

THE FAMILY MALACHIIDAE (INSECTA: COLEOPTERA) IN COLLECTIONS OF THE NATURAL HISTORY MUSEUM IN BELGRADE

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Abstract

Entomological collections of the Natural History Museum in Belgrade were reviewed. Thirty-six species of the Malachiidae family were identified in the collections of the museum. New species for Serbian fauna are *Charopus flavipes* Paykull, 1798, *Hypebaeus flavipes* (Fabricius, 1787), *Ebaeus gibbus* (Drapiez, 1819), *Ebaeus thoracicus* (Geoffroy, 1785), *Sphinginus lobatus* (Olivier, 1790), *Clanoptilus falcifer* (Abeille de Perrin, 1882), *Malachius scutellaris* Erichson, 1840, *Anthocomus equestris* (Fabricius, 1781), *Anthocomus coccineus* (Schaller, 1783). New species for fauna of Bosnia and Herzegovina are *Colotes obsoletus* Erichson, 1840 and *Hypebaeus flavicollis* (Erichson, 1840). *Ebaeus gibbus* is a new species for Montenegro. An annotated species list is provided. Locations and dates of findings, as well as a distribution of each species and short comments are given.

KEY WORDS: Coleoptera, Malachiidae, fauna, distribution, museum collection.

Introduction

The beetles of the Malachiidae family are mostly small species (1.5-10 mm) with a soft cuticle, and vesicles that may be swollen and protrude from the sides of the thorax and abdomen. The males possess specific organs ("excitators") which terminate on various part of the body: on the head, antennae, top of the elytra, etc. The excitators have glands inside which give off a pheromone, changing the initial aversion of the female to mating.

Occurrence of majority of species depends on conditions of habitats, such as altitude, temperature, humidity. Most of them appear in May-June and take flight till July. The adults of most species feed mainly on pollen of plants, although they occasionally turn carnivorous and prey on aphids. The larvae develop in dead wood, in

dry stems of bush and herbaceous plants, sometimes in soil, and they are predacious (SHUROVENKOV, 1980; MIRUTENKO, 2004; PLATA-NEGRACHE, 2012).

About 4000 species have been described worldwide (KOLIBÁČ *et al.*, 2005), while more than 1440 of them are Palaearctic (MAYOR, 2007).

Material and Methods

Below are the results of the processing of the entomological collections of the Natural History Museum in Belgrade. Specimens of Malachiidae have been collected throughout the territory of former Yugoslavia by different researchers during the 20th and the beginning of 21st century. The collection of Coleoptera by Stjepan SVIRČEV was transferred to boxes in the Collection of Insects of the Institute for Plant Protection and are now stored at the Natural History Museum in Belgrade.

For presentation of the entomological materials the original practice of writing labels by hand has been maintained. But where necessary, modern geographic names, clarification and explanation in square brackets were provided. The names of collectors are given according to the original writing.

Abbreviations used besides the generally accepted ones are:

AU – Austria; BH – Bosnia and Herzegovina; CR – Croatia; FR – France; GE – Germany; IT – Italy; MC – FYR of Macedonia; MN – Montenegro; SR – Serbia; SL – Slovenia.

CSC – Collection of Coleoptera of Skoplje suburbs by S. VOJINOVIĆ; GC – General Collection of the Natural History Museum in Belgrade (Serbia); GNC – Collection by Guido NONVEILLER; IPP – Collection of the Institute for Plant Protection; KCC – Collection of Coleoptera by Vladimir KODRIĆ; LJC – Collection of Coleoptera by Ljubodrag JANKOVIĆ; MZC – Collection of Lepidoptera by Momčilo ZEČEVIĆ; PNC – Collection by Peter NOVAK; ZGC – Collection by Zoran GRADOJEVIĆ.

Bgd. – Belgrade; Env., Env. de [French] – environs, suburbs; Mont. – mountain; pl., plan. – planina [Serbian] – mountain; Umg. – Umgebung [German] – environs.

Results and Discussion

More than 270 specimens were examined. Among them are nine new species for fauna of Serbia, one new species for Bosnia and Herzegovina, and one for Montenegro. Thirty-six species of the Malachiidae family in the collections of the Natural History Museum in Belgrade are identified in total.

Below, an annotated list of species is provided.

Apalochrus femoralis Erichson, 1840

Material examined: SR: Banat: Sakule, 21.08.2010, 1♀, leg. A. Stojanović (GC); Beograd: Veliko selo, 11.08.2012, 1♀, leg. A. Stojanović (GC).

Distribution: Central, Eastern Europe, the Middle Asia, (MAYOR, 2007), southern Ural, western Siberia (TSHERNYSHEV & LEGALOV, 2008; TSHERNYSHEV, 2012).

Troglops albicans (Erichson, 1840)

Material examined: SR: Beograd: Žarkovački potok, 16.05.1957, 1♂, 1♀, leg. Lj. Janković (LJC).

Distribution: central, southern, eastern Europe, Caucasus, the Middle East (MAYOR, 2007; PLATA-NEGRACHE, 2012).

Comments. There is a tendency to expand the areal for this species, from Europe to Palaearctic.

Troglops silo (Erichson, 1840)

Material examined: IT: Gran Sasso [mountain in central Italy], 06.1920, 1♀ (PNC).

Distribution: southern Europe (except Iberian Peninsula), Caucasus (HORION, 1953; PASQUAL, 2010).

Colotes obsoletus Erichson, 1840

Material examined: BH: Env. de Mostar, 04.07.1931, 1♀, leg. Svirčev (IPP).

SR: Env. de Niš. 04.1933, 1♂, leg. Svirčev (IPP).

Distribution: eastern Mediterranean (MAYOR, 2007).

Comments. It is a new species for fauna of Bosnia and Herzegovina.

Charopus apicalis Kiesenwetter, 1859

Material examined: CR: Spalato D. [=Split], undated, 1♂, leg. Karaman (IPP).

Distribution: central Mediterranean (PLATA & SANTIAGO, 1987; MAYOR, 2007).

Comments. According to unpublished records findings from Croatia are present in collections of the National Museum in Prague also (ŠVIHLA & MIFSUD, 2006).

Charopus concolor (Fabricius, 1801).

Material examined: AU: Karlsdorf Umg. Graz [=Karlsdorf bei Graz], 06.1914, 2♀, leg. Svirčev (IPP).

SR: Grocka: okolina [suburbs] Begaljice 10.05.1997, 1♂, leg. A. Stojanović (GC); Srem: duž puta [along the road] Boljevci – Progar, 17.05.1997, 1♂, leg. A. Stojanović (GC); Vinča: put za deponiju [on the way to landfill], 18.05.1997, 2♂, 1♀, leg. A. Stojanović (GC); Kosmaj, 10.05.2003, 1♀, leg. A. Stojanović (GC); Veliki Mokri lug: Stepin gaj 17.05.2003, 2♀, leg. A. Stojanović (GC); Beograd: Veliko selo, 21.05.2011, 1♂, leg. A. Stojanović (GC); pl. Rudnik: selo [village] – Cvijičev vrh, 09.06.2012, 2♀, leg. A. Stojanović (GC).

Distribution: central, southern Europe, Caucasus, Turkey, Algeria (MAYOR, 2007).

Charopus flavipes Paykull, 1798.

Material examined: CR: Žumber. [Žumberak]: Gora Samobor (Zagreb) [Samoborsko Gorje], 10.06.1947, 1♂, leg. Svirčev (IPP).

SR: Kopaonik: Srebrenac, 27.07.1955, 1♂, leg. Lj. Janković (LJC).

Distribution: Europe (except southern) (MAYOR, 2007), southern Ural (TSHERNYSHEV, 2012).

Comments. This is a new species for Serbia. Previously it was indicated for Croatia by S. HORVÁTOVICH (1969).

Hypebaeus flavicollis (Erichson, 1840)

Material examined: CR: Boccagnazzo [=Bokanjac] près [before] Zara D. [=Zadar], 04.1914, 1♂, leg. Swircsev [Svirčev] (IPP); Split, 04.1928, 3♂ (GNC); Split D., 27.05.1933, 1♂ (GNC).

BH: Env. Mostar, 03.1929, 1♂, 1♀, leg. Svirčev (IPP).

Distribution: central-southern Europe, Asia Minor, northern Africa (CONSTANTIN, 2004; PASQUAL, 2010).

Comments. This is the new species for Bosnia and Herzegovina.

Hypebaeus flavipes (Fabricius, 1787).

Material examined: SR: Beograd: Vračar: Grahavska 6, 13.06.1997, 1♀, 09.07.1998, 1♂, leg. A. Stojanović (GC); Srem: Maradić – Krušedol, 14.07.2012, 3♂, 2♀, leg. A. Stojanović (GC).

Distribution: central, eastern Europe, Siberia, Far East (MAYOR, 2007).

Comments. This is a new species for Serbian fauna.

Ebaeus appendiculatus Erichson, 1840

Material examined: SL: Ljubljana 28.06.1936, 1♀ (PNC).

Distribution: central Europe (CONSTANTIN, 2004; PASQUAL, 2010).

Comments. A. MAYOR (2007) indicates it for Spain and Turkey, which, since there are no other data about findings in this area, is apparently a mistake.

Ebaeus gibbus (Drapiez, 1819)

Material examined: SR: pl. Rudnik: selo [village] – Cvijićev vrh, 09.06.2012, 4♀, leg. A. Stojanović (GC).

MN: Durmitor Mont. Žabljak, 1500 m, 03.07.1958, 7♀ (PNC).

Distribution: France, Switzerland, Italy, Malta (MAYOR, 2007), Hungary (HORVÁTOVICH, 1969).

Comments. The presence of this species in Hungary needs to be verified. This is a new species for Serbia and for Montenegro.

Ebaeus thoracicus (Geoffroy, 1785)

Material examined: SR: Kruševac: Env. Obilićevo, 12.07.1934, 1♂, leg. Svirčev (IPP).

Distribution: western, central Europe (MAYOR, 2007).

Comments. Determined as *Ebaeus coeruleescens*. It is a new species for fauna of Serbia.

Sphinginus coarctatus (Erichson, 1840)

Material examined: AU: Karlsdorf Umg. Graz [=Karlsdorf bei Graz], 06.1914, 2♀, leg. Svirčev (IPP).

Distribution: central, southern Europe, northern Africa (MAYOR, 2007).

Sphinginus lobatus (Olivier, 1790)

Material examined: SR: Beograd: Žarkovački potok 16.05.1957, 1♀, 17.05.1957, 1♂, leg. Lj. Janković (LJC).

Distribution: central, southwestern Europe, northern Africa (PLATA & SANTIAGO, 1990; MAYOR, 2007).

Comments. Introduced as a “breeding species” to England (ALLEN, 1984). This is a new species for fauna of Serbia.

Attalus analis (Panzer, 1798)

Material examined: GE: Brühl, undated, 1♀ (GC).

CR: Spalato D. [Split], undated, 3♂, 3♀, leg. Karaman (IPP).

SR: Kopaonik: Šanac, 18.07.1953, 1♀, leg. Lj. Janković (LJC).

Distribution: Europe (except northern) (MAYOR, 2007).

Comments. Previously determined as *Attalus lateralis*.

Attalus dalmatinus Erichson, 1840

Material examined: CR: Spalato [=Split], undated, 2♀, leg. Karaman (IPP).

BH: Velež pl., 1000 m, 05.1929, 1♂, leg. Svirčev (IPP); Rečica: plan. Javorik, 05.1930, 1♂, leg. Svirčev (IPP); Nadinići: Gacko, 28.05.1951, 2♂, leg. G. Nonveiller (IPP); Obrnje, 28.05.1951, 1♂, 1♀, leg. G. Nonveiller (IPP).

Distribution: northeastern Mediterranean (MAYOR, 2007).

Axinotarsus marginalis (Laporte, 1840)

Material examined: CR: Spalato [=Split], 7♂, 1♀, leg. Karaman (IPP).

SR: Bgd. Topčider, 10.06.1940, 1♀, leg. V. Martino (GC); Banat: Tilva: Delibl. [Deliblatska] Peščara, 30.05.1953, 2♂, 3♀, leg. G. Nonveiller (IPP); DUT [Deliblato sands], 04.06.1960, 1♀, 06.06.1960, 1♀ (ZGC); Beograd: Zvezdara, 21.06.1981, 4♀, leg. Lj. Anđus (GC); pl. Rudnik: selo [village] – Cvijičev vrh, 09.06.2012, 1♂, leg. A. Stojanović (GC).

Distribution: Europe (except northern), Caucasus (MAYOR, 2007).

Axinotarsus ruficollis (Olivier, 1790)

Material examined: SR: Bgd. Topčider, 13.06.1940, 1♀, leg. V. Martino (GC); Grocka: Dražanj 15.06.2002, 1♂, leg. A. Stojanović (GC); Beograd, undated, 1♀ (IPP).

Distribution: Europe, northern Africa (MAYOR, 2007).

Clanoptilus ambiguus (Peyron, 1877)

Material examined: SR: Počuta, 20.05.1909, 1♀, leg. D. Stoičević (GC).

Distribution: southeastern Europe, Caucasus, Turkmenistan (MAYOR, 2007), Kazakhstan (KOLOV & TEMRESHEV, 2012).

Clanoptilus affinis (Ménétriés, 1832)

Material examined: CR: Spalato [=Split], undated, 1♂, leg. Karaman (IPP).

BH: Mostar: Radobolja, 11.?.1917, 2♂, leg. Svirčev (IPP); Hodbina - Mostar, 17.05.1951, 1♀, leg. G. Nonveiller (IPP).

Distribution: central, southern, eastern Europe, Caucasus, Asia Minor, Central Asia, Far East (Švihla, 2008), southern Siberia (TSHERNYSHEV, 2009, 2012).

Clanoptilus elegans (Olivier, 1790)

Material examined: SR: Senjak [Belgrade], 30.04.1909, 3♂, leg. D. Stoićević (GC); Niš, 05.1933, 1♀, leg. Svirčev (IPP); Franztal [=Zemun], 16.05.1944, 1♂, 01.06.1944, 1♂, 1♀, 08.07.1944, 1♀ (KCC); Deliblato Sands, 21.05.1953, 2♂ (ZGC); DK [Deliblato Sands], 17.05.1958, 1♂ (ZGC); Obedska Bara, 9.5.1963, 1♂, 9.5.1983, 1♂, leg. Adamović (GC); Buci, 26.05.1978, 1♂, on *Arrhenatherum* (ZGC); Buci, 26.05.1979, 2♂, on *Arrhenatherum* (det. as *Malachius bipustulatus*) (ZGC); Lomnica, 26.05.1979, 1♀, on *Arrhenatherum* (ZGC); Novi Beograd, 07.05.1988, 1♂, 1♀, 30.05.1988, 1♀, 11.05.1989, 1♂, 05.05.1990, 1♂, on *Lepidium draba*, leg. A. Stojanović (GC); Srem: Krušedol, 23.05.2009, 1♂, 1♀, leg. A. Stojanović (GC); Beograd, undated, 1♂ (det. as *Malachius viridis*) (IPP); Avala [mountain, 20 km S from Belgrade], undated, 1♂ (det. as *Malachius viridis*) (IPP).

Distribution: Europe (except northern), Caucasus, the Middle East, Siberia (MAYOR, 2007).

Clanoptilus falcifer (Abeille de Perrin, 1882)

Material examined: SR: Sv. Ilija [monastery in southern Serbia] 08.07.1930, 1♀ (GC); Kopaonik: Šanac, 19.06.1954, 1♀, leg. Lj. Janković (det. as *Malachius falcifer*) (LJC).

Distribution: central, southeastern Europe, Turkey, Caucasus, south European Russia (CONSTANTIN, 2004; MAYOR, 2007), Ukraine (MIRUTENKO, 1998, 2008).

Comments. This is a new species for Serbia.

Clanoptilus geniculatus (Germar, 1824)

Material examined: CR: Zagreb: Sava [river], 10.05.1942, 1♂, leg. Svirčev (IPP); Maksimir jezero [lake]. Env. de Zagreb, 25.05.1947, 1♀, leg. Svirčev (IPP).

BH: Env. Mostar, 06.1929, 1♂, 3♀, leg. Svirčev (GC).

SR: man. [monastery] Manasija [near Despotovac], 19.06.1908, 1♀, leg. D. Stoićević (GC); Počuta, 20.05.1909, 1♂, leg. D. Stoićević (GC); Valjevica ispod Vlasina [Vlasina: Valjevica], 11.07.1909, 1♀, leg. D. Stoićević (GC); Šumadija. Env. Kragujevac, 15.04.1938, 1♂, 15.06.1938, 1♂, 1♀, leg. Svirčev (IPP); Bgd.: Košutnjak, 06.06.1940, 1♂, 09.06.1940, 1♀, leg. V. Martino (GC); Franztal [=Zemun], 05.06.1944, 1♀ (KCC); Zemun [Belgrade], 06.05.1948, 1♀ (GC); Zemun Srem, 21.05.1948, 1♂, 1♀ (GC); Knjaževac Serb., 27.06.1948, 1♀, leg. Stančić (IPP); Dolina [Deliblato sands], 01.06.1952, 1♂ (det. as *Malachius bipustulatus*) (ZGC); Put za [way to] Jagodn. [Jagodina], 04.07.1953, 2♀ (ZGC); Deliblato Sands, 04.07.1953, 1♀, 27.05.1954, 1♀, 29.05.1954, 1♂, 10.06.1954, 2♀ (ZGC); Kopaonik: subalps. *Picea abies*, 23.08.1954, 1♀, leg. Lj. Janković (det. as *Malachius geniculatus*) (LJC); Košut. [Beograd: Košutnjak], 19.05.1967, 1♂ (GC); Košutnjak [Belgrade], 16.06.1972, 1♂, leg. A. Sigunov (GC); Grocka [near Belgrad], 05.05.1978, 1♂, leg. Lj. Anđus (GC); Oblačinsko Jezero [lake], 15.07.1978, 1♀, leg. Lj. Tričković (GC); Kopaonik, 24.07.1980, 1♀, Robara [on *Quercus robur*], leg. Lj. Tričković (GC); Surčin, aerodrome, 22.06.1981, 1♀, leg. Lj. Protić (GC); Konatice [10 km S from Obrenovac], 30.05.1982, 1♀, pšenica [wheat], leg. Lj. Protić (GC); Zemun [Belgrade], 25.06.1982, 1♀, Ledine Korov [meadow weeds], leg. Lj. Protić (GC); Pančevo, 13.06.1985, 1♀, leg. Lj. Protić (GC); S. [Sremski] Karlovci, 30.06.1985, 1♀, leg. Lj. Protić (GC); Radmilovac [suburbs of Belgrade], 20.06.1991, 1♂, 2♀, leg. Lj. Protić (GC); Srem: Surduk, 17.05.2008, 2♂, leg. A. Stojanović (GC); Rashka [near Kopaonik], undated, 1♂ (IPP).

MC: Tetovo, 06.1905, 1♀, on *Arrhenatherum* (GC); Skopje, 13.05.1950, 2♀, leg. Bogavac (IPP).

Distribution: Europe (except northern), Caucasus, the Middle Asia, Siberia, Mongolia (MAYOR, 2007), far east of Russia (TSHERNYSHEV, 2012).

Clanoptilus marginellus (Olivier, 1790)

Material examined: BH: Korča Bjelašnica Lanište, 1200 m, 15.07.1931, 1♂, 2♀, leg. Svirčev (IPP).

SR: Rudno, 02.08.1908, 1♂, leg. D. Stoičević (GC); Šumadija. Env. Kragujevac, 15.06.1938, 1♂, 3♀, leg. Svirčev (IPP); Franztal [=Zemun], 08.07.1944, 2♂, 2♀ (KCC); Kneževac Serb., 27.06.1948, 1♀, leg. Stančić (IPP); Zemun [Belgrade], 08.05.1951, 2♂, leg. Stančić (IPP); Obedska Bara, Strem, 21-24.07.1953, 2♀, leg. D. Tričković (GC); Deliblato Sands, BK, 25.05.1954, 1♂ (ZGC); Kopaonik: Ječmište, 28.07.1954, 1♂, leg. Lj. Janković (det. as *Malachius marginellus*) (LJC); Kopaonik: Treska, 25.07.1955, 1♀, 24.09.1955, 1♀ (LJC); Obedska Bara, 03.07.1963, 2♂, leg. Adamović (GC); Buci, 24.07.1978, 1♀ (det. as *Malachius bipustulatus*) (ZGC); Čačak - Zablaće 24.07.1980, 2♀, leg. Tričković (GC); Rajac: Zablaće, 24.7.1980, 1♂ (GC); Tara pl., hotel "Tara", 08.08.1981, 1♂, 1♀, leg. Lj. Protić (GC); Beograd: Resnik: uz kružni put [along the ring road], 16.06.1997, 1♂, leg. A. Stojanović (GC); Vinča: put za deponiju [way to landfill], 29.07.1997, 1♀, leg. A. Stojanović (GC); Srem: Surduk, 14.07.2007, 1♀, leg. A. Stojanović (GC); Srem: Maradik – Krušedol, 07.08.2010, 1♀, leg. A. Stojanović (GC); Beogard, undated, 2♂ (IPP).

MN: Nikšić: Kap. [Kapino] polje [field], 13.07.1961, 1♀, leg. Zoran Gradojević (ZGC).

Distribution: Europe, northern Africa (MAYOR, 2007).

Clanoptilus spinipennis (Germar, 1824)

Material examined: BH: Env. Mostar, 05.1930, 1♂, leg. Svirčev (IPP).

Distribution: central, southeastern Europe, Caucasus, Syria (MAYOR, 2007), Turkey (YILDIRIM & BULAK, 2012).

Clanoptilus strangulatus (Abeille de Perrin, 1885)

Material examined: SR: Sv. Ilija [monastery in southern Serbia], 08.07.1930, 1♀ (CSC); Deliblato Sands, DK, 25.06.1954, 1♀ (ZGC); Obedska Bara, 09.05.1963, 2♂, 2♀, 20.5.1964, 1♂, leg. Adamović (GC); Konatice [near Obrenovac], 30.05.1982, 1♀, Lucerka [lucerne], leg. Lj. Protić (GC).

Distribution: western, eastern, central Europe, Caucasus, middle Asia (MAYOR, 2007).

Cordylepherus viridis (Fabricius, 1787)

Material examined: BH: Env. Mostar, 06.1929, 1♀, leg. Svirčev (IPP).

SR: Dobanovački Zabran [in Zemun, Belgrade], 16.06.1955, 1♀ (IPP); Vladičin [Vladičin Han], undated, 1♀ (IPP).

MC: Srpci – Mak. [Bitola: Srpci], 12.06.1950, 1♀, leg. G. Nonveiller (IPP).

Distribution: Europe, Caucasus, Algeria, the Middle Asia, Siberia, Mongolia (MAYOR, 2007).

Malachius aeneus (Linnaeus, 1758)

Material examined: SL: Ziri [Žiri], 23.06.1933, 1♂ (GNC).

BH: Livno, 20.06.1930, 1♀ (GNC); Tuzla, undated, 1♂, 1♀ (GNC).

SR: Počuta [10 km SW near Valjevo], 20.05.1909, 1♀, leg. D. Stoičević (GC); Bogatić, 06.1909, 1♀ (GC); Env. de Niš, 04.1933, 1♀, leg. Svirčev (IPP); Kruševac: Env. Obilicevo [factory], 12.05.1934, 3♂, 4♀,

21.05.1934, 1 ♀, leg. Svirčev (IPP); Šumadija: Env. Kragujevac, 15.06.1938, 1 ♂, 1 ♀, leg. Svirčev (IPP); Beograd: Košutnjak, 09.06.1940, 1 ♀, leg. V. Martino (GC); Beograd: Topčider, 21.04.1941, 1 ♂, 23.04.1941, 1 ♂, 03.05.1941, 1 ♂, 08.05.1941, 1 ♂, 16.05.1941, 1 ♀, leg. V. Martino (GC); Beograd: Topčider, 09.06.1941, 1 ♀, leg. Petrov (GC); Franztal [=Zemun], 27.05.1944, 2 ♀, 01.06.1944, 1 ♀, 05.06.1944, 2 ♀, 07.06.1944, 2 ♂, 2 ♀ (KCC); Zemun Srem [Belgrade], 21.05.1948, 13 ♀ (GC); Zemun [Belgrade], 08.05.1951, 3 ♂, 6 ♀, leg. Stančić (IPP); Banat: B. [Banatsko] Rankovičevo [=Banatski Karlovac], 30.5.1953, 1 ♀, leg. Stančić (IPP); Beograd: Surčin: Jakovački ključ, 12.06.1954, 1 ♀, leg. Lj. Janković (LJC), 12.06.1954, 1 ♀ (GC); Jagodnja pl., 923 m [25-30 km S from Loznica], 03.06.1964, 2 ♂, leg. Bogavac (IPP); Obedska Bara, 05.06.1964, 2 ♀, 20.05.1964, 1 ♂, leg. Adamović (GC); Konatice [near Obrenovac], 30.05.1982, 1 ♀, pšenica [wheat], leg. Lj. Protić (GC); Beograd: Resnik: uz Kružni put [along the ring road], 16.05.1998, 2 ♀, leg. A. Stojanović (GC); Beograd: Vrčin, 05.05.2001, 1 ♀, leg. A. Stojanović (GC); Deliblatska Peščara: Devojački bunar, 28.05.2005, 1 ♂, leg. A. Stojanović (GC); Lazarevac: Stubica - Stubički vis, 09.05.2009, 1 ♂, 2 ♀, 12.06.2010, 1 ♀, leg. A. Stojanović (GC); Beograd, undated, 1 ♀ (IPP); Surdulica, undated, 1 ♀ (IPP); Beograd: Topčider, undated, 1 ♀ (GC).

MN: Durmitor Mont.: Kanjon Tare, 30.06.1958, 1 ♀, 06.1968, 1 ♀, 07.1968, 1 ♀, leg. J. Markišić (IPP); Durmitor Mont., Žabljak, 1500 m, 03.07.1958, 1 ♂ (PNC).

MC: Skopska crna Gora, 05.1909, 1 ♀ (GC); Skoplje, 17.09.1931, 1 ♂ (CSC); Skopje, 13.05.1950, 1 ♀, leg. Bogavac (IPP).

Distribution: Europe, Caucasus, Turkey, Iran, Siberia (MAYOR, 2007), far east of Russia (TSHERNYSHEV, 2012).

Malachius bipustulatus (Linnaeus, 1758)

Material examined: AU: st. Peter (Steyr.) Umg.-Graz, 27.06.1914, 1 ♀, leg. Svirčev (IPP); Karlsdorf Umg. Graz [=Karlsdorf bei Graz], 06.1914, 2 ♀, leg. Svirčev (IPP).

CR: Žumber [Žumberak]: Gora Samobor, Env. de Zagreb [Samoborsko Gorje, in Zagreb], 10.06.1947, 1 ♀, leg. Svirčev (IPP).

BH: Diva Grabovica, Plasa pl. (4-1600), 08-30.07.1930, 1 ♀, leg. Svirčev (IPP); Fojnica, 28.05.1951, 1 ♂, leg. G. Nonveiller (IPP).

SR: Beograd: Topčider, 11.05.1908, 1 ♂, leg. D. Stoićević (GC); Jablanik – Povlen – Medvednik [Valjevo mountain], 21.05.1909, 2 ♀, Dj realke [Djaci realke] [gymnasium] (GC); Majdanpek [eastern Serbia], 1909, 1 ♂ (GC); Košutnjak [Belgrade], 03.05.1910, 1 ♂ (GC); Blagojev kam. [“kamen” – rock], 17.05.1910, 1 ♂ (GC); Kruševac, Env. Obilićevo [factory], 12.05.1934, 3 ♂, leg. Svirčev (IPP); Bgd. Košutnjak, 06.06.1940, 1 ♀, leg. V. Martino (GC); Beograd: Topčider, 06.06.1941, 1 ♀, leg. V. Martino (GC); Beograd: Ada Huja, 22.05.1950, 1 ♀, leg. Čurčić (IPP); Kopaonik: Šanac, 18.06.1953, 1 ♀ (IPP); Jakovački Ključ [near Surčin], 14.05.1954, 1 ♀ (IPP); Kopaonik: Šanac, 22.05.1954, 1 ♂, leg. Lj. Janković (LJC); Dobanovački Zabran [Zemun, Belgrade], 14.05.1955, 1 ♀ (IPP); Beograd: Surčin: Jakovački ključ, 06.06.1957, 1 ♀, leg. Lj. Janković (LJC); Velika Ada: Ciganlija [Belgrade], 07.05.1961, 1 ♂, leg. D. Čubrilović (GC); Obedska Bara, 09.05.1963, 1 ♀, 05.06.1963, 2 ♀, leg. Adamović (GC); Belanovica [village 10 km E from Ljig], 23.5.1977, 1 ♀ (ZGC); Beograd: Pionirski grad, 02.06.1980, 1 ♀, leg. Lj. Andus (GC); Beograd: Titov gaj [Stepin gaj], 15.06.1980, 1 ♀, leg. Lj. Andus (GC); BGD [Belgrade]: Topčider, 10.05.1981, 2 ♂, leg. Lj. Andus (GC); Beograd: Zvezdara, 21.06.1981, 1 ♀, 28.06.1981, 1 ♀, leg. Lj. Andus (GC); Obedska Bara, 09.05.1983, 1 ♂, leg. Adamović (GC); Del. [Deliblatska] Peščara: Čardak, 24.05.1985, 1 ♂, leg. Lj. Protić (GC); Beograd: Košutnjak, 17.05.1987, 2 ♀, leg. A. Stojanović (GC); Beograd: Topčiderski park, 26.04.1997, 2 ♂, 2 ♀, leg. A. Stojanović (GC); Beograd: Ada Ciganlija, 27.04.1997, 1 ♀, leg. A. Stojanović (GC); Mala Moštanica: Žuto brdo [Yellow hill], 03.05.1997, 1 ♂, leg. A. Stojanović (GC); Beograd: Veliko selo, 21.04.2007, 2 ♂, leg. A. Stojanović (GC);

Veliki Mokri lug: Stepin gaj, 26.05.2007, 1♀, leg. A. Stojanović (GC); Beograd, undated, 1♀ (det. as *Malachius viridis*) (IPP).

MC: Tetovo, 05.1905, 1♀, on *Arrhenaterum* (GC); Bašte [settlement in Skoplje], 20.8.1931, 1♀ (CSC).

Distribution: Europe, Turkey, western and eastern Siberia, Japan (MAYOR, 2007), far east of Russia (TSHERNYSHEV, 2012).

Malachius rubidus Erichson, 1840

Material examined: MN: Durmitor Mont.: Kanjon Tare, 26.06.1958, 2♀, 03.07.1958, 1♀, leg. Janković (IPP).

MC: Skoplje, 17.09.1931, 1♂ (CSC).

Distribution: central, southern Europe, the Middle East (MAYOR, 2007).

Malachius scutellaris Erichson, 1840

Material examined: SR: Kopaonik: Gačac, 15.05.1963, 1♀ (IPP); Timok [river in eastern Serbia], 20.05.1979, 1♂, 1♀ (MZC).

Distribution: central Europe, the Middle East (MAYOR, 2007).

Comments. The new species for Serbian fauna.

Ceratistes dilaticornis (Germar, 1824)

Material examined: CR: Zara D. [=Zadar], 05.1914, 1♂, leg. Swircsev [Svirčev] (IPP); Svilaja pln. Štikovo – Dalm. [Dalmatia], 05.1923, 1♂, leg. Svirčev (IPP); Spalato [=Split], 1♂, leg. Karaman (IPP).

BH: Prolog pl., 1100 m, 28.07.1929, 1♀ (GNC); Fojnica, 28.05.1951, 1♀ (GNC).

Distribution: central-south-eastern Europe (MAYOR, 2007).

Micrinus heteromorphus (Abeille de Perrin, 1869)

Material examined: FR: Tende [south-eastern part of France], 1♀ (PNC).

Distribution: France, Italy, Switzerland (MAYOR, 2007).

Comments. Rare alpine species (PASQUAL, 2010).

Anthocomus equestris (Fabricius, 1781)

Material examined: CR: Env. de Zagreb. Podsused [Zagreb]: Sodel – jaruga [gully] Stjeme – West 25.05.1941, 1♂, leg. Svirčev (IPP); Env. de Zagreb. Malo Sljeme, 08.06.1941, 2♂, leg. Svirčev (IPP); Env. de Zagreb. Savica – Alluvio [Zagreb], 24.08.1941, 1♂, 1♀, leg. Svirčev (IPP); Maksimir. jezero [Maksimir lake], Env. de Zagreb, 24.04.1944, 1♂, leg. Svirčev (IPP).

SR: Env. de Niš, 04.1933, 1♂, leg. Svirčev (IPP); Kruševac: Env. Obilićevo [factory], 12.05.1934, 1♀, leg. Svirčev (IPP); Šumadija, Env. Kragujevac, 01.05.1937, 1♀, leg. Svirčev (IPP); Kikinda – Banat, 11.06.1949, 1♂, leg. D.J.M. (IPP); Banat: B. [Banatsko] Rankovićevo [=Banatski Karlovac], 30.05.1953, 1♂, 2♀, leg. Stančić (IPP); Kosmaj, 06.06.1998, 1♀, leg. A. Stojanović (GC); Beograd: Vračar: Grahavska 6, 07.05.1999, 1♀, leg. A. Stojanović (GC); Srem: Stari Slankamen: Koševac, 06.05.2000, 1♀, leg. A. Stojanović (GC); Beograd, undated, 3♀ (IPP); Aleksinac, undated, 2♀ (IPP), Soko Banja, undated, 1♀ (IPP).

Distribution: Europe, Caucasus, North America (MAYOR, 2007).

Comments. The species was accidentally introduced to North America. Although the species is widely distributed, it still does not report for Serbia previously. This is a first note for Serbian fauna.

Anthocomus coccineus (Schaller, 1783)

Material examined: GE: Neuhofen, Pfalz, 29.08.1930, 2♀, leg. G. Schaaff (GNC).

SR: Beograd: Vrčin, 12.08.2000, 1♂, leg. A. Stojanović (GC); Srem: Stari Slankamen: Koševac, 06.09.2008, 1♀, 28.08.2010, 1♂, leg. A. Stojanović (GC).

Distribution: Europe, Caucasus, the Middle East, middle Asia (MAYOR, 2007).

Comments. Previously, the species hasn't been indicated for the fauna of Serbia, despite its European distribution. It is a new species for Serbian fauna.

Anthocomus fasciatus (Linnaeus, 1758)

Material examined: CR: Split, 04.1928, 1♀ (GNC).

BH: Env. Mostar, 05.1930, 1♂, leg. Svirčev (IPP).

Distribution: Europe, Caucasus, the Middle East (MAYOR, 2007).

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ФАМИЛИЈА MALACHIIDAE (INSECTA: COLEOPTERA) У ЗБИРЦИ ПРИРОДЊАЧКОГ МУЗЕЈА У БЕОГРАДУ

ВЛАДИСЛАВ В. МИРУТЕНКО

Извод

Урађена је ревизија примерака фамилије Malachiidae у Природњачком музеју у Београду. У збирци је идентификовано 36 примерака. Нове врсте за фауну Србије су: *Charopus flavipes* Paykull, 1798, *Hypebaeus flavipes* (Fabricius, 1787), *Ebaeus gibbus* (Drapiez, 1819), *Ebaeus thoracicus* (Geoffroy, 1785), *Sphinginus lobatus* (Olivier, 1790), *Clanoptilus falcifer* (Abeille de Perrin, 1882), *Malachius scutellaris* Erichson, 1840, *Anthocomus equestris* (Fabricius, 1781), *Anthocomus coccineus* (Schaller, 1783). Нове врсте за фауну Босне и Херцеговине су *Colotes obsoletus* Erichson, 1840, *Hypebaeus flavicollis* (Erichson, 1840) док је *Ebaeus gibbus* нова за Црну Гору.

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