

This article was downloaded by: [Andris Bukejs]

On: 12 December 2013, At: 23:47

Publisher: Taylor & Francis

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Zoology and Ecology

Publication details, including instructions for authors and subscription information:
<http://www.tandfonline.com/loi/tzec20>

Catalogue of Latvian Latridiidae (Insecta: Coleoptera)

Andris Bukejs^a, Dmitry Telnov^b & Wolfgang H. Rücker^c

^a Vienības iela 42-29, Daugavpils LV-5401, Latvia

^b Stopiņu novads, Dārza iela 10, Dzidriņas LV-2130, Latvia

^c Von-Ebner-Eschenbach-Straße 12, Neuwied D-56567, Germany

Published online: 27 Nov 2013.

To cite this article: Andris Bukejs, Dmitry Telnov & Wolfgang H. Rücker (2013) Catalogue of Latvian Latridiidae (Insecta: Coleoptera), *Zoology and Ecology*, 23:4, 312-322, DOI: [10.1080/21658005.2013.862060](https://doi.org/10.1080/21658005.2013.862060)

To link to this article: [http://dx.doi.org/10.1080/21658005.2013.862060](https://dx.doi.org/10.1080/21658005.2013.862060)

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

Catalogue of Latvian Latridiidae (Insecta: Coleoptera)

Andris Bukejs^{a*}, Dmitry Telnov^b and Wolfgang H. Rücker^c

^aVienības iela 42-29, Daugavpils LV-5401, Latvia; ^bStopiņu novads, Dārza iela 10, Dzidriņas LV-2130, Latvia;

^cVon-Ebner-Eschenbach-Straße 12, Neuwied D-56567, Germany

(Received 28 September 2013; accepted 18 October 2013)

An annotated catalogue of minute brown scavenger beetles (Coleoptera: Latridiidae) of the Latvian fauna is presented. In total, 54 species representing 10 genera and two subfamilies are hitherto known in Latvia. Two species of them, *Corticaria fulva* (Comolli, 1837) and *Dienerella costulata* (Reitter, 1877), are known only from records that are more than 100 years old, and their occurrence in the Latvian fauna needs to be reconfirmed. *Dienerella argus* (Reitter, 1884) has been removed from the catalogue. During the study, all available published sources of relevant information were reviewed and analyzed. The research history of these beetles in Latvia is surveyed. The recent Latvian fauna of Latridiidae is represented by 10 chorotypes. Species of European (11 or 20.37%), Subcosmopolitan (11 or 20.37%), and Holarctic (10 or 18.52%) chorotypes are considered to be predominant. New data on the distribution of seven insufficiently known species are given.

Peržiūrējus ir išanalizavus visas publikacijas, kuriose minimi Latvijos slaptavabalių (Coleoptera: Latridiidae), sudarytas anotuotas katalogas ir aptariama Latvijos slaptavabalių tyrimų istorija. Iki šiol Latvijoje buvo žinomas 54 slaptavabalių rūšys, priklausančios 10 genčių ir 2 pošeimiams. *Corticaria fulva* (Comolli, 1837) ir *Dienerella costulata* (Reitter, 1877) Latvijoje užregistruotos daugiau nei prieš 100 metų, todėl jų buvima reikėtų patvirtinti pakartotinai. *Dienerella argus* (Reitter, 1884) iš katalogo buvo pašalinta. Dabartinė Latvijos slaptavabalių fauna priskiriamā dešimčiai chorotipu. Dominuoja rūšys, priklausančios europiniam (11 rūšių arba 20.37%), subkosmopolitiniam (10 rūšių, 18,52%) ir holarktiniam (10 rūšys, 18,52%) chorotipams. Pateikiami nauji duomenys apie septynių nepakankamai ištirtų rūšių paplitimą.

Keywords: Coleoptera; Latridiidae; Latvia; fauna; catalogue; biogeography

Introduction

Latridiidae Erichson, 1842 are small beetles with approximately 800 described species worldwide (Rücker 2010). No fewer than 300 species of them are known in the Palaearctic (Johnson 2007), with approximately 170 species of them occurring in Europe (Rücker 2013). At least 140 species are known in North America (Andrews 2002). Silfverberg (2010) reported 82 species of Latridiidae from Fennoscandia, Denmark, and eastern Baltic region. Afrotropical and Neotropical regions are known as most important diversity hotspots for certain genera (e.g. *Melanophthalma* Motschulsky, 1866 and some other) of this family (Rücker 1981, 1984). More than 20 min brown scavenger beetle species are known from fossil records (Bukejs, Kirejtshuk, and Rücker 2011; Bukejs, Reike, and Rücker 2012; Bukejs, Rücker, and Kirejtshuk 2012; Kirejtshuk and Azar 2013; Ponomarenko and Kirejtshuk 2013; Reike 2012; Reike, Alekseev, and Bukejs 2013), most of which were described from Baltic amber.

Minute brown scavenger beetles are frequently found in different open and forested habitats, where they inhabit decomposing vegetation. They occur and develop in leaf litter, fungi, on herbaceous plants, trees, in rotten wood of various decomposition stages, under the bark, and in bird,

mammal, and insect nests. Most species seem to prefer wet or damp habitats. Imago and larvae feed exclusively on fungi, particularly mould. Species of several genera (*Cartodere* Thomson, 1859, *Corticaria* Marsham, 1802, *Corticarina* Reitter, 1881, *Dienerella* Reitter, 1911, *Enicmus* Thomson, 1859, *Latridius* Herbst, 1793, and *Thes* Semenov, 1910) regularly inhabit warehouses of various stored products, where they feed on fungi mycelium growing in damp conditions (Bousquet 1990; Kryzhanovskij 1974; Majka, Langor, and Rücker 2009; Saluk 1992).

To date, 54 species of Latridiidae are known in the Latvian fauna. However, two species of them, *Corticaria fulva* (Comolli, 1837) and *Dienerella costulata* (Reitter, 1877), are known only from old records, and their occurrence in the local fauna should be reconfirmed (by new material). A total of 33 works containing information on minute brown scavenger beetles have been published in Latvia.

The first information on minute brown scavenger beetles from the present territory of Latvia was published in the first half of the nineteenth century by Fleischer (1829). In the book devoted to the beetle fauna of ‘Ostseeprovinzen’, he mentioned two species: *Latridius porcatus* Herbst [listed as *L. marginatus* Payk.] and *Corticaria ferruginea* Marsham [listed as *Latridius fenestralis* F.].

*Corresponding author. Email: carabidae@inbox.lv

At the end of the nineteenth century, Seidlitz's monograph '*Fauna Baltica*' was published. In this monograph, keys to families, genera and species of the Baltic Coleoptera (including potential ones) were presented. Unfortunately, not all data on localities were provided. In the first edition of the monograph (Seidlitz 1872–75), 19 species of Latridiidae were mentioned, which were supplemented with another four species in the second edition (Seidlitz 1887–91).

At the beginning of the twentieth century, another checklist of Baltic Coleoptera was published (Rathlef 1905). In this list and its supplement (Rathlef 1921), 30 species of Latridiidae were reported for Latvia.

A few other papers containing faunal data on minute brown scavenger beetles were published at the turn of the nineteenth century (Heyden 1903; Lackschewitz 1927; Lackschewitz and Mikutowicz 1939; Mikutowicz 1905, 1911; Müthel 1889).

Three minute brown scavenger beetle species, namely *Latridius minutus* (Linnaeus), *Corticaria serrata* (Paykull), and *Enicmus rugosus* (Herbst), were recorded in Latvian storehouses (Vītols 1941).

Fragmentary information on Latvian Latridiidae can also be found in Trauberga (1957), Priedītis (1979), Barševskis and Savenkovs (1991), Barševskis (1992a, 1992b), Barševskis (1993b), and Spūnģis (2008).

In the monograph '*The Beetles of Eastern Latvia*' (Barševskis 1993a), faunal data on 30 Latridiidae species are presented, 13 of which are new records for the Latvian fauna. Later, the same author (Barševskis 1997) reported 21 min brown scavenger beetle species from Augšdaugava region (also located in the eastern part of Latvia).

As for specially protected nature territories, 26 species of Latridiidae are known from Silene Nature Park (Barševskis 2002) and 20 species – from Gauja National Park (Kalniņš et al. 2007). Fewer than 10 species have been hitherto reported from other Latvian specially protected nature territories.

During the last decades, Bukejs (2011), Telnov (1996, 2001), Telnov and Kalniņš (2003), and Telnov et al. (2005, 2006) have also provided fragmentary faunal data on Latvian minute brown scavenger beetles.

The first catalogue of Latvian Coleoptera (Telnov et al. 1997) lists 41 species of Latridiidae, but two previously recorded species, namely *Corticaria ferruginea* Marsham and *Stephostethus rugicollis* (Olivier), were removed. In the second edition of the catalogue (Telnov 2004), this number expanded to 48 species.

In a single special publication devoted to Latvian Latridiidae (Bukejs and Rücker 2013), faunal data on 36 species were presented, five species of which were reported for the local fauna for the first time.

Ulanowski (1883) mentioned two species as minute brown scavenger beetles [listed as 'Latridiidae']. But according to contemporary systematics, only one of them, *Cortinicara gibbosa* Herbst (listed as *Melano-*

phthalma gibbosa Herbst), belongs to Latridiidae; the second species, *Myrmecixenus subterraneus* Chevrolat, 1835 (listed as *Myrmecoxenus subterraneus* Chvr.), is a member of Tenebrionidae. Many of Ulanowski's Latvian records are considered to be doubtful (see also Barševskis 1993a). Consequently, like other researchers working on Latvian beetles (Barševskis 2003; Barševskis, Kalniņš, and Cibulskis 2005; Bukejs 2013; Bukejs, Telnov, and Háva 2013; Spuris 1981, 1983, 1984, 1990, 1991a, 1991b; Telnov 2004; Telnov et al. 1997), we ignored data reported by Ulanowski (1883) in our publication.

The aim of our study was to carry out the critical revision of the available bibliographical data, to compile the annotated catalogue of Latvian Latridiidae according to modern systematics, and to perform the biogeographical analysis of the fauna.

Methods and conventions

The order of higher taxa follows the Catalogue of Palaearctic Coleoptera, volume 4, chapter Latridiidae (Johnson 2007), Rücker (2010) and Bouchard et al. (2011), synonymy and nomenclature for species-rank taxa are used in accordance with Johnson (2007), Johnson and Rücker (2007), and Rücker (forthcoming). Species and genera are listed alphabetically, because the phylogenetic arrangement is not yet possible.

The species recorded in Latvia rightly are marked with an index number; the species mentioned for the Latvian fauna erroneously are marked as excluded (-). Synonyms and references follow species names. For some species a note is presented.

The general distribution of the species is assessed according to Johnson (2007), Majka, Langor, and Rücker (2009), Rücker (2010), and Saluk (1992). The classification of chorotypes follows the one suggested by Taglianti et al. (1999), except Trans-Euroasiatic Asiatic-disjunct and Trans-Euroasiatic Polydisjunct chorotypes (after Gorodkov 1984). Abbreviations of chorotypes: COS – Cosmopolitan, SCO – Subcosmopolitan, OLA – Holarctic, PAL – Palaearctic, ASE – Asiatic-European, TEA-AD – Trans-Euroasiatic Asiatic-disjunct, TEA-PD – Trans-Euroasiatic Polydisjunct, WPA – West Palaearctic, SIE – Sibero-European, and EUR – European.

The source of faunal data: Coleoptera distribution database of the Entomological Society of Latvia (Riga).

Abbreviations: N – North, S – South, W – West, E – East.

Results

Annotated catalogue of Latvian Latridiidae

Family Latridiidae Erichson, 1842

Subfamily Latridiinae Erichson, 1842

Genus *Cartodere* C. G. Thomson, 1859

Subgenus *Aridius* Motschulsky, 1866

C. (Aridius) nodifer (Westwood, 1839)

- = *antipodum* (White, 1846)
- = *humile* (Rey, 1889)
- = *marginalis* (Broun, 1880)
- = *nodulosa* (Motschulsky, 1866)
- = *rufescens* (Delahon, 1913)
- = *sculpturata* (Broun, 1880)

Lackschewitz and Mikutowicz 1939 (*Latridius*); Barševskis 1993a (*Aridius*), 2002 ([sic] *Cortodere*); Telnov et al. 1997 (*Aridius*), 2006 (*Aridius*); Telnov 2004; Bukejs and Rücker 2013.

Subgenus *Cartodere* C. G. Thomson, 1859**C. (s. str.) *constricta*** (Gyllenhal, 1827)

- = *aegyptiaca* (Motschulsky, 1866)
- = *apicalis* (Blackburn, 1888)
- = *approximata* (Wollaston, 1877)
- = *carinata* (Gyllenhal, 1827)
- = *carinulata* (Mannerheim, 1844)
- = *castanea* (Broun, 1886)
- = *incisa* (Mannerheim, 1844)
- = *limbata* (Förster, 1851)
- = *monticola* (Mannerheim, 1844)
- = *nervosa* (Mannerheim, 1844)
- = *perpusilla* (Walker, 1858)
- = *sculptile* (LeConte, 1855)
- = *tenuis* (Belon, 1885)

Rathlef 1905 (*Latridius*); Mikutowicz 1911 (*Latridius*); Lackschewitz and Mikutowicz 1939 (*Latridius*); Barševskis 1993a (*Latridius*), 1993b (*Latridius*); Telnov 1996, 2004; Telnov et al. 1997; Bukejs and Rücker 2013.

Genus *Dienerella* Reitter, 1911**Subgenus *Cartoderema*** Reitter, 1911

- = *Cartoderopsis* Dajoz, 1963

D. (*Cartoderema*) *ruficollis* (Marsham, 1802)

- = *atripennis* (Motschulsky, 1866)
- = *collaris* (Mannerheim, 1844)
- = *concinna* (Mannerheim, 1844)
- = *exilis* (Mannerheim, 1844)
- = *liliputana* (A. Villa & V. G. Villa, 1833)
- = *nanula* (Mannerheim, 1844)
- = *pulicaria* (Melsheimer, 1844)

Bukejs and Rücker 2013.

Note: Known from a single locality in SE Latvia.

D. (*Cartoderema*) *vincenti* C. Johnson, 2007

- = *elongata* (Curtis, 1830)

Mikutowicz 1911 (*Cartodere elongata* Curt.); Lackschewitz and Mikutowicz 1939 (*Cartodere elongata* Curt.); Telnov 1996 (*elongata* Curtis), 2004 (*elongata* Curtis); Telnov et al. 1997 (*elongata* Curtis); Kalniņš et al. 2007 (*elongata* Curtis).

Subgenus *Dienerella* Reitter, 1911

- = *Microgramme* Walkley, 1948

(-) D. (s. str.) *argus* (Reitter, 1884)

Telnov 1996, 2004; Telnov et al. 1997.

Note: A single record of this species in Rīga city (Telnov 1996) based on misidentification. Consequently, we have removed this species from the list.

D. (s. str.) *costulata* (Reitter, 1877)

Mikutowicz 1911 (*Cartodere*); Telnov et al. 1997; Telnov 2004.

Note: Known only from a single old record in Talsi, W Latvia (Mikutowicz 1911).

D. (s. str.) *filiformis* (Gyllenhal, 1827)

- = *angustata* (Stephens, 1829)
- = *parallelala* (Mannerheim, 1844)
- = *parallelipennis* (Solsky, 1876)
- = *subcostella* (Reitter, 1915)
- = *tantilla* (Mannerheim, 1844)
- Seidlitz 1872–75 (*Cartodere*), 1887–91 (*Cartodere*); Rathlef 1905 (*Cartodere*); Lackschewitz and Mikutowicz 1939 (*Cartodere*); Barševskis 1993a (*Cortodera*); Telnov et al. 1997; Telnov 2004; Kalniņš et al. 2007.

D. (s. str.) *filum* (Aubé, 1850)

Rathlef 1921 (*Cartodere*); Lackschewitz and Mikutowicz 1939 (*Cartodere*); Trauberga 1957 (*Cartodera*); Barševskis 1993a (*Cortodera*); Telnov et al. 1997; Telnov 2004; Kalniņš et al. 2007; Bukejs and Rücker 2013.

Genus *Enicmus* C. G. Thomson, 1859

- = *Permidius* Motschulsky, 1866

E. *brevicornis* (Mannerheim, 1844)

- = *carbonarius* (Mannerheim, 1844)
- = *subterraneus* (Gistel, 1857)

Lackschewitz and Mikutowicz 1939 (*Latridius*); Barševskis 1993a, 2002; Telnov et al. 1997; Telnov 2004.

Note: Known only from three localities.

E. *fungicola* C. G. Thomson, 1868

Seidlitz 1887–91; Rathlef 1905 (*Latridius*); Telnov 2004; Bukejs and Rücker 2013.

Note: Known only from three localities.

E. *histrio* Joy et Tomlin, 1910

Barševskis 1993a, 2002; Telnov et al. 1997; Telnov 2004; Bukejs and Rücker 2013.

E. *planipennis* A. Strand, 1940

Telnov 2004; Telnov et al. 2005.

Note: Known from a single locality near Kuivīži (N Latvia).

E. *rugosus* (Herbst, 1793)

- = *depressus* (Grimmer, 1841)
- = *ferrugineus* Gerhardt, 1912
- = *frater* E. Weise, 1972
- = *planatus* (Mannerheim, 1844)
- = *ruficornis* (Kugelann, 1794)
- = *rugipennis* (Mannerheim, 1844)
- Seidlitz 1872–75, 1887–91; Rathlef 1905 (*Latridius*); Vītols 1941 (*Latridius*); Barševskis 1993a, 2002; Telnov

et al. 1997; Telnov 2004; Kalniņš et al. 2007; Spuņģis 2008; Bukejs and Rücker 2013.

E. testaceus (Stephens, 1830)

- = *cordaticollis* (Aubé, 1850)
- = *crenicallos* (C. G. Thomson, 1868)
- = *feiferi* (Reitter, 1875)
- = *opacipennis* (Wollaston, 1864)
- = *pseudotestaceus* Franz, 1974

Mikutowicz 1905 (*cordaticollis* Aubé); Rathlef 1921 (*Latridius*); Telnov et al. 1997; Telnov 2004; Kalniņš et al. 2007; Bukejs and Rücker 2013.

E. transversa (Olivier, 1790)

- = *sculptilis* (Gyllenhal, 1827)
- = *Seidlitz 1872–75, 1887–91*; Rathlef 1905 (*Latridius*); Barševskis 1993a, 2002; Telnov et al. 1997; Telnov 2004; Kalniņš et al. 2007; Spuņģis 2008 ([sic] *stransversus* Oliver); Bukejs and Rücker 2013.

Genus *Latridius* Herbst, 1793

- = *Conithassa* C. G. Thomson, 1859
- = *Isidius* Motschulsky, 1866

L. assimilis (Mannerheim, 1844)

- = *flavicornis* (Motschulsky, 1866)
- = *herborisans* (Gistel, 1857)
- = *pseudominutus* (A. Strand, 1958)
- = *scitus* (Mannerheim, 1844)
- = *sulcifrons* (Broun, 1895)
- = *Seidlitz 1872–75 (Enicmus), 1887–91 (Enicmus)*; Rathlef 1905; Barševskis 1992b, 1993a (*Enicmus pseudominutus* Strand), 2002 (*pseudominutus* Strand); Telnov et al. 1997 (*pseudominutus* Strand); Telnov 2004 (*pseudominutus* Strand).

L. brevicollis (C. G. Thomson, 1868)

- = *carpathicus* (Reitter, 1875)
- Rathlef 1905; Barševskis 2002; Telnov et al. 1997; Telnov 2004; Bukejs and Rücker 2013.

New records: Rīga city, Pļavnieki, Ulbrokas mežs (forest) between Lubānas Street and Rīga Preču II railway station, 25 April 1996 (1, pine forest, on underside of sporophore, leg. D. Telnov).

Note: Known only from three localities.

L. consimilis Mannerheim, 1844

- = *basalts* (Motschulsky, 1866)
- = *parallelocollis* (Mannerheim, 1844)
- = *subtestaceus* (Belon, 1881)

Telnov 2001, 2004; Telnov et al. 2005; Bukejs and Rücker 2013.

L. gemellatus Mannerheim, 1844

- = *kolbei* (Wanka, 1929)
- = *nidicola* (Palm, 1944)
- = *Barševskis 1993a (Enicmus nidicola* Palm), 2002 (*nidicola* Palm); Telnov et al. 1997 (*nidicola* Palm); Telnov

2004 (*nidicola* Palm); Kalniņš et al. 2007 (*nidicola* Palm); Bukejs and Rücker 2013.

New records: Rīga city, Pļavnieki, Dravnieku Street, 8 February 1993 (1, apartments, on an old bird nest (collection), leg. D. Telnov); Talsi district, Slitere National Park, Kolka, 9 March 1996 (1, apartments, leg. D. Telnov).

Note: Known from four localities all around Latvia.

L. hirtus Gyllenhal, 1827

- = *distincticollis* (Roubal, 1933)
- = *hirsutulus* Stephens, 1829
- = *Seidlitz 1872–75 (Enicmus), 1887–91 (Enicmus)*; Rathlef 1905; Barševskis 1993a (*Enicmus*), 2002; Telnov et al. 1997; Telnov 2004; Bukejs and Rücker 2013.

Note: Known only from two localities in SE Latvia.

L. minutus (Linnaeus, 1767)

- = *Seidlitz 1872–75 (Enicmus)*, *Seidlitz 1887–91 (Enicmus)*; Rathlef 1905; Vītols 1941 (*Enicmus*); Trauberga 1957 (*Enicmus*); Barševskis 1993a (*Enicmus*), 2002; Telnov et al. 1997; Telnov 2004; Kalniņš et al. 2007; Bukejs and Rücker 2013.

L. porcatus Herbst, 1793

- = *alius* (E. Weise, 1972)
- = *anthracinus* (Mannerheim, 1844)
- = *marginatus* (Paykull, 1798)
- = *minutissimus* Motschulsky, 1858
- = *pusillus* Motschulsky, 1858
- = *Fleischer 1829 (marginatus Payk.)*; Seidlitz 1872–75 (*Enicmus anthracinus* Mannh.), 1887–91 (*Enicmus anthracinus* Mannh.); Rathlef 1905; Barševskis 1993a (*Enicmus anthracinus*), 2002 (*anthracinus* Mannerheim); Telnov et al. 1997 (*anthracinus* Mannerheim); Telnov 2004 (*anthracinus* Mannerheim); Kalniņš et al. 2007 (*anthracinus* Mannerheim).

Genus *Stephostethus* LeConte, 1878

S. alternans (Mannerheim, 1844)

Bukejs and Rücker 2013.

Note: Known from a single locality in Moricsala Nature Reserve (W Latvia).

S. angusticollis (Gyllenhal, 1827)

- = *angulatus* (Mannerheim, 1844)
- = *kokujevi* (Semenov, 1898)
- = *laticeps* (Belon, 1881)
- = *obtusatus* (Roubal, 1951)
- = *stricticollis* (Rey, 1889)
- = *undulatus* (Motschulsky, 1866)
- = *Seidlitz 1887–91 (Latridius)*; Rathlef 1905 (*Latridius*); Barševskis 1993a (*Latridius*), 2002; Telnov et al. 1997; Telnov 2004; Bukejs and Rücker 2013.

S. caucasicus (Mannerheim, 1844)

- = *sinuatocollis* sensu auctorum

Bukejs and Rücker 2013.

Note: Known only from three localities.

S. lardarius (DeGeer, 1775)

- = *acuminatus* (Paykull, 1798)
 - = *dilaticollis* (Motschulsky, 1866)
 - = *pini* (Motschulsky, 1866)
 - = *quadratus* (Herbst, 1793)
 - = *subbrevis* (Motschulsky, 1866)
- Seidlitz 1872–75 (*Latridius*), 1887–91 (*Latridius*); Rathlef 1905 (*Latridius*); Trauberga 1957 (*Latridius*); Barševskis 1993a (*Latridius lardarius* L.), 2002; Telnov et al. 1997; Telnov 2004; Bukejs and Rücker 2013.

S. pandellei (C. N. F. Brisout de Barneville, 1863)

- = *poppiusi* (Semenov, 1904)
 - = *subnudus* (Reitter, 1889)
 - = *tremulae* (C. G. Thomson, 1868)
- Seidlitz 1887–91 (*Latridius*); Rathlef 1905 (*Latridius*); Lackschewitz and Mikutowicz 1939 (*Latridius*); Telnov et al. 1997; Telnov and Kalniņš 2003; Telnov 2004.

Note: Known only from three localities.

S. rugicollis (Olivier, 1790)

- = *campicola* (Gerhardt, 1911)
 - = *lignarius* (Gistel, 1857)
 - = *ovatus* (Grimmer, 1841)
- Seidlitz 1872–75 (*Latridius*), 1887–91 (*Latridius*); Rathlef 1905 (*Latridius*); Telnov et al. 1997 (removed from the list); Telnov 2004; Bukejs and Rücker 2013.

Note: Known only from two localities.

Genus *Thes* Semenov, 1910***Th. bergrothi*** (Reitter, 1881)

- = *africanus* (Dajoz, 1980)
- = *microps* (Ericson, 1896)
- = *tricarinatus* (Brown, 1934)

Mikutowicz 1911 (*Latridius*); Rathlef 1921 (*Latridius*); Lackschewitz 1927 (*Latridius*); Telnov et al. 1997; Telnov 2004; Kalniņš et al. 2007.

New records: Cēsis district, Gauja National Park, Augšlīgatne env., Ramas village, 20 August 2005 (1, old avenue, from sporophore growing on old *Tilia cordata*, leg. D. Telnov); Liepāja district, Rucava env., 22 May–19 June 1999 (1, old-growth pine forest, pitfall trap, leg. V. Spuņģis).

Subfamily Corticariinae Curtis, 1829**Genus *Corticaria*** Marsham, 1802

- = *Abothria* Belon, 1897
- = *Adasia* Belon, 1897
- = *Brevina* Belon, 1897
- = *Dapeda* Belon, 1897
- = *Diarthrocera* Broun, 1893
- = *Epipeda* Belon, 1897
- = *Epipedana* E. Strand, 1942
- = *Parascheva* Gozis, 1886

C. aphictoides Reitter, 1898

- = *porochini* C. Johnson, 2007

= *longicornis* auct. nec Herbst, 1793

Bukejs and Rücker 2013 (*porochini* C. Johnson, 2007).

Note: Known from three localities in SE Latvia.

C. crenulata (Gyllenhal, 1827)

- = *spectabilis* Dajoz, 1970

Barševskis 2002.

Note: Known from a single locality (Ilgas env.) in SE Latvia.

C. elongata (Gyllenhal, 1827)

- = *phoretica* Dajoz, 1970

- = *pseudoelongata* Dajoz, 1970

- = *villiersi* Dajoz, 1970

Mikutowicz 1905; Rathlef 1921; Barševskis 2002; Telnov et al. 1997; Telnov 2004; Bukejs and Rücker 2013.

C. ferruginea Marsham, 1802

- = *boreophila* Motschulsky, 1867

- = *deleta* (Mannerheim, 1853)

- = *denticulata* Kirby, 1837

- = *fenestrata* sensu auctorum

- = *kirbyi* LeConte, 1855

- = *longula* Broun, 1910

- = *nigriceps* (Waltl, 1839)

- = *nigricollis* (Zetterstedt, 1838)

- = *obtusa* LeConte, 1855

- = *rufulus* (Zetterstedt, 1838)

- = *rugulosa* LeConte, 1855

- = *subacuminata* Mannerheim, 1844

Fleischer 1829 (*Latridius fenestralis* F.); Seidlitz 1872–75 (*ferruginea* Gyll.), 1887–91; Rathlef 1905; Telnov et al. 1997 (removed from the list); Telnov 2004; Bukejs and Rücker 2013.

Note: Known only from three localities.

C. fulva (Comolli, 1837)

- = *attenuata* Motschulsky, 1867

- = *cardiodera* Fairmaire, 1875

- = *ciliata* Motschulsky, 1867

- = *concolor* H. Brisout de Barneville, 1880

- = *flavescens* C. G. Thomson, 1871

- = *hirtella* C. G. Thomson, 1863

- = *metallica* Reitter, 1874

- = *normanna* C. N. F. Brisout de Barneville, 1892

- = *unicarinulata* Motschulsky, 1867

Mikutowicz 1911; Rathlef 1921; Lackschewitz and Mikutowicz 1939 (*Cartodere*); Telnov et al. 1997; Telnov 2004.

Note: Known only from a few historical records.

C. impressa (Olivier, 1790)

- = *atricollis* Reitter, 1898

- = *badia* Mannerheim, 1844

- = *campicola* Mannerheim, 1844

- = *denticulatus* (Gyllenhal, 1827)

- = *sculptipennis* Faldermann, 1837

- = *validipes* Motschulsky, 1867

Seidlitz 1887–91; Rathlef 1905; Lackschewitz and Mikutowicz 1939; Barševskis 1993a; Telnov et al. 1997; Telnov 2004; Kalniņš et al. 2007; Bukejs and Rücker 2013.

C. lapponica (Zetterstedt, 1838)

= *robusta* Ganglbauer, 1899

Bukejs and Rücker 2013.

Note: Known from a single locality (Ilgas env.) in SE Latvia.

C. lateritia Mannerheim, 1844

= *eppelsheimeri* Reitter, 1875

Barševskis 1993a (*eppelsheimeri* Reitter); Telnov 2004.

Note: Known from three localities in SE Latvia.

C. longicollis (Zetterstedt, 1838)

= *formicetorum* (Mannerheim, 1843)

= *stigmosa* Motschulsky, 1867

Seidlitz 1872–75 (*formicetorum* Mannh.); Telnov et al. 1997; Telnov 2004.

New records: Gulbene district, Pededzes lejtece, Specially protected nature territory, 18 May 2003 (1, the Pededze River pasture meadow near Lubāna–Balvi road, hollow *Ulmus* sp., leg. D. Telnov); Gulbene district, Pededzes lejtece, Specially protected nature territory, near Lake Vidējais Garezers, 18 May 2003 (1, pine forest, *Formica* sp. nest, leg. I. Salmane); Rīga district, Dalbe, 9 June 1996 (1, *Formica* sp. nest, soil elector leg. D. Telnov); Rīga district, Piejūra Nature Park, Lilaste env., 5 September 2006 (1, pine forest, rotten wood, elector, leg. I. Salmane); Rīga district, between Ulbroka and Dzidriņas, near Ulbrokas kapi (cemetery), 25 March 2007 (1, *Formica* sp. nest, soil elector, leg. D. Telnov).

Note: These are the first actual data on this species from Latvia since more than 130 years ago.

C. longicornis (Herbst, 1783)

= *abietorum* Motschulsky, 1867

= *depressa* C. G. Thomson, 1871

= *mannerheimi* Reitter, 1875

Seidlitz 1872–75; Barševskis 1993a (*abietorum* Motschulsky and *longicornis* Herbst), Barševskis 2002 (*abietorum* Motschulsky); Telnov et al. 1997 (*abietorum* Motschulsky and *longicornis* Herbst); Telnov 2004 (*abietorum* Motschulsky and *longicornis* Herbst); Kalniņš et al. 2007; Bukejs and Rücker 2013.

C. polypori J. R. Sahlberg, 1900

Telnov et al. 1997; Telnov 2004.

New records: Valmiera district, Ziemeļvidzeme Biosphere reserve, Mazsalaca env., the Salaca River valley near Silgaļi house, 23 June 1996 (2, mixed forest, in flight, leg. D. Telnov).

Note: The first actual data on this species from Latvia.

C. pubescens (Gyllenhal, 1827)

= *brouni* Hetschko, 1926

= *capensis* Motschulsky, 1867

= *concinnula* Mannerheim, 1844

= *diluta* Mannerheim, 1844

= *grossa* LeConte, 1855

= *intricata* Mannerheim, 1844

= *robusta* Broun, 1914

= *testacea* Dalla Torre, 1879

= *tincta* Mannerheim, 1844

Seidlitz 1872–75, 1887–91; Rathlef 1905; Barševskis 1993a, 2002; Telnov et al. 1997; Telnov 2004; Bukejs and Rücker 2013.

C. rubripes Mannerheim, 1844

= *baicalica* Mannerheim, 1844

= *limbicollis* Motschulsky, 1867

= *linearis* (Paykull, 1798)

= *obscuripes* Reitter, 1898

= *spinulosa* C. G. Thomson, 1871

= *thomsoni* Reitter, 1881

Müthel 1889 (*linearis* Payk.); Seidlitz 1887–91 (*linearis* Payk.); Rathlef 1905 (*linearis* Payk.); Lackschewitz and Mikutowicz 1939 (*linearis* Payk.); Barševskis 1993a (*linearis* Payk.), 2002; Telnov et al. 1997; Telnov 2004 (*linearis* Paykull); Kalniņš et al. 2007 (*linearis* Paykull and *rubripes* Mannerheim); Spuņģis 2008 (*linearis* Paykull and *rubripes* Mannerheim); Bukejs and Rücker 2013.

C. saginata Mannerheim, 1844

= *curtipes* Lövendal, 1893

Telnov 2004; Telnov et al. 2005; Kalniņš et al. 2007; Spuņģis 2008.

New records: Talsi district, Slītere National Park, Kolka, Rīga Gulf shore, 11–18 July 2004 (1, foredunes, pitfall trap, leg. V. Spuņģis).

Note: Known only from two localities.

C. serrata (Paykull, 1798)

= *adustipennis* Motschulsky, 1867

= *axillaris* Mannerheim, 1844

= *chilensis* Dajoz, 1967

= *clairi* H. Brisout de Barneville, 1881

= *flavifrons* Motschulsky, 1867

= *hispanica* Dajoz, 1970

= *laticollis* Mannerheim, 1844

= *melanophthalma* Mannerheim, 1844

= *motschulskii* Kolenati, 1846

= *octodentata* Say, 1824

= *quadricollis* Motschulsky, 1867

= *rotulicollis* Wollaston, 1854

= *serrata* Marsham, 1802

= *subcordata* Rey, 1889

= *tenuicornis* Motschulsky, 1867

= *weisei* Reitter, 1875

Seidlitz 1872–75, 1887–91; Rathlef 1905; Lackschewitz and Mikutowicz 1939; Vitols 1941; Barševskis 1997; Telnov et al. 1997; Telnov 2004; Bukejs and Rücker 2013.

C. umbilicata (Beck, 1817)

= *borealis* Wollaston, 1855
 = *cylindrica* Mannerheim, 1844
 = *cylindripennis* Motschulsky, 1867
 = *umbilicifera* Mannerheim, 1844

Seidlitz 1872–75 (*cylindrica* Mannh.), 1887–91; Rathlef 1905; Lackschewitz and Mikutowicz 1939; Barševskis 1993a; Telnov et al. 1997, 2005; Telnov 2004; Bukejs and Rücker 2013.

Genus *Corticarina* Reitter, 1881

= *Oropsime* Gozis, 1881

C. lambiana (Sharp, 1910)

Barševskis 1992b, 1993a, 2002; Telnov et al. 1997; Telnov 2004.

C. latipennis (J. R. Sahlberg, 1871)

= *fowleriana* (Sharp, 1910)
 = *terricula* (Fall, 1899)
 = *trinotata* (J. R. Sahlberg, 1926)

Barševskis 1992b, 1993a, 2002; Telnov et al. 1997; Telnov 2004; Kalniņš et al. 2007.

New records: Rīga district, Juglas forestry quarter No. 102, patch No. 5, along the Urga River, between houses Kaktiņi and Sitkalni, 1 May 2008 (1, pine forest, leg. D. Telnov); Rīga district, Jūrmala city, Priedaine, 19 September 1974 (1, meadows near bridges, leg. V. Melecis); Rīga district, Saulkrasti, 16 June 1996 (1, the Rīga Gulf shore, leg. F. Savich); Talsi district, Slītere National Park, Mazirbe, 16 June 1995 (1, mixed old growth forest, leg. D. Telnov); Valka district, Trikāta, 15 May 1993 (1, leg. M. Kalniņš).

C. minuta (Fabricius, 1792)

= *americana* (Mannerheim, 1844)
 = *brevicollis* (Mannerheim, 1844)
 = *compta* (LeConte, 1855)
 = *fuscula* (Gyllenhal, 1827)
 = *melanocara* (Gistel, 1857)
 = *ovalipennis* (Reitter, 1875)
 = *trifoveolata* (L. Redtenbacher, 1849)

Seidlitz 1872–75 (*fuscula* Gyll.), 1887–91 (*Corticaria fuscula* Gyll.); Rathlef 1905 (*Corticaria fuscula* Gyll.); Barševskis 1992a (*Cortinicara fuscula*), 1992b (*Cortinicara fuscula* Gyll.), 1993a (*fuscula* Gyll.), 2002 (*fuscula* Gyll.); Telnov et al. 1997 (*fuscula* Gyll.); Telnov 2004 (*fuscula* Gyll.); Kalniņš et al. 2007 (*fuscula* Gyll.); Spuņģis 2008 (*fuscula* Gyll.); Bukejs 2011; Bukejs and Rücker 2013.

C. parvula (Mannerheim, 1844)

= *obfuscata* A. Strand, 1937

Barševskis 1992b, 1993a (*obfuscata* Strand), 2002 (*obfuscata* Strand); Telnov et al. 1997 (*obfuscata* Strand); Telnov 2004 (*obfuscata* Strand); Bukejs and Rücker 2013.

New records: Gulgene district, Pededzes lejtece Specifically protected nature territory, pasture woodland oppo-

site Silenieki house, the right bank of the Pededze River, 11 May 2002 (1, beaten from dry branches, leg. D. Telnov).

Note: Known only from three localities.

C. similata (Gyllenhal, 1827)

= *fulvipes* (Comolli, 1837)
 = *pusilla* (Rey, 1889)
 = *subtilis* (Mannerheim, 1844)

Seidlitz 1872–75 (*Corticaria*), 1887–91 (*Corticaria*); Rathlef 1905 (*Corticaria*); Lackschewitz and Mikutowicz 1939 (*Corticaria*); Barševskis 1993a, 1997, 2002; Telnov et al. 1997; Telnov 2004; Kalniņš et al. 2007; Bukejs and Rücker 2013.

C. truncatella (Mannerheim, 1844)

= *fossilata* (Rey, 1889)
 Seidlitz 1887–91 (*Corticaria*); Rathlef 1905 (*Corticaria*); Barševskis 1993a, 2002; Telnov et al. 1997; Telnov 2004; Bukejs and Rücker 2013.

Note: Known only from three localities.

Genus *Cortinicara* C. Johnson, 1975***C. gibbosa*** (Herbst, 1793)

= *cylindricollis* (Motschulsky, 1866)
 = *fuscotestacea* (Motschulsky, 1861)
 = *gibbula* (Motschulsky, 1866)
 = *herbacea* (Gistel, 1857)
 = *intricata* (Rey, 1889)
 = *pallida* (Marsham, 1802)
 = *reseda* (Walker, 1859)

Seidlitz, 1872–75 (*Corticaria*), 1887–91 (*Corticaria*); Heyden 1903 (*Corticaria*); Rathlef 1905 (*Corticaria*); Trauberga 1957 (*Corticaria*); Priedītis 1979 (*Corticaria*); Barševskis 1993a (*Cortinicara*), 2002 (*Cortinicara*); Telnov et al. 1997 (*Cortinicara*); Telnov 2004; Kalniņš et al. 2007; Spuņģis 2008; Bukejs 2011; Bukejs and Rücker 2013.

Table 1. Comparison of the Latridiidae fauna in Latvia (LV), Lithuania (LT), Estonia (EE), and Belarus (BY).

Taxa	Number of species			
	LV	LT	EE	BY
Latridiinae				
<i>Cartodere</i>	2	2	2	2
<i>Dienerella</i>	5	4	4	4
<i>Enicmus</i>	7	6	4	6
<i>Latridius</i>	7	4	3	6
<i>Stephostethus</i>	6	5	5	5
<i>Thes</i>	1	1	1	1
Corticariinae				
<i>Corticaria</i>	16	13	17	17
<i>Corticarina</i>	6	4	5	5
<i>Cortinicara</i>	1	1	1	1
<i>Melanophthalma</i>	3	2	1	3
Total	54	42	43	50

- Genus *Melanophthalma*** Motschulsky, 1866
Subgenus *Melanophthalma* Motschulsky, 1866
M. maura Motschulsky, 1866
= *austriaca* Franz, 1967
Bukejs and Rücker 2013.
Note: A recently discovered species in Latvia. Known from five localities in SE Latvia.
- M. suturalis*** (Mannerheim, 1844)
= *fallax* Rey, 1889
Telnov et al. 2006.
Note: Known from a single locality in southern Latvia.

- M. transversalis*** (Gyllenhal, 1827)
= *crocata* (Mannerheim, 1844)
= *curticollis* (Mannerheim, 1844)
= *hortensis* (Mannerheim, 1844)
= *moraviaca* Reitter, 1875
= *sinica* C. Johnson, 1972
= *wollastoni* (G. R. Waterhouse, 1859)
Seidlitz 1872–75 (*Corticaria*), 1887–91 (*Corticaria*);
Heyden 1903; Rathlef 1905 (*Corticaria*); Barševskis 1993a, 2002; Telnov et al. 1997 (*curticollis* Mannerheim); Telnov 2004 (*curticollis* Mannerheim); Kalnīnš et al. 2007 (*curticollis* Mannerheim); Bukejs 2011 (*curticollis* Mannerheim); Bukejs and Rücker 2013.

Taxonomical structure of the Latvian Latridiidae fauna

According to Bouchard et al. (2011), Johnson (2007), and Rücker (2010), the family Latridiidae contains two subfamilies: Latridiinae and Corticariinae. There are 54 species and 10 genera of two subfamilies known in the Latvian fauna. The number of known species in adjacent territories varies slightly (Table 1): 43 species in Estonia (Silfverberg 2010), 42 species in Lithuania (Tamutis, Tamutė, and Ferenca 2011), 50 species in Belarus (Alexandrovitch et al. 1996; Johnson 2007).

Biogeography of Latvian Latridiidae

Ten chorotypes represent the Latvian fauna of minute brown scavenger beetles:

Cosmopolitan – six species (11.11%): *Cartodere nodifer*, *C. constricta*, *Corticaria elongata*, *C. fulva*, *C. serra*, *Cortinicara gibbosa*.

Subcosmopolitan – 10 species (18.52%): *Latridius assimilis*, *L. consimilis*, *L. porcatus*, *E. histrio*, *Dienerella ruficollis*, *D. filum*, *Stephostethus lardarius*, *Thes bergrothi*, *Corticaria ferruginea*, *C. pubescens*.

Holarctic – ten species (18.52%): *Latridius hirtus*, *L. minutus*, *D. costulata*, *D. filiformis*, *Corticaria*

Chorotype	Number of species	
		Latvia
COS	6	11.11
SCO	10	18.52
OLA	10	18.52
PAL	7	12.97
ASE	1	1.85
SIE	4	7.41
WPA	2	3.70
TEA-AD	2	3.70
TEA-PD	1	1.85
EUR	11	20.37
Total	54	100.00

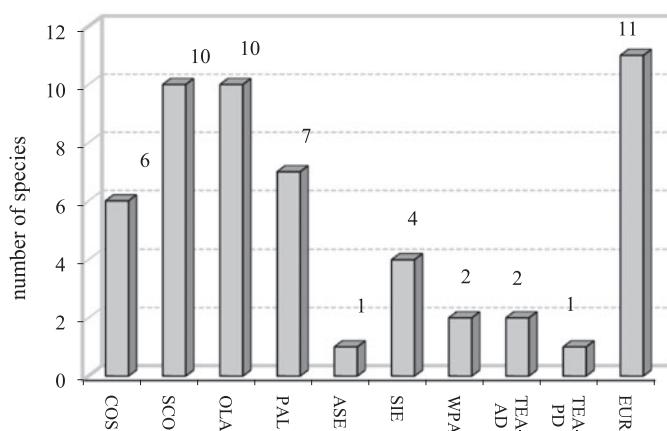


Figure 1. Biogeographical structure of the Latvian Latridiidae fauna: COS – Cosmopolitan, OLA – Holarctic, SCO – Subcosmopolitan, PAL – Palaearctic, ASE – Asiatic-European, TEA-AD – Trans-Euroasiatic Asiatic-disjunct, TEA-PD – Trans-Euroasiatic Polydisjunct, WPA – West Palaearctic, SIE – Sibero-European, and EUR – European.

aphictoides, *C. impressa*, *C. rubripes*, *C. saginata*, *Corticarina latipennis*, *C. minuta*.

Palaearctic – seven species (12.97%): *Enicmus brevicornis*, *E. rugosus*, *E. transversus*, *Corticaria crenulata*, *C. umbilicata*, *Corticarina similata*, *C. truncatella*.

Asiatic-European – one species (1.85%): *Melanophthalma transversalis*.

Trans-Euroasiatic Asiatic-disjunct – two species (3.70%): *Stephostethus angusticollis*, *S. rugicollis*.

Trans-Euroasiatic Polydisjunct – one species (1.85%): *Corticaria lateritia*.

West Palaearctic – two species (3.70%): *Enicmus testaceus*, *Melanophthalma suturalis*.

Sibero-European – four species (7.41%): *Stephostethus pandellei*, *Corticaria lapponica*, *Corticarina lambiana*, *Melanophthalma maura*.

European – 11 species (20.37%): *Latridius brevicollis*, *L. gemellatus*, *Enicmus fungicola*, *E. planipennis*, *Dienella vincenti*, *Stephostethus alternans*, *S. caucasicus*,

Corticaria longicollis, *C. longicornis*, *C. polypori*, *Corticarina parvula*.

The analysis of the distribution of Latvian Latridiidae species shows that the range of chorotypes is rather wide. European (11 species or 20.37%), Subcosmopolitan (10 or 18.52%), and Holarctic (10 or 18.52%) species are considered to be predominant (Figure 1).

References

Part A. Bibliography on Latvian Latridiidae

- Barševskis, A. 1992a. "Laucese upes ūdens piesārņojuma ietekme uz tās entomofaunu [The Influence of Water Pollution of the Laucese River on the Fauna of Insecta]." *LDPAB-DPI organizācijas Informatīvais Biļetens* 1: 5.
- Barševskis, A. 1992b. "Materiāli par Ilgu apkārtnes vaboļu faunu [Material on Beetles of Ilgas Environs]." *LDPAB-DPI organizācijas Informatīvais Biļetens* 2: 9–10.
- Barševskis, A. 1993a. *Austrumlatvijas vaboles* [The Beetles of Eastern Latvia]. Daugavpils: Saule.
- Barševskis, A. 1993b. "Ieskats Teiču rezervāta vaboļu faunas īpatnības [Beetles' Fauna of Teiči Reservation]." *DPU DA Informatīvais Biļetens* 4: 8–9.
- Barševskis, A. 1997. "Augšdaugavas vaboļu (Insecta: Coleoptera) faunistiskās īpatnības [Faunistical Peculiarities of Beetles (Insecta: Coleoptera) in Augšdaugava]." *Daba un muzejs* 7: 8–9.
- Barševskis, A. 2002. "Vaboļu kārtā (Coleoptera) [Beetles (Coleoptera)]." In *Silenes dabas parka fauna, flora un vegetācija* [Fauna, Flora and Vegetation of Silene Nature Park], edited by A. Barševskis, N. Savenkovs, P. Evarts-Bunders, I. Daniele, G. Pētersons, V. Pilāts, E. Zviedre, et al., 37–60. Daugavpils: Baltijas Koleopteroloģijas institūts.
- Barševskis, A., and N. Savenkovs. 1991. "Piedrujas sauso pļavu vaboļu īpatnības [Peculiarities of the Beetles Fauna on Dry Meadows in Piedruja]." In *Kultūrvides veidošanas problēmas Daugavas telejā* [Challenges of Forming Cultural Environment in Daugava Valley], Daugavpils 5–7.
- Bukejs, A. 2011. "Materials about the Fauna of Beetles (Insecta: Coleoptera) of Naujene Rural Municipality (Daugavpils District, Latvia). Part 3." *Acta Biologica Universitatis Daugavpiliensis* 11 (1): 10–21.
- Bukejs, A., and W. H. Rücker. 2013. "Contributions to the Knowledge of Latvian Latridiidae (Insecta: Coleoptera)." *Zoology and Ecology* 23 (2): 129–137.
- Fleischer, J. 1829. "Beitrag zur Fauna der Ostseeprovinzen. Verzeichnis derjenigen Käfer, die soweit mir bekannt ist, als einheimische bis hierzu noch nicht aufgeführt sind [To the Knowledge of Fauna of Ostseeprovinzen]." *Die Quatember, Kurländische Gesellschaft für Literatur und Kunst* 1 (2): 9–19.
- Heyden, L. 1903. "Beiträge zur Coleopteren-Fauna der nordwestlichen Teile Russland [To the Knowledge of Coleoptera Fauna of North-western Part of Russia]." *Korrespondenzblatt des Naturforscher-Vereins zu Riga* 46: 18–35.
- Kalniņš, M., E. Juceviča, A. Karpa, I. Salmane, A. Poppels, and D. Telnovs. 2007. "Invertebrates." In *Biodiversity in Gauja National Park*, edited by V. Pilāts, 106–149. Sigulda: Gauja National Park Administration.
- Lackschewitz, T. 1927. "Zur Koleopterenfauna des ostbaltischen Gebietes, I [To the Knowledge of Beetle Fauna of Eastern Baltic Region, I]." *Korrespondenzblatt des Naturforscher-Vereins zu Riga* 59: 12–14.
- Lackschewitz, T., and J. Mikutowicz. 1939. "Zur Koleopterenfauna des ostbaltischen Gebietes, II [To the Knowledge of Beetle Fauna of Eastern Baltic Region, II]." *Korrespondenzblatt des Naturforscher-Vereins zu Riga* 63: 48–76.
- Mikutowicz, J. 1905. "Zur Koleopterenfauna der Ostseeprovinzen Russlands, I [To the Knowledge of Coleoptera Fauna of the German Baltic Provinces of Russia, I]." *Korrespondenzblatt des Naturforscher-Vereins zu Riga* 48: 73–92.
- Mikutowicz, J. 1911. "Zur Koleopterenfauna der Ostseeprovinzen Russlands, II [To the Knowledge of Coleoptera Fauna of the German Baltic Provinces of Russia, II]." *Korrespondenzblatt des Naturforscher-Vereins zu Riga* 54: 25–30.
- Müthel, C. 1889. "Neue Käfer aus Südlivland [New Beetles from Southern Livland]." *Korrespondenzblatt des Naturforscher-Vereins zu Riga* 32: 6–8.
- Priedītis, A. 1979. "Видовой состав и значение жуков в кроне яблони в Латвии [Species Composition and Value of Beetles in the Crown of Apple Trees in Latvia]." *Труды Латвийской сельскохозяйственной академии (Захиста растений от вредителей)* 167: 19–25.
- Rathlef, H. 1905. *Coleoptera Baltica. Käfer-Verzeichnis der Ostseeprovinzen nach den Arbeiten von Ganglbauer und Reitter* [Coleoptera of Baltica. Beetle Catalogue of Ostseeprovinzen after Ganglbauer's and Reitter's Works]. Dorpat: C. Mattiesen.
- Rathlef, H. 1921. "Supplementum zu den Coleoptera Baltica [Additions for Catalogue Coleoptera of Baltica]." *Sitzungsberichte der Naturforscher-Gesellschaft bei der Universität Dorpat* 25 (2/4): 53–65.
- Seidlitz, G. 1872–75. *Fauna Baltica. Die Käfer (Coleoptera) der Ostseeprovinzen Russlands* [The Beetles (Coleoptera) of Ostseeprovinzen Provinces of Russia]. Dorpat: H. Laakmann.
- Seidlitz, G. 1887–91. *Fauna Baltica. Die Käfer (Coleoptera) der Ostseeprovinzen Russlands. Zweite neu bearbeitete Auflage mit 1 Tafel* [The Beetles (Coleoptera) of Ostseeprovinzen Provinces of Russia. 2nd ed.]. Königsberg: Hartungsche Verlagsdruckerei.
- Spungis, V. 2008. *Fauna and Ecology of Terrestrial Invertebrates in Raised Bogs in Latvia*. Rīga: Pertovskis.
- Telnov, D. 1996. "Sixty-three New and Rare Species of Coleoptera in the Fauna of Latvia." *Latvijas Entomologs* 35: 36–43.
- Telnov, D. 2001. "To the Knowledge of Latvian Coleoptera, 1." *Latvijas Entomologs* 38: 61–69.

- Telnov, D. 2004. "Check-list of Latvian Beetles (Insecta: Coleoptera). Second Edition." In *Compendium of Latvian Coleoptera*, edited by D. Telnov, Vol. 1, 1–114. Rīga: Pertovskis.
- Telnov, D., A. Barševskis, F. Savich, F. Kovalevsky, S. Berdnikov, M. Doronin, R. Cibulskis, and D. Ratniece. 1997. "Check-list of Latvian Beetles (Insecta: Coleoptera)." *Mitteilungen des Internationalen Entomologischen Vereins Supplement V*: 1–140.
- Telnov, D., Ch. Fägerström, J. Gailis, M. Kalniņš, U. Piterāns, and K. Vilks. 2006. "Contributions to the Knowledge of Latvian Coleoptera. 5." *Latvijas Entomologs* 43: 78–125.
- Telnov, D., J. Gailis, M. Kalniņš, A. Napolov, U. Piterāns, K. Vilks, and P. F. Whitehead. 2005. "Contributions to the Knowledge of Latvian Coleoptera. 4." *Latvijas Entomologs* 42: 18–47.
- Telnov, D., and M. Kalniņš. 2003. "To the Knowledge of Latvian Coleoptera. 3." *Latvijas Entomologs* 40: 21–33.
- Trauberga, O. 1957. "Coleoptera – Vaboles [Coleoptera – Beetles]." In *Latvijas PSR dzīvnieku noteicējs*, 1 [Guides to Identification of Latvian animals, Vol. 1], 455–592. Rīga: Latvijas Valsts izdevniecība.
- Ulanowski, A. 1883. "Z fauny coleopterologicznej Inflant Polskich [To the Coleopterological Fauna of Polish Provinces]." *Sprawozdanie Komisyi Fizjograficznej* 18: 1–60.
- Vītols, O. 1941. "Latvijas PSR noliktavās sastaptie posmkāji (Arthropoda) [Arthropoda Found in Latvian (RLSS) Storehouses]." *Jelgavas Lauksaimniecības akadēmijas raksti* 1 (3): 421–476.

Part B. Other literature sources

- Alexandrovitch, O. R., I. K. Lopatin, A. D. Pisanenko, V. A. Tsinkевич, and S. M. Snitko. 1996. *A Catalogue of Coleoptera (Insecta) of Belarus*. Minsk: Fund Fundamental Research of Republic of Belarus.
- Andrews, F. G. 2002. "Latridiidae Erichson, 1842." In *American Beetles. Volume 2: Polyphaga: Scarabaeoidea through Curculionoidea*, edited by R. H. Arnett Jr., M. C. Thomas, P. E. Skelley, and J. H. Frank, 395–398. Boca Raton, FL: CRC Press.
- Barševskis, A. 2003. *Ground Beetles (Coleoptera: Carabidae, Trachypachidae and Rhysodidae) of Latvia*. Daugavpils: Baltic Institute of Coleopterology.
- Barševskis, A., M. Kalniņš, and R. Cibulskis. 2005. *Adephagous Water Beetles (Coleoptera, Dytisciformia) of Latvia*. Daugavpils: Baltic Coleopterological Society.
- Bouchard, P., Y. Bousquet, A. E. Davies, M. A. Alonso-Zarazaga, J. F. Lawrence, C. H. C. Lyal, A. F. Newton, et al. 2011. "Family-group Names in Coleoptera (Insecta)." *ZooKeys* 88: 1–972.
- Bousquet, Y. 1990. *Beetles Associated with Stored Products in Canada: An Identification Guide*. Ottawa: Research Branch, Agriculture Canada, Publication 1837.
- Bukejs, A. 2013. "Catalogue of Latvian Leaf-beetles (Coleoptera: Megalopodidae, Orsodacnidae and Chrysomelidae)." *Latvijas Entomologs* 52: 3–57.
- Bukejs, A., A. G. Kirejtshuk, and W. H. Rücker. 2011. "New Species of *Latridius* (Coleoptera: Latridiidae) from Baltic Amber." *Baltic Journal of Coleopterology* 11: 203–207.
- Bukejs, A., H.-P. Reike, and W. H. Rücker. 2012. "Enicmus adrianae sp. nov. – A New Scavenger Beetle (Coleoptera: Latridiidae) from Baltic Amber." *Baltic Journal of Coleopterology* 12 (2): 149–154.
- Bukejs, A., W. H. Rücker, and A. G. Kirejtshuk. 2012. "Cartodere (Aridius) succinobaltica sp. nov. (Coleoptera: Latridiidae) from Baltic Amber." *Latridiidae* 9: 25–28.
- Bukejs, A., D. Telnov, and J. Háva. 2013. "Catalogue of Latvian Dermestidae (Insecta: Coleoptera)." *Zoology and Ecology* 23 (3): 224–232.
- Gorodkov, K. B. 1984. "Типы ареалов насекомых тундры и лесных зон Европейской части СССР [Ranges Types of Insects of Tundra and Forests Zones of European Part of USSR]." In *Ареалы насекомых европейской части СССР* [Areal of the Insects of the European Part of the USSR], edited by O. A. Scarlato and K. B. Gorodkov, 3–20. Leningrad: Nauka (maps 179–221).
- Johnson, C. 2007. "Family Latridiidae Erichson, 1842." In *Catalogue of Palaearctic Coleoptera*, edited by I. Löbl and A. Smetana, Vol. 4, 635–648. Stenstrup: Apollo Books.
- Johnson, C., and W. H. Rücker. 2007. "Changes to Nomenclature of Latridiidae and Endomychidae, Merophysiinae in Central Europe after Revision in 'Catalogue of Palaearctic Coleoptera', Volume 4, June 2007." *Latridiidae* 5: 7–10.
- Kirejtshuk, A. G., and D. Azar. 2013. "Current Knowledge of Coleoptera (Insecta) from the Lower Cretaceous Lebanese Amber and Taxonomical Notes for Some Mesozoic Groups." *Terrestrial Arthropod Reviews* 6 (1–2): 103–134.
- Kryzhanovskij, O. L. 1974. "Latridiidae." In *Насекомые и клещи – вредители сельскохозяйственных культур, том 2. Жесткокрылые* [Insects and Ticks – The Pests of Agricultural Cultures. II. Coleoptera], edited by O. L. Kryzhanovskij, 119–299. Leningrad: Nauka.
- Majka, Ch., D. Langor, and W. H. Rücker. 2009. "Latridiidae (Coleoptera) of Atlantic Canada: New Records, Keys to Identification, New Synonyms, Distribution, and Zoogeography." *Canadian Entomologist* 141: 317–370.
- Ponomarenko, A. G., and A. G. Kirejtshuk. 2013. "Catalogue of Fossil Coleoptera." Accessed August, 2013. <http://www.zin.ru/Animalia/Coleoptera/rus/paleosys.htm>
- Reike, H.-P. 2012. "Neue Arten und Anmerkungen zu Latridiidae (Coleoptera) aus Baltischem Bernstein [New Species and Remarks on Latridiidae (Coleoptera) of Baltic Amber]." *Latridiidae* 9: 7–23.
- Reike, H.-P., V. I. Alekseev, and A. Bukejs. 2013. "Dieneremria rueckeri, a New Genus and Species of Minute Brown Scavenger Beetle from Baltic Amber, with Notes on Other Fossil Latridiidae (Coleoptera: Cucujoidea)." *Zootaxa* 3686 (3): 381–388.
- Rücker, W. H. 1981. "Revision der Motschulsky-Typen aus Nord- und Südamerika, Coleoptera: Latridiidae, Melanophthalma Motschulsky [Revision of Motschulsky's Types from North and South America, Coleoptera: Latridiidae, Melanophthalma Motschulsky]." *Entomologische Blätter* 77 (1–2): 49–53.
- Rücker, W. H. 1984. "Neue Arten der Gattung *Melanophthalma* Motschulsky aus Afrika (Coleoptera, Latridiidae) [New Species of the Genus *Melanophthalma* Motschulsky from Africa (Coleoptera: Latridiidae)]." *Annales Historico-Naturales Musei Naturalis Hungarici* 76: 139–141.
- Rücker, W. H. 2010. "Checklist Latridiidae and Merophysiinae of the World." *Latridiidae and Merophysiinae* 9: 1–16.
- Rücker, W. H. 2013. "Fauna Europaea: Coleoptera, Latridiidae." In *Fauna Europaea: Coleoptera, Beetles, Fauna Europaea Version 2.4*, edited by P. Audisio. Accessed July, 2013. <http://www.faunaeur.org>
- Rücker, W. H. forthcoming. "Ein neues Synonym zu *Corticaria aphictoides* Reitter, 1898 (Coleoptera, Latridiidae) [A new synonym for *Corticaria aphictoides* Reitter, 1898 (Coleoptera, Latridiidae)]." *Latridiidae, Mitteilungsblatt für Systematik und Taxonomie der Latridiidae* 10.
- Saluk, S. V. 1992. "Family Latridiidae." In *Определитель насекомых Дальнего Востока СССР*, том 3, часть 2 [Guides to the Insects of Russian Far East. Coleoptera or Beetles, Vol. 3, Part 2], edited by P. A. Ler, 378–392. Vladivostok: Dalnauka.

- Silfverberg, H. 2010. "Enumeratio renovata Coleopterorum Fennoscandiae, Daniae et Baltiae [New Catalogue of Coleoptera of Fennoscandia, Danmark and Eastern Baltic States]." *Sahlbergia* 16: 1–144.
- Spuris, Z. 1981. "Catalogue of Insects of Latvia. 2. Click-beetles (Elateridae)." *Latvijas Entomologs* 24: 5–21.
- Spuris, Z. 1983. "Catalogue of Insects of Latvia. 4. Ground Beetles (Carabidae)." *Latvijas Entomologs* 26: 5–67.
- Spuris, Z. 1984. "Catalogue of Insects of Latvia. 5. Long-horn Beetles (Cerambycidae)." *Latvijas Entomologs* 27: 5–31.
- Spuris, Z. 1990. "Catalogue of Insects of Latvia. 8. Ladybirds (Coccinellidae)." *Latvijas Entomologs* 33: 5–20.
- Spuris, Z. 1991a. "Catalogue of Insects of Latvia. 9. The Family Scarabaeidae." *Latvijas Entomologs* 34: 5–27.
- Spuris, Z. 1991b. "Catalogue of Insects of Latvia. 11. The Families Haliplidae, Noteridae, Dytiscidae, and Gyrinidea." *Acta hydroentomologica Latvica* 1: 5–23.
- Taglianti, V. A., P. A. Audisio, M. Biondi, M. A. Bologna, G. M. Carpaneto, A. De Biase, S. Fattorini, et al. 1999. "A Proposal for a Chorotype Classification of the Near East Fauna, in the Framework of the Western Palearctic Region." *Biogeographia* 20: 31–59.
- Tamutis, V., B. Tamutė, and R. Ferenca. 2011. "A Catalogue of Lithuanian Beetles (Insecta, Coleoptera)." *ZooKeys* 121: 1–494.