

CHECKLIST OF LONGHORN BEETLES (COLEOPTERA: CERAMBYCIDAE) FROM MT. FRUŠKA GORA

N. PIL

Institute for Nature Conservation of Serbia, Radnička 20a,
21000 Novi Sad, Serbia and Montenegro

ABSTRACT: Scientific analysis of longhorn beetles (Coleoptera: Cerambycidae) from references and material collected on Mt. Fruška Gora during the period 2000 - 2005 has shown the presence of 99 species of longhorn beetles (Coleoptera: Cerambycidae) on Fruška Gora. Among them, four species are recorded as new for the fauna of Serbia and Montenegro, nine species are recorded for the first time for the Serbian fauna, and six species are new for the fauna of Fruška Gora. The list includes some endemic species and numerous species which are rarely found in Serbia.

KEY WORDS: Cerambycidae, Mt. Fruška Gora.

INTRODUCTION

The Mountain massif of Fruška Gora is separated from the rest of the Dinarid system. Euro-siberian, Central and Northern European, Peripannonian, Mediterranean, and in some cases Atlantic entomofaunistic elements can be found in this area.

Several researchers have investigated the entomofauna on this in many ways special island-like mountain massif surrounded by lowland (ADAMOVIĆ 1950, 1965; MIKŠIĆ 1963; ILIĆ 2005; PIL and STOJANOVIĆ, in press).

From the 1960's to the present day, almost no research on this group was done. The given area is a national park under pressure from logging.

MATERIAL AND METHODS

The checklist given in the present paper represents data taken from several published works (ADAMOVIĆ 1950, 1965; MIKŠIĆ 1963; ILIĆ 2005).

Also, some material was collected on field trips to Fruška Gora during the period 2000 - 2005. This material was identified according to BENSE (1995), while species belonging to the tribe Dorcadionini were determined according to MIKŠIĆ and KORPIĆ (1985).

All results were summarized and analyzed with respect to their distribution (ALTHOFF and DANILEVSKI, 1997) and bionomy, (whether they are monophagous or polyphagous species).

RESULTS

Recent results show the presence of 99 species of longhorn beetles (Coleoptera: Cerambycidae) on Mt. Fruška Gora (Table 1).

Table 1. Checklist of longhorn beetles (Coleoptera: Cerambycidae) of Mt. Fruška Gora with distribution (Bg - Bulgaria, Ro – Romania, Mc - Macedonia, Gr – Greece, Po – Poland, Cz – Czech Republic; CE – Central Europe, NE – Northern Europe).

| Species | D I S T R I B U T I O N | | | | | |
|---|-------------------------|------------------|------------------------------|-------------------------|--|------------|
| | European | Pontic subregion | Euromedi-terranean subregion | Euro-siberian subregion | Northern and Southern European mountain region | Palaeartic |
| <i>Aegomorphus clavipes</i> Schrank, 1781 | | | | * | | |
| <i>Aegomorphus krüperi</i> Kraatz, 1859 | | | * | | | |
| <i>Agapanthia cardui pannonica</i> Kratochvil, 1985 | | | * | | | |
| <i>Agapanthia cynerae</i> (Germar, 1817) | | | * | | | |
| <i>Agapanthia dahli ssp. dahli</i> (Richter, 1821) | | | | * | | |
| <i>Agapanthia kirbyi</i> Gyllenhal, 1817 | | | * | | | |
| <i>Agapanthia maculicornis</i> (Gyllenhal, 1817) | | * | | | | |
| <i>Agapanthia schurmanni</i> (Sama, 1978) | | | * Gr, Mc | | | |
| <i>Agapanthia villosoviridescens</i> (Degeer, 1775) | | | | * | | |
| <i>Agapanthia violacea</i> (Fabricius, 1775) | | | * | | | |
| <i>Alosterna tabacicolor</i> (Degeer, 1775) | | | | * | | |
| <i>Anaesthetis testacea</i> Fabricius, 1781 | | | * | | | |
| <i>Anaglyptus gibbosus</i> (Fabricius, 1787) | | | * | | | |
| <i>Anaglyptus mysticus</i> (Linnaeus, 1758) | | | * | | | |
| <i>Anastrangalia dubia</i> (Scopoli, 1763) | | | | | * | |
| <i>Aromia moschata ssp. moschata</i> (Linnaeus, 1758) | | | | | | * |
| <i>Brachyleptura scutellata ssp. scutellata</i> (Fabricius, 1781) | | | | * | | |
| <i>Cerambyx (Mesocerambyx) scopoli</i> (Füsslins, 1775) | | | * | | | |
| <i>Cerambyx cerdo ssp. cerdo</i> Linnaeus, 1758 | | | * | | | |
| <i>Cerambyx miles</i> Bonelli, 1823 | | | * | | | |
| <i>Cerambyx welensii</i> Küster, 1846 | | * | | | | |
| <i>Chlorophorus aegyptiacus</i> (Fabricius, 1775) | | | * Bg, Mc, Gr | | | |
| <i>Chlorophorus figuratus</i> (Scopoli, 1763) | | | | * | | |
| <i>Chlorophorus hungaricus</i> Seidlitz, 1891 | | * | | | | |
| <i>Chlorophorus trifasciatus</i> (Fabricius, 1781) | | | * | | | |
| <i>Chlorophorus varius</i> (Müller, 1766) | | | | * | | |
| <i>Clytus arietis</i> (Linnaeus, 1758) | | | | * | | |

Table 1. Continued.

| Species | D I S T R I B U T I O N | | | | | |
|--|-------------------------|------------------|------------------------------|-------------------------|--|------------|
| | European | Pontic subregion | Euromedi-terranean subregion | Euro-siberian subregion | Northern and Southern European mountain region | Palaeartic |
| <i>Clytus rhamni</i> Germar, 1817) | | | * | | | |
| <i>Cortodera discolor</i> Fairmaire, 1866 | | | * | | | |
| <i>Cortodera femorata</i> (Fabricius, 1787) | | | * | | | |
| <i>Corymbia rubra rubra</i> Linnaeus, 1758 | | | | | | * |
| <i>Dinoptera collaris</i> (Linnaeus, 1758) | | | | * | | |
| <i>Dorcadion</i> (<i>Carinatodorcadion</i>) <i>aethiops</i> (Scopoli, 1763) | | | * | | | |
| <i>Dorcadion</i> (<i>Carinatodorcadion</i>) <i>fulvum canaliculatum</i> (Fischer – Waldheim, 1823) | | * | | | | |
| <i>Dorcadion</i> (<i>Pedestredorcadion</i>) <i>pedestre ssp. pedestre</i> (Poda, 1761) | | * | | | | |
| <i>Dorcadion</i> (<i>Pedestredorcadion</i>) <i>scopoli</i> (Herbst, 1784) | | * | | | | |
| <i>Echinocerus floralis</i> (Pallas, 1773) | | | | * | | |
| <i>Exocentrus adspersus</i> Mulsant, 1846 | | | | * | | |
| <i>Exocentrus lusitanus</i> (Linnaeus, 1767) | * | | | | | |
| <i>Grammoptera erythropus</i> Gebler, 1841 | * | | | | | |
| | Po,Cz | | | | | |
| <i>Grammoptera ruficornis</i> (Fabricius, 1781) | | | | * | | |
| <i>Judolia sexmaculata</i> (Linnaeus, 1758) | * | | | | | |
| | NE,CE | | | | | |
| <i>Leioderes kollari</i> Redtenbacher, 1849 | | | * | | | |
| <i>Leptura aurulenta</i> (Fabricius, 1792) | | | * | | | |
| <i>Lepturalia nigripes</i> (Degeer, 1775) | * | | | | | |
| | NE,CE | | | | | |
| <i>Megopsis</i> (<i>Aegosoma</i>) <i>scabricornis</i> (Scopoli, 1763) | | | * | | | |
| <i>Mesosa curculionoides</i> (Linnaeus, 1761) | | | | * | | |
| <i>Molorchus kiesewetteri</i> Mulsant & Ray, 1861 | | * | | | | |
| <i>Molorchus umbellatarum</i> (Schreber, 1759) | | | | | | |
| <i>Morinus funereus</i> (Mulsant, 1863) | | | * | | | |
| <i>Necydalis ulmi</i> Chevrolat, 1838 | | | * | | | |
| <i>Neoclytus acuminatus</i> (Fabricius, 1775) | | | | | | * |
| <i>Neodorcadion bilineatum</i> (Germar, 1824) | | * | | | | |
| <i>Obriopsis bicolor</i> Kraatz, 1862 | | | * | | | |
| <i>Oplasia fennica</i> (Paykull, 1800) | * | | | | | |
| <i>Pachyta quadrimaculata</i> (Linnaeus, 1758) | | | | * | | |
| <i>Pachytodes cerambyciformis</i> (Schränk, 1781) | | | | * | | |
| <i>Pachytodes erraticus</i> (Dalman, 1817) | | | * | | | |
| <i>Phymatodellus rufipes</i> (Fabricius, 1776) | | | * | | | |
| <i>Phymatodes testaceus</i> (Linnaeus, 1758) | | | | | | * |
| <i>Phytoecia coerulea</i> (Scopoli, 1763) | | | * | | | |
| <i>Phytoecia hirsutula</i> (Frölich, 1793) | | * | | | | |
| <i>Phytoecia icterica</i> (Schaller, 1783) | | | | * | | |
| <i>Phytoecia molybdaena</i> (Dalman, 1817) | | | * | | | |
| <i>Phytoecia pustulata pustulata</i> (Schränk, 1776) | | | | * | | |
| <i>Phytoecia scutellata</i> (Fabricius, 1792) | | * | | | | |
| <i>Phytoecia uncinata</i> (Redtenbacher, 1842) | * CE | | | | | |
| <i>Phytoecia virgula</i> (Charpentier, 1825) | | | * | | | |
| <i>Plagionotus arcuatus</i> (Linnaeus, 1758) | | | * | | | |

Table 1. Continued.

| Species | D I S T R I B U T I O N | | | | | |
|---|-------------------------|------------------|------------------------------|-------------------------|--|------------|
| | European | Pontic subregion | Euromedi-terranean subregion | Euro-siberian subregion | Northern and Southern European mountain region | Palaeartic |
| <i>Plagionotus detritus</i> (Linnaeus, 1758) | | | * | | | |
| <i>Plagionotus floralis</i> (Pallas, 1773) | | | | * | | |
| <i>Pogonocherus hispidus</i> (Linnaeus, 1758) | * | | | | | |
| <i>Prionus coriarius</i> (Linnaeus, 1758) | | | | * | | |
| <i>Pseudovadonia livida</i> (Fabricius, 1776) | | | | * | | |
| <i>Purpuricenus budensis</i> (Götz, 1783) | | * | | | | |
| <i>Rhagium (Megarhagium) sycophanta</i> (Schrank, 1781) | | | | * | | |
| <i>Rhagium mordax</i> (De Geer, 1775) | | | | * | | |
| <i>Ropalopus clavipes</i> (Fabricius, 1775) | | | | * | | |
| <i>Ropalopus macropus</i> (Germar, 1824) | | | | * | | |
| <i>Rosalia alpina</i> (Linnaeus, 1758) | | | | | * | |
| <i>Rupela maculata</i> (Poda, 1761) | | | | * | | |
| <i>Saperda octopunctata</i> (Scopoli, 1792) | | | | * | | |
| <i>Spondylis buprestoides</i> (Linnaeus, 1758) | | | | * | | |
| <i>Stenocorus quercus</i> (Goetz, 1783) | * | | | | | |
| <i>Stenopterus ater</i> (Linnaeus, 1767) | | | * | | | |
| <i>Stenopterus flavicornis</i> Küster, 1846 | | | * | | | |
| <i>Stenopterus rufus geniculatus</i> Kraatz, 1863 | | | * | | | |
| <i>Stenopterus similatus</i> Holzschuh, 1979 | | | * Gr | | | |
| <i>Stenosola dubia</i> (Laicharting, 1784) | * CE | | | | | |
| <i>Stenostola ferrea</i> (Schrank, 1776) | * NE,CE | | | | | |
| <i>Stenurella bifasciata</i> (Müller, 1776) | | | * | | | |
| <i>Stenurella melanura var corvina</i> (Linnaeus, 1758) | | | | * | | |
| <i>Stenurella nigra</i> (Linnaeus, 1758) | | | * | | | |
| <i>Stenurella septempunctata</i> (Fabricius, 1792) | | | * | | | |
| <i>Strangalia attenuata</i> (Linnaeus, 1758) | | | | * | | |
| <i>Tetropium fuscum</i> (Fabricius, 1787) | | | | * | | |
| <i>Tetrops praeusta</i> (Linnaeus, 1758) | | | * | | | |
| <i>Vadonia hirsuta</i> (Daniel et Daniel, 1891) | | | * Ro | | | |
| <i>Vadonia steveni</i> (Sperk, 1835) | | * | | | | |
| <i>Vadonia unipunctata ssp. unipunctata</i> (Fabricius, 1787) | | | * | | | |
| <i>Xylotrechus antilope</i> (Schönherr, 1817) | | | * | | | |
| TOTAL: | 9 | 12 | 42 | 30 | 2 | 4 |

DISCUSSION AND CONCLUSIONS

Those 99 cerambycid species belong taxonomically to six subfamilies and 25 tribes. This is 39.6 % of the total number of known species in Serbia.

Distribution analysis revealed the presence of inhabiting the Euromediterranean (42%), Euro-siberian (30%), and Pontic subregions (12%).

Among them, the following four species are recorded as new for the fauna of Serbia and Montenegro: *Cortodera discolor* Fairmaire, 1866; *Stenopterus similatus* Holzschuh, 1979; *Chlorophorus aegyptiacus* (Fabricius, 1775); and *Agapanthia osmanlis* Reiche, 1858.

Nine species are recorded for the first time for the Serbian fauna: *Agapanthia maculicornis* (Gyllenhal, 1817); *Lepturalia nigripes* (Degeer, 1775); *Cortodera femorata* (Fabricius, 1787); *Vadonia hirsuta* (Daniel and Daniel, 1891); *Anaglyptus gibbosus* (Fabricius, 1787); *Agapanthia schurmanni* Sama, 1978; *Grammoptera erythropus* Gebler, 1841; *Judolia sexmaculata* (Linnaeus, 1758); and *Obriopsis bicolor* Kraatz, 1862.

Six species were new for the fauna of Mt. Fruška Gora: *Phytoecia molybdaena* (Dalman, 1817); *Stenostola ferrea* (Schrank, 1776); *Ropalopus clavipes* (Fabricius, 1775); *Ropalopus macropus* (Germar, 1824); *Agapanthia cynerae* (Germar, 1817); and *Vadonia steveni* (Sperk, 1835).

Also noticed was the presence of some endemic species, predominantly Balkan endemics: *Vadonia hirsuta* (Daniel and Daniel, 1891); *Phytoecia hirsutula* (Frölich, 1793); *Cortodera discolor* Fairmaire, 1866, *Chlorophorus aegyptiacus* (Fabricius, 1775); *Agapanthia schurmanni* Sama, 1978; and *Aegomorphus krüperi* Kraatz, 1859. Some of them were previously registered at only on one locality or in only one Balkan country, for example *Vadonia hirsuta* (Daniel and Daniel, 1891) in Romania (Dobruja region) or *Stenopterus similatus* Holzschuh, 1979 in Greece.

There are numerous species which are rarely found in Serbia, apart from those mentioned earlier as new and endemic species: *Vadonia steveni* (Sperk, 1835); *Tetropium fuscum* (Fabricius, 1787); *Stenostola ferrea* (Schrank, 1776); *Stenosola dubia* (Laicharting, 1784); *Stenopterus ater* (Linnaeus, 1767); *Stenocorus quercus* (Goetz, 1783); *Pogonocherus hispidus* (Linnaeus, 1758); *Phytoecia uncinata* (Redtenbacher, 1842); *Phytoecia scutellata* (Fabricius, 1792); *Phytoecia molybdaena* (Dalman, 1817); *Oplosia fennica* (Paykull, 1800); *Obriopsis bicolor* Kraatz, 1862, *Necydalis ulmi* Chevrolat, 1838; *Molorchus umbellatarum* (Schreber, 1759); *Molorchus kiesewetteri* Mulsant and Ray, 1861; *Exocentrus lusitanus* (Linnaeus, 1767); *Chlorophorus trifasciatus* (Fabricius, 1781); *Chlorophorus hungaricus* Seidlitz, 1891; *Cerambyx welensii* Küster, 1846; *Anaesthetis testacea* Fabricius, 1781; *Agapanthia schurmanni* (Sama, 1978); *Agapanthia maculicornis* (Gyllenhal, 1817); *Agapanthia cynerae* (Germar, 1817) (second record for Serbia); *Aegomorphus krüperi* Kraatz, 1859; and *Aegomorphus clavipes* Schrank, 1781.

No rare or endemic species were noted in ADAMOVIĆ (1950, 1965) or MIKŠIĆ (1963).

REFERENCES

- ADAMOVIĆ, Ž., 1950. *Zbirka Cerambycidae u Prirodnačkom muzeju srpske zemlje. I deo*. Naučna knjiga, Beograd.
- ADAMOVIĆ, Ž., 1965. Cerambycidae (Coleoptera) collected in Srbija. *Glasnik Prirodnačkog muzeja srpske zemlje*, Beograd, B. XX, 147-183.
- ALTHOFF, J. & M.L. DANILEVSKI, 1997. *A checklist of longicorn beetles (Coleoptera, Cerambycoidea) of Europe*. Slovensko entomološko društvo Štefana Michielija, Ljubljana.

- BENSE, U., 1995. Bockkäfer: *Illustrierter Schlüssel zu den Ceramyciden und Vesperiden Europas* (Longhorn beetles), Margraf Verlag, Weikersheim.
- ILIĆ, N., 2005. *Strižibube Srbije (Coleoptera, Cerambycidae) – Faunistički pregled*. SZGR “Joksimović”, Beograd, 1-180.
- MIKŠIĆ, R., 1963. Beitrag zur Kenntnis der Bockkäferfauna (Cerambycidae) slaviens. *Acta biol.*, Zagreb, 3 :55-188.
- MIKŠIĆ, R., 1971. *Katalog der Bockkäfer (Cerambycidae) Jugoslawiens*. Institut za Šumarstvo, Sarajevo.
- MIKŠIĆ, R. & E. GEORGIJEVIĆ, 1971. Cerambycidae of Yugoslavia, part I. *Akad. nauka i umetnosti Bosne i Hercegovine*, Sarajevo, XLIII, 3: 1-175. [in Serbian]
- MIKŠIĆ, R. & E. GEORGIJEVIĆ, 1973. Cerambycidae of Yugoslavia, part II. *Akad. nauka i umetnosti Bosne i Hercegovine*, Sarajevo, XLV, 4:1-153. [in Serbian]
- MIKŠIĆ, R. & M. KORPIĆ, 1985. Cerambycidae of Yugoslavia, part III. *Akad. nauka i umetnosti Bosne i Hercegovine*, Sarajevo, LXII, 5: 1-148. [in Serbian]
- PIL, N. & D. STOJANOVIĆ, 2005. New longhorn beetles (Coleoptera: Cerambycidae) from the Union of Serbia and Montenegro. *Arch. Biol. Sci.*, Belgrade. [in press]

СПИСАК РЕГИСТРОВАНИХ ВРСТА СТРИЖИБУБА (COLEOPTERA: CERAMBYCIDAЕ) НА ФРУШКОЈ ГОРИ

Н. Пил

Завод за заштиту природе, Радничка 20а, 21000 Нови Сад, Србија и Црна Гора

Обједињавањем детаљних литературних података (ADAMOVIĆ (1950, 1965), MIKŠIĆ (1963), ILIĆ (2005)) о фауни стрижибуба (Coleoptera: Cerambycidae) на Фрушкој гори, као и детерминисаних врста сакупљених током 2000 – 2005. године добијен је јединствен списак од 99 врста, што чини 39.6% од укупног броја до данас регистрованих врста у Србији. У ту коначну бројку сабрали смо и нове врсте што за СЦГ што само за Србију да би добили тачан однос.

Анализа фаунистичке припадности показала је највећу бројност еуромедитеранских врста (42%), затим еуросибирских (30%), и на крају понтијских врста (12%).

На овом списку нашле су се: - 4 врсте нове за фауну СЦГ, - 9 врста нових за фауну Србије, - 6 врста до сада нерегистрованих на Фрушкој гори, - 6 балканских ендема, - 25 ретких врста.

Accepted September 28, 2005