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A PRELIMINARY STUDY OF THE SUMMER ASPECT OF WEEVIL (COLEOPTERA: CURCULIONOIDEA) FAUNA OF THE OVČAR-KABLAR GORGE (WESTERN SERBIA)

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Abstract

The first preliminary overview of the weevil (Coleoptera: Curculionoidea) fauna registered in the Ovčar-Kablar Gorge (western Serbia) is given. The field research was conducted in June and July 2016 at seven localities. Among a total of 62 identified species and 7 subspecies, 14 are recorded for the first time for the Republic of Serbia, including one Balkan endemic species (*Cleopomiarus medius*). One of the registered species (*Sciaphobus caesius*) is protected by the national regulations of the Republic of Serbia.

KEY WORDS: fauna, Curculionidae, Brentidae, Nanophyinae, Attelabidae, *Sciaphobus caesius*.

Introduction

The Ovčar-Kablar Gorge is situated in western Serbia, in the municipalities of Čačak and Požega. Its geographical position in Serbia is presented on the grid map in Fig. 1, with squares of 10 km × 10 km, based on the Military Grid Reference System and the Universal Transverse Mercator (UTM) projection (Lampinen, 2001). The gorge includes meanders of Zapadna Morava River, passing between the mountain ranges of Ovčar on the right side, and Kablar, on the left. The total surface of the gorge is 6,174 ha. Its altitude ranges from 200 to 985 m a.s.l., its length is approximately 20 km, while the maximum depth of the gorge is 710 m.

Since 2000, 2,240 ha of the gorge's surface is officially a first-category protected area declared as a Landscape of Outstanding Features (Anonymous, 2000).

Like other gorges on the Balkan Peninsula, the Ovčar-Kablar Gorge represents a refuge with elements of Tertiary flora (Đorđević *et al*., 1998). Besides different terrestrial ecosystems, two artificial water accumulations exist in the Ovčar-Kablar Gorge – Ovčar Banja and Međuvršje (Puzović *et al*., 2009). The geological structure of the Ovčar-Kablar Gorge mostly consists of limestone. The climate is semiarid moderate-continental, with a Mediterranean influence in several locations. Thanks to this, well-preserved thermophilic deciduous forests with European and Oriental hornbeam, Turkey oak, Hungarian oak and sessile oak are prevalent, while steep slopes are covered by beech forests. Meadows and pastures are also present, while hygrophilous vegetation, represented by willows, poplars and alders, is present on the accumulations' banks. Rocks and cliffs are frequent on Mt. Kablar (Puzović *et al*., 2009).

Weevils (superfamily Curculionoidea), including true weevils (family Curculionidae), are probably the most abundant group of living organisms on Earth (Lyal & King, 1996; Oberprieler *et al*., 2007). To date, 65,000 species have been recorded, but it is assumed that more than 220,000 species exist (Oberprieler *et al*., 2007). In terms of ecology, this is a very important group of insects; weevils inhabit almost all terrestrial and freshwater ecosystems. Living on/in plants, they are intrinsically bound to them as a food source and/or place for laying eggs. Because of such diversity richness, weevils are still not sufficiently researched. It is assumed that only one quarter of species has been described so far (Oberprieler *et al*., 2007). In Serbia, weevil fauna is currently under intense research (Pešić, 2000, 2002, 2003, 2004, 2006, 2009, 2012, 2013, 2014; Pešić & Jelić, 2000; Pešić & Avramović, 2010). Radović *et al*. (1995) estimated that 1,200 weevil species are present in Serbia. Currently, only 33 weevil species are strictly protected in Serbia, while an additional seven are protected by national legal regulations (Anonymous, 2010).

The weevil fauna of the Ovčar-Kablar Gorge has been sporadically and poorly investigated so far, and no data have been published. Therefore, this work provides the first data on the weevil fauna of this gorge.

Materials and Methods

Collection of adult weevil specimens in the Ovčar-Kablar Gorge was conducted by Filip Vukajlović Ivan Tot, Jelena Šeat and Bojana Nadaždin during two short summer excursions, in the periods between 25-27th June 2016 and between 27-30th July 2016, within a wider study organized by the Scientific Research Society of Biology and Ecology Students "Josif Pančić" from Novi Sad, at seven different locations: Banjski Potok (43.884158 N, 20.194641 E, 365 m a.s.l.), Ljubičići (43.922716 N, 20.197719 E, 565-610 m a.s.l.), Rošci (43.925247 N, 20.172180 E, 650 m a.s.l.), Sveta Trojica Monastery (43.891541 N, 20.197848 E, 510-515 m a.s.l.), Tučkovo (43.912743 N, 20.136063 E, 370-405 m a.s.l.), Vidova (43.916958 N, 20.230736 E, 275-310 m a.s.l.) and Vrnčani (43.925046 N, 20.137317 E, 475-490 m a.s.l.). The map of the researched localities given in Fig. 1 was created using QGIS 2.18.2 software (www.qgis.org). Adult specimens were collected by sweeping with an entomological net and by shaking vegetation, as well as by hand (individuals hidden under rotten stumps and tree bark). Collected beetles were killed by ethyl acetate. All specimens were prepared, pinned, labeled and their sex was determined. For some of them, dissection of genitalia was done for precise identification purpose. Identification was made using a series of keys (Smreczyński, 1965; Angelov, 1976, 1978, 1979, 1980, 1981; Freude *et al*., 1981, 1983; Caldara, 1984, 1990; Alonso-Zarazaga, 1990; Ehret, 1990). A list of species and the accompanying taxonomic data are organized in accordance with the catalogues of Löbl & Smetana (2011, 2013) and their update (Alonso-Zarazaga *et al*., 2017). Based on these catalogues, weevil species registered for the first time in the Republic of Serbia are labeled in Table 1 with

the symbol #. All material is deposited in the weevil collection of the Faculty of Science, University of Kragujevac, Kragujevac, Serbia.

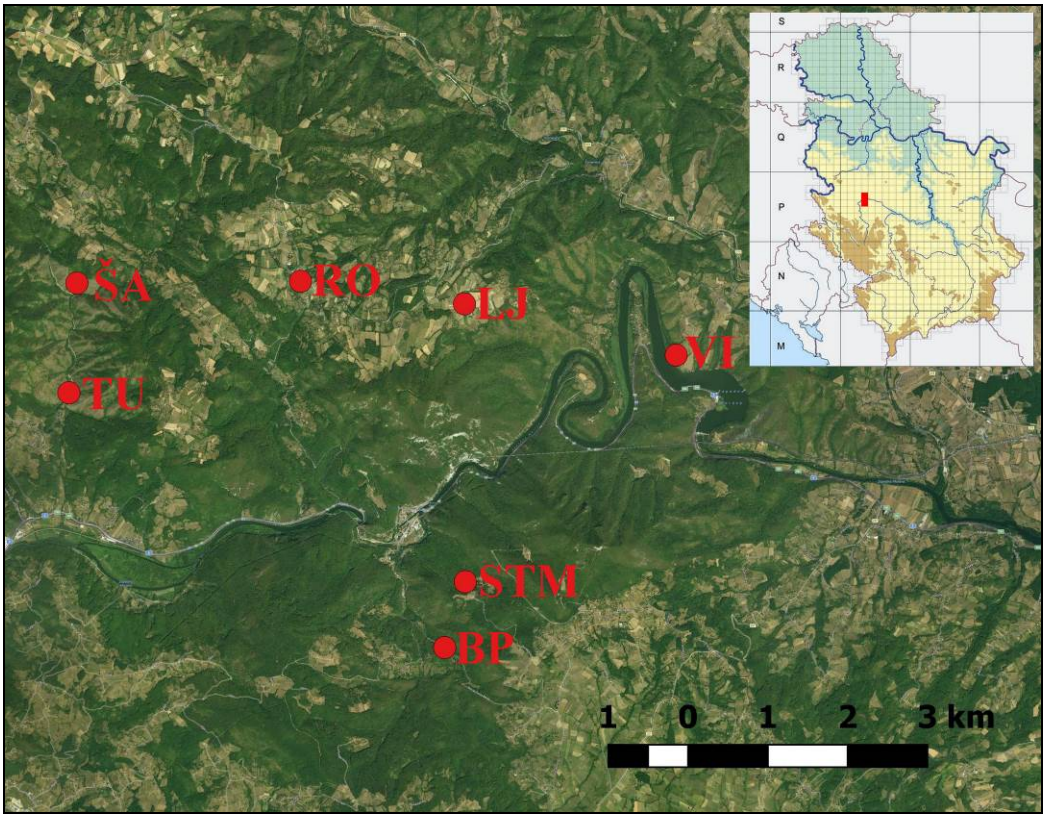

Figure 1. Maps showing the position of the researched area in Serbia (right) and of collecting sites of weevils (main part). BP - Banjski Potok; LJ - Ljubičići; RO - Rošci; STM - Sveta Trojica Monastery; TU - Tučkovo; VI - Vidova; VR - Vrnčani. (created by using Lampinen, 2001 and QGIS 2.18.2 software available at www.qgis.org).

Results

During the two abovementioned periods in 2016, 126 weevil specimens (45 males and 81 females) were collected at seven localities in the Ovčar-Kablar Gorge. A total of 62 species and 7 subspecies were identified (Table 1) belonging to 36 genera, 16 tribes, 11 subtribes, 8 subfamilies and 3 families (Table 2).

Table 1. A list of identified species and subspecies and other weevil taxa recorded in the Ovčar-Kablar Gorge, western Serbia. M – male; F – female; # – registered for the first time in the Republic of Serbia.

No.	Taxa	Date	Locality	M	F	Σ
	family **Attelabidae** Billberg, 1820					
	subfamily Attelabinae Billberg, 1820					
	tribe Apoderini Jekel, 1860					
	subtribe Apoderina Jekel, 1860					
	Apoderus Olivier, 1807					
#1	*coryli* (Linnaeus, 1758)	27.07.2016	Tučkovo		1	1
	family **Brentidae** Billberg, 1820					
	subfamily Apioninae Schoenherr, 1823					
	tribe Apionini Schoenherr, 1823					
	subtribe Apionina Schoenherr, 1823					
	Apion Herbst, 1797					
2	*cruentatum* Walton, 1844	25.06.2016	Ljubičići		1	1
	subtribe Aplemonina Kissinger, 1968					
	Perapion Wagner, 1907					
	(*Perapion*) Wagner, 1907					
3	*affine* (Kirby, 1808)	25.06.2016	Ljubičići	1		1
		28.07.2016	Sveta Trojica Monastery		1	1
4	*curtirostre* (Germar, 1817)	25.06.2016	Ljubičići	1		1
5	*violaceum violaceum* (Kirby, 1808)	27.06.2016	Banjski Potok	1		1
	subtribe Catapiina Alonso-Zarazaga, 1990					
	Catapion Schilsky, 1906					
6	*seniculus* (Kirby, 1808)	25.06.2016	Ljubičići	3	1	4
		28.07.2016	Sveta Trojica Monastery		1	1
	subtribe Ceratapiina Alonso-Zarazaga, 1990					
	Ceratapion Schilsky, 1901					
	(*Acanephodus*) Alonso-Zarazaga, 1990					
7	*onopordi onopordi* (Kirby, 1808)	25.06.2016	Ljubičići	1		1
		27.06.2016	Banjski Potok		1	1
	subtribe Ixapiina Alonso-Zarazaga, 1990					
	Trichopterapion Wagner, 1930					
8	*holosericeum* (Gyllenhal, 1833)	25.06.2016	Ljubičići		1	1
	subtribe Kalcapiina Alonso-Zarazaga, 1990					
	Taeniapion Schilsky, 1906					

Table I – continued

No.	Taxa	Date	Locality	M	F	Σ
9	*urticarium urticarium* (Herbst, 1784)	25.06.2016	Ljubičići	1		1
		26.06.2016	Vidova	2		2
		27.06.2016	Banjski Potok	1		1
		30.07.2016	Rošci	1		1
	subtribe Oxystomatina Alonso-Zarazaga, 1990					
	Cyanapion Bokor, 1923					
	(*Bothryorrhynchapion*) Bokor, 1923					
10	*platalea* (Germar, 1817)	25.06.2016	Ljubičići		1	1
	Eutrichapion Reitter, 1916					
	(*Eutrichapion*) Reitter, 1916					
11	*viciae* (Paykull, 1800)	25.06.2016	Ljubičići		1	1
		27.06.2016	Banjski Potok		1	1
	(*Phalacrolobus*) Alonso-Zarazaga, 1990					
12	*melancholicum* (Wencker, 1864)	26.06.2016	Vidova		1	1
		27.07.2016	Tučkovo		1	1
	(*Psilocalymma*) Alonso-Zarazaga, 1990					
13	*rhomboidale* (Desbrochers des Loges, 1870)	25.06.2016	Ljubičići	1		1
		27.06.2016	Banjski Potok		1	1
	Ischnopterapion Bokor, 1923					
	(*Ischnopterapion*) Bokor, 1923					
#14	*fallens* (Marseul, 1888)	25.06.2016	Ljubičići		2	2
		30.06.2016	Ljubičići		1	1
15	*loti* (Kirby, 1808)	26.06.2016	Vidova	1	2	3
		30.06.2016	Ljubičići		1	1
#16	*modestum* (Germar, 1817)	30.07.2016	Ljubičići		1	1
#17	*plumbeomicans plumbeomicans* (Rosenhauer, 1856)	25.06.2016	Ljubičići		1	1
		26.06.2016	Vidova	1	3	4
	Oxystoma Duméril, 1805					
18	*dimidiatum* (Desbrochers des Loges, 1870)	26.06.2016	Vidova		1	1
	Stenopterapion Bokor, 1923					
	(*Stenopterapion*) Bokor, 1923					
19	*meliloti* (Kirby, 1808)	25.06.2016	Ljubičići		1	1
20	*tenue* (Kirby, 1808)	27.07.2016	Vrnčani		1	1
	subtribe Piezotrachelina Voss, 1959					

Table I – continued

No.	Taxa	Date	Locality	M	F	Σ
	Protapion Schilsky, 1908					
21	*dentipes* (Gerstaecker, 1854)	26.06.2016	Vidova	1	1	2
22	*nigritarse* (Kirby, 1808)	25.06.2016	Ljubičići		1	1
#23	*ruficrus* (Germar, 1817)	27.07.2016	Tučkovo		1	1
24	*schoenherri* (Boheman, 1839)	26.06.2016	Vidova		2	2
25	*trifolii* (Linnaeus, 1768)	25.06.2016	Ljubičići	1		1
	subfamily Nanophyinae Gistel, 1848					
	tribe Nanophyini Gistel, 1848					
	Nanophyes Schoenherr, 1838					
26	*marmoratus marmoratus* (Goeze, 1777)	30.07.2016	Rošci	1		1
	family **Curculionidae** Latreille, 1802					
	subfamily Conoderinae Schoenherr, 1833					
	supertribe Ceutorhynchitae Gistel, 1848					
	tribe Ceutorhynchini Gistel, 1848					
	Nedyus Schoenherr, 1825					
27	*quadrimaculatus* (Linnaeus, 1758)	27.06.2016	Banjski Potok	1	1	2
	Thamiocolus Thomson, 1859					
28	*pubicollis* (Gyllenhal, 1837)	26.06.2016	Vidova	1		1
29	*signatus* (Gyllenhal, 1837)	26.06.2016	Vidova		1	1
	subfamily Curculioninae Latreille, 1802					
	tribe Cionini Schoenherr, 1825					
	Cionus Clairville, 1798					
30	*hortulanus* (Geoffroy, 1785)	27.07.2016	Tučkovo	1	1	2
31	*thapsus thapsus* (Fabricius, 1792)	27.07.2016	Tučkovo	1		1
	tribe Mecinini Gistel, 1848					
	Cleopomiarus Pierce, 1919					
32	*graminis* (Gyllenhal, 1813)	27.06.2016	Banjski Potok	1	1	2
		28.07.2016	Sveta Trojica Monastery		1	1
#33	*medius* (Desbrochers des Loges, 1893)	27.07.2016	Tučkovo	2	2	4
	Gymnetron Schoenherr, 1825					
#34	*melanarium* (Germar, 1821)	30.07.2016	Ljubičići		1	1
	Mecinus Germar, 1821					
#35	*labilis* (Herbst, 1795)	25.06.2016	Ljubičići		1	1
	Rhinusa Stephens, 1829					

Table I – continued

No.	Taxa	Date	Locality	M	F	Σ
#36	*melas* (Boheman, 1838)	26.06.2016	Vidova	1		1
	tribe Smicronychini Seidlitz, 1891					
	Smicronyx Schoenherr, 1843					
	(*Smicronyx*) Schoenherr, 1843					
#37	*jungermanniae* (Reich, 1797)	25.06.2016	Ljubičići	2		2
	tribe Tychiini Thompson, 1859					
	subtribe Tychiina Thompson, 1859					
	Sibinia Germar, 1817					
	(*Sibinia*) Germar, 1817					
38	*abdominalis* Tournier, 1874	26.06.2016	Vidova	1	2	3
#39	*arenariae* Stephens, 1831	25.06.2016	Ljubičići	2		2
40	*femoralis* Germar, 1823	25.06.2016	Ljubičići		1	1
41	*phalerata* Gyllenhal, 1835	25.06.2016	Ljubičići		1	1
42	*viscariae* (Linnaeus, 1760)	26.06.2016	Vidova		1	1
	Tychius Germar, 1817					
	(*Tychius*) Germar, 1817					
43	*aureoles* Kiesenwetter, 1852	25.06.2016	Ljubičići		1	1
		27.07.2016	Tučkovo	1		1
#44	*cuprifer* (Panzer, 1799)	26.06.2016	Vidova		1	1
45	*kulzeri* Penecke, 1934	25.06.2016	Ljubičići	1	2	3
46	*medicaginis* Brisout de Barneville, 1863	27.06.2016	Banjski Potok	1	1	2
47	*meliloti* Stephens, 1831	30.07.2016	Ljubičići		1	1
48	*quinquepunctatus* (Linnaeus, 1758)	27.06.2016	Banjski Potok	1		1
49	*squamulatus* Gyllenhal, 1835	26.06.2016	Vidova	2		2
	subfamily Entiminae Schoenherr, 1823					
	tribe Otiorhynchini Schoenherr, 1826					
	Dodecastichus Stierlin, 1861					
50	*pulverulentus* (Germar, 1823)	27.07.2016	Tučkovo		1	1
	Otiorhynchus Germar, 1822					
	(*Pendragon*) Gozis, 1885					
51	*ovatus* (Linnaeus, 1758)	25.06.2016	Ljubičići		1	1
	tribe Phyllobiini Schoenherr, 1826					
	Phyllobius Germar, 1823					
	(*Metaphyllobius*) Smirnov, 1913					

Table I – continued

No.	Taxa	Date	Locality	M	F	Σ
52	*pomaceus* (Gyllenhal, 1834)	27.06.2016	Banjski Potok		1	1
	tribe Polydrusini Schoenherr, 1823					
	Polydrusus Germar, 1817					
	(*Eudipnus*) Thomson, 1859					
53	*formosus* (Mayer, 1779)	25.06.2016	Ljubičići		1	1
	tribe Sciaphilini Sharp, 1891					
	Eusomus Germar, 1823					
54	*ovulum* Germar, 1823	25.06.2016	Ljubičići		2	2
	Sciaphobus Daniel, 1904					
	(*Sciaphobus*) Daniel, 1904					
55	*caesius* (Hampe, 1870)	25.06.2016	Ljubičići	1	3	4
		27.07.2016	Vrnčani		1	1
	tribe Sitonini Gistel, 1848					
	Sitona Germar, 1817					
56	*languidus* Gyllenhal, 1834	27.06.2016	Banjski Potok		1	1
		27.07.2016	Tučkovo	1		1
57	*lineatus* (Linnaeus, 1758)	27.06.2016	Banjski Potok		1	1
		30.07.2016	Ljubičići		1	1
58	*puncticollis* Stephens, 1831	25.06.2016	Ljubičići		1	1
		27.06.2016	Banjski Potok		1	1
		28.07.2016	Sveta Trojica Monastery		1	1
59	*suturalis* Stephens, 1831	30.07.2016	Rošci		1	1
	tribe Tanymecini Lacordaire, 1863					
	subtribe Tanymecina Lacordaire, 1863					
	Tanymecus Germar, 1817					
	(*Tanymecus*) Germar, 1817					
60	*palliatus* (Fabricius, 1787)	27.06.2016	Banjski Potok	1		1
	subfamily Hyperinae Marseul, 1863					
	tribe Hyperini Marseul, 1863					
	Donus Jekel, 1865					
#61	*tessellatus* (Boheman, 1834)	27.07.2016	Tučkovo	1		1
	Hypera Germar, 1817					
	(*Dapalinus*) Capiomont, 1868					
#62	*fornicata* (Penecke, 1928)	27.06.2016	Banjski Potok	1	1	2

Table I – continued

No.	Taxa	Date	Locality	M	F	Σ
63	*meles* (Fabricius, 1792)	25.06.2016	Ljubičići		1	1
		26.06.2016	Vidova		1	1
		27.06.2016	Banjski Potok		1	1
	(*Hypera*) Germar, 1817					
64	*miles* (Paykull, 1792)	25.06.2016	Ljubičići		1	1
65	*venusta* (Fabricius, 1781)	25.06.2016	Ljubičići		1	1
		26.06.2016	Vidova		1	1
	Limobius Schoenherr, 1843					
66	*borealis borealis* (Paykull, 1792)	25.06.2016	Ljubičići		1	1
		26.06.2016	Vidova		1	1
	subfamily Lixinae Schoenherr, 1823					
	tribe Lixini Schoenherr, 1823					
	Larinus Dejean, 1821					
	(*Larinomesius*) Reitter, 1924					
67	*minutus* Gyllenhal, 1835	26.06.2016	Vidova	1		1
		27.06.2016	Banjski Potok	1		1
		27.06.2016	Tučkovo		2	2
68	*obtusus* Gyllenhal, 1835	26.06.2016	Vidova	1		1
	(*Phyllonomeus*) Gistel, 1856					
69	*planus* (Fabricius, 1792)	26.06.2016	Vidova		1	1
	Total			**45**	**81**	**126**

Discussion and Conclusions

Based on the presented results, in the analyzed one-year summer aspect of weevil fauna in the Ovčar-Kablar Gorge, the family Curculionidae was the most numerous (43 species and 2 subspecies), followed by Brentidae (25 species and 5 subspecies), while Attelabidae was represented by one species only (Table 2). The most abundant subfamilies were Apioninae (family Brentidae) with 24 species, followed by Conoderinae (family Curculionidae) with 23 species. The most numerous tribes were Apionini (family Brentidae) with 24 species and Tychiini (family Curculionidae) with 12 species, while the most numerous subtribes were Oxystomatina (family Brentidae) with 11 species and Tychiina (family Curculionidae) with 12 species. The most numerous genera within the family Curculionidae were *Tychius* Germar, 1817 (7 species) and *Sibinia* Germar, 1817 (5 species), while within the family Brentidae, the genus *Protapion* Schilsky, 1908 (5 species) was dominant. This is to be expected because on the researched territory in July, the dominant plants are from the families Fabaceae and Caryophyllaceae, which are used by adult weevils as a food source, as well as places for oviposition (Freude *et al*., 1981, 1983).

The obvious predominance of females compared to males (81:45) (Table 1) is a result of collection during summer, when the copulation of most weevil species has already ended, males have disappeared, and the development of the new generation is already underway (Angelov, 1976, 1978, 1979, 1980, 1981). This is the reason why 36 species and subspecies (over 52% of the total species number) were registered with only one specimen, mainly female (28 out of 36, i.e. over 77%), still laying eggs. An obvious illustration showing that weevil reproduction finishes in early summer is the fact that only 27 adult weevils (over 21% of the total number) were collected in July, and 18 of them (over 66%) were females.
The largest number of species were collected at the site Ljubičići (36), followed by Vidova (20), Banjski Potok (17) and Tučkovo (10).

Based on the data given by Alonso-Zarazaga *et al*. (2017) in the latest update of the catalogues of Palaearctic Curculionoidea edited by Löbl & Smetana (2011, 2013), 14 (i.e., over 20%) weevil species from this material were registered for the first time in the Republic of Serbia: *Apoderus coryli*, *Ischnopterapion fallens*, *I. modestum*, *I. plumbeomicans*, *Protapion ruficrus*, *Cleopomiarus medius*, *Gymnetron melanarium*, *Mecinus labilis*, *Rhinusa melas*, *Smicronyx jungermanniae, Sibinia arenariae*, *Tychius cuprifer*, *Donus tessellatus* and *Hypera fornicata*. Among them, *C. medius*, registered from locality Tučkovo, is an endemic Balkan species (Caldara & Legalov, 2016; Alonso-Zarazaga *et al*., 2017). This species has been recorded in all countries surrounding Serbia so far.

Table 2. The number of weevil taxa from the Ovčar-Kablar Gorge arranged by family.

Family	Number of subfamilies	Number of tribes	Number of subtribes	Number of genera	Number of species/subspecies
Attelabidae	1	1	1	1	1
Brentidae	2	2	8	13	25
Curculionidae	5	13	2	22	43
Total	**8**	**16**	**11**	**36**	**69**

Sciaphobus caesius, recorded in Ljubičići and Vrnčani, is a protected species in Serbia (Anonymous, 2010).
In comparing the results with those of similar studies conducted in Serbia, the weevil fauna of the Ovčar-Kablar Gorge is relatively rich, especially if the short collecting period during the summer (when adult weevils are less active) is taken into account. Identification of the weevil species collected from the meadows of Mt. Goč (central Serbia) confirmed the presence of 64 species (Pešić & Jelić, 2000). During the research performed on Mt. Čemerno (southwestern Serbia), 31 species of the family Brentidae were identified (Pešić, 2009), while in the Golija-Studenica Biosphere Reserve (southwestern Serbia), 34 species of the family Brentidae were collected (Pešić & Avramović, 2010). On Mt. Tara (western Serbia) and the Stara Planina Mts. (southeastern Serbia), 72 and 101 weevil species were identified, respectively (Pešić, 2003), while in the Fruška Gora National Park (northern Serbia), 92 weevil species were collected (Pešić *et al*., 2017). The largest number of weevil species in Serbia was recorded in the city of Kragujevac and its vicinity (central Serbia), 399 in total, but this is the result of many research excursions conducted more systematically over many years (Pešić, 2013).

These results represent the first published data about weevil fauna of the Ovčar-Kablar Gorge collected during two short field trips. Because of the short collecting periods in June and July and in hope that the research of the weevil fauna of this gorge will continue, we can conclude with certainty that the total number of weevil taxa in this gorge is considerably higher. More detailed research organized monthly (or bimonthly) during the vegetation period for at least five consecutive years should give a much clearer picture about the weevil fauna of the Ovčar-Kablar Gorge.

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ПРЕЛИМИНАРНА СТУДИЈА ЛЕТЊЕГ АСПЕКТА ФАУНЕ СУРЛАША (COLEOPTERA: CURCULIONOIDEA) ОВЧАРСКО-КАБЛАРСКЕ КЛИСУРЕ (ЗАПАДНА СРБИЈА)

СНЕЖАНА ПЕШИЋ, ФИЛИП ВУКАЈЛОВИЋ И ИВАН ТОТ

ИЗВОД

Иако је Овчарско-кабларска клисура законски званично заштићена 2000. године, овај предео изузетних одлика је у великој мери неистражен, поготово у погледу ентомофауне. У овом раду је изложен први до сада објављени преглед фауне сурлаша (Coleoptera: Curculionoidea) ове клисуре, базиран на два кратка летња теренска истраживања (од 25-27. јуна и од 27-30. јула) 2016. године, која су спровели чланови Научно истраживачког друштва студената биологије и екологије „Јосиф Панчић“ са Природно-математичког факултета, Универзитета у Новом Саду и ХабиПрот из Београда. На седам локалитета (Љубичићи, Видова, Бањски поток, Тучково, манастир Свете Тројице, Рошци и Врнчани), сакупљено је 126 адултних сурлаша. Идентификоване su 62 врсте и седам подврста из 36 родова, сврстаних у три фамилије (Attelabidae, Brentidae и Curculionidae), осам подфамилија, 16 трибуса и 11 подрибуса. Међу констатованим врстама је 14 (*A. coryli*, *I. fallens*, *I. modestum*, *I. plumbeomicans*, *P. ruficrus*, *C. medius*, *G. melanarium*, *M. labilis*, *R. melas*, *S. jungermanniae*, *S. arenariae*, *T. cuprifer*, *D. tessellatus* и *H. fornicata*) нових за фауну Србије, које у актуелном (из 2017) каталогу сурлаша Палеарктика нису наведене за нашу земљу. Врста *C. medius* је балкански ендемит, који је до сада био регистрован у свим околним земљама, осим Србије. Међу евидентираним врстама је и *S. caesius*, који је заштићен у Србији Правилником о проглашењу и заштити строго заштићених и заштићених дивљих врста биљака, животиња и гљива.

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