

Materials to the knowledge of Latvian seed-beetles (Coleoptera: Chrysomelidae: Bruchinae)

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Bukejs A. 2010. Materials to the knowledge of Latvian seed-beetles (Coleoptera: Chrysomelidae: Bruchinae). *Baltic J. Coleopterol.*, 10(2): 177-184.

The faunal and bibliographical information on Bruchinae Latreille, 1802 of the Latvian fauna are presented in the current paper. *Bruchidius villosus* (Fabricius, 1792) and *Spermophagus calystegiae* (Lukjanovitsh & Ter-Minassian, 1957) are reported for the first time for Latvia. Bibliographical analysis on seed-beetles in Latvia is made for the first time. An annotated list of Latvian Bruchinae including 4 genera and 12 species is given.

Key words: Coleoptera, Chrysomelidae, Bruchinae, Latvia, fauna, new records, bibliography.

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INTRODUCTION

The subfamily Bruchinae Latreille, 1802 comprises 58 genera distributed throughout the world (Borowiec 1987). In Fennoscandia and Baltica, 15 species and 5 genera of seed-beetles are known (Silfverberg 2004). Hitherto, in the second edition of the check-list of Latvian Coleoptera (Telnov 2004) 4 genera and 9 species of Bruchinae were mentioned. In adjacent territories, the number of registered species of this subfamily slightly varies: Belarus – 11 species of 5 genera are recorded (Alexandrovitch et al. 1996; Barševskis 2001), Estonia – 4 species of 1 genus (Silfverberg 2004), Lithuania – 9 species of 4 genera (Pileckis, Monsevičius 1997; Silfverberg 2004), Kaliningrad region – 8 species of 4 genera (Aleksseev 2003).

The first data on seed-beetles in Latvia were published in the beginning of the 19th century (Precht 1818). Subsequently, more than 15 works were published. Faunal records on Bruchinae in Latvia can also be found in following articles

(Ulanowski 1883; Lackschewitz, Mikutowicz 1939; Barševskis 1993, 1996, 2001; Barševskis et al. 2004; Telnov et al. 2005; Bukejs 2006).

Seed-beetles are of a great economic importance. Some of them are dangerous pests of leguminous plants (Kryzhanovskij 1974). In Latvia, *Acanthoscelides obtectus* (Say, 1831) is reported as the pest of bean *Phaseolus* sp. (Smarods, Liepa 1956), and *Bruchus pisorum* (Linnaeus, 1758) – as the pest of peas *Pisum* sp. (Ozols 1963).

The aim of the current work is to summarize information on Bruchinae in Latvia. Faunal data on 10 species are presented. Two species, *Bruchidius villosus* (Fabricius, 1792) and *Spermophagus calystegiae* (Lukjanovitsh & Ter-Minassian, 1957), are reported for the first time for Latvia. Bibliography analysis on seed-beetles in Latvia is made for the first time. An annotated list of Latvian species of Bruchinae is presented. Altogether, 12 species of 4 genera are reported for Latvia.

MATERIAL AND METHODS

A total of 411 specimens of Bruchinae were reviewed during the current investigation. The examined material is deposited in the collection of Daugavpils University Institute of Systematic Biology (DUBC, Daugavpils, LV), the collection of Latvian Natural History Museum (Rīga, LV), and private collection of Andris Bukejs (Daugavpils, LV).

The following species keys were used for identification of material: Anton (1994), Brandi (1981), Karapetjan (1985), Lukjanovitsh, Ter-Minassian (1957). The systematics suggested by Silfverberg (2004). The nomenclature and synonymy suggested by Anton (2010).

Host plants are listed citing the monograph of Lukjanovitsh, Ter-Minassian (1957). General species distribution is given according to Egorov 1996; Hayashi et al. 1984; Karapetjan (1985); Lukjanovitsh, Ter-Minassian (1957).

Classification of chorotypes follows as suggested by Taglianti *et al.* (1999). The transcript of chorotypes codes: ASE – Asiatic-European, CAE – Centralasiatic-European, CEM – Centralasiatic-European-Mediterranean, CEU – Centraleuropean, COS – Cosmopolitan, EUR – European, SIE – Sibero-European.

The following information is given for each species: scientific name & author, published bibliographic sources for Latvia, faunal data (locality, collecting date, number of collected specimens in oval brackets, information on the habitat and the collector's name), host plants, phenology (Latvian data only; IV, V, VI, VII, VIII, IX – months from April to September), general distribution of species and the chorotype code.

Explanations of the abbreviations used: d. – administrative district (system of administrative districts used in Latvia from 1991 to 2009), env. – environs, Isl. – island, syn. – synonym, vill. – village or little settlement, C – Central, S – South, N – North, E – East, W – West.

RESULTS AND DISCUSSION

During the current research, occurrence of 9 species of seed-beetles was confirmed for the fauna of Latvia. Two species, *Bruchidius villosus* (Fabricius, 1792) and *Spermophagus calystegiae* (Lukjanovitsh & Ter-Minassian, 1957), are reported for the first time for the Latvian fauna.

Ulanowski (1883) reported *Bruchidius unicolor* (Olivier, 1795) from Rēzekne d., Ozolmuiža (E Latvia). This species not mentioned in previous catalogues of Latvian Coleoptera (Telnov *et al.* 1997; Telnov 2004).

Overall, the list of Latvian Bruchinae Latreille, 1802 includes 4 genera and 12 species.

Analysis of the chorotypes of Latvian Bruchinae shows that the range of chorotypes is rather wide: Cosmopolitan – 3 species [*Bruchus rufimanus* Boh., *B. pisorum* (L.), *Acanthoscelides obtectus* (Say)], Asiatic-European – 1 species [*Bruchus atomarius* (L.)], Sibero-European – 1 species [*Bruchus loti* Pk.], Centralasiatic-European-Mediterranean – 1 species [*Bruchus affinis* Frölich], Centralasiatic-European – 3 species [*Bruchus laticollis* Boh., *Bruchidius unicolor* (Ol.), *Spermophagus sericeus* (Geoffr.)], European – 1 species [*Spermophagus calystegiae* (Lukjanovitsh & Ter-Minassian)], and Centraleuropean – 2 species [*Bruchidius marginalis* (F.), *B. villosus* (F.)].

AN ANNOTATED LIST OF LATVIAN BRUCHINAE

CHRYSOMELIDAE LATREILLE, 1802

BRUCHINAE LATREILLE, 1802

Bruchini Latreille, 1802

Bruchina Latreille, 1802

Bruchus Linnaeus, 1767

B. loti Paykull, 1800

References: Seidlitz 1872-1875, 1887-1891; Rathlef 1905 (Mylabridae: *Mylabris*); Lackschewitz, Mikutowicz 1939 (*Mylabris*); Spuris 1974; Barševskis 1993, 2002; Telnov *et al.*

1997; Telnov 2004; Bukejs 2006; Kalniņš et al. 2007.

Examined material: 49 exx: Daugavpils d.: Butiški, 1.VII.2009 (2, valley of the Daugava Rivet, leg. A.Bukejs, M.Balalaikins); Dviete, 22.VI.2008 (1, leg. A.Barševskis); Ilgas, Silene Nature Park, 1.VII.1989 (2, leg. A.Barševskis), 31.V.1992 (1, leg. A.Barševskis), 9.VI.1992 (3, leg. A.Barševskis), 2.VII.1992 (1, leg. A.Barševskis), 30.VIII.1992 (1, bog, leg. A.Barševskis), 1.VII.1996 (3, leg. A.Barševskis), 25-30.VI.1998 (1, leg. A.Barševskis), 14-20.VI.2002 (1, leg. A.Barševskis), 18.V.2005 (1, leg. A.Barševskis); Kurcums, 6.VI.2008 (9, near Lake Kurcums, leg. A.Barševskis); Ļubāste E env., Daugavpils beltway, 15.VI.2006 (2, inland dunes, leg. A.Barševskis); Naujene, 13.VI.1989 (1, leg. A.Barševskis); Svente, 11.V.2008 (1, near Lake Sventes, leg. A.Barševskis); Jēkabpils d.: Dunava, 1.VI.2002 (1, leg. A.Barševskis); Krāslava d.: 4.3 km E Kumbuļi, SW Pizāni, 16.VII.2008 (1, leg. R.Cibuļskis); Šķeltova, 13.VI.1987 (1, leg. A.Barševskis), 24.IX.1989 (1, leg. A.Barševskis), 28.VIII.1992 (1, leg. A.Barševskis), 9.V.1993 (2, leg. A.Barševskis); Liepāja d.: Liepāja, 11-13.VII.2006 (4, seashore, dunes, leg. A.Barševskis); Pāvilosta, 13.VIII.2008 (1, leg. A.Barševskis); Ludza d.: Bļāši, 23.VI.2009 (1, leg. M.Balalaikins); Saldus d.: Reņģe, 5.VIII.1928 (1, leg. J.Muskars); Talsi d.: Slītere National Park, Zilie Kalni (hills), 10.VII.2004 (1, leg. A.Barševskis); Tukums d.: Antīnciems, 16.VI.1948 (1, leg. anonymous); Ventspils d.: Moricsala Isl., Moricsala Nature Reserve, 5.IV.2002 (2, leg. U.Valainis), 26.VI.2004 (1, leg. A.Barševskis).

Host plants: *Lathyrus* (*L. pratensis*, *L. tuberosus*, *L. vernus*).

Phenology: IV, V, VI, VII, VIII, IX.

General distribution: C and N Europe, Siberia, Kazakhstan, Russian Far East, Japan. [SIE]

Note: One of most common species of the genus in Latvia.

***B. atomarius* (Linnaeus, 1760)**

syn.: *granarius* Linnaeus, 1767

References: Precht 1818 (*granarius*); Seidlitz 1872-1875 (*granarius* L.), 1887-1891 (*granarius* L.); Ulanowski 1883; Rathlef 1905 (*Mylabridae: Mylabris*); Barševskis 1993, 2002; Telnov et al.

1997; Telnov 2004; Bukejs 2006; Kalniņš et al. 2007.

Examined material: 184 exx: Aizkraukle d.: Skrīveri, V.2009 (9, arboretum, leg. A.Barševskis); Valle, 12.VIII.2008 (4, leg. A.Barševskis); Cēsis d.: Brežģis NW env., Brežģa kalns (hill), 3.VII.2006 (1, leg. A.Barševskis, U.Valainis, A.Pankjāns); Daugavpils d.: Bebrene, 4.V.2006 (1, leg. E.Rudāns), 13.V.2006 (3, leg. E.Rudāns), 22.VI.2006 (1, leg. E.Rudāns), 18.VI.2006 (3, leg. E.Rudāns), 25.VI.2006 (1, leg. E.Rudāns), 1.VII.2006 (1, leg. E.Rudāns); Eglaine, 20.VIII.2008 (1, leg. A.Barševskis); Ilgas, Silene Nature Park, 6.VI.1988 (1, leg. A.Barševskis), 23.V.1992 (1, leg. A.Barševskis), 30.V.1992 (2, leg. A.Barševskis), 31.V.1992 (2, leg. A.Barševskis), 9.VI.1992 (1, leg. A.Barševskis), 2.VII.1992 (6, leg. A.Barševskis), 15.V.1993 (3, leg. A.Barševskis), 12.VII.1993 (1, leg. A.Barševskis), 13.VI.1995 (3, leg. A.Barševskis), 14.VI.1995 (1, leg. A.Barševskis), 20.VI.1995 (3, leg. A.Barševskis), 29.VI.1995 (1, leg. A.Barševskis), 9.V.1996 (7, leg. A.Barševskis), 10.V.1996 (1, leg. R.Cibuļskis), 25.V.1997 (6, leg. A.Barševskis), 6-15.VI.2004 (2, leg. A.Barševskis), 28-30.VI.2004 (1, leg. A.Barševskis), 18.V.2005 (2, leg. A.Barševskis), 27-28.VI.2005 (2, leg. A.Barševskis), 30.VI.2005 (1, leg. A.Barševskis), 10.V.2006 (2, leg. A.Barševskis), 30.VI.2006 (1, leg. A.Barševskis), 9.VI.2008 (2, leg. A.Barševskis), 19-22.VI.2008 (3, leg. anonymous); Kurcums, near Lake Kurcums, 6.VI.2008 (1, leg. A.Barševskis); Ļubāste E env., Daugavpils beltway, 17.V.2007 (3, inland dunes, leg. A.Barševskis, K.Barševska); Naujene, 27.IV.2007 (2, Jezupova park, leg. K.Aksjuta, M.Murd), 9.V.2008 (2, Jezupova park, leg. R.Cibuļskis); Pilskalne, 9.V.2005 (10, leg. A.Barševskis), 5.V.2008 (4, leg. A.Barševskis, K.Barševska); Šarlote, 11.V.2008 (3, leg. K.Aksjuta), 1.VI.2008 (1, leg. K.Aksjuta); Šedere, Straumēni house, 12-13.VI.2007 (5, leg. M.Murd), 22-24.VI.2007 (1, leg. M.Murd), 29.VII.2007 (1, leg. M.Murd), 23.III-5.IV.2008 (2, window trap, leg. M.Janovska), 19-20.IV.2008 (2, leg. M.Janovska), 1-3.V.2008 (1, leg. M.Janovska), 10-11.V.2008 (7, leg. M.Janovska); Gulbene d.: Lejasciems, VII.2005 (1, leg. A.Barševskis, A.Bukejs, R.Cibuļskis); Jēkabpils d.: Viesīte, 15.IV.2008 (1, leg. A.Barševskis); Krāslava d.: Indrica, 24.V.1990 (1, leg. A.Barševskis); Šķeltova, 17.V.1987 (2, leg.

A.Barševskis), 28.VIII.1992 (1, leg. A.Barševskis), 9.V.1993 (7, leg. A.Barševskis), 20.V.1995 (1, humid meadow, leg. A.Barševskis), 23.VIII.2005 (2, leg. A.Barševskis), 25.V.2007 (1, leg. A.Barševskis, K.Barševska), 3.VI.2008 (2, leg. A.Barševskis), 11.VIII.2009 (1, leg. A.Barševskis); Ludza d.: 1.5 km SW Gāgari, 56°26'44"N 27°50'02"E, 10.V.2008 (2, old clearing, leg. A.Bukejs), 16.V.2009 (3, leg. A.Bukejs); Rundēni, 10.V.2008 (1, forest edge, leg. A.Bukejs); Salnava, 31.V.1997 (2, leg. I.Leiskina); Madona d.: Saules kalns (hill), 7.VII.2006 (2, leg. A.Pankjāns, E.Rudāns, A.Barševskis); Preiļi d.: Lake Bicānu, 24.VI.2002 (1, leg. A.Barševskis); Jersika, 29.VI.1992 (1, leg. A.Barševskis), 4.VI.2006 (2, leg. K.Barševska), 29.VI.2008 (1, leg. A.Barševskis), 1-10.V.2009 (4, leg. K.Barševska, A.Barševskis); Rīga: Rīga, 27.V.1939 (1, coll. J.Muskars); Talsi d.: Ances meži un purvi (forests and bogs) PNT, 27.VI.2006 (1, leg. U.Valainis); Kaļķi, 12.V.2009 (1, leg. A.Barševskis); Slītere National Park, Zilie Kalni (hills), 10.VII.2004 (4, leg. A.Barševskis); Valka d.: Strenči, 3.VII.2006 (3, leg. A.Barševskis, U.Valainis, A.Pankjāns); Ventspils d.: Moricsala Isl., Moricsala Nature Reserve, 29.VI.2002 (2, leg. U.Valainis), 14.V.2004 (1, leg. A.Barševskis), 26.VI.2004 (3, leg. A.Barševskis), 29.V.2006 (1, leg. E.Rudans), 14.VI.2008 (1, leg. U.Valainis), 15.VII.2008 (2, leg. A.Barševskis).

Host plants: *Vicia* (*V. sepium*, *V. angustifolia*, *V. faba*, *V. pisiformis*, *V. cracca*, *V. dumetorum*), *Lathyrus* (*L. pratensis*, *L. tuberosus*, *L. vernus*).

Phenology: IV, V, VI, VII, VIII.

General distribution: Europe, Caucasus, Asia Minor, Iran, Siberia, Kazakhstan, Central Asia, Mongolia, Russian Far East, NE China, North Korea. [ASE]

Note: One of most common species of the genus in Latvia.

***B. rufimanus* Boheman, 1833**

References: Seidlitz 1872-1875, 1887-1891 (*rufimanus* Sch.); Rathlef 1905 (*Mylabridae: Mylabris*); Smarods, Liepa 1956; Trauberga 1957; Ozols 1963; Šmits, Spuris 1966; Spuris 1974; Telnov et al. 1997; Barševskis 2002; Telnov 2004; Kalniņš et al. 2007.

Examined material: Not confirmed by the author.

Host plants: *Vicia faba*, also on others *Viciae* (*Lathyrus sativus*, *Pisum sativum*).

Phenology: VI, VII, VIII.

General distribution: C and S Europe, Caucasus, N Africa, Asia Minor, Near East, Iran, Siberia, Kazakhstan, Central Asia, Russian Far East, Japan, China (Sichuan, Shanghai), Korean Peninsula; introduced also to N America and S Africa. [COS]

***B. laticollis* Boheman, 1833**

References: Telnov 2004; Telnov et al. 2005.

Examined material: Not confirmed by the author.

Host plants: *Lathyrus*, *Vicia*.

Phenology: VI.

General distribution: S Europe, the Crimea, Caucasus, Asia Minor, Near East, Kazakhstan, Central Asia (Turkmenistan, Tajikistan, Uzbekistan). [CAE]

Note: Very rare species in Latvia; reported from single locality. In Baltic states and Fennoscandia it is known only from Latvia (Silfverberg 2004).

***B. affinis* Frölich, 1799**

References: Barševskis 1993, 2002; Telnov et al. 1997; Telnov 2004.

Examined material: 53 exx: Aizklraukle d.: Rīteri, 21.VI.2006 (13, leg. A.Barševskis), 29.VI.2006 (7, leg. A.Barševskis); Cēsis d.: Brežģis NW env., Brežģa kalns (hill), 3.VII.2006 (1, leg. A.Barševskis, U.Valainis, A.Pankjāns); Daugavpils d.: Daugavpils, Ruģeļi, 26.VI.1992 (6, leg. A.Barševskis); Elerne, 19.VI.2009 (1, leg. M.Nitcis); Ilgas, Silene Nature Park, 14-20.VI.2002 (1, leg. A.Barševskis), 2-10.VII.2004 (1, leg. A.Barševskis); Ļubāste E env., Daugavpils beltway, 16.VI.2005 (1, inland dunes, leg. A.Barševskis, A.Bukejs, U.Valainis); Naujene, 13.VI.1989 (1, leg. A.Barševskis); Svente, 17.VII.2003 (1, leg. N.Strode); Jēkabpils d.: Dunava, 25.VI.2008 (4, clearing, leg. A.Barševskis); Jēkabpils, 13.V.2006 (1, near Jēkabpils hospital, leg. K.Barševska, A.Barševskis); Krāslava d.: Piedruja, V.1993 (1, leg. A.Barševskis); Rēzekne d.: Stoļerova, Lake Šostu env., 29.VII.2009 (1, clearing, leg. M.Balalaikins); Tukums d.: Jaunmokas, near Jaunmoku castle, 16.VII.2008 (13, leg. A.Barševskis).

Host plants: *Lathyrus sylvestris*, *Vicia sepium*, *Pisum sativum*.

Phenology: V, VI, VII.

General distribution: S and C Europe, south and western parts of European Russia, N Africa, Caucasus, Asia Minor, Syria, Afghanistan, Kazakhstan, south part of W Siberia, Central Asia (Kyrgyzstan, Tajikistan); introduced also to India and Taiwan. [CEM]

Note: Rather infrequent species in Latvia. Hitherto, it was known only from 2 localities.

***B. pisorum* (Linnaeus, 1758)**

References: Ulanowski 1883; Smarods, Liepa 1956; Trauberga 1957; Ozols 1963; Šmits, Spuris 1966; Spuris 1974; Barševskis 1993; Telnov et al. 1997; Telnov 2004.

Examined material: 3 exx: Rīga, X.1991 (3, leg. N.Savenkov);

Host plants: *Pisum* (*P. sativum*, *P. arvense*, *P. elatius*). Pested species.

Phenology: V, VI, VII, X.

General distribution: Europe, N Africa, Caucasus, Asia Minor, Near East, W Siberia, Kazakhstan, Central Asia (Uzbekistan, Tajikistan), Russian Far East; introduced also to Japan, Mongolia, China (Sichuan), Korean Peninsula, India (Himachal Pradesh, Kashmir, Sikkim, Uttar Pradesh), N and C America. [COS]

Note: Introduced species.

Acanthoscelidina Bridwell, 1946

***Acanthoscelides* Schilsky, 1905**

***A. obtectus* (Say, 1831)**

References: Smarods, Liepa 1956; Trauberga 1957 (*Bruchidius*); Šmits, Spuris 1966; Spuris 1974; Barševskis 1993; Telnov et al. 1997; Telnov 2004.

Examined material: 108 exx: Daugavpils d.: Daugavpils, II.2008 (14, in room, leg. A.Bukejs); Stropi, II.2008 (47, in room, leg. A.Bukejs); Rēzekne d.: Rēzekne, 1995 (1, leg. A.Barševskis); Rīga: Rīga, 4.VIII.1973 (1, Miera Str. 59, leg. M.Stiprais), 22.X.1973 (43, Miera Str. 59, in room, leg. M.Stiprais), 14.V.1996 (1, in room of museum, leg. N.Savenkov), Rīga, Kr.Barona Str. 6, 26.XI.2009 (1, in room, leg. A.Barševskis).

Host plants: *Phaseolus*. Pested species.

Phenology: only in rooms; II, III, IV, V, VIII, X, XI.

General distribution: S and C America; introduced to Palaearctic – Europe, N Africa,

Caucasus, Asia Minor (Turkey), Iran, Mongolia, E Siberia, Russian Far East, Japan, Korean Peninsula. [COS]

Note: Introduced species. In Latvia the species has been noted also as a pest of peas, beetles have been recorded inside a seeds.

***Bruchidius* Schilsky, 1905**

***B. marginalis* (Fabricius, 1776)**

References: Barševskis 1996, 2001, 2002; Telnov et al. 1997 (*Bruchus*); Barševskis et al. 2004; Telnov 2004; Telnov et al. 2005.

Examined material: 8 exx: Daugavpils d.: Ilgas, Silene Nature Park, 13.VI.1995 (1, leg. A.Barševskis), 25-30.VI.1998 (4, on *Astragalus glycyphyllus*, leg. A.Barševskis), 14-20.VI.2002 (1, leg. A.Barševskis), 2-10.VII.2004 (2, leg. A.Barševskis), 30.VI.2005 (1, leg. A.Barševskis).

Host plants: *Astragalus glycyphyllus*.

Phenology: V, VI, VII.

General distribution: S and C Europe, south part of European Russia, Caucasus. [CEU]

Note: Very rare species in Latvia; known from two localities. According to the catalogue of Silfverberg (2004), the species is mentioned for Latvia and Lithuania. It is known also from Belarus (Barševskis 2001).

***B. unicolor* (Olivier, 1795)**

syn.: *olivaceus* Germar, 1824

References: Ulanowski 1883 (*Bruchus olivaceus* Germ.).

Examined material: Not confirmed by the author.

Host plants: *Onobrychis sativa*; also on *Medicago orbicularis*, *Vicia* sp. and *Onobrychis* sp.

Phenology: VII, VIII.

General distribution: S and C Europe, the Crimea, Caucasus, Central Asia. [CAE]

Note: Very rare and insufficiently known species, with no confirmed records in the last 120 years. Record needs confirmation. In Baltic states and Fennoscandia it is reported only for Lithuania (Silfverberg 2004). It is known also from N Belarus (Alexandrovitch et al. 1996).

***B. villosus* (Fabricius, 1792)**

Examined material: 3 exx: Liepāja d.: Pape, 14.IV.1992 (3, leg. N.Savenkovs).

Host plants: *Genista*, *Cytisus scoparius*, *Laburnum anagyroides*.

Phenology: IV.

General distribution: S and C Europe, the Crimea. [CEU]

Note: New species for the Latvian fauna. According to the catalogue of Silfverberg (2004), this species is mentioned for Denmark and Sweden.

Amblycerini Bridwell, 1932

***Spermophagus* Schoenherr, 1833**

syn.: *Euspermophagus* Zacher, 1930

***S. sericeus* (Geoffroy, 1785)**

References: Telnov 2004; Telnov et al. 2005.

Examined material: 1 ex.: Daugavpils d.: Ilgas, Silene Nature Park, 9.V.1996 (1, leg. A.Barševskis).

Host plants: *Convolvulus*, *Calystegia*.

Phenology: V, VI.

General distribution: S and C Europe, south and central part of European Russia, Caucasus, Asia Minor, south part of W Siberia, Central Asia. [CAE]

Note: Very rare species, with two records from SW and SE Latvia. According to the catalogue of Silfverberg (2004), the species is mentioned for Denmark, Finland, Lithuania and Sweden. It

is known also from Belarus (Alexandrovitch et al. 1996).

***S. calystegiae* (Lukjanovitsh & Ter-Minassian, 1957)**

Examined material: 2 exx: Daugavpils d.: Ilgas, Silene Nature Park, 18.V.2005 (2, leg. A.Barševskis).

Host plants: *Calystegia*.

Phenology: V.

General distribution: Europe (excl. N), Caucasus. [EUR]

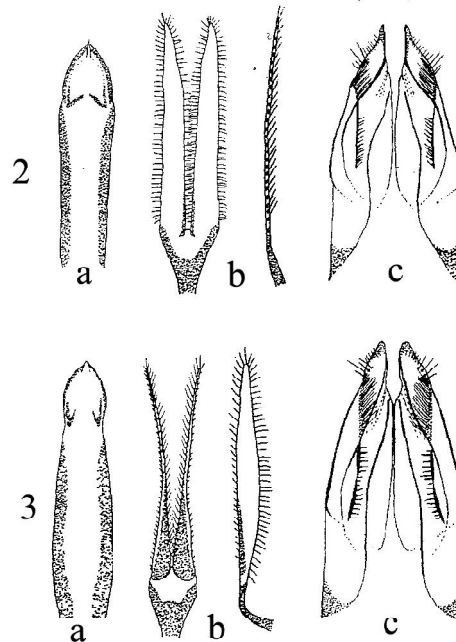
Note: New species for the Latvian fauna. Externally, *S. calystegiae* (Fig. 1.) is very similar to *S. sericeus*. These two species authentically differ only by the shape of the aedeagus (Figs 2-3: a, b) and the IX urite (Figs 2-3: c).

ACKNOWLEDGEMENTS

For the presented material, I am grateful to Kristīna Aksjūta, Maksims Balalaikins, Arvīds Barševskis, Raimonds Cibulskis, Marina



Fig. 1. *Spermophagus calystegiae*: habitus.



Figs. 2-3. 2 – *Spermophagus sericeus*, 3 – *S. calystegiae*: a – aedeagus, dorsal view; b – parameres, dorsal and lateral views, c – the IX urite (after Anton 1994).

Janovska, Ainārs Pankjāns, Uldis Valainis (all – Daugavpils University Institute of Systematic Biology, LV), Katrīna Barševska and Iveta Leiskina (Daugavpils, LV), Nikolajs Savenkovs (Latvian Museum of Nature, Rīga, LV), and the students of Daugavpils University.

The research has been done within the framework of the project of European Social Fund (No 2009/0206/1DP/1.1.1.2.0/09/APIA/VIAA/010).

REFERENCES

- Alexandrovitch O.R., Lopatin I.K., Pisanenko A.D., Tsinkevitch V.A., Snitko S.M. 1996. A catalogue of Coleoptera (Insecta) of Belarus. Minsk: 1–103.
- Alekseev V.I. 2003. On fauna of leaf beetles (Coleoptera: Chrysomelidae) and seed beetles (Coleoptera: Bruchidae) of Kaliningrad region (Baltic coast). *Baltic Journal of Coleopterology*, 3 (1): 63–75.
- Anton K.-W. 1994. Familie: Brucidae. In: Lohse G.A., Lucht W.H. (eds) *Ergänzungen und Berichtungen zu Freude-Harde-Lohse "Die Käfer Mitteleuropas"* 10. 3 Supplementband. Krefeld: 143–151.
- Anton K.-W. 2010. Bruchinae. In: Löbl I. & Smetana A. (ed.) *Catalogue of Palaearctic Coleoptera, Vol. 6*. Stenstrup, Apollo Books: 339-353.
- Barševskis A. 1993. The Beetles of Eastern Latvia. Saule, Daugavpils: 1–221. (in Latvian, English abstract).
- Barševskis A. 1996. New and rare species of Coleoptera in the fauna of Latvia. *Daba un muzejs*, 6: 16-18. (in Latvian, English abstract).
- Barševskis A. 2001. New and rare species of beetles (Insecta: Coleoptera) in the Baltic states and Belarus. *Baltic Journal of Coleopterology*, 1 (1-2): 3–18.
- Barševskis A. 2002. Coleoptera. In: Barševskis A., Savenkovs N., Evarts-Bunders P., Daniele I., Pētersons G, Pilāts V., Zviedre E., Pilāte D., Kalniņš M., Vilks K., Poppels A. (eds.) *Fauna, flora and vegetation of Silene Nature Park*. Baltijas Koleopteroloģijas institūts, Daugavpils: 37–60. (in Latvian).
- Barševskis A., Valainis U., Bičevskis M., Savienkovs N., Cibulskis R., Kalniņš M., Strode N. 2004. Faunistic records of the beetles (Hexapoda: Coleoptera) in Latvia. 1. *Acta Biologica Universitatis Daugavpiliensis*, 4 (2): 93–106.
- Borowiec L. 1987. The genera of seed-beetles (Coleoptera, Bruchidae). *Polskie Pismo Entomologiczne*, 57: 3–207.
- Brandi P. 1981. Bruchidae. In: Freude H., Harde K.W., Lohse G.A. (eds) *Die Käfer Mitteleuropas*. Band 10. Goecke & Evers, Krefeld: 7–21.
- Bukejs A. 2006. Materials about the fauna of beetles (Insecta: Coleoptera) of Naujene rural municipality (Daugavpils district, Latvia). Part 1. *Acta Biologica Universitatis Daugavpiliensis*, 6 (1-2): 65–75.
- Egorov A.B. 1996. Bruchidae. In: *Keys to Insects of Far East of SSSR*. 3. Coleoptera. 3. St.Petersburg, Nauka: 140–158.
- Hayashi M., Morimoto K., Kimoto Sh. (eds.) 1984. *The Coleoptera of Japan in Color*. Volume IV. Japan, Hoikusha Publishing Co: 1–407. (in Japanese).
- Kalniņš, M., Juceviča, E., Karpa, A., Salmāne, I., Poppels, A. and Teļnovs, D. 2007. Invertebrates. In: Pilāts V. (ed.) *Biodiversity in Gauja National Park*. Sigulda, Gauja National Park Administration: 106–149.
- Karapetjan A.P. 1985. Fauna Armjanskoj SSR: Zernovki (Bruchidae). Erevan, izd-vo Akademii Nauk Armjanskoj SSR: 1–172. (in Russian).

- Lackschewitz T., Mikutowicz J. 1939. Zur Koleopterenfauna des ostbaltischen Gebietes, II. Korrespondenzblatt des Naturforscher-Vereins zu Riga, 63: 48–76.
- Lukjanovitsh F.K., Ter-Minassian M.E. 1957. Zhuki-zernovki Bruchidae. In: Fauna SSSR, 29 (1). Moscow-Leningrad, izd-vo Akademii Nauk SSSR: 1–210. (in Russian).
- Ozols E. 1963. Agricultural entomology. 2 ed. Latvian State Publishing House, Rīga: 1–512. (in Latvian).
- Pileckis S., Monsevičius V. 1997. Fauna of Lithuania: Beetles, 2. Vilnius, Publishing House of Encyclopaedias and Scientific Literature: 1–216.
- Precht K. 1818. Verzeichnis der bis jetzt, vornehmlich in der Umgegend von Riga und im Rigischen Kreise bekannt gewordenen und systematisch bestimmten käferartigen Insecten (Coleoptera Linnaei, Eleutherata Fabricii). Riga, D. Müller: 1–39.
- Rathlef H. 1905. Coleoptera Baltica. Käfer-Verzeichnis der Ostseeprovinzen nach den Arbeiten von Ganglbauer und Reitter. Dorpat, C. Mattiesen: 16–199.
- Seidlitz G. 1872-1875. Fauna Baltica. Die Käfer (Coleoptera) der Ostseeprovinzen Russlands. Dorpat: H. Laakmann: 4, XLII: 142–560.
- Seidlitz G. 1887-1891. Fauna Baltica. Die Käfer (Coleoptera) der Ostseeprovinzen Russlands. Zweite neu bearbeitete Auflage mit 1 Tafel. Königsberg, Hartungsche Verlagsdruckerei: 12, LVI: 192–818.
- Silfverberg H. 2004. Enumeratio nova Coleopterorum Fennoscandiae, Daniae et Baltiae. Sahlbergia, 9: 1-111.
- Smarods J., Liepa I. 1956. Dārzu kaitēkļi un slimības. Rīga, Latvijas Valsts izdevniecība: 1–407. (in Latvian).
- Šmits V., Spuris Z. 1966. Vaboles – Coleoptera. In: Z. Spuris (ed.) Latvijas dzīvnieki. Rīga, Zvaigzne: 177–187. (in Latvian).
- Spuris Z. 1974. Cietspārni jeb vaboles – Coleoptera. In: Z. Spuris (ed.) Latvijas dzīvnieku pasaule. Rīga, Liesma: 139–151. (in Latvian).
- Taglianti V.A., Audisio P.A., Biondi M., Bologna M.A., Carpaneto G.M., De Biase A., Fattorini S., Piattella E., Sindaco R., Venchi A., Zapparoli M. 1999. A proposal for a chorotype classification of the Near East fauna, in the framework of the Western Palearctic region. Biogeographia, 20: 31–59.
- Telnov D. 2004. Check-List of Latvian Beetles (Insecta: Coleoptera). Second Edition. In: D. Telnov (ed.) Compendium of Latvian Coleoptera, vol. 1. Rīga, Pertovskis & Co: 1–114.
- Telnov D., Barševskis A., Savich F., Kovalevsky F., Berdnikov S., Doronin M., Cibulskis R., Ratniece D. 1997. Check-List of Latvian Beetles (Insecta: Coleoptera). Mitteilungen des Internationalen Entomologischen Vereins, Supplement V: 1–140.
- Telnov D., Gailis J., Kalniņš M., Napolov A., Piterāns U., Vilks K., Whitehead P.F., 2005. Contributions to the Knowledge of Latvian Coleoptera. 4. Latvijas Entomologs, 42: 18–47.
- Trauberga O. 1957. Coleoptera – vaboles. In: Latvijas PSR dzīvnieku noteicējs, 1. Rīga, Latvijas Valsts izdevniecība: 455–592. (in Latvian).
- Ulanowski A. 1883. Z fauny coleopterologicznej Inflant Polskich. Sprawozdanie Komisji Fizyjograficznej: 18: 1–60.

Received: 12.10.2010.

Accepted: 15.12.2010.