155-178

# Explanatory notes on the updates concerning the genus Donacia FABRICIUS, 1775 in the second edition of the Catalogue of Palaearctic Coleoptera, Vol. 6/2

(Coleoptera: Chrysomelidae)

E. GEISER & M.A. JÄCH

#### Abstract

The forthcoming second edition of the Catalogue of Palaearctic Coleoptera (Vol. 6/2: Chrysomelidae, in prep.) will contain a lot of corrections and additions to the first edition (Vol. 6: Chrysomeloidea), published in 2010. The present article deals solely with the genus Donacia FABRICIUS, 1775 and provides explanations for some of the corrections and additions, especially those which require more detailed treatment, and therefore cannot be printed in the second edition of the catalogue itself.

The second edition of the catalogue will include 68 Palaearctic species/subspecies of Donacia, three fewer than in the first edition, because five taxa are now regarded as synonyms (two of which are newly established herein: Donacia meridionalis WEISE, 1886 syn.n. = D. bicolora ZSCHACH, 1788, and D. issykensis JACOBSON, 1901 syn.n. = D. vulgaris ZSCHACH, 1788), because one synonym has been resurrected, and because one species has been newly described.

Donacia melanocephala (MARSHAM, 1802), which has hitherto been regarded as a synonym of D. dentata HOPPE, 1795, is newly synonymized with D. semicuprea PANZER, 1795, based on the examination of type specimens.

Numerous additional faunistic records, verified records and 20 first records for countries (or subordinate units) are provided herein, based on recent literature records and on numerous museum specimens examined by the first author. On the other hand, several records for countries (or subordinate units) have to be deleted in the second edition, because the records were either based on misidentifications, or because they could not be verified despite considerable efforts.

Incorrect subsequent spellings of taxa names and the controversial spellings of various author names in the first edition are corrected and discussed.

The apparent problem concerning the priority of Donacia marginata HOPPE, 1795 and D. limbata PANZER, 1795 is explained.

The references of several original descriptions are corrected in the second edition, and these corrections are explained herein.

Nomina nuda are also treated herein, and their identities are explained.

Key words: Coleoptera, Chrysomelidae, Donaciinae, Donacia, Palaearctic, catalogue, taxonomy, nomenclature, corrections, faunistics, spelling of author names, nomina nuda.

#### Introduction

The forthcoming second edition of the Catalogue of Palaearctic Coleoptera (Vol. 6/2: Chrysomelidae), edited by BEZDĚK & SEKERKA (in prep.), will contain a lot of corrections and additions to the first edition (Vol. 6: Chrysomeloidea), edited by LÖBL & SMETANA (2010).

During the last decade our knowledge on the taxonomy and distribution of many species has improved. Numerous faunistic articles with new records have been published. Furthermore, the first author of the present article studied numerous specimens of Donacia FABRICIUS, 1775 of many museums and thereby discovered various new country records, which will be added in the second edition of the Catalogue of Palaearctic Coleoptera (GEISER in prep.).

Since the first edition, the list of countries and geographical subunits has undergone some changes. Countries like "Yugoslavia" have been split up into several smaller ones. Also, Crimea will be considered as a separate geographical unit in the second edition. Siberia, which was previously divided into two subunits, will include three subunits: East Siberia, South Siberia and West Siberia. The Caucasian countries Armenia, Azerbaijan and Georgia are shifted from Europe to Asia in the distribution lists.

In contrast to the first edition, the new catalogue will include also infrasubspecific (unavailable) names (according to ICZN 1999: Art. 45.5–6); they will be listed together with the available names, but in contrast to the latter they are not italicized. If a taxon was originally described as a subspecies, variety or aberration, the abbreviations "ssp." respectively "var." or "ab." are added after the page number.

Another particular category of unavailable names are nomina nuda. They were never described formally, but they may be found on labels in collections, and in various publications. Nomina nuda were not documented in CPC2010. Therefore, nomina nuda are treated herein, to raise awareness of their existence and to provide detailed explanations about their identity.

In the catalogue chapter "New nomenclatorial and taxonomic acts, and comments" of the new edition, only concise remarks can be provided to explain the new data; but some of these new data need in-depth explanation, which cannot be printed in the catalogue itself. Therefore, corrections and additions, especially those which require more detailed treatment (incl. lists of material examined), are documented here.

### Material and methods

Abbreviations:

BMNH	Natural History Museum, London [formerly: British Museum, Natural History], United Kingdom		
	(Michael Geiser, Maxwell V.L. Barclay)		
CeNaK	Center of Natural History of the University of Hamburg, Germany (Martin Husemann, Marianna		
	Simões, Birgit Jaenicke)		
EIHU	Hokkaido University, Sapporo, Japan		
HNHM	Hungarian Natural History Museum, Budapest, Hungary (Ottó Merkl †, Tamás Németh)		
HNSA	Museum Haus der Natur, Salzburg, Austria (Patrick Gros)		
MSNV	Museo di Storia Naturale Verona, Italy (Mauro Daccordi, Roberta Salmaso, Leonardo Latella)		
NHMB	Natural History Museum Basel, Switzerland (Matthias Borer, Christoph Germann, Eva Sprecher,		
	Isabelle Zuercher)		
NHMW	Natural History Museum Vienna, Austria (Manfred A. Jäch, Helena Shaverdo, Michaela Brojer,		
	Harald Schillhammer, Wolfgang Schönleithner †, Wolfgang Brunnbauer)		
NMBE	Natural History Museum Bern, Switzerland		
NMEG	Natural History Museum Erfurt, Germany (Matthias Hartmann)		
NMNHS	National Museum of Natural History Sofia, Bulgaria		
OUMNH	Oxford University Museum of Natural History, United Kingdom (Amoret Spooner)		
PMSL	Slovenian Museum of Natural History, Ljubljana, Slovenia (Tomi Trilar)		
SDEI	Senckenberg German Entomological Institute, Müncheberg, Germany (Thomas Schmitt, Stephan		
	Blank, Mandy Schröter)		
SMF	Senckenberg Museum Frankfurt, Germany (Andrea Hastenpflug-Vesmanis, Damir Kovac)		
SNMC	Slovakian Museum of Natural History, Bratislava, Slovakia (Vladimir Janský, Martin Sečanský)		
ZFMK	Zoological Research Museum Alexander Koenig, Bonn, Germany		
ZISP	Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia (Alexey Moseyko)		
ZSM	Zoological State Collection, Munich, Germany (Michael Balke, Martin Baehr †)		
ZSRO	Zoological collection of the University of Rostock, Germany (Stefan Richter, Andreas Bick)		
CPC2010	Catalogue of Palaearctic Coleoptera, Vol. 6. Chrysomeloidea		
CPC2022	Catalogue of Palaearctic Coleoptera, Vol. 6/2. Chrysomelidae		
ChryFaun	Database of the faunistic project group: "Chrysomelidae of Central Europe" (SCHMITT et al. 2014).		
2	Data status: 2.VII.2020.		

GBIF	Global Biodiversity Information Facility [http://www.gbif.org/], a compilation of data from various sources with a broad range of data quality: from excellent to rubbish. It provides interesting hints, but they must be thoroughly checked for correctness (see also JÄCH et al. 2016: XVI–XVII).	
ab.	aberration (infrasubspecific, generally unavailable according to ICZN 1999: Art. 45.6)	
coll.	collection	
det.	identified by	
ex.	specimen	
exs.	specimens	
ex coll.	derived from collection	
HN	homonym	
ICZN	International Commission on Zoological Nomenclature	
IN	infrasubspecific name (unavailable)	
in litt.	in litteris (denoting a nomen nudum, a formally undescribed, unavailable name)	
leg.	collected by	
pers. comm.	personal communication	
ssp.	subspecies	
t.	teste (attested or confirmed by)	
var.	variety (available or unavailable name, depending on ICZN 1999: Art. 45.6)	

The list of taxa below the heading of each taxon includes only those available or unavailable names for which some explanatory comments are provided.

Label data: The text within square brackets [...] is explanatory and not part of the original label text.

Additional records: Published and unpublished (first) records, which were not included in CPC2010.

Verified records: Published records, which were already included in CPC2010, and which have been verified by the first author (or other experts).

In the chapter "References", original descriptions are cited only for those Palaearctic species, which were not listed in the references of CPC2010 or if these original descriptions are discussed in the text.

#### Author names

Unfortunately, various author names were modified in CPC2010, which caused instability and confusion (see JÄCH 2005, JÄCH et al. 2016). For instance, the authority of taxa published by CASTELNAU (1840) was changed to "Laporte" in all volumes of the "Catalogue of Palaearctic Coleoptera", while the name "Castelnau" is used in various world catalogues and other check-lists (see e.g., HANSEN 1998, JÄCH et al. 2016). In any case, author names must be spelled in the same way they were published in the respective original papers. In CASTELNAU (1840) the name "Laporte" does not appear anywhere in the entire book.

The name of the Russian entomologist Andrej Petrovich Semenov-Tian-Shanskij (1866–1942) has been generally shortened to "Semenov" in CPC2010, however, in one of the two taxa of *Donacia* described by him (*D. jacobsoni*) he used his full name: Semenov-Tian-Shanskij.

Georgiy Georgiyevich Jacobson (1871–1926) published numerous articles in Latin, where his surname is almost always spelled as "Jacobson", but in his early papers (1892, 1894) he used the name "Jacobsohn". In CPC2010 (and other volumes of the "Catalogue of Palaearctic Coleoptera") the name was generally spelled as "Jakobson", regardless of the spelling in the original papers. In articles, which were published in Cyrillic script, his name was spelled "Якобсон". However, even in some of these articles in Cyrillic, his name is occasionally also written in Latin alphabet on certain text pages (see e.g., JACOBSON 1905: 148, 150, 152). In all these cases, the

spelling is "Jacobson". We have not found any publication by this author, where he had spelled his name as "Jakobson".

#### Additions, corrections and explanations

#### Donacia aequidorsis JACOBSOHN, 1894

#### Additional records:

RUSSIA (WEST SIBERIA): Chelyabinsk Oblast, Kartaly District, Karagaily-Aiyat River, 2.VII.1997 (GUS'KOVA 2010).

TURKEY: "Turkey", [ex] coll. E. Witte [no further data], 4 exs., det. H. Goecke 1956, t. E. Geiser 2019 (NHMB: 1 ex., SMF: 3 exs.) (EKIZ et al. 2020).

Distribution: South Russia, West Siberia, Kazakhstan, Turkey.

#### Donacia antiqua KUNZE, 1818

#### Verified records:

FINLAND: BOROWIEC (1989); LJUNGBERG (2017).
SWEDEN: LJUNGBERG (2017).
RUSSIA (NORTH TERRITORY): LJUNGBERG (2017); St. Petersburg Oblast, Raivola, 1 ex., [leg.] J. Sahlberg, Donacia brevitarsis [det.] J. Sahlberg, [ex] coll. E. Reitter, Donacia antiqua det. E. Geiser 2020 (HNHM).

**Distribution**: Northern Europe.

Most of the literature records and geographical data in GBIF are incorrect, mainly because *Donacia antiqua* and *D. brevitarsis* were erroneously mixed up for decades. Even the widely used keys of REITTER (1920) and MOHR (1966a) allocated the characters to the wrong species – see BOROWIEC (1989) and KIPPENBERG (1994).

*Donacia antiqua* occurs only in northern Europe. All specimens from other regions, especially from Central Europe, belong to *D. brevitarsis*.

#### Donacia aquatica (LINNAEUS, 1758)

#### Additional records:

- ALBANIA: Prokletije Mountains, Sylbice, Liqeni i Verdbë [Lake Verdbe], 42°31'16"N 20°5'18"E, 2090 m,
  8.VII.2011, 5 exs., leg. Z. Barina, A. Kovács, G. Puskás & B. Sárospataki, det. J. Bezděk (HNHM) (BEZDĚK 2018); Prokletije Mountains, Döberdol, Liqeni i Dashit [Lake Dashit], 42°32'1"N 20°4'39"E, 2080 m,
  9.VII.2011, 2 exs., leg. Z. Barina, A. Kovács, G. Puskás & B. Sárospataki, det. J. Bezděk (HNHM) (BEZDĚK 2018).
- CROATIA (first record): Ludbreg, 3 exs., leg. V. Apfelbeck, without date, det. Z. Kaszab 1962, t. E. Geiser 2020 (HNHM).

SERBIA: GAVRILOVIĆ & ĆURČIĆ (2011).

- RUSSIA (SOUTH SIBERIA): Different locations in the Kuznetsk-Salair mountain region, Kemerovo Oblast, 18 exs. (GUS'KOVA et al. 2018).
- IRAN: Teheran [no further data] (BIEŃKOWSKI 2014); North Khorasan Province, Bojnurd, 37°21'N 57°12'E, 1080 m, 7.V.2009, 2 exs. (SAMIN 2018).

Distribution: Palaearctic Region, from Ireland to the Russian Far East.

Donacia aquatica does not occur in Japan (HAYASHI 2020).

#### Donacia bactriana WEISE, 1887

#### Additional record:

RUSSIA (SOUTH SIBERIA): Minusinsk [no further data] (GOECKE 1960).

Distribution: Central Asia to East Siberia.

#### Donacia bicolora ZSCHACH, 1788

meridionalis WEISE, 1886: 250 (var.) syn.n.

**Original spelling**: According to ICZN (1999: Art. 32), the name "*bicolora*" (as it was spelled in the original description) is to be regarded as correct original spelling, which was also used in CPC2010. The name "*bicolor*", which, unfortunately, can be found in various publications and in recent internet sources (e.g., http://www.eu-insekten.de/steckbrief.php?tier= Donacia\_bicolor), is an incorrect subsequent spelling (ICZN 1999: Art. 33.3) and not an unjustified emendation (ICZN 1999: Art. 33.2.3); if it is found that one of the subsequent authors changed the name "*bicolora*" in a demonstrably intentional manner to "*bicolor*", the latter name has to be added to the list of synonyms of *D. bicolora*.

In Classical Latin, *bicolor* is used frequently for the male, female and neuter form (single-ended adjective of the third declension). Therefore, some coleopterists obviously think that the name "*bicolora*" must be corrected to "*bicolor*". However, in Classical Latin, *bicolorus*, *-a*, *-um* was also used, for instance by Flavius Vopiscus, who wrote a biography of emperor Aurelianus around 300 AD (LEWIS & SHORT 1975: 236). Therefore, "*bicolora*" fully conforms to Classical Latin.

**Taxonomy:** In CPC2010, specimens from the southern part of Italy (from central Italy southwards) were regarded as a subspecies: *D. b. meridionalis*. Actually, the latter was originally described as *Donacia bicolora* var. *meridionalis* collected near Rome (exact number of syntypes unknown). Nevertheless, *meridionalis* was widely used as a subspecific name for specimens collected in southern Italy. Tab. 1 shows that all "diagnostic" characters mentioned by WEISE (1886) are within the variability range of *D. bicolora*. Therefore, *D. b. meridionalis* is here regarded as a synonym of *D. bicolora*.

Tab. 1: Comparison of the "diagnostic" characters described by WEISE (1886) for *Donacia bicolora* var. *meridionalis*, and corresponding characters found in *D. bicolora* outside the range of *D. b.* var. *meridionalis*.

Characters	bicolora var. meridionalis	bicolora
Colour of upper side	cupreous-brown and partly dark-green;	mainly golden-green, but also dark-green,
	feebly shiny	cupreous, bluish; shiny
Body length	9 mm	8–11 mm
Pronotum	central part of pronotum finely punctate	central part of pronotum finely punctate
Elytral impressions	very deep	very deep
Tooth on hind femur	very small	small to very small

The first author studied about 30 specimens from southern Italy (HNHM, MSNV, SDEI) but found no significant morphological differences that would warrant a subspecific separation. A few specimens from southern Italy have some characters described by WEISE (1886), but most of them look like typical *D. bicolora*.

#### Additional records:

ALBANIA: MOHR (1966b).

BOSNIA and HERZEGOVINA: MOHR (1966b); "Sarajewo" [Sarajevo], leg. V. Apfelbeck, 2 exs., det. K. Lopatin, t. E. Geiser 2020 (HNHM); "Herzegowina" [Herzegovina] [no further data], 4 exs., det. E. Geiser 2020 (SDEI).

MONTENEGRO (first record): Ulcinj, Solana, 8.V.2015, 1 ex., leg. D. & L. Kopr, det. J. Bezděk, coll. D. Kopr, Brno, Czechia (J. Bezděk, pers. comm. 8.X.2020).

SERBIA: MOHR (1966b); GAVRILOVIĆ & ĆURČIĆ (2011).

RUSSIA (SOUTH SIBERIA): Sayan Mountains (BIEńKOWSKI 2014) and many records from the Kuznetsk-Salair mountain region (GUS'KOVA et al. 2018).

KYRGYZSTAN: BIEŃKOWSKI (2014).

CHINA (XINJIANG) (first record): "Kuldscha [Ghulja, in Chinese: Yining Shi], Juldus [Yuldus Basin]", ex coll. E. Reitter, 3 exs., det. V. Tomov, t. E. Geiser 2020 (HNHM).

Distribution: Widely distributed in the Palaearctic Region, from Europe to East Siberia.

#### Donacia bicoloricornis CHEN, 1941

Distribution: East Palaearctic (from eastern China and Russian Far East to Japan).

The record from "Korea" in CPC2010 refers to South Korea (CHO & AN 2020).

#### Donacia brevicornis AHRENS, 1810

**Nomenclature**: In CPC2010, "*Donacia impressa* sensu KRAATZ, 1869: 266" was listed under *D. brevicornis* AHRENS, 1810. However, Kraatz never described a species with this name. Therefore, it must be deleted from the list of synonyms.

#### Additional records:

MOLDAVIA: Transnistria, Rîbnița Province, Plopi, 19.V.1960, 1 ex. (MOSEYKO 2015).

NETHERLANDS: Limburg Province, Echt, V.1968, leg. Berger, ex coll. Ziegler (ZFMK) [ChryFaun]; same locality, date and collector, det. et coll. R. Beenen, Nieuwegein, Netherlands [ChryFaun]; Limburg Province, Meinweg National Park, Vlodrop-Station, 5.VI.2013, 1 ex., leg., det. et coll. R. Beenen, Nieuwegein, Netherlands [ChryFaun].

SERBIA: MOHR (1966b).

SWITZERLAND: BEZDĚK & MLEJNEK (2016).

RUSSIA (WEST SIBERIA): Chelyabinsk Oblast (GUS'KOVA 2010); Tjumen Oblast, Tobolsk (BIEŃKOWSKI 2014).

Distribution: From Europe and Algeria to West Siberia.

"YU" (Yugoslavia) has to be replaced by "SB" (Serbia).

#### Donacia brevitarsis THOMSON, 1884

**Verified records**: This species has often been confused with *D. antiqua* (see above). Verified data sources for countries (or subordinate units) listed in CPC2022 are provided below.

AUSTRIA: GEISER (2016), based on 26 exs. (NHMW).

BELGIUM: Records of *D. antiqua* (specimens collected between 1938 and 1942) provided by FAGOT (2019) obviously refer to *D. brevitarsis*.

BELARUS: BOROWIEC (1989).

CROATIA: Ludbreg, [leg.] V. Apfelbeck, ex coll. V. Apfelbeck, 7 exs., D. antiqua det. Z. Kaszab 1962, D. brevitarsis det. E. Geiser 2020 (HNHM).

CZECHIA: BEZDĚK & MLEJNEK (2016).

FINLAND: SILFVERBERG (1987); BOROWIEC (1992).

FRANCE: Paris, ex coll. Kraatz, 1 ex., D. antiqua det. E. Reitter, D. simplicifrons det. ?, D. brevitarsis det. E. Geiser 2020 (SDEI).

GERMANY: More than 10 specimens, det. E. Geiser (SMF, SDEI, CeNaK, ZSRO).

HUNGARIA: Veszprém County, Tihany 15.IV.1939, 1 ex., [leg.] V. Székessy, *D. antiqua* det. V. Székessy, *D. antiqua* det. Z. Kaszab, *D. brevitarsis* det. E. Geiser (HNHM).

ITALY: RUFFO (1964); RAVIZZA (1973); BOROWIEC (1989); 21 exs., det. E. Geiser (MSNV).

LATVIA: TELNOV (2004).

LITHUANIA: BOROWIEC (1989).

POLAND: BOROWIEC (1989).

SWEDEN: BOROWIEC (1992); LJUNGBERG (2016).

UKRAINE: BOROWIEC (1989).

RUSSIA (NORTH TERRITORY, CENTRAL TERRITORY): BIEŃKOWSKI (2014); Jaroslawl Oblast, Jaroslawl, 2 exs., [leg.] A. Jakowlew, *D. antiqua* det. G. Jacobson, *D. antiqua* ex coll. E. Reitter, *D. brevitarsis* det. E. Geiser 2020 (HNHM).

#### Additional records:

SWITZERLAND: Genève, 22.IV.1996, 5 exs., leg. et det. C. Besuchet, ex coll. M. Döberl in coll. U. Arnold, Berlin, Germany [ChryFaun]; Canton of Genève, Jussy, 470 m, 4.XI.1987, 2 exs., leg. P. Scherler, det. C. Germann, ex coll. P. Scherler (NMBE) [ChryFaun].

SLOVAKIA: BEZDĚK & MLEJNEK (2016).

RUSSIA (WEST SIBERIA): Tjumen Oblast (BIEŃKOWSKI 2014, SERGEEVA & DEDYUKHIN 2021).

**Distribution**: Many countries in North and Central Europe as well as in Russia (including West Siberia).

"NL" (Netherlands) has to be deleted. According to WINKELMAN & BEENEN (2010) and Ron Beenen (pers. comm. 25.IX.2020) there are no confirmed records of *D. brevitarsis* from the Netherlands. Furthermore, we found no confirmed records for Denmark and Slovenia so far.

### Donacia cinerea HERBST, 1784

### Additional records:

ALBANIA (first record): Qarku i Tiranës [Tirana County] between Shkallë and Shengjin I Math Lumi Erzen [Erzen River], 41°19'22"N 19°59'44"E, 420 m, riverside, 20.V.2017, 16 exs., leg. D. Horvath, M. Lukátsi, O. Merkl, T. Németh, B. Szelencz & V. Szénási, det. R. Mlejnek, t. E. Geiser 2019 (HNHM).

SERBIA: GAVRILOVIĆ & ĆURČIĆ (2011).

RUSSIA (SOUTH SIBERIA): Krasnoyarsk Krai, Yermakovsk District, Tanzybej village (Zapadnye Sayany), 9.VI.2002, 20.V.2011, 15.VI.2011, leg. E.V. Borisova, det. E. Guskova & E. Akulov, coll. E. Akulov, Krasnoyarsk, Russia; Krasnoyarsk Krai, Minusinsk District, Znamenka, det. E. Guskova & E. Akulov, leg. & coll. E. Akulov, Krasnoyarsk, Russia (GUSKOVA & AKULOV 2016).

CHINA (XINJIANG) (first record): "Prov. Kuldscha, Ober Ili-Thal" [Kuldscha (or Ghulja) County, upper Ili Valley], 1897, 1 ex., [leg.] F. Hauser, det. H. Goecke 1956, t. E. Geiser 2018 (NHMW).

Distribution: West Palaearctic, from Europe to West and South Siberia.

#### Donacia clavareaui JACOBSON, 1906

*kweilina* CHEN, 1966: 145 *mediohirsuta* CHEN, 1966: 145

**Taxonomy**: *Donacia clavareaui* was confused with *D. fukiensis* GOECKE, 1944 for decades. CONG & YU (1997) re-established *D. fukiensis* as a valid species, but this was mostly ignored by subsequent authors. After the examination of the type series of *D. fukiensis* (NHMB), the status of *D. fukiensis* as a valid species has been confirmed, and *D. kweilina* as well as *D. mediohirsuta* were eventually synonymized with *D. clavareaui* by GEISER (2019).

**Distribution**: East Palaearctic. Confirmed records are known from China (Guangxi, Heilongjiang, Nei Mongol (HuA 2002), Sichuan, Yunnan), Japan, Mongolia, Russia (East Siberia, Far East) and South Korea (GEISER 2019).

#### Donacia clavipes clavipes FABRICIUS, 1792

#### Additional records:

BOSNIA and HERZEGOVINA: MOHR (1966b).

MONTENEGRO (first record): Ulcinj, Ada Bojana, 8.–9.V.2015, 1 ex., leg. D. & L. Kopr, det. J. Bezděk, coll. D. Kopr, Brno, Czechia (J. Bezděk, pers. comm. 8.X.2020).

- IRAN: Guilan Province, Rasht, 37°9'36"N 49°25'12"E, 40 m, 25.–26.VIII. 2012, 1 &, leg. et det. E. Aslan & H. Ghahari, coll. B. Gruev in NMNHS (ASLAN & GHAHARI 2017).
- RUSSIA (SOUTH SIBERIA): Altai Republic, Aktash, bank of Chuya River, 20.VII.1992, 2 exs., leg. D. Telnov, det. L. Medvedev, t. E. Geiser 2021 (NMEG); Altai Republic, Aktash, Chuya river, VI.1992, 2 exs., leg. A. Tschernich, det. E. Geiser 2021 (NMEG).

Distribution: West Palaearctic, from Europe to Central Asia as well as West and South Siberia.

# Donacia clavipes glabrata SOLSKY, 1871

glabrata SOLSKY, 1871: 245

**Original description (date)**: According to STANDFUSS & KERZHNER (2004), this subspecies was described in 1871 (not in 1872).

Distribution: East Palaearctic (East Siberia to eastern China).

# Donacia crassipes FABRICIUS, 1775

striata PANZER, 1795: 1

**Original description (date)**: According to ALONSO-ZARAZAGA & EVENHUIS (2017), *D. striata* was published in 1795 (not in 1796).

# Additional records:

BOSNIA and HERZEGOVINA: MOHR (1966b); Herzegovina, 1 ex., ex coll. V. Apfelbeck, det. K. Lopatin, t. E. Geiser 2019 (HNHM); Dervent, ex coll. V. Apfelbeck, 4 exs., det. K. Lopatin, t. E. Geiser 2019 (HNHM); Bosnia, Hutovo Blato, 24.–29.V.1934, 4 exs., leg. J. Fodor, det. J. Bezděk 2017, t. E. Geiser 2019 (HNHM). SERBIA: GAVRILOVIĆ & ĆURČIĆ (2011).

RUSSIA (SOUTH SIBERIA): Kemerovo Oblast, Krapivinsk District, 8 km SSW Saltymakovo, Azhendarovo, 54°45'N 87°1'E, 10.–20.VII 2008, 1 3, coll. A. Korshunov, Kemerovo, Russia (GUSKOVA et al. 2016).

TURKEY: Bolu Province, Lake Abant, 1450 m, 24.VI.1969, 1 ex., leg. G. Osella, det. P. Benato 1983, t. E. Geiser 2019 (MSNV) (EKIZ et al. 2020).

Distribution: Widely distributed in the Palaearctic Region.

# Donacia delagrangei PIC, 1896

jacobsoni Semenov-Tian-Shanskij & Reichardt, 1927: 218

Taxonomy: Donacia jacobsoni was synonymized with D. delagrangei by KIPPENBERG (2010).

# Additional record:

ARMENIA (first record): "Armenia, g. Yagzykurb" [in Cyrillic script], 2300 m, 21.IV.1956, 1 ex., [leg.] Korostelev, *Donacia jacobsoni* det. W. Shavrov, *D. delagrangei* det. E. Geiser 2019 (BMNH). – According to V. Asatryan (pers. comm. 2021), the spelling on the locality label ("Yagzykurb") is very likely based on a mistake. Probably, it should refer to Mt. Amarnots (or Yazyurt, or Yazivurd, 2742 m), near the village of Martiros (Vayots Dzor Province, 39°35'50"N 45°30'36"E).

Distribution: Turkey, Georgia, Armenia.

# Donacia dentata HOPPE, 1795

autumnalis WESTHOFF, 1882: 253 (var.)

**Original description (page number)**: *Donacia autumnalis* was described by WESTHOFF (1882: p. 253, not on p. 259).

**Taxonomy**: *Donacia melanocephala* (MARSHAM, 1802) must be deleted from the synonymy list. For details, see below, under *D. semicuprea* PANZER, 1795.

# Additional records:

MOLDAVIA: MOSEYKO (2015).

SERBIA: MOHR (1966b); GAVRILOVIĆ & ĆURČIĆ (2011).

SLOVENIA (first record): Carniolia, Laibach [Ljubljana], 1 ex., [leg.] J. Stussiner, ex coll. E. Reitter, det. E. Geiser 2019 (HNHM); Ljubljana, 1 ex., [leg.] M. Grabowski, det. V. Tomov, t. E. Geiser 2019 (HNHM); Wippach [Vipava], [leg.] J. Stussiner, 2 exs., ex coll. E. Reitter, det. E. Geiser 2019 (HNHM).

RUSSIA (SOUTH SIBERIA): Krasnoyarsk Krai, Minusinsk, 8.VIII.2001, leg. E. Akulov, coll. E. Akulov, Krasnoyarsk, Russia (GUSKOVA & AKULOV 2016). Distribution: From Europe to East Siberia.

# Donacia fennica PAYKULL, 1800

#### Additional records:

RUSSIA (SOUTH SIBERIA): Kuznetsk Depression, Zhuravlevo, 29.VI.2006, 2 exs., leg. et det. E. Konovaltsev, coll. D. Efimov, Kemerovo, Russia; Lake Tanaevo, 30.VI.2006, 2 exs., leg. et det. D. Sidorov, coll. E. Gus'kova, Barnaul, Russia; Salair Ridge, Zhuravlevo, 2.VII.2006, 1 ex., leg. et det. A. Atuchin, coll. A. Atuchin, Kemerovo, Russia (GUs'KOVA et al. 2018).

RUSSIA (FAR EAST): Amur Oblast (BIEŃKOWSKI 2014).

Distribution: Widely distributed in the northern Palaearctic.

In the past, this species has been recorded repeatedly from Central Europe, but these records refer to *D. malinovskyi* (specifically, its brown colour form "*arundinis*").

# Donacia flemola GOECKE, 1944

Distribution: Russia (Far East), China (Jilin), North Korea, South Korea, Japan.

The record for "Korea" in CPC2010 refers to North Korea and South Korea (CHO & AN 2020).

# Donacia freyi GOECKE, 1940

**Nomen nudum**: "*Donacia alpina* APFELBECK in litt." is a nomen nudum referring to *D. freyi* (GOECKE 1941).

All specimens of *D. freyi* examined so far (MSNV, NHMB, SDEI, SMF) were collected in August/September 1918. Some of these specimens were labelled "*Donacia alpina* Apflb." by Viktor Apfelbeck (1859–1934), former curator of entomology at the National Museum of Bosnia and Herzegovina, Sarajevo.

**Distribution**: So far, this species is known only from Albania (Prokletije Mountains, also called North Albanian Alps).

# Donacia frontalis JACOBY, 1893

#### Additional records:

CHINA (CHONGQING): CHEN et al. (2010); CHINA (HONG KONG): Hong Kong, 10.V.1926, 1 ç (EIHU) (HAYASHI & HARUSAWA 2000); CHINA (HUBEI): LEI & ZHOU (1998); CHINA (SHANXI): HAYASHI & HARUSAWA (2000).

JAPAN: Honshu, Hyogo Prefecture (HAYASHI & HARUSAWA 2000).

### Distribution: Eastern China, Japan.

The type locality "Wusong" (formerly: "Woosong") now belongs to Shanghai, which was once part of Jiangsu, where this species also occurs.

"HEI" (China: Heilongjiang) has to be deleted. The records are very likely based on misidentification of *D. knipowitschi* JACOBSON, 1927. Heilongjiang is quite far from the other locations of *D. frontalis* and the morphological characters of these two species are very similar (HAYASHI & LEE 2007).

# Donacia fukiensis GOECKE, 1944

**Taxonomy**: In CPC2010, *Donacia fukiensis* was listed as a synonym of *D. clavareaui*, but it has been re-established as a valid species by CONG & YU (1997). For more details, see above, under *D. clavareaui*.

**Distribution**: China (Fujian). All specimens examined from locations outside Fujian belong to *D. clavareaui* (GEISER 2019).

### Donacia galaica BÁGUENA, 1959

# Additional record:

PORTUGAL: "Lusitan." [Lusitania, an old name for Portugal] [no further data], 4 exs., coll. Fry (BMNH no 1905-100), det. E. Geiser 2019 (BMNH); "Portugal", VII.1970, VII.1971, [no further data], Museu Nacional de História Natural e da Ciência, Universidade de Lisboa, Portugal, Datasource: GBIF [29.III.2021].

Distribution: Western Iberian Peninsula (Portugal and Spain north of Portugal).

#### Donacia gracilicornis JACOBSON, 1899

#### Additional record:

SYRIA (first record): 3 km south of Tartous, 19.V.1952, 4 exs., leg. E. Schmidt, det. H. Goecke 1953, t. E. Geiser 2018 (SDEI: 1 ex., NHMB (coll. G. Frey): 3 exs.).

Distribution: Western Asia: Georgia, Iran, Turkmenistan, Syria.

# Donacia impressa PAYKULL, 1798

impressa PAYKULL, 1798: 193

**Original description (date)**: *Donacia impressa* was published in 1798 (not 1799) according to BOUSQUET (2016).

#### Additional records:

GREECE (first record): Lake Stymfalia, 37°51'5"N 22°26'40"E, 600 m, 5.V.2012, 2 exs., leg. A. Link, det E. Geiser 2016, coll. A. Link, Haid bei Ansfelden, Austria.
SERBIA: GAVRILOVIĆ & ĆURČIĆ (2011).
IPANI: Kubrilovih va Pover Abmed Province, Verni 20°30'N 51°36'E, 1850 m, 10 V 2011, 2 eve. (SAMD) 2018).

IRAN: Kuhgiloyeh ve Boyer-Ahmad Province, Yasuj, 30°39'N 51°36'E, 1850 m, 10.V.2011, 3 exs. (SAMIN 2018).

Distribution: Wide-spread in the Palaearctic Region: North Africa, Europe to East Siberia.

# Donacia japana Chûjô & GOECKE, 1956

# Distribution: Japan.

According to CPC2010, this species is distributed in Japan, China and North Korea. But the records from China and North Korea were based on incorrectly identified specimens of *Donacia aquatica* (see HAYASHI 2020).

# Donacia knipowitschi JACOBSON, 1927

# Additional record:

CHINA (HEILONGJIANG): Harbin, 16.–29.VI.1953, 8 exs., [leg.] N. Kardakoff, det. E. Geiser 2019, coll. G. Frey (NHMB).

Distribution: China, Russian Far East.

# Donacia lenzi SCHÖNFELDT, 1888

**Taxonomy**: Donacia "aeraria BALY, 1873: 69 [HN]" was listed as a homonym of *D. aeraria* BALY, 1865 and as a synonym of *D. lenzi* in CPC2010. In fact, "*D. aeraria* BALY, 1873" is not based on a valid description. BALY (1873: 69) just provided a very short faunistic note about his "Donacia æraria" and even provided a reference to the original description (BALY 1865: 7). Therefore, "aeraria BALY, 1873: 69 [HN]" must be deleted.

*Donacia aeraria* BALY, 1865 was synonymized with *D. delesserti* GUÉRIN-MÉNEVILLE, 1844 by GOECKE (1934: 229). The latter occurs only in the Oriental Region.

#### Donacia lungtanensis HAYASHI & LEE, 2009

This species is a new addition to CPC2022.

Distribution: Taiwan.

#### Donacia malinovskyi AHRENS, 1810

ararensis THIERRIAT, 1943: 22 (var.) [IN] arundinis AHRENS, 1810: 41 caroli THIERRIAT, 1943: 22 (var.) [IN] ladonensis THIERRIAT, 1943: 22 (var.) [IN] mequignoni THIERRIAT, 1943: 22 (var.) [IN]

**Taxonomy**: *Donacia malinovskyi* is highly variable in its dorsal colouration, on the basis of which four varieties (see above) were described by THIERRIAT (1943).

Furthermore, due to the variable colouration, the taxonomic history of this species is rather complicated. AHRENS (1810) described the green metallic form as *D. malinovskyi* and considered it similar to *D. clavipes*. Two pages later, the same author described the brown form as a different species named *D. arundinis*, which he considered similar to *D. micans*, now a synonym of *D. crassipes*. Both "species" were synonymized with *D. fennica* by WEISE (1881) but JACOBSOHN (1892) separated *D. fennica* from the brown colour form "arundinis" of *D. malinovskyi*.

#### Additional records:

AUSTRIA: GEISER (2018).

- BOSNIA and HERZEGOVINA (first record): Bosnia m.[eridionalis; southern Bosnia], [no further data], 1 ex., *Donacia malinovskyi* forma *arundinis* det. E. Geiser 2020 (SNMC).
- FINLAND (first record): Finland [no further data], 1 ex., Donacia malinovskyi forma arundinis det. H. Goecke, t. E. Geiser 2019, coll. G. Frey (NHMB); Finland [no further data], 1 ex., Donacia malinovskyi forma arundinis det. E. Geiser 2019 (MSNV); Finland [no further data], 3 exs., Donacia malinovskyi forma arundinis det. E. Geiser 2019, coll. C. Stock (SMF).
- SWITZERLAND: Canton of Vaud, Nyon, without date, 3 exs., leg. G. Schneider, det. R. Mlejnek (NHMB) (BEZDĚK & MLEJNEK 2016).

Distribution: Europe, from France to European Russia and southwards to 45° latitude.

"SP" (Spain) must be deleted from the country list, because there is no evidence that *Donacia* malinovskyi occurs in southern Europe. It should be pointed out, that the green morph of *D. malinovskyi* resembles *D. dentata*, which actually does occur in Spain, and thus may have been the source of the misidentification.

# Donacia marginata HOPPE, 1795

*australis* JACOBSOHN, 1892: 428 (var.) *limbata* PANZER, 1795: 12 *vittata* PANZER, 1795: 11 [HN] **Original description (date)**: According to ALONSO-ZARAZAGA & EVENHUIS (2017), the descriptions of *Donacia limbata* and *D. vittata* were published on 26<sup>th</sup> April 1795 (not in 1796). The description of *D. marginata* was probably published on 8<sup>th</sup> May 1795 (ENGELMANN 1846), and therefore, *D. limbata* would be the older name, but further studies on the exact publication date of *D. marginata* are necessary.

The name *D. marginata* has been used for this common and widely distributed species since 1900 in many publications. Although very rarely, the name *D. limbata* has also been used as a valid name after 1900 (e.g., JOHNSON & HALBERT 1902), and therefore, *D. limbata* cannot be regarded as nomen oblitum (ICZN 1999: Art. 23.9.2). If it is found that *D. limbata* is in fact the older name, the case should be referred to the ICZN in order to preserve the frequently used name *D. marginata*.

**Nomen nudum**: "Donacia trojana REITTER" is a nomen nudum, which was mentioned by EVERTS (1910, 1911). Specimens labelled "Donacia trojana REITTER" can be found in various museum collections. The description of *D. limbata* var. *australis* from Greece and Russia (North Caucasus) was based on such specimens.

#### Additional records:

BOSNIA and HERZEGOVINA: MOHR (1966b); "Bosnien", 1 ex., [leg.] E. Reitter & H. Leder, det. E. Geiser 2019, ex coll. C. Bosch (SMF); Bosnia, Ilidža, 1 ex., [leg.] Horvath, det. E. Geiser 2020 (HNHM).

SERBIA: MOHR (1966b); GAVRILOVIĆ & ĆURČIĆ (2011).

- RUSSIA (EAST SIBERIA): Krasnoyarsk Krai, Krasnoyarsk, Akademgorodok, Yenisey riverbank, 6.VI.2000, leg. et coll. E. Akulov, Krasnoyarsk, Russia; Krasnoyarsk Krai, Sukhobuzimsky District, Lake Bartat, 22.VI.2013, leg. et coll. E. Akulov, Krasnoyarsk, Russia (GUSKOVA & AKULOV 2016).
- KYRGYZSTAN (first record): "Semiritschje [Semirechye Oblast], Przewalsk [Przhevalsk, today: Karakol, Yssyk-Kul Region]", 1 ex., [ex coll.] E. Bodemeyer, det. E. Geiser 2019 (MSNV); same locality data, 4 exs., [ex coll.] E. Bodemeyer, det. E. Geiser 2019, ex coll. C. Bosch (SMF); "Przewalsk" [Karakol], 50 exs., det. E. Geiser 2019, ex coll. C. Bosch (SMF); "Przewalsk" [Karakol], 50 exs., det. E. Geiser 2019, ex coll. C. Bosch (SMF). Karakol was named Przevalsk in 1889–1920 and later again from 1939–1991. The specimens were obviously collected during one of the expeditions financed and analysed (from 1906 onwards) by August Rudolf Eduard von Bodemeyer (1854–1918) (see BODEMEYER 1928); his collection was eventually purchased by Carl Bosch (1874–1940), German engineer, Nobel Laureate in Chemistry, and ardent collector of insects and minerals.

Distribution: West Palaearctic Region, Central Asia, West and East Siberia.

# Donacia obscura Gyllenhal, 1813

#### Additional records:

LUXEMBOURG: FAGOT (2019).

RUSSIA (SOUTH SIBERIA): Kuznetsk Alatau: the southern part of the western macroslope (Skalistye Gory Range) and Kuznetsk Alatau Nature Reserve (GUS'KOVA et al. 2018).

KAZAKHSTAN: BIEŃKOWSKI (2014).

Distribution: Large parts of the northern West Palaearctic as well as West and South Siberia.

# Donacia ochroleuca WEISE, 1912

# Additional records:

- RUSSIA (SOUTH SIBERIA) (first record): Barnaul, "West-Sibirien, ex Orig. Smlg. J. Breit, Wien" [western Siberia, original collection of J. Breit, Vienna, Austria], 1 ex., det. E. Geiser 2019, coll. G. Frey (NHMB); Barnaul, Sibir. occ. [western Siberia], ex orig. Smlg. [original collection] J. Breit, Vienna, Austria, 1 ex., det. H. Kippenberg 2013, t. E. Geiser 2019, coll. G. Frey (NHMB).
- RUSSIA (EAST SIBERIA): Tschita [Chita] (GOECKE 1960). The material was likely collected by Hermann Frieb, who was a prisoner-of-war in Chita (until 1920), where he collected a lot of beetles, which he sent by mail to his family in Salzburg, Austria (GEISER 1991).

**Distribution**: From South Siberia to the Russian Far East.

In CPC2010, "CH" (China), without further details, was listed in the distribution. So far, neither specimens in museum collections nor any published record with precise Chinese locality data could be found. This species was not listed for China in the comprehensive works of GRESSITT & KIMOTO (1961), HUA (2002) and KONSTANTINOV (2003). However, since this species occurs in the Russian Ussuri and Amur regions, its occurrence in Heilongjiang or Jilin seems biogeographically plausible.

# Donacia polita KUNZE, 1818

**Nomina nuda**: In the HNHM (coll. Frivaldszky), there are three specimens from the "Balkan" identified as "*Donacia elegans* DAHL [F. Dahl (1856–1929), zoologist from Berlin, Germany]". "*Donacia elegans*" is a nomen nudum. These specimens clearly belong to *D. polita*.

In the SNMC (coll. J. Roubal, ex coll. O. Leonhard), there are two specimens from Greece (Zante [Zakynthos], Kalamaki, 1909, leg. M. Hilf) labelled "*Donacia polita* var. graecorinsularis DAN." (nomen nudum). The abbreviation "Dan." may refer to Karl Daniel (1862–1930), a chemist from Munich, who published a lot about beetles. These specimens clearly belong to *D. polita*.

# Additional records:

FRANCE: Region Nouvelle-Aquitaine, Department Gironde (BORDY et al. 2012).

MONTENEGRO (first record): Lake Skutari, 13.V.1980, 90 exs., leg. H. Hebauer, det. et coll. K. Witzgall, t. E. Geiser 2018 (ZSM).

SERBIA: GAVRILOVIĆ & ĆURČIĆ (2011); "Serbia" [no additional data], 1 ex., det. E. Geiser 2019, coll. B. Schwarzer (SMF).

TURKEY: EKIZ et al. (2020).

Distribution: From Spain and Morocco to Turkey.

"HU" (Hungary) must be deleted. It occurs in Croatia, which partially belonged to Hungary until 1918. KASZAB (1962) listed this species only for Croatia and not for Hungary. Furthermore, in 2020, the first author screened the collection of the HNHM, where only specimens from Croatia but no specimens from Hungary were found.

# Donacia provostii FAIRMAIRE, 1885

Additional record:

NORTH KOREA: CHO & AN (2020).

**Distribution**: East Asia, from the Russian Far East to Japan and Korea, widely distributed in China and in the Oriental Region east of 100° longitude.

# Donacia recticollis JACOBY, 1893

Distribution: Oriental Region (northeastern India) and Nepal.

This species was subsequently added to the list of Palaearctic species by LÖBL & SMETANA (2013: 42) based on five specimens from Nepal (Lake Phewa near Pokhara, 800 m), already recorded by MEDVEDEV & SPRECHER-UEBERSAX (1999).

Three of these specimens were traced by the first author: 1 ex., 9.X.1992, leg. J. Weipert, det. L. Medvedev, ex coll. Medvedev (ZISP); 2 exs., 10.X.1992, leg. A. Weigel, det. E. Geiser 2021, coll. A. Weigel (Wernburg, Germany).

This is the only Donacia species known so far from Nepal.

# Donacia reticulata GYLLENHAL, 1817

appendiculata AHRENS, 1810: 34 [HN] coeruleans SHAVROV, 1948: 50 (ab.) [IN]

**Taxonomy**: SHAVROV (1948) described *Donacia appendiculata* ab. *coeruleans* based on specimens labelled "*D. appendiculata* ab. *coeruleans* Reitter", which was a nomen nudum until 1948.

# Additional record:

SWITZERLAND: Canton of Bern, Wengimoos, 22.VII.1990, 1 q, leg. W. Gfeller, det. R. Mlejnek, coll. J. Voříšek, Jirkov, Czechia (BEZDĚK & MLEJNEK 2016). – The depository of this specimen is currently unknown; Jiří Voříšek died in 2019, and his collection was bought by the BMNH (J. Bezděk, pers. comm. 2021); however, according to M. Geiser (pers. comm. 2021) this specimen is not in the BMNH; it was probably sold or exchanged before Voříšek's death.

Distribution: Central and southern Europe and North Africa, west of 20° longitude.

"PL" (Poland) must be deleted; no reliable record is known despite of thorough faunistic research on the Polish Donaciinae for decades (BEZDĚK & MLEJNEK 2016).

# Donacia semicuprea PANZER, 1795

semicuprea PANZER, 1795: 14 melanocephala MARSHAM, 1802: 348 (Leptura) syn.n.

**Original description (date)**: According to ALONSO-ZARAZAGA & EVENHUIS (2017), *D. semi-cuprea* was described on 26<sup>th</sup> April 1795 (not in 1796).

**Taxonomy:** In CPC2010, *Donacia melanocephala* was listed as a synonym of *D. dentata*. Recently, the first author examined the holotype of *D. melanocephala* (BMNH, coll. J.F. Stephens) and identified it as *D. semicuprea*. Furthermore, the original description agrees exactly with *D. semicuprea* and not with *D. dentata*.

# Additional records:

BOSNIA and HERZEGOVINA: MOHR (1966b). SERBIA: MOHR (1966b); GAVRILOVIĆ & ĆURČIĆ (2011). GEORGIA: BIEŃKOWSKI (2014).

Distribution: Widely distributed in the Palaearctic Region, from Europe to East Siberia.

# Donacia simplex FABRICIUS, 1775

# Additional records:

SERBIA: MOHR (1966b); GAVRILOVIĆ & ĆURČIĆ (2011).

IRAN: Guilan Province, Talesh, 37°48'N 48°54'E, 145 m, VII.2009, 1 ♂, leg. et det. E. Aslan et H. Ghahari, coll. B. Gruev, Plovdiv, Bulgaria (ASLAN & GHAHARI 2017); "Persien" [Iran], Elburs-Gebirge [Elburs Mountains], 1 ex., [ex coll.] E. Reitter, det. H. Goecke 1956, t. E. Geiser 2019 (SMF).

SOUTH KOREA: CHO & AN (2020).

SYRIA (first record): Anti-Lebanon Mountains, Zebdani [Az-Zabadani (or Al-Zabadani), Rif Dimashq Governorate], V.1931, 36 exs., [leg.] H. Kulzer, ex coll. C. Bosch, det. E. Geiser 2019 (SMF). – Hans Kulzer (1889–1975) was a coleopterologist from Munich. In 1931, he made collecting trips to Syria and Lebanon by order of C. Bosch (for details about Carl Bosch, see above, under *D. marginata*).

Distribution: Palaearctic Region.

### Donacia sparganii gracilipes JACOBY, 1885

tschitscherini SEMENOV, 1895a: 141

**Original description**: *Donacia tschitscherini* was described by SEMENOV (1895a: 141) and not by SEMENOV (1895b: 191).

**Taxonomy**: *Donacia gracilipes* is regarded as a valid species by some authors (e.g., BIEŃKOWSKI 2014), others treat it as a subspecies of *D. sparganii* (e.g., HAYASHI 2020).

There are good arguments for both opinions, but it is not intended to change the status in CPC2022, where *D. gracilipes* will still be treated as a subspecies.

Distribution: Northeastern Palaearctic Region.

### Donacia sparganii sparganii AHRENS, 1810

**Nomen nudum**: In the HNHM, there are two specimens from "Britannia" labelled: "*Donacia hederae* Chapuis". One of these specimens belongs to *D. sparganii*, the other one to *D. versi-colorea*. Both occur in Great Britain. The name "*D. hederae*" could not be found in any publication so far.

#### Additional records:

AUSTRIA: GEISER (2001).

UKRAINE: Markovychi, 4.V.1898 and 24.VI.1903, data file of M. Orlova-Bienkowskaja [ChryFaun]; Wolodymyr-Wolynskyj, 20.VII.1904, data file of M. Orlova-Bienkowskaja [ChryFaun].

**Distribution**: From Europe to West Siberia between 45° and 60° latitude.

"HU" (Hungary) must be deleted from the country list. KASZAB (1962) recorded *Donacia sparganii* from the Carpathian Mountains but not from present-day Hungary. Furthermore, in 2020, the collection of the HNHM was screened by the first author, who found no specimens from Hungary.

# Donacia splendens hiurai KIMOTO, 1983

Distribution: Japan (Honshu).

# Donacia splendens splendens JACOBSOHN, 1894

**Distribution**: Mongolia, Russia (from the Yenissei River eastwards to the Pacific coast), Japan (Hokkaido).

HAYASHI (2020) has recently examined about 180 specimens of both subspecies. He found *D. s. hiurai* only in Honshu, whereas in Hokkaido only the nominotypical subspecies was found.

"WS" (Russia: West Siberia) must be deleted. There is no evidence that *D. splendens* occurs there. Its confirmed distribution agrees very well with "East Siberia" as defined in CPC2022.

# Donacia springeri Müller, 1916

Additional records: CZECHIA: BEZDĚK & MLEJNEK (2016). LATVIA: TELNOV et al. (2011).

**Distribution**: Central Europe, including northern Italy and French Alps. Also recorded from Latvia and southern Sweden. Detailed records for the countries listed in CPC2022 were published by BROJER et al. (2014).

#### Donacia thalassina GERMAR, 1811

**Distribution**: This species has a very large distribution area, which covers almost the whole Palaearctic Region; it does not, for instance, occur in North Africa and Japan. There are two recognized subspecies, a western and an eastern one. According to GUS'KOVA (2017) both subspecies occur in Mongolia, which needs to be confirmed.

### Donacia thalassina intermedia JACOBSON, 1899

coerulea JACOBSON, 1901: 105 (var.) [IN] *rufovariegata* JACOBSON, 1901: 105 (ssp.) *semenovi* JACOBSON, 1907: 5

**Nomenclature**: *Donacia thalassina rufovariegata* var. *coerulea* was described as a variety (blue-purple colour variation) of a subspecies, and therefore it is automatically unavailable according to ICZN (1999: Art. 45.6).

**Original spelling**: *Donacia semenovi* is to be regarded as correct original spelling according to ICZN (1999: Art. 32). The name "*semenowi*", as it was printed in CPC2010, is an incorrect subsequent spelling. This mistake has already been corrected by LÖBL & SMETANA (2011: 45).

Distribution: East Palaearctic.

"JA" (Japan) must be deleted. HAYASHI (2020) found no evidence for the occurrence of *Donacia thalassina* in Japan.

"XIN" (China: Xinjiang) must be deleted. The records from Xinjiang in fact refer to *Donacia thalassina thalassina* (see below).

# Donacia thalassina thalassina GERMAR, 1811

#### Additional records:

BOSNIA and HERZEGOVINA: MOHR (1966b).

CROATIA: Ludbreg [near Varaždin], ex coll. V. Apfelbeck [†1934], 1 ex., det. Z. Kaszab 1962, t. E. Geiser 2020 (HNHM).

GREECE: Macedonia, Salonica Galiko [Thessaloniki, Gallikos River], [leg.] J. Waterston, 26.IV.1918, 3 exs. (BMNH no 1934-312), det. K.G. Blair, t. E. Geiser 2019 (BMNH); Mikron, Tsiachmati near Pharsalos [Farsala], 26.IV.–4.V.1941, 1 ex., leg. F. Schubert, ex coll. F. Schubert, det. E. Geiser 2020 (NHMW).

SERBIA: MOHR (1966b); GAVRILOVIĆ & ĆURČIĆ (2011).

CHINA (XINJIANG): Kuldscha [Ghulja, in Chinese: Yining Shi], Juldus [Yuldus Basin], 3 exs., D. thalassina thalassina, ex coll. E. Reitter, det. E. Geiser 2020 (HNHM).

IRAN: Guilan Province, Astara, ca. -20 m, 38°20'N 48°46'E, IX. 2012, 1 ex. (GHAHARI & JEDRYCZKOWSKI 2016); Ahar (East Azarbaijan Province), 38°18'N 47°4'E, 1365 m, 9.VII.2009, 3 exs. (SAMIN 2018).

# Distribution: Ireland to Mongolia.

"ES" (Russia: East Siberia) must be deleted. The record derives from a misinterpretation of specimens, which were identified as *Donacia thalassina* without specification of the subspecies. In fact, these specimens refer to *D. t. intermedia.* There is no evidence for the occurrence of *D. t. thalassina* in East Siberia (BIEŃKOWSKI 2014).

#### Donacia tomentosa AHRENS, 1810

# Additional records:

AUSTRIA: GEISER (2018). CRIMEA (first record): Crimea, Sevastopol, 1 ex., det. J. Roubal, t. E. Geiser 2020, ex coll. J. Roubal (SNMC).

- CROATIA (first record): Cres, Merag Pond, Sveti Vid, 25.V.2006, 2 ♀♀, leg. A. Link, det. E. Geiser 2016 (NHMW); Ludbreg, [leg.] V. Apfelbeck, 6 exs., ex coll. V. Apfelbeck, det. Z. Kaszab 1962, t. E. Geiser 2020 (HNHM); Dalmatia, VI.1937, 8 exs., det. E. Geiser 2020 (SNMC).
- GREECE (first record): Peloponnes, Karteri, Lake Stimfalia, 37°50'35"N 22°26'52"E, 25.VI.2003, 3 ♂♂, 2 ♀♀, swept from the lake margin, leg. D. Mann, det. E. Geiser 2015 (OUMNH).
- IRAN: Guilan Province, Fooman, 37°7'48"N 49°11'24"E, ca. 30 m, IX.2012, 1 J, 1 g, leg. E. Aslan & H. Ghahari, det. et coll. B. Gruev, Plovdiv, Bulgaria (ASLAN & GHAHARI 2017); Borujerd (Lorestan Province), 33°30'N 48°30'E, 1590 m, 11.VIII.2013, 4 exs., leg. N. Samin, det. B. Gruev (SAMIN 2018).
- ISRAEL (first record): Palestine, nr. [near] "Jerisheh", ca. 4–7 m, NE of Jaffa, 26.IV.1918, 4 exs., [det.? coll.?] S.L. Partbury 1969, det. E. Geiser 2019 (BMNH). Jarisha (also Jerisha or Jerisheh) is a Palestinian Arab village located near the ancient site of Tell Jarisha (Tel Gerisa) on the south bank of Al-Awja (= Yarkon) River.

Distribution: From France to Central Asia and West Siberia.

#### Donacia transversicollis FAIRMAIRE, 1887

*transversicollis* FAIMAIRE, 1887: 135 *tuberfrons* GOECKE, 1934: 221

**Original description**: The original description of this species has been incorrectly cited in CPC2010: "*transversicollis* Fairmaire, 1887c: 315". It was actually described in the "Annales de la Société Entomologique de Belgique" (see FAIRMAIRE 1887a in the references below) and not in the "Revue d'Entomologie" (see FAIRMAIRE 1887b in the references below). The page number was also wrong. Thus, the correct citation in CPC2010 should be: "*transversicollis* Fairmaire, 1887a (not c): 135 (not 315)".

**Original spelling**: In CPC2010, the name *tuberfrons* was incorrectly spelled as "*tuberifrons*". Without any doubt, *tuberfrons* is to be regarded as correct original spelling. GOECKE (1934) did not make a grammatical mistake nor was there an inadvertent error or a copyist's or printer's error. Goecke always used the spelling "*tuberfrons*" in his later publications and on all his identification labels.

However, VOISIN (2011: 349) stated that the name "*tuberifrons*" is an unjustified emendation ("émendation injustifiée") (ICZN 1999: Art. 33.2), probably because he thought that SILFVERBERG (2010) intentionally added an "i" as connecting vowel. This is definitely not the case, because SILFVERBERG (2010) did not announce the change of the name in the catalogue chapter "New nomenclatorial and taxonomic acts, and comments". Therefore, "*tuberifrons*" clearly is to be regarded as an incorrect subsequent spelling (ICZN 1999: Art. 33.3), because the change of the original spelling was not "demonstrably intentional".

Distribution: China (Sichuan and Yunnan).

#### Donacia ussuriensis MEDVEDEV, 1973

#### Additional record:

NORTH KOREA: CHO & AN (2020).

**Distribution**: Known only from the Russian Far East and from North Korea.

#### Donacia versicolorea (BRAHM, 1790)

suffriani WESTHOFF, 1882: 253 (var.)

**Original description (page number)**: *Donacia suffriani* has been described by WESTHOFF (1882: p. 253, not on p. 257). The page number has already been corrected by LÖBL & SMETANA (2013: 42).

#### Additional records:

LUXEMBOURG: FAGOT (2019).
SERBIA: MOHR (1966b); GAVRILOVIĆ & ĆURČIĆ (2011).
SLOVENIA: White Carniola, Veliki Nerajec, Nerajske luge, 9.IX.1999, leg. B. Drovenik, ex coll. B. Drovenik (PMSL) [ChryFaun].
RUSSIA (SOUTH SIBERIA): GUSKOVA et al. (2016).

Distribution: Northern part of the Palaearctic Region, from Ireland to the Pacific coast.

"ST" (Russia: South Territory) must be deleted. According to BIEŃKOWSKI (2014) and GUSKOVA et al. (2016), *D. versicolorea* does not occur in the southern part of European Russia.

# Donacia vulgaris ZSCHACH, 1788

issykensis JACOBSON, 1901: 105 (ssp.) syn.n.

**Taxonomy**: *Donacia vulgaris issykensis* was described by JACOBSON (1901) based on a specimen from Issyk-Kul (Kyrgyzstan). He listed the following differences to *Donacia v. vulgaris*: antennae and legs with larger yellow parts; punctures of pronotum more delicate; elytra with more regular punctures in the middle and in the basal part.

The first author studied more than 30 specimens from different countries of Central Asia stored in five museum collections, all labelled as "*D. vulgaris issykensis*" by different experts. These specimens were compared with specimens from Europe and various parts of Asia. The characters mentioned by JACOBSON (1901) can be found in specimens throughout the distribution area. Obviously, specimens from Central Asia do not deserve subspecific separation (see also GOECKE 1960, ASKEVOLD 1990, WARCHAŁOWSKI 2010, HAYASHI 2020).

#### Additional records:

SERBIA: MOHR (1966b); GAVRILOVIĆ & ĆURČIĆ (2011).

MONGOLIA: Mongolian Altai: 10 km E of Bulgan, 7.VII.2007, leg. et det. E. Gus'kova & R. Yakovlev, coll. E. Gus'kova, Barnaul, Russia (GUS'KOVA 2017); Bulgan, 9.VII.2007, leg. et det. E. Gus'kova & R. Yakovlev, coll. E. Gus'kova, Barnaul, Russia (GU'SKOVA 2017); Eastern Mongolia (BIEŃKOWSKI 2014).

Distribution: Europe and Palaearctic Asia including Japan.

#### Discussion

In CPC2010, 71 species and subspecies of the genus *Donacia* were listed. In CPC2022, the number of species/subspecies is reduced to 68, and the status of six taxa has changed; two former subspecies (*Donacia bicolora meridionalis* and *D. vulgaris issykensis*) and three former species (*Donacia kweilina*, *D. mediohirsuta*, and *D. jacobsoni*) are now regarded as synonyms, and one synonym (*D. fukiensis*) has been resurrected. Finally, one Palaearctic species (*D. lungtanensis*) was described in 2009 but was not yet listed in CPC2010.

In total, 122 additional records are listed herein. Some of these data have been published recently, and a few derive from previously overlooked publications; 20 new records for countries (or subordinate units) are published herein for the first time.

Museum collections are an important source for distribution data. 56 additional country records derive from the studies of museum specimens by the first author. The Hungarian Natural History Museum in Budapest yielded the majority of these new data (18 records, 32%). Additional museum records resulting from these studies have already been published recently (GEISER 2019, EKIZ et al. 2020). Furthermore, a lot of these museum specimens confirmed the occurrence of several species in various countries (or subunits). These records are not listed here, because these particular countries (or subunits) were already listed in CPC2010. However, some records

formerly considered as questionable or inaccurate, are now confirmed based on such museum specimens.

It has to be stressed that there are many more museum collections to be studied than just those listed above under "Material and methods", and the examination of some of the museums listed has not yet been completed.

There are only a few Donaciinae specialists active at present, and many museum specimens have not been examined for decades or even for more than 100 years. Unfortunately, museum visits for guest scientists were almost impossible between March 2020 and June 2021 due to COVID-19 restrictions. Therefore, new faunistic data can be expected in the foreseeable future as soon as the accessibility of museums will improve again.

#### Acknowledgements

First and foremost we would like to thank all museum curators who supported this work. Additionally, the following colleagues supported our study, especially during lockdown periods: Jan Bezděk (Brno, Czechia) has been always quick to help with literature and useful advice, Alexey Moseyko (ZISP) traced several holotypes of Jacobson and sent detailed photographs, Michael Theo Schmitt (Greifswald, Germany) provided faunistic data on *Donacia* stored in ChryFaun, and Helena Shaverdo (NHMW) decoded labels in Cyrillic handwriting.

For useful information, literature, discussion and/or practical support, thanks are due to: Ulf and Kathrin Arnold (Berlin, Germany), Vardan Asatryan (Yerevan, Armenia), Ingolf Askevold (Tallahassee, Florida, United States), Ron Beenen (Nieuwegein, Netherlands), Ali Nafiz Ekiz (Uşak, Turkey), Ali Gök (Isparta, Turkey), Johannes Frisch and Bernd Jaeger (Berlin, Germany), Fritz Gusenleitner and Martin Schwarz (Linz, Austria), Mats Jonsell and Håkan Ljungberg (Uppsala, Sweden), Horst Kippenberg (Herzogenaurach, Germany), Andreas Link (Ansfelden, Austria), Dmitry Telnov (London, United Kingdom), and Andreas Weigel (Wernburg, Germany).

Furthermore, the first author thanks Remigius Geiser junior (Vienna, Austria) for solving computer problems, Gloria Geiger (Salzburg, Austria) for her help with the translation of original descriptions in French, Irmgard Geiger (Salzburg, Austria) for the translation and explanation of Albanian locality names, Remigius Geiser senior (Salzburg, Austria) for the translation of the Latin original descriptions and for meticulous corrections and discussions.

Jan Bezděk (Brno, Czechia) deserves special recognition for the final review of the manuscript, and last, but not least, Max Barclay (BMNH) is thanked for the linguistic review of the manuscript.

Funding: The research in the SNMC was funded by the Operational Program of Research and Development and co-financed with the European Fund for Regional Development (EFRD) ITMS 26230120004: Building of Research and Development Infrastructure for investigation of genetic biodiversity of organisms and joining the IBOL initiative.

# References

- AHRENS, A. 1810: Beiträge zu einer Monographie der Rohrkäfer. Neue Schriften der Naturforschenden Gesellschaft zu Halle 1 (3): 9–48.
- ALONSO-ZARAZAGA, M.A. & EVENHUIS, N.L. 2017: Revised dating of Panzer's Faunae insectorum Germanicae initia. Deutschlands Insecten (1792–1810), based primarily on the Leipzig Book Fair Catalogs. – Sherbornia 4 (1): 1–8.

- ASKEVOLD, I. 1990: Reconstructed phylogeny and reclassification of the genera of Donaciinae (Coleoptera: Chrysomelidae). – Quaestiones Entomologicae 26 (4): 600–664.
- ASLAN, E.G. & GHAHARI, H. 2017: Contribution to the Chrysomelidae (Coleoptera) fauna of Guilan Province (Northern Iran) with new records. – Journal of the Entomological Research Society 19 (3): 85–94.
- BALY, J.S. 1865: Phytophaga Malayana. A revision of the phytophagous beetles of the Malay Archipelago, with descriptions of the new species collected by Mr. A.R. Wallace. – Transactions of the Entomological Society of London (3) 4: 1–76, pls. 1–5. [pp. 77–300 printed in 1867]
- BALY, J.S. 1873: Catalogue of the phytophagous Coleoptera of Japan, with descriptions of the species new to science. Transactions of the Entomological Society of London 1873: 69–99.
- BEZDĚK, J. 2018: Taxonomical changes, comments and new country records of West Palaearctic Chrysomelidae (Coleoptera) with special regards to Mediterranean species. – Caucasian Entomological Bulletin 14 (Suppl.): 17–27.
- BEZDĚK, J. & MLEJNEK, R. 2016: Icones Insectorum Europae centralis, Megalopodidae, Orsodacnidae, Chrysomelidae: Donaciinae, Criocerinae. – Folia Heyrovskyana, Series B 27: 1–63. [in Czech and English]
- BEZDĚK, J. & SEKERKA, L. (eds.) (in prep.): Catalogue of Palaearctic Coleoptera. Volume 6/2. Revised and updated Second Edition. Chrysomeloidea II (Megalopodidae, Orsodacnidae, Chrysomelidae). – Leiden: Brill.
- BIEŃKOWSKI, A.O. 2014: Leaf beetles reed beetles (Coleoptera: Chrysomelidae: Donaciinae). Livny: Izdatel' Mukhametov G.V., 380 pp. [in Russian] [the author's name is of Polish origin, and therefore it is here spelled as in Polish language and not transliterated from Cyrillic script]
- BODEMEYER, B. von 1928: Zum 10. Todestage: Eduard v. Bodemeyer. In Meißner, O. (ed.): Entomologische Chronik. Entomologische Zeitschrift 16: 197–198.
- BORDY, B., DOGUET, S. & DEBREUIL, M. 2012: Les Donaciinae de France (Coleoptera, Chrysomelidae). – Supplement Rutilans 1, 185 pp.
- BOROWIEC, L. 1989: Donacia brevitarsis Thomson, 1884 in Poland. Polskie Pismo Entomologiczne 58: 827–829.
- BOROWIEC, L. 1992: *Donacia brevitarsis* Thomson, 1884. Lectotype designation (Coleoptera, Chrysomelidae, Donacinae). – Genus 3 (1): 63–64.
- BOUSQUET, Y. 2016: Litteratura Coleopterologica (1758–1900): a guide to selected books related to the taxonomy of Coleoptera with publication dates and notes. – ZooKeys 583: 1–776. DOI: 10.3897/zookeys.583.7084
- BROJER, M., GEISER, E. & SCHUH, R. 2014: Bemerkenswerte K\u00e4ferfunde aus \u00f6sterreich (XX) (Coleoptera). Koleopterologische Rundschau 84: 359–364.
- CASTELNAU, [F.-L.] 1840: Histoire naturelle des insectes coléoptères. Vol. 2. Paris: P. Duménil, 563 + [1] pp., 38 pls.
- CHEN, B., LI, T. & HE, Z. 2010: Insects in Chongqing Municipality. Chongqing Science and Technology Press, 331 pp. [in Chinese]
- CHO, H.W. & AN, S.L. 2020: An annotated checklist of Leaf Beetles (Coleoptera: Chrysomelidae) of Korea, with comments and new records. Far Eastern Entomologist 404: 1–36.
- CONG, S. & YU, P. 1997: The identity and distribution of *Donacia fukiensis* Goecke with notes on three related species from China (Coleoptera: Chrysomelidae: Donaciinae). – Coleopterists Bulletin 51 (3): 203–207.
- EKIZ, A.N., GEISER, E., GÖK, A. & KAYA, Ö.D. 2020: Donaciinae (Coleoptera: Chrysomelidae) of Turkey: species list and new records. – Aquatic Insects 41 (3): 241–253.

- ENGELMANN, W. 1846: Bibliotheca historico-naturalis. Verzeichnis der Bücher über Naturgeschichte welche in Deutschland, Scandinavien, Holland, England, Frankreich, Italien und Spanien in den Jahren 1700–1846 erschienen sind. Erster Band. – Leipzig: Wilhelm Engelmann, viii + [1] + 786 pp.
- EVERTS, E. 1910: Bemerkungen zu dem neuen "Catalogus Coleopterorum Europae, Caucasi et Armeniae Rossicae". Auctoribus Dr. L. v. Heyden, E. Reitter, J. Weise, editio secunda 1906. (Col.). – Deutsche Entomologische Zeitschrift 1910: 527–540.
- EVERTS, E. 1911: Einige Ergänzungen zu den Bemerkungen zum neuen Catalogus Coleopterorum Europae, Caucasi et Armeniae Rossicae. (Col.). – Deutsche Entomologische Zeitschrift 1911: 422– 431.
- FAGOT, J. 2019: Entretiens sur les Chrysomelidae de Belgique et des régions limitrophes 7: Les Donaciinae de la faune belge (Coleoptera: Chrysomelidae), catalogue et atlas. – Entomologie faunistique 72: 45–69.
- FAIRMAIRE, L. 1887a: Coléoptères de l'intérieur de la Chine. Annales de la Société Entomologique de Belgique 31: 87–136.
- FAIRMAIRE, L. 1887b: Notes sur les coléoptères des environs de Pékin (1<sup>re</sup> partie). Revue d'Entomologie 6: 312–335.
- GAVRILOVIĆ, B.D. & ĆURČIĆ, S.B. 2011: Diversity of species of the family Chrysomelidae (Insecta, Coleoptera) in Serbia, with an overview of previous researches. – Acta Zoologica Bulgarica 63 (3): 231–244.
- GEISER, E. 1991: Beiträge zur Geschichte der naturwissenschaftlichen Forschung in Salzburge. 3. Der Salzburger Käferforscher Hermann Frieb. – Mitteilungen der Gesellschaft für Salzburger Landeskunde 131: 363–371.
- GEISER, E. 2001: Die Käfer des Landes Salzburg. Faunistische Bestandserfassung und tiergeographische Interpretation. Monographs on Coleoptera 2: 1–706.
- GEISER, E. 2016: Additions to the checklist of the Chrysomelidae of Austria (Coleoptera: Chrysomelidae). Koleopterologische Rundschau 86: 229–230.
- GEISER, E. 2018: Additions to the Checklist of the Chrysomelidae (excluding Bruchinae) of Austria (II) (Coleoptera: Chrysomelidae). Koleopterologische Rundschau 88: 211–215.
- GEISER, E. 2019: To be or not to be a synonym revision of the *Donacia clavareaui-fukiensis* complex (Coleoptera, Chrysomelidae, Donaciinae). – In Schmitt, M., Chaboo, C.S. & Biondi, M. (eds.): Research on Chrysomelidae 8. – ZooKeys 856: 27–50. DOI: 10.3897/zookeys.856.32388
- GEISER, E. (in prep.): Donaciinae. In Bezděk, J. & Sekerka, L. (eds.): Catalogue of Palaearctic Coleoptera. Volume 6/2. Revised and updated Second Edition. Chrysomeloidea II (Megalopodidae, Orsodacnidae, Chrysomelidae). – Leiden: Brill.
- GHAHARI, H. & JEDRYCZKOWSKI, W.B. 2016: Four species of the leaf beetles (Coleoptera: Chrysomelidae) new for the fauna of Iran. – Far Eastern Entomologist 327: 14–16.
- GOECKE, H. 1934: Revision asiatischer Donaciinen (Col. Chrys.). I. (3. Beitrag zur Kenntnis der Donaciinen). Die Untergattung *Cyphogaster* nov. subg. – Koleopterologische Rundschau 20 (6): 215– 230.
- GOECKE, H. 1941: 1374. Donacia freyi Goecke, alpina Apflb. i. l. In Ermisch, K. (ed.): Kleine coleopterologische Mitteilungen. – Entomologische Blätter 37 (1): 47.
- GOECKE, H. 1960: Monographie der Schilfkäfer. III. Die Gattungen und Arten der Donaciinae (Col. Chrys.) und ihre Verbreitung. 18. Beitrag zur Kenntnis der Donaciinae. – Entomologische Blätter 56 (1): 1–19.
- GRESSITT, J.L. & KIMOTO, S. 1961: The Chrysomelidae (Coleoptera) of China and Korea, Part 1. Pacific Insects Monograph 1 A: 1–299.

- GUS'KOVA, E.V. 2010: The Leaf-beetles (Coleoptera, Chrysomelidae) of the South Urals. Entomofauna 31 (14): 169–225.
- GUS'KOVA, E.V. 2017: Leaf-beetles (Coleoptera: Chrysomelidae) of the Mongolian Altai: subfamilies Donaciinae, Criocerinae, Eumolpinae and Galerucinae. Entomologist's Gazette 68: 23–36.
- GUSKOVA, E.V. & AKULOV, E.N. 2016: New records of *Donacia* Fabricius, 1775 (Coleoptera: Chrysomelidae: Donaciinae) from Krasnoyarskii Krai (Russia). – Biological Bulletin of Bogdan Chmelnitskiy Melitopol State Pedagogical University 6 (3): 248–249.
- GUS'KOVA, E.V., EFIMOV, D.A. & ATUCHIN, A.A. 2018: Leaf beetles (Coleoptera: Chrysomelidae) of the Kuznetsk-Salair Mountain Area (Russia, Siberia). Part One: Subfamilies Donaciinae, Criocerinae, Cassidinae and Chrysomelinae. – Entomologist's Gazette 69: 123–145.
- GUSKOVA, E.V., EFIMOV, D.A. & KORSHUNOV, V.A. 2016: New for the fauna of the Kemerovo Region (Russia, Siberia) leaf beetles (Coleoptera: Chrysomelidae). – Far Eastern Entomologist 307: 11– 16.
- HANSEN, M. 1998: Hydraenidae (Coleoptera). In Hansen, M. (ed.): World Catalogue of Insects, Vol. 1. – Stenstrup: Apollo Books, 168 pp.
- HAYASHI, M. 2020: Revision of extant and fossil Donaciinae (Coleoptera: Chrysomelidae) of Japan. Japanese Journal of Systematic Entomology, Supplementary Series 2: 61–160.
- HAYASHI, M. & HARUSAWA, K. 2000: Donacia frontalis Jacoby from Japan (Coleoptera, Chrysomelidae, Donaciinae). – Tokyo: Elytra 28: 203–209.
- HAYASHI, M. & LEE, C.-F. 2007: A new *Donacia* from Taiwan, with a new record of *Donacia frontalis* Jacoby (Coleoptera, Chrysomelidae, Donaciinae). – Tokyo: Elytra 35 (2): 551–557.
- HUA, L.-z. 2002: List of Chinese Insects. Vol. II. Guangzhou: Zhongshan University Press, 612 pp.
- ICZN, 1999: International Code of Zoological Nomenclature. Fourth edition. London: International Trust for Zoological Nomenclature, 306 pp.
- JACOBSOHN, G. [= JACOBSON] 1892: Analytische Übersicht der bekannten Donacia- und Plateumaris-Arten der alten Welt. – Horae Societatis Entomologicae Rossicae 26: 412–437.
- JACOBSOHN, G. [= JACOBSON] 1894: Materialia ad cognitionem faunae Chrysomelidarum provinciae Astrachanensis. – Horae Societatis Entomologicae Rossicae 28: 152-160.
- JACOBSON, G.G. 1901: Symbola ad cognitionem Chrysomelidarum Rossiae asiaticae. Öfversigt af Finska Vetenkaps-Societetens Förhandlingar B 43 [1900–1901]: 99–147.
- JACOBSON, G.G. 1905: Fasc. 1–3, pp. 1–240. In: Zhuki Rossii i zapadnoy Evropy. S.-Peterburg: A.F. Devrien, 1024 pp., lxxxiii pls. [in Russian]
- JACOBSON, G. 1907: Donacia semenovi, sp. nov. (Coleoptera, Chrysomelidae). Russkoe Entomologicheskoe Obozrenie VII: 5–6.
- JÄCH, M.A. 2005: Buchbesprechung. Koleopterologische Rundschau 75: 417-419.
- JÄCH, M.A., KODADA, J., BROJER, M., SHEPARD, W.D. & ČIAMPOR, F. 2016: Coleoptera: Elmidae and Protelmidae. – World Catalogue of Insects, Vol. 14. – Brill: Leiden, XXI + 318 pp.
- JOHNSON, W.F. & HALBERT, J.N. 1902: A list of the beetles of Ireland. Proceedings of the Royal Irish Academy 6 (3): 535–827.
- KASZAB, Z. 1962: Levélbogarak, Chrysomelidae. In: Magyarorzág Állatvilága, Fauna Hungariae. Budapest: Akadémiai Kiadó, 416 pp.
- KIPPENBERG, H. 1994: Chrysomelidae (excl. Alticinae). In Lohse, G.A. & Lucht, W. (eds.): Die K\u00e4fer Mitteleuropas, Vol. 14 (3) Supplementband. – Krefeld: Goecke & Evers, pp. 17–92.
- KIPPENBERG, H. 2010: Beitrag zur Kenntnis von Donacia delagrangei Pic und D. kraatzi Weise. Koleopterologische Rundschau 80: 183–188.

- KONSTANTINOV, A.S. 2003: Chrysomelidae. Aquatic leaf beetles of China (Coleoptera). In Jäch, M.A. & Ji, L. (eds.): Water Beetles of China 3: 563–572.
- KRAATZ, G. 1869: Ueber deutsche Donacien. Berliner Entomologische Zeitschrift 13: 263–272.
- LEI, C.L. & ZHOU, Z.B. (eds.) 1998: List of the insects of Hubei Province. Wuhan: Hubei Science and Technology Press, 650 pp. [in Chinese]
- LEWIS, C.T. & SHORT, C. 1975: A Latin Dictionary. London: Oxford University Press, xiv + 2019 pp.
- LJUNGBERG, H. 2016: Ny kunskap om biologi och förekomst hos tre dåligt kända bladbockar (Coleoptera, Chrysomelidae). [New information on the biology and occurrence of three poorly known reed beetles (Coleoptera, Chrysomelidae)]. Entomologisk Tidskrift 137 (3): 65–77.
- LJUNGBERG, H. 2017: Återfynd av bronsrörbock *Donacia antiqua* i Norrbotten (Coleoptera, Chrysomelidae). [Rediscovery of the reed beetle *Donacia antiqua* in northern Sweden]. – Entomologisk Tidskrift 138 (3–4): 161–166.
- LÖBL, I. & SMETANA, A. (eds.) 2010: Catalogue of Palaearctic Coleoptera. Volume 6. Chrysomeloidea. Stenstrup: Apollo Books, 924 pp.
- LÖBL, I. & SMETANA, A. (eds.) 2011: Catalogue of Palaearctic Coleoptera. Volume 7. Curculionoidea I. Stenstrup: Apollo Books, 373 pp.
- LÖBL, I. & SMETANA, A. (eds.) 2013: Catalogue of Palaearctic Coleoptera. Volume 8. Curculionoidea II. – Leiden: Brill, 700 pp.
- MEDVEDEV, L.N. & SPRECHER-UEBERSAX, E. 1999: Katalog der Chrysomelidae von Nepal. Entomologica Basiliensia 21: 261–354.
- MOHR, K.-H. 1966a: Chrysomelidae. In Freude, H., Harde, K.W. & Lohse, G.A. (eds.): Die K\u00e4fer Mitteleuropas, Vol. 9. – Krefeld: Goecke & Evers, pp. 95–280.
- MOHR, K.-H. 1966b: Ergebnisse der Albanien-Expedition 1961 des Deutschen Entomologischen Institutes, 47. Beitrag, Coleoptera: Chrysomelidae II. – Beiträge zur Entomologie 16: 347–380.
- MOSEYKO, A. 2015: Leaf Beetles (Coleoptera, Chrysomelidae) of Transnistria, pp. 36–73. Lecture in memoriam L.L. Popa, professor of Bioscience. – Tiraspol: Transnistrian State University.
- RAVIZZA, C. 1973: Relitti biotici di Donaciinae (Col. Chrysom.) nella degradazione ecologica di un piccolo bacino lacustre intermorenico lombardo. – Annali della Facoltà di scienze agrarie della Università degli studi di Torino 8: 283–296.
- REITTER, E. 1920: Bestimmungstabellen der europäischen Coleopteren. Heft 88: Chrysomelidae, 1.Teil: Tribus Donaciinae. – Wiener Entomologische Zeitung 38 (1–3): 21–43.
- RUFFO, S. 1964: Contributi alla conoscenza della distribuzione dei Coleotteri Crisomelidi nella regione appenninica. I. Orsodacnini, Donaciini, Criocerini. – Memorie del Museo Civico di Storia Naturale di Verona 12: 41–96.
- SAMIN, N. 2018: Nineteen new records of species of the family Chrysomelidae (Coleoptera: Chrysomeloidea) for the fauna of Iran. Acta Zoologica Bulgarica 70 (4): 459–464.
- SCHMITT, M., BÄSE, W., BEENEN, R., DROVENIK, B., FRITZLAR, F., GEISER, E., JÄCKEL, R., LANGER, M., MAUSER, J., RINGEL, H., SCHÖLLER, M. & SIEDE, D. 2014: Das Projekt ChryFaun – Faunistik der mitteleuropäischen Blatt- und Samenkäfer (Chrysomelidae s.l.). – Entomologische Blätter für Biologie und Systematik der Käfer 110: 33–38.
- SEMENOV, A. 1895a: Coleoptera asiatica nova. III. Horae Societatis Entomologicae Rossicae 29: 125– 144.
- SEMENOV, A. 1895b: Coleoptera asiatica nova. IV. Horae Societatis Entomologicae Rossicae 29 [1894– 1895]: 189–210.
- SEMENOV-TIAN-SHANSKIJ, A. & REICHARDT, A. 1927: De nova Donaciae specie e Transcaucasia (Coleoptera, Chrysomelidae). – Russkoe Entomologicheskoe Obozrenie 21: 218–219.

- SERGEEVA, E.V. & DEDYUKHIN, S.V. 2021: New records of leaf-beetles (Coleoptera, Chrysomelidae) from Tyumenskaya Oblast, Russia. – Euroasian Entomological Journal, 20 (1): 9–14. DOI: 10.15298/euroasentj.20.1.2
- SHAVROV, W.B. 1948: Novye formy i mestonakhozhdeniya donaciy (Coleoptera, Chrysomelidae, Subfam. Donaciinae) fauny SSSR. II. – Byulleten' Moskovskogo Obshchestva Ispytateley Prirody, Otdel biologicheskiy (N. S.) 53 (1): 49–52.
- SILFVERBERG, H. 1987: Mapping the Finnish Chrysomelidae I. Notulae entomologicae 67: 5-16.
- SILFVERBERG, H. 2010: Donaciinae, pp. 354–368. In Löbl, I. & Smetana, A. (eds.): Catalogue of Palaearctic Coleoptera. Vol. 6. Chrysomeloidea. – Stenstrup: Apollo Books, 924 pp.
- STANDFUSS, K. & KERZHNER, I.M. 2004: Publikationsdaten der "Trudy Russkogo Entomologicheskogo Obshchestva" und "Horae Societatis Entomologicae Rossicae", 1861–1932. – Entomofauna 25 (14): 237–248.
- TELNOV, D. 2004: Checklist of Latvian Beetles. Second Edition.– Riga: Entomological Society of Latvia, 113 pp.
- TELNOV, D., VILKS, K., PITERÄNS, U., KALNINS, M. & FÄGERSTRÖM, C. 2011: Contributions to the knowledge of Latvian Coleoptera 9. – Latvijas entomologs 50: 20–26.
- THIERRIAT, A. 1943: Donacia malinowskyi [sic!] Ahr. en France. Bulletin Scientifique de Bourgogne X (2): 17–22.
- VOISIN, J.F. 2011: Les types de Donaciinae des collections du Muséum national d'Histoire naturelle, Paris (Coleoptera, Chrysomelidae). – Bulletin de la Société entomologique de France 116 (3): 345–354.
- WARCHAŁOWSKI, A. 2010: The Palaearctic Chrysomelidae Identification Keys. Warszawa: Natura Optima Dux Foundation, 1212 pp.
- WEISE, J. 1881: Chrysomelidae. Lieferung 1, pp. 1–192. In: Naturgeschichte der Insekten Deutschlands. Erste Abteilung Coleoptera. Sechster Band [1893]. – Berlin: Nicolaische Verlags-Buchhandlung, xiv + 1161, 1 pl. [issued in parts].
- WEISE, J. 1886: Synonymische und andere kleine Mittheilungen über Chrysomeliden. Deutsche Entomologische Zeitschrift 30 (1): 249–250.
- WESTHOFF, F. 1882: Die K\u00e4fer Westfalens. Verhandlungen des naturhistorischen Vereins der preussischen Rheinlande und Westfalens 38. Supplement (II. Abtheilung): 141–323. [I. Abtheilung (pp. I–XXVIII, 1–140) was issued in 1881]
- WINKELMAN, J.K. & BEENEN, R. 2010: Chrysomelidae haantjes (excl. Bruchinae). In Vorst, O. (ed.): Catalogus van de Nederlandse kevers (Coleoptera). – Monografieën van de Nederlandse Entomologische Vereniging 11: 149–158.

Dr. Elisabeth GEISER Saint-Julien-Straβe 2/314, A – 5020 Salzburg, Austria (elisabeth.geiser@gmx.at)

Dr. Manfred A. JÄCH Naturhistorisches Museum Wien, Burgring 7, A – 1010 Wien, Austria (manfred.jaech@nhm-wien.ac.at)