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CONTRIBUTION TO THE KNOWLEDGE OF THE SLOVENIAN ALTICINAE FAUNA (COLEOPTERA: CHRYSOMELIDAE)

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Abstract – Additional informations on 48 species of Alticinae (Coleoptera: Chrysomelidae) and its localities in Slovenia are given as a follow-up to the first contribution of the *Material for the beetle (Coleoptera) fauna in Slovenia*. The recent occurrence of *Longitarsus languidus* Kutschera, 1863 in Slovenia and *L. minusculus* (Foudras, 1860) in west part of the country is confirmed. The second recent evidence of *L. noricus* Leonardi, 1976 and the third recent evidence of *Apteropeda orbiculata* (Marsham, 1802) in Slovenia are given.

KEY WORDS: faunistics, Coleoptera, Chrysomelidae, Alticinae, *Longitarsus*, Slovenia

Izvleček – PRISPEVEK K POZNAVANJU FAVNE BOLHAČEV (COLEOPTERA: CHRYSOMELIDAE: ALTICINAE) SLOVENIJE

V prispevku podajamo nove podatke o pojavljanju 48 vrst bolhačev v Sloveniji kot dodatek *Gradivu za favno hroščev (Coleoptera) Slovenije*. Potrdili smo pojavljajanje vrste *Longitarsus languidus* Kutschera, 1863 v Sloveniji in *L. minusculus* (Foudras, 1860) v zahodnem delu države. Podajamo tudi drugi novejši podatki za vrsto *L. noricus* Leonardi, 1976 in tretji za vrsto *Apteropeda orbiculata* (Marsham, 1802) v Sloveniji.

KLJUČNE BESEDE: favna, Coleoptera, Chrysomelidae, Alticinae, *Longitarsus*, Slovenija

Introduction

Overview information about Slovenian Alticinae is published in recent years in the work of Brelih et al. (2003) and Gruev (2002, 2003, 2005), and information

regarding particular region in the work of Rak Cizej et al. (2001). Recent general information about Central European species and their presence in countries of Palaearctic region is given in publication of Čížek & Doguet (2008) and Döberl (2010). The most detailed survey represents *Material for the beetle (Coleoptera) fauna in Slovenia* (Brelih et al. 2003), where exact informations about localities of the revised material can be found.

Our paper is further contribution to the knowledge of the Slovenian Alticinae fauna and links up to the work of Brelih et al. (2003). For this we used identical abbreviations and identical form of the list of localities including UTM squares, areas, regions and subregions (Tab. 1). The number codes of the individual species are preserved and also number of collected specimens is presented. Data about zoogeographical characteristics of mentioned taxa are according to Gruev (2004a, b, c). On 24 localities, mostly different from localities presented in Brelih et al. (2003), 48 species of Alticinae were collected in years 1994 – 2004. Notes on localities and biology of *Longitarsus languidus* Kutschera, 1863, *L. minusculus* (Foudras, 1860), and *L. noricus* Leonardi, 1976 are added.

Abbreviations

c – coll. d – det. l – leg. v – vid. sp – specimen(s)

JBe – Jan Bezděk, PBo - Petr Boža, PCi - Petr Čížek, ZMa - Zdeněk Malinka

Table 1. List of localities

Tabela 1. Seznam najdišč

Locality	UTM	x-coordinate	y-coordinate	Altitude	Area	Region 1. 2. 3. 4.
Bele Vode, near Mornova zijalka cave, Šoštanj env.	VM84	14°58 E	46°24 N	560 m	Štj.	1. 2. 3.
Čaven, mountain cottage Na Čavnu, Trnovski gozd mts.	VL18	13°51 E	45°55 N	1240 m	Prm.	5B. 9.
Foresters lodge, 1 km NNW of Jelenov studenec, Stojna mts., Kočevje env.	VL85	14°50 E	45°38 N	900 m	Dol.	5B. 3. 4.
Kastelec, Kozina env.	VL04	13°52 E	45°35 N	330 m	Ist.	6. 4. 3.
Krakovski gozd, near Sajevce, Kostanjevica na Krki env.	WL37	13°26 E	45°52 N	150 m	Dol.	4. 12.
Kraple, Čreta mt. env., Dobrovљe mts.	VM92	14°58 E	46°17 N	750-800 m	Štj.	2. 5.
Krmica, Trnovski gozd mts.	VM09	13°46 E	45°57 N	980 m	Prm.	5B. 9.
Letuš (near Golob)	WM03	15°01 E	46°19 N	315 m	Štj.	2. 5.
Ljubljana, centre of city	VM60	14°30 E	46°03 N	290 m	Lju.	3. 4. 4.
Logar, Luče ob Savinji	VM83	14°44 E	46°21 N	530 m	Štj.	2. 6.
Loški potok, Nova vas env.	VL66	14°35 E	45°42 N	710 m	Dol.	5B. 5.
Ocizla (near Klanec), Kozina env.	VL15	13°55 E	45°36 N	440 m	Ist.	6. 4. 3.
Petrinjski kras, Petrinje, Kozina env.	VL14	13°54 E	45°34 N	450 m	Ist.	6. 4. 3.
Podklanec, Žiri env.	VL39	14°07 E	46°01 N	500 m	Gor.	2/5. 1.
Poljane pri Podgradu env., Podgrajsko podolje	VL24	14°06 E	45°32 N	580 m	Ist.	6. 4. 1.
Sela na Krasu	UL97	13°38 E	45°50 N	230 m	Prm.	6. 3.
Šelovec – Avška gmajna, Trnovski gozd mts.	VL08	13°49 E	45°56 N	1150 m	Prm.	5B. 9.
Sežana, 1,5 km NW	VL16	13°52 E	45°43 N	cca 400 m	Prm.	6. 3.
Snežnik mt., Ilirska Bistrica env.	VL54	14°26 E	45°35 N	1200 – 1500 m	Not.	5B. 8.
Sveti Duh – Olševo mt. slope, Karavanke mts.	VM74	14°40 E	46°26 N	1100-1700 m	Kor.	1. 2. 3.
Sveti Jeronim, Vransko env., Dobrovљe mts.	VM92	14°57 E	46°15 N	420 m	Štj.	2. 5.
Sveti Urban, Dobrovљe mts.	VM93	15°00 E	46°19 N	650 m	Štj.	2. 5.
Veliki Dol, Komen env.	VL06	13°46 E	45°46 N	220 m	Prm.	6. 3.
Zgornji Hotič, Litija env.	VM80	14°49 E	46°05 N	280 m	Gor.	2. 4.

List of records

01.02. *Phyllotreta vittula* (L. Redtenbacher, 1849)

Localities:

Dolenjsko: Krakovski gozd, Sajevce, Kostanjevica na Krki env., 27.-28.6.2003 (2 sp), lcZMa dPČi; Foresters lodge, Stojna mts., 900 m, Kočevje env., 15.-16.7.2000 (2 sp), lcZMa dPČi.

01.04. *Phyllotreta nemorum* (Linnaeus, 1758)

Localities:

Dolenjsko: Loški potok, Nova vas env., 28.4.2002 (1 sp), lcZMa dPČi.

01.05. *Phyllotreta undulata* (Kutschera, 1860)

Localities:

Gorenjsko: Podklanec, Žiri env., 27.10.2002 (1 sp), lcZMa dPČi.

Dolenjsko: Loški potok, Nova vas env., 28.4.2002 (1 sp), lcZMa dPČi.

01.10. *Phyllotreta ochripes* (Curtis, 1837)

Localities:

Štajersko: Letuš, Savinja riv. valley, 15.4.1994 (1 sp), lcZMa dPČi.

01.11. *Phyllotreta exclamationis* (Thunberg, 1784)

Localities:

Dolenjsko: Krakovski gozd, Sajevce, Kostanjevica na Krki env., 27.-28.6.2003 (1 sp), lcZMa dPČi.

01.20. *Phyllotreta procera* (L. Redtenbacher, 1849)

Localities:

Istra: Kastelec, Kozina env., 30.4.2002 (1 sp), lcZMa dPČi.

02.09. *Aphthona pygmaea* Kutschera, 1861

Localities:

Primorsko: Sela na Krasu, 27.-28.10.2002 (3 sp), lcZMa dPČi.

Štajersko: Sv. Urban, Dobrovlje mts., 13.5.1995 (1 sp), lcZMa dPBo.

02.11. *Aphthona venustula* Kutschera, 1861

Localities:

Istra: Kastelec, Kozina env., 30.4.2002, in the evening (1 sp), lcZMa dPČi.

Štajersko: Sv. Urban, Dobrovlje mts., 13.5.1995 (6 sp), lcZMa dPČi.

02.12. *Aphthona euphorbiae* (Schrank, 1781)

Localities:

Dolenjsko: Foresters lodge, Stojna mts., Kočevje env., 15.-16.7.2000 (1 sp), lcZMa dPČi.

Commentary:

The first published locality of this Euroasiatic (Palaearctic) element, polyphagous and eurytopic species, in the region Dolenjsko. This is now the

southernmost locality in Slovenia, distant from historical localities (Brelih et al. 2003).

02.15. *Aphtona semicyanea* Allard, 1859

Localities:

Primorsko: Sela na Krasu, 27.-28.10.2002 (3 sp), 20.-22.6.2003 (1 sp), lcZMa dPČi.

02.17. *Aphtona ovata* Foudras, 1861

Localities:

Notrjansko: Snežnik mt., Ilirska Bistrica env., 28.4.2002 (1 sp), lcZMa dPČi.

Commentary:

Data represent recent confirmation of the occurrence of this Central European element, oligophagous and stenotope species, in the Snežnik mt. (see Müller, 1953).

02.19. *Aphtona atrovirens* (Förster, 1849)

Localities:

Istra: Kastelec, Kozina env., 30.4.2002 (1 sp), lcZMa dPČi.

Primorsko: Sežana, 1,5 km NW, 27.6.2001 (2 sp), lcZMa dPČi.

03.01. *Longitarsus pellucidus* (Foudras, 1860)

Localities:

Štajersko: Krapple, Čreta mt. env., Dobrovlje mts., 14.10.1995 (1 sp), lcZMa, dPBo.

03.05. *Longitarsus succineus* (Foudras, 1860)

Localities:

Primorsko: Krnica, Trnovski gozd mts., 6.-7.7.1999 (1 sp), lcZMa dPBo.

03.06. *Longitarsus noricus* Leonardi, 1976

Localities:

Istra: Kastelec, Kozina env., 29.-30.10.2002 (1 sp), lcZMa dPBo.

Commentary:

Data represent the second recent evidence of this Central European element in Slovenia, the first evidence for the Istrian region. The locality is part of Kraški rob named Spodnji Kras W and NW of Kastelec village, formed by E and NE hillside of hill Kras (346 m). Area is covered with typical steppe grassland, lined by thermophilous oak woods, and flat terrain depression with more rural character – pasture and small vineyards near the village. Type of locality is “Submediterranean-Ilyrean pastures of the Karst Plateau” according to European Grasslands Report Nr. 5 (2003) and “Eastern sub-mediterranean dry grasslands” according to Jogan et al. (2004). We didn’t control and recorded plants in this locality, but the nature of the locality corresponds with *L. noricus* characteristics – grassland specialist, eurytype and oligophagous species on Asteraceae.

03.10. *Longitarsus nigrofasciatus* (Goeze, 1777)

Localities:

Štajersko: Kraple, Čreta mt. env., Dobrovlje mts., 16.5.1995 (2 sp), lcZMa dPBo.

03.16. *Longitarsus helvolus* Kutschera, 1864

Localities:

Primorsko: Sela na Krasu, 27.-28.10.2002 (1 sp), lcZMa dPBo.

03.19. *Longitarsus melanocephalus* (De Geer, 1775)

Localities:

Dolenjsko: Krakovski gozd, Sajevce, Kostanjevica na Krki env., 27.-28.6.2003 (3 sp), lcZMa dPBo.

03.28. *Longitarsus pratensis* (Panzer, 1794)

Localities:

Istra: Kastelec, Kozina env., 29.-30.10.2002 (4 sp), lcZMa dPBo.

Dolenjsko: Krakovski gozd, Sajevce, Kostanjevica na Krki env., 27.-28.6.2003 (1 sp), lcZMa dPBo.

03.32. *Longitarsus reichei* (Allard, 1860)

Localities:

Istra: Kastelec, Kozina env., 29.-30.10.2002 (1 sp), lcZMa dPBo.

Gorenjsko: Zg. Hotič, Litija env., 4.-5.7.1999 (1 sp), lcZMa dPBo.

Dolenjsko: Krakovski gozd, Sajevce, Kostanjevica na Krki env., 27.-28.6.2003 (5 sp), lcZMa dPBo.

03.41. *Longitarsus apicalis* (Beck, 1817)

Localities:

Štajersko: Sv. Jeronim, Vransko env., 17.4.1994 (1 sp), lcZMa dPČi.

03.43. *Longitarsus luridus* (Scopoli, 1763)

Localities:

Istra: Kastelec, Kozina env., 30.4.2002 (2 ex.), 29.-30.10.2002 (1 sp) lcZMa dPČi; Poljane env., Podgrajsko podolje, pitfall trap, 25.6.-31.10.2001 (1 sp), lcZMa dPČi

Gorenjsko: Podklanec, Žiri env., 27.10.2002 (4+1 sp), lcZMa dPČi dPBo.

Dolenjsko: Krakovski gozd, Sajevce, Kostanjevica na Krki env., 27.-28.6.2003 (12+4 sp), lcZMa dPČi dPBo.

Štajersko: Sv. Jeronim, Vransko env., 18.-19.5.1997 (1 sp), lcZMa dPBo.

03.47. *Longitarsus languidus* Kutschera, 1863

Localities:

Primorsko: Sežana 1,5 km NW, 27.6.2001 (1 sp), lcZMa dPBo.

Commentary:

Data represent recent confirmation of this species (Central European element) in Slovenia. Finding site approves the occurrence in western part of

Slovenia only from before 31.12.1950 (Brelih et al. 2003). In this work is one date of collection of this thermophile species – October 1930 in Plave (Primorsko). Gruev (2003) presented distribution in Slovenia (without any details), and in Croatia-Istria and North-East Italy. These areas are near here presented locality. Locality of collection is steppe hillside lined with deciduous trees. Type of locality is the same as described for *L. noricus* in general. Strejček (1996) presented range of occurrence in Czech Republic (Pálava Biosphere Reserve of UNESCO, South Moravia) in grassy steppe in months of March and April and then in October. From this point of view is interesting the occurrence at the end of June. When collecting we didn't control and record plants in this locality. The presence of *Senecio jacobaea* L. is very probable, as this type of locality, steppe hillside, agrees with the ecological requirements of the nutrient plant (Slavík & Štěpánková 2004) of this monophagous and stenotope beetle species (Čížek & Doguet 2008).

03.48. *Longitarsus minusculus* (Foudras, 1860)

Localities:

Istra: Kastelec, Kozina env., 29.-30.10.2002 (5 sp), lcZMa dPČi.

Commentary:

Data represent the third recent locality of this Central European element in Slovenia, first in western part of the country. It gives a confirmation of the formerly presented occurrence in the region Istra (before 1951, Brelih et al. 2003, Müller 1953). The description of the locality is presented in “Commentary” by *L. noricus*. The nature of the locality corresponds with *L. minusculus* characteristics – steppe and forest steppe species, stenotope and oligophagous on *Lamiaceae*.

03.50. *Longitarsus linnaei* (Duftschmidt, 1825)

Localities:

Istra: Ocižla, Kozina env., 1.5.2000 (1 sp) lcZMa dPČi.

03.52. *Longitarsus niger* (Koch, 1803)

Localities:

Istra: Kastelec, Kozina env., 30.4.2002 (1 sp), lcZMa dPČi.

03.58. *Longitarsus oblitteratus* (Rosenhauer, 1847)

Localities:

Primorsko: Sela na Krasu, 27.-28.10.2002 (1 sp), lcZMa dPBo.

03.59. *Longitarsus salviae* Gruev, 1975

Localities:

Istra: Kastelec, Kozina env., 30.4.2002 (2 sp), 29.-30.10.2002 (1 sp) lcZMa dPBo; Petrinje, Petrinjski kras, Kozina env., 29.4.-1.5.2003 (2 sp), lcZMa dPBo.

Primorsko: Sežana 1,5 km NW, 27.6.2001 (1 sp) lcZMa dPBo.

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04.06. *Altica tamaricis* (Schrank, 1785)

Localities:

Gorenjsko: Zgornji Hotič, Litija env., 4.-5.7.1999 (2 sp), lcZMa dPČi.

04.07. *Altica oleracea* (Linnaeus, 1758)

Localities:

Istra: Petrinjski kras, Petrinje env., 25.-27.6.2001 (1 sp), 29.4.-1.5.2003 (1 sp), lcZMa dPČi; Kastelec, Kozina env., 29.-30.10.2002 (1 sp), lcZMa dPČi.

06.02. *Batophila rubi* (Paykull, 1799)

Localities:

Primorsko: Krnica, Trnovski gozd mts., 15.-17.5.1999 (2 sp), 6.-7.7.1999 (1 sp.), lcZMa dPČi; Selovec – Avška Gmajna, Trnovski gozd mts., 7.-8.7.1999 (5 sp), lcZMa dPČi.

Koroško: Sv. Duh – Olševa mt. slope, Karavanke mts., 17.-18.5.1997 (1 sp), lcZMa dPČi.

08.05. *Neocrepidodera ferruginea* (Scopoli, 1763)

Localities:

Primorsko: Krnica, Trnovski gozd mts., 6.-7.7.1999 (1 sp), lcZMa dPBo.

Štajersko: Sv. Urban, Dobrovje mts., around sinkholes in forest, 15.10.1994 (1 sp), lcZMa dPBo.

08.07. *Neocrepidodera femorata* (Gyllenhal, 1813)

Localities:

Dolenjsko: Foresters lodge, Stojna mts., Kočevje env., 15.-16.7.2000 (1 sp), lcZMa dPBo.

09.01. *Orestia alpina* (Germar, 1824)

Localities:

Koroško: Sv. Duh – Olševa mt. slope, Karavanke mts., 14.5.1999 (1 sp), lcZMa dPBo.

10.01. *Derocrepis rufipes* (Linnaeus, 1758)

Localities:

Istra: Kastelec, Kozina env., 30.4.2002, (1 sp), lcZMa dPČi; Ocizla, Kozina env., 1.5.2000 (2 sp), lcZMa dPČi.

Primorsko: Selovec – Avška Gmajna, Trnovski gozd mts., 7.-8.7.1999 (2 sp), lcZMa dPBo.

12.03. *Crepidodera aurata* (Marsham, 1802)

Localities:

Gorenjsko: Zgornji Hotič, Litija env., Sava riverside, 4.-5.7.1999 (2 sp), lcZMa dPČi.

Štajersko: Kraple, Dobrovje mts., 16.5.1995 (2 sp), lcZMa dPČi; Sv. Urban, Dobrovje mts., 14.5.1995 (1 sp), lcZMa dPČi; Bele Vode, Šoštanj env., 16.5.1997, (1 sp) lcZMa dPBo.

12.04. *Crepidodera plutus* (Latreille, 1804)

Localities:

Gorenjsko: Zgornji Hotič, Litija env., 4.-5.7.1999 (2 sp), lcZMa dPČi.

Commentary:

Data represent the first locality of this rare, oligophagous and stenotope species (Euroasiatic Palaearctic element) in the region Gorenjsko.

13.02. *Epitrix pubescens* (Koch, 1803)

Localities:

Primorsko: Veliki Dol, Komen env., 1.5.2002, (2 sp), lcZMa dPČi.

Gorenjsko: Zgornji Hotič, Litija env., 4.-5.7.1999 (1 sp), lcZMa dPČi.

14.03. *Minota halmae* (Apfelbeck, 1906)

Localities:

Dolenjsko: Foresters lodge, Stojna mts., Kočevje env., 15.-16.7.2000 (1 sp), lcZMa dPBo.

17.03. *Chaetocnema semicoerulea* (Koch, 1803)

Localities:

Gorenjsko: Zgornji Hotič, Litija env., Sava riverside, 4.-5.7.1999 (1 sp), lcZMa dPČi.

17.05. *Chaetocnema picipes* Stephens, 1831

Localities:

Dolenjsko: Foresters lodge, Stojna mts., Kočevje env., 15.-16.7.2000 (1 sp), lcZMa dPČi (determinated as *Ch. laevicollis*).

17.08. *Chaetocnema conducta* (Motschulsky, 1838)

Localities:

Dolenjsko: Krakovski gozd, Sajevce, Kostanjevica na Krki env., 27.-28.6.2003 (3 sp), lcZMa dPČi.

17.15. *Chaetocnema hortensis* (Geoffroy, 1785)

Localities:

Ljubljana z okolico: Ljubljana, on walls in centre, 18.10.1998 (3 sp), lcZMa dPČi.

Dolenjsko: Loški potok, Nova vas env., 28.4.2002 (2 sp), lcZMa dPČi; Krakovski gozd, Sajevce, Kostanjevica na Krki env., 27.-28.6.2003 (1 sp), lcZMa dPČi.

18.01. *Sphaeroderma testaceum* (Fabricius, 1775)

Localities:

Primorsko: Čaven, Koča na Čavnu, Trnovski gozd mts., 12.7.2000 (1 sp), lcZMa dJBe; Sežana, 1,5 km NW, 27.6.2001, (3 sp), lcZMa dJBe; Sela na Krasu, 29.-30.6.2002 (2 sp), lcZMa dJBe.

Dolenjsko: Krakovski gozd, Sajevce, Kostanjevica na Krki env., 27.-28.6.2003 (4 sp), lcZMa dJBe.

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18.02. *Sphaeroderma rubidum* (Graells, 1853)

Localities:

Dolenjsko: Krakovski gozd, Sajevce, Kostanjevica na Krki env., 2.-3.7.2004 (1 sp), lcZMa dJBe.

Štajersko: Logar, Luče ob Savinji, 16.5.1998 (1 sp), lcZMa dJBe.

20.02. *Apteropeda orbiculata* (Marsham, 1802)

Localities:

Gorenjsko: Podklanec, Žiri env., 27.10.2002 (1 sp), lcZMa dPBo.

Commentary:

Data represent the third recent evidence of this European element in Slovenia, and the first recent evidence for the Gorenjsko region.

23.02. *Psylliodes (Psylliodes) affinis* (Paykull, 1799)

Localities:

Štajersko: Kraple, Dobrovlje mts., 14.10.1995 (1 sp), lcZMa dPČi.

23.07. *Psylliodes (Psylliodes) napi* (Fabricius, 1792)

Localities:

Primorsko: Krnica, Trnovski gozd mts., 15.-17.5.1999 (1 sp), lcZMa dPBo.

Štajersko: Sv. Urban, Dobrovlje mts., 12.8.1995 (1 sp), Sv. Urban env., pit-fall trap in front of Vračka Zijalka cave, 12.8.-13.10.1995 (1 sp) lcZMa dPBo.

Remark: The years of the taxon description were specified according to Döberl (2010) for *Aphtona ovata* and *Longitarsus helvolus*.

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