

IX INTERNATIONAL SYMPOSIUM ON AGRICULTURAL SCIENCES

24th September 2020
Banja Luka
Bosnia and Herzegovina

BOOK OF ABSTRACTS



AGRORES 2020



BOOK OF ABSTRACTS

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AGRICULTURAL SCIENCES



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24 September, 2020
Banja Luka
Bosnia and Herzegovina

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SYMPOSIUM PROGRAM

	Thursday, September 24, 2020
	Participation online via the Google Meet platform

<i>Time</i>	
09:00 – 09:30	Opening remarks
	Welcome address by: <ul style="list-style-type: none"> - Zlatan Kovačević, PhD, Dean of Faculty of Agriculture, University of Banja Luka; - Boris Pašalić, PhD, Minister of Agriculture, Forestry and Water Management of the Republic of Srpska; - Željko Vaško, PhD, President of the Organizing Committee;
	<i>Plenary session</i>
	<i>Moderator: Željko Vaško</i>
09:30 – 10:00 PL_01	Srđan Krčo, Senka Gajinov FOOD AND DIGITAL: BITS & BITES
10:00 – 10:30 PL_02	Andrei Jean Vasile CONTEMPORARY AGRICULTURE AND THE REAL GREEN REVOLUTION - DOES THE RENEWABLE ENERGY PRODUCTION REALLY MATTER?
10:30 – 10:45	Discussion


		SECTION 1:	<i>Session 1</i>
		CROP SCIENCE	

	Oral Presentations	Google Meet platform
	<i>Moderator: Novo Pržulj</i>	
11:00-11:15 O1_01	Natalija Kravić, Vojka Babić, Danijela Ristić, Milan Stevanović, Anika Kovinčić, Violeta Anđelković MAIZE GENETIC RESOURCES IN SERBIA – MANAGEMENT AND UTILIZATION IN BREEDING	

11:15-11:30 O1_02	Danijela Pavlovic, Ana Andjelkovic, Aleksandra Savic, Dragana Bozic, Sava Vrbnicanin COMMON WILD OAT (<i>Avena fatua</i> L.) SPIKELET AND SEED MORPHOLOGY VARIATION IN BOSNIA AND HERZEGOVINA
11:30-11:45 O1_03	Marko Mladenović, Nikola Grčić, Milan Stevanović, Olivera Đorđević Melnik, Milica Nikolić, Stefan Kolašinac, Slaven Prodanović EVALUATION OF GRAIN YIELD AND ITS COMPONENTS OF SOME EXPERIMENTAL, REGISTERED AND COMMERCIAL ZP MAIZE (<i>Zea mays</i> L.) HYBRIDS
11:45-12:00 O1_04	Novo Pržulj, Vojislava Momčilović, Milan Mirosavljević, Zoran Jovović, Ana Velimirović VARIATION IN DURATION OF PRE-ANTHESIS PHASES OF DEVELOPMENT IN BARLEY (<i>Hordeum vulgare</i> L.)
P1_01	Jelena M. Golijan CONTENT OF FREE POLYPHENOLS AND FLAVONOIDS IN ORGANIC AND CONVENTIONALLY PRODUCED MAIZE SEED (<i>Zea mays</i>)
P1_02	Vladeta Stevović, Miloš Marjanović, Dragan Đurović, Dalibor Tomić, Milomirka Madić, Vesna Đurović EFFECT OF GIBBERELIC ACID TREATMENT ON THE INITIAL INCREASE IN RED FESCUE
P1_03	Dalibor Tomić EFFECT OF GIBBERELIC ACID TREATMENT ON THE INITIAL GROWTH AND NODULATION OF WHITE CLOVER
P1_04	Snežana Mladenović Drinić, Jelena Srđić, Jelena Vukadinovic VARIABILITY OF MICRONUTRIENT CONTENT IN SWEET CORN HYBRIDS AFTER BOILING
P1_05	Zoran Maličević, Zeljko Lakic, Milan Jugović, Dragoljub Mitrovic THE SIGNIFICANCE OF TRANSVERSAL DISTRIBUTION DURING THE APPLICATION OF PLANT PROTECTION BY BOOM SPRAYER
P1_06	Ivica Djalovic, Muhammad Farooq GENOTYPE AND FERTILIZATION EFFECT ON ZINC CONTENT IN MAIZE (<i>Zea mays</i> L.)
P1_07	Mira Vojvodić, Brankica Tanović, Petar Mitrović, Ivana Vico, Dejan Lazić, Miloš Stevanović, Aleksandra Bulajić IDENTIFICATON OF BINUCLEATE RHIZOCTONIA SPP. AG-A FROM STRAWBERRY AND MULTINUCLEATE R. SOLANI AG-2-2 FROM SUGAR BEET IN SERBIA

P1_08	Markola Saulic, Ivica Đalović, Vladan Jovanović, Dragana Božić, Sava Vrbničanin A COMPARISON OF METHODS FOR ASSESSMENT OF SOIL WEED SEED-BANK IN THE LONG-TERM CROP ROTATION
P1_09	Biljana Kelečević, Siniša Mitrić, Zlatan Kovačević SEED GERMINATION OF COMMON COCKLEBUR (<i>Xanthium orientale</i> subsp. <i>italicum</i> (MORETTI) GREUTER)
P1_10	Iva Savić, Milica Nikolić, Vesna Kandić, Dejan Dodig, Ana Obradović, Danijela Ristić, Slavica Stanković DETERMINATION OF THE FUMONISINS CONTENT IN DIFFERENT SMALL GRAINS
P1_11	Milica Nikolić, Iva Savić, Vesna Kandić, Ana Obradović, Milan Stevanović, Danijela Ristić, Slavica Stanković RESISTANCE OF SMALL GRAINS TO TOXIGENIC FUNGI OF THE FUSARIUM GENUS OF THE LISEOLA SECTION
P1_12	Ružica Ždero Pavlović, Bojana Blagojević, Tatjana Jurić, Boris Popović EFFECT OF THE CHOLINE ON THE PRODUCTION OF PHARMACOLOGICALLY ATTRACTIVE SECONDARY METABOLITES IN WHEAT SPROUTS
P1_13	Milomirka Madić, Milan Biberdžić, Aleksandar Paunović, Desimir Knežević, Vladeta Stevović, Dalibor Tomić, Dragan Đurović GRAIN YIELD AND 1,000-GRAIN WEIGHT OF TRITICALE VARIETIES DEPENDING ON THE FERTILIZATION
P1_14	Jovana Knjeginjić, Sandra Bijelić, Dijana Kulačanin, Zoran Đogić, Borivoje Bogdanović YIELD POTENTIAL AND FRUIT QUALITY OF CLUB APPLE CULTIVARS IN CLIMATIC CONDITIONS OF EASTERN SERBIA
P1_15	Vesna Kandić, Dejan Dodig, Milan Stevanović, Nikola Grčić ZP ADMIRAL- FACULTATIVE TRITICALE VARIETY
P1_16	Danijela Ristić, Marija Kostadinović, Natalija Kravić, Anika Kovinčić, Milan Stevanović, Iva Savić, Milica Nikolić GENETIC DIVERSITY OF MAIZE INBRED LINES ASSESSED BY SSR MARKERS
P1_17	Aleksa Lipovac, Marija Čosić, Boško Gajić, Nevenka Djurović, Ružica Stričević POTENTIAL OF KLADOVO AGRICULTURAL SOIL FOR IRRIGATION FROM THE ASPECT OF INFILTRATION CHARACTERISTICS

P1_18	Boris Popovic, Ruzica Zdero Pavlovic, Bojana Blagojevic, Tatjana Juric EFFECT OF SALICYLIC ACID ON THE PRODUCTION OF PHARMACOLOGICALLY ATTRACTIVE SECONDARY METABOLITES IN WHEAT SPROUTS
P1_19	Zeljko Lakic, Tihomir Predic, Mirjana Zabic, Zoran Malicevic QUALITY OF SILAGE FROM WHOLE MAIZE PLANT PREPARED ON DAIRY CATTLE FARMS
P1_20	Milan Biberdzic, Dragana Lalevic, Sasa Barac, Aleksandar Djikic, Vera Rajcic, Jelena Stojiljkovic THE YIELD OF SOME WHEAT VARIETIES SOWN AT THE OPTIMUM TIME AND IN LATE SOWING
P1_21	Željko Dolijanović, Nebojša Momirović, Snežana Oljača, Milena Simić, Vesna Dragičević, Djordje Moravčević THE EFFECT OF FALL SOWN DIFFERENT COVER CROPS ON POPCORN WEEDINESS
P1_22	Jovanović-Radovanov K., Simić A., Radivojević M., Mandić V., Bijelić Z., Sokolović D., Babić S. RESPONSE OF ITALIAN RYEGRASS SEED CROP TO NITROGEN FERTILIZATION AND TRINEXAPAC-ETHYL APPLICATION
12:00-12:30	Discussion of oral and poster presentations

 AGRORES 2020	SECTION 2: HORTICULTURE	<i>Session 1</i>
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	Oral Presentations	Google Meet platform
	<i>Moderator: Borut Bosančić</i>	
13:00-13:15 O2_01	Maja Natić, Milica Fotirić Akšić, Dragana Dabić Zagorac FRUITS UNDER THE SPOTLIGHT OF ANALYTICAL CHEMISTS	
13:15-13:30 O2_02	Jovana Žunić, Biljana Kelečević, Zlatan Kovačević, Dijana Mihajlović UPTAKE AND TRANSLOCATION OF HEAVY METALS BY RAGWEED (<i>Ambrosia artemisiifolia</i> L.)	
13:30-13:45 O2_03	Dejana Stanić, Milica Perućica THE PRESENCE OF LEAFMINERS ON DIFFERENT APPLE VARIETIES IN THE LOCATION KULA (EAST SARAJEVO)	


13:45-14:00 O2_04	Zorana Đekanović, Mihajlo Voruna, Mariana Radulović, Duška Delić ISOLATION AND IDENTIFICATION OF <i>Fusarium oxysporum</i> f.sp. <i>solani</i> (MART.) SACC. FROM SOIL ON MODIFIED NASH AND SNYDER'S MEDIUM
14:00-14:15 O2_05	Vida Todorović, Branka Lazić, Nikolina Đekić POSSIBILITY OF IMPROVING VEGETABLE PRODUCTION IN REPUBLIC OF SRPSKA
14:15-14:30 O2_06	Ranka Milašin, Nicoletta Contaldo, Mariana Radulović, Duška Delić MULTILOCUS TYPING OF PHYTOPLASMAS ISOLATES FROM 16SRI AND 16SRV GROUPS FROM FOREST SPECIES
14:30-14:45 O2_07	Dragoslav Ivanišević, Mladen Kalajdžić, Nada Korać CHARACTERISTICS OF SOME WHITE AND RED GRAPEVINE CULTIVARS IN FRUŠKA GORA WINE REGION
14:45-15:00 O2_08	Miljan Cvetkovic VITALISING ICT RELEVANCE IN AGRICULTURAL LEARNING
P2_01	Emina Mladenović, Lazar Pavlović, Milena Lakićević, Ksenija Hiel, Dragana Spasojević BIOECOLOGICAL ANALYSIS OF CITY BLOCK GREENERY IN NOVI SAD (SERBIA)
P2_02	Đorđe Malenčić, Jovana Šućur, Dejan Prvulović, Mirjana Ljubojević, Radenka Kolarov, Biljana Lazović, Mirjana Adakalić PHYTOCHEMICAL ANALYSIS AND ANTIOXIDANT POTENTIAL OF POMEGRANATE (<i>Punica granatum</i>) JUICE
P2_03	Lovro Sinkovič, Vladimir Meglič, Barbar Pipan DIVERSITY OF SLOVENIAN <i>Vitis</i> spp. GENOTYPES
P2_04	Lovro Sinkovič, Barbara Pipan, Vladimir Meglič, Georgios Merkouropoulos, Theodora Pitsoli, Demetrios Taskos, Younes Hmimsa, Salama El Fatehi, Mohammed Ater, Aicha El Oualkadi, Aliko Kapazoglou MEDVITIS - PROTECTING THE DIVERSITY OF MEDITERRANEAN VITIS IN A CHANGING ENVIRONMENT

P2_05	Lovro Sinkovič, Barbara Pipan, Vladimir Meglič, Sofia Petrova, Marina Antić, Penelope Bebeli, Miguel Ângelo Pinheiro de Carvalho, Aleksandra Savić, Mirjana Vasić, Creola Brezeanu <i>Lathyrus</i> DIVERSITY: AVAILABLE RESOURCES WITH RELEVANCE TO CROP IMPROVEMENT – PROGRESS REVIEWS AND RELATIONSHIP WITH AEGIS (EUGRAINLEG)
P2_06	Lovro Sinkovič, Barbara Pipan, Marina Antić, Vida Todorović, Sonja Rašeta, Vladimir Meglič MORPHO-AGRONOMIC DIVERSITY OF <i>Lathyrus sativus</i> L. GENETIC RESOURCES FROM SLOVENIA AND BOSNIA AND HERZEGOVINA
P2_07	Sonja Rašeta, Mirela Kajkut Zeljković, Marina Antić, Gordana Đurić, Vida Todorović MORPHOLOGICAL CHARACTERIZATION OF TOMATO ACCESSIONS (<i>Lycopersicon esculentum</i> Mill.) FROM GENE BANK OF REPUBLIC OF SRPSKA
P2_08	Mirsad Ičanović, Husnija Kudić, Mihajlo Marković SOIL SUITABILITY WITHIN THE BORDERS OF THE MUNICIPALITY OF BUŽIM FOR THE APPLES (<i>Malus domestica</i>) CULTIVATING
P2_09	Marijana Peić Tukuljac, Dario Danojevic, Slađana Medić-Pap, Jelica Gvozdanović-Varga, Dejan Prvulović POLYPHENOLIC COMPOUNDS AND ANTIOXIDANT CAPACITY OF FRUITS OF SWEET PEPPER
P2_10	Đurović, D., Millatović, D., Đorđević, B., Zec, G., Radović, A., Boškov Đ. EFFECT OF IRRIGATION ON FRUIT QUALITY AND YIELD OF ‘RED CAP’ APPLE CULTIVAR DEPENDING ON CROP LOAD
P2_11	Petar Nikolić, Sandra Golubović, Luka Rodić, Živan Mitrović, Ranka Golubović WILD BEE FAUNA ASSOCIATED WITH INTENSIVE APPLE PRODUCTION
P2_12	Marija Simonović, Draga Graora MIGRATORY BEHAVIOUR OF PARTHENOLECANIUM CORNI BOUCHÉ (<i>Hemiptera: Coccidae</i>) DEVELOPMENTAL STAGES ON GRAPEVINE
P2_13	Marija Simonović, Draga Graora PREDATORS OF SOFT SCALE INSECTS (<i>Hemiptera: Coccidae</i>) IN VINEYARDS IN SERBIA
P2_14	Nikolina Đekić, Vida Todorović, Ivana Koleška EFFECT OF PYROPHYLLITE APPLICATION ON QUALITY OF LETTUCE

P2_15	Sandra Bijelić, Dijana Kulačanin, Borivoje Bogdanović, Aleksandra Tepić Horecki POMOLOGICAL CHARACTERISTICS AND BIOACTIVE COMPOUNDS OF CORNELIAN CHERRY (<i>Cornus mas</i> L.) CULTIVARS IN THE ONLY COLLECTION POOL IN SERBIA
P2_16	Vedrana Komlen, Alma Rahimić, Aida Šukalić, Svjetlana Hadžić, Saud Hamidović, Aleksandra Govedarica Lučić THE IMPACTS OF MICROBIAL FERTILIZER APPLICATION ON THE HEALTH CONDITION AND QUALITY OF THE TOMATO FRUIT
P2_17	Svjetlana Zeljković, Nada Parađiković, Jelena Davidović Gidas IN VITRO PROPAGATION OF ORCHID
P2_18	Marko Sretenović, Novica Miletić, Nenad Tamaš, Milan Milanović EFFICACY OF FLUBENDIAMIDE AND EMAMECTIN BENZOATE IN THE CONTROL OF COTTON BOLLWORM (<i>Helicoverpa armigera</i> Hübner) ON SWEET PEPPER
P2_19	Predrag Ilić, Gordana Đurić, Nikola Mičić FERTILITY AND FRUIT CHARACTERISTICS OF THE HAZEL CULTIVARS GROWN IN DIFFERENT AGRO-ECOLOGICAL CONDITIONS IN BOSNIA AND HERZEGOVINA
P2_20	Marina Dervišević, Aleksandar Stojanović, Lazar Sivčev, Draga Graora BIONOMY OF PARTHENOLECANIUM PERSICAE (FABRICIUS) (<i>Hemiptera: Coccidae</i>) ON GRAPEVINE IN SERBIA
P2_21	Boris Dorbić, Mihaela Banić, Željko Španjol, Emilija Friganović, Elma Temim PERCEPTIONS AND ATTITUDES ON ORNAMENTAL CHARACTERISTICS AND THE USE OF MEDITERRANEAN EVERGREEN TREES AND SHRUBS
P2_22	Zorica Ranković-Vasić, Jelena Ivanović, Nikolina Lisov, Aleksandar Petrović, Ivana Plavšić, Dragan Nikolić MORPHOLOGICAL AND PRODUCTION-TECHNOLOGICAL CHARACTERISTICS NEWLY CREATED GRAPEVINE VARIETY VOŽD
P2_23	Mirjana Ruml, Nada Korać PHENOLOGICAL MODELS FOR PREDICTING THE BUDBURST AND FLOWERING DATE OF GRAPEVINE

P2_24	Ivana Radojević INDICATORS FERTILITY AND QUALITY OF GRAPES OF THE MOLDOVA GRAPEVINE CULTIVATED ACCORDING TO THE PRINCIPLES OF ORGANIC PRODUCTION
P2_25	Petrović Aleksandar, Lisov Nikolina, Plavšić Ivana, Madžgalj Valerija, Ranković-Vasić Zorica, Nikolić Dragan INFLUENCE OF SOME ENOLOGICAL TREATMENTS ON <i>TRANS-RESVERATROL</i> AND TOTAL PHENOLIC CONTENT IN WINE
P2_26	Blagojević Bojana, Ružica Ždero Pavlović, Tatjana Jurić, Nenad Magazin, Maja Milovac, Boris Popović POLYPHENOL COMPOSITION AND ANTIOXIDANT ACTIVITY OF PLUM CULTIVARS TRADITIONALLY GROWN IN SERBIA
P2_27	Nada Zavisic, Jelena Davidovic Gidas, Svjetlana Zeljkovic, Gordana Djuric PRODUCTION OF FRUIT PLANTING MATERIAL IN THE REPUBLIC OF SRPSKA IN THE PERIOD 2009-2019
P2_28	Jože Hladnik REMOVING ASTRINGENCY IN PERSIMMON WITH CO ₂ AND THE EFFECT OF PROLONGED SOFTENING PROCESS
P2_29	Jože Hladnik, Matej Stopar CHANGES IN APPLE RIPENESS PARAMETERS AFTER COLD STORAGE WITHOUT CONTROLLED ATMOSPHERE
P2_30	Ana Vujošević, Sandra Vuković, Đorđe Moravčević, Svjetlana Zeljković, Boris Dorbić APPLICATION OF PHYTOHORMONE AND ITS EFFECT ON THE DECORATIVE PROPERTIES OF GLADIOLUS (<i>Gladiolus</i> sp. L)
P2_31	Tanja Krmpot, Mirela Kajkut Zeljković, Ljubomir Radoš, Đurađ Hajder MORPHOLOGICAL CHARACTERISTICS OF THE LEAVES OF AUTOCHTHONOUS GENOTYPES OF SWEET CHERRY (<i>Prunus avium</i> L.)
P2_32	Boban Djordjević, Dejan Djurović, Gordan Zec, Vladimir Skoko INFLUENCE OF ROOT PRUNING ON VIGOUR AND FRUIT QUALITY OF APPLE CULTIVAR GOLDEN DELICIOUS CLON RAINERS

P2_33	Djordje Moravčević, Željko Dolijanović, Ana Vujošević, Sandra Vuković, Ilinka Pećinar, Vida Todorović, Svjetlana Zeljković FERTILIZER EFFECTS ON THE CONTAINER PRODUCTION OF TOMATO SEEDLINGS
P2_34	Dejana Radonjić, Đorđe Bojbaša, Miljan Cvetković APPLES ON THE BANJALUKA MARKET
P2_35	Tatjana Jovanović-Cvetković, Dragutin Mijatović, Milana Vujanović, Rada Grbić FERTILITY AS A PARAMETER OF VALUE OF TABLE CULTIVARS ESTER AND PALATINA IN THE KOZARACKO WINE-GROWING AREA
P2_36	Antonije Žunić, Slavica Vuković, Sanja Lazić, Dragana Šunjka, Dragana Bošković, Aleksandra Alavanja SUSCEPTIBILITY OF <i>GRAPHOLITA MOLESTA</i> BUSCK TO INSECTICIDES IN PEACH ORCHARDS
P2_37	Sanja Lazić, Dragana Šunjka, Marijana Skenderović, Antonije Žunić, Slavica Vuković, Aleksandra Alavanja DISSIPATION DYNAMIC OF INDOXACARB INSECTICIDE IN PEACH FRUITS
P2_38	Alma Mičijević, Aida Šukalić, Svetlana Hadžić, Alma Leto ANALYSIS OF VITAMIN C CONTENT OF POMEGRANATE FRUITS IN DIFFERENT LOCALITIES OF HERZEGOVINA
15:00-15:30	Discussion of oral and poster presentations

 AGROReS 2020	SECTION 3: ANIMAL SCIENCES	<i>Session 2</i>
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	Oral Presentations	Google Meet platform
	<i>Moderator: Nebojša Savić</i>	
11:00-11:15 O3_01	Vesna Gantner, Mirna Gavran, Maja Gregić, Božo Važić, Ranko Gantner, Klemen Potočnik THE VARIATION IN MILK COMPOSITION OF DAIRY GOATS DUE TO N-3 UNSATURATED FATTY ACIDS SUPPLEMENTATION	

11:15-11:30 O3_02	Bozo Vazic, Biljana Rogic, Milanka Drinic, Vesna Gantner , Slobodan Momic, Ivan Pihler FLEECE MASS AND PHYSICAL-MECHANICAL PROPERTIES OF WOOL OF DUPSKA SHEEP
11:30-11:45 O3_03	Dragan Dokić, Mirna Gavran, Maja Gregić, Vesna Gantner THE IMPACT OF TRADE BALANCE OF AGRI-FOOD PRODUCTS ON THE STATE’S ABILITY TO WITHSTAND THE CRISIS
11:45-12:00 O3_04	Predrag Ilić, Manja Vitasović, Aleksandar Mladenović IMPACT OF THE TRAINING PROCESS ON THE LEVEL OF STRESS IN HORSES
12:00-12:15 O3_05	Bojana Rudić, Biljana Rogić, Aljoša Janjić, Božo Važić THE GENERATION INTERVALS IN LIPIZZAN HORSE FROM STATE-OWNED STUD VUČIJAK
12:15-12:30 O3_06	Mirna Gavran, Vesna Gantner TRENDS IN POPULATIONS OF THE MOST COMMON LARGE GAME IN A HUNTING AREA IN EASTERN CROATIA IN INTERVAL 2008–2018
P3_01	Đorđe Savić, Željko Sladojević, Danijela Kirovski, Stoja Jotanović, Srđan Čolović INCIDENCE OF REPRODUCTIVE PATHOGENS IN BREEDING PIGS POPULATION ON SELECTED FARMS IN REPUBLIC OF SRPSKA
P3_02	Dojčinović Slobodan, Saša Lovrić, Golić Bojan, DETERMINATION OF THE PRESENCE OF AFLATOXIN B1 IN FEED IN REPUBLIC OF SRPSKA (BIH) IN THE PERIOD OF 2017-2019.
P3_03	Bojan Golić, Vesna Kalaba, Slobodan Dojčinović MICROBIOLOGICAL CRITERIA IN THE PRODUCTION OF STERILISED MILK
P3_04	Slađana Preradović, Biljana Rogić, Aljoša Janjić, Božo Važić STUDBOOK FROM STATE-OWNED STUD VUČIJAK: ERRORS AND CORRECTIONS
P3_05	Nebojša Savić, Dragan Mikavica YOLK SAC CONVERSION EFFICIENCY OF BROWN TROUT (<i>Salmo trutta</i> M. Fario) AND RAINBOW TROUT (<i>Oncorhynchus mykiss</i>) DURING ENDOGENOUS NUTRITION
P3_06	Stoja Jotanović, Ratko Mijatović, Vladimir Salak, Mladinko Lulić, Goran Kostić, Đorđe Savić, Milutin Cvijanović, Marinko Vekić EMBRYOTRANSFER IN CATTLE
P3_07	Vesna Kalaba, Bojan Golić, Tanja Ilić ANTIBACTERIAL ACTIVITY OF DIFFERENT TYPES OF HONEY ON PATHOGENIC BACTERIA

P3_08	Marinko Vekić, Živko Klincov, Stoja Jotanović, Đorđe Savić PRODUCTION RESULTS OF BROILER CHICKEN FARMS OF DIFFERENT CAPACITIES IN REGION OF BANJA LUKA
12:30-13:00	Discussion of oral and poster presentations

	SECTION 4: AGRICULTURAL ECONOMICS AND RURAL DEVELOPMENT	<i>Session 2</i>
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	Oral Presentations	Google Meet platform
	<i>Moderator: Dragan Brković</i>	
13:00-13:15 O4_01	Aleksandar Ostojić, Željko Vaško, Dragan Brković ASSESSMENT OF WHEAT SELF-SUFFICIENCY IN BOSNIA AND HERZEGOVINA	
13:15-13:30 O4_02	Gordana Rokvic, Dragan Brkovic AGRICULTURAL AND RURAL COOPERATIVES DEVELOPMENT – THE LATEST TRENDS	
13:30-13:45 O4_03	Gordana Rokvic, Ljiljana Drinic, Nebojsa Novkovic IMPLEMENTATION OF GENDER RESPONSIVE BUDGETING IN AGRICULTURE AND RURAL DEVELOPMENT IN BOSNIA AND HERZEGOVINA AND THE SURROUNDING COUNTRIES	
13:45-14:00 O4_04	Nebojša Novković, Beba Mutavdžić, Žarko Ilin, Nataša Vukelić, Šumadinka Mihjlović ANALYSIS AND PREDICTION OF PRODUCTIVE AND ECONOMIC CHARACTERISTICS OF WATERMELON PRODUCTION IN VOJVODINA REGION	
14:00-14:15 O4_05	Ranko Sarić, Snežana Branković, Adiba Džudović THE EFFECT OF WEED CONTROL IN POPLAR PLANTATIONS	
14:15-14:30 O4_06	Aleksandar Miljatović, Veljko Vukoje ANALYSIS OF NET WORKING CAPITAL OF AGRICULTURAL ENTERPRISES OF VOJVODINA	
14:30-14:45 O4_07	Bratislav Pešić, Nikola Stolić, Nebojša Zlatković TYPE OF WASTE AS A FACTOR OF ECONOMIC DEVELOPMENT OF HOUSEHOLDS AND ENVIRONMENTAL PROTECTION IN RURAL ENVIRONMENTS	

14:45-15:00 O4_08	Marija Stojadinović, Bratislav Pešić, Nikola Stolić, Nebojša Zlatković THE SIGNIFICANCE OF AGRICULTURAL ADVISORS FOR AGRICULTURAL DEVELOPMENT IN THE TOPLICA DISTRICT
15:00-15:15 O4_09	Vesna Mrdalj, Leila Šeper, Nataša Tomić AGRICULTURAL SUPPORT POLICIES OF BOSNIA AND HERZEGOVINA AND INTERNATIONAL ECONOMIC INTEGRATIONS
15:15-15:30 O4_10	Željko Vaško, Veselin Dutina, Boris Vaško INTERMEDIATION IN INCREASE OF AGRICULTURAL LAND USE BY ICT SUPPORT
15:30-15:45 O4_11	Tihomir Novaković, Beba Mutavdžić, Dragan Milić, Dragan Tekić, Aleksandar Miljatić MEASURING OF TECHNICAL EFFICIENCY OF AGRUCULTURAL HOLDINGS IN SERBIA USING DEA METHOD
15:45-16:00 O4_12	Sanjin Ivanović, Zorica Vasiljević, Jonel Subić TREATMENT OF OTHER GAINFUL ACTIVITIES AND MARKETING COSTS ACCORDING TO VARIOUS FADN REGULATIONS
P4_01	Bojan Dimitrijević, Jelena Golijan, Slavoljub Lekić, Nada Lakić THE IMPACT OF SOME SOCIO - DEMOGRAPHIC FACTORS ON CONSUMER ATTITUDES TOWARD ORGANIC SEED IN THE REPUBLIC OF SERBIA
P4_02	Vera Rašković, Nemanja Stošić, Milan Glišić ANALYSIS OF PRODUCTION, EXPORT AND IMPORT OF TOMATOES IN SERBIA
P4_03	Ljiljana Drinić ENTREPRENEURSHIP DEVELOPMENT BY LEAN STARTUP METHODOLOGY
P4_04	Enika Gregorić, Vesna Počuča, Gordana Matović, Mirjana Ruml DROUGHT ANALYSIS FOR THE REGION OF NORTH BACKA, SERBIA
P4_05	Nemanja Jalić, Aleksandar Ostojić BOSNIA AND HERZEGOVINA'S WINE FOREIGN TRADE AND MARKET
P4_06	Mihajlo Munćan, Tamara Paunović, Jelena Đoković IMPROVING THE ECONOMIC EFFICIENCY OF FAMILY FARMS BY INTRODUCING A NEW LINE OF LIVESTOCK PRODUCTION
P4_07	Stanislav Zekić, Bojan Matkovski, Danilo Đokić WINE PRODUCTION IN SERBIA AND COMPETITIVENESS ON INTERNATIONAL MARKET

P4_08	Marija Stojadinović, Pešić Bratislav, Nikola Stolić, Nebojša Zlatković THE SIGNIFICANCE OF AGRICULTURAL CONSULTANTS FOR THE DEVELOPMENT OF AGRICULTURE IN THE TOPLICA DISTRICT
16:00-16:30	Discussion of oral and poster presentations

P1_07

Identificaton of binucleate rhizoctonia spp. ag-a from strawberry and multinucleate *R. solani* ag-2-2 from sugar beet in Serbia

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Abstract

Rhizoctonia spp. comprise soil-borne fungi widely distributed in temperate climate worldwide which are annually causing significant yield losses to a range of cultivated plants. A species status of *Rhizoctonia spp.* has not yet been established and the isolates are classified based on nuclei status as multinucleate and binucleate *Rhizoctonia spp.*, and further divided into 13 anastomosis groups (AG) (AG-1-13) of multinucleate Rhizoctonia and 23 AG (AG-A-W) of binucleate Rhizoctonia. In this paper we are reporting morphological and molecular features of binucleate *Rhizoctonia spp.* AG-A causing black root rot on strawberry and multinucleate *R. solani* AG-2-2 causing root and crown rot of sugar beet. During 2015 and 2016 at several strawberry and sugar beet producing areas, plants expressing prominent root and crown necrosis and rot have been observed with disease incidence estimated at 20-30%. At two localities, in the vicinity of Belgrade (City of Belgrade District) and Vašica locality (Srem District), symptomatic strawberry and sugar beet plants were sampled and 12 and 8 Rhizoctonia-like isolates have been recovered, respectively. As exhibiting uniform morphological features, two representative isolates originating from strawberry and sugar beet (101-16 and 270-15) were selected and identified. Pathogenicity of representative isolates was confirmed in artificial inoculations of strawberry runners or sugar beet seedlings, respectively, followed by a successful reisolation. The isolates were identified based on hyphal branching pattern, nuclear status (binucleate isolate from strawberry and multinucleate from sugar beet) and conventional AG pairing with known tester isolates. The identification was confirmed by sequencing of ITS region of rDNA of isolates 101-16 and 270-15 (GenBank MH517393 and MK123309, from strawberry and sugar

beet, respectively). Identification of multinucleate *R. solani* AG-2-2 was also confirmed using sensitive and specific real-time PCR protocol.

Key words: *Rhizoctonia spp*, Identification, strawberry, sugar beet