

IX INTERNATIONAL SYMPOSIUM ON AGRICULTURAL SCIENCES

24th September 2020
Banja Luka
Bosnia and Herzegovina

BOOK OF ABSTRACTS



AGRORES 2020



BOOK OF ABSTRACTS

IX International Symposium on Agricultural Sciences "AgroReS 2020"
24 September, 2020; Banja Luka, 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

online on the website <https://agrores.net/zbornici/>

CIP - Каталогизacija у публикацији

Народна и универзитетска библиотека

Републике Српске, Бања Лука

631(048.3)

INTERNATIONAL Symposium on Agricultural
Sciences (9 ; Banja Luka ; 2020)

Book of Abstracts [Elektronski izvor] / 9th
International Symposium on Agricultural Sciences
"AgroReS 2020", 24 September, 2020, Banja Luka,
Bosnia and Herzegovina ; [organizer University of
Banjaluka, Faculty of Agriculture ; editor in chief Željko
Vaško]. - Banja Luka : Faculty of Agriculture =
Poljoprivredni fakultet, 2020

Način pristupa (URL): <https://agrores.net/zbornici/>

ISBN 978-99938-93-63-9

COBISS.RS-ID 129416961

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AGRICULTURAL SCIENCES



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24 September, 2020
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Bosnia and Herzegovina

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SYMPOSIUM PROGRAM

| | |
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|  | 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 |


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

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|------------------------------------|---|
| 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 |

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| 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 |

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| 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 |

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|  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) | |


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| 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 |

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| 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) |
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| 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 |
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| 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 |
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| P2_24 | Ivana Radojević INDICATORS FERTILITY AND QUALITY OF GRAPES OF THE MOLDOVA GRAPEVINE CULTIVATED ACCORDING TO THE PRINCIPLES OF ORGANIC PRODUCTION |
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| 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 <i>GLADIOLUS</i> (<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 |

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| 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 |

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|  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 | |

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| 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 |

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| 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 |

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|  | 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 | |

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| 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 |

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| 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_08

A Comparison of Methods for Assessment of Soil Weed Seed–Bank in the Long-Term Crop Rotation

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Abstract

The aim of the research was to determine which methodological procedure is more appropriate for assessing how the crop rotation affects the composition and size of weed seed bank. A long-standing stationary experiment "Plodoredi" at the Institute of Field and Vegetable Crops in Novi Sad was used for the research. According to the "Square grill" method, the land was sampled with two plots of wheat for 50 years in a monoculture and 3 year crop rotation (winter wheat-corn-soybean). It was sampled in autumn 2014, spring and autumn 2015, and two metrological procedures were used to assess the soil weed seed bank: physical extraction of seed and seedling emergence method. According to the first method, 500 ml of the soil sample was washed with a jet of water through a sieve of a different diameter (2 mm, 200 µm, 500 µm and 800 µm), and separate seeds were determined using the determination keys. The seedling emergence method was carried out under controlled conditions of greenhouses for a period of 12 weeks, and the number of seedling was monitored. Method of physical extraction estimated that the number ranged from 53250 seeds m⁻² in autumn 2014 to up to 43725 seeds m⁻² after spring sampling. On plots where the rotation of three crops is applied after all three sampling, the number of weed seeds in relation to the monoculture (15600/18075/16875 seeds m⁻²) is estimated to be three times smaller. This method indicated that in the monocultures total in the soil was represented 15 weed species, while in the 3-year crop rotation 17. According to the seedling emergence method and counting the seedling, it was found that on the monoculture in the following period it is ready to germinate 6 weed species, or 11 in 3-year crop rotation.

Key words: weed seed bank, crop rotation.