



**13<sup>th</sup> International Scientific/Professional Conference  
AGRICULTURE IN NATURE AND  
ENVIRONMENT PROTECTION**



**7<sup>th</sup> – 9<sup>th</sup>, September 2020, Osijek, Croatia**

**FAKULTET AGROBIOTEHNIČKIH ZNANOSTI OSIJEK**  
(Faculty of Agrobiotechnical Sciences Osijek, Vladimira Preloga 1, Osijek)

08:00 – 10:00	<b>PRIJAVA SUDIONIKA I AKREDITACIJA / REGISTRATION</b>
10:00 – 11:00	<b>PRVI DAN / FIRST DAY (07-09-2020)</b> <b>DVORANA / HALL „AULA MAGNA“</b> <b>SVEČANO OTVARANJE / OPENING CEREMONY</b>  <b>DODJELA NAGRADA I ZAHVALNICA</b> <b>DVORANA / HALL „AULA MAGNA “</b>  Plenarna izlaganja / Plenary session Moderatori / Chairmen: Danijel Jug, Márta Birkás, Marija Ravlić
11:00 – 11:20	<b>Márta Birkás, Igor Đekemati, Danijel Jug, Ivica Kisić, Zoltán Kende</b> - Experiences in soil conservation tillage systems
11:20 – 11:40	<b>Rada Đurović-Pečev</b> - The fate and behaviour of pesticides in the environment
11:40 – 12:00	<b>Branislava Lalić, Milena Marčić, Ana Firanj Sremac</b> - A decade of harmful organism and micrometeorological conditions operational monitoring in Serbia: <i>Venturia inaequalis</i> case study
12:00 – 12:20	<b>Danijel Jug, Irena Jug, Boris Đurđević, Bojana Brozović, Davorka K. Hackenberger, Branimir K. Hackenberger, Ksenija Cindrić Kalin, Marija Vihovanec Sabo</b> - Desertification and drought in Europe – Implications and perspectives related to climate change
12:20 – 12:30	<b>Pitanja i rasprava / Question and Discussion</b>  Plenarna izlaganja / Plenary session Moderatori / Chairmen: Irena Jug, Heike Knicker, Boris Đurđević
12:30 – 12:50	<b>Stoian Vlad, Vidican Roxana</b> - Mycorrhizal mechanisms as part of the environmental solutions in sustainable agriculture
12:50 – 13:10	<b>Heike Knicker, Marina Paneque, Maria Lopez-Martin, Marta Velasco-Molina, Jose-Maria de la Rosa</b> - Biochar application or fire management – How does the input of pyrogenic residues affect C, N and P recalcitrance in soil?
13:10 – 13:30	<b>Marija Vihovanec Sabo</b> - Dezertifikacija i degradacija zemljišta – globalne, EU i nacionalne obveze
13:30 – 13:50	<b>Benoit Le Rumeur</b> - Trace elements and seaweeds extracts, tools for a sustainable management of soil functions and plant production
13:50 – 14:00	<b>Pitanja i rasprava / Question and Discussion</b>
14:00 – 15:00	<b>KOKTEL DOBRODOŠLICE / WELCOME COCTAIL</b>
15:00 – 17:00	<b>FAKULTETSKA VIJEČNICA / FACULTY HALL</b> <b>OKRUGLI STOL / ROUND TABLE</b>  "Dezertifikacija, degradacija zemljišta, suša – stare prijetnje novi izazovi"  "Desertification, land degradation and drought - old threats new challenges"  Moderatori / Chairmen: Danijel Jug
SECTION V	<b>Poljoprivredna mehanizacija / Agricultural Machinery</b> Moderatori / Chairmen: Goran Heffer, Ivan Plaščak
17:00 – 17:10	<b>Ivan Vidaković, Goran Heffer, Katica Šimunović, Goran Rozing, Željko Barač, Filip Janješić</b> - Analiza trošenja pokretnih dijelova homogenizatora za miješanje smjese u tvornici stočne hrane –studij slučaja
17:10 – 17:20	<b>Željko Barač, Ivan Plaščak, Tomislav Jurić, Mladen Jurišić, Goran Heffer, Domagoj Zimmer, Ivan Vidaković, Dorijan Radočaj, Petar Kujundžija</b> - Proizvedena razina buke drobiliceu odnosu na pojedine eksploatacijske činitelje
17:20 – 17:30	<b>Domagoj Zimmer, Mladen Jurišić, Ivan Plaščak, Dorijan Radočaj</b> - Primjena robota i robotskih sustava u poljoprivrednoj praksi
17:30 – 17:40	<b>Pitanja i rasprava / Question and Discussion</b> <b>Kraj prvog dana – End of first day</b>



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**DRUGI DAN / SECOND DAY (08-09-2020)  
DVORANA / HALL „AULA MAGNA“**

8:00 – 9:00	
<b>PRIJAVA SUDIONIKA I AKREDITACIJA / REGISTRATION</b>	
<b>SECTION I</b>	<b>Biljna proizvodnja / Plant Production</b> <b>Moderatori / Chairmen: Mladen Jurišić, Bojana Brozović, Edward Wilczewski, Željko Dolijanović</b>
9:00 – 9:10	<b>Dorijan Radočaj, Mladen Jurišić, Ivan Plaščak, Željko Barać, Emanuel Sigurnjak</b> - Monitoring of soybean growth stages using an unmanned aerial vehicle (UAV)
9:10 – 9:20	<b>Angelina Dujković, Helena Ereš, Karolina Vrandečić, Magdalena Matić, Jasenka Ćosić</b> - In vitro antifungalni učinak eteričnih ulja na <i>Pyrenophora graminea</i>
9:20 – 9:30	<b>Andrija Špoljar, Ivka Kvaternjak, Dragutin Žibrin, Mirjana Mužić</b> - Utjecaj uzgoja zobi ( <i>Avena sativa L.</i> ), kukuruza ( <i>Zeamays L.</i> ) i soje ( <i>Glycinemax. L.</i> ) na reakciju i električnu provodljivost tla
9:30 – 9:40	<b>Ivan Lović, Mirjana Brmež, Ivana Majić, Emilija Raspudić</b> - Utjecaj ponovljene sjetve kukuruzana pojavu kukuruzne zlatice ( <i>Diabroticavirgiferavirgifer LeConte – Coleoptera: Chrysomelidae</i> ) u 2018. godini
9:40 – 9:50	<b>Željko Dolijanović, Dušan Kovačević, Snežana Oljača, Srđan Šeremešić, Zoran Jovović</b> - Morphological and productive characteristics of durum wheat in organic farming
9:50 – 10:00	<b>Srdjan Šeremešić, Maja Manojlović, Monika Tomšik, Nataša Vujić, Boris Đurđević, Željko Dolijanović, Bojan Vojnov, Brankica Babec</b> - The effects of mulch and bio-fertilizers on soil properties in organic soybean and buckwheat production
10:00 – 10:10	<b>Sanda Rašić, Jurica Jović, Josipa Šošić, Suzana Kristek</b> - Weeds in sugar beet crops and possibilities of control
10:10 – 10:20	<b>Goran Herman, Vladimir Ivezić, Meri Engler, Helena Žalac, Brigita Popović</b> - Utjecaj supstrata različitog porijekla s dodatkom i bez dodatka cinka na translokaciju cinka u presadnice špinata
10:20 – 10:30	<b>Pitanja i rasprava / Question and Discussion</b>
<b>10:30 – 10:50</b>	
<b>PAUZA ZA KAVU / COFFEE BREAK</b>	
10:50 – 11:00	<b>Edward Wilczewski</b> - The impact of catch crops on physical, chemical and biological properties of soil
11:00 – 11:10	<b>Bojana Brozović, Danijel Jug, Irena Jug, Bojan Stipešević, Boris Đurđević, Doris Vidić</b> - Soil protection with different cover crops in the fallow period
11:10 – 11:20	<b>Boris Ravnjak, Tomislav Vinković, Zdenko Lončarić, Monika Tkalec Kojić, Emerik Galić, Ivana Vinković Vrček, Ivna Štolfa Čamagajevac</b> - Biofortifikacija nanoselenom – utjecaj na mineralni sastav korijena i lista špinata
11:20 – 11:30	<b>Jelena Ravlić, Zvonimir Bede, Milutin Bede, Doris Adašević, Marija Ravlić</b> - Alelopatički utjecaj Teofrastovog mračnjaka ( <i>Abutilon theophrasti Medik.</i> ) na klijavost i rast soje
11:30 – 11:40	<b>Božica Japundžić-Palenkić, Nataša Romanjek Fajdetić, Branimir Vujčić</b> - Usporedba utjecaja dva mikrobiološka gnojiva na rasti razvoj cinije ( <i>Zinnia elegans L.</i> )
11:40 – 11:50	<b>Božica Japundžić-Palenkić, Katarina Širajčić, Nataša Romanjek Fajdetić, Brigita Popović</b> - Utjecaj dviju vrsta tla različitih fizikalno-kemijskih karakteristika na kvalitetu peršinakorjenaša ( <i>Petroselinum crispum ssp. tuberosum Mill.</i> )
11:50 – 12:00	<b>Marija Ravlić, Renata Baličević, Pavo Lucić, Monika Marković, Jelena Ravlić</b> - Allelopathic effect of weed root exudates on crops
12:00 – 12:10	<b>Danijel Jug, Irena Jug, Boris Đurđević, Bojana Brozović, Vedran Viljanac</b> - Reakcija ozime pšenice i kukuruza na reduciranu obradu i gnojdbu dušikom na pseudoqlejnem tlu
12:10 – 12:20	<b>Danijel Jug, Irena Jug, Boris Đurđević, Bojana Brozović, Vedran Viljanac</b> - Reakcija ozime pšenice i kukuruza na reduciranu obradu i gnojdbu dušikom na pseudoqlejnem tlu
12:20 – 12:30	<b>Pitanja i rasprava / Question and Discussion</b>
<b>12:30 – 13:30</b>	
<b>PAUZA ZA RUČAK / LUNCH BREAK</b>	
<b>SECTION II</b>	<b>Animalna proizvodnja / Animal production</b> <b>Moderatori / Chairmen: Tatjana Tušek, Mirjana Baban, Zlatko Puškadija</b>
13:30 – 13:40	<b>Tina Bobić, Filip Bank, Pero Mijić, Mirjana Baban, Vesna Gantner, Maja Gregić</b> - Prevencija šepavosti kod krava infracrvenom termografijom
13:40 – 13:50	<b>Nikica Prvanović Babić, Tugomir Karadjole, Marija Lipar, Nino Maćešić, Iva Getz, Martina Lojkić, Goran Bačić, Marko Samardžija</b> - Neuroaktivnosteroidi ljudi i životinja - javnozdravstveni i ekološki rizik ili lijekovi 21. stoljeća?!
13:50 – 14:00	<b>Kristina Gvozdanović, Minja Zorc, Ivica Bošković, Goran Kušec, Žarko Radišić, Nikolina Boić, Ivona Djurkin Kušec</b> - Runs of Homozygosity of the Istrian Shorthaired Hound dog breed provide evidence of its old origin
14:00 – 14:10	<b>Vesna Gantner, Maja Gregić, Ranko Gantner, Klemen Potočnik</b> - Effect of n-3 unsaturated fatty acids supplementation on milk yield of dairy goats
14:10 – 14:20	<b>Mirna Gavran, Dragan Dokić, Vesna Gantner</b> - Coherence of red deer population with meteorological conditions in hunting area in eastern Croatia in the period 2008-2018



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14:20 – 14:30	<b>Marin Kovačić, Zlatko Puškadija</b> - Prediction of total number of Varroa destructor mites in the honey bee ( <i>Apis mellifera</i> ) colony in late summer
14:30 – 14:40	Pitanja i rasprava / Question and Discussion
14:40 – 14:50	PAUZA ZA KAVU / COFFEE BREAK
<b>SECTION III</b>	<b>Agroekologija / Agroecology</b> Moderatori / Chairmen: <b>Željka Zgorelec, Gabriella Kanižai Šarić, Pavo Lucić</b>
14:50 – 15:00	<b>Željka Zgorelec, Ivica Kisić, Ferdo Bašić</b> - Temporal distribution of Zn, Ni and Cr content and MAC in agricultural soils – Case study Molve, Podravina
15:00 – 15:10	<b>Veljko Vorkapić</b> - Plausible environmental effects of straw removal for the production of bioenergy and bio-based products: a review
15:10 – 15:20	<b>Osama Gazal</b> - Groundwater vulnerability assessment using an improved Agricultural <i>Drastic</i> approach in Arid Region, Case Study: Agricultural Area North Jordan
15:20 – 15:30	<b>Ivan Plaščak, Mladen Jurišić, Dorijan Radočaj, Domagoj Zimmer, Luka Gjajić</b> - Inventarizacija i upravljanje vinogradima u GIS okruženju
15:30 – 15:40	<b>Darija Bilandžija, Marija Galić, Ivica Kisić, Milan Mesić, Nikola Bilandžija, Željka Zgorelec</b> - Temporal variation of soil respiration under energy and arable crops
15:40 – 15:50	<b>Magdalena Remetović, Nikola Sakač, Bojan Šarkanj, Marija Kraševac Sakač</b> - Surfaktanti kao adjuvansi u agrokemikalijama – direktno potencijometrijsko određivanje
15:50 – 16:00	<b>Igor Bogunović, Leon Josip Telak, Paulo Pereira</b> - Effects of soil management techniques on soil water erosion on undeveloped soil in Mediterranean Croatia
16:00 – 16:10	<b>Leon Josip Telak, Igor Bogunović, Paulo Pereira</b> - Comparison study of straw mulching and grass covering on soil properties and soil erosion in a young vineyard of moderate continental climate
16:10 – 16:20	<b>Pavo Lucić, Dora Lončar, Marija Ravlić, Anita Liška, Vlatka Rozman</b> - Laboratory testing of two diatomaceous earths against red flour beetle
16:20 – 16:30	Pitanja i rasprava / Question and Discussion
<b>SECTION IV</b>	<b>Agroekonomija / Agroecconomics</b> Moderatori / Chairmen: <b>Ana Crnčan, Lari Hadelan</b>
16:30 – 16:40	<b>Mateja Jež Rogelj, Nikolina Crnoja, Lari Hadelan, Ornella Mikuš</b> - Regionalna obilježja poljoprivrede Jadranske Hrvatske
16:40 – 16:50	<b>Lari Hadelan, Gabrijel Matešić, Ornella Mikuš, Mateja Jež Rogelj</b> - Prirodni resursi i gospodarska razvijenost zemalja
16:50 – 17:00	<b>Ornella Mikuš, Branka Šakić Bobić, Domagoj Vrtar, Željka Mesić, Lari Hadelan, Mateja Jež Rogelj</b> - Agrookolišne mjere Zajedničke poljoprivredne politike EU: postižu li okolišne ili socioekonomske učinke?
17:00 – 17:10	<b>Dragan Dokić, Maja Gregić, Mirna Gavran, Vesna Gantner</b> - Značaj prostornog planiranja za razvoj poljoprivrede i privlačenje investicija
17:10 – 17:20	Pitanja i rasprava / Question and Discussion
17:20	ZATVARANJE SKUPA / END OF CONFERENCE

13:30 – 14:30	<b>Poster sekcija</b> Moderatori / Chairmen: <b>Bojan Stipešević, Ivona Djurkin Kušec</b>
	<b>Mladen Jurišić, Dorijan Radočaj, Irena Rapčan, Domagoj Zimmer, Antonela Lončar</b> - Modeliranje karteprecizne gnojibde uporabom geostatistike <b>Magdalena Matić, Dario Novoselović, Jasenka Čosić, Angelina Dujković, Karolina Vrandečić</b> - Utjecaj gnojibde dušikom i sorte na zarazu zrna pšenice vrstama <i>Fusarium</i> <b>Vesna Dragičević, Milena Simić, Milan Brankov, Milena Milenković, Branka Kresović, Zoran Dumanović</b> - Grain filling of maize in the function of crop density and genotype <b>Ankica Budimir, Brankica Svitlica, Darko Kiš, Ana Lovrić, Hrvoje Šarčević</b> - Promjene u proizvodnji sadnica duhana u cilju zaštite okoliša <b>Snezana Mladenovic Drinic, Violeta Andjelkovic, Jelena Vukadinovic, Natalija Kravic, Jelena Srdic, Zoran Dumanovic</b> - Biochemical changes in maize seeds at cold storage <b>Maja Karnaš, Melita Lončarić, Karolina Vrandečić, Maja Molnar, Domagoj Šubarić, Vesna Rastija</b> - QSAR analiza kumarinskih derivata s potencijalnim antifungalnim djelovanjem <b>Marijana Tucak, Tihomir Čupić, Daniela Horvat, Goran Krizmanić, Marija Ravlić</b> - Variranje sadržaja kumestrola u populacijama lucerne <b>Luka Poturiček, Josipa Puškarić, Emilija Raspudić, Karolina Vrandečić, Marina Marić, Mirjana Brmež</b> - Monitoring pojave nematoda prenositelja virusa iz roda <i>Xiphinema</i> u vinogradima Vukovarsko-srijemske, Osječko-baranjske i Istarske županije 2018. Godine



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**Irena Rapčan, Mladen Jurišić, Ivan Plaščak, Marin Kolić, Dorijan Radočaj** - Agrotehnika, organizacija i ekonomika uzgoja ječma u OPG-u „SAN“ Budrovcu sezoni 2018./2019.

**Gabriella Kanižai Šarić, Svetlana Milijašević-Marčić, Ivana Potočnik, Elena Petrović, Ivana Majić** - Inhibicija rasta *Alternaria* sp. i *Fusarium* sp. djelovanjem mliječno-kiselih bakterija

**Ivana Jakovljević, Ivana Majić** - Usporedba različitih metoda ulovakukaca vektora bakterije *Xylella fastidiosa* u maslinicima

**Sunčica Guberac, Sanja Grubišić, Vedran Orkić, Sonja Petrović, Sonja Vila, Andrijana Rebekić** - Concentrations of Mg, Fe and Zn in wheatgrass cultivated from wheat cultivars of different origin

**Vedran Orkić, Sanja Grubišić, Sunčica Guberac, Sonja Petrović, Sonja Vila, Andrijana Rebekić** - Differences in Mg, Fe and Zn concentration in wheatgrass juice of wild relatives and modern wheat cultivars

**Kralik Zlata, Olivera Galović, Gordana Kralik, Danica Hanžek** - Utjecaj dodatka ekstrakta cvijeta nevena u hranu nesilica na sadržaj luteina i boju žumanjaka svježih i kuhanih jaja

**Josip Novoselec, Dino Sklepić, Željka Klir, Mario Ronta, Zvonko Antunović** - Fenotipske odlike koza tijekom laktacije u ekološkom uzgoju

**Željka Klir, Andrea Natali Rončević, Josip Novoselec, Zvonko Antunović** - Utjecaj dobi na proizvodni hematološke pokazatelje jaradi u ekološkom sustavu uzgoja

**Marijana Vrbančić, Iva Rojnica, Dijana Horvat** - Primjena konoplje (*Cannabis sativa* L.) u hranidbi brojlera

**Tatjana Tušek, Damir Alagić, Marija Meštrović, Marijana Vrbančić, Miomir Stojnović, Đurica Kalember** - Kretanje vrijednosti širine piska pijetlova i kopuna Sasso hibrida ovisno o uzrastu, soju i dobavljaču pilića

**Mario Ronta, Renata Romić, Stipo Benak, Domagoj Euman, Ana Aračić, Ivana Prakatur, Josip Novoselec, Zvonimir Steiner** - Utjecaj krmiva na kvalitetu peleta krmne smjese

**Mislav Anić, Hrvoje Marjanović, Maša Zorana Ostrogović Sever** - Ten years of carbon flux measurement in pedunculate oak forest (*Quercus robur* L.) in Croatia

**Antonija Kezerle, Natalija Velić, Marija Stjepanović, Darko Velić, Hrvoje Pavlović, Frane Čačić Kenjerić** - Adsorptive removal of Congo Red from synthetic and real wastewater using brewers' spent grain

**Magdalena Remetović, Nikola Sakač, Bojan Šarkanj, Marija Kraševac Sakač** - Surfaktanti kao adjuvansi u agrokemikalijama – direktno potencijometrijsko određivanje

**Ana Crmčan, Jelena Kristić, Sanja Jelić Milković** - Output and economic indicators of farms covered by FADN survey in Croatia

\* Poster sekcija se otvara na početku (09,00), a zatvara na kraju (17,00) 2. dana (08. rujna).  
(Poster section will be open from 09,00 to 17,00 hour at second day (08 September))

\*\* Konferencija će se održati sukladno preporukama i u skladu s važećim propisanim epidemiološkim mjerama zaštite vezane uz virus COVID-19.  
(The conference will be held in accordance with the recommendations and in accordance with the applicable prescribed epidemiological protection measures related to the COVID-19 virus)

\*\*\* Side Event WG – CST

The international workshop of the ISTRO Working Group, WG – CST (Working Group-Conservation Soil Tillage) will be integrated within the international scientific/professional conference at second day (08 September)