

## ON LATVIAN DONACIINAE KIRBY, 1837 (COLEOPTERA: CHRYSOMELIDAE)

**Andris Bukejs**

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There are faunal, phenological and bibliographical information on Donaciinae Kirby, 1837 of the Latvian fauna presented in the current paper. Bibliographical analysis on this leaf-beetle subfamily in Latvia is made for the first time. An annotated list of Latvian Donaciinae is given, including 3 genera and 27 species.

Key words: Coleoptera, Chrysomelidae, Donaciinae, Latvia, fauna, check-list, bibliography

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### INTRODUCTION

The subfamily Donaciinae Kirby, 1837 comprises two tribes and approximately 150 species (Lopatin 1977) distributed throughout the world but predominantly in the north hemisphere. Of them, 90 species are known from Palaearctic (Silfverberg 2010), 32 species – from eastern Europe (Bieńkowski 2004), and 33 species – from Fennoscandia and Baltiae (Silfverberg 2004).

Hitherto, in the second edition of the check-list of Latvian Coleoptera (Telnov 2004) 25 species of Donaciinae were mentioned: *Macrolea* Samouelle, 1819 [2 species], *Donacia* Fabricius, 1775 [17 species], *Donaciella* Reitter, 1920 [3 species] and *Plateumaris* Thomson, 1859 [3 species]; *P. discolor* (Panzer, 1795) was mentioned as synonym of *P. sericea* (Linnaeus, 1761) but *P. affinis* Kunze, 1818 as synonym of *P. rustica* (Kunze, 1818). In adjacent territories, the number of registered Donaciinae species slightly varies: Belarus – 29 species are recorded (Lopatin & Nesterova 2005), Estonia – 26 species (Silfverberg 2004), Lithuania – 26 species (Pileckis,

Monsevičius 1997; Silfverberg 2004), Kaliningrad region – 25 species (Alekseev 2003), St. Petersburg and Leningrad region – 28 species (Romantsov 2007).

The first data on Donaciinae in Latvia were published in the beginning of the 19th century (Precht 1818, Fleischer 1829). Subsequently, more than 30 works were published. Spuris (1953) provided ecological and faunal information on 14 species of long-horned leaf beetles in Latvia. In 1993, Barševskis published his monograph “The Beetles of Eastern Latvia” (Barševskis 1993a), containing data on 23 species of three genera, mostly from eastern and south-eastern parts of the country. Stiprais (1977) published faunal data on 17 species of Donaciinae, but Valainis et al. (2007) – on 19 species. Scarce faunal records on Donaciinae in Latvia can also be found in following other articles (Lindberg 1932; Lackschewitz, Mikutowicz 1939; Šmits 1962; Telnov 1996, 2002; Barševskis 2001; Barševskis et al. 2004; Telnov et al. 2006; Bukejs, Telnov 2007).

Imagoes of Donaciinae inhabit waterbodies and swamps, feed on leaves or pollen of water plants. Larvae develop under water, feed on plant sap, pupate within coccons attached to roots, rhizomes or leaves under water. Life cycle is two- or three-years in various species (Bieńkowski 2004).

The aim of the current work is to summarize information on Donaciinae in Latvia. New faunal data on 18 species are presented. Complete annotated bibliographical information on this leaf-beetles subfamily in Latvia is given for the first time. An annotated list of Latvian species of Donaciinae is presented. Altogether, 27 species of 3 genera are reported for Latvia.

## MATERIAL AND METHODS

Material studied is stored in the collection of Daugavpils University Institute of Systematic Biology (DUBC, Daugavpils, Latvia), the collection of Latvian Natural History Museum (Rīga, Latvia), private collection of Andrzej O. Bieńkowski (Moscow, Russia), and private collection of author (Daugavpils, Latvia).

The following keys were used for identification of material: Bieńkowski 2004, Lopatin & Nesterova 2005, Kippenberg & Döberl 1994, Mohr 1966, Warchałowski 2003. The systematics suggested by Silfverberg (2004). The nomenclature and synonymy suggested by Silfverberg (2010).

Host plants are listed citing the monograph of Lopatin & Nesterova (2005). General distribution of species is given according to Bieńkowski (2004), Borowiec (2004), Hayashi et al. 1984, Lopatin (1977, 1986), Lopatin & Kulenova (1986), Lopatin & Nesterova (2005), Medvedev (1982, 1992), Medvedev & Dubeshko (1992), Silfverberg (2010), and Warchałowski (2003).

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, EUR – European, NEU – Northeuropean, PAL – Palaearcti, SIE – Sibero-European, TUE – Turano-European, WPA – Weast-Palaearctic.

In annotated list, the following information is given for each species: scientific name & author, published bibliographic sources for Latvia, host plants, phenology (Latvian data only; IV, V, VI, VII, VIII, IX – months from April to September; in oval brackets – ten-day period), 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, PNT – protected nature territory, vill. – village or little settlement, C – Central, S – South, N – North, E – East, W – West.

## RESULTS AND DISCUSSION

Overall, the list of Latvian Donaciinae Kirby, 1837 includes 3 genera and 27 species.

### AN ANNOTATED LIST OF LATVIAN DONACIINAE.

#### CHRYSOMELIDAE LATREILLE, 1802 DONACIINAE KIRBY, 1837

##### HAEMONIINI S.-H. CHEN, 1941

##### MACROPLEA SAMOUELLE, 1819

syn.: *Haemonia* Dejean, 1821

##### *M. appendiculata* (Panzer, 1794)

syn.: *equiseti* (Fabricius, 1798)

**References:** Spuris 1953; Telnov et al. 1997; Telnov 2004.

**Host plants:** *Potamogeton* (Potamogetonaceae), *Myriophyllum spicatum* (Haloragaceae), *Ranunculus divaricatus* (Ranunculaceae), *Carex* (Cyperaceae); occurs also under water.

**Phenology:** no data for Latvia. In Belarus specimens were recorded in V-VII (Lopatin, Nesterova 2005).

**General distribution:** N and C Europe, Siberia, Altai, Sayans, Kazakhstan, Mongolia, Russian Far East. [SIE]

**Note:** Very rare species in Latvia; known from two localities.

***M. mutica* (Fabricius, 1792)**

syn.: *baltica* Seidlitz, 1875; *zosteræ* (Fabricius, 1801)

**References:** Seidlitz 1872-1875 (*Haemonia*), 1887-1891 (*Haemonica zosteræ* F.); Rathlef 1905 (*Haemonia*); Trauberga 1957 (*Haemonia mutica* F.); Barševskis 1993a; Telnov 1996, 2004; Telnov et al. 1997, 2006 (*Haemonia*); Kalniņš et al. 2007.

**Host plants:** occurs under water on *Zostera* (Zosteraceae), *Potamogeton* (Potamogetonaceae), *Ruppia* (Ruppiaceae), *Zannichellia* (Zannichelliaceae), *Myriophyllum* (Haloragaceae).

**Phenology:** V, VI.

**General distribution:** Europe, Siberia, Kazakhstan, Central Asia (Uzbekistan, Kirghizstan), Mongolia, Russian Far East, Japan. [ASE]

**Note:** Rare species in Latvia with five known localities.

**DONACIINI KIRBY, 1837**

**DONACIA FABRICIUS, 1775**

syn.: *Donaciomima* Medvedev, 1973; *Donaciella* Reitter, 1920

***D. crassipes* Fabricius, 1775**

**References:** Precht 1818; Seidlitz 1872-1875, 1887-1891; Ulanowski 1883; Rathlef 1905; Danka 1950; Spuris 1953; Trauberga 1957; Stiprais 1977; Barševskis et al. 1992, 2004; Barševskis 1993a, 2002; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007; Kalniņš et al. 2007.

**Host plants:** *Nuphar luteum*, *Nyphaeae alba* (Nymphaeaceae).

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

**General distribution:** Europe, Siberia, N and C Kazakhstan. [SIE]

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

***D. dentata* Hoppe, 1795**

**References:** Seidlitz 1872-1875, 1887-1891; Ulanowski 1883; Rathlef 1905; Spuris 1953;

Stiprais 1977; Barševskis 1993a, 2002; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007.

**Host plants:** *Sagittaria sagittifolia*, *Alisma plantagoaquatica* (Alismataceae). Bieńkowski (2004) also mentions *Typha* as host plant.

**Phenology:** VI, VII, VIII.

**General distribution:** Europe, W Siberia, Altai, E Kazakhstan. [SIE]

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

***D. versicolore* (Brahm, 1790)**

syn.: *bidens* Olivier, 1791; *cincta* Germar, 1810

**References:** Fleischer 1829 (*cincta* Germ.); Seidlitz 1872-1875 (*bidens* Oliv.), 1887-1891 (*bidens* Ol.); Rathlef 1905; Danka 1950; Spuris 1953, 1974; Stiprais 1977; Barševskis 1993a, 2002; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007.

**Host plants:** *Potamogeton natans* and *P. perfoliatus* (Potamogetonaceae).

**Phenology:** VI, VII, VIII.

**General distribution:** Europe, Caucasus, Siberia, Kazakhstan, Russian Far East. [SIE]

**Note:** Rather infrequent species in Latvia.

***D. semicuprea* Panzer, 1796**

**References:** Seidlitz 1872-1875, 1887-1891; Ulanowski 1883; Rathlef 1905; Danka 1950; Spuris 1953; Pūtele 1974; Stiprais 1977; Barševskis 1988, 1993a, 2002; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007.

**Host plants:** *Glyceria maxima* and *G. plicata* (Poaceae).

**Phenology:** IV(3), V, VI, VII, VIII, IX(1).

**General distribution:** Europe, Siberia. [SIE]

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

***D. fennica* Paykull, 1800**

**References:** Seidlitz 1872-1875, 1887-1891; Rathlef 1905; Spuris 1953; Telnov et al. 1997; Telnov 2004.

**Host plants:** *Scolochloa festucacea* (Poaceae).

**Phenology:** no data for Latvia. In Belarus specimens were recorded in VI (Lopatin, Nesterova 2005).

**General distribution:** N Europe, Siberia. [SIE]

**Note:** Very rare species in Latvia; known from two localities.

***D. sparganii* Ahrens, 1810**

**References:** Fleischer 1829; Seidlitz 1872-1875, 1887-1891; Ulanowski 1883; Rathlef 1905; Spuris 1953; Stiprais 1977; Barševskis 1988, 1993a, 2002; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007.

**Host plants:** *Sparganium emersum*, *S. erectum* (Sparganiaceae), *Butomus umbellatus* (Alismataceae).

**Phenology:** V, VI, VII.

**General distribution:** Europe (excl. S), Siberia, Mongolia, Russian Far East, Japan. [SIE]

**Note:** Rather infrequent species in Latvia.

***D. aquatica* (Linnaeus, 1758)**

syn.: *dentipes* Fabricius, 1792

**References:** Seidlitz 1872-1875 (*dentipes* F.), 1887-1891 (*dentipes* F.); Ulanowski 1883 (*dentipes* F.); Rathlef 1905; Spuris 1953; Šmits 1962; Stiprais 1977; Barševskis 1988, 1993a, 2002; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007; Kalniņš et al. 2007.

**Host plants:** *Carex* (Cyperaceae), *Sparganium emersum* (Sparganiaceae). Bieńkowski (2004) also mentions *Glyceria*, *Ranunculus lingua*, *Eleocharis*, *Typha*, *Potamogeton*, *Juncus* and *Alisma* as host plants.

**Phenology:** V, VI, VII, VIII, IX, X.

**General distribution:** Europe, Siberia, Russian Far East, Japan. [SIE]

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

***D. impressa* (Paykull, 1799)**

**References:** Fleischer 1829; Seidlitz 1872-1875, 1887-1891; Rathlef 1905; Spuris 1953; Stiprais 1977; Barševskis 1993a, 2002; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007; Kalniņš et al. 2007.

**Host plants:** *Carex*, *Scirpus* (Cyperaceae).

**Phenology:** V, VI, VII, VIII, IX (1).

**General distribution:** Europe, N Africa (Algeria, Morocco), Siberia, Kazakhstan, Mongolia. [PAL]

**Note:** Common species.

***D. brevitarsis* Thomson, 1884**

**References:** Barševskis 1992, 1993a; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007; Barševskis et al. 2007.

**Host plants:** Cyperaceae.

**Phenology:** VI.

**General distribution:** Europe (excl. S). [CEU]

**Note:** Very rare species with single known locality from SE part of Latvia.

***D. brevicornis* Ahrens, 1810**

syn.: *platysterna* Thomson, 1866

**References:** Seidlitz 1872-1875 (*platysterna* Thoms.), 1887-1891; Rathlef 1905; Pütele 1974; Telnov et al. 1997 (deleted from list); Telnov 2004; Bukejs, Telnov 2007.

**Host plants:** *Scirpus lacustris* (Cyperaceae).

**Phenology:** V, VI.

**General distribution:** Europe, N Africa (Algeria). [WPA]

**Note:** Very rare species in Latvia; known from two localities.

***D. marginata* Hoppe, 1795**

syn.: *lemmae* Fabricius, 1810; *limbata* Panzer, 1796

**References:** Seidlitz 1872-1875 (*lemmae* F.), 1887-1891 (*limbata* Pz.); Ulanowski 1883 (*limbata* Pz.); Rathlef 1905 (*limbata* Panz.); Spuris 1953 (*limbata* Pz.); Stiprais 1977; Barševskis 1993a; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007.

**Host plants:** *Carex* and *Cyperus* (Cyperaceae), *Sparganium emersum* (Sparganiaceae), *Iris pseudacorus* (Iridaceae).

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

**General distribution:** Europe, N Africa (Morocco), Caucasus, Asia Minor, N East, south part of W Siberia, Iran, Kazakhstan, Central Asia (Tajikistan, Uzbekistan). [CEM]

**Note:** Rather infrequent species in Latvia.

***D. bicolora* Zschach, 1788**

syn.: *sagittariae* Fabricius, 1792

**References:** Precht 1818 (*sagittariae*); Seidlitz 1872-1875 (*sagittariae* F.), 1887-1891; Ulanowski 1883; Rathlef 1905; Spuris 1953, 1974; Šmits, Spuris 1966; Stiprais 1977; Barševskis 1993a, 2001, 2002; Telnov et al. 1997; Telnov 2002, 2004; Valainis et al. 2007; Kalniņš et al. 2007.

**Host plants:** *Carex* and *Scirpus* (Cyperaceae), *Sagittaria* and *Alisma* (Alismataceae), *Sparganium* (Sparganiaceae), *Glyceria* (Poaceae).

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

**General distribution:** Europe, Caucasus, Asia Minor, Near East, Iran, south part of W Siberia, Sayans, Kazakhstan, Central Asia (Uzbekistan). [CAE]

**Note:** Common.

***D. obscura* Gyllenhal, 1813**

**References:** Seidlitz 1872-1875, 1887-1891; Ulanowski 1883; Rathlef 1905; Lackschewitz, Mikutowicz 1939; Spuris 1953; Barševskis 1993a, 2002; Telnov et al. 1997; Telnov 2002, 2004; Valainis et al. 2007.

**Host plants:** *Carex*, *Scirpus*, *Schoenoplectus lacustris* (Cyperaceae).

**Phenology:** IV(3), V, VI, VII, VIII.

**General distribution:** Europe (excl. S), W Siberia, Kazakhstan. [SIE]

**Note:** Rare species in Latvia, with few known localities.

***D. antiqua* Kunze, 1818**

syn.: *gracilis* Suffrian, 1845

**References:** Ulanowski 1883; Barševskis 1993a, 2002; Telnov et al. 1997; Barševskis et al. 2004; Telnov 2004; Valainis et al. 2007.

**Host plants:** *Carex* (Cyperaceae).

**Phenology:** V, VI, VII.

**General distribution:** N Europe. [NEU]

**Note:** Rare species in Latvia, known from few localities.

***D. thalassina* Germar, 1811**

**References:** Seidlitz 1872-1875, 1887-1891; Ulanowski 1883; Rathlef 1905; Spuris 1953; Barševskis 1993a, 2002; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007.

**Host plants:** *Scirpus*, *Carex* (Cyperaceae). Bieńkowski (2004) also mentions *Eleocharis* and *Glyceria* as host plants.

**Phenology:** V, VI, VII.

**General distribution:** Europe (excl. S), Siberia, Kazakhstan, Mongolia, Siberia, Russian Far East, Japan, China. [ASE]

**Note:** Rather infrequent species in Latvia.

***D. vulgaris* Zschach, 1788**

syn.: *typhae* Ahrens, 1810

**References:** Seidlitz 1872-1875, 1887-1891; Rathlef 1905; Pütele 1974; Stiprais 1977;

Barševskis 1993a; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007; Kalniņš et al. 2007.

**Host plants:** *Carex* (Cyperaceae), *Sparganium* (Sparganiaceae), *Typha* (Typhaceae).

**Phenology:** V, VI, VII.

**General distribution:** Europe, Caucasus, Asia Minor, Afghanistan, Iran, Siberia, Kazakhstan, Central Asia (Kyrgyzstan, Tajikistan), Russian Far East, Japan, China. [ASE]

**Note:** Rare species in Latvia, known from few localities.

***D. simplex* Fabricius, 1775**

syn.: *linearis* Hoppe, 1795

**References:** Precht 1818; Seidlitz 1872-1875 (*linearis* Hoppe), 1887-1891 (*linearis* Hoppe); Ulanowski 1883; Rathlef 1905; Stiprais 1977; Barševskis 1993a, 2002; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007.

**Host plants:** *Carex* (Cyperaceae), *Sparganium enersum* (Sparganiaceae).

**Phenology:** V, VI, VII.

**General distribution:** Europe, Siberia, Altai, Sayans, Mongolia, China (Inner Mongolia). [SIE]

**Note:** Rather infrequent.

***D. clavipes* (Fabricius, 1793)**

syn.: *menyanthis* Fabricius, 1801

**References:** Fleischer 1829 (*Donacia menyanthis* F.); Seidlitz 1872-1875 (*Donacia menyanthis* F.), 1887-1891 (*Donacia*); Ulanowski 1883 (*Donacia*); Rathlef 1905 (*Donacia*); Spuris 1953 (*Donacia*), 1974 (*Donacia*); Trauberga 1957 (*Donacia*); Šmits, Spuris 1966 (*Donacia*); Stiprais 1977 (*Donacia*); Barševskis 1988, 1993a, 2002 (*Donacia*); Telnov et al. 1997 (*Donacia*); Barševskis et al. 2004 (*Donaciella*); Telnov 2004 (*Donaciella*); Valainis et al. 2007 (*Donaciella*); Kalniņš et al. 2007 (*Donaciella*).

**Host plants:** *Phragmites australis* (Poaceae).

**Phenology:** V, VI, VII.

**General distribution:** Europe, Asia Minor (Turkey), **Black Sea coast**, Siberia, Kazakhstan, Central Asia (Kyrgyzstan), Mongolia, Russian Far East, N China. [ASE]

**Note:** Common species.

***D. tomentosa* (Ahrens, 1810)**

**References:** Seidlitz 1872-1875 (*Donacia*), 1887-1891 (*Donacia*); Rathlef 1905 (*Donacia*); Spuris 1953 (*Donacia*); Stiprais 1977 (*Donacia*); Barševskis 1993a, 2002 (*Donacia*); Telnov et al. 1997 (*Donacia*); Telnov 2004 (*Donaciella*).

**Host plants:** *Butomus umbellatus* (Alismataceae).

**Phenology:** VI, VII.

**General distribution:** Europe, Caucasus, W Siberia, Altai, Kazakhstan, Central Asia (Turkmenistan, Uzbekistan). [CAE]

**Note:** Rare species in Latvia, with few known localities.

#### ***D. cinerea* (Herbst, 1784)**

syn.: *hydrochaeridis* (Fabricius, 1801)

**References:** Seidlitz 1872-1875 (*Donacia hydrochaeridis* F.), 1887-1891 (*Donacia*); Rathlef 1905 (*Donacia*); Spuris 1953 (*Donacia*), 1974 (*Donacia*); Šmits, Spuris 1966 (*Donacia*); Stiprais 1977 (*Donacia*); Barševskis 1988, 1993a, 2002 (*Donacia*); Telnov et al. 1997 (*Donacia*); Telnov 2004 (*Donaciella*); Valainis et al. 2007 (*Donaciella*); Kalniņš et al. 2007 (*Donaciella*).

**Host plants:** *Sparganium* (Sparganiaceae), *Typha* (Typhaceae), *Carex* (Cyperaceae).

**Phenology:** V, VI, VII.

**General distribution:** Europe, Caucasus, Asia Minor (Turkey), Iran, south part of W Siberia, Kazakhstan, Central Asia (Uzbekistan). [CAE]

**Note:** Common species in Latvia.

#### **PLATEUMARINI BÖVING, 1922**

##### ***PLATEUMARIS* THOMSON, 1859**

SUBGENUS *EUPATEUMARIS* IABLOKOFF-KHNZORIAN, 1966

#### ***P. discolor* (Panzer, 1795)**

**References:** Fleischer 1829 (*Donacia discolor* Ahrens); Ulanowski 1883 (*Donacia discolor* Pz.); Rathlef 1921; Šmits 1962; Telnov et al. 1997.

**Host plants:** *Carex* (Cyperaceae). Bieńkowski (2004) also mentions *Juncus*, *Eleocharis*, *Eriophorum*, *Caltha* and *Trichophorum* as host plants.

**Phenology:** V, VI, VII. In Belarus specimens were recorded in V-VI (Lopatin & Nesterova 2005).

**General distribution:** Europe. The precise distribution of this species must be defined more exactly because of the former confusion with the closely related species *P. sericea* (L.). [EUR]

**Note:** Insufficiently known species in Latvia. The taxonomical status of *P. discolor* (Pz.) is insufficiently clear. It is close to *P. sericea* (L.) from which differs by variable characters from which the most significant is the ratio of lengths of antennomeres.

#### ***P. sericea* (Linnaeus, 1761)**

syn.: *aenea* (Hoppe, 1795); *nymphaeae* (Fabricius, 1792)

**References:** Precht 1818 (*Donacia nymphaeae*); Seidlitz 1872-1875, 1887-1891; Ulanowski 1883 (*Donacia*); Rathlef 1905; Trauberga 1957; Stiprais 1977; Barševskis 1993a, 1993b, 2002; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007; Kalniņš et al. 2007; Spuņģis 2008.

**Host plants:** *Carex* (Cyperaceae). Bieńkowski (2004) also mentions *Iris*, *Scirpus* and *Sparganium* as host plants.

**Phenology:** V, VI. In Belarus specimens were recorded in IV-VI (Lopatin, Nesterova 2005).

**General distribution:** Europe, Asia Minor, Caucasus, Iran, Siberia, Kazakhstan, Mongolia, Russian Far East, Japan, China. The precise distribution of this species must be defined more exactly because of the former confusion with the closely related *P. discolor* (Pz.). [ASE]

**Note:** Insufficiently known species in Latvia.

SUBGENUS *PLATEUMARIS* S. STR.

#### ***P. braccata* (Scopoli, 1772)**

syn.: *abdominalis* (Olivier, 1795); *nigra* (Fabricius, 1792)

**References:** Precht 1818 (*Donacia nigra*); Seidlitz 1872-1875 (*Donacia nigra* F.), 1887-1891; Rathlef 1905; Stiprais 1977; Barševskis 1993a, 1993b; Telnov et al. 1997; Telnov 2004.

**Host plants:** *Typha* (Typhaceae), *Carex* and *Scirpus* (Cyperaceae). Bieńkowski (2004) also mentions *Phragmites* as host plant.

**Phenology:** VI.

**General distribution:** Europe, Caucasus, south part of W Siberia, SE Kazakhstan. [TUE]

**Note:** Very rare species in Latvia; known from four localities.

#### ***P. affinis* (Kunze, 1818)**

syn.: *pallipes* Kunze, 1818;

**References:** Fleischer 1829 (*Donacia*); Kawał 1865 (*Donacia pallipes*); Seidlitz 1872-1875, 1887-1891; Rathlef 1905; Lindberg 1932; Barševskis 1993a.

**Host plants:** *Carex* (Cyperaceae), *Caltha palustris*, *Ranunculus circinatus* (Ranunculaceae). Bieńkowski (2004) also mentions *Iris*, *Glyceria* and *Scirpus* as host plants.

**Phenology:** VI. In Belarus specimens were recorded in V-VI (Lopatin, Nesterova 2005).

**General distribution:** Europe, N Africa (Algeria), W Siberia. [WPA]

**Note:** Insufficiently known species in Latvia.

### *P. rustica* (Kunze, 1818)

**References:** Seidlitz 1872-1875, 1887-1891; Rathlef 1905; Stiprais 1977; Barševskis 1993a, 2002; Telnov et al. 1997; Telnov 2004; Valainis et al. 2007; Kalniņš et al. 2007.

**Host plants:** *Carex* (Cyperaceae), *Butomus* (Alismataceae). Bieńkowski (2004) also mentions *Phragmites*, *Glyceria* and *Cladium* as host plants.

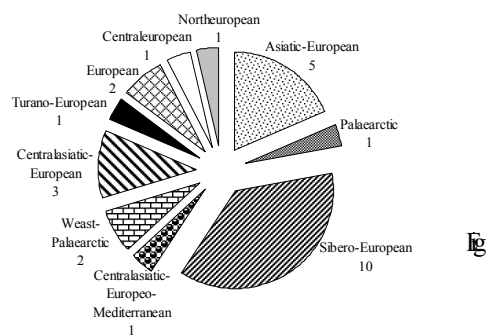
**Phenology:** V, VI. In Belarus specimens were recorded in VI-VII, IX (Lopatin, Nesterova 2005).

**General distribution:** Europe. [EUR]

**Note:** Rare and insufficiently known species in Latvia.

Analysis of the chorotypes of Latvian Donaciinae shows that the range of chorotypes is rather wide: Asiatic-European – 5 species [*Macrolea mutica* (F.), *Donacia thalassina* Germ., *D. vulgaris* Zschach, *D. clavipes* (F.), *Plateumaris sericea* (L.)], Palaearctic – 1 species [*Donacia impressa* (Pk.)], Weast-Palaearctic – 2 species [*Donacia brevicornis* Ahr., *Plateumaris affinis* (Kunze)], Sibero-European – 10 species [*Macrolea appendiculata* (Pz.), *Donacia crassipes* F., *D. dentata* Hoppe, *D. versicolorea* (Brahm), *D. semicuprea* Pz., *D. fennica* Pk., *D. sparganii* Ahr., *D. aquatica* (L.), *D. obscura* Gyll., *D. simplex* F.], Centralasiatic-European-Mediterranean – 1 species [*Donacia marginata* Hoppe], Centralasiatic-European – 3 species [*Donacia bicolora* Zschach, *D. tomentosa* (Ahr.), *D. cinerea* (Hrbst.)], Turano-European – 1 species [*Plateumaris braccata* (Scop.)],

**European – 2 species** [*Plateumaris discolor* (Panzer, 1795), *P. rustica* (Kunze)], **Centraleuropean – 1 species** [*Donacia brevitarsis* Thoms.] **and Northeuropean – 1 species** [*Donacia antiqua* Kunze]. Species with wide distribution range (Asiatic-European and Sibero-European) are predominant (Fig. 1).



1. Range of number of species of Latvian Donaciinae on chorotypes.

### FAUNAL DATA

In the list after the species name the locality and the collecting date are indicated, in the brackets are indicated the number of collected specimens, information about habitat and collector's name.

#### *Donacia crassipes* Fabricius, 1775

Daugavpils d.: Medumi, Lake Ilgas, 02.VIII.2007 (3, on *Nuphar*, leg. M.Murd); Rēzekne d.: Kirkiliški env., Lake Rušons, 56°11'90"N 27°05'67"E, 22.VI.2006 (4, leg. A.Bukejs); Īdeņa env., bank of Lake Lubāns, 06.VII.2008 (2, leg. A.Bukejs, M.Balalaikins), 15.VII.2009 (12, on *Nuphar*, leg. A.Bukejs, M.Balalaikins); Lake Micānu, 28.VII.2009 (7, leg. M.Balalaikins); Ventspils d.: Moricsala Isl., Moricsala Nature Reserve, 15.VII.2008 (1, leg. V.Alekseev, A.Pavlova), 14.VII.2009 (1, leg. A.Barševskis).

***Donacia dentata* Fabricius, 1792**

Daugavpils d.: Medumi, bank of Lake Ilgas, 02.VIII.2007 (1, leg. M.Murd); Jēkabpils d.: Dunava, 23.VI.2008 (14, leg. A.Barševskis); Rēzekne d.: Īdeņa env., bank of Lake Lubāns, 15.VII.2009 (2, leg. A.Bukejs, M.Balalajkins); bank of Lake Micānu, 28.VII.2009 (10, leg. M.Balalajkins); Talsi d.: Sabile, 19.VII.2007 (1, leg. A.Pankjāns, A.Soldāns, U.Valainis, A.Barševskis).

***Donacia semicuprea* Panzer, 1796**

Daugavpils d.: Višķi, 27.V.1987 (1, leg. A.Barševskis); Preiļi d.: Jersika, 15.V.2007 (12, leg. A.Barševskis), 20.V.2007 (21, leg. A.Barševskis), 25.V.2007 (2, leg. A.Barševskis), 26.V.2007 (3, leg. A.Barševskis), 27.V.2007 (2, leg. A.Barševskis), 29.V.2007 (3, leg. K.Barševska, A.Barševskis), 05.VI.2007 (9, leg. A.Barševskis), 09-10.VI.2007 (2, leg. K.Barševska, A.Barševskis), 10.VII.2007 (18, leg. K.Barševska, A.Barševskis), 14.VII.2007 (3, leg. A.Barševskis), 27.IV.2008 (1, leg. K.Barševskis), 24.V.2008 (1, leg. A.Barševskis), 31.V.2008 (5, leg. A.Barševskis), 17.VI.2008 (14, leg. A.Barševskis), 23-24.VI.2008 (5, leg. A.Barševskis), 02.VII.2008 (3, leg. A.Barševskis), 10.V.2009 (3, leg. A.Barševskis), 03.VII.2009 (3, leg. A.Barševskis).

***Donacia aquatica* Kunze, 1818**

Daugavpils d.: Šedere, Straumēni house, 01-03.V.2008 (1, leg. M.Janovska); Preiļi d.: Jersika, Kurpnieki house, 31.V.2008 (1, leg. A.Barševskis), 17.VI.2008 (1, leg. A.Barševskis), 23-24.VI.2008 (4, leg. A.Barševskis), X.2008 (3, leg. A.Barševskis).

***Donacia impressa* Paykull, 1799**

Daugavpils d.: Butišķi, 26.V.2008 (1, valley of the Daugava River, leg. A.Bukejs); Demene, 17.V.1994 (1, leg. A.Barševskis); Ilgas, Silene Nature Park, 07.VII.1992 (1, leg. A.Barševskis), 15.V.1993 (2, leg. A.Barševskis), 19.VI.1996 (1, leg. A.Barševskis); Jēkabpils d.: Dunava, 01-07.VI.2009 (1, leg. K.Barševska); Rēzekne d.: Īdeņa env., bank of Lake Lubāns near the Daugava River, 10.VI.2007 (1, leg. A.Bukejs).

***Donacia brevicornis* Ahrens, 1810**

Daugavpils d.: Ilgas, Silene Nature Park, 06.VI.1992 (1, leg. A.Barševskis).

***Donacia marginata* Hoppe, 1795**

Kuldīga d.: Skruna, near the Venta River, 11.VII.2006 (1, leg. A.Barševskis, K.Barševska); Preiļi d.: Jersika, Kurpnieki house, 08.VII.2006 (1, leg. A.Barševskis), 10.VII.2007 (3, leg. A.Barševskis, K.Barševska), 02.VI.2008 (1, leg. A.Barševskis), 23-24.VI.2008 (4, leg. A.Barševskis), 25.VII.2009 (4, leg. A.Barševskis).

***Donacia bicolora* Zschach, 1788**

Daugavpils d.: Bebrene, 27.VI.2005 (1, leg. E.Rudāns); Preiļi d.: Jersika, Kurpnieki house, 25.V.2007 (1, leg. A.Barševskis), 10.VII.2007 (2, leg. A.Barševskis, K.Barševska).

***Donacia obscura* Gyllenhal, 1813**

Daugavpils d.: 2.5 km E Ļūbeste, bank of Lake Židu, 29.IV.2008 (1, leg. A.Bukejs).

***D. antiqua* Kunze, 1818**

Daugavpils d.: Bebrene, 14.V.2006 (26, leg. E.Rudāns), 20.V.2006 (1, leg. E.Rudāns).

***Donacia thalassina* Germar, 1811**

Daugavpils d.: Ilgas, bank of Lake Riču, Silene Nature Park, 06.VII.2006 (1, leg. A.Bukejs); Ventspils d.: Moricsala Isl., Moricsala Nature Reserve, 15.VII.2008 (1, leg. V.Alekseev, A.Pavlova).

***Donacia vulgaris* Zschach, 1788**

Daugavpils d.: Bebrene, 17.VI.2006 (1, leg. E.Rudāns); Preiļi d.: Jersika, 29.VI.1992 (1, leg. A.Barševskis).

***Donacia simplex* Fabricius, 1775**

Daugavpils d.: Ilgas, Silene Nature Park, 06.VI.1999 (1, leg. A.Barševskis); Jēkabpils d.: Rubeņi, 12.VII.1997 (1, leg. I.Leiskina), 03.V.1998 (1, leg. I.Leiskina).

***Donacia clavipes* Fabricius, 1792**

Daugavpils d.: Ilgas, bank of Lake Riču, Silene Nature Park, 06.VII.2006 (1, leg. A.Bukejs); Ļubaste E env., Daugavpils beltway, 06.VI.2004



(1, leg. A.Barševskis); Rēzekne d.: Īdeņa env., bank of Lake Lubāns, 15.VII.2009 (1, leg. A.Bukejs, M.Balalaikins); Ventspils d.: Moricsala Isl., Moricsala Nature Reserve, 15.VII.2008 (1, leg. V.Alekseev).

***Donacia tomentosa* Ahrens, 1810**

Rēzekne d.: Bērzgale, 29.VII.1992 (1, bank of lake, leg. A.Barševskis); Lake Micānu, 28.VII.2009 (4, leg. M.Balalaikins); Īdeņa env., bank of Lake Lubāns, 15.VII.2009 (1, leg. A.Bukejs, M.Balalaikins).

***Donacia cinerea* (Herbst, 1784)**

Daugavpils d.: Bebrene, 14.V.2006 (1, leg. E.Rudāns); Ilgas, Silene Nature Park, 07.VII.1991 (1, leg. A.Barševskis), 07.VI.1996 (1, leg. A.Barševskis).

***Plateumaris discolor* (Panzer, 1795)**

Aizkraukle d.: 3 km N Aizkraukle, Aizkraukles purvs (bog) PNT, 01.VII.2008 (9, leg. A.Bukejs & A.Pankjāns); Daugavpils d.: Baltmuižas bog, 06.VI.2002 (2, leg. R.Cibuļskis); Ilgas, Silene Nature Park, 03.VI.1992 (1, leg. A.Barševskis), 10.VI.1992 (1, leg. A.Barševskis), 20.VI.1992 (1, leg. A.Barševskis); Jūrmala: Kūdra, 17.V.2008 (1, leg. A.Titovs).

***Plateumaris sericea* (Linnaeus, 1761)**

Daugavpils d.: Bebrene, 14.V.2006 (1, leg. E.Rudāns); Pilskalne, 05.V.2008 (1, leg. A.Barševskis, K.Barševska); Preiļi d.: Kersika, Kurpnieki house, 04.VI.2006 (1, leg. A.Barševskis), 20.V.2007 (2, leg. A.Barševskis), 17.VI.2008 (1, leg. A.Barševskis); Rēzekne d.: Puša, 25.V.2002 (1, leg. A.Barševskis).

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