

Cerambycids of Southeast Serbia (Coleoptera, Cerambycidae)

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Abstract:

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The cerambycids (longhorn beetles) are known as very attractive insects, as well as pests, especially in forestry. Our investigation and collecting the specimens on the territory of Serbia has started in the middle of the nineteenth century. Up today, 242 species were registered in the fauna of Serbia (Ilić, 2005). The first information about cerambycids in Serbia was published by Bobić (1871). Significant contribution in researching of the family Cerambycidae was given by Košanin (1904). Finally, there were several domestic authors occupied by longhorn beetles: Adamović (1950), Mikšić (1963), Ćurčić et al. (2003) and Ilić (2005). In this review forty-nine species reviewed from 34 genera which belong to five subfamilies: Prioninae, Lepturinae, Spondylidinae, Cerambycinae and Lamiinae. Examined material has been collected in the Southeastern Serbia. The most numerous were the subfamily Cerambycinae, comprising 18 species from 15 genera.

Key words: Coleoptera, Checklist, Southeast Serbia

Introduction

The Cerambycidae comprises about 25,000-30,000 species distributed in all zoogeographical regions worldwide. All known species are phytophagous; majority of their larvae are xylophagous (86%); some members feed on herbaceous plants (13%). They could cause serious damages on forest habitats, so they are marked as pests (Bílý and Mehl, 1989).

There are about 2.500 species in the Palaearctic fauna of which 625 occur in Europe (Bílý and Mehl, 1989; Ilić, 2005).

Pančić was the first investigator who started collecting the specimens of Coleoptera in Serbia since 1846, but the first information about cerambycids in Serbia has been published by Bobić (1891). Significant contribution in researching of the family Cerambycidae was given by Košanin (1904). He has noted 72 species from various localities in Serbia. Long after that,

Adamović (1950) complements Košanin's coleopteran collection and reporting 25 new species. Mikšić (1963) published 278 species for the fauna of ex Yugoslavia. For the territory of Serbia he has noticed 141 species, based on following data of Svirčev (1938), Kuthy (1896), Živojinović (1950) and Adamović (1950). In additional research Mikšić et al. (1971, 1973, and 1985) presented 283 species from 105 genera. In the latest publication Ćurčić et al. (2003), reported 5 subspecies, along with 49 species, belonging to 49 genera as well as two new species in Serbia: *Leiopus femoratus* Faimaire and *Pachytodes cerambyciformis* (Schrank).

Up to year of 2005, it was described 242 species, 40 subspecies from 123 genera, 15 subgenera, 44 tribes and 6 subfamilies in Serbia (Ilić, 2005). Most recent data shows there are 259 species of longhorn beetles in Serbia (Pil & Stojanović, 2009).

Material and methods

Greater part of samples comes from the student's collections of insects. Our analysis included the specimens from family Cerambycidae, with except of the Tribe of Dorcadionini. Investigated material was collected on 31 localities with different vegetation and habitat in Southeastern Serbia (details are given in Fig. 1). Samples were preserved in 70% ethyl-alcohol, and deployed in wooden boxes held at about 22 °C. All specimens are deposited in Department of Biology and Ecology, Faculty of Sciences, University of Niš, Serbia.

Identification of the collected samples is performed by the keys: Mikšić and Georgijević (1971, 1973); Bense (1995). This investigation related to all representatives of the family Cerambycidae, with the exception of the tribe Dorcadionini.

Results and discussion

A total number of 49 species were identified from 34 genera, from 20 tribes, belonging in 5 subfamilies: Prioninae (2 species), Lepturinae (15 species), Spondylidinae (2 species), Cerambycinae (18 species), Lamiinae (12 species).

New records for the fauna of investigated territory are marked by an asterisk (*) (**Tab. 1**).

Subfamily Prioninae

Tribe Megopidini

Aegosoma scabricornis (Scop. 1763), synonym *Megopsis scabricornis* – 3♀, Serbia: Bela Palanka: Čiflik, 26.06.2006, leg. I. Gnjatović; 3♀, Serbia: Suva mt., 23.05.2007, leg. O. Stojnev.

Prionus coriarius (L. 1758) – 1♂, Serbia: Niš 15.08.2005, leg. S. Lukić; 2♂, Serbia: Stara mt., 07.07.2006, leg. M. Jovanović; 1♂, Serbia: Bela Palanka: Čiflik, 26.06.2006, leg. I. Gnjatović; 1♂, Serbia: Vladičin Han, 18.07.2008, leg. I. Gnjatović.

Subfamily Lepturinae

Tribe Anaglyptini

Anastrangalia sanguinolenta L. 1761 – 1♂, Serbia: Čestin, 27.05.2007, leg. O. Stojnev; 1♂, Serbia: Suva mt., 16.07.2007, leg. I. Gnjatović; 1♂, Serbia: Vladičin Han, 16.07.2008, leg. I. Gnjatović. 1♀, Serbia: Pirot, 15.08.2006, leg. I. Gnjatović.

Anastrangalia dubia (Scop. 1763) – 1♀, Serbia: Vitkovac, 27.05.2008, leg. I. Gnjatović.

Tribe Asemini

**Brachyta balcanica* (Hampe 1870) – 1♂, Serbia: Niš, 16.07.2009, leg. I. Gnjatović; 1♀, Serbia: Niš:

Bojanine Vode, 16.07.2008, leg. I. Gnjatović; 1♀, Serbia: Donji Dušnik, 09.06.2007, leg. I. Gnjatović.

Tribe Lepturini

Cortodera flavimana (Walt 1838) – 1♀, Serbia: Donji Dušnik, 03.06.2006, leg. I. Gnjatović; 1♂, Serbia: Donji Dušnik, 01.06.2007, leg. I. Gnjatović; 1♂, Serbia: Bosilegrad, 10.08.2008, leg. O. Stojnev.

Corymbia scutellata (Fab. 1781) – 1♀, Serbia: Niš, 16.07.2009, leg. I. Gnjatović.

Leptura maculata Poda, 1761, synonym *Rutpela maculata* (Poda 1761) – 1♀, 1♂, Serbia: Donji Dušnik, 06.06.2006, leg. I. Gnjatović; 1♂, Serbia: Novo Selo, 19.07.2007, leg. J. Mirković; 2♂, Serbia: Niš, 07.06.2009, leg. M. Ristić; 1♀, Serbia: Vladičin Han, 18.07.2008, leg. I. Gnjatović; 1♂, Serbia: Vladičin Han, 13.08.2008, leg. I. Gnjatović; 1♀, 1♂, Serbia: Suva mt., 25.06.2007, leg. O. Stojnev; 1♂, Serbia: Niš, 15.04.2009, M. Stamenković; 1♂, Serbia: Babička Gora, 05.07.2008, leg. I. Gnjatović; 1♂, Serbia: Vrelo, 03.06.2006, leg. I. Gnjatović; 1♂, Serbia: Stara mt., 11.07.2007, leg. I. Gnjatović.

Leptura quadrifasciata L. 1758, -1♀, Serbia: Vladičin Han, 10.08.2008, leg. I. Gnjatović.

Pachytodes cerambyciformis (Sch. 1787) -1♂, Serbia: Vladičin Han, 23.08.2008, leg. I. Gnjatović; 1♂, Serbia: Niš, 15.07.2007, leg. O. Stojnev; 1♂, Serbia: Čestin, 27.06.2007, leg. I. Gnjatović.

Pachytodes erraticus (Dalman 1817) -1♂, Serbia: Vladičin Han, 21.07.2008, leg. I. Gnjatović.

Tribe Rhagiini

Rhagium mordax Deg. 1785 – 2♂, Serbia: Suva mt., 12.08.2008, leg. I. Gnjatović; 1♀, Serbia: Vladičin Han, 22.08.2008, leg. I. Gnjatović.

Rhagium inquisitor L., 1758, – 1♀, Serbia: Suva mt., 12.08.2008, leg. I. Gnjatović.

Rhagium bifasciatum Fab. 1775 – 2♀, Serbia: Vladičin Han, 22.08.2008, leg. I. Gnjatović.

Rhagium sycophanta (Sch. 1781) – 1♀, Serbia: Vladičin Han, 22.08.2008, leg. I. Gnjatović.

Tribe Stenopterini

Stenurella bifasciata (Mull. 1776) – 1♀, Serbia: Niš, 15.07.2008, leg. I. Gnjatović.

Tribe Tragosomatini

Vadonia unipunctata (Fab. 1787) – 1♂, Serbia: Donji Dušnik, 05.06.2006, leg. I. Gnjatović.

Subfamily Spondylidinae

Tribe Asemini

Arhopalus fesus (Mul. 1839) – 1♀, Serbia: Niška Banja, 08.08.2007, leg. I. Gnjatović.

Arhopalus rusticus (L. 1758) – 1♂, Serbia: Niška Banja, 04.09.2007, leg. I. Gnjatović; 1♀, Serbia: Niš: Malča, 09.30.2007, leg. I. Gnjatović.

Subfamily Cerambycinae**Tribe Callichromini**

Aromia moschata (L. 1758) – 3♀, 4♂, Serbia: Suva mt., 07.07.2006, leg. M. Jovanović;

Rosalia alpina (L.1758) – 1♂, Serbia: Leskovac, 17.07.2006, leg. I. Gnjatović; 1♂, Serbia: Zlot, 10.08.2007, leg. D. Gligorijević; 4♂, Serbia: Suva mt. 27.07.2007, leg. I. Gnjatović;

Tribe Callidini

Callidium violaceum (L. 1758) – 2♀, Serbia: Šišmanovac, 03.07.2007, leg. J. Mirković; 1♂, Serbia: Vlasina lake, 22.06.2007, leg. I. Gnjatović.

Hylotrupes bajulus (L. 1758) – 1♀, Serbia: Vranje, 15.07.2008, leg. I. Gnjatović.

Phymatodes testaceus (L. 1758) – 1♂, Serbia: Vlasina lake, 22.06.2007, leg. I. Gnjatović; 1♂, Serbia: Niš, 17.05.2005, leg. V. Žikić; 1♀, Serbia: Izvor, 25.07.2006, leg. I. Gnjatović; 2♂, 1♀, Serbia: Niš: Novo Selo, 22.08.2007, leg. I. Gnjatović.

Pyrrhidium sanguineum (L. 1758) – 1♂, Serbia: Bujanovac, 12.06.2006, leg. I. Gnjatović; 2♂, Serbia: Niš, 12.08.2008, leg. A. Savić.

Ropalopus clavipes (Fab. 1775) – 1♀, Serbia: Vlasina lake, 07.06.2007, leg. I. Gnjatović.

Tribe Clytini

Chlorophorus figuratus (Scop. 1763) – 1♂, Serbia: Vladičin Han, 16.08.2008, leg. I. Gnjatović.

Chlorophorus varius (Mull. 1766) – 1♀, Serbia: Niš, 13.08.2009, leg. I. Gnjatović.

Clytus arietis L. 1768, -1♀, Serbia: Vladičin Han, 04.08.2008, leg. I. Gnjatović.

Isotomus speciosus (Schn. 1787) – 1♀, 2♀, Serbia: Niška Banja, 23.09.2007, leg. I. Gnjatović; 1♀, Serbia: Niš, 26.09.2009, leg. V. Žikić.

Plagionotus arcuatus (L. 1758) – 1♀, 1♂, Serbia: Niš, 11.06.2007, leg. I. Gnjatović; 2♂, Serbia: Novo Selo, 22.08.2007, leg. I. Gnjatović; 1♂, Serbia: Niš, 16.08.2008, leg. I. Gnjatović; 1♂, Serbia: Zajebčar, 16.08.2009, leg. I. Gnjatović; 1♀, Serbia: Suva mt., 09.07.2007, leg. I. Gnjatović;

Plagionotus floralis (Pall. 1776) – 1♀, Serbia: Niš, 11.06.2007, leg. I. Gnjatović; 1♂, Serbia: Niš, 04.07.2008, leg. I. Gnjatović; 1♂, Serbia: Niš, 05.08.2008, leg. I. Gnjatović; 1♂, Serbia: Niš, 15.04.2009, leg. M. Stamenković; 1♀, Serbia: Kukavica mt., 07.06.2008, leg. I. Gnjatović; 1♀, Serbia: Bujanovac, 04.08.2006, leg. I. Gnjatović; 1♂, Serbia: Donji Dušnik, 25.06.2006, leg. I. Gnjatović; 1♀, Serbia: Bujanovac, 13.08.2006, leg. I. Gnjatović; 1♂, Serbia: Petrova Reka, 12.06.2006, leg. I. Gnjatović.

Tribe Cerambycini

Cerambyx cerdo (L. 1758) – 1♂, Serbia: Niš, 06.05.2008, leg. I. Gnjatović; 4♀, 4♂, Suva mt., 19.05.2008, leg. I. Gnjatović.

Cerambyx scopoli Fessly 1775 – 3♀, 2♂, Serbia: Niš, 06.05.2008, leg. I. Gnjatović; 1♂, Čestin, 15.06.2008, leg. I. Gnjatović; 1♀, 3♂, Stara mt., 29.05.2006, leg. I. Gnjatović; 1♀, Serbia: Suva mt.: Ličje 23.05.2007, I. Gnjatović.

Tribe Purpuriceini

Purpuricen *kaehler* (L., 1758) – 1♂, Serbia: Niš, 19.06.2009, leg. M. Mladenović.

Tribe Hesperophanini

Stromatium unicolor (Oli., 1795) – 1♀, Serbia: Niš, 12.08.2007, M. Jovanović; 1♂, Serbia: Niš: Jelašnica, 26.08.2007 leg. I. Gnjatović; 1♂, Serbia: Niš: Gabrovac, 06.08.2006, leg. I. Gnjatović; 1♀, Serbia: Vlasina lake, 03.06.2008, leg. I. Gnjatović; 1♂, Serbia: Niš: Jelašnica, 01.10.2007, leg. I. Gnjatović; Serbia: 1♂, Vladičin Han 07.08.2008, leg. I. Gnjatović; Serbia: 1♀, Stara mt., 13.07.2007, leg. I. Gnjatović; 4♀, 3♂, Serbia: Niš, 15.07.2009, leg. A. Vidojković.

**Trichoferus fasciculatus* (Fald.,1837) – 1♀, Serbia: Ličje, 21.05.2007, leg. I. Gnjatović.

Subfamily Lamiinae**Tribe Agapanthini**

Agapanthia cardui (L. 1767) – 1♀, 1♂, Serbia: Niš, 20.07.2006, leg. I. Gnjatović.

Agapanthia dahli (Rich. 1821) – 1♀, 1♂, Serbia: Niš, 11.07.2009, leg. A. Vidojković; 1♂, Serbia: Niš: Čegar, 12.06.2008, leg. I. Gnjatović; 1♂, Serbia: Petrova Reka, 12.06.2006, leg. I. Gnjatović.

Agapanthia violaceae (Fab. 1775) – 1♂, Serbia: Niš, 21.08.2008, leg. I. Gnjatović; 1♂, Serbia: Niš, 20.07.2009, leg. I. Gnjatović; 1♀, Serbia: Vlasina lake, 16.06.2007, leg. I. Gnjatović; 1♀, Serbia: Niška Banja, 17.07.2008, leg. I. Gnjatović; 1♀, Serbia: Vranje, 10.06.2007, leg. I. Gnjatović.

Agapanthia villosoviridescens (De Geer 1775) – 1♀, 1♂, Serbia: Niška banja, 10.09.2007, leg. I. Gnjatović; 1♀, 1♂, Serbia: Niš; Novo Selo, 22.08.2007, leg. I. Gnjatović; 2♀, Serbia: Zlot, 18.08.2007, leg. D. Gligorijević; 1♀, Serbia: Batinac, 10.04.2007, leg. S. Pištoljević.

Tribe Mesosini

Mesosa nebulosa (Fab. 1781) – 1♀, Serbia: Vlasina lake, 16.06.2007, leg. I. Gnjatović; 1♀, Serbia: Niš, 04.07.2009, leg. I. Gnjatović.

Tribe Monochamini

Monochamus galloprovincialis (Oli. 1795) – 1♂, Serbia: Niš, 16.06.2007, leg. I. Gnjatović.

Tribe Lamiini

Morimus funereus Muls. 1863 – 1♂, Serbia: Niš: Delijski vis, 13.04.2009, leg. M. Stanković; 1♂, Serbia: Niš: Delijski vis, 16.09.2009, leg. M. Stanković; 4♀, 1♂, Serbia: Suva mt., 12.08.2008, leg. I. Gnjatović.

Tribe Phytoeciini

**Opsilia molybdaena* (Dal. 1817) – 1♂, Serbia: Niš, 06.07.2007, leg. I. Gnjatović.

Phytoecia icterica (Schall. 1783) – 1♂, Serbia: Niška Banja, 25.05.2008, leg. I. Gnjatović.

Phytoecia pustulata (Sch., 1776) – 1♂, Serbia: Niš, 06.07.2007, leg. I. Gnjatović.

Phytoecia virgula (Char., 1825) – 1♂, Serbia: Niš, 08.08.2008, leg. I. Gnjatović.

Tribe Tetrocini

Tetrops starkii Chev. 1859 – 1♂, Serbia: Bovan lake, 01.05.2009, leg. V. Žikić.

Table 1. The list of new species of investigated territory.

Subfamily	Species	Locality
Prioninae	<i>Brachyta balcanica</i> (Hampe, 1870)	Niš
Cerambycinae	<i>Trichoferus fasciculatus</i> (Fald., 1837)	Ličje
Lamiinae	<i>Opsilia molybdaena</i> (Dal., 1817)	Niš

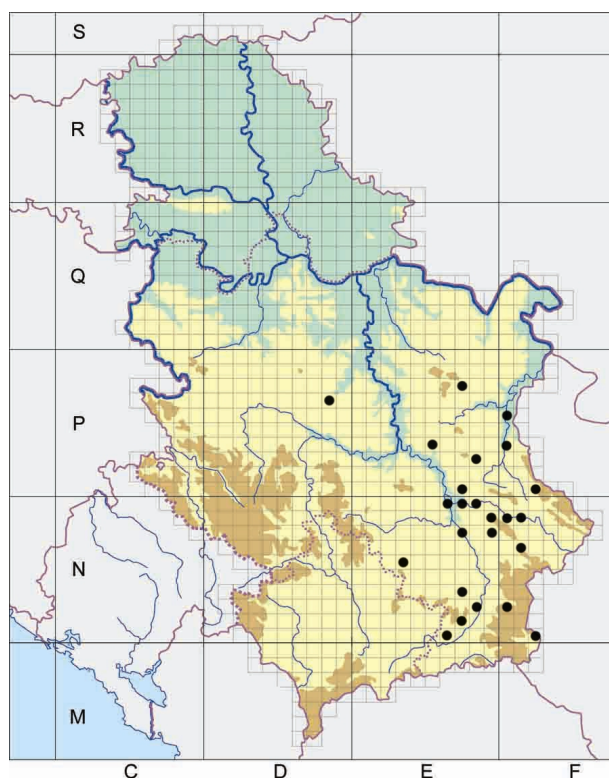


Figure 1. Map of Serbia (UTM 10x10), showing sites where investigated material was collected: EN06 Bujanovac; EN17 Vranje; EN28 Vladičin Han, Babička gora; EN37 Kukavica mt.; EN53 Šišmanovac; EN77 Leskovac; EN79 Donji Dušnik, Ličje; EN89 Suva mt., Bojanine vode; EN96 Novo Selo; EN97 Niš, Gabrovac, Delijski Vis; EN98 Niška Banja, Jelašnica; EP07 Čegar, Vrelo; EP28 Batinac; EP35 Bovan lake; EP77 Zlot; FN02 Bosilegrad; FN20 Vlasina lake; FN61 Izvor; FN80 Bela Palanka – Čiflik; FN81 Petrova Reka; FP02 Vitkovac; VP30 Stara mt.; VP50 Zaječar; DP Čestina

Conclusion

We presented 49 species of the family Cerambycidae from 34 genera. New records for the fauna of Southeast Serbia are: *Brachyta balcanica* (Prioninae), *Trichoferus fasciculatus* (Cerambycinae) and *Opsilia molybdaena* (Lamiinae).

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