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DIVERSITY OF COLEOPTERANS: CERAMBYCIDAE, CHRYSOMELIDAE, COCCINELLIDAE FROM BUZĂU AREA (ROMANIA)

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Abstract. The paper presents data on the diversity of Cerambycidae, Chrysomelidae and Coccinellidae from Buzău area basing on an unpublished material and bibliographical sources. A number of 139 species belonging to 89 genera of 15 subfamilies are presented. In the study area there are some rare and endangered species, they being important from the conservation point of view: *Cerambyx cerdo* Linnaeus, *Rosalia alpina* Linnaeus, *Morimus funereus* Mulsant and *Cryptocephalus laetus* Fabricius.

Résumé. On présente des données sur la diversité des coléoptères Cerambycidae, Chrysomelidae et Coccinellidae de la zone de Buzău, sur la base d'un matériel non publié et de sources bibliographiques. On présente 139 espèces, encadrées en 89 genres, de 15 sous-familles. Dans l'aire étudiée il y a quelques espèces rares et périlicitées, qui sont importantes du point de vue de leur conservation: *Cerambyx cerdo* Linnaeus, *Rosalia alpina* Linnaeus, *Morimus funereus* Mulsant et *Cryptocephalus laetus* Fabricius.

Key words: Coleoptera, Cerambycidae, Chrysomelidae, Coccinellidae, Buzău, Romania.

INTRODUCTION

The Buzău county is located in the South-eastern Romania, between Lat. 44°44' and 45°49' N and between 26°04' and 27°26' E Long. The county stretches almost the entire hydrographic basin of the Buzău River, which springs from the Curved Carpathians (Eastern Carpathians). Here it occurs the three relief contours, harmoniously gathered: to the North there are the Buzău Mountains, part of the Curved Carpathians; to the South, there is the field which belongs to the Romanian Plain; and in the middle, a hilly area, with altitudes from 400 and 800 meters and covered with orchards.

Buzău area was not the subject of some systematic investigation on the coleopteran fauna. First data belong to Jaquet (1904) who reported seven Chrysomelidae species: *Labidostomis longimana*, *Cryptocephalus octacosmus*, *Pachybrachis tessellatus*, *Oomorphus concolor*, *Timarcha goettingensis*, *Galeruca dahli*, *Derocrepis rufipes*. In 1912, Petri reported three Cerambycidae species (*Acanthocinus griseus*, *Stictoleptura scutellata*, *Xylosteus spinolae*), five Chrysomelidae species (*Neocrepidodera transsilvanica*, *Plateumaris consimilis*, *Chrysomela saliceti*, *Orestia aubei*, *Phyllotreta undulata*) and two Coccinellidae species (*Hippodamia variegata*, *H. undecimnotata*) from the Buzău Mountains (Bodzaer Gebirge), without mentioning other data. In 1944, also from this area, Panin reported other five Chrysomelidae species: *Chrysolina fastuosa*, *C. haemoptera*, *C. marcasitica*, *C. polita* and *C. umbratilis*.

Between 1987 – 2004, the scientists from „Grigore Antipa” National Museum of Natural History (Bucharest) and from the Institute of Biology of Bucharest made studies on the biodiversity of the natural reservations “Spătaru”, “Frasinu” and “Sărata-Monteoru”. A part of the data were published by Falcă et al. (2004), Serafim (2005, 2006) and Maican (2006).

MATERIAL AND METHOD

The studied material is preserved in the collections of „Grigore Antipa” National Museum of Natural History and of the Institute of Biology of Bucharest. Most of the specimens were collected and donated to the „Grigore Antipa” Museum by Viorel Ungureanu.

The studied specimens were collected during 1973-2007, from the following sites, most of them from the hilly and field areas of the Buzău county. The collecting stations are presented in figure 1.

- Unguriu (350-600 m alt.), Măgura, with forests of *Fagus sylvatica*, the species *Sambucus nigra*, *Quercus* sp., *Fraxinus excelsior*, *Corylus avellana*, *Populus* sp., *Salix* sp., *Prunus spinosa*, *Crataegus monogyna*, *Betula pendula*, *Rosa*

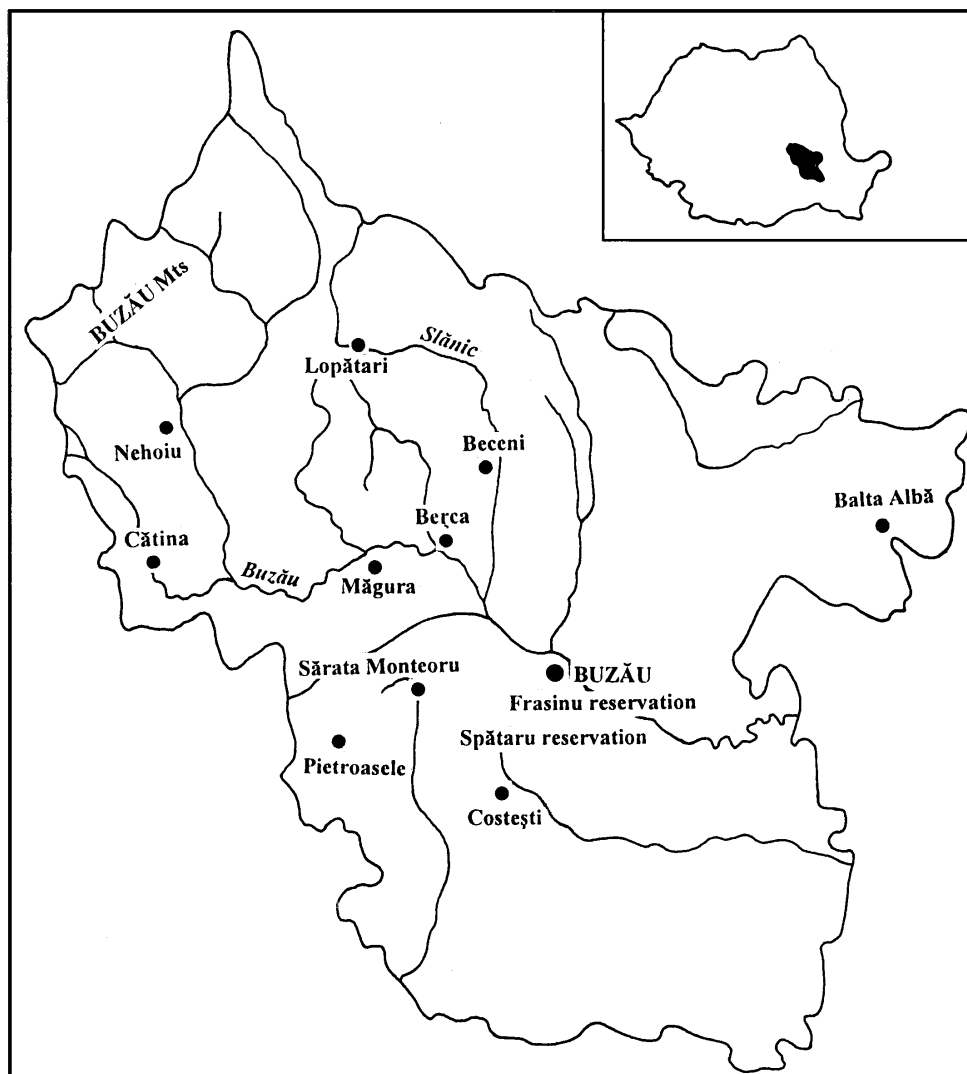


Fig. 1 – Collecting stations in Buzău county (Romania).

canina, *Rubus* sp., *Fragaria* sp., *Robinia pseudacacia*, *Sambucus ebulus*, *Arctium lappa*, *Taraxacum officinalis*, *Primula* sp., etc. being also present.

- Hartăgelu forest house, Hartăgelu, Buzău Mts., with forests dominated by *Fagus sylvatica*, *Picea abies*, *Abies alba*; it also occur: *Tussilago farfara*, *Sambucus nigra*, *Sambucus ebulus* etc.

- Vulcanii noroioși (Muddy Volcanoes), Berca, geological and floral reservation. The presence of some halophilous plants distinguishes: *Nitraria schoeberi* and *Obione verrucifera*, which are at the western limit of their range.

- Vizireanu Hill, East to Vulcanii noroioși (Muddy Volcanoes) and West to Slănic streamlet. Vegetation is of steppe up to forest steppe, made of grassy species and, on very large areas, of thick bushes alternating with tree species. There it occurs: *Stipa capillata*, *Poa* sp., *Dactylis glomerata*, *Typha* sp., *Phragmites australis*, *Adonis vernalis*, *Pulsatilla montana*, *Syringa vulgaris*, *Hippophaë rhamnoides*, *Eleagnus angustifolia*, *Rosa canina*, *Rubus tomentosus*, *Fragaria viridis*, *Corylus avellana*, *Tilia cordata*, *Quercus* sp.

- Arbănași, right bank of Slănic, Beceni. From the tree species, there are present: *Fagus sylvatica*, *Pinus nigra*, *Fraxinus excelsior*, *Betula pendula*, *Salix* sp., *Quercus* sp., and from the bushes: *Rosa canina*, *Eleagnus angustifolia*, *Hippophaë rhamnoides*, *Rubus* sp.

- Balauru Hill (400 m alt.), West to Izvorul Dulce, Beceni. Vegetation is formed of characteristic species to the steppe and forest steppe: *Stipa capillata*, *Sambucus ebulus*, *Salix* sp., *Crataegus* sp., *Prunus spinosa*, *Hippophaë rhamnoides*, *Rosa canina*, *Rubus* sp., *Viola* sp., *Adonis vernalis*, *Arctium lappa*, *Taraxacum officinalis*, *Carduus* sp., *Aristolochia clematidis*, *Ranunculus* sp., *Iris pumilla*, *Pulsatilla montana* etc.

- Izvorul Dulce, Beceni village, left bank of Slănic streamlet. Cultivated vegetation is prevalent, and it is represented by fruit trees, agricultural, vegetable, wine cultures, decorative floral species.

- Spătaru and Frasinu Natural Reservations: depression ash trees forests, dominated by *Fraxinus angustifolia* and *F. pallisiae*.

- Crâng Park (Buzău City), with *Quercus* sp.

The specimens were collected using the entomological net, light traps, and also by trees shaking or directly from plants and soil.

The systematic presentation and nomenclature used are according to the system proposed by Sama (2005) for Cerambycidae family, Warchalowski (2003) for Chrysomelidae and Canepari (2005) for Coccinellidae.

RESULTS

139 species of longhorn beetles (Cerambycidae), leaf beetles (Chrysomelidae) and ladybirds (Coccinellidae) are presented. They belong to 15 subfamilies and 89 genera as follows: Cerambycinae (13 genera and 17 species), Lamiinae (14 genera and 19 species), Lepturinae (16 genera and 23 species), Prioninae (2 genera and 2 species), Donaciinae (one genus with one species), Criocerinae (4 genera and 6 species), Clythrinae (3 genera and 6 species), Cryptocephalinae (2 genera and 9 species), Lamprosomatinae (one genus with one species), Eumolpinae (one genus with one species), Chrysomelinae (9 genera and 20 species), Galerucinae (2 genera and 4 species), Halticinae (8 genera and 13 species), Cassidinae (3 genera and 4 species) and Coccinellinae (10 genera and 13 species) (Tab. 1).

The species and genera are presented in alphabetic order, according to subfamilies.

Table 1

Taxa	Published data	Material Collecting site/ Habitat/ Date
CERAMBYCIDAE		
CERAMBYCINAE		
<i>Axinopalpis gracilis</i> (Krynicky, 1832)		3 specs Izvorul Dulce, Beceni, 21.06.2003, 1.08.2005 (light trap)
<i>Cerambyx cerdo</i> (Linnaeus, 1758)		2 specs Crâng Park, Buzău, 3.07.2000 - 3.06.2001
<i>Cerambyx scopoli</i> (Fuessly, 1775)		6 specs Unguriu, Măgura, 11.05.2003, 12-13.06.2004, 12-28.06.2006 (on <i>Sambucus nigra</i> , beech forest)
<i>Chlorophorus figuratus</i> (Scopoli, 1763)		Spătaru forest, 24.06.1987; 1 spec. Măgura, 23.06.2004 (on Apiaceae, beech forest)
<i>Chlorophorus sartor</i> (O.F. Müller, 1766)		2 specs Vulcanii norioși, Berca, 15.06.2002; 1 spec. Crâng forest, Buzău, 18.06.2003; 2 specs Izvorul Dulce, Beceni, 28.08.2005 (on Apiaceae)
<i>Chlorophorus varius</i> (Müller, 1766)		2 specs Vulcanii norioși, Berca, 15.06.2002 (on Apiaceae); 1 spec. Crâng forest, Buzău, 18.06.2003; 4 specs Izvorul Dulce, Beceni, 29.07.-20.08.2005 (on Apiaceae)
<i>Clytus arietis</i> (Linnaeus, 1758)		2 specs Vulcanii norioși, Berca, 14.07.2001
<i>Hylotrupes bajulus</i> (Linnaeus, 1758)		1 spec. Arbănași, Beceni, 25.07.2005
<i>Isotomus speciosus</i> (Schneider, 1787)		1 spec. Izvorul Dulce, Beceni, 8.07.2002 (on flowers)
<i>Obrium cantharinum</i> Linnaeus, 1767)		1 spec. Izvorul Dulce, Beceni, 2.08.2006 (in garden, light trap)
<i>Phymatodes testaceus</i> (Linnaeus, 1758)		1 spec. Izvorul Dulce, Beceni, 12.05.2007 (on flowers)
<i>Plagionotus floralis</i> (Pallas, 1773)		2 specs Vulcanii norioși, Berca, 15.06.2002
<i>Purpuricenus kaechleri</i> (Linnaeus, 1758)		1 spec. Buzău, 30.06.2004
<i>Ropalopus macropus</i> (Germar, 1824)		1 spec. Unguriu, Măgura, 11.05.2003 (beech forest)
<i>Rosalia alpina</i> (Linnaeus, 1758)		Măgura, 8-9.06.1997 (beech forest)
<i>Stenopterus flavicornis</i> (Küster, 1846)		1 spec. Vulcanii norioși, Berca, 15.06.2002; 1 spec. Izvorul Dulce, Beceni, 8.06.2003; 1 spec. Dealul Balauru, Izvorul Dulce, Beceni, 22.06.2003
<i>Stenopterus rufus</i> (Linnaeus, 1767)		2 specs Izvorul Dulce, Beceni, 8.06.2003
LAMIINAE		
<i>Acanthocinus griseus</i> Fabricius, 1792)	Buzău Mts (Petri, 1912)	
<i>Agapanthia villosoviridescens</i> (De Geer, 1775)		1 spec. f.h. Hărtăgelu, Hărtașu, Nehoiașu, Buzău Mts, 14.08.2002 (coniferous forest)

Table 1 (continued)

Taxa	Published data	Material Collecting site/ Habitat/ Date
<i>Calamobius filum</i> (Rossi, 1790)		4 specs Dealul Balauru, Izvorul Dulce, Beceni, 15-22.06.2002 (on Poaceae)
<i>Carinatodorcadion fulvum canaliculatum</i> (Fischer-Waldheim, 1823)	Spătaru forest (Falcă et al., 2004)	8 specs Dealul Vizireanu, Berca, Beceni, 4.05.2003 (on the ground), 16.04.2005; 1 spec. Crâng forest, Buzău, 18.06.2003; 1 spec. Dealul Balauru, Izvorul Dulce, Beceni, 12.05.2004 (on the ground)
<i>Lamia textor</i> (Linnaeus, 1758)		3 specs Vulcanii noroiși, Berca, 15.06.2002, 1.05.2005, 1 spec. Arbănași, Beceni, 25.07.2005 (on the ground)
<i>Mesosa curculionoides</i> (Linnaeus, 1761)		1 spec. Unguriu, Măgura, 3.07.2003 (beech forest)
<i>Mesosa nebulosa</i> (Fabricius, 1781)		1 spec. Unguriu, Măgura, 03.07.2003 (beech forest)
<i>Morimus funereus</i> (Mulsant, 1863)		6 specs Unguriu, Măgura, 11.05.2003, 18.08.2003, 19.07.2004 (beech forest); 1 spec. Arbănași, Beceni, 25.07.2005 (beech forest)
<i>Neodorcadion bilineatum</i> (Germar, 1824)		1 spec. Dealul Vizireanu, Berca, Beceni, 4.05.2005; 4 specs Dealul Balauru, Izvorul Dulce, Beceni, 4.05.2005 (on the ground); 1 spec. Beciu, Scorțoasa, 30.05.2007
<i>Oberea oculata</i> (Linnaeus, 1758)		1 spec. f.h. Hărtăgelu, Hărtăgu, Nehoiășu, Buzău Mts, 14.08.2002 (coniferous forest)
<i>Pedestredorcadion equestre transylvanicum</i> (Ganglbauer, 1883)		7 spec. Dealul Vizireanu, Berca, Beceni, 1.09.1999, 16.04.-4.05.2005; 2 specs Vulcanii noroiși (Păcelele Mari), Berca, 18.04.2002, 4.05.2003; 2 specs Dealul Balauru, Izvorul Dulce, Beceni, 20.04.2003
<i>Pedestredorcadion murrayi</i> (Küster, 1847)		2 specs Vulcanii noroiși, Berca, 7.04.2001; 22 specs Balauru hill, Izvorul Dulce, Beceni, 23.04.2003, 4.05.2003, 12.05.2004, 16.04.2005, 4.05.2005 (on the ground)
<i>Pedestredorcadion pedestre</i> (Poda, 1761)		12 specs Vizireanu hill, Berca, Beceni, 4.05.2003, 16.04.-4.05.2005 (on the ground)
<i>Phytoecia caerulea</i> (Scopoli, 1772)		1 spec. Unguriu, Măgura, 12.06.2004 (beech forest)
<i>Phytoecia pustulata</i> (Schrank, 1776)		1 spec. Balauru hill, Izvorul Dulce, Beceni, 6.05.2002 (hay field)
<i>Pogonocherus hispidus</i> (Linnaeus, 1758)		1 spec. Măgura, 28.06.2006 (beech forest)
<i>Saperda carcharias</i> (Linnaeus, 1758)		2 specs Izvorul Dulce, Beceni, 1.08.2005, 12.08.2006 (light trap)
<i>Saperda perforata</i> (Pallas, 1773)		1 spec. Izvorul Dulce, Beceni, 1.06.1999
<i>Tetrops praeustus</i> (Linnaeus, 1758)		1 spec. Balauru hill, Izvorul Dulce, Beceni, 4.05.2005
LEPTURINAE		
<i>Alosterna tabacicolor</i> (De Geer, 1775)		1 spec. Izvorul Dulce, Beceni, 1.06.2002 (on Apiaceae); 3 specs Unguriu, Măgura, 12.06.2004

Table 1 (continued)

Taxa	Published data	Material Collecting site/ Habitat/ Date
<i>Anoplodera sexguttata</i> (Fabricius, 1775)		3 specs Unguriu, Măgura, 12.06.2004 (on Apiaceae, skirts of beech forest)
<i>Cortodera femorata</i> (Fabricius, 1775)		1 spec. Arbănași, Beceni, 02.05.2005
<i>Cortodera humeralis</i> (Schaller, 1783)		4 specs Unguriu, Măgura, 11.05.2003 (skirts of beech forest)
<i>Dinoptera collaris</i> (Linnaeus, 1758)		2 specs Unguriu, Măgura, 12.06.2004 (on flowers, forest road)
<i>Leptura aurulenta</i> (Fabricius, 1792)		1 spec. Unguriu, Măgura, 19.07.2004 (on Apiaceae, forest road)
<i>Leptura quadrifasciata</i> (Linnaeus, 1758)		2 specs f.h. Hărtăgelu, Harțașu, Nechoiașu, Buzău Mts, 17.08.2002 (coniferous forest)
<i>Pachyta quadrimaculata</i> (Linnaeus, 1758)		1 spec. f.h. Hărtăgelu, Harțașu, Nechoiașu, Buzău Mts, 17.08.2002 (on flowers)
<i>Pachytodes cerambyciformis</i> (Schrank, 1781)		2 specs f.h. Hărtăgelu, Harțașu, Nechoiașu, Buzău Mts, 15-18.08.2002 (on flowers)
<i>Pachytodes erraticus</i> (Dalman, 1817)	27 specs Sihlea, 23.06.1987; 7 specs Spătaru forest, 24.06.1987; (Serafim, 2006)	4 specs Crâng forest, Buzău, 18.06.2003; Unguriu, Măgura, 19.07.2004; 4 specs Arbănași, Beceni, 2.07.2005; 1 spec. Vulcanii noroiși, Berca, 15.06.2002 (on Apiaceae); 1 spec. Măgura, 30.06.2006 (beech forest)
<i>Pidonia lurida</i> (Fabricius, 1792)		1 spec. Unguriu, Magura, 11.05.2003
<i>Pseudovadonia livida</i> (Fabricius, 1776)	36 specs Sihlea, 23.06.1987; 53 specs Spătaru forest, 24.06.1987; (Serafim, 2006)	2 specs Vulcanii noroiși, Berca; 15.06.2002 (on Apiaceae); 2 specs Crâng forest, Buzău, 18.06.2003; 1 spec. Izvorul Dulce, Beceni, 21.06.2003 (light trap)
<i>Rhagium sycophanta</i> (Schrank, 1781)		2 specs Unguriu, Măgura, 11.05.2003
<i>Rutpela maculata</i> (Poda, 1761)		5 specs f.h. Hărtăgelu, Harțașu, Nechoiașu, Buzău Mts, 16-17.08.2002 (on flowers); 1 spec. Unguriu, Măgura, 19.07.2004; 3 specs Măgura, 28.06.2006 (beech forest)
<i>Stenocorus meridianus</i> (Linnaeus, 1758)	Spătaru forest, 7 km South-West Buzău, 24.06.1987 (Serafim, 2005)	
<i>Stenurella bifasciata</i> (Müller, 1776)	3 specs Costești, Spătaru forest, 24.06.1987 (Serafim, 2006)	3 specs Vulcanii noroiși, Berca, 15.06.2002 (on Apiaceae)
<i>Stenurella melanura</i> (Poda, 1761)		3 specs f.h. Hărtăgelu, Harțașu, Nechoiașu, Buzău Mts, 16.08.2002 (coniferous forest); 1 spec. Arbănași, Beceni, 2.07.2005 (on <i>Daucus</i> sp.); 3 specs Măgura, 28.06.2006
<i>Stenurella nigra</i> (Linnaeus, 1758)		1 spec. Izvorul Dulce, Beceni, 9.05.2004 (hay field, on flowers); 1 spec. Unguriu, Măgura, 12.06.2004 (on Apiaceae, skirts of beech forest)

Table 1 (continued)

Taxa	Published data	Material Collecting site/ Habitat/ Date
<i>Stenurella septempunctata</i> (Fabricius, 1792)		5 specs Unguriu, 12.06.2004 (on Apiaceae, skirts of beech forest); 3 specs Măgura, 28.06.2006
<i>Stictoleptura rubra</i> (Linnaeus, 1758)		5 specs f.h. Hărtăgelu, Harțagu, Nehoiașu, Buzău Mts, 15-18.08.2002 (coniferous forest)
<i>Stictoleptura scutellata</i> (Fabricius, 1781)	Buzău Mts (Petri, 1912)	
<i>Vadonia unipunctata</i> (Fabricius, 1787)		3 specs Vulcanii noroioși, Berca, 15.06.2002 (on Apiaceae)
<i>Xylosteus spinolae</i> Frivaldszky, 1838	Buzău Mts (Petri, 1912)	
PRIONINAE		
<i>Aegosoma scabricorne</i> (Scopoli, 1763)		1 spec. Crâng forest, Buzău, 10.07.2002; 2 specs Izvorul Dulce, Beceni, 10.07.2002 (on <i>Morus</i> , in a hollow), 4.08.2002 (light trap)
<i>Prionus coriarius</i> (Linnaeus, 1758)		1 spec. Unguriu, Măgura, 19.07.2004 (beech forest); 1 spec. Bozioru, 14.07.2007 (light trap)
CHRYSOMELIDAE		
DONACIINAE		
<i>Plateumaris consimilis</i> (Schrank, 1781)	Buzău Mts (Petri, 1912)	
CRIOCERINAE		
<i>Crioceris duodecimpunctata</i> (Linnaeus, 1758)	Spătaru forest (Maican, 2006)	
<i>Crioceris quatuordecimpunctata</i> (Scopoli, 1763)	Spătaru forest (Maican, 2006)	
<i>Crioceris quinquepunctata</i> (Scopoli, 1763)	Spătaru forest (Maican, 2006)	
<i>Lema cyanella</i> (Linnaeus, 1758)	Frasinu forest (Maican, 2006)	
<i>Lilioceris lili</i> (Scopoli, 1763)		2 specs Izvorul Dulce, Beceni, 6.05.2002, 22.06.2003 (on <i>Lilium</i> sp.)
<i>Oulema melanopus</i> (Linnaeus, 1758)		1 spec. Crâng forest, Buzău, 24.03.2000; 1 spec Izvorul Dulce, Beceni, 22.06.2003
CLYTHRINAE		
<i>Clytra laeviuscula</i> (Ratzeburg, 1837)	Frasinu forest (Maican, 2006)	2 specs Vulcanii noroioși, 15.06.2002 (on <i>Salix</i> sp.); 1 spec. Măgura, 23.06.2004 (on <i>Salix</i> sp., forest outskirts)
<i>Clytra quadripunctata</i> (Linnaeus, 1758)		2 spec. Balauru hill, Izvorul Dulce, Beceni, 7.05.2000, 2.05.2002
<i>Labidostomis longimana</i> (Linnaeus, 1761)	Buzău surroundings (Jaquet, 1904)	2 specs Izvorul Dulce, Beceni, 9.06.2002
<i>Smaragdina affinis</i> (Illiger, 1794)		2 specs Izvorul Dulce, Beceni, 2.05.2002
<i>Smaragdina salicina</i> (Scopoli, 1763)		4 specs Balauru hill, Izvorul Dulce, Beceni, 26.04.2002, 2.05.2002, 9.05.2004, 4.05.2005

Table 1 (continued)

Taxa	Published data	Material Collecting site/ Habitat/ Date
<i>Smaragdina xanthaspis</i> (Germar, 1824)		2 specs Izvorul Dulce, Beceni, 1-9.06.2002 (on flowers); 1 spec. Balauru hill, Izvorul Dulce, Beceni, 22.06.2003
CRYPTOCEPHALINAE		
<i>Cryptocephalus bipunctatus</i> (Linnaeus, 1758)		12 specs Vulcanii noroioși, Pâclele Mici, 15.06.2002, 30.05.2007 (on Umbelliferae); 1 spec. Crâng forest, Buzău, 18.06.2003; 1 spec. Arbănași, Beceni, 16.07.2005 (on flowers)
<i>Cryptocephalus flavipes</i> Fabricius, 1781		3 specs Balauru hill, Izvorul Dulce, Beceni, 02.05.2002, 1-15.06.2002
<i>Cryptocephalus hypochoeridis</i> (Linnaeus, 1758)	Spătaru forest; Frasinu forest (Maican, 2006)	2 specs Izvorul Dulce, Beceni, 1.06.2002 (on flowers)
<i>Cryptocephalus laetus</i> Fabricius, 1792		1 spec. Balauru hill, West to Fulga, Cernătești, 31.08.2005
<i>Cryptocephalus moraei</i> (Linnaeus, 1758)	Spătaru forest (Maican, 2006)	1 ♀ Balauru hill, Izvorul Dulce, Beceni, 22.06.2003 (hay field)
<i>Cryptocephalus octacosmus</i> Bedel, 1891 (syn: <i>C. sexpustulatus</i> Rossi, 1790)	Buzău surroundings (Jaquet, 1904)	1 spec. Vulcanii noroioși, 15.06.2002 (on flowers); 1 spec. Izvorul Dulce, Beceni, 1.06.2002 (on plants); 1 spec. Balauru hill, Izvorul Dulce, Beceni, 22.06.2003
<i>Cryptocephalus sericeus</i> (Linnaeus, 1758)		1 spec. Vulcanii noroioși, 5.06.1999; Izvorul Dulce, Beceni, 9.06.2002 (on Umbelliferae); 2 specs Crâng forest, Buzău, 18.06.2003; 1 spec. Arbănași, Beceni, 30.08.2005 (on Umbelliferae)
<i>Pachybrachis hieroglyphicus</i> (Laicharting, 1781)		1 spec. Balauru hill, West to Izvorul Dulce, Beceni, 13.06.2004 (hay field)
<i>Pachybrachis tessellatus</i> (Olivier, 1791) (syn: <i>histrion</i> Olivier, 1791)	Buzău surroundings (Jaquet, 1904)	
LAMPROSOMATINAE		
<i>Oomorplus concolor</i> (Sturm, 1807)	Buzău surroundings (Jaquet, 1904)	
EUMOLPINAE		
<i>Eumolpus asclepiadeus</i> (Pallas, 1776)	Spătaru forest; Frasinu forest (Maican, 2006)	
CHRYSOMELINAE		
<i>Chrysolina cerealis</i> (Linnaeus, 1767)		5 specs Vizireanu hill, 508 m alt., 15.06.2004 (under stone); 1 spec. Vizireanu hill, 508 m alt., Vulcanii noroioși, 1.09.2005 (hay field)
<i>Chrysolina fastuosa</i> (Scopoli, 1763)	Buzău Mts., without other specifications (Panin, 1944); Spătaru forest, Frasinu forest (Maican, 2006)	1 spec. Harțagu, f.h. Hărtăgelu, Nehoiășu, Buzău Mts, 15.08.2002; 1 spec. Arbănași, Beceni, 28.04.2003 (on <i>Urtica</i> sp.); 10 specs Izvorul Dulce, Beceni, 9.05.2004 (hay field); 2 specs Unguriu, Măgura, 19.07.2004 (forest road)

Table 1 (continued)

Taxa	Published data	Material Collecting site/ Habitat/ Date
<i>Chrysolina globipennis</i> (Suffrian, 1851)		2 specs (1♂, 1♀) Unguriu, Măgura, 19.07.2004 (forest road)
<i>Chrysolina haemoptera</i> (Linnaeus, 1758)	Meledic, Lopătari (Panin, 1944)	Corbu (Cătina), 20.08.1996 (Coll. Ș. Proches); Balauru hill, Izvorul Dulce, 3.03.2002; Pârscov, 29.03.2003 (under stone)
<i>Chrysolina herbacea</i> (Duftschmid, 1825)		5 specs Izvorul Dulce, Beceni, 17.05.2003 (on <i>Mentha</i>); 1 spec. Unguriu, Măgura, 19.07.2004 (forest road)
<i>Chrysolina limbata</i> (Fabricius, 1775)		5 specs Arbănași, Beceni, 7.08.2004, 2.07.2005; 1 spec. Izvorul Dulce, Beceni, 29.08.2005 (hay field)
<i>Chrysolina marcasitica</i> (Germar, 1824)	Buzău Mts., (Panin, 1944)	
<i>Chrysolina polita</i> (Linnaeus, 1758)	Buzău Mts., (Panin, 1944)	2 specs Harțașu, f.h. Hărtăgelu, Nehoiașu, Buzău Mts, 15.-16.08.2002
<i>Chrysolina sturmi</i> (Westhoff, 1882)	Spătaru forest (Maican, 2006)	1 spec. Harțașu, f.h. Hărtăgelu, Nehoiașu, Buzău Mts, 15.08.2002 (<i>Picea</i> forest) ; 1 spec. Unguriu, Măgura, 1.07.2003 (forest road)
<i>Chrysolina umbratilis</i> (Weise, 1887)	Buzău Mts., (Panin, 1944)	
<i>Chrysolina varians</i> (Schaller, 1783)	Sărata-Monteoru forest (Maican, 2006)	
<i>Chrysomela populi</i> Linnaeus, 1758		1 spec. Balauru hill, West to Izvorul Dulce, 29.07.2003 (on <i>Populus</i> sp.); 1 spec. Măgura, 23.06.2004 (skirts of beech forest, on <i>Populus</i> sp.)
<i>Chrysomela saliceti</i> Suffrian, 1849	Buzău Mts (Petri, 1912)	2 specs (1♂, 1♀) Balauru hill, West to Izvorul Dulce, Beceni, 29.07.2003, 15.06.2004 (on <i>Populus nigra</i>)
<i>Colaphus sophiae</i> (Schaller, 1783)		1 spec. Izvorul Dulce, Beceni, 7.05.2002
<i>Entomoscelis adonidis</i> (Pallas, 1771)		2 specs (1♂, 1♀) Vulcanii noroiși, Pâclele Mari, 15.06.2000; 9 specs Vulcanii noroiși, Pâclele Mici, 30.05.2007
<i>Gastrophysa polygoni</i> (Linnaeus, 1758)	Spătaru forest; Sărata-Monteoru forest (Maican, 2006)	1 spec. Vulcanii noroiși, Pâclele Mari, 18.04.2002; 1 spec. Izvorul Dulce, Beceni, 1.06.2002 (on flowers); 1 spec. Balauru hill, West to Izvorul Dulce, Beceni, 4.05.2005
<i>Gonioctena fornicata</i> (Brüggemann, 1873)		1 spec. Izvorul Dulce, Beceni, 26.04.2002
<i>Leptinotarsa decemlineata</i> (Say, 1824)		2 specs Izvorul Dulce, Beceni, 5.09.2004 (on <i>Solanum tuberosum</i>)
<i>Plagioderma versicolora</i> (Laicharting, 1781)		1 spec. Izvorul Dulce, Beceni, 7.07.2002
<i>Timarcha goettingensis</i> (Linnaeus, 1758) (syn: <i>Chrysomela coriaria</i> Laicharting, 1781)	Buzău surroundings (Jaquet, 1904)	1♂ Vulcanii noroiși, Pâclele Mici, 18.04.2002 (on the ground); 1♂ Arbănași, Beceni, 2.05.2005 (on the ground)
GALERUCINAE		
<i>Galeruca dahli</i> (Joannis, 1866)	Buzău surroundings (Jaquet, 1904)	

Table 1 (continued)

Taxa	Published data	Material Collecting site/ Habitat/ Date
<i>Galeruca pomonae</i> (Scopoli, 1763)		1 spec. Balauru hill, Izvorul Dulce, Beceni, 17.10.2000; 3 specs Unguriu, Măgura, 12.06.2004 (on plants and ground, skirts of beech forest); 1 spec. Vizireanu hill, Vulcanii noroioși, 15.06.2004 (hay field); 2 specs Arbănași, Beceni, 2.07.2005
<i>Galeruca tanacetii</i> (Linnaeus, 1758)	Spătaru forest ; Frasinu forest (Maican, 2006)	1 spec. Crâng forest, Buzău, 01.10.2002 ; 1 spec. Izvorul Dulce, Beceni, 08.06.2003 (hay field); 1 spec. Unguriu, Măgura, 12.06.2004 (on plants, beech forest); 1 spec. Vizireanu hill, Vulcanii noroioși, 15.06.2004 (hay field); 2 specs Arbănași, Beceni, 30.08.2005
<i>Xanthogaleruca luteola</i> (Müller, 1766)		3 specs Izvorul Dulce, Beceni, 14.07.2002, 4.09.2002, 21.-22.06.2003 (light trap)
HALTICINAE		
<i>Aphthona flava</i> Guillebeau, 1895		1 ♀ Balauru hill, Izvorul Dulce, Beceni, 22.06.2002
<i>Chaetocnema chlorophana</i> (Duftschmid, 1825)		8 specs Balauru hill, West to Izvorul Dulce, Beceni, 4.05.2005
<i>Crepidodera aurata</i> (Marsham, 1802)		3 specs Izvorul Dulce, Beceni, 20.04.2002 (on <i>Sambucus nigra</i>)
<i>Crepidodera lamina</i> (Bedel, 1901)		2 ♂♂ Izvorul Dulce, Beceni, 20.04.2002 (on <i>Sambucus nigra</i>)
<i>Derocrepis rufipes</i> (Linnaeus, 1758)	Buzău surroundings (Jaquet, 1904)	
<i>Neocrepidodera ferruginea</i> (Scopoli, 1763)		1 spec. Balauru hill, Izvorul Dulce, Beceni, 22.06.2002
<i>Neocrepidodera transversa</i> (Marsham, 1802)	Frasinu forest (Maican, 2006)	1 spec. Corbu, Cătina, 25.08.1996, on <i>Artemisia</i> sp. (Coll. Ș. Procheș)
<i>Neocrepidodera transsilvanica</i> (Fuss, 1864)	Buzău Mts. (Petri, 1912)	
<i>Orestia aubei</i> Allard, 1859	Buzău Mts. (Petri, 1912; under the name <i>Orestia arcuata</i> Mill.)	
<i>Phyllotreta atra</i> (Fabricius, 1775)	Frasinu forest (Maican, 2006)	1 ♂ Izvorul Dulce, Beceni, 3.05.2003
<i>Phyllotreta undulata</i> (Kutschera, 1860)	Buzău Mts (Petri, 1912)	1 spec. Izvorul Dulce, Beceni, 3.05.2003 (light trap)
<i>Phyllotreta vittula</i> (Redtenbacher, 1849)		4 specs Balauru hill, West to Izvorul Dulce, Beceni, 4.05.2005
<i>Sphaeroderma testaceum</i> (Fabricius, 1775)	Spătaru forest (Maican, 2006)	
CASSIDINAE		
<i>Cassida prasina</i> Illiger, 1798		2 specs Izvorul Dulce, Beceni, 09.06.2002 (on Umbelliferae)

Table 1 (continued)

Taxa	Published data	Material Collecting site/ Habitat/ Date
<i>Cassida viridis</i> Linnaeus, 1758		1 spec. Crâng forest, Buzău, 17.04.2000
<i>Hypocassida subferruginea</i> (Schrank, 1776)		1 spec. Izvorul Dulce, Beceni, 15.07.2001
<i>Pilemostoma fastuosa</i> (Schaller, 1783)		1 spec. Arbănași, Beceni, 25.07.2005
COCCINELLIDAE COCCINELLINAE		
<i>Adalia bipunctata</i> (Linnaeus, 1758)		5 specs Izvorul Dulce, Beceni, 19.04.-6.05.2002, 12.05.2007
<i>Adalia decempunctata</i> (Linnaeus, 1758)		1 spec. Izvorul Dulce, Beceni, 3.04.2003
<i>Calvia (Anisocalvia) quatuordecimguttata</i> (Linnaeus, 1758)		2 specs Izvorul Dulce, Beceni, 2.05.2002, 12.05.2007; 2 specs Balauru hill, Izvorul Dulce, Beceni, 2.05.2002
<i>Coccinella septempunctata</i> Linnaeus, 1758	Șarânga, Pietroasele, 22.07.1967; Balta Albă, 30.06.-2.07.1970 (Serafim, 1991)	Nehoiu, 29.08.1973; 3 specs Izvorul Dulce, Beceni, 17.05.2003, 9.05.2004; 1 spec. Măgura, Unguriu, 19.07.2004; 1 spec. Vizireanu hill, Berca, 16.04.2005; 1 spec. Joseni, Berca, 30.05.2007
<i>Coccinula quatuordecimpustulata</i> (Linnaeus, 1758)		2 specs Izvorul Dulce, Beceni, 9.08.2002- 21.06.2003; 1 spec. Măgura, Unguriu, 19.07.2004; 1 spec. Balauru hill, Izvorul Dulce, Beceni, 4.05.2005
<i>Halyzia sedecimguttata</i> (Linnaeus, 1758)		1 spec. Izvorul Dulce, Beceni, 9.08.2002
<i>Hippodamia tredecimpunctata</i> (Linnaeus, 1758)		1 spec. Izvorul Dulce, Beceni, 26.04.2002; 2 specs Vulcanii noroioși, (Păcelele Mici), Berca, 30.05.2007
<i>Hippodamia (Semiadalia) undecimnotata</i> (Schneider, 1792)	Buzău Mts. (Petri, 1912; Serafim, 1991);	5 specs Izvorul Dulce, Beceni, 26.04.- 4.05.2002
<i>Hippodamia variegata</i> (Goeze, 1777)	Buzău Mts. (Petri, 1912)	4 specs Izvorul Dulce, Beceni, 9.06.2002- 1.05.2005; 2 specs Balauru hill, Izvorul Dulce, Beceni, 22-23.06.2002
<i>Oenopia conglobata</i> (Linnaeus, 1758)		2 specs Balauru hill, Izvorul Dulce, Beceni, 2.05.2002, 1 spec. 12.05.2007; Buzau (Marghiloman park), 2.05.2002
<i>Propylaea quatuordecimpunctata</i> (Linnaeus, 1758)		1 spec. Balauru hill, Izvorul Dulce, Beceni, 7.05.2000; 7 specs Izvorul Dulce, Beceni, 25.04.-1.06.2002; 2 specs Arbănași, Beceni, 21.08.2005
<i>Psyllobora (Thea auct.) vigintiduopunctata</i> (Linnaeus, 1758)		1 spec. Buzău (Crâng park), 14.03.2002; 1 spec. Izvorul Dulce, Beceni, 5.07.2002; 2 specs Arbănași, Beceni, 1.05.-21.08.2005; 1 spec. Vulcanii noroioși, Păcelele Mici, Berca, 30.05.2007
<i>Tythaspis sedecimpunctata</i> (Linnaeus, 1758)		4 spec. Izvorul Dulce, Beceni, 1.05.2005; 1 spec. Balauru hill, Izvorul Dulce, Beceni, 4.05.2005

Abbreviations:

f.h. – forest house; Mt./Mts - Mountain/s; spec. (s) – specimen (s); coll. – collection

Translation of Romanian names Vulcanii Noroioși = Muddy Volcanoes

DISCUSSIONS

From the 61 Cerambycidae species listed (which represent almost 24 % of the total of the species known in Romania), 8 species were previously cited (Petri, 1912; Serafim, 2005, 2006), and 53 species are mentioned for the first time from this area.

Referring to IUCN (the International Union for the Conservation of Nature) Red List 2007 of Threatened Species, *Cerambyx cerdo* is included into VU (Vulnerable) category.

According to IUCN status of conservation, *Rosalia alpina* Linnaeus (Cerambycidae) is included into CR (Critically Endangered) category and in the addenda of Berna Convention as a rare species, threat with extinction. The larva develops in the wood of old oaks (*Fagus sylvatica*, *F. orientalis*).

The species *Morimus funereus* Mulsant (Cerambycidae) grows in beech and oak, but occasional appearances have been remarked in the coniferous forests and steppes with Poaceae species. According to IUCN status of conservation: species with low risk, threatened (LR).

Cerambyx cerdo Linnaeus, *C. scopolii* Fuessly, *Chlorophorus sartor* O.F. Müller and *Purpuricenus kaechleri* (Linnaeus) are protected at the European level and included in the *Carpathian List of Endangered species* (Pawłowski, 2003).

The family Chrysomelidae is represented by 65 species, representing about 10 % of the total number of the known species until now in Romanian fauna. Among these, 32 were previously reported (Jaquet, op. cit.; Petri, op.cit.; Panin, op. cit.; Maican, op. cit.), 33 species being now mentioned for the first time in the studied area.

Neocrepidodera transsilvanica (Fuss, 1864) was mentioned in Buzău Mts., without other specifications by Petri (op. cit.). This is an endemic species in the Eastern and Southern Carpathians.

Cryptocephalus laetus Fabricius is a rare species in Romanian fauna, known only from Dobrogea region: Cernavodă (Jaquet, 1899), Agigea (Serafim & Maican, 2004) and Letea forest, the Danube Delta (Ieniște, 1968).

From Coccinellidae, 3 species were previously reported from the Buzău area (Petri, 1912; Serafim, 1991), 10 species being reported now. The 13 species represent almost 17 % of the total of the Romanian reported species.

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DIVERSITATEA COLEOPTERELOR: CERAMBYCIDAE, CHRYSOMELIDAE, COCCINELLIDAE DIN ZONA BUZĂULUI (ROMÂNIA)

REZUMAT

În lucrare prezentăm date referitoare la diversitatea coleopterelor Cerambycidae, Chrysomelidae și Coccinellidae din zona Buzăului, pe baza unor materiale din colecții și a informațiilor bibliografice publicate în perioada 1904-2006.

Sunt prezentate 139 specii, încadrate în 89 genuri, din 15 subfamilii. 53 specii de Cerambycidae, 33 specii de Chrysomelidae și 10 specii de Coccinellidae sunt semnalate pentru prima dată din această zonă.

Dintre speciile importante din punct de vedere al conservării, protejate la nivel european, se remarcă: *Cerambyx cerdo* Linnaeus, *Rosalia alpina* Linnaeus and *Morimus funereus* Mulsant.

Neocrepidodera transsilvanica (Fuss) este un endemit Carpatic, iar *Cryptocephalus laetus* Fabricius este o specie rară în fauna României.

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