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sa međunarodnim učešćem

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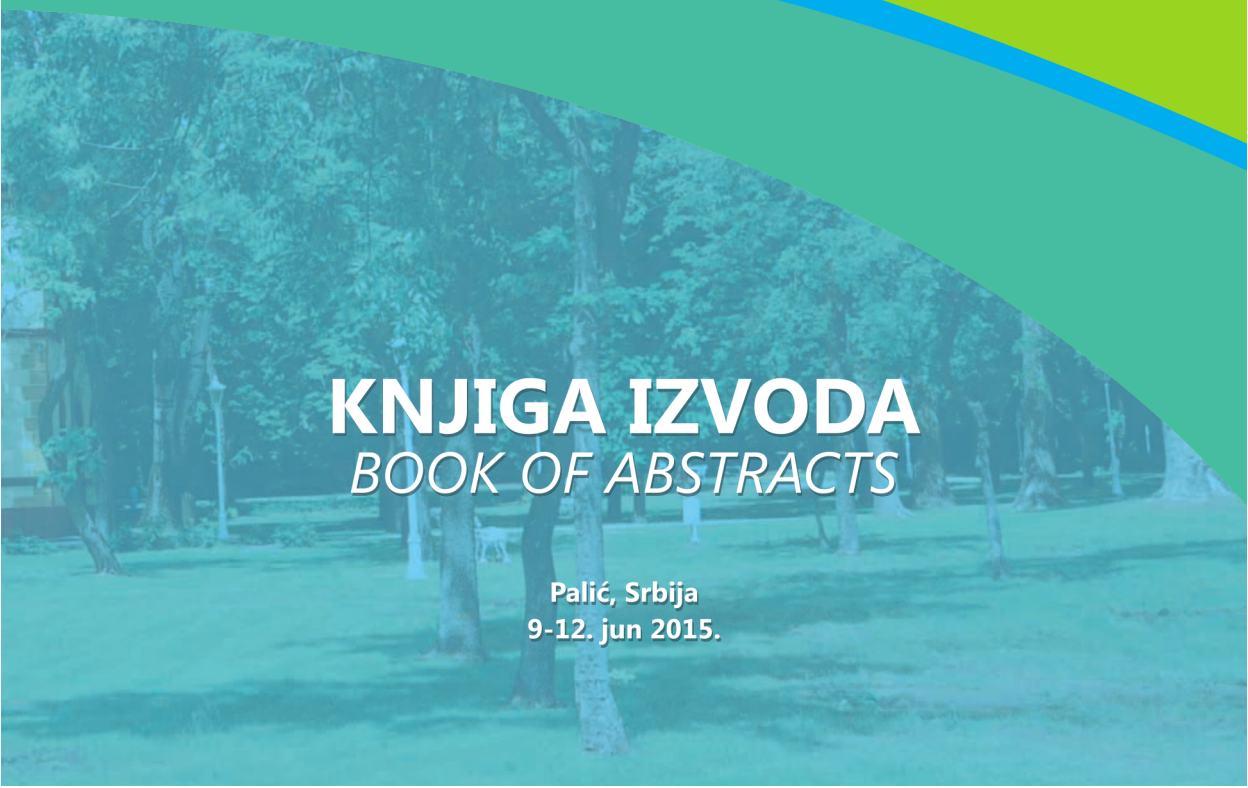

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1/11 Vertikalna distibucija organohlornih pesticida u sedimentu reke Tise
Vertical distributions of organochlorine pesticides in Tisza River sediments
Snežana Štrbac, Mira Pucarević, Nataša Stojić, Nataša Žugić Drakulić, Biljana Panin

1/12 Validacija postojećih indeksa za utvrđivanje porekla teških metala u sedimentima reke Tise
Validation of existing indexes for determining the origin of heavy metals in sediments of the Tisza River
Snežana Štrbac, Milica Kašanin-Grubin, Nebojša Vasić, Ilija Brčeski, Branimir Jovančićević

1/13 Identifikacija izvora policikličnih aromatičnih ugljovodonika (PAH) detektovanih u površinskom sedimentu reke Dunav u neposrednoj blizini Novog Sada
Source identification of polycyclic aromatic hydrocarbons (PAHs) detected in surface sediments of the Danube River in the vicinity of Novi Sad
Maja Brborić, Branislav Vrana, Jelena Radonić, Sabolč Pap, Maja Turk Sekulić

1/14 Primena indeksa ekološkog rizika i indeksa zagađenja u proceni statusa sedimenata
Application of ecological risk index and pollution load index in the assessment of the sediment status
Sanja Sakan, Dubravka Relić, Ivan Anđelković, Dragana Đorđević

1/15 The sediment type determination by ED – XRF spectrometry measurements
Bojan Tanaskovski, Ljiljana Milicic, Mihajlo Jovic, Marjana Stojanovic, Slavka Stankovic

1/16 Određivanje ostataka organohlornih pesticida u zemljištu centralne i istočne Srbije tokom 2014. godine
Determination of organochlorine pesticides residues in the soil of central and eastern Serbia during 2014
Isidora Kecojević, Ivana Vasiljević, Danica Mrkajić, Milana Lazović, Biljana Bajić, Ana Joksimović, Jelena Maksimović

1/17 Organic matter and clay contents impact on the target and remediation values of As, Ni and Cr in soil in Serbia affected by floods
Vesna Radovanović, Zoran Dinić, Jelena Maksimović, Radmila Pivić, Aleksandra Stanojkovic Sebić, Branka Žarković

1/18 Ispitivanje pH zemljišta
Soil pH testing
Snežana Aksentijević, Jelena Kiurski, Vesna Kecić, Ivana Oros

1/19 Application of self-organizing maps for trace element and lead isotope biomonitoring in the Belgrade urban area
Isidora Deljanin, Davor Antanasijević, Mira Aničić Urošević, Milica Tomašević, Aleksandra Perić-Grujić, Mirjana Ristić

1/20 Masene koncentracije PM_{10} čestica u ambijentalnom vazduhu
Mass concentrations of PM10 particles in ambient air
Slađana Meseldžija, Ljiljana Janković-Mandić, Jelena Marković, Đuro Čokeša, Antonije Onjia, Vedrana Vuletić

4/3 The water quality used for irrigation of agricultural soil in the basin of West Morava river
Vesna Radovanović, Zoran Dinić, Jelena Maksimović, Aleksandra Stanojkovic Sebić, Radmila Pivić, Branka Žarković

4/4 Uticaj načina korišćenja i geološke podloge terena na fizičko-hemijske osobine zemljišta - primer Fruška Gora
Influence of land use and geological setting on physico-chemical soil properties - example of Fruška Gora
Milan Milenković, Aleksandar Lazarević, Milica Kašanin-Grubin, Gordana Gajica, Srđan Bojović, Ljuba Josić, Branimir Jovančićević

4/5 Prikaz ekohemijskih karakteristika industrijskog zemljišta u Srbiji na primeru pojedinih lokaliteta
Echochemical characterisics of industrial soil from several locations in Serbia
Sandra Kasalica, Bojana Stanimirović, Vladimir Dražić, Igor Urošević

4/6 Nitratni i nitritni azot u podzemnim vodama poljoprivrednih oblasti
Nitrate and nitrite nitrogen in groundwater of agricultural regions
Olivera Paunović, Jasmina Pastor, Una Marčeta, Aleksandar Đurić, Miroslav Vulić

4/7 Jačanje kapaciteta za upravljanje komunalnim otpadnim vodama grada Novog Sada
Strengthening the capacity of municipal wastewater management in Novi Sad
Boris Obrovski, Veselin Bežanović, Mladenka Novaković, Maja Đogo, Maja Sremački, Ivana Mihajlović, Mirjana Vojinović Miloradov

4/8 Tunel and kolektor Krivelj River and the state of the environment
Slađana Krstić, Milenko Ljubojev, Vesna Ljubojev

4/9 Determination of Platinum in tunnel dust and soils from Brno's agglomeration, Czech Republic
Renata Komendová, Rostislav Dvořák

4/10 Management of pharmaceutical waste
Svetlana Goločorbin-Kon, Nataša Milić, Slobodan Kon, Andjelka Grubin, Momir Mikov

4/11 Određivanje sadržaja toksičnih i mikroelemenata u uzorcima vode, zemljišta i biljnog materijala uzetim u okolini termoelektrane Gacko atomsko - apsorpcionom spektrofotometrijom
Determination of toxic and microelements content in water, soil and plant samples, collected in area of the thermal power plant Gacko by application of atomic absorption spectrometry technique
Vesna Antunović, Snežana Nikolić Mandić, Marija Ilić

4/12 Nitrogen dioxide emission in photocopying process
Jelena Kiurski, Ivana Oros, Vesna Kecić, Snežana Aksentijević

4/13 Environmental aspects of obsolete propellants reuse in industrial explosives
Jovica Đ. Bogdanov, Zoran J. Bajić, Radenko S. Dimitrijević, Mladen M. Vuruna, Mihael M. Bučko

Organic matter and clay contents impact on the target and remediation values of As, Ni and Cr in soil in Serbia affected by floods

Vesna Radovanović[1], Zoran Dinić [2], Jelena Maksimović[2], Radmila Pivić[2], Aleksandra Stanojkovic Sebić[2], Branka Žarković[1]

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After the floods in the republic of Serbia, in May 2014, soil samples, taken in disturbed state from fifty locations from the depth of 0-30 cm, were studied. The content of clay fraction (fraction less than 0.002mm), organic matter content, and total content of As, Ni and Cr were analyzed.

According to the results obtained it was determined that the content of As was above the Maximum Permissible Concentrations (MPC) in 1 analyzed soil samples, then, the content of Cr was above the MPC in 8 analyzed soil samples, while the content of Ni was above the MPC in 27 analyzed samples.

Figure 1. Location map with selected sample sites

The water quality used for irrigation of agricultural soil in the basin of West Morava river

Vesna Radovanović[1], Zoran Dinić[2], Jelena Maksimović[2], Aleksandra Stanojkovic Sebić[2], Radmila Pivić[2], Branka Žarković[1]

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This paper presents the results of testing the water quality for irrigation during the summer seasons 2013, in the basin of the Zapadna ("West") Morava River, from Kratovska stena to Maskare, in three monitoring cycles on 16 selected sites belonging to agricultural area under irrigation. It was established that the surface water quality corresponded to the standards for irrigation according to temperature, pH, conductivity (ECw), dissolved solids (TDS), ion balance: Ca^{2+}, Mg^{2+}, K^{+}, Na^{+}, chlorides (Cl^{-}), sulfates (SO_4^{2-}), Sodium Adsorption Ratio (SAR). The content of the following trace elements and heavy metals was determined: Cr, Ni, Pb, Cu, Zn, Cd, B, As, Fe, Hg.

Figure 1. Location map of Zapadna Morava valley with selected sample sites