

ON LATVIAN CHRYSOMELINAE (COLEOPTERA: CHRYSOMELIDAE): 4. GENUS *CHRYSOLINA* MOTSCHULSKY, 1860

Andris BUKEJS¹, Dmitry TELNOV²

¹Institute of Systematic Biology, Daugavpils University, Vienības 13, LV-5401 Daugavpils, Latvia. E-mail: carabidae@inbox.lv

²Stopiņu novads, Dārza iela 10, Dzidriņas LV-2130, Latvia. E-mail: telnov@parks.lv

Abstract. The current paper presents faunal, ecological and bibliographical information on the leaf-beetle genus *Chrysolina* Motschulsky, 1860 of Latvia. A total of 1,132 specimens were reviewed. The bibliographical analysis of Latvian *Chrysolina* was made for the first time. Three species, *Chrysolina rufa* (Duftschmid, 1825), *Ch. fuliginosa galii* (Weise, 1884) and *Ch. quadrigemina* (Suffrian, 1851) were excluded from the list of Latvian Coleoptera. The annotated list of 21 species of Latvian *Chrysolina* Motschulsky, 1860 is presented.

Key words: Coleoptera, Chrysomelidae, *Chrysolina*, Latvia, fauna, bibliography

INTRODUCTION

The current publication is a continuation of studies of the Latvian fauna of Chrysomelinae leaf-beetles (Bukejs 2009b, c, 2010; Bukejs & Telnov 2010).

The genus *Chrysolina* Motschulsky, 1860 comprises 469 species and 251 subspecies (Bieńkowski 2007). Most species are distributed in Europe, Asia and Africa. A small number of species inhabit North America (including the introduced European ones). Some species were introduced into Australia (Bieńkowski 2001). Forty nine species are known from Eastern Europe (Bieńkowski 2004).

The second edition of the check-list of Latvian beetles (Telnov 2004) comprised 22 species of *Chrysolina*, but three species [*Ch. chalcites* (Germar, 1824), *Ch. reitteri* (Weise, 1884) and *Ch. susterai* Bechyne, 1950] were removed from the list. The number of species of this genus reported from adjacent territories slightly differs: Belarus – 21 species (Lopatin & Nesterova 2005), Estonia – 19 species (Silfverberg 2004), Lithuania – 19 species (Pileckis & Monsevičius 1997; Tamutis, pers. comm.), St. Petersburg and the Leningrad region – 15 species (Romantsov 2007), the Kaliningrad region – 17 species (Alekseev 2003).

The first information on leaf-beetles of the genus *Chrysolina* in Latvia was published at the end of the 18th century in monographs about the nature of Livland (Fischer 1784, 1791). Subsequently, more than 35 works appeared. Faunal data on these leaf-beetles are also available in articles by the following authors: Müthel 1886, 1889; Danka and Stiprais 1972; Pūtele 1974, 1981a; Stiprais 1977; Barševskis 1988, 1993, 1996, 1997;

Rūtenberga 1992; Leiskina 1999, 2000; Telnov 2002; Barševskis *et al.* 2004; Telnov *et al.* 2006; Bukejs and Telnov 2007.

Imago and larvae of the genus *Chrysolina* feed on herbaceous plants (mostly on Labiatae, Compositae, Hypericaceae, rarely on Ranunculaceae, Poaceae, Fabaceae, Plantaginaceae, Rubiaceae, Scrophulariaceae, Polygonaceae etc.). Pupation takes place in soil. Some species are ovoviviparous. Hibernating stage is usually imago, rarely egg (Bieńkowski 2004; Dubeshko & Medvedev 1989).

The aim of the current work was to summarize data on the genus *Chrysolina* Motschulsky, 1860 in Latvia. Bibliographical information was compiled for the first time. Faunal data on 20 species and the annotated list of Latvian *Chrysolina* are presented. Altogether, 21 species of *Chrysolina* are reported from Latvia.

MATERIAL AND METHODS

A total of 1,132 specimens of *Chrysolina* were reviewed during the current investigation. The examined material is deposited in the collection of Daugavpils University Institute of Systematic Biology (DUBC, Daugavpils, LV), the collection of Latvian Natural History Museum (LDM, Rīga, LV), the collection of the Institute of Biology of Latvian University (LUBI, Salaspils, LV), Dmitry Telnov's (DTC, Rīga, LV), Andris Bukejs' (ABUC, Daugavpils, LV) and V. Pūtele's (Institute of Biology of Latvian University, Salaspils, LV)

private collections. The electronic database of the Entomological Society of Latvia (held by D. Telnov, Rīga, LV) was also made use of in this study.

The following identification keys were used for the identification of specimens: Bieńkowski 1999, 2004, 2007; Lopatin and Nesterova 2005; Mohr 1966; Warchałowski 2003. The systematics used follows that suggested by Silfverberg (2004), and the system of subgenera is after Bieńkowski (2001). The nomenclature and synonymy are after Bieńkowski (1998, 2001, 2007).

Host plants are included into the check-list based on Lopatin and Nesterova (2005). The general species distribution is given according to Bieńkowski (1999, 2004, 2007); Borowiec (2004); Hayashi *et al.* (1984); Lopatin (1977, 1986); Lopatin and Kulenova (1986); Lopatin and Nesterova (2005); Medvedev (1982, 1992); Medvedev and Dubeshko (1992) and Warchałowski (2003).

The classification of chorotypes follows the one suggested by Taglianti *et al.* (1999) except the Palaearctic-Oriental chorotype. The explanation of the chorotype codes used: ASE – Asiatic-European, CAE – Centralasiatic-European, CEM – Centralasiatic-Europeo-Mediterranean, CEU – Central-European, EUM – Europeo-Mediterranean, EUR – European, OLA – Holarctic, PAL – Palaearctic, PAO – Palaearctic-Oriental, SEU – South-European, SIE – Sibero-European, TUE – Turano-European.

The following information is provided for each species: scientific name and author, the published bibliographical sources for Latvia, faunal data (locality, collection date, number of collected specimens in parentheses, information on the habitat and the collector's name), host plants, phenology (Latvian data only; IV, VI, VII, VIII, IX, X – months from April to October; in parentheses – ten-day period), the general species distribution and the chorotype code.

Some species on the list are marked with a dash (-). These species were recorded for the Latvian fauna, but they seem not to occur in the Baltic region, and it is doubtful whether they have ever occurred in Latvia. These species are here-with excluded from the list of Latvian Coleoptera.

The explanation of the abbreviations used: d. – administrative district (the system of administrative districts used in Latvia from 1991 to 2009), ? d. – no district information is given on the label of this specimen but there are at least two places with this name in Latvia, env. – environs, Isl. – island, num. – numerous specimens (more than 10), syn. – synonym, vill. – village or little settlement, PNT – protected nature territory, C – Central, S – South, N – North, E – East, W – West.

The photographs were taken using a Zeiss Stereo Discovery V12 stereomicroscope and an AxioCam digital camera.

RESULTS AND DISCUSSION

The current research confirmed the occurrence of 20 species of *Chrysolina* in Latvia. One species, *Ch. aurichalcea* (Gebler, 1825), was not found and its presence in the Latvian fauna needs further confirmation.

Three species, *Chrysolina rufa* (Duftschmid, 1825), *Ch. fuliginosa galii* (Weise, 1884) and *Ch. quadrigemina* (Suffrian, 1851), were removed from the list of Latvian Coleoptera.

Ch. aurichalcea (Gebler, 1825), which was not included in previous catalogues of Latvian Coleoptera (Telnov *et al.* 1997; Telnov 2004), was reported for the Latvian fauna (Pūtele 1984).

Ulanowski (1883) reported *Chrysolina hemisphaerica* Germar, 1817 [*Chrysomela*] and *Ch. umbratilis* (Weise, 1887) [*Chrysomela olivacea* Suffr.] for Livonia [Inflant Polskich], which is the territory of E Latvia (Latgale) at present. *Ch. hemisphaerica* Germar, 1817 is generally distributed in the Alps, Sudetes, Carpathians and N Balkans, but *Ch. umbratilis* (Weise, 1887) is distributed in Romania, Croatia, Hungary and the Carpathians. Their occurrence in Latvia is doubtful, therefore these species are not included in the current list.

Two species, *Ch. chalcites* (Germar, 1824) and *Ch. susterai* Bechyne, 1950 were excluded from the previous check-list of Latvian Coleoptera (Telnov *et al.* 1997; Telnov 2004). The author of this paper reviewed two specimens of *Ch. chalcites* [without labels] and one specimen of *Ch. susterai* [syn. *Ch. morio* Krynicki, 1832 nec Fabricius, 1792; Slītere, 11 July 1981, leg. V. Pūtele] from the collection of the Institute of Biology of Latvian University. However, all these specimens turned out to have been misidentified and belong to *Ch. geminata*.

Ch. chalcites (Germar, 1824) is generally distributed in SE Europe (Apulia, Balkan Peninsula, the catchment basin of the Danube River, the S Ukraine, S Russia), the Caucasus, Asia Minor, Near East and Central Asia, but *Ch. susterai* Bechyne, 1950 is distributed in SE Europe (the catchment basin of the Danube River, Romania, the Ukraine, S Russia), the N Caucasus, Siria, Kazakhstan, Central Asia and Altai. Their presence in the Latvian fauna is doubtful, therefore these species are not included in the list presented.

Overall, the list of Latvian species of the genus *Chrysolina* Motschulsky, 1860 comprises 21 species.

The analysis of Latvian *Chrysolina* chorotypes shows that their range is rather wide: Holarctic – two species [*Ch. staphylaea* (L.), *Ch. marginata* (L.)]; Palaearctic-Oriental – one species [*Ch. aurichalcea* (Gebler)]; Palaearctic – one species [*Ch. sanguinolenta* (L.)]; Asiatic-European – two species [*Ch. graminis* (L.), *Ch. polita* (L.)]; Sibero-European – five species [*Ch. ce-*

realis (L.), *Ch. sturmi* (Westh.), *Ch. varians* (Schall.), *Ch. limbata* (F.), *Ch. fastuosa* (Scop.); Centralasiatic-European-Mediterranean – two species [*Ch. gypsophyllae* (Küst.), *Ch. hyperici* (Forst.)]; Centralasiatic-European – two species [*Ch. coerulans* (Scriba, 1791), *Ch. haemoptera* (L.)]; Turano-European – one species [*Ch. carnifex* (F.)]; Europeo-Mediterranean – two species [*Ch. analis* (L.), *Ch. americana* (L.)]; European – two species [*Ch. geminata* (Pk.), *Ch. oricalcia* (Müll.)]; Central-European – one species [*Ch. kuesteri* (Hell.)].

List of *Chrysolina* Motschulsky, 1860 of the Latvian fauna

Chrysomelidae Latreille, 1802

Chrysomelinae Latreille, 1802

Chrysolina Motschulsky, 1860

syn.: *Chrysomela* auct. nec Linnaeus, 1758

subgenus *Synerga* Weise, 1900

syn.: *Menthastrilla* Bechyne, 1950

(-) *Ch. herbacea* (Duftschmid, 1825)

syn.: *menthastri* (Suffrian, 1851); *fulminans* (Suffrian, 1851)

References: Ulanowski 1883 (*Chrysomela menthastri* Suffr.).

Host plants: *Mentha* (Labiatae).

General distribution: S, C and E Europe, Asia Minor, the Caucasus, Iran, Central Asia (Turkmenistan). [CAE]

Note: the species was not included in the current list. The occurrence of this species in Latvia needs further confirmation. The nearest known localities of this species are in S Belarus (Lopatin & Nesterova 2005).

Ch. coerulans (Scriba, 1791) (Fig. 17)

syn.: *violacea* Panzer, 1797 nec Goeze, 1777; *oblonga* (Duftschmid, 1825)

References: Seidlitz 1872–1875 (*Chrysomela violacea* Panz.), 1887–1891 (only as a potential species); Bukejs 2009a.

Examined material: seven specimens: Daugavpils d.: Ilgas, Silene Nature Park, 1991 (1, leg. A. Barševskis); Rīga: Rīga (6, coll. C. Müthel).

Host plants: *Mentha* (Labiatae).

Phenology: no data for Latvia.

General distribution: C and E Europe, the Caucasus, Asia Minor, Near East, Iran, Iraq, Afghanistan, Central Asia, the southern Ural. [CAE]

Note: a recently recorded species in Latvia, known from two localities. In the catalogue compiled by Silfverberg (2004) it is mentioned only for Estonia. The species is also known from Belarus (Lopatin & Nesterova 2005).

subgenus *Euchrysolina* Bechyne, 1950

Ch. graminis (Linnaeus, 1758) (Fig. 6)

syn.: *artemisiae* Motschulsky, 1860; *fulgida* Fabricius, 1801

References: Precht 1818 (*Chrysomela*); Kawall 1866 (*Chrysomela*); Seidlitz 1872–1875, 1887–1891 (*Chrysomela*); Ulanowski 1883 (*Chrysomela*); Rathlef 1905 (*Chrysomela*); Trauberga 1957 (*Chrysomela*); Stiprais 1977 (*Chrysomela*); Barševskis 1988, 1993, 2002; Telnov *et al.* 1997, 2006; Telnov 2004; Kalniņš *et al.* 2007; Bukejs and Telnov 2007; Barševskis *et al.* 2009.

Examined material: 53 specimens: Aizkraukle d.: Rīteri, 21 June 2006 (1, leg. A. Barševskis); Skrīveri, 20 June 2006 (1, bank of the Daugava River, leg. A. Barševskis); Cēsis d.: Cēsis, 10 June 1995 (1, C. Fägerstöm); Daugavpils d.: Bebrene, 9 May 1987 (1, leg. A. Barševskis), 16 June 2006 (1, leg. E. Rudāns); Butiški, 12 August 2006 (2, valley of the Daugava River, leg. A. Bukejs and M. Balalaikins); Daugavpils, Ruģeļi, June 2007 (1, leg. V. Kokina); Elerne, 24 May 2007 (1, leg. U. Valainis), 31 May 2007 (1, bank of the Daugava River, leg. M. Murd); Ilgas, Silene Nature Park, 29 April–10 July 2000 (1, leg. A. Rutka); Kalnišķi, 55°52'54"N 26°44'03"E, 21 August 2009 (1, bank of the Daugava River, leg. A. Bukejs, M. Balalaikins); Līksna, 1986 (1, leg. R. Cibulskis); Lociki, 20 August 2001 (1, leg. L. Lociks); Maļinova, 4 June 1986 (1, leg. A. Barševskis); Slutišķi, 12 May 1987 (1, leg. A. Barševskis), 12 June 1987 (1, leg. A. Barševskis); Stropi, 10 September 2005 (1, agrocenosis, leg. A. Bukejs), 29 May 2007 (1, sandy agrocenosis, leg. A. Bukejs), 2 July 2008 (1, agrocenosis, on *Mentha*, leg. A. Bukejs), 12 July 2008 (1, dry meadow, leg. A. Bukejs); Vabole, 1993 (2, leg. M. Jukšs), 27 June 1994 (1, leg. R. Cibulskis); Višķi, 2 June 1987 (1, leg. A. Barševskis); Jēkabpils d.: Dunava, 23 June 1993 (1, leg. A. Barševskis), 1–7 June 2009 (2, leg. K. Barševska); Rubene, 2 May 1998 (1, leg. I. Leiskina), 18 August 2001 (1, leg. I. Leiskina); Krāslava d.: Izvalta, Murāni houses, 21 August 1992 (1, leg. A. Barševskis); Šķeltova, 8 June 1986 (1, leg. A. Barševskis), 30 June 1993 (1, leg. A. Barševskis); Madona d.: Mētriēna E env., Sildas, Teiču Nature Reserve, 20 May 1992 (1, leg. V. Spuņģis); Preiļi d.: Jersika, Kurpnieki house, 24 June 2005 (2, leg. A. Barševskis), 23–24 June 2006 (4, leg. A. Barševskis, K. Barševska); Pelēči, 3 August 1997 (1, leg. I. Jurkjāne); Sutri, Znotiņi house, 3 June 2007 (1, leg. A. Soldāns); Rēzekne d.: Bērzgale, 16 June 2001 (1, leg. C. Fägerstöm); Īdeņa, 8 September 2007 (1, bank of Lake Lubāns, leg. A. Bukejs, M. Balalaikins); Talsi d.: Mazirbe, 26 June 2006 (2, seashore, leg. A. Barševskis, U. Valainis, A. Pankjāns); Valmiera d.: Vecate, 18 August 1992 (7, humid meadow, leg. M. Kalniņš).

Host plants: compositae, labiatae.

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

General distribution: Europe, Asia Minor, the Caucasus, Siberia, Kazakhstan, Central Asia, Mongolia, Russian Far East, N China. [ASE]

Note: common.

subgenus *Erythrochysa* Bechyne, 1950

***Ch. polita* (Linnaeus, 1758) (Fig. 14)**

References: Precht 1818 (*Chrysomela*); Seidlitz 1872–1875, 1887–1891 (*Chrysomela*); Ulanowski 1883 (*Chrysomela*); Rathlef 1905 (*Chrysomela*); Danka and Stiprais 1972 (*Chrysomela*); Pūtele 1974, 1980, 1981a, b, 1982 (*Chrysomela*); Stiprais 1977 (*Chrysomela*); Barševskis 1988, 1993, 2002; Rūtenberga 1992 (*Chrysomela*); Telnov *et al.* 1997; Telnov 2004; Kalniņš *et al.* 2007; Bukejs and Telnov 2007.

Examined material: 284 specimens: Aizkraukle d.: 6 km N Aizkraukle, Aizkraukles purvs (bog) PNT, 6 August 2008 (2, leg. A. Bukejs, M. Balalaikins); Pļaviņas env., Aiviekstes karjeri (quarry), 11 May 2002 (1, bushes, leg. D. Telnov); Aluksne d.: Jaunanna env., 13 June 2009 (1, valley of the Pededze River, mixed forest, leg. D. Telnov); Balvi d.: Reibāni env., 16–17 June 2001 (1, clearing, leg. D. Telnov); Bauska d.: 3 km SW Budberga, Straumeņu forest, 28 June 2003 (1, clearing, leg. D. Telnov); Pilsrundāle env., 25 June 2006 (2, deciduous forest, leg. D. Telnov); Cēsis d.: Cēsis, Cīrulīši, 22 May 2004 (2, left bank of the Gauja River, leg. D. Telnov), Cēsis, Pipariņi, Benču distributary, 26 June 2004 (2, riverside, leg. D. Telnov); Cēsis N env., distributary of the Lēnčupe River, 21 June 2008 (1, deciduous forest, leg. D. Telnov); Ieriķi, 6 May 1995 (1, mixed forest, leg. D. Telnov); Līgatne env., Paslavu pļavas (meadows), 19 August 2005 (1, dry meadow, leg. M. Kalniņš); 3 km NE Skaļupes, Kīķi house, 26 April 2008 (1, mixed forest, leg. D. Telnov); Skaļupe, 7–11 July 2003 (1, leg. H. Silfverberg); Taurene env., Lodes muiža (manor), 16–18 June 2002 (2, leg. I. Salmane), 6 July 2008 (1, meadow, leg. M. Kalniņš); Daugavpils d.: Bebrene, 9 May 1987 (1, leg. A. Barševskis), 27 March 2005 (1, leg. E. Rudāns), 6 May 2006 (1, leg. E. Rudāns), 24 June 2006 (1, leg. E. Rudāns); Butišķi, 12 August 2006 (4, valley of the Daugava River, leg. A. Bukejs and M. Balalaikins), 21 August 2006 (1, valley of the Daugava River, leg. A. Bukejs), 26 May 2007 (1, sandy agrocenosis, leg. A. Bukejs), 26 May 2008 (4, valley of the Daugava River, leg. A. Bukejs), 1 July 2009 (1, valley of the Daugava River, leg. A. Bukejs, M. Balalaikins); Daugavpils, 3 December 1986 (1, leg. A. Barševskis), Daugavpils, Ruģeļi, 16 May 2006 (1, leg. V. Kokina), Daugavpils, Viduspoguļanka, 11 June 2006 (1, leg.

A. Pankjāns); 2 km SW Daugavpils, Apses env., 10 June 2006 (1, bank of the Daugava River, leg. A. Bukejs); Dviete, 11 May 1996 (1, leg. A. Lapa), 22 June 2008 (1, forest, leg. A. Barševskis); Elerne, Muravki house, 29 December 2006 (3, leg. E. Rudāns); Ilgas, Silene Nature Park, 1992 (1, leg. A. Barševskis), 2 September 1992 (1, leg. A. Barševskis), 29 April – 10 July 2000 (1, leg. L. Bogdāne), 29 April – 10 July 2000 (2, leg. A. Rutka), June–July 2000 (1, leg. I. Haka and G. Hļebnāja), August 2002 (1, leg. A. Barševskis), 6–15 June 2004 (1, leg. A. Barševskis), 7 September 2005 (1, leg. A. Barševskis), 5–10 June 2006 (1, leg. L. Jakubāne), 17–20 June 2008 (1, leg. V. Krone, J. Sraskeviča), 1 July 2008 (1, leg. I. Irbe), 1–7 July 2008 (5, leg. T. Vasiljeva), 17 June 2009 (1, leg. R. Cibulskis), 27 June 2009 (1, leg. T. Vasiljeva, S. Pupiņa), 1–3 July 2009 (2, leg. S. Pupiņa); Ilukste, 20 May 2006 (1, leg. A. Pankjāns); Kalnišķi, 55°52'54"N 26°44'03"E, 21 August 2009 (1, bank of the Daugava River, leg. A. Bukejs, M. Balalaikins); Kalupe, 23 August 1994 (1, leg. R. Cibulskis); Kovaļki, Jaunkļaviņi house, 31 July 2008 (1, meadow, leg. V. Vaņkovs); Krauja, 29 May 2007 (1, old clearing, leg. A. Bukejs); Kurcums, Lake Kurcums env., 6 June 2008 (2, leg. A. Barševskis); Likсна, 1987 (1, leg. R. Cibulskis), August 1993 (1, leg. R. Cibulskis), 3 April 1994 (1, leg. R. Cibulskis), 30 April 1994 (1, leg. R. Cibulskis); Lociki, 26 May 2001 (2, leg. G. Lociks); Naujene, March 1992 (1, leg. A. Barševskis); Nīcgale parish, Nīcgale, 29 August 2000 (1, forest, leg. A. Barševskis); Šarlote, 8 June 2008 (1, leg. K. Aksjuta); Šedere, Straumēni house, 16 March 2008 (1, leg. M. Janovska), 1–3 May 2008 (1, leg. M. Janovska), 13 May 2008 (1, leg. M. Janovska); Slutišķi, 4 May 2008 (1, leg. K. Barševska, A. Barševskis); Stropi, 7 May 2006 (1, leg. A. Bukejs), 3 June 2006 (1, leg. A. Bukejs), 30 April 2007 (1, agrocenosis, in soil, leg. A. Bukejs), 25 May 2007 (2, old clearing, leg. A. Bukejs), 22 June 2007 (2, old clearing, leg. A. Bukejs), 31 May 2008 (2, agrocenosis, leg. A. Bukejs), 10 August 2009 (1, leg. A. Bukejs); Svente, Sasaļu mežs (forest) PNT, 20 January 2008 (1, leg. A. Barševskis); Vabole, 1993 (1, leg. M. Jukšs), 18 September 1993 (1, leg. R. Cibulskis), 1 April 1994 (1, leg. R. Cibulskis), 3 April 1994 (2, leg. R. Cibulskis), 14 July 1997 (2, leg. R. Cibulskis); Vasargēlišķi, 29 April 2008 (6, Bondaru glen, leg. A. Pankjāns, U. Valainis); Višķi, 29 March 1986 (1, leg. A. Barševskis), 29 March 1987 (3, leg. A. Barševskis); Gulbene d.: 2.5 km SE Ostrovieši, Ezernieki forestry, Pededzes lejtecēs PNT, 23 April 2006 (1, flood-lands, leg. D. Telnov); Jēkabpils d.: Asare, 2 May 1998 (1, leg. I. Leiskina); Dunava, April 2002 (2, leg. A. Barševskis), 16 April 2006 (1, leg. A. Barševskis), 10–18 June 2006

- (3, leg. K. Barševska), 10–19 June 2007 (1, leg. K. Barševska), 1–7 June 2009 (5, leg. K. Barševska), 11–22 June 2009 (5, leg. K. Barševska); Rubene, 4 July 1998 (1, leg. I. Leiskina); Zasa, 15 July 1998 (1, leg. I. Leiskina), 9 April 1999 (1, leg. I. Leiskina); Jelgava d.: Dalbe, 9 June 1996 (1, meadow, leg. D. Telnov); Krāslava d.: Asūne SE env., Lake Mazais Asūnes, 30 June 2006 (1, lakeside, leg. D. Telnov); Lake Dridzis, Liepu Isl., 12–13 July 1994 (2, mixed forest, leg. D. Telnov); Izvalta, Murāni house, 21 August 1992 (1, leg. A. Barševskis); Šķeltova, 22 March 1986 (1, leg. A. Barševskis), 7 December 1986 (2, leg. A. Barševskis), 14 August 2006 (1, leg. A. Barševskis), 3 June 2008 (1, leg. A. Barševskis), 28 June 2008 (1, leg. A. Barševskis), 10 April 2009 (1, leg. A. Barševskis); Tartaks, 30 June 2006 (2, bank of Lake Tartaks, leg. D. Telnov), August 2008 (1, leg. A. Soldāns); Liepāja d.: Embūte, 6 June 2009 (2, forest edge, leg. D. Telnov), 8 August 2009 (1, meadow, leg. D. Telnov); Kazdanga, 5 May 1975 (1, leg. M. Stiprais); Limbaži d.: Aloja, 16 August 1992 (1, dry meadow, leg. M. Kalniņš); Lauči, 17 July 1995 (1, seashore, leg. D. Telnov); Mērnīeku dumbrajī (swamp forests) PNT, ~150 m from Estonian border, 15 June 2002 (1, forest edge, leg. D. Telnov); Staicele, 16 August 1992 (6, bank of the Salaca River, leg. M. Kalniņš); Tuja NE env., Melbārži, 1–13 May 2006 (2, meadow, leg. M. Kalniņš); Ludza d.: Salnava, 24 October 1998 (1, leg. I. Leiskina); Madona d.: Meirāni, 5–10 June 2006 (1, leg. A. Barševskis); Vīķi, 17 July 2004 (1, valley of the Salaca River, leg. D. Telnov); Ogre d.: Kastrāne env., 24 May 2003 (1, avenue, under bark, leg. D. Telnov); Ķegums, 11 August 2006 (1, leg. A. Barševskis, E. Rudāns); Lielvārde, 19 September 1992 (1, leg. M. Kalniņš); Preiļi d.: Jersika, 16 April 2005 (2, leg. I. Gurčonoks), 15 May 2005 (1, leg. A. Barševskis), 24 June 2005 (1, leg. A. Barševskis), 3 September 2005 (1, leg. A. Barševskis), 9 April 2006 (2, leg. K. Barševska), 14 April 2006 (1, leg. A. Barševskis), 4 May 2006 (5, leg. K. Barševska), 13 May 2006 (1, leg. K. Barševska, A. Barševskis), 26–28 May 2006 (4, leg. K. Barševska), 4 June 2006 (6, leg. K. Barševska), 6–7 June 2006 (1, leg. A. Barševskis, K. Barševska), 23–24 June 2006 (5, leg. A. Barševskis, K. Barševska), 25 August 2006 (1, leg. A. Barševskis), 25 May 2007 (1, leg. A. Barševskis), 22–25 June 2007 (1, leg. A. Barševskis), 5 September 2007 (1, leg. A. Barševskis), 24 May 2008 (1, leg. A. Barševskis), 31 May 2008 (3, leg. A. Barševskis), 13 June 2008 (1, leg. A. Barševskis), 22–25 September 2008 (1, leg. A. Barševskis), 2 September 2008 (1, leg. A. Barševskis), 11–12 April 2009 (1, leg. A. Barševskis), 24 May 2009 (1, leg. A. Barševskis, K. Barševska), 30 May 2009 (3, leg. K. Barševska), 22–24 June 2009 (7, leg. A. Barševskis); Pelēči, 19 August 1997 (1, leg. I. Jurkjāne); Preiļi, 1 May 1998 (1, park, leg. R. Gribusts); Rēzekne d.: Bērzgale, 8 July 2008 (1, leg. M. Balalaikins); Īdeņa env., 56°44'38"N 26°55'11"E, 6 July 2008 (1, bank of Lake Lubāns, leg. A. Bukejs, M. Balalaikins); Lukna, 15 March 1987 (1, leg. A. Barševskis); Lake Micanu, 2 June 2009 (1, meadow, leg. M. Balalaikins); Nagļi, 29 September 2009 (1, bank of Lake Lubāns, leg. M. Balalaikins); Tiskādi, 2 July 1992 (1, along lake, leg. A. Barševskis); Rīga: Āgenskalns, 11 June 2007 (1, garden, leg. M. Kalniņš); Daugavgrīva, 10 April 1993 (4, in hibernation place, in hollow, leg. M. Kalniņš); Rīga d.: Bajāri, 22 June 1973 (1, leg. anonymous); 5 km E Cekule, 29 March 2003 (1, in hibernation place, under bark, leg. D. Telnov); Dārziņi, 14 June 1971 (1, leg. L. Danka); Dzidriņas, 9 June 2006 (1, humid meadow, leg. D. Telnov), 20 May 2007 (1, garden, in flight, leg. D. Telnov); Ķekava N env., Doles Isl., 23 August 2008 (1, bank of the Daugava River, leg. D. Telnov); Krimulda, 5 June 1993 (1, meadow, leg. M. Kalniņš); Kūdra, 26 May 2002 (1, leg. A. Titovs); Valguma VM, 12 April 2000 (1, roadside in forest, leg. J. Gailis); Saldus d.: Reņģe, 16 May 1932 (1, leg. J. Muskars); Talsi d.: Kolka, 3–4 August 2004 (1, seashore, leg. I. Salmane); Mazirbe, 26 June 2006 (6, seashore, leg. A. Barševskis, U. Valainis, A. Pankjāns); 1 km NW Roja, 1 June 2003 (1, seashore, leg. D. Telnov); Sabile, 19 July 2007 (1, leg. A. Pankjāns, A. Soldāns, U. Valainis, A. Barševskis); Uši E env., Bažu bog, 10 July 1994 (2, leg. D. Telnov); Uši, 25 June 2002 (5, seashore, leg. C. Fägerstöm); Tukums d.: W bank of Lake Engures, mouth of the Dziedrupe River, 2 May 1993 (3, leg. M. Kalniņš), 21 May 1993 (1, leg. M. Kalniņš); Lielais Ķemeru tīrelis (moorland), Tīreļi house S env., Ķemeru National Park, 22 June 2008 (2, bog, leg. D. Telnov); Valka d.: Trikāta, Rūtiņi house, 25 March 1992 (1, in hibernation place, leg. M. Kalniņš); Valmiera d.: Mazsalaca env., Silgali house, 23 June 1996 (1, leg. D. Telnov); Vecate, 16 August 1992 (1, humid meadow, leg. M. Kalniņš); Ventpils d.: Moricsala Isl., Moricsala Nature Reserve, 29 June 2002 (1, leg. U. Valainis), 2 September 2002 (1, leg. U. Valainis), October 2003 (1, leg. U. Valainis), 29 May 2006 (1, leg. E. Rudāns), 12–13 August 2006 (2, leg. M. Kalniņš); Pūze, 10 September 1974 (1, humid forest edge, leg. anonymous); Sarnāte, 31 May 2008 (3, wet deciduous forest, leg. D. Telnov); near Usmas forestry, 5 May 2008 (1, leg. A. Pankjāns, U. Valainis, A. Soldāns, E. Tamānis).
- Host plants:** *Mentha*, *Origanum*, *Lycopus* (Labiatae).
Phenology: IV, V, VI, VII, VIII, IX, X.
General distribution: Europe, Asia Minor, the Caucasus, Siberia, Altai, Tuva, Kazakhstan, Central Asia, Mongolia, Russian Far East, N and W China. [ASE]

Note: a very common and widespread species in Latvia.

subgenus *Taeniostica* Motschulsky, 1860

(-) *Ch. reitteri* (Weise, 1884)

syn.: *lurida* Linnaeus, 1767 nec Scopoli, 1763; *saxonica* Silfverberg, 1977

References: Seidlitz 1872–1875, 1887–1891 (*Chrysomela lurida* L.); Ulanowski 1883 (*Chrysomela lurida* L.); Rathlef 1905 (*Chrysomela lurida* L.); Telnov *et al.* 1997 (removed from the list); Telnov 2004 (removed from the list).

Host plants: *Artemisia* and *Stachys* are mentioned as host plants in literature (Bieńkowski 2004).

General distribution: S and C Europe, Asia Minor, the Caucasus, Kazakhstan, W Siberia (Sayans). [TUE]

subgenus *Chrysolina* s. str.

***Ch. staphylaea* (Linnaeus, 1758) (Fig. 8)**

syn.: *cuprea* (DeGeer, 1775); *subferruginea* (Suffrian, 1851)

References: Fischer 1784, 1791 (*Chrysomela*); Precht 1818 (*Chrysomela*); Seidlitz 1872–1875, 1887–1891 (*Chrysomela*); Ulanowski 1883 (*Chrysomela*); Heyden 1903 (*Chrysomela*); Rathlef 1905 (*Chrysomela*); Brammanis 1930 (*Chrysomela*); Trauberga 1957 (*Chrysomela*); Priedītis 1958 (*Chrysomela*); Pūtele 1974, 1980, 1981a, b (*Chrysomela*); Stiprais 1977 (*Chrysomela*); Barševskis 1988, 1993, 2002; Rūtenberga 1992 (*Chrysomela*); Telnov *et al.* 1997; Telnov 2004; Kalniņš *et al.* 2007; Bukejs and Telnov 2007.

Examined material: 164 specimens: Aizkraukle d.: Aizkraukle env., Aizkraukles purvs (bog), 4 May 1995 (2, clearing and bog, leg. A. Barševskis), 6 km N Aizkraukle, Aizkraukles purvs (bog) PNT, 6 August 2008 (1, leg. A. Bukejs, M. Balalaikins); Aluksne d.: Gaujiena, 30 May 2001 (1, leg. J. Gailis); Bauska d.: Jumpravas, 25 June 2006 (2, park, leg. D. Telnov); Cēsis d.: Cēsis, Pārgaujas Str., 8 July 2004 (1, leg. I. Salmane); Līgatne, 27 May 1995 (1, leg. D. Telnov); Lodes muiža (manor), 8 July 2001 (1, leg. J. Gailis), 17 June 2002 (8, leg. I. Salmane); Ungurmuiža, 14 March 2002 (1, in hibernation place, under bark on base of oak, leg. D. Telnov); Daugavpils d.: Bebrene, 27 March 2005 (1, leg. E. Rudāns), 5 May 2006 (1, leg. E. Rudāns), 6 May 2006 (1, leg. E. Rudāns), 16 September 2006 (2, leg. E. Rudāns), 8–10 December 2006 (1, leg. E. Rudāns); Daugavpils, Viduspoguļanka, N side of Lake Plotišķu, 21 April 2008 (1, leg. U. Valainis); Dviete, 11 May 1996 (1, leg. A. Lapa); Elerne, Muravki house, 29 December 2006 (1, leg. E. Rudāns); Ilgas, Silene Nature Park, 6 March 1992 (1, leg. A. Barševskis), 21–24 April 1995 (1, leg.

A. Barševskis), June 1999 (1, leg. A. Bukejs), 29 April–10 July 2000 (2, leg. A. Rutka), June–July 2000 (1, leg. I. Haka and G. Hļebnaja); Līksna, 1 April 1994 (1, leg. R. Cibulskis); Maļinova, 14 April 2007 (1, agrocenosis, leg. M. Murd); Pilskalne, 5 April 1990 (1, leg. A. Barševskis); ~10 km NW Saliēna, Rozališki house, 55°54'15"N 26°48'54"E, 21 May 2008 (1, leg. A. Bukejs, M. Nitcis); Šedere, Straumēni house, 12–13 June 2007 (1, leg. M. Murd), 5–6 April 2008 (1, leg. M. Janovska), 1–3 May 2008 (1, leg. M. Janovska), 13 May 2008 (1, leg. M. Janovska); Stropi, 29–30 April 2006 (1, leg. A. Bukejs), 2 May 2008 (1, leg. A. Bukejs); Vabole, 1993 (1, leg. M. Jukšs), August 1993 (2, leg. R. Cibulskis), 6 May 1994 (4, leg. R. Cibulskis); Višķi, 29 March 1986 (4, leg. A. Barševskis), 8 March 1987 (2, leg. A. Barševskis), 23 March 1987 (1, leg. A. Barševskis); Dobele d.: Lielauce, 1 April 2001 (2, under bark, leg. J. Gailis); 7 km NE Ukri, Ukru gārša (rich deciduous forest), 4 May 2006 (1, leg. I. Salmane); Gulbene d.: 2.5 km SE Ostrovieši, Ezernieki forestry, Pededzes lejtecis PNT, 10 June 2006 (2, in copula, mixed forest, leg. D. Telnov); 1.5 km S Silenieki, near Pededze bridge, 18 May 2003 (1, under bark, leg. D. Telnov); Jēkabpils d.: Asare, 6 July 2000 (1, leg. I. Leiskina); Dunava, 6 December 1992 (1, leg. A. Barševskis), 23 July 1994 (1, leg. A. Barševskis), 6 April 1996 (1, forest, leg. A. Barševskis), April 2002 (1, leg. A. Barševskis), 7–8 October 2006 (1, leg. A. Barševskis), 29 November 2006 (1, leg. A. Barševskis), 13 May 2007 (1, leg. K. Barševska, A. Barševskis), 5 May 2008 (1, Dviete forest, leg. A. Barševskis); Rubeņi, 8 December 1996 (1, leg. I. Leiskina), 29 March 1997 (1, leg. I. Leiskina); Tadenava, 22 October 2006 (1, leg. A. Barševskis); 6 km NW Vandāni, Vimbaru forest, 12 August 2008 (1, leg. M. Balalaikins); Viesīte, 8 August 2008 (1, clearing, leg. A. Barševskis); Zasa, 30 October 1998 (1, leg. I. Leiskina), 7 April 1999 (1, leg. I. Leiskina); Krāslava d.: Piedruja, 10 April 1991 (1, dry meadow, leg. A. Barševskis); Šķeltova, 22 March 1986 (1, leg. A. Barševskis), 7 December 1986 (1, leg. A. Barševskis), 8 April 2006 (1, leg. A. Barševskis), 26 November 2006 (2, leg. A. Barševskis, K. Barševska), 11 August 2009 (2, leg. A. Barševskis); Tartaks, 30 June 2006 (1, bank of Lake Tartaks, leg. D. Telnov); Ūdrīši, 26–27 April 2008 (1, leg. M. Janovska); Liepāja d.: Embūte N env., Kļaviņas, 1 May 2009 (1, bank of pond, leg. D. Telnov); Kazdanga, 5 July 1975 (12, leg. M. Stiprais); Limbaži d.: Tuja NE env., Melbārži, 1–13 May 2006 (2, leg. M. Kalniņš), 22 June 2008 (1, meadow, leg. M. Kalniņš); Madona d.: 2.5 km SE Barkava, Barkavas ozolu audze PNT, 10 June 2006 (1, mixed forest, leg. D. Telnov); Stirniene, 16 June 1998 (1, leg.

M. Kalniņš); Ogre d.: Pārogre, 20–21 May 2002 (1, R. Spots); Preiļi d.: Jersika, 15 August 1996 (1, leg. A. Barševskis), 16 April 2005 (1, leg. I. Gurčonoks), 15 May 2005 (2, leg. A. Barševskis), 14 May 2006 (1, leg. K. Barševska), 7 June 2006 (1, leg. A. Barševskis, K. Barševska), 23 December 2006 (1, leg. A. Barševskis, K. Barševska), 15 April 2007 (2, leg. A. Barševskis), 5–6 May 2007 (1, leg. K. Barševska, A. Barševskis), 9–10 June 2007 (1, leg. K. Barševska, A. Barševskis), 2 May 2008 (1, leg. A. Barševskis), 30 May 2009 (1, leg. K. Barševska); Sutri, Znotiņi house, 20 May 2007 (2, leg. A. Soldāns), 6 April 2008 (1, leg. A. Soldāns); Vārkava, 25 June 1992 (1, leg. G. Spuriņš); Rēzekne d.: Gaigalava env., bank of Lake Lubāns near the Aiviekste River, 8 September 2007 (2, leg. A. Bukejs, M. Balalaikins); Viļāni, 5 November 2008 (1, leg. A. Barševskis); Rīga: 7 June 1988 (1, leg. F. Savičs), Daugavgrīva, 25 April 1992 (1, leg. F. Savičs); Rīga d.: Bergi, 9 October 1991 (1, dry meadow, leg. M. Kalniņš); Cekule, 11 August 1994 (1, leg. D. Telnov); ~5 km E Cekule, 29 March 2003 (1, in hibernation place, under bark of alder, leg. D. Telnov); Dzidriņas, 3 September 2005 (1, meadow, leg. D. Telnov), 9 October 2005 (2, meadow, leg. D. Telnov), 9 June 2006 (1, humid meadow, leg. K. Greķe), 9 June 2009 (1, under stone, leg. D. Telnov); Garciems, 12 May 1971 (1, seashore, leg. M. Stiprais); Garkalne env., Senču sils (pine forest), 28 June 1993 (1, leg. M. Kalniņš); Jauncekle, 7 May 2003 (2, xeric roadside, on sand and grass, leg. D. Telnov); Ķekava N env., Doles Isl., 23 August 2008 (1, leg. D. Telnov); Kudra, 19 August 2007 (1, leg. M. Puķītis); Salaspils, 5 May 2002 (1, leg. D. Telnov); between Saulkrasti and Zvejniekciems, 1 October 2005 (1, seashore, leg. I. Salmane); Sigulda, 26 September 1992 (1, leg. M. Kalniņš), 14 November 1992 (1, in hibernation place, leg. M. Kalniņš); Silciems, 25 April 1937 (1, Veļupītes meadow, leg. anonymous); Saldus d.: Reņģe, 10 May 1934 (1, coll. J. Muskars); Talsi d.: Kolka, 3 July 1999 (1, leg. M. Kalniņš); 1.5 km S Kolka, Zēņdīķis pond, 17 July 2002 (1, leg. I. Salmane); Slītere National Park, Zilei Kalni (hills) and Dāvida Pļavas (meadows), 1 September 2006 (2, leg. A. Pankjāns, E. Rudāns, U. Valainis), 22 August 2008 (1, leg. A. Barševskis); Upeņieki, 6 May 2006 (1, valley of the Raķupe River, leg. D. Telnov); Valgale, 8 July 1939 (1, leg. A. Freibergs); Tukums d.: Bērziems, near Lake Engures, 5 July 2000 (1, leg. A. Karpa); Valka d.: Trikāta, Rūtiņi house, 15 May 1993 (1, leg. M. Kalniņš); Valmiera d.: Mazsalaca, 27 August 2006 (1, leg. A. Barševskis); Ventspils d.: Lonaste E env., Kuikas house, 6 May 2006 (2, valley of the Pāce River, leg. D. Telnov); Moricsala Isl., Moricsala Nature Reserve, 2 June 2009 (2, leg. N. Savenkovs).

Host plants: Labiatae (*Mentha*, *Lamium*). In literature (Bienkowski 2004; Jolivet 1990), Ranunculaceae and Plantago (Plantaginaceae) are also mentioned as host plants.

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

General distribution: Europe, the Caucasus, Siberia, Kazakhstan, Central Asia (Kirghizstan), Mongolia, Russian Far East, N China; also known from N America. [OLA]

Note: a very common and widespread species in Latvia.

subgenus *Chrysomorpha* Motschulsky, 1850

Ch. cerealis (Linnaeus, 1767) (Figs 9, 10)

References: Groschke 1805 (*Chrysomela*); Seidlitz 1872–1875, 1887–1891 (*Chrysomela*); Ulanowski 1883 (*Chrysomela*); Rathlef 1905 (*Chrysomela*); Stiprais 1977 (*Chrysomela*); Telnov *et al.* 1997; Telnov 2004; Kalniņš *et al.* 2007.

Examined material: 29 specimens: Daugavpils d.: Līksna parish, Ļūbaste env., near Rīga–Krāslava beltway, 6 June 2004 (1, inland dunes, leg. A. Barševskis), 16 June 2005 (7, leg. A. Barševskis), 17 May 2007 (1, inland dunes, leg. A. Barševskis, K. Barševska), 2 June 2007 (3, leg. A. Barševskis), 8 June 2008 (4, leg. K. Barševska, A. Barševskis), 26 May 2009 (2, inland dunes, near Lake Židu, leg. A. Barševskis, K. Barševska, A. Anichtchenko); Jēkabpils d.: Jēkabpils, 8 May 1922 (1, leg. J. Muskars); Kuldīga d.: Šķērvelis River connection with the Venta River, 3 June 2001 (1, valley of river, leg. D. Telnov); Rīga: Rīga (5, coll. C. Müthel); Rīga d.: Sigulda, 28 April 1996 (1, mixed forest, leg. D. Telnov); Silciems (num., leg. anonymous); Valka d.: Trikāta, Āķeri house, 30 July 1992 (1, dry meadow, leg. M. Kalniņš).

Host plants: *Thymus*, *Artemisia* (Compositae).

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

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

Note: a rare species in Latvia.

subgenus *Anopachys* Motschulsky, 1860

Ch. aurichalcea (Gebler, 1825)

References: Pūtele 1984 (*Chrysomela aurichalcea* Mnh.).

Examined material: Not confirmed by the author.

Host plants: *Artemisia* (Compositae).

Phenology: no data for Latvia. In Europe, specimens were collected from the middle of June to the end of September (Bienkowski 1998); in Belarus VI–VII (Lopatin & Nesterova 2005).

General distribution: Europe, the Caucasus, Kazakhstan, Central Asia (Kirghizstan), Siberia, Russian Far East, Mongolia, Japan, China (Manchuria, Szechwan, Gansu, Kwangsi, Chuang, Jiangsu, Zhejiang, Xinjiang),

the Korean Peninsula, Taiwan, Laos, Vietnam. [PAO]
Note: a very rare species in Latvia; known only from a single locality in Slītere National Park, NW Latvia (Pūtele 1984). The record needs confirmation. The species is also known from N Belarus (Lopatin & Nesterova 2005), Lithuania (Tamutis, pers. comm.), the Moscow region, St. Petersburg city (Bienkowski 1998, 2004) and the Leningrad region (Romantsov 2007).

subgenus *Colaphoptera* Motschulsky, 1860

(-) *Ch. rufa* (Duftschmid, 1825)

syn.: *dahli* (Suffrian, 1851); *menthae* (Duftschmid, 1825); *metallica* (Küster, 1847)

References: Ulanowski 1883 (*Chrysomela*); Telnov *et al.* 1997; Telnov 2004 (*menthae* Duft.).

Host plants: in literature (Bieńkowski 2004), *Petasites* (Compositae) is mentioned as a host plant.

General distribution: C Europe (mts. the Alps, Germany, Slovenia, Romania, Bulgaria, the Sudetes, the Carpathians). [CEU]

Note: actual faunal data on this species in Latvia are absent. The occurrence of the species in Latvia is doubtful. Therefore it has been excluded from the list of Latvian Coleoptera.

subgenus *Sulcicollis* J. Sahlberg, 1913

syn.: *Minckia* Strand, 1935

***Ch. oricalcia* (Müller, 1776) (Fig. 16)**

syn.: *bulgarensis* (Schrank, 1781); *olivacea* Schaller, 1783 nec Suffrian, 1851

References: Telnov 2004.

Examined material: one specimen: Rīga d.: between Cekule and Saurieši, 6 July 1995 (1, xeric meadow, leg. D. Telnov).

Host plants: in literature (Bieńkowski 2004), Apiaceae is mentioned as a host plant.

Phenology: VII.

General distribution: Europe (SE England, E France, Italy, the Balkans, S Fennoscandinavia, Central Europe, the Ukraine). [EUR]

Note: a very rare species in Latvia; known only from a single locality. In the catalogue compiled by Silfverberg (2004) it is mentioned for Denmark, Lithuania, Sweden and Norway.

subgenus *Colaphodes* Motschulsky, 1860

***Ch. haemoptera* (Linnaeus, 1758) (Fig. 18)**

syn.: *acuticollis* Fairmaire, 1877; *atra* (Goeze, 1777)

References: Fischer 1784, 1791 (*Chrysomela*); Precht 1818 (*Chrysomela*); Seidlitz 1872–1875, 1887–1891 (*Chrysomela*); Ulanowski 1883 (*Chrysomela*); Rathlef 1905 (*Chrysomela*); Stiprais 1977 (*Chrysomela*); Barševskis 1993; Telnov *et al.* 1997; Telnov 2004.

Examined material: eight specimens: Rīga: Rīga (8, coll. C. Müthel).

Host plants: *Plantago* (Plantaginaceae). In literature (Bieńkowski 2004), *Galium* (Rubiaceae) and *Linaria* (Scrophulariaceae) are also mentioned as host plants.

Phenology: IX (1).

General distribution: Europe, Asia Minor, the Caucasus, N Iran, Central Asia; reported also from the Himalayas. [CAE]

Note: a very rare species in Latvia; known from three localities in Rīga city, Rīga district, Vangaži (Stiprais 1977) and Daugavpils district, Šķeltiņi (Barševskis 1993).

subgenus *Allochrysolina* Bechyné, 1950

(-) *Ch. fuliginosa galii* (Weise, 1884)

syn.: *molluginis* Suffrian, 1853 nec Brahm, 1790

References: Heyden 1903 (*Chrysomela fuliginosa* Ol. var. *galii* Wse.); Telnov *et al.* 1997 (*fuliginosa* Olivier, 1807); Telnov 2004 (*fuliginosa* Olivier, 1807).

Host plants: in literature (Bieńkowski 2004), *Centaurea scabiosa* (Compositae) and *Galium mollugo* (Rubiaceae) are mentioned as host plants.

General distribution: Portugal, Spain, NW Italy, France, Germany. [SEU]

Note: actual faunal data on this species in Latvia are absent. The occurrence of this species in Latvia is doubtful. Therefore it is excluded from the list of Latvian Coleoptera.

subgenus *Colaphosoma* Motschulsky, 1860

***Ch. sturmi* (Westhoff, 1882) (Fig. 12)**

syn.: *fuscipes* Gmelin, 1790; *goettingensis* Linnaeus, 1761 nec Linnaeus, 1758; *diversipes* (Bedel, 1892); *haemoptera* Fabricius, 1792 nec Linnaeus, 1758; *violacea* auct. nec Müller, 1776

References: Fischer 1778, 1791 (*Chrysomela goettingensis* L.); Precht 1818 (*Chrysomela goettingensis*); Seidlitz 1872–1875, 1887–1891 (*Chrysomela goettingensis* L.); Ulanowski 1883 (*Chrysomela goettingensis* L.); Heyden 1903 (*Chrysomela diversipes* Bedel); Rathlef 1905 (*Chrysomela goettingensis* L.); Stiprais 1977 (*Chrysomela violacea* Mull.); Barševskis 1993 (*violacea* Muell.); Telnov *et al.* 1997; Telnov 2004.

Examined material: 14 specimens: Daugavpils d.: Ilgas, Silene Nature Park, 1984 (1, leg. anonymous), 3 May 1989 (1, leg. A. Barševskis); Jēkabpils d.: Viesīte, 8 August 2008 (1, clearing, leg. A. Barševskis); Liepāja d.: Embūte, 6 June 2009 (1, meadow, leg. D. Telnov); Lake Papes, 17 June 2005 (1, meadow, leg. D. Telnov); Šķede, 16–17 July 2006 (1, seashore, leg. A. Napolov); Rīga: Rīga (5, coll. C. Müthel); Rīga d.: Dzidriņas, 20 May 2007 (1, garden, leg. D. Telnov); Talsi d.: Mazirbe, 26 June 2006 (1, seashore, leg. A. Barševskis, U. Valainis,

A. Pankjāns); Ventspils d.: Ventspils S env., 8 June 2005 (1, roadside, leg. C. Fägerström).

Host plants: *Galium* (Rubiaceae), *Glechoma* (Labiatae), *Linaria* (Scrophulariaceae).

Phenology: V, VI, VII, VIII.

General distribution: Europe, the Caucasus, Siberia, Kazakhstan. [SIE]

Note: a rare species in Latvia.

subgenus *Stichoptera* Motschulsky, 1860

Ch. sanguinolenta (Linnaeus, 1758) (Fig. 13)

syn.: *marginalis* (Duftschmid, 1825)

References: Precht 1818 (*Chrysolina*); Seidlitz 1872–1875, 1887–1891 (*Chrysolina marginalis* Duft.); Ulanowski 1883 (*Chrysolina*); Rathlef 1905 (*Chrysolina*); Barševskis 1996, 1997; Telnov *et al.* 1997; Telnov 2004.

Examined material: 33 specimens: Aizkraukle d.: Meņģele, 12 September 2004 (1, meadow, leg. M. Kalniņš); Daugavpils d.: Daugavpils, Ruģeļi, 26 June 1992 (1, xeric meadow, leg. A. Barševskis); Daugavpils, Viduspoguļanka, N side of Lake Plotičku, 55°54'59"N 26°29'51"E, 21 April 2008 (1, edge of pine forest, leg. A. Pankjāns); Ļūbaste env., near Rīga–Krāslava beltway, 1 July 1995 (2, xeric meadow, leg. A. Barševskis), 30 May 1996 (1, xeric habitat, leg. A. Barševskis), 6 June 2004 (1, leg. A. Barševskis); Slutišķi, 29 April 2008 (1, valley of the Daugava River, leg. A. Pankjāns, U. Valainis); Jēkabpils d.: Dunava, 7–8 October 2006 (1, leg. A. Barševskis); Liepāja d.: Pape, 24–26 May 1994 (1, seashore, dunes, leg. N. Savenkovs), 22–24 August 1995 (2, leg. N. Savenkovs), 2 October 2004 (1, gray dune, leg. V. Spuņģis); Limbaži d.: Salacgrīva, 16 August 2008 (1, leg. A. Barševskis); Preiļi d.: Jersika, Kurpnieki house, 4 May 2005 (1, leg. A. Barševskis), 7 May 2005 (1, leg. A. Barševskis), 21 May 2005 (4, leg. A. Barševskis), 6–7 June 2006 (1, leg. A. Barševskis, K. Barševska); Rīga: Pļavnieki, 18 April 2004 (1, grassland, leg. D. Telnov), 1 May 2005 (1, grassland, leg. D. Telnov); Ziepniekkalns, 20 April 2004 (1, grassland, leg. D. Telnov), 20 September 2004 (1, grassland, leg. D. Telnov); Rīga d.: Kūdra, 2 September 2001 (1, leg. A. Titovs), 26 May 2002 (1, leg. A. Titovs), 13 June 2002 (1, leg. A. Titovs), 1 September 2002 (1, leg. A. Titovs), 18 August 2008 (1, leg. A. Titovs), 7 September 2008 (1, leg. A. Titovs); Talsi d.: Melnsils SE env., mouth of the Melnsilupe River, 22 September 2002 (1, valley of river, leg. R. Matrozis).

Host plants: *Linaria* (Scrophulariaceae), *Plantago* (Plantaginaceae).

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

General distribution: Europe, N Africa (Morocco), N part of Asia Minor, the Caucasus, Kazakhstan, Central Asia (Kirghizstan), the southern part of Siberia, Mongolia, Russian Far East. [PAL]

Note: a rather infrequent species in Latvia.

Ch. gypsophilae (Küster, 1845) (Fig. 7)

syn.: *rufomarginata* (Suffrian, 1851)

References: Seidlitz 1887–1891 (*Chrysolina*); Rathlef 1905 (*Chrysolina*); Stiprais 1977 (*Chrysolina*); Barševskis 1993, 1996, 2002; Telnov *et al.* 1997; Barševskis *et al.* 2004; Telnov 2004; Kalniņš *et al.* 2007.

Examined material: 36 specimens: Cēsis d.: Līgatne env., Paslavu pļavas (meadows), 19 August 2005 (1, dry meadow, leg. M. Kalniņš); Daugavpils d.: Ļūbaste env., near Rīga–Krāslava beltway, 1 July 1995 (12, xeric meadow, leg. A. Barševskis); Daugavpils, Mežciems, 14 July 1991 (1, xeric habitat, leg. A. Barševskis), Daugavpils, Ruģeļi, 3 May 1997 (1, dry meadow, leg. A. Barševskis), Daugavpils, Jaunforštade, 4 October 2008 (1, leg. R. Orlovskis); Līksna parish, 3 km N Daugavpils, 28 June 2009 (1, inland dunes, roadside, leg. A. Bukejs); Ilgas, Silene Nature Park, 1986 (1, leg. A. Barševskis); Rīga: Rīga (3, coll. C. Mūthel); Rīga d.: Jaunciems, 14 May 1953 (1, leg. M. Stiprais); Silciems, 17 May 1937 (6, leg. anonymous).

Host plants: Scrophulariaceae (*Linaria*), Polygonaceae (*Rumex*), Labiatae (*Salvia*). In literature (Bieńkowski 2004), *Artemisia* (Compositae) is also mentioned as a host plant.

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

General distribution: Europe, N Africa, the Canaries, Asia Minor, the Caucasus, Kazakhstan, C Asia (Kirghizstan, Turkmenistan). [CEM]

Note: a rather infrequent species in Latvia.

Ch. kuesteri (Helliesen, 1912)

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

Examined material: one specimen: Liepāja d.: Ziemepe, 15 June 2001 (1, gray dune, leg. V. Spuņģis).

Host plants: Labiatae.

Phenology: VI. In Belarus, the species is recorded in VII, VIII, IX (Lopatin & Nesterova 2005).

General distribution: C and S Europe (Iberian Peninsula, France, N Italy, Central Europe and the catchment basin of the Danube River), reported also from Kiev (Ukraine). [CEU]

Note: a very rare species with a single known locality from the SE part of Latvia. In Fennoscandia and Baltic states it is known only from Latvia (Silfverberg 2004); known also from Belarus (Lopatin & Nesterova 2005).

subgenus *Sphaeromela* Bedel, 1899

Ch. varians (Schaller, 1783) (Figs 2, 3)

syn.: *aethiops* Fabricius, 1792; *centaura* (Herbst, 1783); *centauri* (Fabricius, 1787); *hyperici* Thomson, 1866; *margarita* (Olivier, 1798)

- References:** Precht 1818 (*Chrysomela*); Fleischer 1829 (*Chrysomela centaurei* F.); Seidlitz 1872–1875, 1887–1891 (*Chrysomela*); Ulanowski 1883 (*Chrysomela*); Rathlef 1905 (*Chrysomela*); Trauberga 1957 (*Chrysomela*); Stiprais 1977 (*Chrysomela*); Pūtele 1981a, b, 1982 (*Chrysomela*); Barševskis 1988, 1993, 2002; Telnov *et al.* 1997; Telnov 2004; Kalniņš *et al.* 2007; Bukejs and Telnov 2007.
- Examined material:** 216 specimens: Aizkraukle d.: Aizkraukle, 21 June 1995 (1, clearing, leg. A. Barševskis); Cēsis d.: Lenčupe, 19 June 2001 (1, leg. C. Fägerstöm); Līgatne env., Paslavu pļavas (meadow), 19 August 2005 (2, dry meadow, leg. M. Kalniņš); Lode, 2–9 July (1, pitfall trap, leg. J. Gailis); Pielekši, 20 June 2001 (2, leg. C. Fägerstöm); Daugavpils d.: Bebrene, 15 July 2006 (2, leg. E. Rudāns); Dubna, Lielie Stradišķi house, 8 July 2006 (1, leg. A. Pankjāns); Ilgas, Silene Nature Park, 7 July 1991 (1, near Lake Riču, leg. A. Barševskis), 1 July 1992 (1, leg. A. Barševskis), 1992 (1, leg. A. Barševskis), 19 June 1993 (1, leg. A. Barševskis), 4 July 1993 (1, leg. A. Barševskis), 11 June 1994 (2, leg. A. Barševskis), 11 June 1996 (1, leg. A. Barševskis), 18 June 1996 (1, leg. A. Barševskis), 20 June 1996 (1, leg. A. Barševskis), 27 June 1996 (2, leg. A. Barševskis), 28 June 1996 (1, leg. A. Barševskis), 3 July 1996 (2, leg. A. Barševskis), 8 September 1997 (4, leg. A. Barševskis), 29 April – 10 July 2000 (2, leg. L. Bogdāne), 29 April – 10 July 2000 (1, leg. A. Rutka), June–July 2000 (2, leg. I. Haka and G. Hļebnaja), 13 June 2001 (1, leg. G. Lociks), 14 June 2001 (3, leg. G. Lociks), 15 June 2001 (1, leg. G. Lociks), 9 July 2001 (2, leg. G. Lociks), 14–20 June 2002 (2, leg. A. Barševskis), 28–30 June 2004 (1, leg. A. Barševskis), 8 July 2005 (1, leg. A. Barševskis), 25–29 June 2007 (1, leg. V. Krone), 1 August 2007 (1, leg. U. Valainis, A. Barševskis), 9 June 2008 (1, leg. A. Barševskis, A. Soldāns), 2 July 2008 (2, leg. T. Vasiljeva); Krauja, 4 August 2007 (1, old clearing, leg. A. Bukejs); Līksna, 19 July 1994 (1, leg. R. Cibulskis); Lūbaste env., near Rīga–Krāslava beltway, 2 July 1991 (1, leg. A. Barševskis); Naujene, 25 June 2008 (2, clearing, leg. K. Aksjuta), 30 April 2009 (2, leg. A. Anichtchenko); 1 km NW Randene, 30 April 1998 (1, in soil, leg. D. Grigorjeva); Saliņa parish, 2.5 km N Ritani, 1 July 2007 (1, leg. A. Bukejs); edere, 14 July 2007 (1, leg. K. Aksjuta), 19–20 April 2008 (1, leg. M. Janovska); Silene, 4 July 1996 (1, leg. A. Barševskis); Stropi, 15 August 2007 (3, meadow, on *Hypericum* sp., leg. A. Bukejs); Svente, 21 July 1992 (1, leg. A. Barševskis); Vabole, 10 July 1994 (1, leg. R. Cibulskis), 9 August 1994 (1, leg. R. Cibulskis), 9 July 1995 (1, leg. R. Cibulskis); Dobele d.: Tērvete, 11 June 1974 (1, pine forest, leg. V. Melecis); Jēkabpils d.: Asare, 22 July 1998 (1, leg. I. Leiskina), 25 July 2001 (1, leg. I. Leiskina); Dignaja, 12 July 2009 (2, leg. M. Balalaikins); Dunava, 15–16 April 1994 (1, in hibernation place, leg. A. Barševskis), 21 July 1997 (1, leg. A. Barševskis), 1–5 August 1997 (1, leg. A. Barševskis), 10–18 June 2006 (1, leg. K. Barševska), 8–9 August 2009 (1, leg. A. Barševskis); Rubeņi, 11 July 1997 (1, leg. I. Leiskina), 19 July 1997 (1, leg. I. Leiskina), 16 November 1997 (1, leg. I. Leiskina), 29 July 2001 (1, leg. I. Leiskina); Zasa, 28 July 1998 (2, leg. I. Leiskina); Lake Silabebru, 28 July 2006 (1, lake-side, leg. M. Kalniņš); Krāslava d.: Ezernieki, Garaudži, 24 July 2008 (2, leg. U. Valainis, R. Cibulskis); Izvalta, 18 April 1987 (1, leg. A. Barševskis); Šķeltova, 27 July 1989 (1, leg. A. Barševskis), 23 July 1996 (1, leg. A. Barševskis), 27 July 1996 (2, leg. A. Barševskis), 31 July 1995 (1, leg. A. Barševskis), 11 August 2009 (1, leg. A. Barševskis); Tartaks, 55°54'15"N 26°48'54"E, 30 May 2008 (1, leg. A. Pankjāns); Varnaviči, 25 July 1991 (1, leg. U. Suško); Kuldīga d.: Alsunga, Augšzavas PNT, 28 August 2005 (2, leg. A. Barševskis, A. Bukejs, U. Valainis); Rudbārži, 9 August 2004 (1, leg. A. Barševskis); Liepāja d.: Durbe, 5 September 2008 (3, leg. R. Orlovskis, A. Barševskis); Embūte, 18 July 2009 (2, meadow, leg. D. Telnov); Limbaži d.: Kuiķule, near Lībiešu upurālas, 27 July 2007 (1, leg. A. Barševskis); Mērnīeki, 5 July 2003 (1, forest edge, leg. D. Telnov); Ludza d.: Salnava, 19 July 1998 (1, leg. I. Leiskina); Madona d.: Jumurda, Lake Lācīšu env., 19 July 2008 (3, leg. A. Barševskis); between Jumurda and Lubeja, 30 June 2007 (1, leg. D. Telnov); Krustkalni Nature Reserve, 11 August 2005 (1, leg. A. Barševskis); Preiļi d.: Pelēči, 22 June 1997 (1, leg. I. Jurkjāne), 12 July 1997 (1, leg. I. Jurkjāne); Rēzekne d.: Bērzgale, 16 June 2001 (1, leg. C. Fägerstöm); Dricāni, 1993 (1, leg. R. Cibulskis); Malta, 14 June 2001 (2, leg. C. Fägerstöm); Sprukti, 8 July 2008 (2, leg. M. Balalaikins); Rīga: Purvciems, 18 June 1991 (1, Biķernieku forest, leg. D. Telnov); Rīga d.: Baldone, 12 May 2006 (1, coniferous forest, leg. I. Salmāne); Cekule, 21 August 1991 (1, leg. F. Kovaļevskis); 9 July 1992 (1, leg. D. Telnov); Kūdra, 24 June 2006 (1, leg. A. Titovs), September 2008 (1, leg. A. Titovs); Mālpils, 16 August 2008 (1, leg. A. Barševskis); Silciems, 8 August 1937 (1, Daudupītes meadow, leg. anonymous); Talsi d.: Ance purvi un meži (bogs and forests) PNT, 27 June 2006 (3, leg. A. Barševskis); Kaļķi, Kaļķupes ielejas PNT, 13 July 2009 (7, leg. A. Barševskis, R. Cibulskis); Kolka, 30 May 2007 (1, seashore, leg. M. Kalniņš); Slītere, 22 June 2002 (1, leg. C. Fägerstöm); Slītere National Park, Zilie Kalni (hills) and Dāvida Pļavas (meadows), 10 July 2004 (3, leg. R. Cibulskis, A. Barševskis), 21 July 2004 (2, leg. A. Barševskis), 1 September 2006 (2, leg. A. Pankjāns, E. Rudāns, U. Valainis), July 2008

(6, leg. A. Barševskis, U. Valainis), 22 August 2008 (1, leg. A. Barševskis); Valmiera d.: Briede, 21 August 2006 (1, leg. A. Pankjāns); Ventspils d.: Moricsala Isl., Moricsala Nature Reserve, 10 September 2001 (6, leg. A. Barševskis), 29 June 2002 (10, leg. U. Valainis), 3–5 August 2002 (16, leg. U. Valainis), June 2003 (1, leg. U. Valainis), 26 June 2004 (4, leg. A. Barševskis), 9 July 2004 (6, leg. A. Barševskis), 3–4 August 2004 (1, leg. A. Barševskis), July 2007 (19, leg. A. Barševskis), 15 July 2008 (4, leg. A. Barševskis).

Host plants: *Hypericum* (Hypericaceae).

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

General distribution: Europe, the Caucasus, Siberia; introduced also into N America. [SIE]

Note: a very common and widespread species in Latvia.

subgenus *Taeniochrysea* Bechyne, 1950

Ch. americana (Linnaeus, 1758) (Fig. 5)

References: Müthel 1886 (*Chrysomela*); Seidlitz 1887–1891 (*Chrysomela*); Rathlef 1905; Telnov *et al.* 1997; Telnov 2004.

Examined material: six specimens: Rīga: in town, Pokrova cemetery, 17 July 1996 (3, park, leg. D. Telnov); Rīga (3, coll. C. Müthel).

Host plants: in literature (Warchałowski 1993), *Rosmarinus officinalis* and *Lavandula* (Lamiaceae) are mentioned as host plants.

Phenology: V, VII.

General distribution: S Europe, N Africa (the basin of the Mediterranean Sea); also reported from England and Belgium. [EUM]

Note: a very rare species in Latvia with two records from Rīga. In Fennoscandia and Baltic states it is known only from Latvia (Silfverberg 2004).

subgenus *Hypericia* Bedel, 1899

Ch. hyperici (Forster, 1771) (Fig. 19)

syn.: *fucata* Fabricius, 1781; *gemellata* Geoffroy, 1785; *viridula* Laicharting, 1781

References: Müthel 1886 (*Chrysomela fucata* Fbr.); Seidlitz 1887–1891 (*Chrysomela*); Rathlef 1905 (*Chrysomela*); Pūtele 1981a, b, 1984 (*Chrysomela*); Barševskis 1996 (misidentification), 2002; Telnov *et al.* 1997; Leiskina 1999 (misidentification), 2000 (misidentification); Barševskis *et al.* 2004 (misidentification); Telnov 2004; Bukejs and Telnov 2007 (misidentification).

Examined material: 10 specimens: Rīga: Rīga (3, coll. C. Müthel); Valka d.: Trikāta, Āķeri house, 30 July 1992 (1, meadow, leg. M. Kalniņš); Trikāta N env., Strenču sils (pine forest), 29 August 1992 (1, leg. M. Kalniņš); Valmiera d.: Mazsalaca, Ģenderti house, 15 August 1992 (5, dry meadow, leg. M. Kalniņš).

Some earlier reports of this species: Jēkabpils d.: Zasa (Leiskina 1999); Jēkabpils d.: Rubene (Leiskina 2000); Krāslava d.: Šķeltova and Izvalta (Barševskis 1996); Ventspils d.: Moricsala Isl., Moricsala Nature Reserve (Barševskis *et al.* 2004) and Daugavpils d.: Stropi (Bukejs & Telnov 2007) were based on misidentification and concern to *Ch. geminata* (Paykull, 1799).

Host plants: *Hypericum* (Hypericaceae).

Phenology: VII, VIII. In Belarus, the species is recorded in V–VII, IX (Lopatin & Nesterova 2005).

General distribution: S and C Europe, N Africa, Asia Minor, the Caucasus, Kazakhstan, Central Asia (Uzbekistan); also introduced into N America (Canada, USA) and Australia. [CEM]

Note: a very rare species in Latvia.

(-) *Ch. quadrigemina* (Suffrian, 1851)

References: Pūtele 1980, 1981a, b (*Chrysomela*); Telnov *et al.* 1997; Telnov 2004.

General distribution: N Africa (Algeria, Tunisia, Egypt), Europe (Iberian Peninsula, Italy, Dalmatia, Austria and Switzerland). [WME]

Note: the occurrence of this species in Latvia is doubtful. Probably, the report of this species from Talsi district: Slītere National Park (Pūtele 1980, 1981a, b) was based on misidentification. Therefore it was removed from the list of Latvian Coleoptera.

Ch. geminata (Paykull, 1799) (Fig. 15)

References: Ulanowski 1883 (*Chrysomela*); Müthel 1889 (*Chrysomela*); Seidlitz 1887–1891 (*Chrysomela*); Rathlef 1905 (*Chrysomela*); Stiprais 1977 (*Chrysomela*); Barševskis 1993, 2002; Telnov *et al.* 1997; Telnov 2002, 2004; Telnov *et al.* 2006; Kalniņš *et al.* 2007.

Examined material: 80 specimens: Aizkraukle d.: Taurkalne, 5 October 2005 (1, leg. J. Donis); Cēsis d.: Līgatne env., Paslavu pļavas (meadows), 19 August 2005 (4, dry meadow, leg. M. Kalniņš); Daugavpils d.: Daugavpils, Križi, 20 May 2001 (1, leg. G. Lociks); Dviete, 22 August 2006 (1, leg. A. Barševskis); Jēkabpils d.: Dignāja, 12 July 2009 (1, leg. M. Balalaikins); Dunava, 18 July 1995 (1, leg. A. Barševskis), 27 July 1999 (1, leg. A. Barševskis), 20 August 2000 (1, leg. I. Leiskina), 8–9 August 2009 (6, leg. A. Barševskis); Rubene, 5 July 1999 (1, leg. I. Leiskina), 20 July 1999 (1, leg. I. Leiskina), 27 July 1999 (1, leg. I. Leiskina); Zasa, 22 July 1998 (1, leg. I. Leiskina), 28 July 1998 (1, leg. I. Leiskina); Krāslava d.: Ezernieki, Garaudži, 24 July 2008 (2, leg. U. Valainis, R. Cibulskis); Izvalta, 1 August 1995 (1, leg. A. Barševskis); Šķeltova, 27 July 1989 (1, leg. A. Barševskis), May 1990 (1, leg. A. Barševskis), 1992 (1, leg. A. Barševskis), 30 July 1995 (1, leg. A. Barševskis), 31 July 1995 (4, leg. A. Barševskis),

23 July 1996 (2, leg. A. Barševskis), 11 August 2009 (2, leg. A. Barševskis); Kuldīga d.: Alsunga, Augšuzāva PNT, 28 August 2005 (1, leg. A. Barševskis, A. Bukejs, U. Valainis); Skruna, 5 September 2008 (1, leg. R. Orlovskis, A. Barševskis); Limbaži d.: 1 km S Ainaži, 10 September 2003 (1, coastal meadow, leg. I. Salmāne); Limbaži, 7 June 1998 (1, leg. anonymous); Staicele, 17 August 1992 (1, leg. F. Savičs); Rēzekne d.: Nagļi, 1 May 1998 (1, bank of Lake Lubāns, leg. A. Bojāre); Rīga d.: Cekule, 4 August 1991 (1, leg. F. Kovaļevskis); Kūdra, 29 June 2002 (1, leg. A. Titovs); Talsi d.: Slītere, 5 June 1978 (1, leg. V. Pūtele), 11 July 1981 (1, leg. V. Pūtele), 23 August 1983 (1, leg. V. Pūtele); Ventspils d.: Moricsala Isl., Moricsala Nature Reserve, 10 September 2001 (16, leg. A. Barševskis), 5 June 2002 (1, leg. U. Valainis), 3–5 August 2002 (4, leg. U. Valainis), June 2003 (2, leg. U. Valainis), July 2007 (5, leg. A. Barševskis), 4 October 2007 (1, leg. A. Pankjāns), 15 July 2008 (2, leg. A. Barševskis), 15 October 2008 (1, leg. A. Barševskis).

Host plants: *Hypericum* (Hypericaceae).

Phenology: V, VI, VII, VIII, IX, X (2).

General distribution: Europe, Caucasus. [EUR]

Note: rather infrequent species in Latvia.

subgenus *Chalcoidea* Motschulsky, 1860

Ch. carnifex (Fabricius, 1792) (Fig. 4)

References: Seidlitz 1872–1875, 1887–1891 (*Chrysomela*); Rathlef 1905 (*Chrysomela*); Stiprais 1977 (*Chrysomela*); Telnov *et al.* 1997; Telnov 2004.

Examined material: one specimen: Daugavpils d.: Ilgas, Silene Nature Park (Barševskis 1996) was based on misidentification and concern to *Ch. carnifex* (F.).

Host plants: *Artemisia* (Compositae).

Phenology: VI, VIII.

General distribution: Europe (Iberian Peninsula, France, N Italy, Central Europe, Central Russia), N Kazakhstan, the southern part of W Siberia. [TUE]

Note: a very rare species in Latvia, known from two localities.

Ch. analis (Linnaeus, 1767) (Fig. 1)

syn.: *schach* (Fabricius, 1792)

References: Precht 1818 (*Chrysomela*); Fleischer 1829 (*Chrysomela*); Seidlitz 1872–1875, 1887–1891 (*Chrysomela*); Ulanowski 1883 (*Chrysomela*); Rathlef 1905 (*Chrysomela*); Brammanis 1930 (*Chrysomela*); Trauberga 1957 (*Chrysomela*); Stiprais 1977 (*Chrysomela*); Barševskis 1993; Telnov *et al.* 1997; Telnov 2004; Kalniņš *et al.* 2007; Bukejs and Telnov 2007.

Examined material: six specimens: Cēsis d.: Līgatne env., Paslavu pļavas (meadows), 19 August 2005 (1, dry meadow, leg. M. Kalniņš); Daugavpils d.:

Krauja, 4 August 2007 (1, old clearing, leg. A. Bukejs); Stropi, 8 August 2007 (1, meadow, leg. A. Bukejs); Višķi, 12 March 1990 (1, in hibernation place, leg. A. Barševskis); Kuldīga d.: Skruna, 5 September 2008 (1, leg. R. Orlovskis, A. Barševskis); Rīga d.: Sigulda, 12 September 1948 (1, leg. anonymous).

Host plants: *Artemisia* (Compositae).

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

General distribution: N Africa (Algeria), Europe (from S France, N Italy, S Fennoscandia Central Europe and Eastern Europe to the Urals), the N Caucasus. [EUM]

Note: a rare species in Latvia, known from few localities.

Ch. marginata (Linnaeus, 1758) (Fig. 21)

References: Fischer 1784 (*Chrysomela*), 1791 (*Chrysomela*); Precht 1818 (*Chrysomela*); Seidlitz 1872–1875, 1887–1891 (*Chrysomela*); Rathlef 1905 (*Chrysomela*); Brammanis 1930 (*Chrysomela*); Stiprais 1977 (*Chrysomela*); Barševskis 1996 (misidentification); Telnov *et al.* 1997; Telnov 2004.

Examined material: three specimens: Rīga: Rīga, 5 October 1941 (1, coll. J. Muskars), Rīga (2, coll. C. Mūthel).

Earlier report of this species: Daugavpils d.: Ilgas, Silene Nature Park (Barševskis 1996) was based on misidentification and concern to *Ch. carnifex* (F.).

Host plants: *Artemisia*, *Tripleurospermum*, *Tanacetum millefolium* (Compositae).

Phenology: VI, VII, VIII, IX, X (1).

General distribution: Europe, N Africa, the Caucasus, Asia Minor, Near East, Siberia, Central Asia, Mongolia, Russian Far East, W China, N America (Alaska). [OLA]

Note: a very rare species in Latvia, known from four localities.

subgenus *Craspeda* Motschulsky, 1860

Ch. limbata (Fabricius, 1775) (Fig. 20)

References: Precht 1818 (*Chrysomela*); Seidlitz 1872–1875, 1887–1891 (*Chrysomela*); Ulanowski 1883 (*Chrysomela*); Rathlef 1905 (*Chrysomela*); Barševskis 1993, 2002; Telnov *et al.* 1997; Telnov 2004.

Examined material: two specimens: Rīga d.: Salaspils (2, coll. C. Mūthel).

Host plants: *Plantago* (Plantaginaceae), *Artemisia* (Compositae). In the literature (Bieńkowski 2004), Rossaceae and Laniaceae are also mentioned as host plants.

Phenology: VII.

General distribution: Europe, Caucasus, Siberia, NW Kazakhstan, Mongolia. [SIE]

Note: a very rare species in Latvia, known from three localities.

subspecies *Fastuolina* Warchalowski, 1991

syn.: *Dlochrysa* auct. nec Motschulsky, 1860

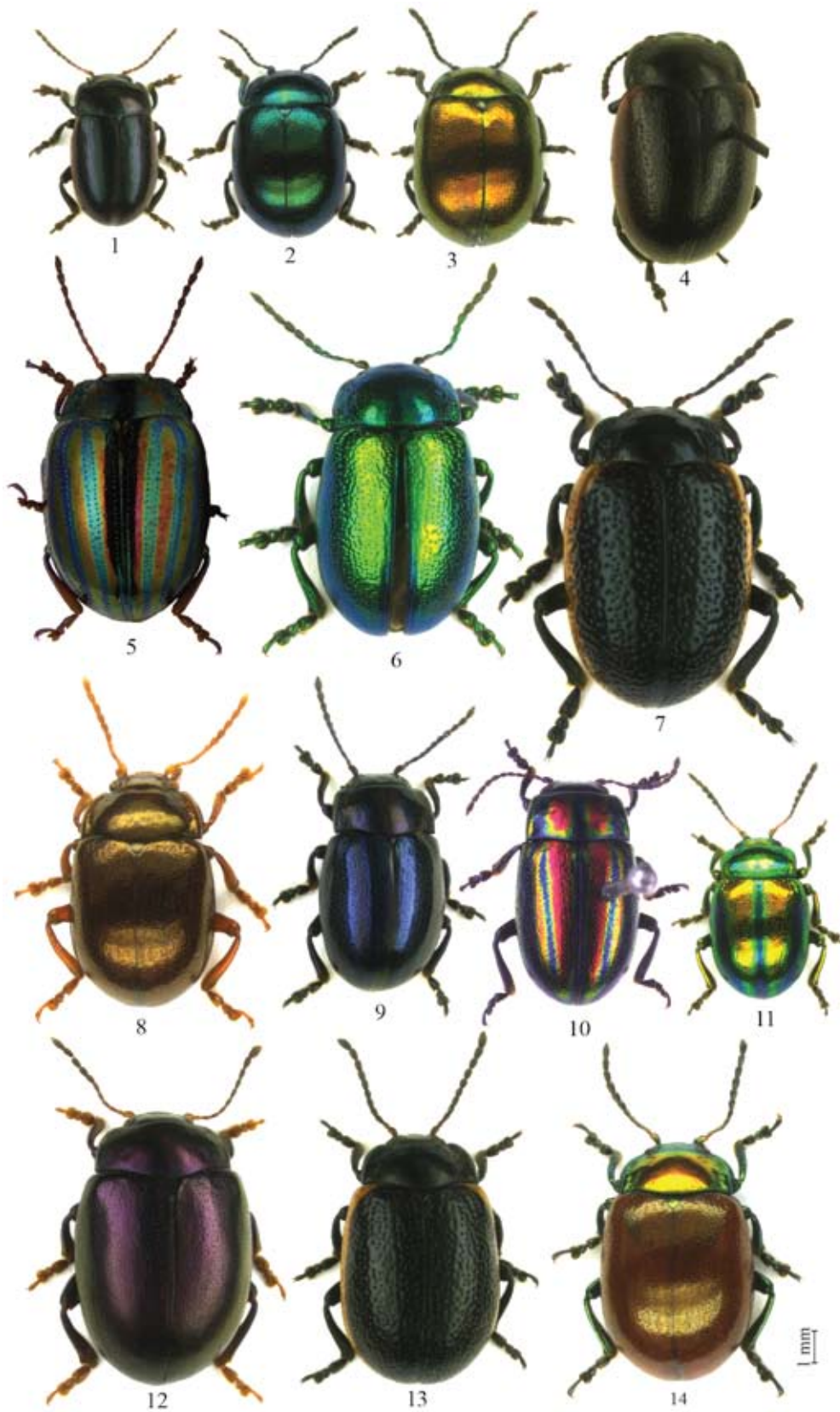
***Ch. fastuosa* (Scopoli, 1763) (Fig. 11)**

References: Precht 1818 (*Chrysomela*); Kawall 1865 (*Chrysomela*); Seidlitz 1872–1875, 1887–1891 (*Chrysomela*); Ulanowski 1883 (*Chrysomela*); Rathlef 1905 (*Chrysomela*); Priedītis 1958 (*Chrysomela*); Pūtele 1974, 1980, 1981a, b (*Dlochrysa*); Stiprais 1977 (*Chrysomela*); Barševskis 1988, 1993, 2002; Telnov *et al.* 1997; Telnov 2004; Kalniņš *et al.* 2007; Bukejs and Telnov 2007; Spunģis 2008.

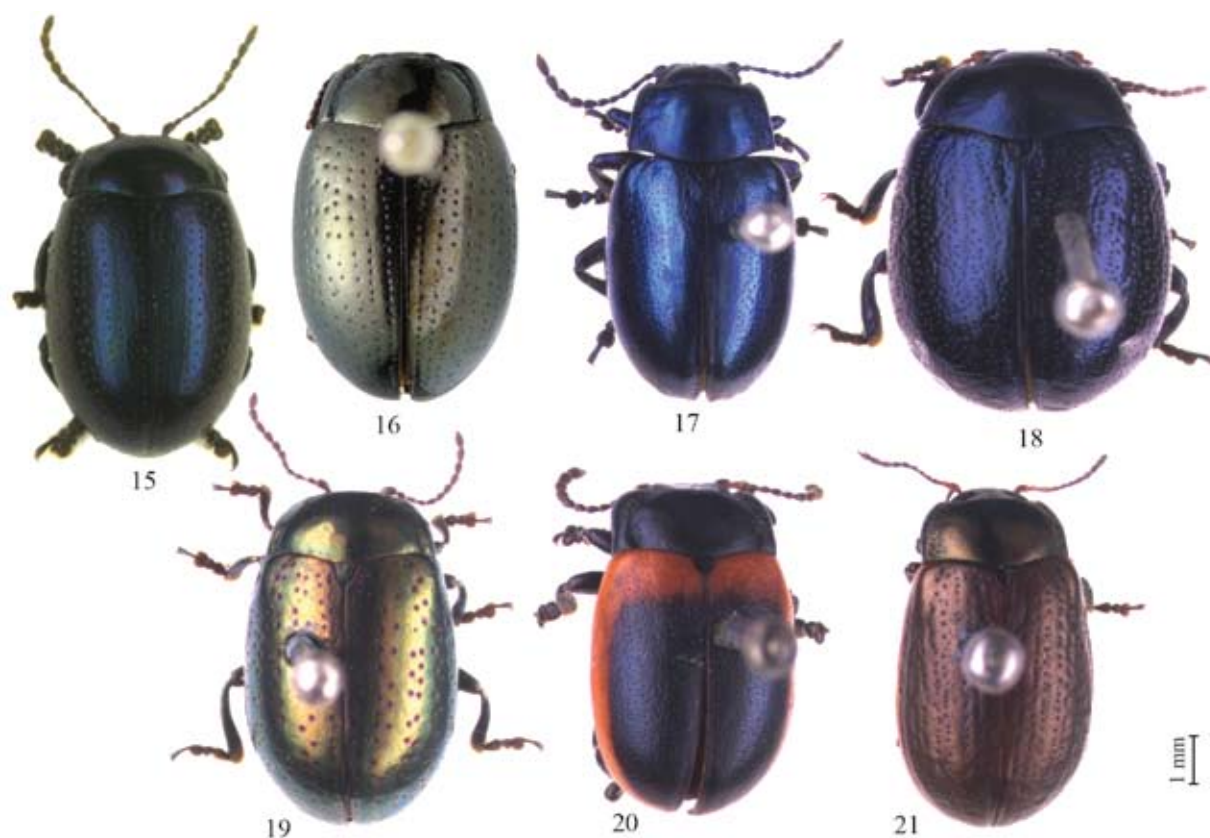
Examined material: 178 specimens: Aizkraukle d.: Kurmene, 1 August 1997 (1, leg. I. Leiskina); Skrīveri, 19 June 2006 (7, leg. A. Barševskis), 20 June 2006 (1, bank of the Daugava River, leg. A. Barševskis); Bauska d.: Bauska Nature Park, 3 May 2008 (1, leg. A. Pankjāns); Jumpravas, 24 June 2002 (1, bank of the Lielupe River, leg. I. Salmane); Mežotne env., near the Lielupe River, 3 May 2008 (1, leg. U. Valainis, A. Pankjāns, A. Soldāns, E. Tamanis); Cēsis d.: Cēsis, Bērzaīne, 18 June 2004 (1, bank of the Pirtsupīte River, leg. I. Salmane), 8 July (1, meadow, leg. I. Salmane); Daugavpils d.: Bebrene, 9 May 1987 (4, leg. A. Barševskis), 13 June 2006 (1, leg. E. Rudāns), 19 June 2006 (2, leg. E. Rudāns); Daugavpils, Križi, 28 June 1992 (1, leg. A. Barševskis); Dviete, 17 April 1993 (1, leg. A. Barševskis); Ilgas, Silene Nature Park, 19 June 1993 (1, leg. A. Barševskis), 16 June 1995 (2, leg. A. Barševskis), 29 April–10 July 2000 (1, leg. L. Nikitina), 14 June 2001 (1, leg. G. Lociks), 18 May 2005 (5, leg. A. Barševskis), 1–3 July 2008 (1, leg. T. Vasiljeva), 1–3 July 2008 (3, leg. R. Cibulskis), 1–3 July 2008 (1, leg. N. Mihailova); Ilukste, 20 May 2006 (1, leg. A. Pankjāns); Lielborne, 21 May 2008 (1, bank of the Daugava River, leg. A. Pankjāns); Līksna, August 1993 (1, leg. R. Cibulskis); Naujene, 27 April 2007 (3, Jezupova park, leg. A. Barševskis), 29 April 2008 (13, valley of the Daugava River, leg. A. Pankjāns, U. Valainis), 9 May 2008 (2, Jezupova park, leg. R. Cibulskis); 9 May 2008 (1, Jezupova park, broad leaved forest, leg. U. Valainis); Pilskalne, 9 May 2005 (15, leg. A. Barševskis), 24 May 2009 (1, leg. U. Valainis, M. Nitcis, A. Pankjāns); Saliēna parish, Daugavsargu loks (precipice), 17 May 2007 (1, leg. A. Pankjāns); Šedere, Straumēni house, 10–11 May 2008 (2, leg. M. Janovska), 1 June 2008 (1, leg. M. Janovska); Stropi, July 2001 (1, leg. A. Bukejs), 8 July 2006 (1, leg. A. Bukejs), 25 May 2007 (2, swampy bank of Lake Lielais Stropu, leg. A. Bukejs), 28 May 2007 (1, meadow, leg. A. Bukejs), 31 May

2008 (1, agrocenosis, leg. A. Bukejs), 12 July 2008 (1, dry meadow, leg. A. Bukejs); Vabole, 1993 (2, leg. M. Jukšs), 24 July 1994 (1, clearing, leg. R. Cibulskis), 9 August 1994 (1, clearing, leg. R. Cibulskis); 1.5 km SW Vecpils, 55°54'41"N 26°43'51"E, 9 May 2008 (1, leg. R. Cibulskis); Gulbene d.: Ligo E env., valley of Tīro ditch, 21–22 May 2005 (1, forest edge, leg. D. Telnov); Jēkabpils d.: Atašiena, 11 May 1996 (1, leg. M. Čačka); Dignāja, 12 July 2009 (1, leg. M. Balalaikins); Dunava, 23 May 1993 (1, leg. A. Barševskis), 23 June 1993 (2, leg. A. Barševskis), 8 May 1994 (1, leg. A. Barševskis), 27 May 1995 (1, leg. A. Barševskis), 20 August 2000 (1, leg. I. Leiskina), 13 May 2007 (1, leg. K. Barševska, A. Barševskis), 6–9 June 2007 (2, leg. K. Barševska), 10–19 June 2007 (1, leg. K. Barševska), 23–30 June 2007 (1, leg. K. Barševska); Jēkabpils, Krustpils, near Asote castle mound, 6 August 2008 (17, leg. A. Barševskis); Rubeņi, 30 May 1997 (2, leg. I. Leiskina), 23 August 2001 (1, leg. I. Leiskina); 6 km NW Vandāni, Vīmbaru forest, 12 August 2008 (2, leg. M. Balalaikins); Zasa, 19 June 2000 (2, leg. I. Leiskina); Jūrmala: Ķemeri, 5 June 1949 (1, leg. M. Stiprais); Pumpuri, 25 July 1972 (1, garden, on *Urtica*, leg. V. Melecis); Krāslava d.: Šķeltova, 18 May 1986 (4, leg. A. Barševskis), 1 May 1996 (1, leg. A. Barševskis); 2.3 km W Tartaks, Misjūni, 9 May 2008 (1, glens meadow, leg. R. Cibulskis); Liepāja d.: Grobiņa, 18 May 1991 (1, park, leg. M. Kalniņš); Limbaži d.: Mērnīeku dumbrāji (swamp forests) PNT, ~150 m from Estonian border, 15 June 2002 (1, forest edge, leg. D. Telnov); Ogre d.: Vērene, 24 May 2003 (1, meadow, leg. D. Telnov); Preiļi d.: Jersika, 10 July 2005 (2, leg. I. Gurčonoks), 23–24 June 2009 (1, leg. K. Barševska); Pelēči, 26 August 1997 (1, leg. I. Jurkjāne); Vārkava, 25 June 1992 (2, leg. G. Spuriņš); Rēzekne d.: Malta, 14 June 2001 (1, leg. C. Fägerstöm); Rīga: Rīga, 17 May 1938 (1, coll. J. Muskars), 31 May 1974 (6, leg. L. Danka); Rīga d.: 2 km S Cekule, 4 September 2004 (1, pine forest, leg. D. Telnov); Krimulda, 14 April 1993 (2, leg. M. Kalniņš); between Saulkrasti and Zvejniekiems, mouth of the Ķīšupe River, 28 May 2003 (1, leg. R. Matrozis); Talsi d.: 1 km NW Roja, 1 June 2003 (1, seashore, leg. D. Telnov); Vandzene, 25 May 2008 (1, leg. anonymous); Valka d.: Trikāta, Rūtiņi house, 23–25 June 1991 (2, leg. M. Kalniņš), 25 June 1991 (3, dry meadow, leg. M. Kalniņš), 15 May 1993 (6, meadow, leg. M. Kalniņš); Ventpils d.: Moricsala Isl., Moricsala Nature Reserve, 29 May 2006 (1, leg. A. Barševskis); Pūze, 14 June 1974 (1, garden, leg. V. Melecis); ? d.: Zilāni, 22 June 1975 (3, leg. M. Stiprais).

Host plants: *Lamium*, *Galeopsis* (Labiatae). In literature (Bieńkowski 2004), *Urtica* (Urticaceae) is also mentioned as a host plant.



Figures 1–14. Habitus, dorsal: 1 – *Chrysolina analis*, 2 and 3 – *Ch. varians*, 4 – *Ch. carnifex*, 5 – *Ch. americana*, 6 – *Ch. graminis*, 7 – *Ch. gypsophilae*, 8 – *Ch. staphylaea*, 9 and 10 – *Ch. cerealis*, 11 – *Ch. fastuosa*, 12 – *Ch. sturmi*, 13 – *Ch. sanguinolenta*, 14 – *Ch. polita*.



Figures 15–21. Habitus, dorsal: 15 – *Ch. geminata*, 16 – *Ch. oricalcia*, 17 – *Ch. coeruleans*, 18 – *Ch. haemoptera*, 19 – *Ch. hyperici*, 20 – *Ch. limbata*, 21 – *Ch. marginata*.

Phenology: IV (2), V, VI, VII, VIII, IX.

General distribution: Europe, the Caucasus, Asia Minor, W Siberia, Altai. [SIE]

Note: a very common and widely distributed species in Latvia.

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APIE LATVIJOS ENTOMOFAUNOS LAPGRAUŽIUS VABALUS CHRYSOMELINAE (COLEOPTERA: CHRYSOMELIDAE): 4. GENTIS CHRYSOLINA MOTSCHULSKY, 1860

A. Bukejs, D. Telnov

SANTRAUKA

Šiame straipsnyje pateikiami duomenys apie Latvijos lapgraužių vabalų genties *Chrysolina* Motschulsky, 1860 fauną, ekologiją ir bibliografiją. Iš viso buvo peržiūrėti 1132 vabalai. Pirmą kartą išanalizuota bibliografinė medžiaga apie Latvijos *Chrysolina* fauną. Trys rūšys – *Chrysolina rufa* (Duftschmid, 1825), *Ch. fuliginosa galii* (Weise, 1884) ir *Ch. quadrigemina* (Suffrian, 1851) buvo pašalintos iš Latvijos vabalų faunos sąrašo. Pateikiamas Latvijos entomofaunos *Chrysolina* genties rūšių (21) sąrašas su anotacijomis.

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