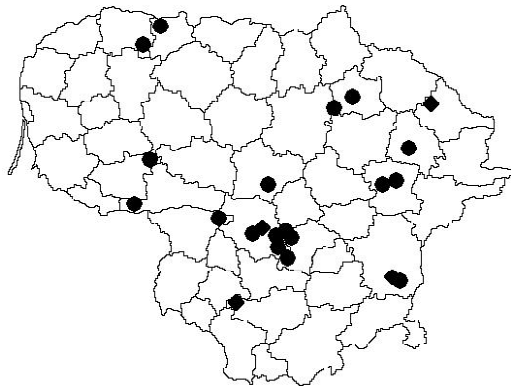


Fig. 8. Distribution of *Ctenicera pectinicornis* in Lithuania

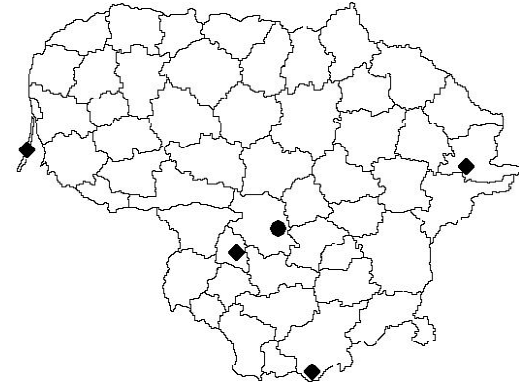


Fig. 11. Distribution of *Paraphotistus nigricornis* in Lithuania

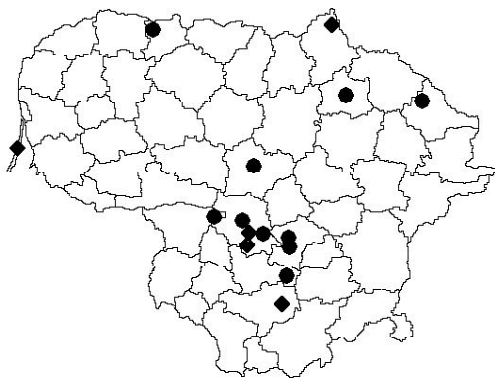


Fig. 9. Distribution of *Anostirus castaneus* in Lithuania

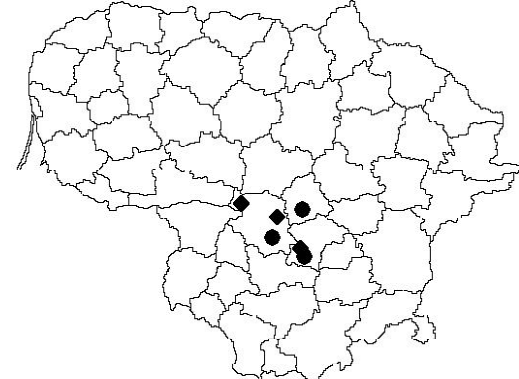


Fig. 12. Distribution of *Calambus bipustulatus* in Lithuania



Fig. 13. Distribution of *Procraerus tibialis* in Lithuania

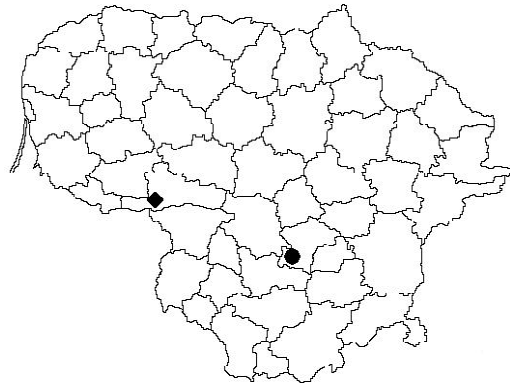


Fig. 16. Distribution of *Ampedus elongatulus* in Lithuania

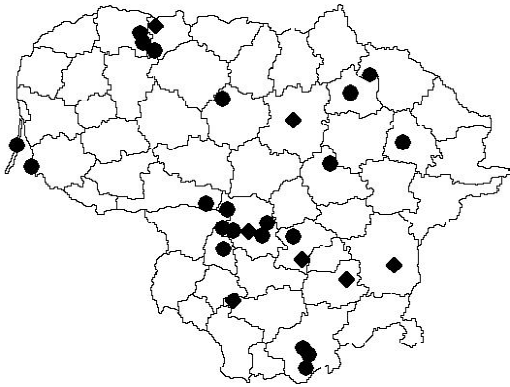


Fig. 14. Distribution of *Ampedus sanguinolentus* in Lithuania

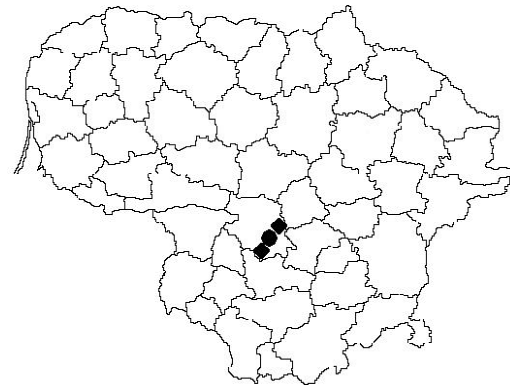


Fig. 17. Distribution of *Ampedus elegantulus* in Lithuania

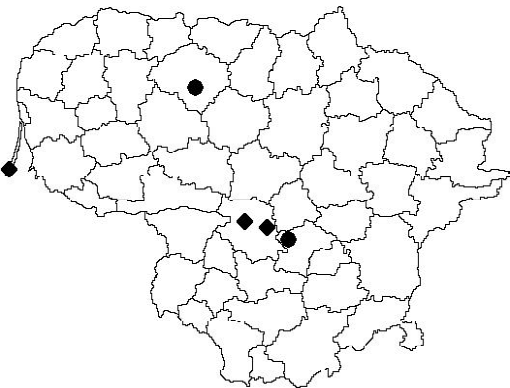


Fig. 15. Distribution of *Ampedus nigroflavus* in Lithuania

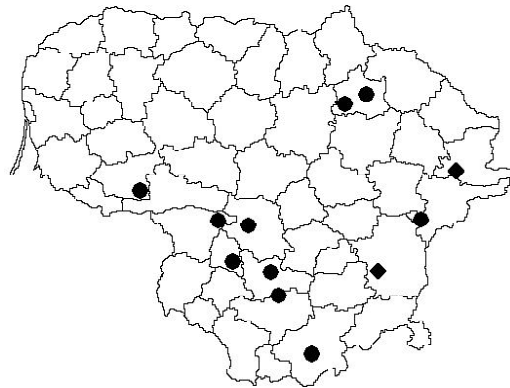


Fig. 18. Distribution of *Ampedus preustus* in Lithuania



***Procrærus tibialis* (Lacordaire, 1835)**

Chorotype: Europeo-Mediterranean

Kaun.: Kamšos Bot.-Zoo. R., 12 05 1998 (1, deciduous forest, V.T.), [TIZM]; Kaun.t.: „Vytauto parkas“ park, 11 05 2008 (1, Al.M.), 31 05 2009 (1, on the oak trunk, Al.M.), [Al.M].

There are known only one locality of this species in Kaunas environs from Lithuania. For the first time it has been noted by A. Palionis in 06 07 1923 (Ferenca 2006) (Fig. 13). The finding of A. Meržijevskis in 11 05 2008 and 31 05 2009 confirmed that the population of this species still exist. Another new finding place is situated about 8 km to the west. This species is rare in Baltic countries (Danish Red Data book 1997, Gärdenfors 2000, Dietze 2004, Barševskis 2005), equally very rare and insufficient known in Lithuania.

***Ampedus sanguinolentus* (Schrank, 1776)**

Chorotype: Palearctic

Ut.: Utena env., 24 06 1966 (1, E.G.); Var.: Puvočiai env., 03 07 1978 (1, G.Š.), Čepkelių Nat. R., 25 06 1985 (1, R.F.), Zervynos env., 16 06 1977 (1, V.M.); Maz.: Meižiai env., 21 07 1980 (1, V.M.), Santeklių miškas f., 25 06 1998 (1, V.M.); Akm.: Kamanų Nat. R., 02 05 1984 (1, V.M.), Užpelkių Bot.-Zoo. R., 05 05 1999 (1, V.M.); Kaun.: Braziūkai env., 24 05 2009 (1, V.T.), Jiesios Land. R., 08 05 1981 (2, R.F.), Meištinės miškas f., 13 05 1984 (1, R.F.), Dubravos miškas f.<sup>2</sup>, 09 07 1984 (1, R.F.), 08 06 1992 (1, R.F.); Kais.: Pravieniškių miškas f., 09 05 1986 (1, R.F.); Sil.: Ventės Ragas env. 01 06 1988 (1, R.F.); Siaul.: Tyrulių Bot.-Zoo. R., 15 07 1998 (1, R.F.); Mar.: Jūrės miškas f., 25 05 2000 (1, R.F.); Cur.Sp.: Juodkrantė env., 05 07 2004 (1, R.F.); Ukm.: Taujėnų miškas f., 22 06 2004 (1, G.Š.), [TIZM]; Rok.: Puluikiai env., 02 05 1971 (1, A.M.), [VU]; Kup.: Drūlenai env., 01 06 1991 (1, R.P.); Jurb.: Kalviai env., 10 05 2001 (1, P.I.); Kaun.: Ringovės Ent. R., 08 07 2004 (1, P.I.), [EI].

This rather frequent species in Europe was viewed as rare in Lithuania (Pileckis & Monsevičius 1995) and it was noticed only in

few localities before (Ogijewicz 1939, Pileckis 1963, Monsevičius 1997, Šablevičius 2000, Ferenca 2006) (Fig. 14). In our opinion this species is widely however sporadically distributed throughout Lithuania.

***Ampedus nigroflavus* (Goeze, 1777)**

Chorotype: Europeo-Mediterranean

Kais.: Pravieniškės env., 02 05 1989 (1, Al.M.), [Al.M.]; Siaul.: Slydžiai env. 26 04 1997 (1, in rotten willow stump, V.T.), 17 08 1997 (2, V.T.), 16 05 1998 (2, in rotten maple stump, V.T.), [TIZM].

This saproxylic species was viewed as very rare in Lithuania (Pileckis & Monsevičius 1995), only few findings have been known before (Pileckis & Monsevičius 1995, Ferenca 2003, Inokaitis 2009) (Fig. 15). The status of protected species is given for it in some European countries (Danish Red Data book 1997, Gärdenfors 2000). In Lithuania this species is insufficient known.

***Ampedus elongatulus* (Fabricius, 1787)**

Chorotype: Sibero-European

Kais.: Kruonis env., 26 04 1975 (1, Al.M.) [Al.M.].

This saproxylic species was viewed as very rare in Lithuania (Pileckis & Monsevičius 1995), only one finding has been known before (Gurjeva 1979, Pileckis & Monsevičius 1995) (Fig. 16). *A. elongatulus* as extinct or probably extinct species is included to Estonian Red Data Book (1998), in Lithuania the species is insufficient known.

***Ampedus elegantulus* (Schönherr 1817)**

Chorotype: Europeo-Mediterranean

Kaun.: Jiesios Land. R., 18 04 2007 (1, A. P), [TIZM].

Recently found click beetles species in Lithuania (Ferenca 2004, Inokaitis 2009) (Fig. 17). This species is very rare and not enough known in Lithuania and also very rare in Germany (Hennig & Reiāmann 2005), Denmark (Danish Red Data book 1997), Sweden (Gärdenfors 2000), Latvia (Barševskis, 2005).

***Ampedus praeustus*** (Fabricius, 1792)

Chorotype: Sibero-European

Kaun.: Raudondvaris env. 20 06 1973 (1, E.G.); Var.: Marcinkonys env., 12 06 1977 (1, V.M.); Sak.: Juškinė giria f., 30 04 2000 (1, R.F.); Prie.: Prienai env., 23 06 1984 (1, R.F.); Taur.: Viešvilės Nat. R.<sup>2</sup>, 15 05 2007 (1, R.F.), Viešvilės Nat. R.<sup>2</sup>, 09 05 2008 (3, V.T., [TIZM]); Kup.: Strančių miškas f., 09 04 1991 (1, R.P.), Mirabelio miškas f., 16 01 1998 (1, R.P.), Girelė f., Pamarnakiai env., 26 02 1997 (1, R.P.); Svenc.: Purviniškių Telm.R., 01 06 2007 (1, P.I.) 22 06 2007 (5, P.I.); Alyt.: Punios šilas f., 25 07 2008 (1, vine trap, P.I.), [EI]; Mar.: Kazlų Rūda env., 08 05 1989 (1, Al.M.), [Al.M].

This furtive saproxylic species was viewed as very rare in Lithuania (Pileckis & Monsevičius 1995), only few findings have been known before (Ogijewicz 1939, Strazdienė 1988, Pileckis & Monsevičius 1995) (Fig. 18). This species is protected in some Baltic countries (Danish Red Data book 1997, Dietze 2004) and not enough known in Lithuania.

***Ampedus tristis*** (Linnaeus, 1758)

Chorotype: Sibero-European

Jurb.: Liepgirių miškas f., 14 06 1989 (3, B.J.); Sak.: Juškinės miškas f., 27 06 1997 (1, R.F.); Taur.: Viešvilės Nat. R.<sup>2</sup>, 18 08 2006 (1, R.F.), [TIZM]; Anyk.: Šimonių miškas f., 29 03 1998, (1, R.P.); Pan.: Vosniūnų miškas f., 16 06 2000 (1, R.P.), [EI].

This boreomontan species is associated with decaying spruce woods (Gurjeva 1979) and in Lithuania is rare (Pileckis & Monsevičius 1995). The information about only one finding fact has been published before (Ferenca et al. 2002) (Fig. 19). The notification of S. Pileckis and Vidm. Monsevičius (1995) that this species is distributed in north-western part of Lithuania is probably based on unpublished collection material of B. Jakaitis. This species is rare and insufficient known in Lithuania.

***Ampedus erythrogonus*** (O.F.Müller, 1821)

Chorotype: Europeo-Mediterranean

Jurb.: Liepgirių miškas f., 15 07 1977 (1, B.J.), 26 07 1977 (1, B.J.), 02 08 1977 (2, B.J.), 13 09 1977 (1, pheromone traps for *Ips typographus* L., B.J.), 22 05 1979 (1, B.J.); Mar.: Kazlų Rūda env., 07 06 1967 (1, E.G.); Sak.: Juškinės miškas f., 04 06 2000 (1, R.F.), 01 04 2001 (1, R.F.), Tervydoniai env., 09 10 1988 (1, R.F.); Kaun.: Dubravos miškas f.<sup>2</sup>, 08 06 1992 (1, R.F.), 28 03 2007 (1, R.F.), Salc.: Rūdininkų giria f. 15 04 2004 (1, R.F.); Taur.: Viešvilės Nat. R.<sup>3</sup>, 04 07 2001 (1, V.U.), [TIZM]; Mar.: Kazlų Rūda env., 01 06 1996 (1, Al.M.), [Al.M]; Kup.: Slavinčiškio miškas f., 18 04 1991 (1, R.P.), Žemaitėliai env., 02 03 1997 (1, R.P.), [EI].

This saproxylic species is associated with decaying deciduous woods (Gurjeva 1979) and in Lithuania is very rare (Pileckis & Monsevičius 1995). Only few findings of this species have been known before (Ogijewicz 1939, Tamutis & Zolubas 2001, Šablevičius 2004, Ferenca 2004) (Fig. 20). The notification made by S. Pileckis and Vidm. Monsevičius (1995) that this species is distributed in northwestern part of Lithuania probably is based on unpublished collection material of B. Jakaitis. This species is protected in some Baltic countries (Danish Red Data book 1997, Dietze 2004), in Lithuania – rare and insufficient known.

***Ampedus nigrinus*** (Herbst, 1784)

Chorotype: Holarctic

Akm.: Kamanų Nat.R. 10 10 1984 (1, V.M.), 18 07 1991 (1, V.M.), 01 08 1991 (1, V.M.); Var.: Čepkelių Nat. R., 20 08 1981 (1, V.M.); Birz.: Spalviškiai env., 31 05 1976 (1, V.M.); Jurb.: Liepgirių miškas f., 15-23 05 1979 (6, B.J.); Sak.: Juškinės miškas f., 02 05 2004 (3, R.F.), 13 05 2006 (1, R.F.); Mar.: Jūrės miškas f., 29 04 1998 (1, R.F.); Kaun.: Dubravos miškas f.<sup>2</sup>, 03 06 1990 (1, R.F.), Kleboniškių miškas f., 17 04 1984 (1, anonymous), Dubravos miškas f.<sup>4</sup>, 17 05 1997 (1, V.T.), [TIZM]; Kup.: Drūlenai env., 27 04 1995 (1, R.P.); Anyk.: Šimonių miškas f., 13 07 2000 (1, R.P.); Salc.: Purviniškių Telm.R., 01 06 2007 (1, P.I.); Pan.: Žalioji giria f., — 06 2000 (1, H.O.), [EI]; Kaun.: Dubravos miškas f.<sup>3</sup>, 14 06 2006 (1, Al.M.) [Al.M].

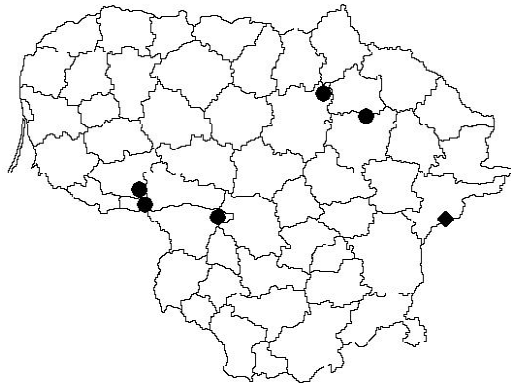


Fig. 19. Distribution of *Ampedus tristis* in Lithuania

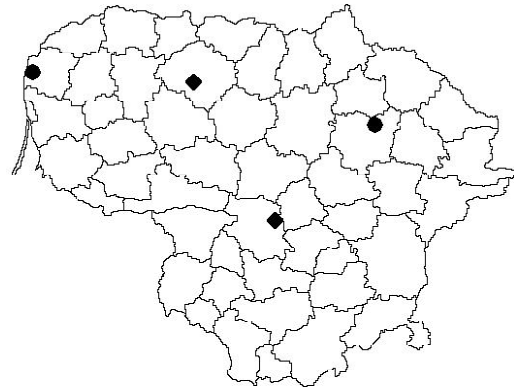


Fig. 22. Distribution of *Cardiophorus asellus* in Lithuania

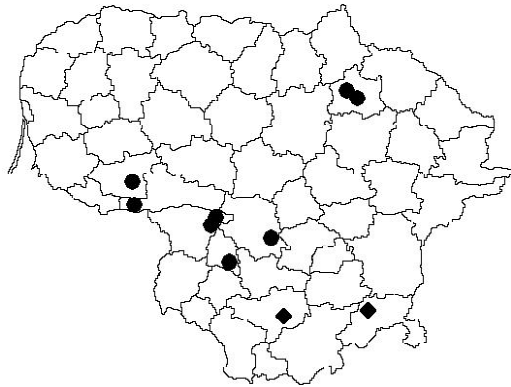


Fig. 20. Distribution of *Ampedus erythrogonus* in Lithuania

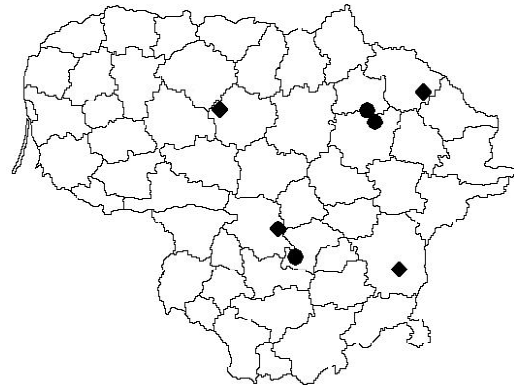


Fig. 23. Distribution of *Dicronychus cinereus* in Lithuania

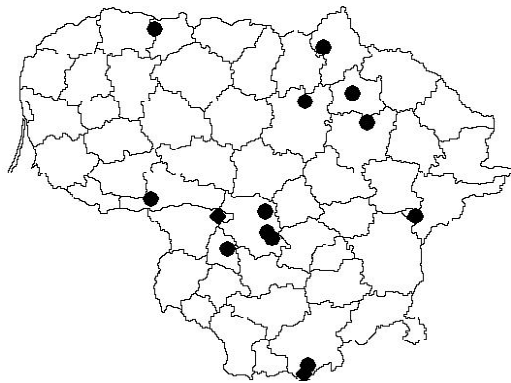


Fig. 21. Distribution of *Ampedus nigrinus* in Lithuania

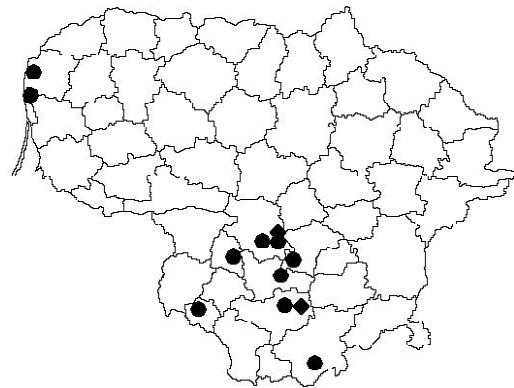


Fig. 24. Distribution of *Dicronychus equiseti* in Lithuania

This species is associated with decaying spruce woods (Gurjeva 1979) and in Lithuania is very rare (Pileckis & Monsevičius 1995). Only few findings of this species have been known before (Pileckis & Monsevičius 1982, Tamutis & Zolubas 2001, Ferenc 2004) (Fig. 21). This species is rare in Denmark (Danish Red Data book 1997) and likewise rare and insufficient known in Lithuania.

***Cardiophorus asellus*** Erichson, 1840

Chorotype: Sibero-European

Pal.: Palanga airport env., 30 05 2001 (1, R.F.), [TIZM]; Anyk.: Šimonių miškas f., 28 04 1999 (1, R.P.), [EI].

Recently found species in Lithuania, has been known only in two localities before (Tamutis 2003, Inokaitis 2009) (Fig. 22). This psamophilous species is rare in Denmark (Danish Red Data book 1997) and likewise rare and not enough known in Lithuania.

***Dicronychus cinereus*** (Herbst, 1784)

Chorotype: Sibero-European

Kais.: Kruonis env., — 1973 (1, Al.M.), [Al.M.]; Kup.: Uldukai env., 24 04 1999 (1, R.P.); Anyk.: Šimonių miškas f., 09 05 1998 (1, R.P.), [EI].

This species is rare in Lithuania (Pileckis & Monsevičius 1995), only few older than 70 years records have been documented in Lithuania before (Ogijewicz 1939, Ferenc 2006) (Fig. 23).

***Dicronychus equiseti*** (Herbst, 1784)

Chorotype: Sibero-European

Prien.: Birštonas, 21 07 1969 (2, E.G.); Kaun.: Dubravos miškas f.<sup>2</sup>, 09 05 1981 (4, R.F.), 24 04 2003 (1, R.F.), Jiesios Land. R., 22 04 1984 (12, R.F.); 01 05 1986 (1, R.F.); Var.: Čepkelių Nat. R., 16 05 1984 (1, R.F.); Mar.: Juodeliai env., 29 05 2002 (1, R.F.), Jūrės miškas f., 25 05 2000 (1, R.F.); Kret.: Manciškė env., 09 05 2001 (2, R.F.); Alyt.: Vidzgirio Bot.-Zoo.R., 15 05 1998 (2, R.F.), [TIZM];

Klaip.: Nemirseta env., 08 06 2004 (1, P.I.); Kais.: Kruonis env., 28 04 2001 (1, Al.M.), [Al.M.].

This species is very rare in Lithuania (Pileckis & Monsevičius 1995), only one older than 80 years record has been documented in Lithuania before (Ferenc 2006) (Fig. 24). The notification made by S. Pileckis and Vidm. Monsevičius (1995) that in Lithuania this species is distributed in the Baltic Sea coast region is unconfirmed till now.

***Paracardiophorus musculus*** (Erichson, 1840)

Cur.Sp.: Juodkrantė env., 11 07 2000 (1, R.F.), 16 07 2000 (1, R.F.), 06 07 2004 (1, R.F.), [TIZM].

Only one finding fact of this species has been known in Lithuania before (Pileckis 1963). The new findings of *P. musculus* show that the species is still populating in the Juodkrantė environs (Curonian Spit). This place lies at the north border of the main distribution area.

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*Received: 23.03.2010.*

*Accepted: 30.05.2010.*