



# AGRORES

## 2019

### BOOK OF ABSTRACTS



**BOOK OF ABSTRACTS**



**AGRORES**  
**2019**

**VIII INTERNATIONAL SYMPOSIUM  
ON  
AGRICULTURAL SCIENCES**

**16-18 May, 2019  
Trebinje  
Bosnia and Herzegovina**

## BOOK OF ABSTRACTS



VIII International Symposium on Agricultural Sciences "AgroReS 2019"  
16-18 May, 2019; Trebinje, Bosnia and Herzegovina

*Publisher*

University of Banja Luka  
Faculty of Agriculture  
University City  
Bulevar vojvode Petra Bojovića 1A  
78000 Banja Luka, Republic of Srpska, B&H

*Editor in Chief*

Željko Vaško

*Technical Editors*

Biljana Rogić

*Circulation*

150

CIP - Каталогизacija u publikaciji

Народна и универзитетска библиотека

Републике Српске, Бања Лука

631(048.3)(0.034.2)

INTERNATIONAL Symposium on Agricultural  
Sciences (8 ; Trebinje ; 2019)

Book of Abstracts [Elektronski izvor] / 8th  
International Symposium on Agricultural Sciences  
"AgroReS 2019", 16-18 May, 2019, Trebinje, Bosnia and  
Herzegovina ; [organizer University of Banjaluka,  
Faculty of Agriculture ; editor in chief Željko Vaško]. -  
Banja Luka : Faculty of Agriculture = Poljoprivredni  
fakultet, 2019. - 1 elektronski optički disk (CD-ROM) :  
tekst ; 12 cm



Nasl. sa nasl. ekrana. - Na nasl. str.: AgroRes 2019. -  
Tiraž 150. - Registar.

ISBN 978-99938-93-54-7

COBISS.RS-ID 8128024



VIII INTERNATIONAL SYMPOSIUM ON  
AGRICULTURAL SCIENCES



**AGRORES**  
**2019**

**BOOK OF ABSTRACTS**

16-18 May, 2019  
Trebinje  
Bosnia and Herzegovina

**BOOK OF ABSTRACTS**



**AGRORES**  
**2019**

**ORGANIZERS**

---



**Faculty of Agriculture**  
**University of Banja Luka**

*in cooperation with*



University of Ljubljana  
*Biotechnical Faculty*

**Biotechnical Faculty**  
**University of Ljubljana**



**Agronomická fakulta**  
Mendelova univerzita v Brně

**Faculty of AgriSciences**  
**Mendel University in Brno**



**Genetic Resources Institute**  
**University of Banja Luka**



**RebResNet Scientific Network**



**Faculty of Agriculture**  
**University of Novi Sad**



**CIHEAM**  
BARI

**Mediterranean Agronomic**  
**Institute of Bari**



**BTF**  
Biotehnički fakultet

**Biotechnical Faculty**  
**University of Montenegro**



**The Chamber of Agricultural Engineers**  
**of the Republic of Srpska**

**BOOK OF ABSTRACTS**

## SUPPORTED BY

---

Ministry for Scientific and Technological Development, Higher Education and Information Society of the Republic of Srpska;

Ministry of Agriculture, Forestry and Water Management of Republic of Srpska.

## ORGANIZING COMMITTEE

---

### *President*

Željko Vaško, PhD

### *Secretary*

Biljana Rogić, PhD

Siniša Mitrić, PhD

### *Members*

Miljan Cvetković, PhD; Nebojša Savić, PhD; Đorđe Savić, PhD; Zoran Maličević, PhD; Dragan Brković, ma; Tanja Krmpot, ma; Slobodan Stojnić, ma; Milan Šipka, B.Ag.; Zdravko Marković, B.Ag.; Mladen Babić, B.Ag.; Danijela Kuruzović.

## SCIENTIFIC COMMITTEE

---

Novo Pržulj, president, BiH; Geza Bujdosó, *Hungary*; Adrian Asanica, *Romania*; Đorđe Moravčević, *Serbia*; Klime Beleski, *North Macedonia*; Edi Maletić, *Croatia*; Miljan Cvetković, *BiH*; Gregogi Lang, *USA*; Sezai Erkisli, *Turkey*; Desimir Knežević, *Serbia*; Snježana Hrnčić, *Montenegro*; Danijela Kondić, *BiH*; Duška Delić, *BiH*; Ilija Komljenović, *BiH*; Ivica Đalović, *Serbia*; Jelena Čukanović, *Serbia*; Siniša Mitrić, *BiH*; Jan Turan, *Serbia*; Daniel Falta, *Czech Republic*; Radko Rajmon, *Czech Republic*; Božo Važić, *BiH*; Milanka Drinić, *BiH*; Nebojša Savić, *BiH*; Stoja Jotanović, *BiH*; Goran Mirjanić, *BiH*; Biljana Rogić, *BiH*; Đorđe Savić, *BiH*; Vesna Gantner, *Croatia*; Andrei Jean-Vasile, *Romania*; Hrabrin Bašev, *Bulgaria*; Emil Erjavec, *Slovenia*; Nebojša Novković, *Serbia*; Zorica Vasiljević, *Serbia*; Aleksandra Martinovska, *North Macedonia*; Miomir Jovanović, *Montenegro*; Željko Vaško, *BiH*; Vesna Mrdalj, *BiH*; Stanislav Minta, *Poland*; Mladen Todorović, *Italy*; Hamid El Bilali, *Italy*; Vladimir Meglič, *Slovenia*; Gordana Đurić, *BiH*; Zlatan Kovačević, *BiH*; Mirjana Žabić, *BiH*; Mihajlo Marković, *BiH*; Nikola Mičić, *BiH*; Mihael Toman, *Slovenia*; Pandi Zdruli, *Italy*, Alban Ibraliu, *Albania*.

## *HONORARY COMMITTEE*

---


1. Srđan Rajčević, MSc, Minister for Scientific and Technological Development, Higher Education and Information Society, the Republic of Srpska;
2. Boris Pašalić, PhD, Minister of Agriculture, Forestry and Water Management, the Republic of Srpska;
3. Mirko Ćurić, Mayor of Trebinje City;
4. Radoslav Gajanin, PhD, Rector of University of Banja Luka;
5. Zlatan Kovačević, PhD, Dean of Faculty of Agriculture, University of Banja Luka;
6. Emil Erjavec, PhD, Dean of Biotechnical Faculty, University of Ljubljana;
7. Nedeljko Tica, PhD, Dean of Faculty of Agriculture, University of Novi Sad;
8. Miomir Jovanović, PhD, Dean of Biotechnical Faculty, University of Podgorica;
9. Maurizio Raeli, PhD, Director of Mediterranean Agronomic Institute of Bari;
10. Pavel Ryant, PhD, Dean of Faculty of AgriSciences, Mendel University in Brno;
11. Gordana Đurić, PhD, Director of Genetic Resources Institute, University of Banja Luka;
12. Andrei Jean-Vasile, PhD, RebResNet scientific network, director/scientific coordinator;
13. Jasenko Nedinić, B.Ag., President of The Chamber of Agricultural Engineers of the Republic of Srpska.



# TABLE OF CONTENTS

SYMPOSIUM PROGRAM .....	10
PLENARY LECTURES .....	31
Section: CROP SCIENCE	
Subsection: Poster Presentations.....	35
Section: CROP SCIENCE	
Subsection: Oral Presentations.....	71
Section: HORTICULTURE SCIENCE	
Subsection: Poster Presentation.....	81
Section: HORTICULTURE SCIENCE	
Subsection: Oral Presentations.....	121
Section: ANIMAL SCIENCE	
Subsection: Poster Presentation.....	130
Section: ANIMAL SCIENCE	
Subsection: Oral Presentations.....	146
Section: AGRO-ECONOMY AND RURAL DEVELOPMENT	
Subsection: Poster Presentation.....	153
Section: AGRO-ECONOMY AND RURAL DEVELOPMENT	
Subsection: Oral Presentation.....	172
<b>Section: SUSTAINABLE MANAGEMENT OF NATURAL RESORUCES</b>	
Subsection: Poster Presentation.....	186
<b>Section: SUSTAINABLE MANAGEMENT OF NATURAL RESORUCES</b>	
Subsection: Oral Presentation.....	207

# **SYMPOSIUM PROGRAM**

	<b>Thursday, May 16, 2019</b>
	Large Hall of HET

<i>Time</i>	<i>Activities</i>
09:00 – 15:00	<b>Registration of participants</b>
15:00 – 15:45	<b>Opening ceremony</b>
	Welcome address by: <ul style="list-style-type: none"> <li>- Zlatan Kovačević, PhD, Dean of Faculty of Agriculture, University of Banja Luka;</li> <li>- Srđan Rajčević, MSc, Minister for Scientific and Technological Development, Higher Education and Information Society of the Republic of Srpska;</li> <li>- Boris Pašalić, PhD, Minister of Agriculture, Forestry and Water Management of the Republic of Srpska;</li> <li>- Radoslav Gajanin, PhD, Rector of the University of Banja Luka;</li> <li>- Mirko Ćurić, Mayor of the City Trebinje;</li> <li>- Željko Vaško, PhD, President of the Organizing Committee;</li> <li>- Guests.</li> </ul>
15:45 – 16:15	<b>Welcome cocktail and press conference</b>
	<b>Plenary sessions</b>
	<i>Working Committee:</i> <b>Željko Vaško, Stanislav Minta, Mladen Todorović, Sava Vrbičanin</b>
16:15 – 16:45 PL_01	Mihael J. Toman INTEGRATED FRESHWATER MANAGEMENT FROM AN ECOLOGICAL POINT OF VIEW
16:45 – 17:15 PL_02	Edi Maletić GRAPEVINE GENETIC RESOURCES IN CROATIA - OLD VARIETIES FOR NEW WINE MARKET
17:15 – 17:45 PL_03	Daniel Falta, Stanislav Navrátil, Gustav Chládek HEAT STRESS AND OTHER STRESSES INFLUENCING MILK PRODUCTION DURING SUMMER
17:45 – 18:15	<b>Discussion</b>
18:00 – 20:00	<b>Diner</b>
20:00 – 22:00	<b>Visit to the Museum of Herzegovina with a piano concert and a cocktail</b>

	<b>Friday, May 17, 2019</b>
---	-----------------------------

### PARALEL WORKING SESSIONS

	<b>SECTION: CROP SCIENCE</b>
---	----------------------------------


	<b>Poster Presentations</b>	Large Hall, Hotel Leotar
9:00-10:00	<b>Poster tour in the poster exhibition hall, in the presence of the authors</b>	
	<b>Moderators of poster presentations:</b> <b><i>Danijela Kondić, Ivica Đalović</i></b>	
P1_01	Štefan Týr, Jakub Neupauer <b>EFFECTIVENESS OF WEED CONTROL IN POTATO FIELD</b>	
P1_02	Jelena M.Golijan, Aleksandar Ž. Kostić, Biljana P. Dojčinović, Danijel D. Milinčić, Mirjana B. Pešić, Slavoljub S. Lekić, <b>CONTENT OF SELECTED TOXIC ELEMENTS IN ORGANIC AND CONVENTIONAL MAIZE SEED</b>	
P1_03	Milena Simić, Vesna Dragičević, Milan Brankov, Branka Kresović, Miodrag Tolimir <b>MAIZE YIELD IN DIFFERENT SYSTEMS OF SOIL TILLAGE AND REGIME OF FERTILIZER APPLICATION</b>	
P1_04	Jelena Golijan, Gorica Vuković, Slavoljub Lekić <b>EFFECTS OF PRODUCTION METHODS ON THE MYCOTOXIN CONTENT IN SEEDS OF MAIZE, SPELT WHEAT AND SOYA BEAN</b>	
P1_05	Jelena Golijan, Dušica Jovičić, Slavoljub Lekić <b>EFFECTS OF THE PRODUCTION METHODS ON VIGOUR OF SOYBEAN SEED</b>	
P1_06	Dejan Dodig, Vesna Kandić, Miroslav Zorić <b>RESPONSE OF TWO-ROW AND SIX-ROW BARLEY TO TERMINAL DROUGHT AND HEAT STRESS</b>	
P1_07	Ivica Đalović, Yinglong Chen, Goran Bekavac <b>EFFECTS OF FERTILIZATION ON YIELD AND YIELD COMPONENTS OF MAIZE (<i>ZEA MAYS</i> L.) IN TEMPERATE SEMIARID REGION</b>	
P1_08	Aleksandar Popović, Slaven Prodanović, Natalija Kravić, Jelena Golijan, Mile Sečanski, Danijela Ristić, Vojka Babić <b>QUALITATIVE TRAITS OF <i>TOP CROSS</i> HYBRIDS DERIVED FROM WESTERN BALKAN MAIZE LANDRACES</b>	

P1_09	Jelena Golijan, Ljubiša Živanović, Jela Ikanović, Ljubica Šarčević-Todosijević PRODUCTION POTENTIAL OF BUCKWHEAT IN ŠUMADIJA ON BROWN FOREST SOIL TYPE
P1_10	Željko Lakić, Svetko Vojin, Vera Popović THE AGRONOMIC PROPERTIES OF A NEW VARIETY OF ITALIAN RYEGRASS VUBO
P1_11	Hamdi Imen, Najar Asma, Ben Ghanem hajer, Varsani Arvind FIRST REPORT OF <i>Barley yellow dwarf virus PAV</i> (BYDV-PAV) IN MAIZE ( <i>Zea mays</i> ) AND TRITICALE ( <i>×Triticosecale Wittmack</i> ) IN TUNISIA
P1_12	Željko Dolijanović, Dušan Kovačević, Snežana Oljača, Milena Simić, Zoran Jovović, Srđan Šeremešić WEEDINESS OF SOYBEAN IN DIFFERENT CROP ROTATION
P1_13	Dalibor Tomić, Vladeta Stevović, Dragan Đurović, Milomirka Madić, Jasmina Knežević THE GROWTH DYNAMICS OF SOYABEAN CROP DURING THE GROWING PERIOD AND YIELD ON ACID SOIL
P1_14	Vladeta Stevović, Dalibor Tomić, Dragan Đurović, Milomirka Madić THE GROWTH DYNAMICS OF WHITE LUPIN CROP DURING THE GROWING PERIOD AND YIELD ON ACID SOIL
P1_15	Vladimir Sabadoš, Vlade Đoković, Dragan Dedić SEED PRODUCTION AND MARKETING IN THE TERRITORY OF THE REPUBLIC OF SERBIA FOR THE PERIOD 2006-2018. YEAR
P1_16	Vladimir Sabadoš, Dragan Dedić, Vlade Đoković, Danijela Dorotić, POSTCONTROL TESTS AS ONE OF WAYS TO PROMOTE SEED PRODUCTION IN SERBIA IN PERIOD 2006-2018.
P1_17	Milomirka Madić, Dragan Đurović, Aleksandar Paunović, Desimir Knežević, Dalibor Tomić, Vera Đekić ASSESSMENT OF THE CORRELATION BETWEEN GRAIN YIELD AND YIELD COMPONENTS OF SPRING BARLEY ON ACID SOIL
P1_18	Đurađ Hajder, Saša Marinković, Danijela Kondić THE OVERWINTERING ABILITY OF RAPESEED ( <i>BRASSICA NAPUS</i> L.) PLANTS IN THE REGION OF BANJA LUKA
P1_19	Biljana Kelečević, Milan Šipka, Zlatan Kovačević, Siniša Mitrić DISTRIBUTION OF <i>Xanthium</i> SPECIES ON THE TERRITORY OF BOSNIA AND HERZEGOVINA

P1_20	Milan Biberdžić, Dragana Lalević, Saša Barać, Danijela Prodanović, Vera Đekić, Jelena Stojiljković INFLUENCE OF SOIL TYPE AND COMPACTION ON YIELD OF SOME VARIETIES OF WINTER WHEAT
P1_21	Goran Ostić, Novo Pržulj, Miodrag Dimitrijević, Slavko Radanović, Miroslav Štrbac STRESS AT EARLY VEGETATIVE STAGE AND VIVIPARY IN MAIZE - POTENTIAL INTERDEPENDENCE
P1_22	Borislav Petković, Ilija Komljenović, Darko Aćimović VARIABILITY OF YIELD NATURAL MEADOW TYPE AGROSTIETUM VULGARIS ON MANJACA
P1_23	Borislav Petković, Novo Pržulj, Vojo Radić THE INFLUENCE OF EXTREME WEATHER CONDITIONS ON THE PRODUCTIVITY OF ONE YEAR OLD FEED MIXTURES IN THE MOUNTAINOUS REGION OF THE CITY OF BANJA LUKA
P1_24	Borislav Petković, Ilija Komljenović, Darko Aćimović THE IMPACT OF WEATHER CONDITIONS ON PRODUCTIVITY BREEDING PERENNIAL PLANTS
P1_25	Jelena Ovuka, Sonja Gvozdenac, Jelena Kešelj, Vladimir Miklič INFLUENCE OF DIFFERENT SUBSTRATE ON SUNFLOWER PARENTS LINE SEED GERMINATION
P1_26	Snežana Mladenović Drinić, Jelena Mesarević, Violeta Anđelković, Mirjana Srebrić GRAIN CAROTENOID CONTENT VARIABILITY IN MAIZE INBRED LINES
P1_27	Snežana Tanasković, Miloš Marjanović, Branka Popović, Aleksandar Paunović THE FIRST RECORD OF HARMFULNESS <i>Diabrotica virgifera</i> sp. <i>Virgifera</i> (LeConte, 1868) IN THE RAŠKA DISTRICT, SERBIA
P1_28	Siniša Dakić, Slobodan Vlajić, Stevan Maširević, Jelica Gvozdanović-Varga, Renata Iličić, Dušanka Bugarski, Vladislav Ognjanov SENSITIVITY OF PHYTOPATHOGENIC BACTERIA TO BACTERICIDES <i>IN VITRO</i> CONDITIONS
P1_29	Štefan Týr and Jakub Nyisztor EFFECTIVENESS OF WEED CONTROL IN SOYBEAN FIELD
P1_30	Nikola Grujić, Branimir Nježić, Milan Radivojević MONITORING OF POTATO CYST NEMATODES IN SERBIA

P1_31	Zoran Bročić, Jelena B. Popović-Djordjević, Aleksandar Ž. Kostić, Radivoje Petronijević and Jasmina Oljača FATTY ACIDS PROFILE OF POTATO TUBERS OF KENNEBEC AND KARLENA VARIETIES FROM SERBIA
P1_32	Zoran Jovović, Vera Popović, Željko Dolijanović, Ana Velimirović, Milo Iličković INFLUENCE OF DIFFERENT ORGANIC FERTILIZERS ON THE QUALITY OF LAVENDER ( <i>Lavandula Officinalis</i> CHAIX) SEEDLINGS
	<b>Oral Presentations</b>   Large Hall, Hotel Leotar
	<b>Working Committee:</b> <b><i>Snježana Mladenović Drinić, Novo Pržulj, Vojo Radić</i></b>
	<b>Part I</b>
10:00-10:15 O1_01	Desimir Knežević, Dušan Urošević, Veselinka Zečević, Danica Mićanović, Danijela Kondić, Adriana Radosavac, Sretenka Srdić, Jelica Živić VARIABILITY OF HARVEST INDEX IN WHEAT ( <i>Triticum aestivum</i> L.)
10:15-10:30 O1_02	Jelena Mesarović, Snežana Mladenović Drinić, Milena Simić, Vesna Dragičević, Milan Brankov, Branka Kresović ALTERATIONS OF CAROTENOIDS IN MAIZE GRAIN UNDER DIFFERENT TILLAGE AND FERTILIZER DOSE
10:30-10:45 O1_03	Ivan Kovačević, Đurađ Hajder, Danijela Kondić, Dragan Mandić, Desimir Knežević MORPHOLOGICAL CHARACTERISTICS OF TWO-ROWED BARLEY ( <i>Hordeum sativum</i> ssp. <i>distichum</i> L.) LANDRACES ORIGINATED FROM HERZEGOVINA
10:45-11:00 O1_04	Novo Pržulj, Milan Miroslavljević, Vojislava Momčilović, Zoran Jovović, Dragan Mandić, Miloš Nožinić EFFECT OF CULTIVAR AND YEAR ON FINAL LEAF NUMBER IN WINTER BARLEY ( <i>Hordeum vulgare</i> L.)
11:00-11:15 O1_05	Dragan Mandić, Novo Pržulj, Goran Đurašinović, Zoran Jovović VITEZ – A NEW VARIETY OF WINTER MANY-ROWED BARLEY
11:15-11:30	<b>Coffee break</b>
	<b>Part II</b>
11:30-11:45 O1_06	Miloš Nožinić, Vesna Bojić, Dragan Romčević, Nemanja Babić, Ivana Petrović RAPESEED OIL AS A BIODEGRADABLE LUBRICANT
11:45-12:00 O1_07	Igor Macanović, Mariana Radulović, Duška Delić DETECTION OF TURNIP YELLOWS VIRUS IN OILSEED RAPE ( <i>Brassica napus</i> L.) IN REPUBLIC OF SRPSKA

12:15-12:30 O1_08	Vojo Radić, Ilija Komljenović POLY-CROSS SELECTION OF RED CLOVER
12:30-12:45 O1_09	Dragan Brenjo, Džemil Hajrić, Dragan Tomović RESULTS OF MONITORING OF PESTICIDE RESIDUES IN FOOD ON MARKET OF BOSNIA AND HERZEGOVINA IN 2018
12:45-13:45	<b>Discussion of oral and poster presentations</b>
	<i>Moderators of the discussion on oral presentations: Snježana Mladenović Drinić, Novo Pržulj, Vojo Radić</i> <i>Moderators of the discussion on poster presentations: Danijela Kondić, Ivica Đalović</i>
14:00	<b>Lunch</b>

	<b>SECTION: HORTICULTURE</b>
---	----------------------------------

	<b>Poster Presentations</b>	Large Hall, Hotel Leotar
9:00-10:00	<b>Poster tour in the poster exhibition hall, in the presence of the authors</b>	
	<i>Moderator of poster presentations: Miljan Cvetković, Đorđe Moravčević, Branimir Nježić</i>	
P2_01	Gordana Popara, Nenad Magazin, Biserka Milić, Zoran Keserović, Jelena Kalajdžić PHYSICAL AND CHEMICAL PROPERTIES OF FRUITS OF ČAČANSKA LEPTICA PLUM ( <i>Prunus domestica</i> L.) GRAFTED ON FOUR DIFFERENT ROOTSTOCKS	
P2_02	Jelena Tomić, Franci Štampar, Jerneja Jakopič, Milan Lukić, Žaklina Karaklajić Stajić, Marijana Pešaković, Svetlana M. Paunović PHYTOCHEMICAL ASSESSMENT OF PLUM ( <i>Prunus domestica</i> L.) CULTIVARS SELECTED IN SERBIA	
P2_03	Tanja Krmpot, Ljubomir Radoš, Milan Šipka RESEARCH ON THE POPULATION OF WILD STRAWBERRY ( <i>Fragaria vesca</i> L.) IN THE REGION OF BANJA LUKA	
P2_04	Ranko Prenkić, Milena Stojanović BIOLOGICAL AND POMOLOGICAL CHARACTERISTICS OF SWEET CHERRY CULTIVARS ON <i>Prunus mahaleb</i> L. ROOTSTOCK	



P2_05	Gordana Šebek, Valentina Pavlova, Tatjana Popović BIOCHEMICAL AND POMOLOGICAL CHARACTERISTICS OF FRUIT OF SOME COMMERCIAL MEDLAR CULTIVARS ( <i>Mespilus germanica L</i> ) GROWN IN BIJELO POLJE
P2_06	Tanja Petrović, Brankica Starčević, Snežana Stevanović, Dragana Paunović, Maja Kokolj, Viktor Nedović THE EFFECT OF PASSIVE MODIFIED PACKAGING ON THE QUALITY OF RASPBERRY FRUITS
P2_07	Snežana Stevanović, Tanja Petrović, Tijana Urošević PHYSICOCHEMICAL CHANGES OF APPLE FRUITS DURING STORAGE IN CONTROLLED ATMOSPHERE
P2_08	Žaklina Karaklajić-Stajić, Jelena Tomić, Marijana Pešaković, Milan Lukić, Svetlana M. Paunović, Boris Rilak EFFECTS OF BIOVERMIX FERTILIZER ON THE PHYTOCHEMICAL SCREENING OF BLACKBERRY ČAČANSKA BESTRNA
P2_09	Svetlana M. Paunović, Mira Milinković, Jelena Tomić, Žaklina Karaklajić-Stajić, Milan Lukić, Marijana Pešaković PHENOLIC COMPOUNDS AND ANTIMICROBIAL ACTIVITY IN BERRY AND LEAF EXTRACTS OF BLACK CURRANT ( <i>Ribes nigrum L.</i> ) EXTRACTS
P2_10	Iryna Smetanska, Jasmina Balijagić, Veselinka Zečević, Larisa Rener, Irfan Mujanović, Slađana Savić DETERMINATION THE CONTENT OF CHLOROPHYLL A, CHLOROPHYLL B AND CAROTENOIDS IN DIFFERENT PLANT SPECIES
P2_11	Sanja Anđić, Borut Bosančić, Gordana Đurić, Branimir Nježić EVALUATIONS OF PEAR ( <i>Pyrus communis L.</i> ) CULTIVARS ON SENSITIVITY TO PEAR LEAF BLISTER MITE ( <i>Eriophyes pyri</i> )
P2_12	Biljana Lolić, Biljana Radusin Sopić, Gordana Đurić THE PRESENCE OF <i>Xanthomonas arboricola</i> pv. <i>pruni</i> IN ORCHARDS AND NURSERIES OF THE REPUBLIC OF SRPSKA
P2_13	Zoran Maličević, Milan Jugović, Siniša Mitrić, Borislav Railić, Dragoljub Mitrović THE INFLUENCE OF THE SPRAYER CONTROL ON THE INCREASE IN THE PRODUCTIVITY OF THE MACHINE- TRACTOR AGGREGATE IN THE PROTECTION OF ORCHARDS

P2_14	Zoran Bročić, Mirko Milinković, Ivana Momčilović, Jasmina Oljača, Biljana Veljković, Drago Milošević, Dobrivoj Poštić COMPARISON OF AEROPONICS AND CONVENTIONAL PRODUCTION SYSTEM OF VIRUS-FREE POTATO MINI-TUBERS IN SERBIA
P2_15	Lovro Sinkovič, Mojca Škof, Kristina Ugrinović CULTIVATION PERIOD INFLUENCE OF DIFFERENT <i>Lactuca sativa</i> L. AND <i>Valeriana locusta</i> L. CULTIVARS ON COLOUR PARAMETERS AND CHLOROPHYLL CONTENT
P2_16	Lovro Sinkovič, Mojca Škof, Kristina Ugrinović EFFECT OF NITROGEN FERTILIZER RATES ON PHYSICO-CHEMICAL CHARACTERISTICS OF ONION BULBS ( <i>Allium cepa</i> L. var. <i>cepa</i> )
P2_17	Vida Todorović, Svjetlana Zeljković, Saša Kovačević, Nikolina Đekić THE EFFECT OF BIOREGULATOR APPLICATION ON SEEDLINGS ON EARLY TOMATO YIELD ( <i>Lycopersicon esculentum</i> Mill.)
P2_18	Djordje Moravčević, Nenad Pavlović, Jasmina Zdravković, Željko Dolijanović, Marija Ćosić EFFECT OF SOWING TIME ON THE YIELD AND QUALITY OF THE SWEET MAIZE KERNELS
P2_19	Mehira Perviz OCCURRENCE OF ALTERNARIA LEAF BLIGHT [( <i>Alternaria dauci</i> (Kühn) Groves & Skolko)] OF CARROT IN BOSNIA AND HERZEGOVINA
P2_20	Zorica Ranković-Vasić, Aleksandar Petrović, Nikolina Lisov, Saša Matijašević, Mirjam Vujadinović Mandić, Ana Vuković, Sara Muždalo, Dragan Nikolić PROPERTIES OF GRAPEVINE HYBRID ‘14362’ OBTAINED FROM CROSSING COMBINATION RED TRAMINER × EARLY MUSCAT
P2_21	Nebojša Marković, Zoran Pržić VARIATION OF CLUSTERS AND BERRY STRUCTURAL INDICATORS OF CABERNET SAUVIGNON AND SAUVIGNON BLANC CV. ( <i>Vitis vinifera</i> L.) UNDER THE INFLUENCE OF DEFOLIATION AND HARVEST TIME
P2_22	Dushko Nedelkovski, Klime Beleski, Venelin Roychev, Goran Milanov POTENTIAL WINTER BUDS FERTILITY OF THE VINE VARIETY REBO ( <i>Vitis vinifera</i> L.)
P2_23	Dushko Nedelkovski, Klime Beleski, Goran Milanov, Viktor Gjamovski, Biljana Korunovska IMPROVING THE FRUIT QUALITY OF CRIMSON SEEDLESS ( <i>Vitis vinifera</i> L.) USING VINE TRUNK GIRDLING AS AN AGROTECHNICAL TOOL

P2_24	Tatjana Jovanović-Cvetković, Dragutin Mijatović, Rada Grbić, Alen Predić, Elma Redžić GRAPE QUALITY OF THE VARIETY CABERNET SAUVIGNON ( <i>Vitis vinifera</i> L.) GROWN IN THE BANJA LUKA REGION
P2_25	Tijana Banjanin, Nikolina Lisov, Aleksandar Petrović, Zorica Ranković-Vasić, Milenko Blesić THE QUALITY OF GRAPE AND WINE OF MERLOT AND BLATINA VARIETIES IN THE AGROECOLOGICAL CONDITIONS OF THE TREBINJE VINEYARD
P2_26	Ivana Radojević, Miloš Ristić, Darko Jakšić, Dragan Nikolić, Zorica Ranković-Vasić, Tatjana Jovanović Cvetković, Ivana Mošić AGRO-BIOLOGICAL CHARACTERISTICS OF CLONE VARIETY OF CABERNET SAUVIGNON 169
P2_27	Dušanka A. Popović, Danijel D. Milinčić, Tamara B. Grahovac, Marija M. Bačević Marinković, Miomir Nikšić, Ninoslav Nikićević, Anita Klaus THE TOTAL PHENOLIC CONTENT OF GRAPE BRANDY AND WINE DISTILLATE ENRICHED WITH CHAGA MUSHROOM ( <i>Inonotus obliquus</i> )
P2_28	Vojislav Trkulja, Zorana Miladinović, Nina Čavić OCCURRENCE, DISTRIBUTION AND HARMFULNESS OF <i>Xylella fastidiosa</i> (Wells <i>et al.</i> ) - CAUSED OF PIERCE'S DISEASE OF GRAPEVINE IN EUROPE
P2_29	Ana Anđelković, Milica Živković, Slađana Popović, Dušanka Cvijanović, Dragana Marisavljević, Danijela Pavlović, Snežana Radulović ORNAMENTAL VINE <i>Parthenocissus quinquefolia</i> (L.) PLANCH. 1887 AS AN INVASIVE SPECIES IN SERBIA
P2_30	Boris Dorbić, Tea Zemunović, Emilija Friganović, Elma Temim, Željko Španjol, Katica Arar ATTITUDES AND PERCEPTIONS OF THE KNIN-BASED SECONDARY SCHOOL PUPILS CONCERNING THE GROWING AND USE OF INDOOR PLANTS
P2_31	Andela Vranic, Ksenija Hiel DECORATIVE PLANTS ON THE EXAMPLE OF A FLAT GREEN ROOF (CASE STUDY NOVI SAD)
P2_32	Jasmina Balijagić, Aleksandra Despotović, Veselinka Zečević, Ranko Prenkić, Irfan Mujanović, Ajsela Spahić GERMINATION OF SEEDS OF CALENDULA ( <i>Calendula officinalis</i> L.) IN ECOLOGICAL CONDITIONS OF POLIMLJE, MONTENEGRO

P2_33	Svjetlana Zeljković, Jelena Davidović Gidas, Vida Todorović, Milica Pašalić GERMINATION OF FLORAL SPECIES DEPENDING ON THE APPLIED BIOSTIMULANT
P2_34	Jelena Davidović Gidas, Svjetlana Zeljković, Gordana Đurić EFFECT OF DIFFERENT BAP CONCENTRATIONS ON MULTIPLICATION OF <i>Lavandula angustifolia</i> Mill. EXPLANTS
	<b>Oral Presentations</b> Large Hall, HET
	<b>Working Committee:</b> <i>Klime Beleski, Sanja Radonjić, Dragan Nikolić</i>
	<b>Part I</b>
10:00-10:15 O2_01	Ivan Glišić, Tomo Milošević, Gorica Paunović, Aleksandra Korićanac, Radmila Ilić CHARACTERISTICS OF NEWLY-BRED DOMESTIC AND INTRODUCED APRICOT CULTIVARS ( <i>P. armeniaca</i> L.) GROWN IN THE REGION OF ČAČAK
10:15-10:30 O2_02	Miljan Cvetković, Nikola Mičić, Velibor Trifković, Aleksandar Životić RASPBERRY PRODUCTION IN BOSNIA AND HERZEGOVINA – CHARACTERISTICS AND CHALLENGES
10:30-10:45 O2_03	Zlatan Ristić, Sanda Stanivuković, Boris Pašalić, Gordana Đurić THE EFFECT OF HYDROCOOLING TREATMENT OF SWEET CHERRY ON HARDNESS DURING STORAGE
10:45-11:00 O2_04	T. Karadeniz, T. Bak, L. Kirca, M. İşler EFFECTS OF OLIVE OIL APPLICATION ON MATURITY IN FIG
11:00-11:15 O2_05	Mladen Kalajdžić, Dragoslav Ivanišević, Predrag Božović, Cassandra Collins DIFFERENCES IN SOME CHARACTERISTICS BETWEEN PRIMARY (N+2) AND SECONDARY (N+3) SHOOTS OF PROBUS ( <i>Vitis vinifera</i> L.)
11:15-11:30	<b>Coffee break</b>
	<b>Part II</b>
11:30-11:45 O2_06	Sanja Radonjić, Snježana Hrnčić, Ilma Kalač TWO YEARS MONITORING OF SPOTTED WING DROSOPHILA - <i>Drosophila suzukii</i> IN NORTHERN MONTENEGRO
11:45-12:00 O2_07	Branimir Nježić, Petar Nikolić PROBLEM IN MANAGEMENT OF THE NORTHERN ROOT-KNOT NEMATODE - <i>Meloidogyne hapla</i>

12:15-12:30 O2_08	Turan Karadeniz, F.E.Tekintaş, S.M.Şen, E.Güler PRIVATE AND BEAUTIFUL FRUIT OF OUR COUNTRY: CRAMP BARK ( <i>Viburnum opulus</i> L.)
	<b>Discussion of oral and poster presentations</b>
	<i>Moderators of the discussion on oral presentations: Klime Beleski, Sanja Radonjić, Dragan Nikolić Moderators of the discussion on poster presentations: Miljan Cvetković, Đorđe Moravčević, Branimir Nježić</i>
14:00	<b>Lunch</b>

	<b>SECTION: ANIMAL SCIENCES</b>
---	-------------------------------------

	<b>Poster Presentations</b>	Small hall, Hotel Leotar
9:00-10:00	<b>Poster tour in the poster exhibition hall, in the presence of the authors</b>	
	<i>Moderators of poster presentations: Božo Važić, Marinko Vekić</i>	
P3_01	Miloš Ž. Petrović, Zoran Ž. Ilić, Radojica Đoković, Marko Cincović, Miodrag Radinović, Branislava Belić, Milun D. Petrović RELATIONSHIP BETWEEN THE METABOLIC STATUS AND THE REPRODUCTIVE EFFICIENCY OF DAIRY COWS IN THE TRANSITION PERIOD	
P3_02	Biljana Veljković, Ranko Koprivica, Dušan Radivojević, Zoran Mileusnić, Aleksandar Kuč TECHNOLOGICAL PROCESS OF MILKING AND QUALITY OF MILK ON A COMMERCIAL FARM	
P3_03	Dragan Dokić, Maja Gregić, Vesna Gantner DETERMINATION OF THE RELATIVE ADVANTAGES IN THE CATTLE PRODUCTION OF MILK AND MEAT BY COMPARATIVE ANALYSIS OF PRODUCTION IN OSIJEK-BARANJA COUNTY AND KRAPINA-ZAGORJE COUNTY	
P3_04	Đorđe Savić, Stoja Jotanović, Miroslav Borojević, Marinko Vekić, Zora Čolović-Šarić CHEMICAL COMPOSITION OF MILK AS AN INDICATOR OF NUTRITIONAL STATE OF COWS	
P3_05	Milenko Šarić, Mišo Vejin, Zora Čolović-Šarić, Dragana Rujević INFLUENCE OF MASTITIS ON REPRODUCTIVE PARAMETERS IN HOLSTEIN-FREISIAN COWS	

P3_06	Dragana Rujevac, Milenko Šarić, Zora Čolović-Šarić THE MICROBIOLOGICAL STATUS OF AUTOCHTHONOUS DAIRY PRODUCTS
P3_07	Maja Gregić, Dragan Dokić, Tina Bobić, Vesna Gantner GENOMIC SELECTION IN HORSE BREEDING
P3_08	Marinko Vekić, Živko Klincov, Stoja Jotanović, Đorđe Savić BASIC PRODUCTION PARAMETERS OF BROILER FARMS IN BANJA LUKA REGION
P3_09	Stoja Jotanović, Stojan Marinković, Đorđe Savić, Ivan Stančić, Marinko Vekić SEASONAL CHANGES IN BOAR EJACULATE QUALITY PARAMETERS
P3_10	Goran Marković, Milomirka Madić USE OF SOME CEREALS FOR CARP ( <i>Cyprinus carpio</i> L.) NUTRITION
P3_11	Nebojša Savić, Jerko Pavličević, Branko Glamuzina THE EFFECTS OF RATION SIZE ON CONDITION FACTOR AND LENGTH-WEIGHT RELATIONSHIP OF THE BROWN TROUT ( <i>Salmo trutta m. Fario</i> )
P3_12	Dragan Mikavica, Nebojša Savić PREPARATION OF EXPERT STUDIES ON THE DAMAGE CAUSED TO THE FISH FUND
P3_13	Brankica Kartalović, Željko Mihaljev, Jelena Babić, Suzana Vidaković, Jelena Petrović, Nikolina Milošević HEXACHLOROBENZENE IN SMOKED SAUSAGE, YES OR NO?
P3_14	Jelena Nikitović, Bogoljub Novaković, Gordana Đurić PHENOTYPIC CHARACTERIZATION OF THE BOSNIAN BROKEN-HAIRED HOUND – BARAK ON THE TERRITORY OF BOSNIA AND HERZEGOVINA
P3_15	Stoja Jotanović, Milorad Sarajlić, Nenad Stojanović, Ivan Stančić, Đorđe Savić, Marinko Vekić INFLUENCE OF TAKING FREQUENCY ON BOAR EJACULATE QUALITY PARAMETERS
	<b>Oral Presentations</b>
	Small hall, Hotel Leotar
	<b>Working Committee:</b> <b>Daniel Falta, Milanka Drinić, Božidarka Marković</b>
	<b>Part I</b>
10:00-10:15 O3_01	Božidarka Marković, Milan Marković, Dušica Radonjić THE CURRENT STATUS OF TRANSHUMANCE LIVESTOCK FARMING IN MONTENEGRO

10:15-10:30 O3_02	Vesna Gantner, Mirna Gavran, Dragan Dokić, Božo Važić, Maja Gregić, Tina Bobić THE EFFECT OF BREEDING REGION ON DIFFERENCES IN PERSISTENCY OF HEAT STRESS EFFECT IN FIRST PARITY SIMMENTALS
10:30-10:45 O3_03	Božo Važić, Sara Popadić, Biljana Rogić, Vesna Gantner GOAT FARMING: STAGNATION AND DEVELOPMENT ON THE TERRITORY OF BOSNIA AND HERZEGOVINA
10:45-11:00	<b>Coffee break</b>
	<b>Part II</b>
11:00-11:15 O3_04	Sara Popadić, Biljana Rogić, Božo Važić THE AVERAGE RELATEDNESS COEFFICIENT IN LIPIZZAN HORSE FROM STATE-OWNED STUD VUČIJAK
11:15-11:30 O3_05	Milanka Drinić, Vojo Radić, Aleksandar Kralj, Zdravko Marković, Mladen Radinović THE PRESENCE OF HEAVY METALS, CD AND PB IN THE FODDER IN THE AREA OF BANJA LUKA
11:30-11:45 O3_06	Mirna Gavran, Maja Gregić, Zrinka Tolušić, Vesna Gantner THE FLUCTUATION IN WILD BOAR POPULATION IN HUNTING AREA IN EASTERN CROATIA
11:45-12:45	<b>Discussion of oral and poster presentations</b>
	<i>Moderators of the discussion on oral presentations: Daniel Falta, Milanka Drinić, Božidarka Marković Moderators of the discussion on poster presentations: Božo Važić, Marinko Vekić</i>
14:00	<b>Lunch</b>



**SECTION:  
AGRO-ECONOMY AND RURAL DEVELOPMENT**

	<b>Poster Presentations</b>	Small hall, HET
9:00-10:00	<b>Poster tour in the poster exhibition hall, in the presence of the authors</b>	
	<i>Moderators of poster presentations: Željko Vaško, Dragan Brković</i>	
P4_01	Jelena Stanojević, Bojan Krstić STRUCTURAL CHANGES IN AGRICULTURE: IMPLICATIONS FOR THE ECONOMY OF THE REPUBLIC OF SERBIA	

P4_02	Sreten Jelić, Tatjana Jovanović, Olga Gavrić HOUSEHOLDS AS MAIN FACTOR OF RURAL AND SUSTAINABLE DEVELOPMENT IN THE REPUBLIC OF SERBIA
P4_03	Petra Nikić Nauth, Gordana Rokvić, Željko Vaško, Tihomir Predić CRITERIA FOR THE DELINEATION OF AREAS WITH NATURAL CONSTRAINTS IN THE EUROPEAN UNION AND REPUBLIKA SRPSKA
P4_04	Grujica Vico, Zoran Rajić, Mile Peshevski, Radomir Bodiroga MULTI CRITERIA DECISION MAKING IN AGRICULTURE – A REVIEW OF USE IN BALKAN COUNTRIES
P4_05	Saïda Salah Mlaouhi, Saïf Nasri, Lassaâd Albouchi ANALYSIS OF CLIMATE CHANGE IMPACT ON PRODUCTION SYSTEMS IN THE REGION OF BIZERTE (TUNISIA) USING A BIO-ECONOMIC APPROACH
P4_06	Ljiljana Drinić, Gordana Rokvić, Aleksandar Ostojić, Branka Čobanović WOMEN ENTREPRENEURSHIP DEVELOPMENT IN AGRICULTURE
P4_07	Milan R. Milanović, Simo Stevanović OPPORTUNITY COST OF SERBIAN AGRICULTURAL EXPORTS
P4_08	Mihajlo Munćan, Jelena Đoković, Tamara Paunović COMPETITIVENESS OF MAIZE AND SUNFLOWER PRODUCTION IN THE CROP ROTATION OF FAMILY FARMS ORIENTED TOWARDS CROP PRODUCTION
P4_09	Miroslav Nedeljković, Aleksandar Maksimović ANALYSIS AND PREDICTION OF RAPESEED PRODUCTION INDICATORS IN THE REPUBLIC OF SRPSKA
P4_10	Aleksandar Ostojić, Nebojša Savić, Jerko Pavličević, Željko Vaško THE RELATIONSHIP BETWEEN IMPORT OF FEED FOR SALMONIDS AND EXPORT OF TROUT FROM BIH
P4_11	Tamara Stojanović COMPARATIVE FINANCIAL ANALYSIS OF CROP, LIVESTOCK AND MIXED AGRICULTURAL PRODUCERS' PROFITABILITY IN THE REPUBLIC OF SRPSKA (BOSNIA AND HERZEGOVINA)
P4_12	Edyta Brzęczek EIT FOOD ACTIVITY AS AN EXAMPLE OF SUPPORT FOR INNOVATION IN THE AGRI-FOOD SECTOR
P4_13	Krzysztof Frąsiak THE PROFITABILITY OF ENERGY PRODUCTION FROM THE CULTIVATION OF ENERGY CROPS
P4_14	Milena Świątek GLOBAL MARKET TRENDS IN ORGANIC FARMING



P4_15	Nataša Tomić, Nemanja Jalić, Nikola Bulović CONSUMER HABITS AND OPINIONS TOWARD ORGANIC PRODUCTS IN BANJA LUKA
P4_16	Bojan Dimitrijević, Jelena Golijan, Slavoljub Lekić, Nada Lakić, Branka Bulatović THE IMPACT OF CERTAIN DEMOGRAPHIC FACTORS ON CONSUMER ATTITUDES TOWARD ORGANIC AGRICULTURAL AND FOOD PRODUCTS IN THE REPUBLIC OF SERBIA
P4_17	Gordana Rokvić, Sandra Rover ANALYSIS OF RURAL TOURISM MANAGEMENT, AN INTEGRATED AND SUSTAINABLE APPROACH
P4_18	Jovana Knežević, Tamara Dojčinović ANALYSIS OF THE POTENTIAL FOR AGRI-TOURISM DEVELOPMENT IN LAKTASI MUNICIPALITY
	<b>Oral Presentations</b> Small hall, HET
	<i>Working Committee:</i> <i>Vesna Mrdalj, Vlado Kovačević, Nebojša Novković</i>
	<b>Part I</b>
10:00-10:15 O4_01	Dori Pavloska Gjorgjieska, Boban Ilić ENABLING EVIDENCE-BASED AGRICULTURAL AND RURAL DEVELOPMENT POLICY MAKING IN THE WESTERN BALKANS
10:15-10:30 O4_02	Mirjana Bojčevski, Zorica Vasiljević, Vlado Kovačević, THE FADN' FARM NET VALUE ADDED AS A MAIN INDICATOR OF FARM INCOME IN EU AND SERBIA
10:30-10:45 O4_03	Tihomir Novaković, Beba Mutavdžić, Dragan Milić, Dragana Tekić THE ANALYSIS OF SUBSIDY STRUCTURE ACCORDING TO TYPE AND ECONOMIC SIZE OF AGRICULTURAL HOLDING IN SERBIA
10:45-11:00 O4_04	Vesna Mrdalj, Nemanja Jalić, Nataša Tomić, Aleksandar Ostojić, Željko Vaško COMPARATIVE ADVANTAGES AND INTRA-INDUSTRY TRADE FOR MEAT SECTOR IN BOSNIA AND HERZEGOVINA'S TRADE
11:00-11:15 O4_05	Akupian Olga Stanislavovna, Kitaev Yuri Alexandrovich COMPETITIVENESS OF RUSSIAN GRAIN: STATE, PROSPECTS AND DEVELOPMENT TRENDS
11:15-11:30 O4_06	Željko Vaško, Marko Ivanković THE LACK OF LABOR FORCE – A THREAT TO THE DEVELOPMENT OF AGRICULTURE
11:30-11:45	<b>Coffee break</b>
	<b>Part II</b>

11:45-12:00 O4_07	Nebojša Novković, Mile Peševski, Beba Mutavdžić, Ljiljana Drinić, Šumadinka Mihajlović TOMATO PRICE – COMPARATIVE ANALYSIS: SERBIA, MACEDONIA AND REPUBLIC OF SRPSKA
12:00-12:15 O4_08	Nebojša Novković, Beba Mutavdžić, Otilija Sedlak, Borko Sorajić, Vasily Erokhin CABBAGE PRICE – COMPARATIVE ANALYSIS
12:15-12:30 O4_09	Delyana Marinova PERCEPTIONS TOWARD AGROTOURISM DIVERSIFICATION – THE CASE OF FAMILY FARMING IN PRESPA REGION, MACEDONIA
12:30-12:45 O4_10	Dragan Brković, Milenko Đurić, Miljan Cvetković POTENTIALS AND OBSTACLES OF AGRITOURISM DEVELOPMENT IN BOSNIA AND HERZEGOVINA AND SERBIA
12:45-13:00 O4_11	Lovro Sinkovič, Gregor Urek NATIONAL ACTION PLAN (NAP) FOR SUSTAINABLE USE OF PLANT PROTECTION PRODUCTS: AN EXAMPLE OF SLOVENIA
13:00-14:00	<b>Discussion of oral and poster presentations</b>
	<i>Moderators of the discussion on oral presentations: Vesna Mrdalj, Vlado Kovačević, Nebojša Novković Moderators of the discussion on poster presentations: Željko Vaško, Dragan Brković</i>
14:00	<b>Lunch</b>



**SECTION:  
SUSTAINABLE MANAGEMENT OF NATURAL  
RESOURCES**

	<b>Poster Presentations</b>	Large Hall, Hotel Leotar
9:00-10:00	<b>Poster tour in the poster exhibition hall, in the presence of the authors</b>	
	<i>Moderators of poster presentations: Mihajlo Marković, Petar Nikolić</i>	
P5_01	Barbara Pipan, Lovro Sinkovič, Marina Antić, Vida Todorović, Vladimir Meglič DIVERSITY OF GENETIC RESOURCES OF <i>Phaseolus coccineus</i> L. FROM BOSNIA AND HERZEGOVINA	

P5_02	Mirsad Ičanović, Mihajlo Marković, Husnija Kudić EVALUATION OF THE SOIL SUITABILITY OF THE BUŽIM MUNICIPALITY, FOR THE POTATO ( <i>Solanum tuberosum</i> ) CULTIVATION
P5_03	Vojka Babić, Tanja Petrović, Marija Milivojević, Milosav Babić, Petar Čanak, Natalija Kravić EFFECT OF SEED PRIMING ON SEED VIABILITY AND SEEDLINGS PERFORMANCES IN MAIZE GENE BANK ACCESSIONS
P5_04	Radovan Savić, Miljan Velojić, Atila Bezdán, Vesna Nikolić, Milica Vranešević, Radoš Zemunac, Nenad Antonić THE DOMINANT DIRECTIONS OF WIND EROSION IN VOJVODINA
P5_05	Dragana Drobnjak, Nenad Katanić CLIMATE STRATEGY AND ACTION PLAN IN THE REPUBLIC OF SERBIA
P5_06	Željko Mihaljev, Brankica Kartalović, Milica Živkov Baloš, Sandra Jakšić, Nenad Popov RADIOACTIVE RESIDUE BURDENS IN SOIL, FOODSTUFFS, ANIMAL FEED AND BIOLOGICAL MATERIAL
P5_07	Nadia Chammem, Amira Oueslati, Lamia Ayed, Asma Mejri, Moktar Hamdi SELECTION OF PROBIOTICS FROM TUNISIAN TABLE OLIVES : TOWARDS A BETTER CONTROL AND VALORIZATION OF A MEDITERRANEAN FERMENTED FOOD
P5_08	Ivana Radojević, Sara Todorić, Filip Mojsovski, Hristina Ivanovska ORGANIC GRAPE PRODUCTION
P5_09	Mirela Kajkut Zeljković, Borut Bosančić, Gordana Đurić DIVERSITY OF PEAR ( <i>Pyrus communis</i> L.) ACCESSIONS IN THE <i>EX SITU</i> COLLECTION AT THE GENE BANK OF REPUBLIKA OF SRPSKA
P5_10	Sonja Rašeta, Mirela Kajkut Zeljković, Marina Antić, Gordana Đurić, Vida Todorović FRUIT CHARACTERISTICS OF TOMATO ACCESSIONS ( <i>Lycopersicon esculentum</i> MILL.) FROM THE GENE BANK OF REPUBLIC OF SRPSKA
P5_11	Veronika Žitniak Čurná REPRODUCTIVE POTENTIAL OF JERUSALEM ARTICHOKE ( <i>Helianthus tuberosus</i> L.)
P5_12	Ivana Čegar, Sanda Stanivuković, Boris Pašalić, Gordana Đurić POMOLOGICAL CHARACTERISTICS OF APPLE FRUITS FROM <i>EX SITU</i> COLLECTION

P5_13	Dijana Mihajlović, Svetlana Antić-Mladenović, Dragoja Radanović, Vaso Bojanić THE CONTENT OF COPPER IN THE SOILS OF DIFFERENT GEOMORPHOLOGICAL UNITS
P5_14	Biljana Radusin Sopić, Biljana Lolić, Branimir Nježić, Milan Šipka, Gordana Đurić SOIL BIOGENITY OF THE BANJA LUKA REGION AS A RESULT OF THE INTERACTION OF BIOLOGICAL AND CHEMICAL FACTORS
P5_15	Siniša Mitrić, Darko Golić, Vaskrsija Janjić, Dragana Božić, Zlatan Kovačević, Vladan Jovanović, Biljana Kelečević DEPENDENCE OF THE EFFICACY OF PRE-EMERGENCE HERBICIDES (PreEM) IN COMMON RAGWEED CONTROL OF THE DOSE AND NUMBER OF DAYS AFTER HERBICIDE APPLICATION (DAA)
P5_16	Michalak Agata THE DEVELOPMENT OF THE BIOGAS SECTOR IN POLAND
P5_17	Mirjana Vasić, Aleksandra Savić, Maja Ječmenica, Danica Mladenović, Milan Zdravković, Jelica Gvozdanić Varga, Slobodan Vlajić GRAIN CHARACTERISTICS OF THE COLLECTION <i>Lathyrus sativus L.</i> IN INSTITUTE OF FIELD AND VEGETABLE CROPS, NOVI SAD, SERBIA
	<b>Oral Presentations</b>
	Red Salon- Hotel Leotar
	<b>Working Committee:</b> <i>Gordana Đurić, Duška Delić, Radovan Savić</i>
	<b>Part I</b>
10:00-10:15 O5_01	Steliana Rodino, Alina Butu, Marian Butu BIOECONOMY AS A DEVELOPMENT DRIVER FOR NATURAL BIORESOURCES STRATEGIES IN ROMANIA
10:15-10:30 O5_02	Ranko Sarić, Vladan Ivetić ESTABLISHMENT OF SHELTERBELTS WITH AUTOCHTHONOUS TREE SPECIES
10.30-10:45 O5_03	Marko Kuzman, Nikola Travar, Sunčica Bodružić, Rodoljub Oljača, Ljiljana Došenović, Gordana Đurić CURRENT CONDITION AND TRANSFORMATION OF DENDROFLORA IN PROTECTED AREA „UNIVERSITY CITY“
10:45-11:00 O5_04	Petar Nikolić, Nikola Travar, Biljana Lolić DIVERSITY OF WILD BEES IN THE REPUBLIC OF SRPSKA AND POTENTIAL FOR THEIR USE IN AGRICULTURAL PRODUCTION

11:00-11:15 O5_05	Dragan Brenjo, Džemil Hajrić EU POLICY ON FOOD QUALITY AND LEGISLATIVE FRAMEWORK IN BOSNIA AND HERZEGOVINA
11:15-11:30	<b>Coffee break</b>
	<b>Part II</b>
11:30-11:45 O5_06	Duška Delić DETECTION OF VIRUSES USING NEXT GENERATION SEQUENCING TECHNOLOGIES: EXPERIENCE WITH FRUIT TREE AND GRAPEVINE VIRUSES
11:45-12:00 O5_07	Mihajlo Marković, Dijana Mihajlović, Svetlana Antić-Mladenović, Milan Šipka LOCAL BACKGROUND VALUES OF THE LEAD IN THE SOILS OF THE BANJA LUKA AREA
12:00-12:15 O5_08	Walter Froelich, Milos Nozinic, Vojislav Trkulja, Vesna Bojic, Novo Przulj, Danijela Kondic, Marc Steinmann, Hannes Kurz, Benedikt Sauer, Mara Bojic, Robert Schmidtke RARE EARTH ELEMENTS IN ROCKS, SOILS, AND PLANTS OF BANJA LUKA REGION, REPUBLIC OF SRPSKA (RS)
12:15-12:30 O5_09	Dimitrije Marković, Gordana Đurić, Branimir Nježić, Boris Pašalić, Gvozden Mičić, Jovana Mastilović ECOSTACK FIRST HORIZON 2020 RESEARCH AND INNOVATION PROJECT AT UNIVERSITY OF BANJA LUKA
12:30-13:30	<b>Discussion of oral and poster presentations</b>
	<i>Moderators of the discussion on oral presentations: Gordana Đurić, Duška Delić, Radovan Savić Moderators of the discussion on poster presentations: Mihajlo Marković, Petar Nikolić</i>
14:00	<b>Lunch</b>

	<b>SECTION: PANEL SESSION HOTEL LEOTAR – LARGE HALL</b>	
---	---	--

	<b>AGRICULTURE AND CLIMATE CHANGE</b>
17.00 – 18.30	<i>Moderator: Professor Mihajlo Marković, Faculty of Agriculture, University of Banja Luka</i>

	<p><b>Panelists:</b>          Professor Goran Trbić, Faculty of Natural Sciences and Mathematics, University of Banja Luka          Tomislav Šajić, MSc, Republic Hydrometeorological Service of the Republic of Srpska          Duško Vujović, MSc, Water Production and Management Division, HET.          Professor Mladen Todorović, Mediterranean Agronomic Institute of Bari</p>
20:00	<b>GALA DINNER</b>

	<b>Saturday, May 18, 2019</b>
---	-------------------------------

09:00 – 12:00	<b>Filed visit (“Popovo polje” company and Monastery “Tvrdoš”)</b>
Large Hall, Hotel Leotar 9:00 – 12:30	<b>24 Conference of agriculture engineers of the Republic of Srpska and 10 Continuous education of agricultural engineers of the Republic of Srpska</b>
	<b>Working Committee: Siniša Mitrić, Borislav Milivojević, Jasenko Nedinić</b>

## Effects of Fertilization on Yield and Yield Components of Maize (*Zea mays* L.) in Temperate Semiarid Region

Ivica Djalovic<sup>1</sup>, Yinglong Chen<sup>2,3</sup>, Goran Bekavac<sup>1</sup>

<sup>1</sup>*Institute of Field and Vegetable Crops, Novi Sad, Serbia*

<sup>2</sup>*State Key Laboratory of Soil Erosion and Dryland Farming on the Loess Plateau, Northwest A&F University, Yangling, Shaanxi 712100, China*

<sup>3</sup>*The UWA Institute of Agriculture, & School of Agriculture and Environment, The University of Western Australia, LB 5005, Perth 6001, Australia*

*Corresponding author: Ivica Djalovic, ivica.djalovic@ifvcns.ns.ac.rs;*

### Abstract

Potential maize yields are determined by the interaction of genotype, environment, and management practices ( $G \times E \times M$ ). The increase in crop yield during the past century is attributed to the selection of genotypes with higher yield potential and an increased amount of nutrients, particularly nitrogen (N) and phosphorus (P). Maximum maize yields are dependent on a balanced nutrition, with N nutrition as the main nutrient limiting maize yields and seed quality. Combined application of nitrogen (N) and phosphorus (P) fertilizer could significantly enhance crop yield. A three years field experiments was conducted at the research experimental station of Institute of Field and Vegetable Crops, Novi Sad, Serbia (N 45° 19', E 19° 50') to investigate effects of nitrogen and phosphorus fertilizers on yield and yield components of maize and to determine optimum levels of N and P for recommendation in agroecological conditions of South Pannonian basin. The trial was established on a chernozem soil (subtype: chernozem on loess and loess-like sediments; variety: slightly calcareous). Factorial combinations of six levels of nitrogen (0, 30, 60, 90, 120 and 180 kg N ha<sup>-1</sup>) and three levels of phosphorus (0, 50 and 80 kg P ha<sup>-1</sup>) were laid out in a randomized complete block design (RCBD) with four replications. Highly significant effects ( $P < 0.01$ ) were observed on almost all agronomic parameters studied due to the pronounced effects of N and P and their interaction. Grain yield was significantly affected by year, fertilisation and year  $\times$  fertilisation interaction. The highest grain yield (12.352 kg ha<sup>-1</sup>) were obtained with the high rate of N (120 kg N ha<sup>-1</sup>) and P (80 kg P ha<sup>-1</sup>). Likewise, application of N and P significantly ( $P < 0.01$ ) influenced 1000 kernel weight, harvest index, leaf area index and plant height. Nitrogen concentrations in grain tended to increase with increase in N rates. Combined with genetic improvement, fertilization has been a powerful tool for increasing maize yield.

*Key words:* maize, fertilization, nitrogen, yield, yield components, temperate semiarid region.