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**ASSASSIN BUGS (INSECTA: HETEROPTERA: REDUVIIDAE) IN
COLLECTIONS OF THE NATURAL HISTORY MUSEUM IN
BELGRADE**

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This paper presents the information on specimens from the family Reduviidae (Heteroptera) stored in the Entomological Collection of Natural History Museum in Belgrade (376 examined specimens, belonging to 28 species). *Empicoris vagabundus* (Linnaeus) is a new species to the fauna of Serbia. *Oncocephalus pilicornis* Herrich-Schaeffer is a new species to the fauna of Montenegro. Most specimens were collected in Serbia, Macedonia and Croatia (Dalmatia). This paper also includes data on species collected after the publishing of the Catalogue (Protić 1998) and some older records which were stored in the Collection for decades without being published.

Key words: Heteroptera, Reduviidae, Natural History Museum in Belgrade

INTRODUCTION

Specimens of the family Reduviidae in the Entomological collection of the Natural History Museum were examined within the regular museum activities: identification, inventory, checking and conserving the Heteroptera specimens. It was determined that they are included in following

collections: Study Collection of Heteroptera (SZ), Collection of Heteroptera by Nikola Kormilev (NK), Collection of Insects by Petar Novak (PN), Collection of Insects by the Institute for Plant Protection (PP), Collection by Ljubodrag Janković (LJJ), and Collection by Zoran Gradojević (ZG). The data from the oldest (initial) collection were already published (Protić 2008). These specimens were mostly collected in Serbia with significant representation of other republics of Former Yugoslavia as well as individual specimens from Austria, Brazil, Greece, Italy, Hungary, Morocco, Germany, Romania, Tunisia, and Venezuela. The Entomological Collection of Natural History Museum includes individual specimens from India (in the butterfly collection by Andraš Galac) and Africa (present to Presidency of Yugoslavia in 1982 from Guinea), which were not identified due to lack of appropriate determination keys.

There are some data on reduviids of Serbia within the faunistic studies (Horváth 1903, Kormilev 1936, 1943; Protić 1993) and systematic catalogues (Protić 1990, 1998).

This paper includes the first published data for the Study Collection of Heteroptera collected after 1993, as well as the data from other collections of Heteroptera in the Natural History Museum which were not published in the catalogue (Protić 1998).

Some changes and additions are proposed to the Catalogue of the Heteroptera of the Palearctic Region (Putshkov & Putshkov 1996) about the distribution of certain species in the territory of ex-Yugoslavia.

MATERIAL AND METHODS

Representatives of the family Reduviidae are large insects and their unusual shape and attractive colors attract not only entomologists but also other naturalists, botanists, zoologists, forestry workers, geologists, agriculture engineers, environmentalists. Names of all collectors were recorded next to the specimens they had collected. Here we will list the names of curators and close associates of the Natural History Museum: Živko Adamović, biologist, curator-entomologist; Ljiljana Andjus, biologist, curator-entomologist; Danka Tripković-Čubrilović, biologist, curator-entomologist; Nikola Diklić, biologist, curator-botanist; Zoran Gradojević, biologist, entomologist; Predrag Jakšić, biologist, entomologist; Ljubodrag Janković, forestry engineer, entomologist; Miroslav Jovanović, agriculture engineer, curator-botanist; Velika Jovanović, curator for millipedes; Nikola Kormilev, agriculture engineer, entomologist; Vladimir Martino, biologist, curator-ornithologist; Ljubodrag Mihajlović, forestry engineer, entomologist; Petar Novak, entomologist (Split); Guido Nonveiller, Faculty of Agricul-

ture, environmental conservationist and entomologist; Milan Paunović, biologist, curator-mammaliologist; Dragan Pavićević, entomologist; Petar Pavlović, geologist, 1st Director of Natural History Museum in Belgrade; Boris Petrov, biologist, curator-mammaliologist; Ljiljana Protić (Kašić), biologist, curator-entomologist; Marko Raković, biologist, curator-ornithologist; Aleksandra Rohalj, biology student; Dragiša Savić, biologist, botanist (Sremska Kamenica); Aleksandar Sigunov, forestry engineer, botanist; Jovan Stančić, Faculty of Agriculture, entomologist (Lyon); Aleksandar Stojanović, agriculture engineer (environmental conservationist), curator-entomologist; Dušan Stojićević, curator-zoologist, 2nd Director of Natural History Museum in Belgrade; Jelena Šeat, biologist (Sombor); Trajče Trajkovski, agriculture engineer, environmental conservationist and entomologist (Marvinci); Marija Vujanić, biologist; Milan Živković, preparatory entomologist, professional photographer (Kovin); Vlada Žikić, biologist, entomologist (Niš).

The studied material includes the specimens from the Collection of Heteroptera by Nikola Kormilev, which originated in the period of 1927-1945. This material was mostly collected in Macedonia and Serbia. It is presently stored in the Natural History Museum in Belgrade. After his move to America, first to Argentina and then to United States, he was unaware of the real condition of "Yugoslav" collection for over 20 years. In late 1970s I started correspondence with Kormilev, who was glad that his collection was safely stored in the Museum and sent one box of tropical Heteroptera as a gift. That material included two species of fam. Reduviidae: *Rhodnius prolixus* Stål and *Triatoma megista* Neiva, collected by Nikola Kormilev.

Order of species in this paper follows the Catalogue of the Heteroptera of the Palearctic Region (Aukema & Rieger 1996). Many of the details of distribution of certain species and the key for revision of certain problematic species were found in the most recent monograph on the subject (Putshkov & Moulet 2009).

The species list does not include data on sex for a smaller number of specimens due to damage on abdomen or poor preservation.

Abbreviations in chapter Results: AU = Austria, BH = Bosnia & Herzegovina, CR = Croatia, GE = Germany, GR = Greece, HU = Hungary, IT = Italy, MC = Macedonia, ME = Montenegro, MO = Morocco, RO = Romania, RS = Serbia, SL = Slovenia, TU = Tunisia; P&M = Putshkov & Moulet (2009); CHP = Catalogue of the Heteroptera of the Palearctic Region, Dist. = Distribution.

RESULTS

List of records**REDUVIIDAE****ECTRICHODIINAE**

Stenolemus novaki Horváth, 1888

CR: Korčula (Curzola) 19.05.1926. 1m leg. P. Novak (PN).

Dist.: Mediterranean.

Ref. Horváth 1888, Novak & Wagner 1951.

CHP: „YU“ – delete.

Note: The type specimen was collected by Petar Novak, as a 8-year-old boy, on the island Hvar, locality Brusje, in May 1888.

Ploiaria domestica (Scopoli, 1786)

CR: Sućurac 08.1923. 1f; 05.06.1924. 1m leg. P. Novak (PN).

MC: Skoplje 13.10.1935. 1m leg. N. Kormilev; Sv. Nikole 07.10.1940. 1m leg. N. Kormilev (NK).

RS: Zaječar 26.08.1910. 1f leg. D. Stojićević (SZ) Beograd: Radmilovac 11.1992. 1f pear orchard, litter leg. Lj. Protić (SZ).

Dist.: Euro-Mediterranean.

Ref. Kormilev 1936, Novak & Wagner 1951; Protić 1993, 1990, 1998.

CHP: Replace “YU” with Serbia (RS).

P&M: There is a mistake with Skopje 13.08.1917. Schulze (1919). Schulze was a collector, and therefore is not included in the references either, the information was published by Schummacher (1918).

There is a mistake of Radmilovac 1912, that should read: Beograd: Radmilovac 11.1992. (Protić 1998).

Metapterus caspicus (Dohrn, 1863)

MC: Dojran 09.09.1937. 1m leg. N. Kormilev, Skoplje 03.04.1938. 1f leg. S. Karaman (NK).

SL: Podčetrtek 30.10.1934. 1f leg. Dr. Jaeger (NK).

Dist.: Turano-mediterranean.

Ref. Kormilev 1938, Sienkiewicz 1964, Protić 1998.

Note: After the review and statements of Andrej Gogala, that in Slovenia there are no known specimens of *Metapterus linearis* Costa, we have done the redetermination of all specimens of this species in the Kormilev's collection. Now we verify all specimens identified as *M. linearis* are *M. caspicus*.

Empicoris baerensprugi (Dohrn, 1836)**Dist.:** European.**Ref.** Kormilev 1936 (Serbia: Leskovac).**CHP:** Replace "YU" with Serbia (RS).***Empicoris culiciformis*** (De Geer, 1773)**MC:** Carevo Selo leg. 2m 15.05.1939. N. Kormilev (NK).**RS:** Deliblatski Pesak leg. Z. Gradojević (SZ).**Dist.:** European.**Ref.** Protić 1994, 1998.**CHP:** Replace "YU" with Serbia (RS).***Empicoris vagabundus*** (Linnaeus, 1758) (Fig. 1)**RS:** Obrenovac: Draževac 07.07.1998. 1f leg. Lj. Mihajlović; Stari Slankamen: Koševac 28.04.2007. 1f leg. A. Stojanović – on a bare loess bank (SZ).**GE:** Fürstenberg 1m Fr. W. Konow.p.**Dist.:** Holarctic.**CHP:** Replace "YU" with Serbia (RS).***Peirates hybridus*** (Scopoli, 1763)**AU:** Franztal 16.05.1944. 1m leg. Kodrić.**CR:** Knin 25.06.1927. 1m leg. P. Novak; Stobreč 09.05.1946. 1m, 1f leg. P. Novak (PN).**MC:** Skopje 24.04.1938. 1f leg. N. Kormilev; Udovo 13.04.1939. 1m, 2f leg. N. Kormilev; Skopje: Vodno 1m 02.05.1939. leg. J. Houška; Skopje 03.04.1940. 2m 1f leg. J. Houška; Skopje, Vodno 04.05.1941. 1f leg. N. Kormilev (NK).**MA:** Tangar 24.11.1934. 1f leg. P. Novak (PN).**ME:** Virpazar 24.03.1934. 1f leg. P. Novak (PN).**RS:** Beograd: Avala 09.05.1937. 1m, 1f leg. G. Nonveiller; Zemun 22.06.1937. 1m. leg. G. Nonveiller; Fruška Gora: Stražilovo 18.04.1948. 1f leg. G. Nonveiller (PP); Požarevac leg. N. Kormilev; Braničevo 30.08.1954. 1f leg. J. Stančić (PP); Obrenovac 07.05.1953. 1f, 12.05.1955. 1m leg. Ž. Adamović; Fruška Gora: Stražilovo 22.04.1967. 1m leg. Z. Mučalica; Beograd: Faculty of Forestry 20.04.1996. 1f leg. A. Stojanović; Beograd: Stepin Gaj 30.04.2001. 1m leg. A. Stojanović; Beograd: Avala 23.03.2000. 2m lgts. Lj. Protić, M. Jovanović, A. Stojanović; Grocka: Vrčin 28.04.2008. 1m leg. A. Stojanović; Beograd:

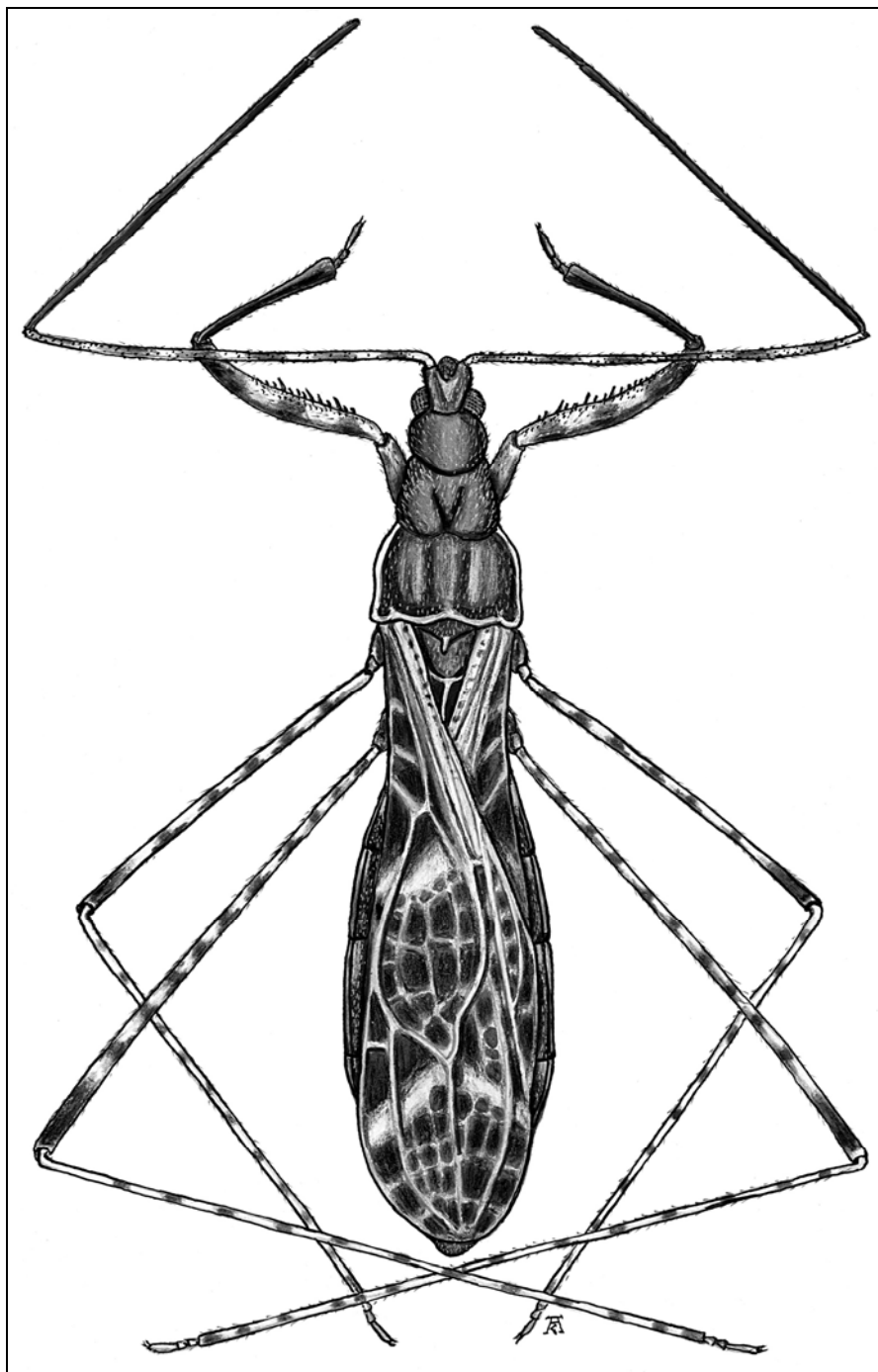


Fig. 1. - *Empicoris vagabundus* (Linnaeus) is a new species to the fauna of Serbia. Drew Dipl. Ing. Aleksandar Stojanović.

Vračar 28.04.2001. 1f leg. A. Stojanović; Šabac: Lipolist 03.08.2002. 1f leg. M. Vujanić; Staro Hopovo 20.04.2009. 1f leg. D. Savić; Novi Beograd: Ušće Galovice 13.08.2005. larva leg. A. Stojanović; Ljig: Kadina Luka 04.09.2010. larva leg. A. Stojanović; Vršac: Vršačka Kula 20.09.2010. 1f leg. M. Jovanović (SZ).

SL: Podčetrtek 1m leg. Dr E. Jaeger (NK).

Dist.: Mediterranean - Central Asian.

CHP: Replace "YU" with Serbia (RS) and Montenegro (ME).

PHYMATINAE

Phymata crassipes (Fabricius, 1775)

HU: Marianosztra 02.09.1935. leg. Dr Feige (NK).

ME: Piva: Komarnica 26.06.1988. 1f leg. G. Mesaroš (SZ).

MC: Skopje, Zelenikovo 02.07.1939. 1f leg. N. Kormilev (NK).

RS: Beograd: Topčider 05.07.1940. 1f leg. V. Martino, Beograd: Avala 13.07.1941. leg. N. Kormilev, Sijerinska Banja 16.06.1940. leg. N. Kormilev (NK); Veliko Gradište 09.06.1956. 1f leg. J. Stančić; Golubac 06.07.1956. 1m leg. J. Stančić (PP); Kopaonik: Šanac 23.06. 1963. leg. Lj. Janković, Dobanovački zabran 16.06.1955. leg. Lj. Janković (LJJ); Deliblatski Pesak 25.06.1954. 1m leg. Z. Gradojević (ZG); Tara: Šljivovica 29.07.1981. 1f leg. Lj. Protić; Stol 12.07.1984. 1m leg. Lj. Protić; Deliblatski pesak: Dubovac 14.07.1987. 1f; Korn 18.08.1987. 1f leg. Lj. Protić; Rošjana 20.06.1981. leg. A. Sigunov; Devojački Bunar 06.06.2003. 1m; 12.05.2007. 1m leg. A. Stojanović; Šara: Piljevački potok 17.07.1986. 1m; Brezovica 21.07.1986 1m leg. P. Jakšić; Đerdap: Veliki Štrbac: Ploča 27.06.1985. 2m, 5f; Mali Štrbac 15.06. 1987. 1m, 4f leg. Lj. Protić; Prokletije: Maja Karanfilit 28.06. 1987. 2m, 1f leg. M. Živković; Goč 23.05.1994. 1m leg. A. Stojanović; Kosmaj 06.06.1998. 1m; 09.05.1996. 2f; 15.08.1998. 1m leg. A. Stojanović; Surduk 22.04.2000. 1f leg. A. Stojanović; Topola-Božurnja 13.06.2002. 1m leg. Lj. Protić; Avala: Čarapićev Brest 03.06.2003. 2m leg. Lj. Protić; Slankamen: Koševac 06.05.2000. 3m, 1f; 28.06.2003. 2m; 16.07.2005. 1m leg. A. Stojanović; Beograd: Stepin Gaj 30.04. 2001. 1m, 1f; 04.06.2005. 1m, 1f; 26.05.2007. 4m leg. A. Stojanović; Rudnik: Gradove 10.06.2003. 2m leg. Lj. Protić; Beograd: Begaljica 14.05.2005. 1m leg. A. Stojanović; Krušedol 23.05.2009. 1m leg. A. Stojanović; Tara: Kaludjerske Bare 1100m 08.09.2006. 1m leg. I. Dodok (SZ).

SL: Savinske Planine, Mt. 07.1933. leg. Dr E. Jaeger (NK).

Dist: Eurosiberian - Mediterranean.

CHP: Replace "YU" with Serbia (RS) and Montenegro (ME).

REDUVIIDAE***Reduvius personatus*** (Linnaeus, 1758)

CR: Sućurac 06.1919. 1m, 07.1923 2m, 25.07.1925. 1m, 05.06.1926. larva leg. P. Novak; Split 25.07.1928. 1m; 28.05.1943. 1m leg. P. Novak (PN); Belje 24.03.1940. 1f leg. I. Grebenšćikov (NK); Milna 29.06.1971. 1m leg. D. Pavićević (SZ).

GR: Igoumenitsa 28.07.1982. 1f leg. S. Živanović (SZ).

IT: Crotone 10.12.1933. 1m leg. P. Novak (PN).

MC: Ohrid 07.08.1927. 1m leg. N. Kormilev; Skopje 14.08.1937. 1m, 22.06.1939. 1f leg. N. Kormilev; Tetovo 13.06.1938. 1f leg. J. Houška (NK).

RS: Požarevac 1f leg. N. Kormilev (NK); Zemun 22.6.1937. 2m leg. G. Ninveiller (PN); Zemun 30.06.1948. 1m leg. G. Ninveiller (PP); Deliblatski Pesak: Dolina 23.07.1953. 1f, 27.07.1954. 1f, Deliblatski Pesak 06.08.1952. abdomen destroyed leg. Z. Gradojević (ZG); Kopaonik: Rudnica 500 m 05.08.1953. leg. Lj. Janković (LJJ); Beograd 10.04.1942. 1m leg. V. Lindtner; Beograd: Topčider 14.06.1942. 1f leg. B. Petrov (NK); Priština: Grmija 700m 20.07.1976. 1m leg. P. Jakšić; Beograd 18.07.1984. 1f leg. M. Živković; Beograd 29.07.1984. 1f leg. M. Živković, Beograd 18.06.1985. 1m leg. Lj. Protić; Valjevo: Petnica 26.06.1991. 1m leg. Đurić; Zemun 10.06.2003. 1f leg. A. Stojanović; Grocka: Vrčin 12.07.2003. 1f leg. A. Stojanović; Beograd (in the Museum) 06.07.2007. 1f leg. A. Stojanović; Paraćin: Krivi Vir 02.03.2008. larva leg. M. Paunović; Boljevci: Crni Lug 21.06.2008. 2f leg. A. Stojanović (SZ).

Dist.: Cosmopolitan.

Ref. Protić 2008.

CHP: Replace “YU” with Serbia (RS) and Montenegro (ME).

Reduvius testaceus (Herrich-Schaeffer, 1845)

CR: Sućurac 05.05.1924. 1f leg. P. Novak (NK).

MC: Karadag 19.07.1927. 1m leg. N. Kormilev; Tetovo 16.05.1931. 1m leg. N. Kormilev (NK).

RS: Leskovac 1f leg. N. Kormilev (NK).

Dist.: Euromediterranean - Central Asian.

Note: Examination of specimens of *R. testaceus* (H.-S.) from the Study Collection of Heteroptera has shown that they were properly determined as that species, and that the suspicion presented in the note in Catalogue of Heteroptera of Palearctic Region was not supported. The

data for Macedonia and Croatia therefore do not pertain to the species *R. pallipes* (Klug).

STENOPODAINAE

Oncocephalus acutangulus Reuter, 1882

GR: Gavdos: Kastri 21.04.2002. 1f leg. M. Raković (SZ).

Dist.: Ponto-mediterranean.

Oncocephalus pilicornis Herrich-Schaeffer, 1835

ME: Sutorman, Mt. 23.05.1947. 1f leg. G. Nonveiller.

Dist.: Euro-Maghreb-Asian.

Ref. Horváth 1897, Novak, & Wagner 195, Sienkiewicz 1964.

CHP: Add Montenegro (ME).

Oncocephalus squalidus (Rossi, 1790)

CR: Korčula: Lumbarda 30.05.1924. 1f leg. P. Novak; Sućurac 05.05.1924. 1f, 15.05.1924. 1f, 06.1923. 1f leg. P. Novak; Muć 22.05.1946. 2m leg. P. Novak; Split 07.06.1946. 1m, 1f leg. P. Novak (PN).

MC: Šarplanina: Gradec 09.07.1939. 1f leg. J. Houška (NK).

RS: Tekija 21.09.1965. 1f, 22.09.1965. 2f leg. D. Čubrilović (SZ).

Dist.: Holomediterranean.

Ref. Protić 1998, Putshkov & Moulet 2009.

CHP: Replace “YU” with Serbia (RS).

Pygolampus bidentata (Goeze, 1778)

MC: Skopje 10.06.1932. 1m leg. Dr S. Karaman (NK).

RS: Smederevo: Landal 03.05.1988. 1f leg. G. Mesaroš (SZ).

SL: Podčetrtek 26.05.1929. 05.1933. 1f leg. Dr E. Jaeger (NK).

Dist.: Palearctic.

Ref. Protić 1998.

CHP: Replace “YU” with Serbia (RS).

HARPACTORINAE

Coranus aegypticus (Fabricius, 1775)

TU: Sfax 20.12.1933. 1f leg. P. Novak (PN).

Dist. Northern Africa and Asia.

Coranus contrarius Reuter, 1881

RS: Beograd: Košutnjak 29.05.1940. 2m leg. V. Martino (SZ); Veliko Gradište 17.05.1954. 1f leg. J. Stančić (PP).

Dist.: Mediterranean.

Ref. Horváth 1897, Kormilev 1943.

CHP: Replace “YU” with Serbia (RS).

Coranus griseus (Rossi, 1790)

CR: Omiš 06.04.1937. 1f leg. P. Novak; Split 18.03.1938. 1m, 1f leg. P. Novak; Sućurac 31.05.1945. 1f leg. P. Novak; Split 18.03.1938. 1f leg. P. Novak (PN).

MC: Skopje 10.06.1932 1f, 08.06.1932. 1m, 24.04.1938. 1m leg. N. Kormilev; Valandovo: Marvinci: Isar 27.04.1992. leg. T. Trajkovski; Valandovo: 29.11.1987. 1m, Marvinci 23.04.1995. 1m, 1f leg. T. Trajkovski (SZ).

RS: Deliblatski Pesak: Dolina 10.1952. 1m leg. Z. Gradojević (ZG); Obedska Bara 13.09.1954. leg. D. Tripković-Čubrilović 1 m, Beograd: Ada Ciganlija 13.02.1987. leg. M. Živković, 12.06.1996. leg. A. Stojanović; Boljevci: Crni Lug 21.10.2000. 1f leg. A. Stojanović (SZ).

Dist.: Mediterranean - Central Asian.

Ref. Furlan & Gogala 1995, Protić 1998.

CHP: Replace “YU” with Serbia (RS).

Note: According to Pučkov (Catalogue of Palearctic), there is no *Coranus aegypticus* (Fabricius) in Europe, but *Coranus griseus* (Rossi). Therefore the citations of *Coranus aegypticus* (F.) in the Catalogue of Yugoslav countries actually pertain to *C. griseus* (R.).

Coranus subapterus (De Geer, 1773)

CR: Lesina (= Hvar): Rudine 10.06.1924. 1f leg. P. Novak, Vrana 18.06.1924. 1f leg. P. Novak, Mosor 22.09.1940 1m, 1f leg. P. Novak (PN).

ME: Durmitor: Crno jezero 29.08.1984. 1m leg. Lj. Protić; 10.08.1985. 1f leg. M. Živković (SZ).

MC: Ohrid 26.06.1927. 1m leg. N. Kormilev; Skoplje 12.07.1932. 1f leg. E. Kormilev (NK).

RS: Požarevac 1m, 1f leg. N. Kormilev (NK); Veliko Gradište 17.05.1954. 1f leg. J. Stančić (PP); Kopaonik: Treska 15.10.1958, Kopaonik: Ječmište 18.08.1956, Kopaonik: Rudnica 05.08.1953. leg. Lj. Janković (LJJ); Stari Slankamen: Koševac larva 28.08.2010. (SZ).

Dist.: Eurosiberian - Mediterranean.

Ref. Protić 1998.

CHP: Replace "YU" with Serbia (RS) and Montenegro (ME).

Coranus tuberculifer Reuter, 1881

MC: Ohrid, Bejbunar 1m leg. N. Kormilev; Udovo 29.05.1937. 1m, 1f; 18.10.1939. 1m leg. N. Kormilev, Crveni Kamen 1500 m 1f 19.08.1941. leg. N. Kormilev (NK).

RS: Beograd: Rakovica 26.09.1940. 1m V. Martino leg. (SZ); Deliblatski Pesak 12.07.1954. 1f, Deliblatski Pesak: Dolina 24.09.1954. 1f, Deliblatski Pesak: Jagoda 08.1954. 1f leg. Z. Gradojević (ZG).

Dist.: Mediterranean - Central Asian.

Ref. Protić 1998, Putshkov & Moulet 2009.

CHP: Replace "YU" with Serbia (RS) and Montenegro (ME).

Nagusta goedeli (Kolenati, 1857)

HU: Simontornya 01.10.1931. 1m, 1f leg. F. Pillich (NK).

RO: Banat: Herkulesbad 26.10.1931. 1f leg. Dorn (NK).

RS: Deliblatski pesak: Česta Šuma 17.06 1988. leg. A. Sigunov, Progar: Bojčinska Šuma 14.02.1998, 1m; 17.03. 2001. 1f leg. A. Stojanović, Barajevo 07.07.2007. larva leg. A. Stojanović; Staro Hopovo 29.11.2009. 1f leg. D. Savić(SZ).

Dist. Mediterranean.

Ref. Protić 1998.

CHP: Replace "YU" with Serbia (RS).

Rhynocoris annulatus (Linnaeus, 1758)

AU: Styria: Graben 30.05.1929. 1m (NK).

BH: Bregava: Do 02.02.2006. 1m leg. D. Todorović (SZ).

CR: Brač: Milna 29.6.1971 1f. leg. D. Pavićević (SZ).

GE: Frankenhäuser, Kyffhäuser 1m, 1f leg. Dr. Feige; Sachsenburg, Thüringen 1m, 1f, Frankenhäuser, Kyffhäuser 1m, 1f leg. Dr. Feige (labels without date) (NK).

GR: Krit: Bramisana 15.04.2003. 1f leg. M. Raković (SZ).

ME: Durmitor: Medjed 18.07.1954. 1m; Durmitor: Durmitor: Tepca 21.07.1981 1m leg. A. Rohalj; Djurdjevića Tara 25.07.1981. 1f leg. Lj. Protić; Durmitor: Sušica 21.07.1981. 1m leg. Lj. Protić; Durmitor: Tepca 22.07.2002. 1f, 13.07.2003. 1m, 14.07.2003. 1m, 24.07.2003. 1m

leg. M. Vujanić; Durmitor: Kanjon Sušice 26.07.2003. leg. M. Vujanić (SZ).

RS: Zlatar: Radojnja 30.06.1979. 1m leg. Lj. Kašić (SZ).

SL: Podčetrtek 05.1933. 4m, 1f, 07.1934. 1m, 1f Dr E. Jaeger leg. (NK).

Dist.: Eurosiberian.

CHP: Replace "YU" with Serbia (RS) and Montenegro (ME).

Rhynocoris iracundus (Poda, 1761)

CR: Sućurac 08.1923. 4m, 15.08.1924. 3m leg. P. Novak; Korčula: Lumbarda 30.05.1924. 1m leg. P. Novak; Sućurac 15.08.1924. leg. P. Novak; Mosor 800m 29.05.1930 1m leg. P. Novak; Split: Marjan 28.05.1945. 1m, 1f leg. P. Novak; Šolta 14.06.1945. 1m leg. P. Novak (PN); Dubrovnik 24.05.1958. leg. Ž. Adamović; Brač: Milna 29.06.1971. 2 m leg. D. Pavićević, Mljet: Sobra 12.07.1976. 1f leg. D. Pavićević (SZ).

GR: Igoumenitsa 28.07.1982. 3m, 1f leg. S. Živanović; Komotini 25.08.1995. 1m leg. V. Žikić (SZ).

ME: Ulcinj: Velika Plaža 04.07.1975. 2f leg. D. Pavićević (SZ).

MC: Prepansko jezero: Asamate 11.07.1937. 1m leg. P. Novak (PN); Đeneral Janković 09.06.1932. 1m leg. N. Kormilev; Skopje, Zelenikovo 02.06.1938. 2m, 1f leg. N. Kormilev; Gumalevo 02.06.1938. 1f leg. N. Kormilev; Skopje 16.05.1939. 1m leg. N. Kormilev; Demir Kapija 13.08.1940. 1f leg. N. Kormilev (NK); Gevgelija 08.05.1965. leg. Ž. Adamović; Drenovo: Raec 10.06.1986. leg. P. Jakšić; Kruševo 06.1987. 1f leg. J. Marovski, Pelister: Lazarov Kamen 03.06.1988. leg. G. Mesaroš; Valandovo: Marvinci 21.06.1988. 2m, 06.06.1990. 1f leg. T. Trajkovski; Valandovo 07.06.1990. 1f leg. T. Trajkovski; Gevgelija: Petrovo 28.05.1995. 1m, 2f leg. T. Trajkovski (SZ).

RS: Beograd: Topčider 14.06.1941. 1f leg. V. Martino; Beograd: Rakovica 21.06.1941. 1f leg. V. Lindtner; Beograd: Topčider 13.06.1942. 1m leg. A. Sigunov; Jablanik 27.06.1954. 1m leg. N. Diklić; Veliko Gradište: Vojilovo 11.06.1954. 1m; Veliko Gradište: Ponikve 8.6.1955. 1f leg. J. Stančić (PP); Beograd: Košutnjak 18.06.1962. 1f; Kopaonik: Gačac 23.06.1963 1m, Kopaonik: Glog 29.06.1964. 1f leg. Lj. Janković (LJJ); Tara, Mt. 11.06.1984. 2m leg. G. Nonveiller (PP); Goč 06.06.1966. 1f leg. V. Jovanović; Velika Remeta 29.05.1972. 1m, 1f leg. D. Pavićević; Grocka 13.06.1979. 1m leg. Lj. Andjus; Beograd: Rakovica 12.06.1981. 1m leg. Lj. Protić; Beograd: Beli Potok 05.07.1982. 1m leg. Lj. Protić; Beograd, 1985. 1f leg. Lj. Protić; Deliblatski pesak: Dubovac 14.07.1987. leg. Lj. Protić; Štrbac 15.06.1987. leg.

M. Živković; Mali Štrbac 15.06.1987. 1f leg. Lj. Protić; Prizrenska Bistrica 22.06.1988. 3m, 3f leg. Lj. Protić; Deliblatski pesak: Tilva 16.06.1988. leg. Lj. Protić; Beograd: Avala 02.06.1996. leg. N. Lazarević; Grocka: Begaljica 09.08.1997. 1m leg. A. Stojanović; Surduk 27.06.1998. 3f, 02.06.2007. 3f leg. A. Stojanović, Kosmaj 06.06.1998, 27.05.2000, 18.06.2005. leg. A. Stojanović; Ritopek 20.06. 1998. leg. A. Stojanović; Niš: Gornji Matijevac 10.04.2000. leg. V. Žikić; Mala



Fig. 2. - *Rhynocoris iracundus* (Poda, 1761) attacking and eating the *Tropinota hirta* (Coleoptera), Krušedol May 23rd 2009. Photo: Aleksandar Stojanović.

Moštanica: Žuto Brdo 10.06.2000. 1m, 3f, 06.07.2001, 22.06.2002. leg. A. Stojanović; Deliblatski pesak: Devojački Bunar 07.06.2003. 1f, 09.08.2003. 1m 2f, 19.06.2004. 1f, 25.06.2005. 1m, 1f leg. A. Stojanović; Beograd: Resnik: Kružni Put 16.06.1997, 06.07. 2002, 31.05. 2003, 24.07.2004. leg. A. Stojanović; Grocka: Dražanj 15.06.2002. leg. A. Stojanović; Grocka: Vrčin 12.07.2003, 25.05.2002, 12.06.2004. leg. A. Stojanović; Stari Slankamen: Koševac 28.06.2003. leg. A. Stojanović; Mala Moštanica: Žuto Brdo 07.08.2004. 1f leg. A. Stojanović; Valjevo: Mravinci 09.08.2003. 1m leg. M. Vujanić; Pčinja, r., Kozjak 13-28.07.2006. leg. J. Šeat; Pčinja, r., Vogance 17.07.2008. leg. J. Šeat; Beograd: Veliko Selo 28.06.2008. leg. A. Stojanović; Krušedol 23.05. 2009. 2m, 1f leg. A. Stojanović (Fig. 2); Lazarevac: Stubica 12.06. 2010. 1m leg. A. Stojanović (SZ); Surduk 03.07.2010. 1m leg. A. Stojanović (SZ).

Dist.: European.

Ref. Protić 1998.

CHP: Replace "YU" with Serbia (RS) and Montenegro (ME).

Rhynocoris niger (Herrich-Schaeffer, 1844)

Dist. Mediterranean.

Ref. Horváth 1897 (Ruma).

CHP: Replace "YU" with Serbia (RS).

Rhynocoris rubricus (Germar, 1814)

CR: Sućurac 07.1923. 1f; 05.07.1924. 1f leg. P. Novak; Vela Luka 18.06.1931. 1m, 1f leg. P. Novak (PN).

ME: Virpazar 21.06.1929. 1f leg. P. Novak (PN).

Dist. Mediterranean.

CHP: Replace "YU" with Montenegro (ME).

Sphedanolestes lividigaster (Mulsant & Rey, 1852)

Dist. Mediterranean.

Ref. Gradojević 1963 (Deliblatski Pesak).

Rhodnius prolixus Stål, 1859

Brasil, 1m, 2f, Venezuela 1m 2f leg. N. Kormilev (NK).

Dist.: Neotropical.

Note: Gift by Nikola Kormilev.

Triatoma megista Neiva, 1911

Brasil leg. N. Kormilev (NK).

Dist.: Neotropical.

Note: Gift by Nikola Kormilev.

Phonoctonus fasciatus (de Beauvois, 1805)

Cameroun: Yaounde 08.1969. leg. G. Nonveiller (PP).

The collection of Indian butterflies by Andraš Galac includes *Vacharia natalica* Stal and *Glymmatophora* sp. Collection of Insects by Institute for Plant Protection includes a specimen from Cameroon (Africa), collected by Prof. Nonveiller in 1970. It is probably a genus connected to cocoa plantations. The Presidency of SFRY made a gift to the Natural History Museum in 1982, consisting of two exhibition tables with prepared insect specimens from Guinea (Africa), including two representatives of Reduviidae: *Glymmatophora* sp. and *Platyeris biguttata* Linnaeus.

Table 1. - Five most common species of family Reduviidae in Serbia. The other species were recorded in fewer than ten localities, with fewer than ten collected specimens.

Species	Number of specimens	Number of localities
<i>Peirates hybridus</i> (Scopoli)	31	13
<i>Phymata crassipes</i> (Fabricius)	64	55
<i>Reduvius personatus</i> (Linnaeus)	36	21
<i>Coranus subapterus</i> (De Geer)	14	11
<i>Rhynocoris iracundus</i> (Poda)	113	62

DISCUSSION AND CONCLUSIONS

The study included 376 specimens, collected in period 1910-2010. The collections include a total of 28 species. There were 16 species collected from 83 sites in Serbia, 12 species from 27 sites in Macedonia, 11 species from 19 sites in Croatia, 7 species from 10 sites in Montenegro, 4 species from 4 sites in Greece, 4 species from 2 sites in Slovenia, 2 species from 2 sites in Germany, while the record for other countries includes only a single species collected at a single site (Austria, Bosnia-Herzegovina, Brazil, Hungary, Italy, Morocco, Tunisia, Venezuela).

The distribution patterns of 27 recorded species are as follows: 16 Mediterranean, 4 European, 2 Eurosiberian, 2 Palearctic, and a single species with Holarctic, African-Asian and cosmopolitan type of distribution.

Of the total number of species from the family Reduviidae recorded in Serbia, *Rhynocoris iracundus* (Poda) has the greatest number of specimens and sites where it was collected, followed by *Phymata crassipes* (Fabricius) and *Reduvius personatus* (Linnaeus) (Tab. 1).

Within the period of 80 years, *Ploiaria domestica* (Scopoli) was recorded in Serbia at only two localities. The first record was from Eastern Serbia (locality Zaječar) and another was from vicinity of Belgrade, in the leaf litter of a pear orchard.

Empicoris vagabundus (Linnaeus) is a new species in the fauna of Serbia. So far it was recorded at two sites: in the broader vicinity of Belgrade (village Draževac), geographical coordinates 44° 34' 23" N, 20° 13' 31" E, at an altitude of 130 m; and in Srem, locality Stari Slankamen, near Danube on a bare loess slope, geographical coordinates 20°15'27" N, 45.1428, 20°25'75" E at the altitude of 80 m.

The European species *Empicoris baerensprugi* (Dohrn) was recorded in Serbia only at Leskovac (Kormilev 1936). The specimen was not preserved, and the only information is literature data.

The Dissertation Thesis by Zoran Gradojević (1963) was based on a study of succession of Arthropoda in the area of Deliblato Sands. Among the species of insects and Heteroptera he cites two interesting species from family Reduviidae: *Empicoris culiciformis* (De Geer) and *Sphedanolestes lividigaster* (Mulsant & Rey), which were never recorded in Serbia again, ever after 50 years. *S lividigaster* is not included in the Collection by Zoran Gradojević, which has been stored and conserved in the Entomological Collection of Natural History Museum in Belgrade since July 2010. As Gradojević had his Heteroptera specimens determined by Dr. Ludvik Hoberlandt from Prague, I assumed that maybe some specimens remained in Prague. Petr Kment checked the specimens in the collection and found none from Serbia.

Oncocephalus pilicornis Herrich-Schaeffer is a new species in the fauna of Montenegro. In the adjacent regions so far it was recorded in Dalmatia and Bosnia and Herzegovina (Protić, 1998).

Oncocephalus squalidus (Rossi) is a Mediterranean species that was recorded in Serbia only at two localities: in Leskovac, more than 70 years ago (leg. Kormilev) and in Đerdap Gorge, locality Tekija, where it was collected 50 years ago (leg. Čubrilović).

Pygolampus bidentata (Goeze) was recorded in Serbia only at two sites. Long ago, in 1900, it was collected in Belgrade (Horváth 1903) but that specimen is not stored in Natural History Museum in Belgrade. Instead there is another specimen in collection that is a female collected in vicinity of Smederevo in 1988. According to the present knowledge of range of this species (Putshkov & Moulet 2009), the locality Smederevo is situated at its eastern boundary.

Rhynocoris annulatus (Linnaeus) has just three known records from Serbia: Rudnik (Csiki 1940), Majdanpek (Živojinović 1950), and previously unpublished locality Zlatar, where a male specimen from the Collection was collected.

The studied collections do not include any specimens of *Rhynocoris niger* (Herrich-Schaeffer). There is only a citation in literature (Horváth 1897). More than 100 years ago it was collected in Srem, at the locality Ruma. It is the only known record of this species in Serbia.

Rhynocoris rubricus (Germar) was considered an Italian-Dalmatian species. However, some records were proven in other Mediterranean countries, as well as in Austria, Slovakia and Czech Republic (Putshkov & Moulet 2009). Specimens stored in the collection of Natural History

Museum in Belgrade were collected in Dalmatia and Montenegro, at the eastern boundary of this species' range.

Csiki (1940) had cited the locality Peć (Serbia: Metohija) where he had collected *Rhinocoris cuspidatus* Ribaut. There is no proof specimen, so it is impossible to check the identification. According to the expert Pavel Pučkov (1996) this is a case of false identification and this is most probably species *Rhinocoris iracundus* (Poda). *Rhinocoris cuspidatus* Ribaut is a North - Western Mediterranean species distributed in Spain, Portugal, France, Andora (Putshkov & Moulet 2009).

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**СТЕНИЦЕ УБИЦЕ (INSECTA: HETEROPTERA: REDUVIIDAE)
У ЗБИРКАМА ПРИРОДЊАЧКОГ МУЗЕЈА У БЕОГРАДУ**

ЉИЉАНА ПРОТИЋ

РЕЗИМЕ

У раду су обједињене информације о примерцима фамилије Reduviidae, који се налазе у саставу више збирки Heteroptera у Ентомолошкој збирци Природњачког музеја у Београду. Укупно је обрађено 376 примерка, а идентификовано је 28 врста.

Empicoris vagabundus (Linnaeus) је нова за фауну Србије.

Најбројнији су примерци из Србије, Македоније и Хрватске (Далмација). Објављени су подаци о врстама уловљеним после објављивања Каталога (Protić 1998), као и о старим примерцима, који се деценијама чувају у збирци и који до сада нису публиковани.