

Country reports

Overview of the invasive alien species in Serbia

Milica Rat^{1*}, Predrag Simonović², Milka Glavendekić³, Momir Paunović⁴, Verica Stojanović⁵, Maja Karaman¹,
Dimitrije Radišić¹, Goran Anačkov¹

University Novi Sad, Faculty of Sciences, Department of Biology and Ecology, Trg Dositeja Obradovica 2, 21000 Novi Sad, Serbia
University of Belgrade, Faculty of Biology, Studentski trg 16, 11000 Belgrade, Serbia
University of Belgrade, Faculty of Forestry, Kneza Viseslava 1, 11030 Belgrade, Serbia
University of Belgrade, Institute for Biological Research "Siništa Stanković", Bulevar Despota Stefana 142, 11000 Belgrade, Serbia
Institute for Nature Conservation of Serbia, Dr Ivana Ribara 91, 11070 Belgrade, Serbia
*corresponding e-mail: milica.rat@dbe.uns.ac.rs

Abstract

Invasive alien species are one of the main threats for biodiversity in the world, and nowadays scientific researches as well as policy makers' cope with them. Regardless, in Serbia this issue is neglected, without appropriate institutional collaboration. To evaluate state of art in Serbia, adopted laws and regulations, published scientific papers, concluded and ongoing research projects with emphasis of recorded alien species to date are reviewed. Alien species are defined as allochthonous species in policy documents, while in scientific papers approaches depend on the subject. By now, 346 invasive alien species were recorded in Serbia. Plants present the most numerous group of species, with 172 recorded alien species. Insects are the second large group with 78 species. Apart from them, important are records of cyanobacteria and fungi, while for the first time are summarized data about alien and potentially invasive bird species. Aquatic ecosystems are the most vulnerable and threatened by spread of invasive alien species in Serbia, with more than 80 aquatic alien organisms. Nevertheless, the majority of research and conservation project are directed to the aquatic habitats. Eventually, the conclusion is that it is necessary to merge existing data and on that basis create effective national strategy for invasive alien species, followed by management tools.

Key words

allochthonous, policy, regulation, animal, fungi, plant, projects, database, information

Introduction

Serbia is spreading over two biogeographic regions - the Balkan Peninsula and the Pannonian Plain. Historical factors and different environmental conditions: climate, pedology and geography, had the influence on the high diversity richness. The development of civilizations and different countries in historical terms has been going on for centuries and there are numerous archaeological sites (cities, roads) that indicate the early development of the region. During the 19th and 20th centuries, the intensive development of the industry and settlements in the area had a significant impact on urbanisation, and at the same time favoured the introduction of alien species.

The study of the flora and fauna in Serbia began in the nineteenth century. Already in this period, the first data that can be assigned to the study of alien species and their “invasive” behaviour were published. In the paper *Enumeratio Plantarum in Banat Temesiensi sponte crescentium et frequentius cultarum* Heuffel (1858) reported about the rapid and remarkable spread of the species *Xanthium spinosum* L. “...in 1833. it was recorded near Vrsac and Palanka (today Stara Palanka); today is much more dangerous weeds in Banat and Hungary Plain”. The significance of those data is in that they indicated both the temporal scale of species introductions and behaviour of aliens during the introduction period. The first studies of alien species were marked by investigation of their impact on the economically important issues: agriculture, fisheries and forestry. Among plants and insects they mostly included species defined as weeds and pests.

The research of the alien species, in the context and definitions of the modern invasive biology and ecology, began during the last decade of the twentieth century and has been intensive since then. The first surveys of alien species of potentially invasive and invasive character were related to fish, insects and plants. This may be explained by their most pronounced impact on the native species, biodiversity and their high socio-economic impact.

The negative impact of invasive alien species

(IAS) on human health and economically important aspects of biodiversity have led to the identification of the problems and rising of the public awareness about them. This resulted in an increased number of national and international projects dealing with IAS. However, there have been no relevant laws and regulations on the invasive alien species in Serbia.

Policy background

The highest legal act of the Republic of Serbia, which defines the nature protection, is the Constitution. Other laws and bylaws, which has arisen from the Constitution, covered the „allochtonous“ and „invasive species“. The laws in force in the Republic of Serbia, which partially provide regulations about the invasive alien species are: Law on Nature Protection (Official Gazette No. 36/2009, 88/2010, 91/2010), Law on Protection and Sustainable Use of Fish Stocks (Official Gazette No. 128/2014), and Law on Wildlife and Hunting (Official Gazette No. 18/2010). In addition to these documents, the Republic of Serbia adopted The National Programme for Environmental Protection (Official Gazette No. 10/2010), Biodiversity Strategy of Republic of Serbia for the period 2011-2018 (2011), The Action Plan for Implementation of the Biodiversity Strategy of Republic of Serbia for the period 2011-2018 (2011) and National Strategy for Sustainable Use of Resources and Goods (Official Gazette No. 33/2012).

A general concept and approach to the issues related to the alien and invasive species was given in Law on Nature Protection. The definitions of the terms “allochtonous species” and “invasive species” were specified therein, along with “Entering of allochtonous species” (Article 82) and “Accidental introduction of allochtonous species” (Article 83). Additionally, *Permission to stock wild animals*, *Breeding of wild animals*, and *Trade in wildlife*, define the conditions for any activities and issuance of permits. Under Article 126, no. 17 of this law, “*Entries of allochtonous species and their hybrids in free nature*” is defined as an offense, with stipulated penalties from 500 000 to 1 000 000 Serbian Dinar (RSD). In Law on

Amendments to Law on Nature Protection there are provisions that prohibit the introduction of invasive and alien species into some areas, which include protected areas with regime levels 2 and 3.

Until recently, the hindrance to enforcing those regulations was the absence of a list of allochthonous and invasive species. In 2012, the Institute for Nature Conservation of Serbia has published *A preliminary list of invasive species in Serbia, with general measures of control and reduction as a basis of future legal acts* (Lazarevic et al. 2012). A list of hybrids of allochthonous species does still not exist. Unfortunately, no regulations at the state level, which deal closely with allochthonous and invasive species, have been adopted afterthat.

The only exception is Law on Protection and Sustainable Use of Fish Stock, in which the allochthonous (alien) fish species are defined more precisely. The introduction of allochthonous species from geographically distant areas, as well as from nearby areas, if they are geographically isolated, is prohibited (Article 30). For violation of this provision, fines for legal and private persons are stipulated. This law is accompanied by set of regulations. Cooperation of the Ministry of Agriculture and Environmental Protection, inspection services, professional communities and fishing associations have led to the active implementation of this law.

In addition to this law, alien species defined as “allochthonous” are treated in Law on Wildlife and Hunting. However, the prohibition of introducing allochthonous species is limited only to the „new allochthonous species“ in that law. In this sense, this law does not involve the introduction of allochthonous species already recorded in Serbia, such as *Dama dama*.

Among the internationally significant legal instruments, the Republic of Serbia has ratified the Carpathian Convention and the Convention on Biological Diversity (the Bern Convention). One of the general objectives of the Carpathian Convention is: the prevention of introduction of invasive alien species, which might threaten ecosystems, habitats or species native to the Carpathians, their control and

eradication. This Convention also pursues policies aiming at IAS prevention and adoption of proper measures.

At the local level, some individual regulations (action plans, ordinances, etc.) have been adopted in the municipalities, e.g. *Action Plan for the Implementation of the Program Environmental Protection of the City of Belgrade*, June 2013, and *Decision on the Regulation of the City of Novi Sad* (Official Gazette of the City of Novi Sad No 56/2012 and 9/2013).

Projects and Research

From the beginning of the 21st century, numerous local, national and international projects that deal with aliens and/or invasive species were implemented in Serbia. The results of those projects have been the published research articles and databases. In the period from 2002 to 2013, over 70 references were published, of which the most in the period 2008-2012. Alien invertebrates and fish in the rivers Danube and Sava, alien insects in forests and urban green infrastructure, urban floras with respect to alien species and impacts of alien species in the agriculture, forestry, ornamental horticulture and water ecosystems were studied.

The invasive species were the subject of the ALARM project (FP6 Integrated Project ALARM, contract GOCE-CT-2003-506675; <http://www.alarm-project.net/alarm/>). A significant part of this project included a survey of aquatic alien and invasive species of the Southern Invasive Corridor (Black Sea – Danube River – Rhine–Main Channel - North Sea). Significant data on the distribution and abundance of aquatic alien organisms in Serbia were collected. Within the ALARM project the database of alien invasive species of the Southern Invasion Corridor (SIC) (Allochthonous Invasive Species of the Southern Invasion Corridor database (AISSIC)) was developed at the Institute for Biological Research “Sinisa Stankovic” University of Belgrade. The aim of that database was to assess the status of certain water bodies in the context of the biological invasions. The AISSIC database contains data on allochthonous species of the

SIC (the Danube River and its main tributaries and Rhein-Main-Danube canal): the donor and recipient areas, periods of investigation, the first year of record, pathways and vectors of introduction (Stefanovic et al. 2008). At present, there are about 3300 records in the database. The ALARM project also dealt with the development of a risk assessment tool for the invasive species. Based on the metrics used, it was found that main waterways in Serbia (the rivers Danube, Sava and Tisa) are significantly exposed to biological invasions. A high level of biological invasions was also recorded for some other large rivers in the country - the Velika Morava River, the Kolubara River, etc.

The research efforts regarding the invasive aquatic organisms were focused also on the BAES database (Biodiversity in Aquatic Ecosystems in Serbia (Simić et al. 2006; <http://baes.pmf.kg.ac.rs/english/index.html>). The BAES database was developed at the Institute of Biology and Ecology, the Faculty of Science, University of Kragujevac, and has resulted from several projects. The database is based on the field research and bibliographic information, and comprises information about the presence and distribution of the species (macroalgae, macroinvertebrates and fish), in aquatic ecosystems in Serbia.

During 2006 and 2007, a project entitled *Action plan for control of introduction, monitoring and suppression of allochthonous invasive taxa* was implemented in Serbia, with the support of the Ministry of Science and Environmental Protection of the Republic of Serbia. The project was performed at the Institute for Biological Research “Siniša Stanković”, University of Belgrade (Contract No. 401-00-452/06-01 from 18.08.06), with the collaboration of the Faculty of Biology, University of Belgrade, the Faculty of Agriculture, University of Belgrade, and the Faculty of Science, Institute of Biology and Ecology, University of Kragujevac. The resulted document contains preliminary lists of the allochthonous taxa, selection of appropriate status indicators, information on the status in regard to the biological invasions in Serbia, as well as identification of the measures for prevention of further biological invasions.

A preliminary list of alien species in Vojvodina

Province was created in 2011, with a second edition in 2013. The project was supported by the Fund for Environmental Protection of the Republic of Serbia. The database of that list contains an overview of the invasive alien species of algae, fungi, plants, invertebrates, and vertebrates, and was created based on the literature review and field research (<http://iasv.dbe.pmf.uns.ac.rs>). The project was implemented at the University of Novi Sad, Faculty of Sciences, Department of Biology and Ecology.

The research on invasive invertebrates and plants have been conducted at the University of Belgrade – Faculty of Forestry in the frame of the Project “Studying climate change and its influence on the environment: impacts, adaptation, and mitigation” (43007) financed by the Ministry of Education Science and Technological development of the Republic of Serbia for the period 2011-2014.

The BioRaS portal is a thorough informative resource about the Serbian wildlife and a sophisticated tool for harvesting field observations of animal, plant and fungus species collected by the civil society in Serbia. It is a full featured citizen science initiative, started by several organisations of the civil society in Serbia, harmonised with academic institutions and supported by the Embassy of the Netherlands in Belgrade (<http://www.bioras.petnica.rs>).

The Danube River is recognised as one of the major pathways for the invasive species spread. Therefore, the International Commission for the Protection of the Danube River (ICPDR) formed a coordinating platform for compilation of multilateral and basin-wide approaches at the “Roof level”¹ of the Danube River Basin (DRB). Among their other goals, the related expert and task groups of the ICPDR serve as an effective platform for coordinating the management of the invasive aquatic species. Their efforts include: collecting of basic information on the distribution of non-indigenous aquatic species within the DRB; iden-

¹ At the Roof level (Part A), the ICPDR agreed on common criteria for analysis related to the DRBM Plan as the basis to address transboundary water management issues. The level of detail of the Roof level (Part A) is lower than that used in the national Part B Plans of each EU Member State.

tifying the invasive species among non-native taxa for the DRB; studying the basic authecological characteristics of the species, to select those that are related to invasive character of the taxa; identifying of the main vectors, invasion routes and pathways relevant for the DRB IAS; identifying of the vulnerability to biological invasions of aquatic ecosystems in the DRB; contributing to the establishment of a database of aquatic IAS within the DRB; contributing to the development, testing and applying of a Risk Assessment Tool for IAS within the DRB; providing the solution for effective monitoring of IAS in aquatic ecosystems within the DRB; contributing to the development and applying of relevant measures for suppression and prevention of biological invasions related to aquatic ecosystems within the DRB; and rising of the public awareness. These efforts have been specifically intensified since the Danube River Basin Management Plan was published in 2009, when it was emphasized that there is no enough information about the non-indigenous taxa to provide effective management solutions. Serbia actively participates in the efforts of the ICPDR to provide efficacious bases for management of aquatic invasions on basin wide level.

Invasive alien species in Serbia

According to the published research papers, online databases, research records and biological collections (see references and Annex 1), a total of 346 alien species has been recorded in Serbia by now. Snalysis reveals 5 groups: cyanobacteria, fungi, invertebrate, chordata and plants. By now, only one cyanobacteria is recognized as invasive alien in Serbia, while fungi list includes nine species belonging to four Divisions. Invertebrates are the second largest groups of IAS in Serbia, including so far 111 species, out of which 78 belong to Insecta. Among Chordata, fishes are majority, with 30 recorded alien species. The largest group of IAS are plants, with 174 representatives, including water ferns.

Increasing colonisation by alien organisms was observed in Serbian waters during the last few decades. Up to now, more than 80 non-indigenous

species (30 fishes, one reptile, 29 aquatic macroinvertebrates, 11 aquatic macrophytes and more than 10 fish parasites) have been reported for aquatic ecosystems in Serbia. Therefore, these ecosystems are the most vulnerable and threatened by expansion of IAS.

The alien and invasive status of the bird species in Serbia has not been analysed in separate studies. There was also no attempts for inventoring and publishing the data on their occurrence in the Serbian territory. For most of the alien bird species can be concluded cautiously that they have escaped from captivity, and that they cannot reproduce out of captivity. *Alectoris chukar* has been introduced at several locations in the mountainous parts of Serbia, mainly as a hunting species. By now, there has been no information on the population size, distribution and potential hybridisation with native *A. graeca*, although the hybridisation between the two species is possible (Barbanera et al. 2009; Barilani et al. 2007). *Psittacula krameri*, which is considered invasive in Europe (EEA 2012), has been repeatedly observed in urban areas, but there is no confirmation of nesting out of captivity. Among other species, the following have been recorded for Serbia: *Cygnus atratus*, *Branta canadensis* (Tucakov 2000; Vasic 1995), *Alopochen aegyptiacus*, *Cairina moschata* (Sciban et al. 2011), *Meleagris gallopavo*, *Coturnix japonica*, *Numida meleagris* and *Melopsittacus undulatus* (Stanimirović 2000), *Mycteria ibis* (Tucakov 2004), *Anser cygnoides* (Sciban et al. 2011), and *Caracara cheriway*. Most probably, the reported birds have escaped from captivity.

Creating of inventories of the alien species has become in a way a feature of the modern science – although definition of the „biological and ecological invasions“ were given back in the mid- 20th century, until recently this process did not proceed on a large scale. From the beginning of the 21st century, the preparation of the so-called black lists has become a priority, primarily in terms of nature conservation. In Serbia, this trend can also be noticed, with a significant increase during the last years. The records of new aliens have contributed additionally to this. At present, the number of the published references on the distribution of invasive alien species in Serbia exceeds

500. Along with inventorying, particular attention is paid to the analyses of the invasiveness of the alien species or prioritisation in relation to the degree of their threat to biodiversity, as well as to ecology of the alien invasive species.

This overview of invasive alien species and references list is not complete, but includes majority of important data related to the issue.

References

- Barbanera F, Guerrini M, Khan AM, Panayides P, Hadjigerou P, Sokos Ch, Gombobaatar S, Samadi S, Khan BY, Tofanelli S, Paoli G, Dini F (2009) Human-mediated introgression of exotic chukar (*Alectoris chukar*, Galliformes) genes from East Asia into native Mediterranean partridges. *Biol Invasions* 11:333–348
- Barilani M, Bernard-Laurent A, Mucci N, Tabarroni C, Kark S, Perez Garrido JA, Randi E (2007) Hybridisation with introduced chukars (*Alectoris chukar*) threatens the gene pool integrity of native rock (*A. graeca*) and red-legged (*A. rufa*) partridge populations. *Biol Conserv* 137:57–69
- European Environmental Agency (2012) The impacts of invasive alien species in Europe. EEA Technical report 16. ISSN 1725-2237 doi:10.2800/65864
- Heuffel J (1858) *Enumeratio plantarum in Banatu Temesiensi sponte crescentium et frequentius cultarum*. Typis Caroly, Ueberreuter, Wien
- Lazarevic P, Stojanovic V, Jelic I, Peric R, Krsteski B, Ajtic R, Sekulic N, Brankovic S, Sekulic G, Bjedov V (2012) A preliminary list of invasive species in Serbia, with general measures of control and reduction as a basis of future legal acts. *Protection of Nature* 62(1):5-31 (In Serbian; Summary in English)
- Sciban M, Djapic D, Sekeres O, Djordjevic I, Ruzic M, Stan-kovic D, Radisic D, Gergelj J, Jankovic M, Radakovic M, Rudic B, Agoston A, Dajovic M, Simic D (2011) Results of the International Waterbird Census in (2012) in Serbia. *Ciconia* 20: 20-128
- Simic V, Snezana S, Petrovic A, Paunovic M, Soric V, Dimitrijevic V (2006) Biodiversity in aquatic ecosystems in Serbia, ex situ conservation (BAES ex situ). <http://baes.pmf.kg.ac.rs>. Accessed 04 June 2015
- Stanimirovic Z (2000) Faunal list of the birds in the Banjička forests and village Banjica (a suburb of Belgrade). *Ciconia* 9:103-110 (In Serbian)
- Stefanovic K, Grujic J, Tomovic J, Paunovic M, Simic S, Veljkovic A, Djikanovic V (2008) Allochthonous invasive aquatic biota in Serbia. The 37th Annual Conference of the Serbian Water Pollution Control. Society “Water 2008”, Mataruška Banja, Serbia, June 3-6th 2008, Proceedings pp 61-66 (in Serbian)
- Tucakov M (2000) Contemporary findings of the canadian geese Canada Goose *Branta canadensis* on the pond near Kolut. *Ciconia* 9:176-178 (In Serbian)
- Tucakov M (2004) Bird fauna at the pond near Kolut, as a criterion for its protection. *Manuscript*. Graduate Thesis. University of Novi Sad Faculty of Sciences, Department of biology and ecology (In Serbian)
- Vasic V (1995) The diversity of bird species in Yugoslavia with an overview of species with international importance. In: Stevanovic V, Vasic V (eds.) Biodiversity of Yugoslavia with an overview of species of international importance. NNK International, institute for nature conservation of Serbia, Faculty of biology Belgrade, pp 471-516 (In Serbian)

Annex 1. List of the invasive alien species in Serbia

Phylum/Division	Class	Order	Species
Cyanobacteria	Hormogoneae	Nostocales	1. <i>Cylindrospermopsis raciborskii</i> (J. Woloszanska) G. Seenaya & N. Subba Raju 1972
Ascomycota	Leontiomycetes	Erysiphales	1. <i>Podosphaera leucotricha</i> (Ellis & Everh.) E.S. Salmon (1900) 2. <i>Uncinula necator</i> (Schwein.) Burrill (1892)
	Dothideomycetes	Botryosphaerales	3. <i>Guignardia aesculi</i> (Peck) V.B. Stewart (1916)
	Sordariomycetes	Diaporthales	4. <i>Cryphonectria parasitica</i> (Murrill) M.E. Barr (1978)
Deuteromycota	Melanconia	Melanconiales	1. <i>Colletotrichum gloeosporioides</i> (Penz.) Penz. & Sacc. (1884)
Basidiomycota	Pucciniomycetes	Pucciniales	1. <i>Puccinia horiana</i> Henn. (1901) 2. <i>Puccinia malvacearum</i> Bertero ex Mont. (1852)
Oomycota	Oomycetes	Peronosporales	1. <i>Plasmopara halstedii</i> (Farl.) Berl. & De Toni, 1888 2. <i>Plasmopara viticola</i> (Berk. & G. Winter) Berl. & De Toni, 1888
Entoprocta		Urnatellida	1. <i>Urnatella gracilis</i> (Leidy, 1851)
Bryozoa	Phylactolaemata	Plumatellida	1. <i>Pectinatella magnifica</i> (Leidy, 1851)
Platyhelminthes		Tricladida	1. <i>Dendrocoelum romanodanubiale</i> (Codreanu, 1949) 2. <i>Dugesia tigrina</i> (Girard, 1850)
Cnidaria	Hydrozoa	Limnomedusae	1. <i>Craspedacusta sowerbyi</i> (Lankester, 1880)
Annelida	Oligochaeta	Tubicifida	1. <i>Branchiura sowerbyi</i> (Beddard, 1892) 2. <i>Potamothrix moldaviensis</i> (Vejdovsky & Mrazek, 1903)
		Terebellida	3. <i>Hypania invalida</i> (Grube, 1860)
	Polychaeta	Sabellida	4. <i>Manayunkia caspica</i> (Annenkova, 1929)
Arthropoda	Insecta	Coleoptera	1. <i>Acanthoscelides obtectus</i> (Say, 1831) 2. <i>Acanthoscelides pallidipennis</i> (Motschulsky, 1874) 3. <i>Bruchidius siliquastri</i> (Delobel, 2007) 4. <i>Bruchus pisorum</i> (Linnaeus, 1758) 5. <i>Bruchus rufimanus</i> (Bohemann, 1833) 6. <i>Carpophilus hemipterus</i> (Linnaeus, 1758) 7. <i>Diabrotica virgifera virgifera</i> (LeConte, 1868) 8. <i>Glischrochilus quadrisignatus</i> (Say, 1835) 9. <i>Gnathocerus cornutus</i> (Fabricius, 1798) 10. <i>Harmonia axyridis</i> (Pallas, 1773) 11. <i>Lasioderma serricorne</i> (Fabricius, 1792) 12. <i>Latheticus oryzae</i> (Waterhouse, 1880) 13. <i>Leptinotarsa decemlineata</i> (Say, 1824) 14. <i>Megabruchidius tonkineus</i> (Pic, 1914) 15. <i>Neoclytus acuminatus</i> (Fabricius, 1775) 16. <i>Oryzaephilus surinamensis</i> (Linnaeus, 1758)

Phylum/Division	Class	Order	Species
			17. <i>Palorus ratzeburgi</i> (Wissmann, 1848)
			18. <i>Ptinus fur</i> (Linnaeus, 1758)
			19. <i>Rhyzopertha dominica</i> (Fabricius, 1792)
			20. <i>Sitophilus granarius</i> (Linnaeus, 1763)
			21. <i>Sitophilus oryzae</i> (Linnaeus, 1763)
			22. <i>Sitophilus zeamais</i> (Motschulsky, 1855)
			23. <i>Stelidota geminata</i> (Say, 1825)
			24. <i>Tenebroides mauritanicus</i> (Linnaeus, 1758)
			25. <i>Tribolium castaneum</i> (Herbst, 1797)
			26. <i>Tribolium confusum</i> (du Val, 1868)
			27. <i>Tribolium destructor</i> (Uyttenboogaart, 1933)
			28. <i>Tribolium madens</i> (Charpentier, 1825)
			29. <i>Typhaea stercorea</i> (Linnaeus, 1758)
		Hemiptera	30. <i>Acizzia jamatonica</i> (Kuwayama, 1908)
			31. <i>Amphiareus obscuriceps</i> (Poppius, 1909)
			32. <i>Aphis illinoisensis</i> (Schimer, 1866)
			33. <i>Aphis spiraecola</i> (Patch, 1914)
			34. <i>Appendiseta robiniae</i> (Gillette, 1907)
			35. <i>Belonochilus numenius</i> (Say, 1832)
			36. <i>Chaitophorus leucomelas</i> (Koch, 1854)
			37. <i>Chaitophorus populifolii</i> (Essig, 1912)
			38. <i>Corythucha ciliata</i> (Say, 1832)
			39. <i>Diaspidiotus perniciosus</i> (Comstock, 1881)
			40. <i>Gilletteella cooleyi</i> (Gillette, 1907)
			41. <i>Homotoma ficus</i> (Linnaeus, 1758)
			42. <i>Leptoglossus occidentalis</i> (Heidemann, 1910)
			43. <i>Metcalfa pruinosa</i> (Say, 1830)
			44. <i>Myzocallis walshii</i> (Monell ex Riley & Monell, 1879)
			45. <i>Perillus bioculatus</i> (Fabricius, 1775)
			46. <i>Pineus strobi</i> (Hartig, 1837)
			47. <i>Prociphilus fraxinifolii</i> (Riley)
			48. <i>Pseudaulacaspis pentagona</i> (Targioni Tozzeti, 1886)
			49. <i>Scaphoideus titanus</i> (Ball, 1932)
			50. <i>Stictocephala bisonia</i> (Kopp & Yonke, 1977)
			51. <i>Viteus vitifoliae</i> (Fitch, 1855)
		Diptera	52. <i>Aedes albopictus</i> (Skuse, 1894)

Phylum/Division	Class	Order	Species	
			53. <i>Chymomyza amoena</i> (Loew, 1862)	
			54. <i>Dasineura gleditchiae</i> (Osten Sacken, 1866)	
			55. <i>Liriomyza huidobrensis</i> (Blanchard, 1926)	
			56. <i>Liriomyza trifolii</i> (Burgess, 1880)	
			57. <i>Obolodiplosis robiniae</i> (Haldeman, 1847)	
			58. <i>Oligotrophus betheli</i> (Felt, 1912)	
			59. <i>Paradiplosis abietis</i> (Hubault 1945)	
			60. <i>Rhagoletis completa</i> (Cresson, 1929)	
			Lepidoptera	61. <i>Antheraea yamamai</i> (Guérin-Méneville, 1861)
				62. <i>Cacoecimorpha pronubana</i> (Hubner, 1799)
				63. <i>Cameraria ohridella</i> (Deschka & Dimic, 1985)
				64. <i>Coleophora laricella</i> (Hübner, 1817)
				65. <i>Epichoristodes acerbella</i> (Walker, 1864)
				66. <i>Hyphantria cunea</i> (Drury, 1773)
				67. <i>Ostrinia nubilalis</i> (Hübner, 1796)
				68. <i>Parectopa robiniella</i> (Clemens, 1863)
				69. <i>Phyllonorycter robiniella</i> (Clemens, 1859)
				70. <i>Tuta absoluta</i> (Meyrick, 1917)
				Hymenoptera
			72. <i>Bruchophagus sophorae</i> (Crosby & Crosby, 1929)	
			73. <i>Isodontia mexicana</i> (Saussure, 1867)	
			74. <i>Monomorium pharaonis</i> (Linnaeus, 1758)	
			75. <i>Nematus tibialis</i> (Newman, 1837)	
			76. <i>Sceliphron curvatum</i> (F.Smith, 1870)	
		Blattaria	77. <i>Blatta orientalis</i> (Linnaeus, 1758)	
		Thysanoptera	78. <i>Frankliniella occidentalis</i> (Pergande, 1895)	
	Arachnida	Prostigmata	79. <i>Aceria erinea</i> (Nalepa, 1891)	
			80. <i>Aceria tristriata</i> (Nalepa, 1890)	
		Acari	81. <i>Varroa destructor</i> (Anderson & Trueman, 2000)	
	Malacostraca	Mysida	82. <i>Limnomysis benedeni</i> (Czerniavsky, 1882)	
		Isopoda	83. <i>Jaera istri</i> (Veuille, 1979)	
			84. <i>Jaera sarsi</i> (Valkanov, 1936)	
		Amphipoda	85. <i>Chaetogammarus (Echinogammarus) ischnus</i> (Stebbing, 1899)	
			86. <i>Chelicorophium curvispinum</i> (Sars, 1895)	
			87. <i>Chelicorophium robustum</i> (Sars, 1895)	
			88. <i>Chelicorophium sowinskyi</i> (Martynov, 1924)	

Phylum/Division	Class	Order	Species		
			89. <i>Dikerogammarus haemobaphes</i> (Eichwald, 1841) 90. <i>Dikerogammarus villosus</i> (Sowinsky, 1894) 91. <i>Gammarus roeseli</i> (Gervais, 1835) 92. <i>Obesogammarus obesus</i> (Sars, 1894)		
		Decapoda	93. <i>Eriocheir sinensis</i> (Milne-Edwards, 1853) 94. <i>Orconectes limosus</i> (Rafinesque, 1817)		
		Mollusca	Bivalvia	Veneroida	1. <i>Corbicula fluminalis</i> (F. Müller, 1774) 2. <i>Corbicula fluminea</i> (F. Müller, 1774) 3. <i>Dreissena polymorpha</i> (Pallas, 1771) 4. <i>Dreissena rostriformis bugensis</i> (Andrusov, 1897)
				Unionoida	5. <i>Sinanodonta woodiana</i> (Lea, 1834)
	Gastropoda	Eupulmonata	6. <i>Arion lusitanicus</i> (Mabille, 1868) 7. <i>Blattella germanica</i> (Linnaeus, 1767)		
		Hygrophila	8. <i>Physella acuta</i> (Draparnaud, 1805)		
Chordata	Actinopterygi	Siluriformes	1. <i>Ameiurus nebulosus</i> (Le Sueur, 1819) 2. <i>Ameiurus melas</i> (Rafinesque, 1820) 3. <i>Pterygoplichthys pardalis</i> (Castellnnau, 1855)		
		Acipenseriformes	4. <i>Polyodon spathula</i> (Walbaum, 1792)		
		Salmoniformes	5. <i>Coregonus peled</i> (Gmelin, 1788) 6. <i>Oncorhynchus mykiss</i> (Walbaum, 1792) 7. <i>Salmo letnica</i> (S. Karaman, 1924) 8. <i>Salmo macedonicus</i> (S. Karaman, 1924) 9. <i>Salvelinus alpinus</i> (Linnaeus, 1758) 10. <i>Salvelinus fontinalis</i> (Mitchill, 1815)		
		Perciformes	11. <i>Lepomis gibbosus</i> (Linnaeus, 1758) 12. <i>Micropterus salmoides</i> (Lacepede, 1802) 13. <i>Neogobius fluviatilis</i> (Pallas, 1814) 14. <i>Neogobius gymnotrachelus</i> (Kessler, 1857) 15. <i>Neogobius kessleri</i> (Günther, 1861) 16. <i>Neogobius melanostomus</i> (Pallas, 1814) 17. <i>Perccottus glenii</i> (Dybowski, 1877) 18. <i>Ponticola kessleri</i> (Gunther, 1861) 19. <i>Proterorhinus semilunaris</i> (Heckel, 1837)		
		Syngnathiformes	20. <i>Syngnathus abaster</i> (A. Risso, 1826)		
		Cypriniformes	21. <i>Alburnus albidus</i> (Costa, 1838)		
			22. <i>Alburnus scoranza</i> (Heckel & Kner, 1858)		

Phylum/Division	Class	Order	Species
			23. <i>Carassius gibelio</i> (Bloch, 1783) 24. <i>Ctenopharyngodon idella</i> (Valenciennes, 1844) 25. <i>Hypophthalmichthys molitrix</i> (Valenciennes, 1844) 26. <i>Hypophthalmichthys nobilis</i> (Richardson, 1845) 27. <i>Pachychilon macedonicum</i> (Steindachner, 1892) 28. <i>Pseudorasbora parva</i> (Temminck and Schlegel, 1842) 29. <i>Rutilus basak</i> (Heckel, 1843) 30. <i>Scardinius knezevici</i> (Biando & Kottelat, 2005)
	Chelonia	Casichelydia	31. <i>Trachemys scripta elegans</i> (Wied-Neuwied, 1839)
	Aves	Anseriformes	32. <i>Alopochen aegyptiaca</i> (Linnaeus, 1766) 33. <i>Anser cygnoides</i> (Linnaeus, 1758) 34. <i>Branta canadensis</i> (Linnaeus, 1758) 35. <i>Cairina moschata</i> (Linnaeus, 1758) 36. <i>Cygnus atratus</i> (Latham, 1790)
		Ciconiiformes	37. <i>Mycteria ibis</i> (Linnaeus, 1766)
		Falconiformes	38. <i>Caracara cheriway</i> (Jacquin, 1784)
		Galliformes	39. <i>Alectoris chukar</i> (J.E. Gray, 1830) 40. <i>Coturnix japonica</i> (Temminck & Schlegel, 1849) 41. <i>Meleagris gallopavo</i> (Linnaeus, 1758) 42. <i>Numida meleagris</i> (Linnaeus, 1758) 43. <i>Phasianus colchicus</i> (Linnaeus, 1758)
		Psittaciformes	44. <i>Melopsittacus undulatus</i> (Shaw, 1805) 45. <i>Psittacula krameri</i> (Scopoli, 1769)
	Mammalia	Rodentia	46. <i>Myocastor coypus</i> (Milina 1782) 47. <i>Ondatra zibethicus</i> (Linnaeus 1766) 48. <i>Rattus norvegicus</i> (Berkenhout, 1769)
		Carnivora	49. <i>Nyctereutes procyonoides</i> (Gray, 1834)
		Artiodactyla	50. <i>Dama dama</i> (Linnaeus, 1758) 51. <i>Odocoileus virginianus</i> (Zimmermann, 1780) 52. <i>Ovis aries musimon</i> (Linnaeus, 1758)
Polypodiophyta	Polypodiopsida	Salviniales	1. <i>Azolla caroliniana</i> Willd. 1810 2. <i>Azolla filiculoides</i> Lam. 1783
Magnoliophyta	Magnoliopsida	Apiales	1. <i>Bifora radians</i> Bieb. 1819
		Apocynaceae	2. <i>Asclepias syriaca</i> L. 1753
		Asterales	3. <i>Ambrosia artemisiifolia</i> L. 1753 4. <i>Ambrosia tenuifolia</i> Spreng. 1826 5. <i>Ambrosia trifida</i> L. 1753

Phylum/Division	Class	Order	Species
			6. <i>Artemisia annua</i> L. 1753
			7. <i>Artemisia verlotiorum</i> Lamotte 1877
			8. <i>Bidens frondosa</i> L. 1753
			9. <i>Centaurea biebersteinii</i> DC. 1838
			10. <i>Centaurea calcitrapa</i> L. 1753
			11. <i>Centaurea diffusa</i> Lam. 1785
			12. <i>Centaurea solstitialis</i> L. 1753
			13. <i>Conyza albida</i> Willd. ex Spreng. 1826
			14. <i>Conyza canadensis</i> (L.) Cronq. 1943
			15. <i>Erechtites hieracifolius</i> (L.) DC. 1838
			16. <i>Erigeron annuus</i> (L.) Pers. 1807
			17. <i>Galinsoga parviflora</i> Cav. 1795
			18. <i>Galinsoga quadriraduata</i> Ruiz et Pav. 1798
			19. <i>Helianthus annuus</i> L. 1753
			20. <i>Helianthus decapetalus</i> L. 1753
			21. <i>Helianthus pauciflorus</i> Nuttall 1818
			22. <i>Helianthus scaberrimus</i> Elliott 1823
			23. <i>Helianthus tuberosus</i> L. 1753
			24. <i>Helminthotheca echioides</i> (L.) Holub 1973
			25. <i>Iva xanthifolia</i> Nutt. 1818
			26. <i>Matricaria discoidea</i> DC. 1838
			27. <i>Picnemon acarna</i> (L.) Cass. 1826
			28. <i>Rudbeckia hirta</i> L. 1753
			29. <i>Rudbeckia laciniata</i> L. 1753
			30. <i>Solidago canadensis</i> L. 1753
			31. <i>Solidago gigantea</i> Aiton 1789
			32. <i>Symphyotrichum lanceolatum</i> (Willd.) G. L. Nesom 1995
			33. <i>Symphyotrichum novae-angliea</i> (L.) G. L. Nesom 1995
			34. <i>Symphyotrichum novi-belgii</i> (L.) G. L. Nesom 1995
			35. <i>Symphyotrichum parviflorum</i> (Nees) Greuter 2003
			36. <i>Symphyotrichum salignum</i> (Willd.) G. L. Nesom 1995
			37. <i>Symphyotrichum tradescantii</i> (L.) G.L.Nesom 1995
			38. <i>Symphyotrichum versicolor</i> (Willd.) G. L. Nesom 1995
			39. <i>Symphyotrichum squamatum</i> (Spreng.) G.L. Nesom 1995
			40. <i>Tanacetum balsamita</i> L. 1753
			41. <i>Tragopogon porrifolius</i> L. subsp. <i>australis</i> (Jordan) Br.-Bl.

Phylum/Division	Class	Order	Species
			42. <i>Xanthium orientale</i> L. 1763 subsp. <i>italicum</i> (Moretti) Greuter 2003
			43. <i>Xanthium spinosum</i> L. 1753
		Balsaminales	44. <i>Impatiens balsamina</i> L. 1753
			45. <i>Impatiens glandulifera</i> Royle 1835
			46. <i>Impatiens noli-tangere</i> L. 1753
			47. <i>Impatiens parviflora</i> DC. 1824
		Boraginales	48. <i>Anchusa azurea</i> Miller 1768
			49. <i>Lappula marginata</i> (Bieb.) Gurke in Engler et Prantl.
			50. <i>Phacelia tanacetifolia</i> Bentham 1835
		Brassicales	51. <i>Armoracia rusticana</i> (Lam.) G. M. Sch 1800
			52. <i>Choriospora tenella</i> (Pallas) DC. 1821
			53. <i>Coronopus didymus</i> (L.) Sm. 1800
			54. <i>Coronopus procumbens</i> Gilib. 1781
			55. <i>Hirschfeldia incana</i> (L.) Lagréze-Fossat 1847
			56. <i>Isatis tinctoria</i> L. 1753
			57. <i>Lepidium virginicum</i> L. 1753
			58. <i>Peltaria alliacea</i> Jacq. 1762
			59. <i>Rapistrum rugosum</i> (L.) All. 1785
		Caryophyllales	60. <i>Amaranthus albus</i> L. 1759
			61. <i>Amaranthus blitoides</i> S. Watson 1877
			62. <i>Amaranthus blitum</i> L. 1753
			63. <i>Amaranthus caudatus</i> L. 1753
			64. <i>Amaranthus crispus</i> (Lesp. et Théven.) N. Terrac. 1890
			65. <i>Amaranthus cruentus</i> L. 1759
			66. <i>Amaranthus deflexus</i> L. 1771
			67. <i>Amaranthus hybridus</i> L. 1753
			68. <i>Amaranthus patulus</i> Bertol. 1837
			69. <i>Amaranthus retroflexus</i> L. 1753
			70. <i>Bassia scoparia</i> (L.) A.J. Scott 1978
			71. <i>Chenopodium ambrosioides</i> L. 1753
			72. <i>Chenopodium aristatum</i> L. 1753
			73. <i>Chenopodium multifidum</i> L. 1753
			74. <i>Chenopodium strictum</i> Roth 1821
			75. <i>Phytolacca americana</i> L. 1753
			76. <i>Portulaca grandiflora</i> Hooker

Phyllum/Division	Class	Order	Species
			77. <i>Portulaca oleracea</i> L. 1753
			78. <i>Tetragonia tetragonoides</i> (Pallas) Kuntze 1891
		Cucurbitales	79. <i>Bryonia dioica</i> Jacq. 1774
			80. <i>Echinocystis lobata</i> (Michx.) Torr. & A. Gray 1840
			81. <i>Sicyos angulatus</i> L. 1753
			82. <i>Thladiantha dubia</i> Bunge 1833
		Cyperaceae	83. <i>Cyperus strigosus</i> L.
		Euphorbiales	84. <i>Euphorbia humifusa</i> Willd. 1813
			85. <i>Euphorbia maculata</i> L. 1753
			86. <i>Euphorbia marginata</i> Pursh 1814
			87. <i>Euphorbia nutans</i> Lag. 1816
		Fabales	88. <i>Amorpha fruticosa</i> L. 1753
			89. <i>Cytisus grandiflorus</i> DC. 1825
			90. <i>Cytisus multiflorus</i> (L. Hér.) Sweet 1826
			91. <i>Cytisus scoparius</i> (L.) Link. 1822
			92. <i>Gleditsia triacanthos</i> L. 1753
			93. <i>Robinia pseudacacia</i> L. 1753
			94. <i>Vicia articulata</i> Hornem. 1807
			95. <i>Vicia ervilia</i> (L.) Willd.
			96. <i>Vicia peregrina</i> L. 1753
		Geraniales	97. <i>Erodium ciconium</i> (L.) L Hér. in Aiton 1789
		Hydrocharitaceae	98. <i>Elodea canadensis</i> Michx 1803
			99. <i>Elodea nuttallii</i> (Planchon) St John 1920
			100. <i>Vallisneria spiralis</i> L. 1753
		Juglandales	101. <i>Juglans nigra</i> L. 1753
		Lamiales	102. <i>Catalpa bignonioides</i> Walter 1788
			103. <i>Salvia reflexa</i> Hornem 1807
			104. <i>Sideritis montana</i> L. 1753
		Malvales	105. <i>Abutilon theophrasti</i> Medikus 1787
		Myrtales	106. <i>Ammania verticillata</i> (Ard.) Lam. 1783
			107. <i>Oenothera biennis</i> L. 1753
			108. <i>Oenothera depressa</i> Greene 1891
			109. <i>Oenothera glazioviana</i> Micheli in Martius 1882
			110. <i>Oenothera oakesiana</i> (A. Gray) S. Watson 1878
			111. <i>Oenothera villosa</i> Thunb. 1794
		Nymphaeales	112. <i>Cabomba caroliniana</i> A. Gray 1837tr

Phyllum/Division	Class	Order	Species
		Oleales	113. <i>Fraxinus americana</i> L. 1753 114. <i>Fraxinus pennsylvanica</i> Marshall 1785 115. <i>Syringa vulgaris</i> L. 1753
		Oxalidales	116. <i>Oxalis corniculata</i> L. 1753 117. <i>Oxalis stricta</i> L. 1753
		Poales	118. <i>Bromus catharticus</i> Vahl 1791 119. <i>Echinochloa crus-galli</i> (L.) Beauv. 1812 120. <i>Echinochloa oryzoides</i> (Ard.) Fritsch 1891 121. <i>Typha laxmannii</i> Lepechin 1801
		Polygonales	122. <i>Polygonum orientale</i> L. 1753 123. <i>Reynoutria japonica</i> Houtt. 1777 124. <i>Reynoutria sachalinensis</i> 125. <i>Reynoutria x bohemica</i> Chrtek & Chrtkova
		Ranunculales	126. <i>Consolida ajacis</i> (L.) Schur 1853 127. <i>Consolida orientalis</i> (S. Gay in Desm.) Schröd. 1909 128. <i>Consolida regalis</i> S. F. Gray 1821
		Rosales	129. <i>Duchesnea indica</i> (Andrews) Focke in Engler & Prantl 1888 130. <i>Elaeagnus angustifolia</i> L. 1753 131. <i>Prunus padus</i> L. 1753 132. <i>Prunus serotina</i> Poir. 1804
		Rubiales	133. <i>Rubia tinctorum</i> L. 1753
		Rutales	134. <i>Ailanthus altissima</i> (Miller) Swingle 1916
		Salicales	135. <i>Populus x canadensis</i> Moench.
		Sapindales	136. <i>Acer negundo</i> L. 1753 137. <i>Koelreuteria paniculata</i> Laxm. 1772 138. <i>Rhus typhina</i> L. 1756
		Scrophulariales	139. <i>Cymbalaria muralis</i> P. Gaertner, B. Meyer et Scherb. 1800 140. <i>Veronica peregrina</i> L. 1753 141. <i>Veronica persica</i> Poir. 1808
		Solanales	142. <i>Cuscuta campestris</i> Yuncker 1932 143. <i>Cuscuta trifolii</i> Bab. 1843 144. <i>Datura stramonium</i> L. 1753 145. <i>Lycium barbarum</i> L. 1753 146. <i>Nicandra physalodes</i> (L.) Gaertner 1791 147. <i>Solanum cornutum</i> Lam. 1797 148. <i>Solanum elaeagnifolium</i> Cav. 1795

Phylum/Division	Class	Order	Species	
		Urticales	149. <i>Broussonetia papyrifera</i> (L.) Vent. 1799 150. <i>Celtis occidentalis</i> L. 1753 151. <i>Humulus scandens</i> (Loureiro) Merr. 1935 152. <i>Maclura aurantiaca</i> Nutt. 1818 153. <i>Ulmus pumila</i> L. 1753	
		Vitales	154. <i>Parthenocissus quinquefolia</i> (L.) Planch. 1887 155. <i>Vitis riparia</i> Michx. 156. <i>Vitis rupestris</i> Scheele 1848	
		Zygophyllales	157. <i>Tribulus terrestris</i> L. 1753	
		Liliopsida	Commelinales	158. <i>Commelina communis</i> L. 1753
		Juncales	159. <i>Juncus tenuis</i> Willd. 1799	
		Poales	160. <i>Cenchrus incertus</i> M.A. Curtis 1837 161. <i>Dasypirum villosum</i> (L.) Borb. 1897 162. <i>Eleusine indica</i> (L.) Gaertn. 1788 163. <i>Lolium multiflorum</i> Lam. 1778 164. <i>Panicum capillare</i> L. 1753 165. <i>Panicum miliaceum</i> L. 1753 166. <i>Paspalum paspalodes</i> (Michx.) Scribner 1894 167. <i>Phalaris canarensis</i> L. 1753 168. <i>Setaria italica</i> (L.) P. B. 1812 169. <i>Sorghum halepense</i> (L.) Pers. 1805 170. <i>Sorghum x sudanense</i> (Piper) Stapf. 1917 171. <i>Sporolobus indicus</i> (L.) R.Br. 1810 172. <i>Tragus racemosus</i> (L.) All. 1785	

References: Selected literature (research articles, proceedings and abstracts) related to the Serbian invasive alien species

- Auger Rozenberg MA, Budryš E, Petanidou T, Glavendekić M, Roques A (2009) Impact of invasive Rose seed Chalcids on native wild Roses and Associated Entomofauna in Europe. International Congress on Biological Invasions, Symposium S2 "Interactions between IAS and native species", Fuzhou, China, 2-6 November 2009, p 44 <http://www.icbi2013.org/admin/newfile/201301161628200645.pdf>. Accessed 04 June 2015
- Bobinac M (2012) Consequences of *Ailanthus altissima* (Mill.) Swingle colonization on the structure of lime coppice stands in NP Fruska Gora. *Acta biologica iugoslavica - Acta herbologica* 21: 51-60
- Budakov Lj, Maletin S (1984) Sex distribution in the population of Prussian carp (*Carassius auratus gibelio* Bloch) in waters of Vojvodina. The Proceedings of „The third congress of ecologists of Yugoslavia“, Book I, Sarajevo, pp 127-132 (In Serbian)
- Cakić P, Petrović Z, Paunović M (1996) Unsere Brutbefunde von *Hypophthalmichthys molitrix* (Valenciennes,

- 1884) im Hauptgerinne der Donau bei Beograd (Jugoslawien). 31. Konferenz der IAD, Baja_Ungarn 1996, Wissenschaftliche Referate, pp 315-318 (In German)
- Cakic P, Lenhardt M, Petrovic Z (2000) The first record of *Gasterosteus aculeatus* L. 1758 (Pisces: Gasterosteidae) in the Yugoslav section of Danube. *Acta biologica iugoslavica – Acta Ichthyologia* 32(1): 79-82
- Cakic P, Lenhardt M, Mickovic D, Sekulic N, Budakov Lj (2002) Biometric analysis of *Syngnathus abaster* populations. *J Fish Biol* 60:1562-1569
- Cakic P, Lenhardt M, Kolarevic J (2004) *Sinergasilus polycolpus*, a new copepod species in the ichthyofauna of Serbia and Montenegro. *Dis Aquat Organ* 58:265–266
- Cakic P, Lenhardt M, Kolarevic J, Mickovic B, Hegedis A (2004) Distribution of the Asiatic cyprinid *Pseudorasbora parva* in Serbia and Montenegro. *Journal of Fish Biology* 65: 1431-1434
- Cetkovic A, Mokrousov M, Plecas M, Bogusch P, Antic D, Djorovic-Jovanovic Lj, Krpo-Cetkovic J, Karaman M (2011) Status of the potentially invasive Asian species *Sceliphron deforme* in Europe, and an update on the distribution of *S. curvatum* (Hymenoptera: Sphecidae). *Acta entomologica Serbica* 16:91-11
- Cetkovic A, Cubrilovic B, Plecas M, Popovic A, Savic D, Stanisavljevic Lj (2012) First records of the invasive American wasp *Isodontia mexicana* (Hymenoptera: Sphecidae) in Serbia. *Acta entomologica Serbica* 17:63-72
- Cirkovic M, Glavendekic M (2006) Application of insecticides in control of the horse chestnut miner *Cameraria ohridella* Deschka i Dimic (Lepidoptera, Gracillariidae). VIII Consultation, on Plant Protection, Zlatibor, Serbia, 27.11-02.12.2006. Book of abstracts, p 17 (In Serbian)
- Cvijan M, Fuzinato S (2012) *Cylindrospermopsis raciborskii* (Cyanoprokaryota): Potential invasive and toxic species in Serbia. *Botanica Serbica* 36:3-8
- Cvijanovic G, Lenhardt M, Hegedis A (2005) The first record of black bullhead *Ameiurus melas* (Pisces, Ictaluridae) in Serbian waters. *Arch Biol Sci* 57(4):21–22
- Djedovic S, Vuksa M, Stojnic B, Jokic G (2012) Retrospective analysis of *Arion lusitanicus* Mabilie control in ornamental plant nurseries. *Biljni lekar* 40(5):431-436 (In Serbian)
- Djukic M, Djunisijevic-Bojovic D, Grbic M, Skocajic D, Obratov-Petkovic D, Bjedov I (2012) Influence of nitrogen form on growth of invasive species *Acer negundo* L. and *Ailanthus altissima* (Mill.) Swingle. *Bulletin Faculty of Forestry* 105:61-72. doi:10.2298/GSF1205061G (in Serbian)
- Dzigurski D, Ljevnaic-Masic B, Nikolic Lj (2012) Invasive plants in weed flora in organic agriculture. *Acta biologica iugoslavica - Acta herbologica* 21:21-29
- Dzigurski D, Nikolic Lj, Ljevnaic-Masic B (2012) Ecological analysis of the weed flora in organic production. *Journal on Processing and Energy in Agriculture* 16(2):67-70
- Dzigurski D, Nikolic Lj (2013) Harmful plants in grassland vegetation ass. *Trifolio-Agrostietum stoloniferae* Markovic 1973 in Vojvodina. *Savremena poljoprivreda* 62:199-205
- Gagic R, Glavendekic M (2008) Entomofauna of *Amorpha fruticosa* L. (Fabaceae: Astragaleae) in Serbia. 2nd International Symposium "Intractable weeds and plants invaders", Osijek, Croatia, 14-18 September 2008. *Book of Abstracts* p 57
- Gagic R, Mihajlovic Lj, Glavendekic M (2008) *Acanthoscelides pallidipennis* (Coleoptera: Bruchidae), a spermatophagous insect of indigo bush (*Amorpha fruticosa* L.) and its natural enemies in Serbia. *Acta biologica iugoslavica - Acta herbologica* 17(2):195-201
- Gavrilovic B, Savic D (2013) Invasive Bruchid species *Bruchidius siliquastri* (Delobel, 2007) and *Megabruchidius tonkineus* (Pic, 1914) (Insecta: Coleoptera: Chrysomelidae: Bruchle) new in the fauna of Serbia: Review of the distribution, biology and host plants. *Acta entomologica serbica* 18(1-2):129-136
- Gergely J, Tucakov M (2004) Amur sleeper (*Percottus glenii*): the first finding in Vojvodina (Serbia). *Halszat* 97:158–160
- Glavendekic M (2005) The role of insect defoliators and pathogen *Phytophthora querceina* HS Jung in drying oak forests. *Forestry* 3:97-106 (In Serbian)
- Glavendekic M, Mihajlovic Lj, Petanovic R (2005) Introduction and spread of invasive mites and insects in Serbia and Montenegro. *Plant Protection and Plant Health in Europe "Introduction and Spread of Invasive Species"*, Berlin, Germany. *Symposium Proceedings* No. 81 p 229-230
- Glavendekic M (2006) *Epichoristodes acerbella* (Walker) (Lepidoptera: Tortricidae): A new species in the fauna of Serbia. *Acta entomologica Serbica* 11(1-2):77-81
- Glavendekic M (2006) Invasive Pests of Forest and Ornamental Nursery Stock. 70th Anniversary of Plant Protection Institute and Annual Balkan Week of Plant

- Health, Kostinbrod, Bulgaria, 28-31 May 2006. Book of Abstracts p 29
- Glavendekic M, Mihajlovic Lj (2007) Citrus flatid planthopper *Metcalfa pruinosa* (Say) (Hemiptera: Flatidae) and locust gall midge *Obolodiplosis robiniae* (Halde-man) (Diptera:Cecidomyiidae): new invasive alien species in Serbia. International Conference „Alien Arthropods in South East Europe Crossroad of the three Continents“ (AASEE), Sofia, Bulgaria, 19-21 September 2007, Proceeding of the International Conference pp 5-9. <http://www.entomophaga.com/conf/1.pdf>. Accessed 04 June 2015
- Glavendekic M, Mihajlovic Lj (2007) Invasive alian insects – pathways and significance. Plenary papers and abstracts, Symposium of Entomologists of Serbia 2007 with International Participation, Užice, Serbia (In Serbian)
- Glavendekic M (2008) Control of *Cameraria ohridella* Deschka & Dimic (Lepidoptera, Gracillariidae) in public green. Plant Protection News 2008/2:67-69. ISSN 1727-1320. (In English)
- Glavendekic M (2008) *Reynoutria japonica* Houtt. and *Reynoutria x bohemica* Chrtek & Chrtková (Polygonaceae) in Serbia. Forestry 60(1-2):67-72 (In Serbian)
- Glavendekic M, Dajic Z (2008) Japanese knotweed s.l. (*Reynoutria*, *Polygonaceae*) in Montenegro. The 3rd International Symposium of Ecologists in Montenegro (ISEM3), Herceg Novi, Montenegro, 8-12 October 2008, Book of Abstracts p. 83
- Glavendekic M, Marjanovic S (2008) Alien insect pests on black locust (*Robinia pseudoacaccia* L.) and bristly locust (*Robinia hispida* L.) and their antagonists. 2nd International Symposium ”Intractable weeds and plants invaders”, Osijek, Croatia, 14-18 September 2008. Book of Abstracts p 59
- Glavendekic M, Mihajlovic L, Marjanovic S (2008) *Platygaster robiniae* Buhl & Duso (Hymenoptera, Platygastridae) parasitoid of *Obolodiplosis robiniae* (Diptera, Cecidomyiidae) in Serbia and Montenegro. 6th International Conference „Current state and prospects of development of microbiology and biotechnology“, Minsk, Belarus, 2-6 June. Book of Proceedings 2:358-360 (In English)
- Glavendekic M, Mihajlovic Lj, Petrovic-Obradovic O (2008) Ornamental plants as invasive species and hosts of invasive insects. IX Conference on Plant Protection, Zlatibor, Serbia, 24-28 November 2008, Proceeding book pp 24-26 (In Serbian)
- Glavendekic M (2009) Invasive and alien species of insects and mites in Serbia and neighboring countries (without *Lymantria dispar* L.). In Grey and semi-grey literature from Serbia (and neighboring countries/territories), Jaksic P. (ed) ver. 3, Integrated project ALARM – TTC Participant 63, Contract number: GOCE-CT-2003-506675, p. 89-148, Belgrade, <http://www.alarmproject.net/alarm/cms/index.php?z=3>
- Glavendekic M, Mihajlovic Lj (2009) Significance of *Platygaster robiniae* Buhl & Duso (Hymenoptera, Platygastridae) in biological control of *Obolodiplosis robiniae* (Haldeman) (Diptera, Cecidomyiidae) in Serbia and Montenegro. VI Congress of Plant Protection of symposium on biological control of invasive organisms, Plant Protection Society of Serbia, Zlatibor, Serbia, 23-27 November 2009. Proceedings pp 157-163
- Glavendekic M, Roques A (2009) Invasive Species Following New Crops. In: Feldmann F, Alford DV, Furk C (eds) Crop Plant Resistance to Biotic and Abiotic Factors: Current Potential and Future Demands. Proceedings of the 3rd International Symposium on Plant Protection and Plant Health in Europe. Berlin, Germany, pp 328-337
- Glavendekic M (2010) Current insects on ornamental plants in Serbia and their economic and ecological importance. Biljni lekar 38(2):122-133 (In Serbian)
- Glavendekic M (2010) *Nematus tibialis* Newman, 1837 – locust sawfly, false acacia sawfly (Hymenoptera: Tenthredinidae). In Alien Terrestrial Arthropods of Europe, Roques A., Kenis M., Lees D., Lopez-Vaamonde C., Rabistch W., J-Y. Rasplus, Roy D., (eds.) BioRisk No. 4, Special Issue, Pensoft Publishing , Moscow & Sofia
- Glavendekic M (2010) The current economic and ecologically important insects on ornamental plants in Serbia. Biljni lekar 2:122-133 (In Serbian)
- Glavendekic M, Mihajlovic Lj, Hrasovec B (2010) Native species *Homalotylus flaminus* Dalman (Hymenoptera, Encyrtidae) parasitoid of *Harmonia axyridis* in Balkan Peninsula. Book of Abstracts. “Population Dynamics, Biological Control, and Integrated Management of Forest Insects”, IUFRO WP 7.03.06 “Integrated management of Forest defoliating Insects”, IUFRO WP 7.03.07 “Population Dynamics of Forest Insects”, IUFRO WP 7.03.13 “Biological Control of Forest Insects and Pathogens”, 12th to 16th September (2010), Eberswalde, University of Applied Sciences Eberswalde,

- Faculty of Forest and Environment, Applied Ecology and Zoology, p. 47
- Glavendekic M, Roques A (2010) *Dryocosmus kuriphilus* (Yasumatsu), Chestnut gall wasp (Hymenoptera, Cynipidae). In: Roques A., Kenis M., Lees D., Lopez-Vaamonde C., Rabistch W., J-Y. Rasplus, Roy D. (eds) Alien Terrestrial Arthropods of Europe, BioRisk, No. 4, Special Issue, Pensoft Publishing, Moscow & Sofia
- Glavendekic M, Roques A (2010) *Metcalfa pruinosa* (Say), Citrus Flatid Planthopper (Hemiptera: Flatidae). In: Roques A., Kenis M., Lees D., Lopez-Vaamonde C., Rabistch W., J-Y. Rasplus, Roy D. (eds) Alien Terrestrial Arthropods of Europe, BioRisk, No. 4, Special Issue, Pensoft Publishing, Moscow & Sofia
- Glavendekic M, Roques A, Mihajlovic L (2010) An ALARM Case study: The rapid colonization of an introduced tree, black locust by an invasive North-American midge and its parasitoids. In: Settele J, Penev L, Georgiev T, Grabaum R, Grobelenik V, Hammen V, Klotz S, Kotarac M, Kühn I (eds.). *Atlas of Biodiversity Risk*, Pensoft Publishing, Sofia & Moscow, pp 157-158
- Glavendekic M (2011) *Pulvinaria hydrangeae* Steinweden 1946 (Hemiptera: Coccidae) - hydrangeas pest. XI Consultation on Plant Protection. Zlatibor, Serbia 28.11-02.12.2011, Book of abstracts, pp 60-61 (In Serbian)
- Glavendekic M (2012) Distribution and ecology of alien invasive insects in Serbia, Julius-Kühn-Archiv, (2012), No. 438, 117-118, Julius Kühn Institut, Bundesforschungsinstitut für Kulturpflanzen, Quedlinburg, Germany <http://pub.jki.bund.de/index.php/JKA/article/view/670/2244>. Accessed 04 June 2015
- Glavendekic M, Golubovic Curguz V, Bjedov I, Obratov-Petkovic D (2013) Invasive species in forestry and landscape architecture and horticulture. XII Consultation on Plant Protection, Plant protection Society, Belgrade, Serbia 25-29 November 2013, Book of abstracts pp 131-133 (In Serbian)
- Glavendekic M, Lazarevic M (2013) Biological control of aphids on public green in Belgrade. International scientific Conference „Biological control: Development, Issues and Prospects“, Poznan, Poland, 14-17 May 2013, Conference Materials pp 9-11
- Glavendekic M, Petrovic J, Petakovic M (2013) Alien invasive species *Aproceros leucopoda takeuchi* (Hymenoptera: Argidae): Elm pest in Serbia. *Forestry* 65(1-2):47-56 (In Serbian)
- Gninenko YuI, Glavendekic M (2010) *Obolodiplosis robiniae* identification recommendations. - VNIILM: St. Petersburg - Pushkin, p 23. ISBN 978-5-94219-172-6
- Grbic M, Skocajic D, Obratov Petkovic D, Bjedov I, Djukic M, Djunisijevic Bojovic D (2011) Pre-sowing treatments to breaking seed dormancy of *Pterocarya stenoptera* C. DC. as an indicator of potential invasiveness. *Bulletin Faculty of Forestry* 103:29-40. doi:10.2298/GSF1103029G
- Havelka J, Shukshuk AH, Ghaliow ME, La Amari M, Kavalieratos NG, Tomanovic Z, Rakhshani E, Pons X, Stary P (2011) Review of invasive grapevine aphid, *Aphis illinoisensis* Shimer, and native parasitoids in the Mediterranean (Hemiptera, Aphididae; Hymenoptera, Braconidae, Aphidiidae). *Arch Biol Sci* 63(1):269-274
- Hegedis A, Nikcevic M, Mickovic B, Jankovic D, Andjus RK (1991) Discovery of the goby *Neogobius gymnotrachelus* in Yugoslav fresh waters. *Arch Biol Sci* 43:39-40
- Hegedis A, Lenhardt M, Mickovic B, Cvijanovic G, Jaric I, Gacic Z (2007) Amur sleeper (*Perccottus glenii* Dubowski, 1877) spreading in the Danube River Basin. *J Appl Ichthyol* 23:705-706
- Hristic DJ (1977) Modification in composition of fish populations with introduction of grass carp (*Ctenopharyngodon idella* Val.) in closed system of channels in melioration region. *Ribarstvo Jugoslavije* 32:33-36 (In Serbo-Croatian)
- Hummel HE (2003) Introduction of *Diabrotica virgifera virgifera* into the Old World and its consequences: a recently acquired invasive alien pest species on *Zea mays* from North America. *Comm agri app biol sci* 68(4):45-57
- Hummel HE, Baca FI, Erski P (2003) Orientation disruption of *Diabrotica virgifera virgifera* in maize by a liquid MCA formulation released from paper squares in the Banat region of Serbia and Montenegro. *Comm agri app biol sci* 68(4):99-104
- Jankovic D (1998) Natural reproduction by Asiatic herbivorous fishes in the Yugoslav section of the River Danube. *Ital J Zool* 65:227-228
- Janjic V, Radivojevic Lj, Jovanovic V (2011) Common ragweed (*Ambrosia artemisiifolia* L.): A harmful weed, ruderal and allergenic plant in the territory of Belgrade. *Acta biologica iugoslavica - Acta herbologica* 20(2):57-66
- Jeremic S, Radosavljevic V (2009) Outbreak of new fish diseases in Serbia. IV International conference “Fishery”, Faculty of Agriculture, Belgrade, Serbia, pp 180-185

- Jerinic-Prodanovic D (2011) The first finding of the fig psylla *Homotoma ficus* L. (Hemiptera, Psylloidea, Homotomidae) in Serbia. *Pesticidi i fitomedicina* 26(3):205-212
- Jovanovic V, Nikolic B, Janjic V, Umiljendic-Gajic J, Stankovic-Kalezic R (2010) Germination of common ragweed (*Ambrosia artemisiifolia* L.) seeds in the laboratory depending on several technical parameters. *Acta biologica iugoslavica - Acta herbologica* 19(2):89-98
- Karaman M (1983) *Pseudorasbora parva* Schlegel (Pisces, Cyprinidae) a new element in the ichthyofauna of Serbia. The Second symposium of SR Serbia fauna, Belgrade, Serbia, Book of Proceedings pp 127-130 (In Serbian)
- Konstantinovic B, Meseldzija M (2004) Weed control in ruderal sites: Field hygiene. *Biljni lekar* 32(6):472-474 (In Serbian)
- Konstantinovic B, Meseldzija M. (2006) Occurrence, spread and possibilities of invasive weeds control in sugar beet. *Matica Srpska Journal for Natural Sciences* 110:173-178
- Konstantinovic B, Meseldzija M, Konstantinovic B (2007) Invasive and quarantine fodder weed species and possibilities of their control. *Field and Vegetable Crops Research* 44(1):325-332
- Konstantinovic B, Meseldzija M, Konstantinovic B (2008) Mapping of important invasive weeds and their control. *Acta biologica iugoslavica - Acta herbologica* 17(2):53-56
- Krstic D, Topalovic S, Colovic S, Glavendekic M (2008) Case: Awarded as an ornamental plant *Fallopia* become an invasive species. IX Conference on Plant Protection, Zlatibor, Serbia, 24-28 November 2008, Proceeding book pp. 100-101 (In Serbian)
- Lakusic D, Jovanovic S (2012) *Symphytotrichum novae-angliae* (Compositae) new alien species in Serbia. *Botanica Serbia* 36(1):67-70
- Lazarevic P, Stojanovic V, Krivosej Z (2008) *Tragopogon porrifolius* L. subsp. *australis* (Jordan) Br.-Bl. (Compositae) new alien species in the flora of Serbia. *Protection of Nature* 59(1-2): 121-126 (In Serbian)
- Lazarevic P, Krivosej Z, Mijovic B (2012) *Artemisia verlotiorum* Lamotte (Asteraceae), new allochthonous and locally invasive plant species in Serbia. *Protection of Nature* 62:81-89 (In Serbian)
- Lenhardt M, Cakic P, Kolarevic J (2004) Influence of the HEPS Djerdap I and Djerdap II dam construction on catch of economically important fish species in the Danube River. *Ecohydrol Hydrobiol* 4:499-502
- Lenhardt M, Hegedis A, Cvijanovic G, Jaric I, Gacic Z, Mickovic B (2006) Non-native freshwater fishes in Serbia and their impacts to native fish species and ecosystems. *Geoph Res Abstracts, European Geosciences Union* 8, 07727
- Lenhardt M, Hegedis A, Mickovic B, Visnjic J, Jetic Z, Smederevac M, Jaric I, Cvijanovic G, Gacic Z (2006) First record of the North American paddlefish (*Pseudorasbora parva* Valbaum, 1792) in the Serbian part of the Danube River. *Arch Biol Sci* 58(3):27-28
- Lenhardt M, Markovic G, Hegedis A, Maletin S, Cirkovic M, Markovic Z (2011) Non-native and translocated fish species in Serbia and their impact on the native ichthyofauna. *Rev Fish Biol Fisheries* 21:407-421
- Lopez - Vaamonde C, Glavendekic M, Paiva MR (2010) Chapter 4 - Invaded habitats. In: Roques A., Kenis M., Lees D., Lopez-Vaamonde C., Rabistch W., J-Y. Rasplus, Roy D. (eds) *Alien Terrestrial Arthropods of Europe, BioRisk, No. 4: 45-50, Special Issue, Pensoft Publishing, Moscow & Sofia.*
- Ljevnacic-Masic B, Dzigurski D, Nikolic Lj (2013) Floristic analysis of weeds in organic production. *Journal on Processing and Energy in Agriculture* 17(1):33-38
- Maletin S, Pujin V, Budakov Lj (1981) Variations of morphological characters of *Carassius auratus gibelio* Bloch, 1783 (Cyprinidae) in Vojvodina province waters. *Acta Biologica Iugoslavica - Biosystematika* 7(2):181-188
- Maletin S, Budakov Lj (1982) The incidence of *Carassius auratus gibelio* in the Danube through Vojvodinana. *Vodoprivreda*, 14: 75-76 (In Serbian; English summary)
- Maletin S, Grgincevic M, Kostic D (1987) The fecundity of Prussian carp (*Carassius auratus gibelio*) from the Palic lake and Obedska bara swamp. *Proc Nat Sci Matica Srpska* 73:47-59
- Maletin S (1988) The large-mouthed black bass (*Micropterus salmoides* Lacepede, 1802, Pisces - Centrarchidae) presence in the open waters of Vojvodina. Proceedings on the conference: Minerals, rocks, extinct and recent biota of Bosnia and Herzegovina, Sarajevo, Bosnia and Hercegovina, pp 537-539 (In Serbo-Croatian)
- Maletin S, Kostic D (1988) The growth of silver carp (*Hypophthalmichthys molitrix* Val.) in the Danube. *Ichthyologia* 20(1):11-18
- Maletin S (1989) Acclimatization of the introduced fish

- species in the water ecosystems in Vojvodina. Vode Vojvodine 17:1–30 (In Serbian)
- Maletin S, Pujin V (1989) The food of bighead carp (*Hypophthalmichthys molitrix*) in Sava and Bosut River during the period of acclimatization. The proceedings of scientific meeting “Rijeka Sava, zastita i koriscenje voda” Zagreb, Croatia pp 467–475 (In Serbo-Croatian)
- Maletin S, Djukic N (1991) *Coregonus peled* (Gmelin, 1788; Osteichthyes, Coregonidae) a new species in the ichthyofauna of the Yugoslav part of the Danube. Matica Srpska Journal for Natural Sciences 80:157–163
- Maletin S (1992) Exploration state of allochthonous fish fauna in Vojvodinana. Ichthyologia 24(1):19–24
- Maletin S, Djukic N, Kostic D, Miljanovic B (1992) Status of water quality in channel Vrbas—Bezdan based on structure of fish community. The Symposium “Zastita voda 92”, Book of Proceedings pp 34–38 (In Serbian)
- Maletin S, Djukic N, Stojanovic S, Ivanc A, Zderic M, Matic A, Andric B, Radak Lj, Miljanovic B (1994) Meliorative effect of grass carp (*Ctenopharyngodon idella*) in controlling aquatic macrophytes in the Tisza valley. Tiscia, 28:41–45
- Maletin S, Djukic N, Miljanovic B, Ivanc A (1997) Status of allochthonous ichthyofauna of Panonian Basin in Yugoslavia. Acta Biologica Iugoslavica - Ekologija 32(2):87–98
- Marinov-Serafimov P (2010) Determination of allelopathic effect of some invasive weed species on germination and initial development of grain legume crops. Pesticidi i fitomedicina 25(3): 251–259
- Marisavljevic D, Stojanovic S, Pavlovic D, Dolovac-Pfaf E (2007) Presence of the allochthonous invasive weed *Iva xanthifolia* Nutt. in Vojvodinani. Acta Biologica Iugoslavica - Acta herbologica 16(2):105–125
- Markovic G, Simovic S, Vasiljevic V (1996) Possible outcome of largemouth bass (*Micropterus salmoides* (Lacepede, 1802) propagation in water courses and ponds of Yugoslavia. Poljoprivreda i sumarstvo 42:101–107 (In Serbian; English summary)
- Markovic G, Simovic S (1997) Pumpkinseed (*Lepomis gibbosus* L. 1758) — unwelcome member to the ichthyofauna of the Yugoslav reservoirs. The Symposium “Ribarstvo Jugoslavije”, Book of Proceedings pp 123–128 (In Serbian; English summary)
- Matvejev SD (1950) Distribution and bird life in Serbia, Serbian Academy of Science and Art, Belgrade, Serbia (In Serbian)
- Mihajlović Lj., Glavendekić M. M., Jakovljević I., Marjanović S. (2008): *Obolodiplosis robiniae* (Haldeman) (Diptera: Cecidomyiidae): A new invasive insect on black locust in Serbia. Bulletin Faculty of Forestry 97:197–207. doi:10.2298/GSF0897197M
- Mihajlovic Lj, Glavendekic M (2010) *Dasyneura gleditchiae* (Osten Sacken), honey locust pod midge (Diptera, Cecidomyiidae). In: Roques A., Kenis M., Lees D., Lopez-Vaamonde C., Rabistch W., J-Y. Rasplus, Roy D. (eds) Alien Terrestrial Arthropods of Europe, BioRisk, No. 4, Special Issue, Pensoft Publishing, Moscow & Sofia
- Mihulka S, Pysek P (2001) Invasion history of *Oenothera* congeners in Europe: A comparative study of spreading rates in the last 200 years. *J Biogeography* 28(5):597–609
- Milijasevic T, Glavendekic M (2001) Diseases and pests of ornamental plants with special reference to the horse chestnut. V Yugoslav Symposium on the Plant Protection, Zlatibor, Serbia 03.-08.12.2001, Book of Abstracts pp. 22–23 (In Serbian)
- Nesic M, Obratov-Petkovic D, Skocajic D, Bjedov I (2013) Seed quantity and quality in fruit heads of *Aster lanceolatus* Willd.: Implications for invasion success. Bulletin Faculty of Forestry 108:129–144 (In Serbian)
- Nikolic Lj, Milosev D, Seremesic S, Latkovic D, Cervenski J (2012) Diversity of weed flora in conventional and organic agriculture. Acta biologica iugoslavica - Acta herbologica 21(1):13–20
- Nikolic V, Simonovic P, Karan-Znidarsic T (2007) First record in Europe of a nematode parasite in Amur sleeper *Percottus glenii* Dybowski, 1877 (Perciformes: Odontobutidae). Bull Eur Assn Fish P 27:36–38
- Obratov-Petkovic D, Bjedov I, Radulovic S, Skocajic D, Djunisijevic-Bojovic D, Djukic M (2009) Ecology and distribution of an invasive species *Aster lanceolatus* Willd. on wet habitats in Belgrade. Bulletin Faculty of Forestry 100:159–178. doi:10.2298/GSF0900159O (in Serbian)
- Panov VE, Alexandrov BG, Arbaciauskas K, Binimelis R, Copp GH, Grabowski M, Lucy F, Leuven RSEW, Nehring S, Paunovic M, Semenchenko V, Son MO (2009) Assessing the Risks of Aquatic Species Invasions via European Inland Waterways: from Concepts to Environmental Indicators. Integrated Environmental Assessment and Management 5(1):110–126
- Pantovic M, Ducic J (2009) The implementation of the Convention on Biological Diversity (CBD) and the

- Convention on Wetlands of International Importance, especially as waterfowl habitat (Ramsar Convention) in the Republic of Serbia. Protection of Nature 60(1-2):693-703 (In Serbian)
- Paunovic M, Cacic P, Hegedis A, Kolarevic J and Lenhardt M (2004) A report of *Eriocheir sinensis* (H. Milne Edwards, 1854) [Crustacea: Brachyura: Grapsidae] from the Serbian part of the Danube River. Hydrobiologia 529:275-277
- Paunovic M, Miljanovic B, Simic V, Cacic P, Djikanovic V, Jakovcev-Todorovic, Stojanovic D, Veljkovic A (2005) Distribution of non-indigenous tubificid worm *Branchiura sowerbyi* (Beddard, 1892) in Serbia. Biotechnol Biotec Eq 3: 91-97
- Paunovic M, Csanyi B, Simic V, Stojanovic B, Cacic P (2006) Distribution of *Anodonta (Sinodonta) woodiana* (Rea, 1834) in inland waters of Serbia. Aquatic Invasions 1(3):154-160
- Paunovic M, Csanyi B, Knezevic S, Simic V, Nenadic D, Jakovcev-Todorovic D, Stojanovic B and Cacic P (2007) Distribution of Asian clams *Corbicula fluminea* (Müller, 1774) and *C. flumilis* (Müller, 1774) in Serbia. Aquatic Invasions 2(2):99-106
- Paunovic MM, Borkovic SS, Pavlovic SZ, Saicic ZS, Cacic PD (2008) Results of the (2006) Sava survey: Aquatic macroinvertebrates. Arch Biol Sci 60(2):265-270
- Pavlovic SZ, Milosevic SM, Borkovic SB, Simic VM, Paunovic MM, Zikic RV and Saicic ZS (2006) A report of *Orconectes (Faxonius) limosus* (Rafinesque, 1817) [Crustacea: Decapoda: Astacidea: Cambaridae: *Orconectes*: Subgenus *Faxonius*] in the Serbian part of the River Danube. Biotechnol Biotec Eq 1:53-56
- Peric R, Panjkovic B, Skondric S, Stojisic V (2013) *Sporobolus indicus* (L.) R. Br. (Gramineae), a new adventive species in the flora of Serbia. Arch Biol Sci 65(4):1511-1514
- Petanovic R, Vidovic B (2009) Spider mites (Tetranychoida) pests of greenhouses. Biljni lekar 37(5):553-562 (In Serbian)
- Petrovic N, Glavendekic M (2009) Pest of ash (*Fraxinus* spp) and their economic importance in forestry and horticulture. International meeting of VI Congress of Plant Protection with Symposium on Biological Control of invasive organisms, Zlatibor (Serbia) 23-27. November (2009). Proceeding book, pp 99-100] (In Serbian)
- Petrovic-Obradovic O, Tomanovic Z, Poljakovic-Pajnik L, Vucetic A (2007) An invasive species of aphid, *Prociophil nifolii* (Hemiptera, Aphididae, Eriosomatle), found in Serbia. Arch Biol Sci 59:9-10
- Petrovic-Obradovic O, Vukasinovic D, Vucetic A, Milovanovic P, Krnjajic S (2009) *Aphis spiraeicola* Patch.: New pest of apple in Serbia. Biljni lekar 37(1):7-10 (In Serbian)
- Petrovic-Obradovic O, Tomanovic Z, Poljakovic-Pajnik L, Hrnčić S, Vucetic A, Radonjic S (2010) New invasive species of aphids (Hemiptera, Aphididae) in Serbia and Montenegro. Arch Biol Sci 62(3):775-780
- Plancic J (1967) Prussian carp (*Carassius auratus gibelio*) a new member of our ichthyofauna (In Serbian). Ribarstvo Jugoslavije 22:6 (In Serbo-Croatian)
- Popovic M, Markovic M (2012) Floristic analysis of perennial species on flowerbeds in Belgrade with special attention on invasiveness of the recorded species. Bulletin Faculty of Forestry 106:169-182. doi:10.2298/GSF1206169P
- Protic Lj (2010) Changes in range and increase of heteroptera in Serbia. Protection of Nature 61:93-104 (In Serbian)
- Protic Lj, Zivic N (2012) *Perillus bioculatus* (Fabricius) (Heteroptera: Pentatomidae) in Serbia. Acta entomologica Serbica 17(1-2):23-28
- Radulovic S, Skocajic D, Bjedov I, Djunisijevic-Bojovic D (2008) *Amorpha fruticosa* L. on wet sites in Belgrade. Bulletin Faculty of Forestry 97:221-233. doi:10.2298/GSF0897221R (in Serbian)
- Ristic B, Bozic D, Pavlovic D, Vrbnicanin S (2008) Germination of common ragweed seeds under different light and temperature conditions. Acta Biologica Iugoslavica - Acta herbológica 17(1):175-180
- Sekulic N, Cacic P, Lenhardt M, Vucic D, Budakov Lj (1998) Short-snouted pipefish *Syngnathus abaster* (Acanthopterygii: Syngnathidae) in the Yugoslav section of the Danube. Ichthyologia 31:79-82
- Simic V, Simic S, Paunovic M, Simonovic P, Radojkovic N, Petrovic A (2012) *Scardinius knezevici* Bianco & Kottelat, (2005) and *Alburnus scoranza* Bonaparte, 1845: new species of ichthyofauna of Serbia and the Danube basin. Arch Biol Sci 64(3):981-990
- Simonovic P, Nikolic V (1997) Ichthyofauna of the Vlasina Lake - State and perspectives. In: Blayencic J (ed.) Vlasina Lake - hidrobiological study. Faculty of Biology, Belgrade. pp 179-198 (In Serbian)
- Simonovic P, Nikolic V (1997): Freshwater fish of Serbia: an annotated check list with some faunistic and zoogeographic considerations. Bios Thessaloniki 4:137-156
- Simonovic P, Valkovic B, Paunovic M (1998) Round goby *Neogobius melanostomus*, a new Ponto-Caspian element for Yugoslavia. Folia Zool 47:305-312

- Simonovic P (2001) Fishes of Serbia. NNK International, institute for nature conservation of Serbia, Faculty of biology Belgrade, 247 pp (In Serbian)
- Simonovic P, Paunovic M, Popovic S (2001) Morphology, feeding and reproduction of the round goby, *Neogobius melanostomus* (Pallas), in the Danube River basin, Yugoslavia. J Great Lakes Res 27(3):281-289
- Simonovic P, Maric S, Nikolic V (2006) Occurrence of paddefish *Polyodon spathula* (Walbaum, 1792) in the Serbian part of the lower River Danube. Aquatic Invasions 1(3):183-185
- Simonovic P, Maric S, Nikolic V (2006) Records of Amur sleeper *Perccottus glenii* (Odontobutidae) in Serbia and its recent status. Arch Sci Biol 58(1):7-8
- Simonovic P (2009) Fish Invasion. Flogiston 17:43-64 (In Serbian)
- Simonovic P, Nikolic V, Grujic S (2010) Amazon salin catfish *Pterygoplichthys pardalis* (Castellnnau, 1855) (Loricariidae, Siluriformes), a new fish species recorded in the Serbian section of the Danube River. Second Balkan Conference on Biology, Plovdiv, Bulgaria 21-23 May 2010, Book of Abstracts p 88
- Simonovic P, Nikolic V, Zoric K, Tubic B (2010) Influence of invasive alien species to the ecological status of the Danube River and its main tributaries in Serbia after terms of the EU Water Framework Directive. In: Paunovic, M., Simonovic, P., Simic, V. & S. Simic (eds) Danube in Serbia – Joint Danube Survey 2 pp 281-301
- Simonovic P, Nikolic V, Grujic S (2010) Amazon sailfin catfish *Pterygoplichthys pardalis* (Castelnau, 1855) (Loricariidae, Siluriformes), a new fish species recorded in the Serbian section of the Danube River. Biotechnol Biotec Eq 24:655-660
- Simonovic P, Tosic A, Vassilev M, Apostolou A, Mrdak D, Ristovska M, Kostov V, Nikolic V, Skraba D, Vilizzi L, Copp GH (2013) Risk identification of non-native freshwater fishes in four countries of the Balkans region using FISK. Mediterranean Marine Science 14(2):369-376
- Sipos S, Miljanovic B, Pejic Lj (2004) The first record of Amur sleeper (*Perccottus glenii* Dybowski, 1877, fam. Odontobutidae) in Danube River. IAD Limnological Reports 35:509-510
- Sirka HV, Lakusic D, Sinzar-Sekulic J, Nikolic T, Jovanovic S (2013) *Reynoutria sachalinensis*: A new invasive species to the flora of Serbia and its distribution in SE Europe. Botanica Serbica 37(2):105-112
- Skocajic D, Grbic M, Tomicevic J, Djunisijevic-Bojovic D, Djukic M (2008) *Elaeagnus umbellata* Thunb. as the potential invasive species in Belgrade region. Bulletin Faculty of Forestry 98:177-188. doi:10.2298/GSF0898177S
- Skraba D, Tosic A, Milicic D, Nikolic V, Simonovic P. (2013) Invasiveness assessment of the Chinese mitten crab *Eriocheir sinensis* (H. Milne Edwards, 1853) in the Serbian section of the river Danube. Arch Biol Sci 65(1):353-358
- Spasic R, Krstic B, Ivanovic M, Glavendekic M (2007) Pests and diseases in greenhouses. XIII Symposium of the Conference on Plant Protection. Zlatibor, Serbia 26 - 30 November, Book of Proceedings pp 28-30
- Stavretovic N, Stevanovic J, Mijovic A (2010) Invasive plant species in lawns of Belgrade residential areas. Acta Biologica Iugoslavica - Acta herbologica 19(1):39-47
- Stavretovic N, Petrovic J, Djuric M (2011) Invasive plant species in lawns of Belgrade parks. Acta Biologica Iugoslavica - Acta herbologica 20(2):121-131
- Stefanovic L, Vrbnicanin S, Simic M (2002) The importance of weed flora mapping. Acta Biologica Iugoslavica - Acta herbologica 11(1-2):1-14
- Stefanovic L, Simic M (2006) *Ambrosia artemisiifolia*: Distribution and suppression in maize. Biljni lekar 34(6):451-458 (In Serbian)
- Stefanovic L, Vrbnicanin S, Malidza G, Elezovic I, Stankovic-Kalezic R, Marisavljevic D, Jovanovic-Radovanov K (2006) Mapping of quarantine, invasive and economically damaging weeds in Serbia and their control. Biljni lekar 34(3):195-203 (In Serbian)
- Stevanovic J, Stavretovic N, Obratov-Petkovic D, Mijovic A (2009) Invasive plant species in certain sporting and recreational fields in Belgrade. Acta Biologica Iugoslavica - Acta herbologica 18(2):115-125
- Szalai M, Komaromi J, Bazok R, Barcic J, Kiss J, Toepfer S (2011) Generational growth rate estimates of *Diabrotica virgifera* populations (Coleoptera: Chrysomelidae). J Pest Sci 84(1):133-142
- Thalji R, Stojanovic D (2008) First sighting of the invasive ladybird *Harmonia axyridis* Pallas (Coleoptera, Coccinellidae) in Serbia. Biljni lekar 36(6):389-393 (In Serbian)
- Tomanovic S, Tomanovic Z, Jovanovic S, Boza P, Kavallieratos NG (2004) *Oenothera biennis* L.: An invasive alien plant species as a reservoir of aphidophagous insects in agroecosystems. Arch Biol Sci 56(1-2):13-14
- Tomicevic J, Grbic M, Skocajic D, Radovanovic D (2012)

- Public attitude in the city of Belgrade towards invasive alien plant species. Bulletin Faculty of Forestry 105:189-204. doi:10.2298/GSF1205189T (in Serbian)
- Vasic V, Pap P, Galic Z, Vasic S, Poljakovic-Pajnik L, Drekcic M (2012) The presence of invasive plant species in the reforestation of sessile oak in the National park Fruska Gora. Topola 189-190:99-107
- Vicentic S, Stavretovic N, Petrovic J (2013) Invasive plant species on school green areas in some suburban communities of Belgrade. Forestry 65(3-4):219-228 (In Serbian)
- Vrbnicanin S, Karadzic B, Dajic-Stevanovic Z (2004) Adventive and invasive weed species in Serbia. Acta Biologica Jugoslavica - Acta herbologica 13(1):1-12
- Vrbnicanin S, Malidza G, Stefanovic L, Elezovic I, Stankovic-Kalezic R, Marisavljevic D, Radovanov-Jovanovic K, Pavlovic D, Gavric M (2008) Distribution of some harmful, invasive and quarantine weeds on the territory of Serbia - part I: Spatial distribution and frequency of eight weed species. Biljni lekar 36(5):303-313 (In Serbian)
- Vrbnicanin S, Malidza G, Stefanovic L, Elezovic I, Stankovic-Kalezic R, Marisavljevic D, Radovanov-Jovanovic K, Pavlovic D, Gavric M (2008) Distribution of some harmful, invasive and quarantine weeds on the territory of Serbia, Part II: Spatial distribution and frequency of nine weeds species. Biljni lekar 36(6):408-417 (In Serbian)
- Vrbnicanin S, Malidza G, Stefanovic L, Elezovic I, Stankovic-Kalezic R, Marisavljevic D, Radovanov-Jovanovic K, Pavlovic D, Gavric M (2009) Distribution of some harmful, invasive and quarantine weeds on the territory of Serbia, Part III: Spatial distribution and frequency of eight weeds species. Biljni lekar 37(1):21-30 (In Serbian)
- Vukov D, Jurca T, Rucando M, Igc R, Miljanovic B (2013) *Cabomba caroliniana* A. Gray 1837: A new, alien and potentially invasive species in Serbia. Arch Biol Sci 65(4):1515-1520
- Zoric K, Jakovcev-Todorovic D, Dikanovic V, Vasiljevic B, Tomovic J, Atanackovic A, Simic V, Paunovic M (2011) Distribution of the Ponto-Caspian polychaeta *Hypnia invalida* (Grube, 1860) in inland waters of Serbia. Aquatic Invasions 1:33-38