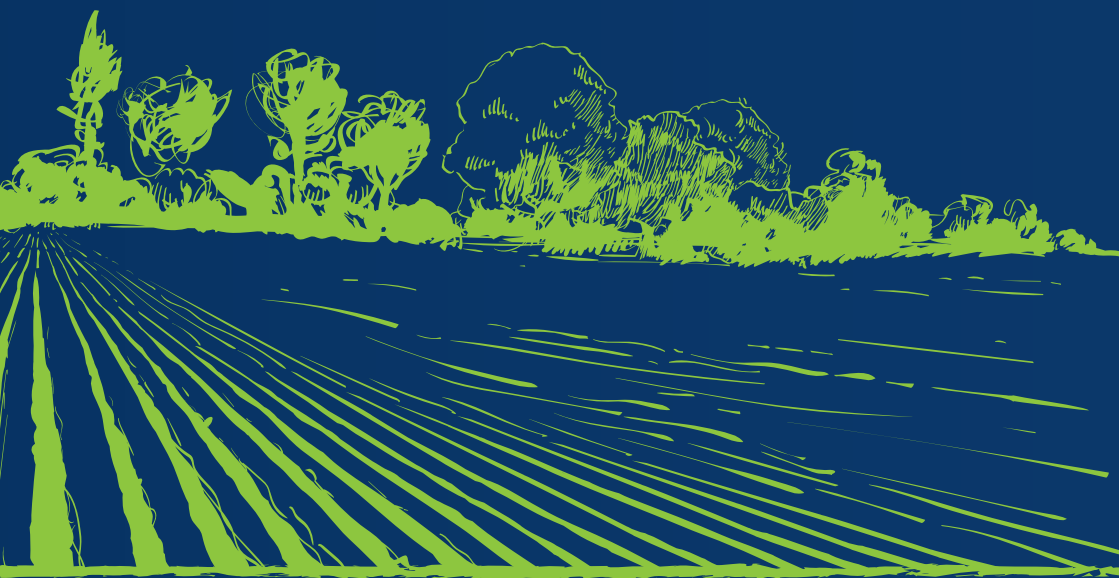


5th ISAF 2025

INTERNATIONAL SYMPOSIUM
for AGRICULTURE AND FOOD
8-10 October 2025

Programme



Organized by:
Faculty of Agricultural Sciences and Food - Skopje,
Ss. Cyril and Methodius University in Skopje





Republic of North Macedonia
**Ministry of agriculture,
forestry and water economy**

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The Faculty of Agricultural Sciences and Food-Skopje is organizing the **5th International Symposium for Agriculture and Food (ISAF-2025)**, which offers a possibility for presenting novel and fundamental advances in the field of sustainable agriculture and food production. ISAF 2025 will bring together and foster the communication among leading researchers, engineers and practitioners with an aim to share their scientific ideas and experiences with all actors in the agricultural sector. Since 2012, the International Symposium for Agriculture and Food is integrating the previous organized events: Faculty-Economy Meeting, Symposium of Viticulture and Wine Production, Symposium for Vegetable and Flower Production and International Conference of the Association of Agricultural Economists of the Republic of North Macedonia.

EVENTS WITHIN ISAF 2025

- 41st Faculty-Economy Meeting
- 14th International Conference of the Association of Agricultural Economists of the Republic of North Macedonia (AAEM)
- Meeting of the Association of Faculties of Agricultural Sciences of South Eastern Europe
- 10th Balkan Animal Sciences Conference BALNIMALCON 2025
- General Assembly of Agro-Well – Horizon Europe Project
- Beyond the leaf: Innovation, Research & Regulation - Philip Morris Panel Discussion
- Biobased Technologies for Climate-Resilient Farming: The DIVAGRI Project Approach
- AgriFood Business x EDIH: Innovate, Connect, Transform

SCIENTIFIC AREAS OF ISAF 2025

The topics of ISAF 2025 are divided into the following scientific sections:

- Animal Biotechnology & BALNIMALCON 2025
- Agricultural Economics
- Agricultural Machinery and Sustainable Agriculture
- Apiculture
- Phytomedicine - Plant Protection
- Food Quality and Safety
- Fruit Growing, Viticulture and Wine Production
- Vegetable, Flower and Decorative Plants Production
- Digital Agriculture & Natural Resources Management
- Field Crop Production
- Genetics, Breeding and Genetic Resources

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Prof. Dr. Marija Cerjak	Prof. Dr. Miljenko Konjacic

PLENARY SPEAKERS



Prof. Dr. Dragi Dimitrievski, Faculty of Agricultural Sciences and Food-Skopje, North Macedonia

Title: From Support to Resurgence – A Vision for the Macedonian Agri-Food Sector

Prof. Dr. Dragi Dimitrievski is a full professor at the Institute of Agricultural Economics at the Faculty of Agricultural Sciences and Food-Skopje, University Ss. Cyril and Methodius in Skopje, and a former Vice-dean for sciences (2003–2005) and former Dean of the Faculty (2009–2017). His research interests and contributions include applied macro-economic analysis in the field of agriculture, with focus on agricultural and rural development policy. Dr. Dragi Dimitrievski is key national expert for agricultural policy and has been actively involved as researcher in different national and international projects related to agricultural and rural development policy analysis. For almost two decades, he is national expert within the Regional Rural Development Standing Working Group in South Eastern Europe (SWG). Dr. Dragi Dimitrievski is regularly being consulted on different important issues regarding the agricultural economics, so as a leader of various national projects, he contributed to development of significant number of strategic and legal documents regarding agricultural policy and rural development. His contribution is especially evident during the food crises due to the Covid-19 and the war in Ukraine, both as support to the policy makers, but also to media to update the public with reliable and thorough information regarding food security issues. All his knowledge and experience in this field he transfers to students through courses in Agricultural Policy that he lectures at all three study cycles, as well as in the course Human Resources Development on the undergraduate studies. Dr. Dragi Dimitrievski has published more than 100 articles in academic journals and international conference proceedings, as well as chapters in different monographs and two textbooks in the field.

PLENARY SPEAKERS



Prof. Dr. Cecilia Costa, CREA, Italy

Title: The most essential of all agricultural activities: apiculture

Dr. Cecilia Costa holds a degree in Agricultural Science and a PhD in Agricultural Biotechnologies. She is a Principal Researcher at CREA, the Italian Agricultural Research Council, where she has led research for over two decades on honey bee breeding and the biodiversity of *Apis mellifera*. Her work emphasizes disease resistance, genotype–environment interactions, and colony health and welfare. Dr. Costa is an active member of the COLOSS Association for the prevention of honey bee colony losses and currently coordinates an EU Horizon project. She has authored approximately 70 scientific publications and is a frequent invited lecturer at national and international apicultural and scientific events.



Prof. Dr. Hossein Azadi, Department of Geography, Ghent University, Belgium

Title: Tipping Points and Resilient Agriculture: How Climate-Smart Agriculture Can Support Small-Scale Farmers

Prof. Dr. Hossein Azadi obtained his first PhD in agricultural economics and the second in human geography. He is currently a professor at Ghent University in Belgium. He has published about 500 journal articles with +13000 citations and h-index of 60 underscoring him as top 3% global scientist ranked by AD Scientific index. His main focus is on land governance, the impacts of climate change on small-scale farmers, and agroecology. He is a member of the editorial boards in Land Use Policy, Land Degradation & Development, Agroecology and Sustainable Food Systems, and Climatic Change. He also serves as a research project evaluator for several international councils and organizations.

PANEL DISCUSSIONS

1. The Role of Innovation and Technology in Climate Change Adaptation in Agriculture

Moderator: Prof. Dr. Vjekoslav Tanaskovikj

Prof. Dr. Zdenko Loncaric, Faculty of Agrobiotechnical Sciences, Josip Juraj Strossmayer University of Osijek, Croatia

Prof. Dr. Hossein Azadi, Department of Geography, Ghent University, Belgium

Prof. Dr. Ordan Cukaliev, Faculty of Agricultural Sciences and Food-Skopje, North Macedonia

Prof. Dr. Mirela Kajkut Zeljković, Institute of Genetic Resources of University of Banja Luka, Bosnia and Hercegovina

Mr. Boban Ilic, SWG

2. From Farm to Global Market: Rethinking Agri-Food Trade

Moderator: Neda Gruevska

Prof. Dr. Ruzica Loncaric, Faculty of Agrobiotechnical Sciences, Josip Juraj Strossmayer University of Osijek, Croatia

Prof. Dr. Vlade Zaric, Faculty of Agriculture, University in Belgrade, Serbia

Prof. Dr. Bozidar Ivanov, Institute of Agricultural Economics, Sofia, Bulgaria

Dr. Ljupco Veleski, Vitaminka AD Prilep, North Macedonia

Sinisha Stefanovski, LK Raspberry DOOEL, North Macedonia

GENERAL PROGRAMME OF ISAF 2025

Date and Time	Programme	Hall
Day 1: 8 October 2025		
09.00–17.30	Registration of participants	Lobby
09.15–15.00	General Assembly of Agro-Well – Horizon Europe Project	Banket
16.00–17.30	Meeting of the Association of Faculties of Agricultural Sciences of Southeast Europe	Banket
18.00–19.00	Opening Ceremony	Biljana
19.00–19.30	Plenary Session 1	Biljana
19.30–21.30	Welcome Reception	Lobby
Day 2: 9 October 2025		
09.00–10.00	Plenary Session 2a & 2b	Biljana
10.00–10.30	Coffee Break	Lobby
	Parallel Sections 1	Biljana, Car Samoil, Kaneo, Ohrid, Labino, Banket
10.30–12.00	Beyond the leaf: Innovation, Research & Regulation - Philip Morris Panel Discussion	Car Samoil
12.00–12.30	Coffee Break	Lobby
	Parallel Sections 2	Biljana, Car Samoil, Kaneo, Ohrid, Labino, Banket
12.30–14.00	AgriFood Business x EDIH: Innovate, Connect, Transform	Green
	Biobased Technologies for Climate-Resilient Farming: The DIVAGRI Project Approach	Banket
14.00–15.00	Lunch	
15.00–16.00	Panel Discussion 1	Biljana
16.00–16.30	Coffee Break	Lobby
16.30–18.00	Parallel Sections 3	Biljana, Car Samoil, Kaneo, Ohrid, Labino, Banket
20.00	Gala Dinner	

Date and Time	Programme	Hall
Day 3: 10 October 2025		
09.00–10.00	Panel Discussion 2	Biljana
10.00–10.30	Coffee Break	Lobby
10.30–12.00	Parallel Sections 4	Biljana, Car Samoil, Kaneo, Ohrid, Labino, Banket
12.00–12.30	Coffee Break	Lobby
12.30–13.45	Parallel Sections 5	Biljana, Car Samoil, Kaneo, Ohrid, Labino, Banket
13.45–14.00	Closing Ceremony	Biljana
14.00–15.00	Lunch	
15.00–18.00	Excursion (optional)	
15.00	Departure of participants	

PROGRAMME BY THEMATIC SECTIONS

ANIMAL BIOTECHNOLOGY & BALNIMALCON 2025

Date: Thursday, 09/Oct/2025

4:30pm - 6:00pm

SES-O-ABBC-03: Animal Biotechnology & BALNIMALCON 2025_Oral Pesentation

Location: Kaneo Hall

Session Chair: **Srečko Gjorgievski**, Faculty of Agricultural Sciences and Food - SkopjeSession Chair: **Zlatko Pejkovski**, Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia**CATTLE EXPOSURE TO HIGH TEMPERATURES IN NORTH MACEDONIA'S PELAGONIA REGION****Sreten Andonov¹**, **Ordan Cukaliev¹**, **Dusko Mukaetov²**, **Aleksandra Martinovska Stojcheska¹**¹UKIM-FZNH, North Macedonia, Republic of; ²UKIM-ZI, North Macedonia, Republic of;
sandonov@fznh.ukim.edu.mk**EFFECT OF THE LAYING HENS' GENOTYPE AND REARING SYSTEM ON THE SELECTED MEAT QUALITY PARAMETERS****Simeon Rakonjac¹**, **Snežana Bogosavljević-Bošković¹**, **Vladimir Dasković¹**, **Zdenka Škrbić²**, **Miloš Lukić²**, **Veselin Petričević²**, **Milun D. Petrović¹**¹University of Kragujevac, Faculty of Agronomy in Čačak, Serbia; ²Institute for Animal Husbandry, Beograd-Zemun, Serbia; simeonr@kg.ac.rs**IN SITU AND EX SITU PROTECTION OF THE AUTOCHTHONOUS BOVINE BREEDS****Gjoko Bunevski¹**, **Vesna Gantner²**, **Bratislav Pecis³**, **Andrej Merdegush⁴**, **Ranko Gantner²**, **Borislav Radevski¹**, **Aleksandar Klincarov¹**, **Violeta Rakic³**, **Nikola Stolic³**¹FASF Skopje, North Macedonia, Republic of; ²University Josip Juraj Strossmayer in Osijek, Faculty of Agro-Biotechnics of science, Croatia; ³Toplica Academy of expert sciences Prokuplje, Serbia; ⁴University of Maribor, Faculty of Agriculture and Life Sciences in Maribor, Slovenia; bunevski@gmail.com**THE ROLE OF SELENIUM (SE) IN PIG NUTRITION****Vladimir Margeta**Faculty of Agrobiotechnical science Osijek, Croatia, Croatia; vmargeta@fazos.hr**PHENOTYPE TREND OF MACEDONIAN PIG HUSBANDRY FARM RESULTS****Vlado Vuković¹**, **Sreten Andonov²**, **Srečko Gjorgievski¹**¹Faculty of agricultural sciences and food - UKIM Skopje, North Macedonia, Republic of; ²Swedish Agriculture University - SLU; vvukovic@fznh.ukim.edu.mk**THE IMPACTS OF GLOBAL WARMING ON THE SEAS: A CASE STUDY OF MONOPLEX PARTHENOPEUS FROM THE MEDITERRANEAN COAST OF TÜRKİYE****Mehmet Gokoglu**, **Mesut Yilmaz**Akdeniz University, Türkiye; gokoglu@akdeniz.edu.tr

Date: Friday, 10/Oct/2025

10:30am - 12:00pm

SES-P-ABB-04: Animal Biotechnology & BALNIMALCON 2025_Poster PresentationLocation: **Kaneo Hall**Session Chair: **Aleksandra Silovska Nikolova**, Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, Republic of North MacedoniaSession Chair: **Zlatko Pejkovski**, Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia**AMMONIA EMISSIONS FROM LIVESTOCK PRODUCTION: CHALLENGES, CAUSES AND MITIGATION APPROACHES****Mirna Gavran¹, Nenad Micić², Vesna Gantner¹**¹Faculty of Agrobiotechnical Sciences, Croatia; ²Institute for Animal Husbandry, Belgrade, Serbia; mgavran@fazos.hr**BOVINE CARCASSES CLASSIFICATION AT DUAL-PURPOSE ADULT CATTLE****Nikola Stolic¹, Bratislav Pešić¹, Violeta Rakic¹, Aleksandar Klincharov², Borislav Radevski², Gjoko Bunevski²**¹Toplica Academy of Applied Studies, Department of Agriculture and Food Technology Studies Prokuplje, R. of Serbia, Serbia; ²Faculty of Agricultural Sciences and Food, Skopje, R. of N. Macedonia; nikola.stolic@gmail.com**EFFECTS OF YEAR AND SEASON ON GROWTH, MILK AND REPRODUCTIVE TRAITS IN ANATOLIAN BUFFALOES****Mehmet Ihsan Soysal, Eser Kemal Gurcan, Emel Özkan Ünal**TEKİRDAG NAMIK KEMAL UNIVERSITY, Türkiye; misoysal@nku.edu.tr**ESTIMATION OF CATTLE AND SHEEP PRODUCTIVE POTENTIAL ON MACEDONIAN PERMANENT GRASSLANDS****Ranko Gantner¹, Dejan Agić¹, Alka Turalija¹, Gjoko Bunevski², Vesna Gantner¹**¹Josip Juraj Strossmayer University in Osijek, Faculty of agrobiotechnical sciences Osijek, Croatia; ²Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food, Skopje, North Macedonia; rgantner@fazos.hr**IDENTIFICATION OF POLYMORPHISMS IN THE SREBF1 GENE REGION OF ANATOLIAN WATER BUFFALOES****Emel Ozkan Unal, Tugce Korkutan, Rozerin Aktaş, Meryem Yıldız, Levent Özduven, M. Ihsan Soysal**Tekirdag Namik Kemal University, Türkiye; ozemel@nku.edu.tr**INSECT LARVAE AS A SUSTAINABLE SOURCE OF PROTEIN IN ANIMAL NUTRITION: POTENTIAL AND CHALLENGES****Srecko Gjorgjevski¹, Aleksandar Karaviloski², Zoran Popovski¹, Dragoslav Kocovski¹, Vlado Vukovich¹, Gjoko Bunevski¹, Koco Porcu¹**¹Ss. Cyril and Methodius in Skopje, Faculty of Agricultural Sciences and Food - Skopje, North Macedonia, Republic of; ²Ve Dog Food DOO, Prilep, Republic of North Macedonia; gjorgjevskisrecko@yahoo.com**MASS COMPOSITION OF OHRID BELVICA (SALMO OHRIDANUS, STEINDACHNER)****Katerina Belichovska, Daniela Belichovska, Aleksandra Silovska Nikolova, Zlatko Pejkovski**Faculty of Agricultural Sciences and Food - Skopje, North Macedonia, Republic of; kbelichovska@yahoo.com**POTENTIAL USE OF INSECTS IN POULTRY NUTRITION****Farahuddin Larghani, Hasan Ersin Samli**TEKİRDAG NAMIK KEMAL UNIVERSITY, Türkiye; esamli@nku.edu.tr**POTENTIALS FOR PROTECTION OF THE TRADITIONAL WHITE BRINE CHEESE FROM OVCHEPOLSKA PRAMENKA BREED****Valentina Jovchevska, Sonja Srbinovska, Kocho Porchu, Dushica Santa**Faculty of Agricultural Sciences and Food - Skopje, UKIM, North Macedonia, Republic of; ssrbinovska@fznh.ukim.edu.mk**DETERMINATION OF RELATIONSHIPS BETWEEN GOAT, CATTLE PRESENCE AND RAW MILK AMOUNT USING PANEL DATA ANALYSIS****Ugur Berker, Eser Kemal Gurcan**TEKİRDAG NAMIK KEMAL UNIVERSITY, Türkiye; egurcan@nku.edu.tr

REFINING CARE AND WELFARE FOR IMMUNODEFICIENT MICE: LESSONS FROM NSG AND NSG-MHC I/II DKO MODELS

Daniel Trajkovski¹, Gustavo Alviter Raymundo¹, Zoran Popovski²

¹University of Cambridge, School of Clinical Medicine, Cambridge, United Kingdom; ²Ss. Cyril and Methodius University of Skopje, Faculty of Agricultural Science and Food, Skopje, North Macedonia; dt440@cam.ac.uk

STATE, TRENDS AND PERSPECTIVES OF ORGANIC LIVESTOCK PRODUCTION IN THE REPUBLIC OF NORTH MACEDONIA

Kocho Porchu, Marija Zdravkovska, Gjoko Bunevski, Dragoslav Kocovski

FZNH, North Macedonia, Republic of; koco_porchu@yahoo.com

THE EFFECTS OF ORGANIC SELENIUM ON THE GROWTH OF DAY-OLD CHICKS

Bratislav Pesic¹, Nikola Stolic¹, Nebojsa Zlatkovic¹, Aleksandra Jevtic¹, Gjoko Bunevski², Dragoslav Kocovski²

¹Toplica Academy Prokuplje., Serbia; ²Faculty of Agricultural Sciences and Food, Skopje, R. Of Macedonia; batta.pesic@gmail.com

THE IMPACT OF DOMESTIC CHICKEN DISTRIBUTION ON WOMEN'S ECONOMIC SITUATION IN KABUL PROVINCE OF AFGHANISTAN

Farahuddin Larghani, Eser Kemal Gurcan

TEKIRDAG NAMIK KEMAL UNIVERSITY, Turkiye; egurcan@nku.edu.tr

USING OF FISH WASTE SILAGE IN ANIMAL NUTRITION

Farahuddin Larghani, Hasan Ersin Samli

TEKIRDAG NAMIK KEMAL UNIVERSITY, Turkiye; esamli@nku.edu.tr

AGRICULTURAL ECONOMICS

Date: Thursday, 09/Oct/2025

10:30am - 12:00pm	SES-O-AE-01: Agricultural Economics_Oral Presentation Location: Ohrid Hall Session Chair: Emelj Tuna, Faculty of agricultural sciences and food - Skopje / UKIM Session Chair: Tom Dufhues, IAMO ELICITING FARMERS' PREFERENCES FOR AGRICULTURAL POLICY REFORM Dragi Dimitrievski¹, Marina Nacka¹, Andreas Drichoutis² ¹Faculty of Agricultural Sciences and Food- Skopje, North Macedonia, Republic of; ²Agricultural University of Athens, Greece; marina.nacka@fzh.ukim.edu.mk FROM STRATEGIC OBJECTIVES TO ACTUAL IMPLEMENTATION: ASSESSING NORTH MACEDONIA AGRICULTURAL AND RURAL DEVELOPMENT POLICY Ana Kotevska¹, Aleksandra Martinovska Stojcheska¹, Emil Erjavec² ¹Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food - Skopje, North Macedonia; ²University of Ljubljana, Biotechnical Faculty, Ljubljana, Slovenia; ana.kotevska@fzh.ukim.edu.mk MEASURING THE MULTI-DIMENSIONAL IMPACTS OF LAND CONSOLIDATION: EVIDENCE FROM A MIXED-METHODS STUDY IN EGRI Aleksandra Martinovska Stojcheska¹, Ana Simonovska¹, Emelj Tuna¹, Ana Kotevska¹, Zlatko Chanevski¹, Dragan Gjoshevski¹, Morten Kvistgaard² ¹Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food, North Macedonia, Republic of; ²International consultant; amartinovska@fzh.ukim.edu.mk POTENTIAL AND PROBLEMS OF GRASSLANDS AS EXPLICIT POLICY INSTRUMENTS TO REALIZE GREEN TRANSITION Kiril Manevski Aarhus University, Denmark; kiril.manevski@agro.au.dk
10:30am - 12:00pm	SES-P-AE-01: Agricultural Economics_Poster Presentation Location: Ohrid Hall Session Chair: Emelj Tuna, Faculty of agricultural sciences and food - Skopje / UKIM Session Chair: Tom Dufhues, IAMO ECONOMIC ANALYSIS OF GRAPE PRODUCTION IN MACEDONIA: THE CASE OF THE SMEDEREVKA VARIETY Riste Elenov¹, Zorica Sredojevic² ¹FASF, North Macedonia, Republic of; ²Faculty of Agriculture, University of Belgrade; relenov@fzh.ukim.edu.mk THE PLACE AND SIGNIFICANCE OF TOBACCO IN MACEDONIA – FROM THE PAST TO THE PRESENT Silvana Pashovska, Karolina Kochoska, Natasha Zdraveska University St Kliment Ohridski-Bitola,Scientific tobacco institute-Prilep,Republic of North Macedonia, North Macedonia, Republic of; silvana.pasoska@uklo.edu.mk
12:30pm - 2:00pm	SES-O-AE-02: Agricultural Economics_Oral Presentation Location: Ohrid Hall Session Chair: Ana Kotevska, Faculty of Agricultural Sciences and Food - Skopje Session Chair: Angel Sarov, IAE OPEN BALKAN INITIATIVE AND IMPACT ON THE TRADE OF FRUIT AND VEGETABLE Vlade Zarić¹, Marina Nacka², Nikola Mararašević¹ ¹Faculty of Agriculture, University in Belgrade, Serbia; ²Faculty of Agricultural Sciences and Food - Skopje, Ss. Cyril and Methodius University in Skopje; vzaric@agrif.bg.ac.rs COMPARATIVE COMPETITIVENESS OF SHEEP AND GOAT MEAT INDUSTRY IN THE COUNTRIES OF BALKAN REGION Bozhidar Ivanov, Veselin Krustev, Dilyana Mitova, Daniela Tsvyatkovska Institute of Agricultural Economics Sofia, Bulgaria; veselin.krustev@gmail.com MIGRATION AND THE FUTURE OF RURAL YOUTH IN THE WESTERN BALKANS: CHALLENGES AND PROSPECTS Emelj Tuna¹, Ana Simonovska¹, Tom Dufhues², Judith Möllers² ¹Faculty of agricultural sciences and food - Skopje / UKIM, North Macedonia, Republic of; ²Leibniz Institute of Agricultural Development in Transition Economies (IAMO); emelj.tuna@fzh.ukim.edu.mk

POLITICAL INSUFFICIENCIES AND RURAL YOUTH BEHAVIOR IN THE WESTERN BALKANS

Ana Simonovska¹, Emelj Tuna¹, Dufhues Thomas², Möllers Judith²

¹Faculty of Agricultural Sciences and Food-Skopje, North Macedonia, Republic of North Macedonia;

²IAMO-Halle, Germany; ana_simonovska@fznh.ukim.edu.mk

BRIDGING THE GAP: FINANCIAL LITERACY AS A PATHWAY TO FINANCIAL INCLUSION FOR SMALL FARMERS IN SOUTHEAST EUROPE

Vasko Hadžievski¹, Aleksandra Martinovska Stojcheska²

¹We Effect, North Macedonia, Republic of; ²Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food, North Macedonia; vasko.hadzievski@weeffect.org

12:30pm - 2:00pm

SES-P-AE-02: Agricultural Economics_Poster Presentation

Location: Ohrid Hall

Session Chair: **Ana Kotevska**, Faculty of Agricultural Sciences and Food - Skopje

Session Chair: **Angel Sarov**, IAE

12:30pm - 1:00pm

AGRICULTURAL EXTENSION METHODS FOR ENHANCING PRODUCTION OF AGRICULTURAL HOLDINGS IN THE REPUBLIC OF NORTH MACEDONIA

Jovan Ažderski¹, Zlatko Chanevski¹, Zoran Bardakoski², Despina Popovska-Stojanov³, Vasko Hadžievski⁴

¹University "Ss. Cyril and Methodius" in Skopje, Faculty of Agricultural Sciences and Food - Skopje, Skopje, North Macedonia, Republic of; ²National Extension Agency for Agriculture, Bitola, Republic of North Macedonia; ³University "Ss. Cyril and Methodius" in Skopje, Institute of Agriculture - Skopje, Skopje, Republic of North Macedonia; ⁴We Effect Project, Embassy of Sweden, Skopje, Republic of North Macedonia; azderski@fznh.ukim.edu.mk

1:00pm - 1:30pm

THE BUSINESS MODEL IN BULGARIAN AGRICULTURAL COOPERATIVES: REGIONAL DIFFERENCES AND SOCIAL IMPACT

Angel Sarov

Institute of Agricultural Economics, Trakia University, Bulgaria; angel.sarov@gmail.com

1:30pm - 2:00pm

TOWARDS THE TRANSITION FROM FADN TO FSDN: FARM-LEVEL ANALYSIS OF FERTILIZER AND PESTICIDE USE IN SERBIA

Mirjana Bojčevski¹, Robert Radišić², Vedran Tomić², Nataša Tolimir², Slavica Čolić²

¹Ministry for Agriculture, Forest and Water Management of the Republic of Serbia; ²Institute for Science Application in Agriculture, Serbia; slavicacol@yahoo.com

AGRICULTURAL MACHINERY AND SUSTAINABLE AGRICULTURE

Date: Thursday, 09/Oct/2025

4:30pm - 6:00pm

SES-O-AMSA-03: Agricultural Machinery and Sustainable Agriculture_Oral**Presentation**

Location: Ohrid Hall

Session Chair: **Zlatko Arsov**, Faculty of Agricultural Sciences and Food - Skopje**TRANSFORMING GRASSLAND SCIENCE FOR CLIMATE ACTION: DESIGN OF CARBON FARMING CURRICULUM****Maryam Rahimi Jahangirlou¹, Ilona Rac², Verica Ilieva³, Kiril Manevski¹**¹Aarhus University, Denmark; ²University of Ljubljana, Slovenia; ³Goce Delchev University, North Macedonia; verica.ilieva@ugd.edu.mk**CONSERVATION AND CONVENTIONAL TILLAGE MANAGEMENT IMPACT ON SOIL PHYSICAL PROPERTIES AND EROSION IN CENTRAL CROATIA****Igor Bogunovic¹, Paulo Pereira², Marija Galic¹, Ivica Kisic¹, Sebastiano Trevisani³**¹University of Zagreb Faculty of Agriculture, Croatia; ²Environmental Management Laboratory, Mykolas Romeris University, Vilnius, Lithuania; ³University IUAV of Venice, Department of Architecture, Construction and Conservation, Dorsoduro 2206, Venezia, Italy; ibogunovic@agr.hr**PERFORMANCE AND ECONOMIC EVALUATION OF A LOCAL BIOCHAR KILN USING AGRICULTURAL RESIDUES IN GHANA.****Theophilus Frimpong⁷, Felix Frimpong², Eric Owusu Danquah³, Patricia Amankwaa Yeboah⁴, Shadrack Kwadwo Amponsah¹, Natson Eyram Amengo⁵, Joel Kwaku Adu⁶**¹CSIR - Crops Research Institute Ghana, Ghana; ²CSIR - Crops Research Institute Ghana, Ghana;³CSIR - Crops Research Institute Ghana, Ghana; ⁴CSIR - Crops Research Institute Ghana, Ghana;⁵CSIR - Crops Research Institute Ghana, Ghana; ⁶CSIR - Crops Research Institute Ghana, Ghana;⁷CSIR - Crops Research Institute Ghana, Ghana; theoifrimz@gmail.com**EXPLOITATION TESTS ON A LINE OF MACHINES FOR THE PRODUCTION OF BIOMASS PRODUCTS****Ile Canev, Igor Iljovski, Zlatko Arsov**FZNH, North Macedonia, Republic of; canevi@fznh.ukim.edu.mk**ENERGY POTENTIAL OF PLANT RESIDUES FROM VINES AND FRUIT PLANTS****Ile Canev¹, Igor Iljovski¹, Nikola Galabov², Zivko Davcev¹**¹FZNH, North Macedonia, Republic of; ²JSC Water economy of R.M.; canevi@fznh.ukim.edu.mk**IMPACT OF LIGHT IRRADIATION ON YIELD OF TOMATOES PRODUCED UNDER COLORED SHADE NETS****Igor Iljovski, Zoran Dimov**FZNH, North Macedonia, Republic of; igoriljovski@gmail.com**ASSESSMENT OF SEVERAL COMPOSITIONAL AND QUALITY CHARACTERISTIC OF TOMATOES GROWN UNDER COLORED SHADE NETS****Igor Iljovski, Frosina Babanovska Milenkovska, Ile Canev**FZNH, North Macedonia, Republic of; igoriljovski@gmail.com

APICULTURE

Date: Thursday, 09/Oct/2025

10:30am - 12:00pm

SES-O-API-01: Apiculture_Oral Presentation

Location: Biljana Hall

Session Chair: **Aleksandar Uzunov**, Faculty of Agricultural Sciences and Food - Skopje, Ss. Cyril and Methodius University in SkopjeSession Chair: **Ales Gregorc**, University of Maribor, Faculty of Agriculture and Life Sciences**VARROA (VARROA DESTRUCTOR) CONTROL FOR SUSTAINABLE APICULTURE****Ales Gregorc**University of Maribor, Faculty of Agriculture and Life Sciences, Slovenia; ales.gregorc@um.si**EFFECT OF BROOD INTERRUPTION METHODS ON INFESTATION OF HONEY BEE (APIS MELLIFERA L.) COLONIES WITH VARROA DESTRUCTOR****Marin Kovačić¹**, Josipa Štavalj¹, Ivana Tlak Gajger², Karolina Tucak¹, Zlatko Puškadija¹¹Faculty of Agrobiotechnical Sciences Osijek, Croatia; ²Faculty of Veterinary Medicine, University of Zagreb, Zagreb, Croatia; marin.kovacic@fazos.hr**TROPILAEALAPSIS, A NEW THREAT TO EUROPEAN APICULTURE****Aleksandar Cvetkovikj¹**, Aleksandar Uzunov^{2,3}¹Faculty of Veterinary Medicine - Skopje, Ss. Cyril and Methodius University in Skopje, Skopje, Macedonia; ²Faculty of Agricultural Sciences and Food - Skopje, Ss. Cyril and Methodius University in Skopje, Skopje, Macedonia; ³State Key Laboratory of Resource Insects, Institute of Apicultural Research, Chinese Academy of Agricultural Sciences, Beijing, China; acvetkovic@fvm.ukim.edu.mk**AN IN-VITRO ASSESSMENT OF TROPILAEALAPS MERCEDESAE SURVIVAL ACROSS A RANGE OF SUBSTRATES.****Maggie C Gill¹**, Bajaree Chuttong², Paul Davies¹, Avril Earl¹, George Tonge¹, Daniel Etheridge¹¹PHIRA-Science, United Kingdom; ²Chiang Mai University, Thailand.; phira.science@gmail.com**INNOVATIVE BREEDING STRATEGIES FOR RESILIENT BEEKEEPING WITHIN THE FRAMEWORK OF THE BEEGUARDS PROJECT IN MACEDONIA****Goran Aleksovski**, Ivana Janeska Stamenkovska, Magdalena Jovanovska, Aleksandar UzunovFaculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, Macedonia; g.aleksovski@fznh.ukim.edu.mk

10:30am - 12:00pm

SES-P-API-01: Apiculture_Poster Presentation

Location: Biljana Hall

Session Chair: **Marin Kovačić**, Faculty of Agrobiotechnical Sciences OsijekSession Chair: **Stobodan Dolasevic**, Institute for Animal Husbandry**APILARNIL FROM THE SOUTHERN ROMANIAN REGION - CHEMICAL CHARACTERIZATION AND MICROBIOLOGICAL INDICATORS FOR FOOD SAFETY****Teodora Colta**, Roxana Antoaneta Spulber, Eusebiu Florea, Cristina Florentina Vaduva, Maria Magdalena Dinca, Adina Gafituc, Bogdan TacheBeekeeping Research and Development Institute, Romania; teodora.colta@icdapicultura.ro**EXPLORING THE CHEMICAL DIVERSITY OF PROPOLIS IN LATVIA: A REGIONAL PERSPECTIVE****Freideriki Papakosta¹**, Konstantia Graikou¹, Leonidas Charistos², Valters Brusbardis³, Josef van der Steen⁴, Ivo Roessink⁵, Bas Buddendorf⁵, Fani Hatjina², Ioanna Chinou¹¹Laboratory of Pharmacognosy and Chemistry of Natural Products, Faculty of Pharmacy, National and Kapodistrian University of Athens, Panepistimiopolis, Zografou, 15771, Athens, Greece; ²Department of Apiculture, Hellenic Agricultural Organisation 'DIMITRA', Nea Moudania, 63 200, Greece; ³Latvian Beekeepers Association, Rigas iela 22, LV-3004 Jelgava Latvia; ⁴Alveus AB Consultancy, Kerkstraat 96, 5061 EL Oisterwijk, The Netherlands; ⁵Wageningen Environmental Research, Droevendaalsesteeg 3, PO Box 47, 6700 AA, Wageningen; faye.d.papakosta@gmail.com**IRON COMPOSITION IN HONEY BEE WORKERS VARIES WITH AGE AND DIET****Ratko Pavlovic¹**, Walter Goessler², Ljubiša Stanisavljević³, Nenad Zarić^{3,4}¹University of Belgrade, Faculty of Chemistry, Belgrade, Serbia; ²University of Graz, Institute of Chemistry, Graz, Austria; ³University of Belgrade, Faculty of Biology, Belgrade, Serbia; ⁴University of Natural Resources and Life Sciences Vienna (BOKU), Institute of Bioanalytics and Agro-Metabolomics, Tulln, Austria; ratko.pavlovic@stud.bio.bg.ac.rs**PRECISE ESTIMATION OF VARROA INFESTATION LEVELS AS A TOOL FOR PRECISION BEEKEEPING****Sergio Albertazzi¹**, Eva Vasiladi^{2,1}, **Cecilia Costa¹**¹CREA, Italy; ²Agricultural University of Athens, Greece; cecilia.costa@crea.gov.it

QUEEN RINGING AS A METHOD TO INDUCE WINTER BROOD BREAK IN HONEY BEE COLONIES

Josipa Štavalj¹, Aleksandar Uzunov^{2,3}, Zlatko Puškadija¹, Irakli Janashia⁴, Chao Chen³, Maggie Gil⁵, Marin Kovačić¹

¹Faculty of Agrobiotechnical Sciences Osijek, Croatia; ²Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food, Skopje, Macedonia; ³State Key Laboratory of Resource Insects, Institute of Apicultural Research, Chinese Academy of Agricultural Sciences, Beijing, China; ⁴Agricultural University of Georgia, Tbilisi, Georgia; ⁵PHIRA-Science, Llandybie, Ammanford, UK; jstavalj@gmail.com

SELECTION AND GENETIC RESOURCES OF THE EUROPEAN HONEYBEE (APIS MELLIFERA): TOWARD SUSTAINABLE APICULTURE

Sladjan Rasic¹, Mića Mladenović²

¹UNIVERSITY EDUCONS, Faculty of ecological agriculture, Sremska Kamenica, Serbia; ²University of Belgrade, Faculty of agriculture, Belgrade, Serbia; rasic.sladjan@gmail.com

SODIUM DISTRIBUTION IN HONEY BEE WORKERS, LARVAE, AND BEE BREAD

Ratko Pavlović¹, Walter Goessler², Robert Brodschneider³, Ljubiša Stanisavljević⁴, Nenad Zarić^{4,5}

¹University of Belgrade, Faculty of Chemistry, Belgrade, Serbia; ²Institute of Chemistry, University of Graz, Graz, Austria; ³University of Graz, Department of Biology, Graz, Austria; ⁴University of Belgrade, Faculty of Biology, Belgrade, Serbia; ⁵University of Natural Resources and Life Sciences Vienna (BOKU), Institute of Bioanalytics and Agro-Metabolomics, Tulln, Austria; ratko.pavlovic@stud.bio.bg.ac.rs

THE CURIOUS CASE OF THE NUMBER OF HONEY BEE COLONIES IN MACEDONIA. WHY DO THE NUMBERS MATTER?

Aleksandar Uzunov¹, Lazo Dimitrov²

¹Faculty of Agricultural Sciences and Food - Skopje, Ss. Cyril and Methodius University in Skopje, Macedonia; ²Institute of Agriculture – Skopje, University Ss. Cyril and Methodius in Skopje, Macedonia; uzunov@fzh.ukim.edu.mk

THE ITALIAN NATIONAL REGISTRY FOR BEE BREEDERS: SAFEGUARDING LOCAL HONEY BEE SUBSPECIES

Patrizia Bergomi, Giorgia Serra, Donato Tesoriero, Vittorio Capano, Cecilia Costa

CREA - Research Centre Agriculture and Environment, Bologna, Italy; cecilia.costa@crea.gov.it

EXPLORING COMPOST-ASSOCIATED BACTERIA FOR ECO-FRIENDLY SUPPRESSION OF A FUNGAL PATHOGEN IN BEEKEEPING

Dzoko Kungulovski¹, Leona Gligoroska¹, Igor Pavlovski²

¹Department of Microbiology and Microbial Biotechnology, Institute of Biology, Faculty of Natural Sciences and Mathematics "Ss Cyril and Methodius" University, Skopje, North Macedonia; ²Research Center for Applied Microbiology and Biotechnology Dr. Kungulovski, Skopje, North Macedonia; leona.gligoroska@hotmail.com

COMPUTER VISION TECHNIQUES FOR AUTOMATIC DETECTION OF TROPILAEALAPS MITES IN HONEY BEE COLONIES (APIS MELLIFERA)

Ema Vasileska¹, Valentina Gecevska¹, Aleksandar Uzunov^{2,3}

¹Ss. Cyril and Methodius University in Skopje, Faculty of Mechanical Engineering, Skopje, Macedonia; ²Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food, Skopje, Macedonia; ³State Key Laboratory of Resource Insects, Institute of Apicultural Research, Chinese Academy of Agricultural Sciences, Beijing, China; ema.vasileska@mf.edu.mk

12:30pm - 2:00pm

SES-O-API-02: Apiculture_Oral Presentation

Location: Biljana Hall

Session Chair: Aslı Özkirim, Hacettepe University

Session Chair: Aleksandar Cvetkovikj, Faculty of Veterinary Medicine - Skopje, Ss. Cyril and Methodius University in Skopje

THE QUALITY OF HONEY BEE (APIS MELLIFERA) QUEENS IN MONTENEGRO

Aleksandar Martinović¹, Josipa Štavalj², Božidarka Marković¹, Zlatko Puškadija², Marin Kovačić²

¹Biotechnical Faculty, University of Montenegro, Montenegro; ²Faculty of Agrobiotechnical Sciences Osijek, University of Josip Juraj Strossmayer in Osijek, Osijek, Croatia; aleksandarmartinovic98@gmail.com

EXAMINATION OF THE MASS AND DIMENSIONS OF ADDED ELEMENTS ATTACHED TO HONEY BEE QUEENS

Slobodan Dolasevic, Maja Petricevic, Milos Marinkovic, Nikola Delic, Nenad Micic, Nenad Stojiljkovic, Bogdan Cekic

Institute for Animal Husbandry, Serbia; dolasevicslobodan.izs@gmail.com

CHRONIC EXPOSURE EFFECTS OF SUFLOXAFLOL AND IMIDACLOPRID UNDER LABORATORY AND FIELD CONDITIONS

Fani Hatjina, Leonidas Charistos

Department of Apiculture, ELGO DIMITRA, Nea Moudania, 63200 Greece; hatjina@elgo.gr

ASSESSING THE IMPACT OF INDOOR RF-EMF EXPOSURE AT 3.6 GHZ ON THE DEVELOPMENT OF HONEY BEES

Anastasia Kalapouti¹, Leonidas Charistos¹, Jürg Fröhlich², Fabian Schneider², Marco Zahner², Zoi Thanou³, Antonios Tsagkarakis³, Andri Varnava⁴, Menelaos Stavrinos⁴, Pieterjan De Boose⁵, Felipe Oliveira Ribas⁵, Arno Thielens⁶, Anke Huss⁷, Maria Bouga³, Fani Hatjina¹

¹Department of Apiculture, Research Institute of Animal Science, Hellenic Agriculture Org. 'DIMITRA', Nea Moudania, Greece, Greece; ²Fields at Work GmbH, Zurich, Switzerland; ³Department of Crop Science, Agricultural University of Athens, Athens, Greece; ⁴Department of Agricultural Sciences, Cyprus University of Technology, Limassol, Cyprus; ⁵Department of Information Technology, Ghent University - imec, Ghent, Belgium; ⁶Photonics Initiative, Advanced Science and Research Center, the Graduate Center of the City University of New York, New York, USA; ⁷Institute for Risk Assessment Sciences, Utrecht University, Utrecht, The Netherlands; anastasiakalapouti@gmail.com

MALTA'S LANDSCAPE SHAPES THE GUT MICROBIOTA OF ITS ENDEMIC HONEY BEE SUBSPECIES, APIS MELLIFERA RUTTNERI

Simone Cutajar^{1,2}, Daniele Alberoni², Loredana Baffoni², Chiara Braglia², Diana Di Gioia², David Mifsud¹

¹Universita ta' Malta; ²Universita' di Bologna; simone.cutajar4@unibo.it

4:30pm - 6:00pm

SES-O-API-03: Apiculture_Oral Presentation

Location: Biljana Hall

Session Chair: **Fani Hatjina**, ELGO DIMITRA

Session Chair: **Simone Cutajar**, University of Malta / University of Bologna

PROS & CONS OF URBAN BEEKEEPING

Gorazd Trušnovec

Urban Beekeepers' Association of Slovenia, Slovenia; gorazd.trusnovec@urbanicebelar.si

EMPOWERED BEEKEEPING FAMILIES IN THE FIELD OF BEEKEEPING WITH AN EMPHASIS ON THE INVOLVEMENT OF WOMEN AND YOUNG

Dejan Antikj¹, Goran Aleksovski¹, Vanco Trajkovski¹, Katja Kotnik²

¹ADRA MACEDONIA, North Macedonia, Republic of; ²ADRA SLOVENIA; adra.slomac@gmail.com

UNEXPECTED RISKS FROM NUTRITIONAL AND BOTANICAL TRAITS OF POLLEN

Daniele Alberoni¹, Bhanu Yadav², Chiara Braglia¹, Soraia Falcão³, Abdulrahim Alkassab⁴, Diana Di Gioia¹, Sergio Angeli²

¹University of Bologna, Italy; ²Free University of Bozen-Bolzano, Italy; ³Instituto Politécnico de Bragança, Portugal; ⁴Julius Kühn-Institut, Germany; daniele.alberoni@unibo.it

SOIL MICROBIOTA INFLUENCE FLORAL SIGNALS AND POLLINATOR ATTRACTION IN SUNFLOWERS

Daniele Alberoni¹, Chiara Braglia¹, Loredana Baffoni¹, Dumenil Claire France Nicolle², Riccardo Favaro², Sergio Angeli², Diana Di Gioia¹

¹University of Bologna, Italy; ²Free University of Bozen, Italy; daniele.alberoni@unibo.it

MICROBIOLOGICAL APPROACH TO USE BEE POLLEN AND PERGA FOR THEIR BIOAVAILABILITY AS THE SUPPLEMENT FOODS

Asli Ozkirim

Hacettepe University, Türkiye; asli.ozkirim@gmail.com

Date: Friday, 10/Oct/2025

10:30am - 12:00pm

SES-O-API-04: Apiculture_Oral Presentation

Location: **Biljana Hall**

Session Chair: **Maggie Gill**, PHIRA-Science

Session Chair: **Aleksandar Uzunov**, Faculty of Agricultural Sciences and Food - Skopje, Ss. Cyril and Methodius University in Skopje

DIFFERENCES BETWEEN DIFFERENT TYPES OF HONEY IN NORTH MACEDONIA

Dr. Irena Djimrevska¹, Prof.Dr. Hrisula Kiprijanovska²

¹Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, North Macedonia, Republic of;

²Faculty of Agricultural Sciences and Food, University St. Cyril and Methodius, Skopje, North

Macedonia; ldjimrevska@yahoo.com

CHEMICAL ANALYSIS OF PROPOLIS POST-TREATMENT WITH ANTI-VARROA APPLICATIONS

Freideriki Papakosta¹, Konstantia Graikou¹, Leonidas Charistos², Fani Hatjina², Ioanna Chinou¹

¹Laboratory of Pharmacognosy and Chemistry of Natural Products, Faculty of Pharmacy, National and Kapodistrian University of Athens, Panepistimiopolis, Zografou, 15771, Athens, Greece; ²Department of Apiculture, Hellenic Agricultural Organisation 'DIMITRA', Nea Moudania, 63 200, Greece;

faye.d.papakosta@gmail.com

GUT MICROBIOME OF THE ORIENTAL HORNET (VESPA ORIENTALIS) AND ITS ROLE IN HONEY BEE PATHOGEN DYNAMICS

Simone Cutajar^{1,2}, Chiara Braglia², Loredana Baffoni², Diana Di Gioia², Martina Mifsud¹, Jorge Spiten³, David Mifsud¹, Daniele Alberoni²

¹Universita ta' Malta; ²Universita' di Bologna; ³Malta Beekeepers Association; simonecutajar@gmail.com

MECHANISM OF MICROBIAL-MEDIATED DNA DAMAGE AND REPAIR IN APIS MELLIFERA UNDER ULTRAVIOLET RADIATION.

Yanjun Liu, Mengjuan Hao, Yan Zhang, Zhenxing Liu

State Key Laboratory of Resource Insects, Institute of Apicultural Research, Chinese Academy of Agricultural Sciences, Beijing, China.; liuzhenxing01@caas.cn

EXPLORATION OF HONEY BEE GENETIC DIVERSITY IN CHINA AND ITS BREEDING PERSPECTIVES

Chao Chen^{1,2}, Wei Shi¹

¹State Key Laboratory of Resource Insects, Institute of Apicultural Research, Chinese Academy of Agricultural Sciences, China, People's Republic of; ²Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, Skopje, Macedonia; chenchao@caas.cn

PERFORMANCE OF NATIVE APIS MELLIFERA RUTTNERI VERSUS INTRODUCED A. M. LIGUSTICA UNDER MALTESE CONDITIONS

David Mifsud¹, Simone Cutajar^{1,2}, Marina Meixner³, Marion Zammit Mangion¹, Thomas Galea⁴, Aleksandar Uzunov^{5,6}

¹Universita ta' Malta; ²Universita' di Bologna; ³Landesbetrieb Landwirtschaft Hessen, Bee Institute, Kirchhain, Germany; ⁴Breeds of Origin Conservancy, Żebbuġ, Malta; ⁵Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food, Skopje, Macedonia; ⁶State Key Laboratory of Resource Insects, Institute of Apicultural Research, Chinese Academy of Agricultural Sciences, Beijing 100193, China; david.a.mifsud@um.edu.mt

PHYTOMEDICINE-PLANT PROTECTION

Date: Friday, 10/Oct/2025

10:30am - 12:00pm	SES-O-PHPP-04: Phytomedicine - Plant Protection_Oral Presentation Location: Ohrid Hall Session Chair: Zvonko Pacanoski, Faculty of Agriculture Sciences and Food BIOLOGICAL DEVELOPMENT OF GRAPHOLITA MOLESTA BUSCK, 1916 (LEPIDOPTERA: TORTRICIDAE) IN NORTH MACEDONIA Miroľub Golubovski¹, Stanislava Lazarevska¹, Sterja Naceski² ¹Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food-Skopje, Institute of Plant Protection and Agricultural Technics, Department of entomology, Republic of North Macedonia; ²Ss. Cyril and Methodius University in Skopje, Faculty of Forest Sciences Landscape Architecture and Environmental Engineering "Hans Em", Republic of North Macedonia; mgolubovski@yahoo.com BIOREMEDIATION OF PESTICIDE-CONTAMINATED SOIL USING MICROORGANISMS FROM PETROLEUM-IMPACTED ENVIRONMENTS Mihail Zhupan¹, Dzoko Kungulovski¹, Igor Pavlovski² ¹University Ss Cyril and Methodius, Faculty of Natural Sciences and Mathematics, North Macedonia, Republic of; ²Research Center for Applied Microbiology and Biotechnology Dr. Kungulovski, Skopje, North Macedonia; mihazhupan9@gmail.com
10:30am - 12:00pm	SES-P-PHPP-04: Phytomedicine - Plant Protection_Poster Presentation Location: Ohrid Hall Session Chair: Rade Rusevski, Faculty of Agricultural Sciences and Food Skopje BIO-ECOLOGY, COMPETIVENESS AND CONTROL OF LAMIAM AMPLEXICAULE L. (HENBIT DEADNETTLE) Zvonko Pacanoski Faculty of Agriculture Sciences and Food, North Macedonia, Republic of; zvonko_lav@yahoo.com BIOCONTROL ACTIVITY OF TRICHODERMA ASPERELLUM AGAINST BOTRYTIS CINEREA ON TOMATO: IN VIVO ASSESSMENT Biljana Kuzmanovska¹, Rade Rusevski¹, Katerina Bandzo Oreshkovikj², Gjorgji Smilkovski¹ ¹Faculty of agricultural sciences and food-Skopje, North Macedonia, Republic of; ²Institute of agriculture-Skopje, North Macedonia, Republic of; bkuzmanovska@fznh.ukim.edu.mk EVALUATION OF BIXAFEN IN THE CONTROL OF NET BLOTCH DISEASE IN BARLEY Rade Rusevski¹, Biljana Kuzmanovska¹, Katerina Bandjo Oreshkovikj² ¹Faculty of Agricultural Sciences and Food Skopje, North Macedonia, Republic of; ²Institute of Agriculture, Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia; raderusevski@yahoo.com HOST PREFERENCE AND SPATIAL DISTRIBUTION OF COTTON MEALYBUGS, PHENACOCUS SOLENOPSIS (TINSLEY, 1898), (HEMIPTERA: PSEUDOCOCCIDAE) Mohammed Khalaf, Iman Al-Juboori University of Kut, Iraq; mkhaf34@yahoo.co.uk IDENTIFICATION OF FUSARIUM SPECIES CAUSING WATERMELON FRUIT ROT Dina Konstantin¹, Renata Ilić¹, Ferenc Bagi¹, Nemanja Pavković¹, Slobodan Vlajić², Tatjana Popović Milovanović³ ¹Faculty of Agriculture, University of Novi Sad, Trg Dositeja Obradovića 8, 21000 Novi Sad, Serbia; ²Institute of Field and Vegetable Crops, Maksima Gorkog 30, 21000 Novi Sad, Serbia; ³Institute of Plant Protection and Environment, Teodora Drazera 9, 11040 Belgrade, Serbia; gjinakonstantin@gmail.com RACE DIVERSITY IN THE POPULATIONS OF PUCCINIA TRITICINA IN THE AREAS OF THE BULGARIAN BLACK SEA COAST Vanya Ivanova Agricultural Academy, Dobrudzha Agricultural Institute-General Toshevo, 9521 Bulgaria; vkiryakova@yahoo.com HARNESSING NATIVE MICROBIAL ANTAGONISTS FOR ECO-FRIENDLY SUPPRESSION OF SOILBORNE PATHOGENS IN TOBACCO Igor Pavlovski¹, Luka Aleksovski², Dzoko Kungulovski² ¹Research Center for Applied Microbiology and Biotechnology Dr. Kungulovski, Skopje, North Macedonia; ²Department of Microbiology and Microbial Biotechnology, Institute of Biology, Faculty of Natural Sciences and Mathematics "Ss Cyril and Methodius" University, Skopje, North Macedonia; aleksovski420@gmail.com

FOOD QUALITY AND SAFETY

Date: Thursday, 09/Oct/2025

4:30pm - 6:00pm

SES-O-FQS-03: Food Quality and Safety_Oral Presentation

Location: Labino Hall

Session Chair: **Ljubica Karakashova**, Faculty of Agricultural science and foodSession Chair: **Silvana Manasievska**, 16.12.1947Session Chair: **Kristina Kijak**, University of Zagreb Faculty of Agriculture**COMPARISON OF NUTRITIONAL PROPERTIES OF DIFFERENT TYPES OF GARLIC PASTE****Ljubica Karakashova¹**, **Frosina Babanovska-Milenkovska¹**, **Zaneta Mijoska²**, **Lenche Velkoska-Markovska¹**¹Faculty of Agricultural Sciences and Food, University St. Cyril and Methodius, Skopje, North Macedonia; ²Food and Veterinary Agency, Skopje, North Macedonia; karakasoval@yahoo.com**CONSUMER AWARENESS AND KNOWLEDGE OF FOOD ADULTERATION IN THE REPUBLIC OF NORTH MACEDONIA****Frosina Babanovska-Milenkovska**, **Teodora Josimovska**, **Ljubica Karakashova**Faculty of Agricultural Sciences and Food, University "Ss. Cyril and Methodius" in Skopje, North Macedonia, Republic of; fbmilenkovska@fznh.ukim.edu.mk**DEVELOPMENT AND VALIDATION OF RP-HPLC METHOD FOR THE DETERMINATION OF POLYPHENOLS IN TOMATO****Lenche Velkoska-Markovska**, **Mirjana Jankulovska S.**, **Sunchica Andonova**Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food - Skopje, North Macedonia; leucevm@fznh.ukim.edu.mk**ESTIMATING CAFFEINE INTAKE FROM DIFFERENT FOOD PRODUCTS AND ASSESSING POPULATION HEALTH RISKS****Frosina Babanovska-Milenkovska¹**, **Ljubica Karakashova¹**, **Lenche Velkoska-Markovska¹**, **Sunchica Andonova¹**, **Biljana Chuleva²**, **Shenaj Skenderoska-Adjija²**, **Jasmina Jovanovska-Veljanovska²**, **Kiril D. Hristovski³**¹Faculty of Agricultural Sciences and Food, University "Ss. Cyril and Methodius" in Skopje, North Macedonia, Republic of; ²Institute for Public Health Republic, Skopje Republic of North Macedonia;³Environmental and Resource Management, The Polytechnic School, Arizona State University; fbmilenkovska@fznh.ukim.edu.mk**FOOD SAFETY IN FOCUS: MACEDONIA'S JOURNEY WITH EFSA****Suzana Popovska**, **Igor Trajkovski**Food and Veterinary Agency, North Macedonia, Republic of; spopovska@fva.gov.mk**SPECTROPHOTOMETRIC QUANTIFICATION OF TOTAL POLYPHENOLS AND FLAVONOIDS IN VEGETABLE EXTRACTS****Irena Petrovska**, **Mirjana S.Jankulovska**, **Lenche Velkoska-Markovska**, **Sunchica Andonova**Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, North Macedonia; renapetrovska2000@gmail.com**VALIDATION OF HPLC METHOD FOR THE SIMULTANEOUS DETERMINATION OF SOME ADDITIVES IN PLANT-BASED FOOD PRODUCTS****Lenche Velkoska-Markovska**, **Sunchica Andonova**, **Kristina Tomska**, **Mirjana Jankulovska S.**, **Frosina Babanovska-Milenkovska**, **Ljubica Karakashova**Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food - Skopje, North Macedonia; leucevm@fznh.ukim.edu.mk

Date: Friday, 10/Oct/2025

10:30am - 12:00pm	SES-O-FQS-04: Food Quality and Safety_Oral Presentation Location: Labino Hall Session Chair: Lenche Velkoska-Markovska, FZNH Session Chair: Violeta Rakić, Toplica Academy of Applied Studies, Department of Agriculture and Food Technology Studies Prokuplje INVESTIGATING THE PROBIOTIC ROLE OF ENVIRONMENTAL LYSINIBACILLUS SPHAERICUS STRAINS Sofija Kostandinovska¹, Dzoko Kungulovski¹, Iskra Cvetkovikj², Natalija Atanasova-Pancevska¹ ¹Ss. Cyril and Methodius University in Skopje, Faculty of Natural Sciences and Mathematics – Skopje, Institute of Biology, Department of Microbiology and Microbial Biotechnology, North Macedonia; ²Ss. Cyril and Methodius University in Skopje, Faculty of Veterinary Medicine; s.kostandinovska@gmail.com PLUM KERNEL OIL AS A NUTRIENT-RICH BYPRODUCT: INSIGHTS INTO FATTY ACIDS AND TOCOPHEROL COMPOSITION Marko Kitanović¹, Andelija Obradović², Biljana Rabrenović¹, Lazar Pejić¹, Mekjell Meland³, Milica Fotirić Akšić¹ ¹University of Belgrade, Faculty of Agriculture, Belgrade, Serbia; ²Institute for Science Application in Agriculture, Belgrade, Serbia; ³NIBIO Ullensvang, Norwegian institute of Bioeconomy Research, Lofthus, Norway; marko.kitanovic@agrif.bg.ac.rs ISOLATION AND FUNCTIONAL ASSESSMENT OF BENEFICIAL MICROBIOTA FROM AN UNCONVENTIONAL MAMMALIAN DAIRY SOURCE Igor Pavlovski¹, Dzoko Kungulovski², Natalija Atanasova Pancevska² ¹Research Center for Applied Microbiology and Biotechnology Dr. Kungulovski, Skopje, North Macedonia; ²Department of Microbiology and Microbial Biotechnology, Institute of Biology, Faculty of Natural Sciences and Mathematics "Ss Cyril and Methodius" University, Skopje, North Macedonia; ipavlovski777@gmail.com PSYCHICAL-CHEMICAL PROPERTIES OF MAIZE GRAIN GROWN UNDER DIFFERENT TILLAGE SYSTEMS AND ORGANIC AMENDMENTS Kristina Kijak, Manuel Matišić, Dora Zurak, Ivica Kisić, Igor Bogunović University of Zagreb Faculty of Agriculture, Zagreb, Croatia; kkijak@agr.hr NATURE'S WAY TO MEET CHALLENGES OF FOOD SECURITY (CAMEL PRODUCTION) Syeda Sidra Batool, Hafiza Umama Fatima, Zia Ur Rehman The Islamia University of Bahawalpur, Pakistan; zia.urrehman@iub.edu.pk NICOTINE POUCHES, A NEW PRODUCT ON THE MARKET OF THE REPUBLIC OF NORTH MACEDONIA Zlatko Arsov, Romina Kabranova, Igor Iljovski, Ile Canev Faculty of Agricultural Sciences and Food - Skopje, North Macedonia, Republic of; zlatko.arsov@fznh.ukim.edu.mk PRODUCTION OF BIOCALCIUM POWDER FROM FISH BONES AND ITS USE AS A FOOD ADDITIVE Nalan Gokoglu, Afsin Ceylan Akdeniz University, Turkey; ngokoglu@akdeniz.edu.tr
12:30pm - 1:45pm	SES-P-FQS-05: Food Quality and Safety_Poster Presentation Location: Labino Hall Session Chair: Mirjana S.Jankulovska, Faculty of Agricultural Sciences and Food - Skopje, Ss Cyril and Methodius University in Skopje Session Chair: Teodora Yaneva, Agricultural Academy Bulgaria ANALYSIS OF SODIUM CHLORIDE CONTENT IN CURED MEAT PRODUCTS IN MACEDONIAN MARKET Aleksandra Silovska Nikolova¹, Daniela Belichovska², Katerina Belichovska¹, Metodija Trajchev¹, Zlatko Pejkovski¹ ¹Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia; ²Institute of Animal and Fishery Science, Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia; silovska@fznh.ukim.edu.mk ANALYSIS OF SODIUM CHLORIDE CONTENT IN SAUSAGE SAMPLES FROM THE MACEDONIAN MARKET Zlatko Pejkovski¹, Aleksandra Silovska Nikolova¹, Daniela Belichovska², Katerina Belichovska¹, Metodija Trajchev¹ ¹Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia, North Macedonia, Republic of; ²Institute of Animal and Fishery Science, Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia; zpejkovski@fznh.ukim.edu.mk

AWARENESS, ATTITUDE, AND ACCEPTANCE OF LABORATORY-GROWN MEAT BY THE MACEDONIAN CONSUMERS

Zlatko Pejkovski¹, Aleksandra Silovska Niklova¹, Daniela Belichovska², Katerina Belichovska¹, Metodija Trajchev¹

¹Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia, North Macedonia, Republic of; ²Institute of Animal and Fishery Science, Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia; zpejkovski@fznh.ukim.edu.mk

BIOCHEMICAL RESPONSES OF TOMATO GENOTYPES TO DROUGHT STRESS: POLYPHENOLIC CONTENT AND ANTIOXIDANT ACTIVITY

Mirjana S. Jankulovska¹, Lenche Velkoska-Markovska¹, Daniela Ganeva², Stanislava Grozeva-Tileva², Vasil Georgiev³, Sibel Aziz², Sunchica Andonova¹, Irena Petrovska¹, Teodora Yaneva⁴, Nasya Tomlekova²

¹Faculty of Agricultural Sciences and Food - Skopje, Ss Cyril and Methodius University in Skopje, North Macedonia, Republic of; ²Maritsa Vegetable Crops Research Institute, Agricultural Academy, Plovdiv, Bulgaria; ³Laboratory Cell Biosystems, Department of Biotechnology, The Stephan Angeloff Institute of Microbiology, Bulgarian Academy of Sciences, Plovdiv, Bulgaria; ⁴Department of Food Technology, Institute of Food Preservation and Quality, Agricultural Academy of Bulgaria, Plovdiv, Bulgaria; jankulovska@fznh.ukim.edu.mk

COLOUR STABILITY AT THE END OF THE SHELF LIFE IN DRY CURED PORK LOIN PRODUCED WITH AN ALTERNATIVE NATURAL NITRITE SOURCE

Aleksandra Silovska Nikolova, Sonja Srbinovska, Metodija Trajchev, Zlatko Pejkovski

Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia, North Macedonia, Republic of; silovska@fznh.ukim.edu.mk

DEVELOPMENT OF FERMENTED OAT-BASED BEVERAGES ENRICHED WITH POLYPHENOL-RICH FRUITS: A FUNCTIONAL ALTERNATIVE TO DIARY

Teodora Yaneva¹, Albena Parzhanova¹, Angel Danev², Yulian Tumbarski³, Dimitar Dimitrov⁴

¹Department of Food Technologies, Institute of Food Preservation and Quality, Agricultural Academy, Plovdiv, Bulgaria;; ²Electrical engineering, electronics and automation, University of Food Technologies, Plovdiv, Bulgaria;; ³Department of Microbiology and Biotechnology, University of Food Technologies, Plovdiv, Bulgaria;; ⁴Department of Selection, Enology and Chemistry, Institute of Viticulture and Enology, Agricultural Academy, Pleven, Bulgaria.; t.yaneva@canri.org

ESTABLISHING A NATIONAL FOOD COMPOSITION DATABASE FOR TRADITIONAL FOODS IN NORTH MACEDONIA

Dushica Santa¹, Maja Dimitrovska², Zvezda Bogevska¹, Frosina Babanovska-Milenkovska¹, Lenche Velkoska-Markovska¹, Mirjana S. Jankulovska¹, Shenaj Skenderoska- Adijja², Janka Porubska³

¹Faculty of Agricultural Sciences and Food - Skopje, Ss Cyril and Methodius University in Skopje; ²Institute for Public Health of the Republic of North Macedonia; ³National Agricultural and Food Centre, Food Research Institute, Department of Food Databases, Bratislava, Slovak Republic; dsanta@fznh.ukim.edu.mk

ETHNOBOTANICAL SURVEY OF THYMUS VULGARIS, HYPERICUM PERFORATUM AND ORIGANUM VULGARE IN NORTH MACEDONIA

Teodora Josimovska, Silvana Manasievska

Faculty of agricultural sciences and food (FASF), University Ss Cyril and Methodius in Skopje; silvanam@fznh.ukim.edu.mk

HARNESSING PROBIOTICS FROM CABBAGE: A NATURAL DEFENSE AGAINST FOODBORNE PATHOGENS

Irina Gjorgjevska- Pejovska, Mila Nikoloska, Sofija Kostandinovska, Dzoko Kungulovski, Natalija Atanasova-Pancevska

Ss. Cyril and Methodius University in Skopje, Faculty of Natural Sciences and Mathematics – Skopje, Institute of Biology, Department of Microbiology and Microbial Biotechnology, North Macedonia; irinagjorgjevska@gmail.com

HOUSEHOLD FOOD WASTE AND ITS ENVIRONMENTAL IMPLICATIONS

Dushica Santa, Sonja Srbinovska, Vladimir Dzabirski

Faculty of Agricultural Sciences and Food - Skopje, Ss Cyril and Methodius University in Skopje; dsanta@fznh.ukim.edu.mk

IRON AND CALCIUM STATUS IN MANDARIN ON THE MARKET IN THE CITY OF ZAGREB

Marko Petek¹, Tea Stanišak², Goran Fruk¹, Antun Šokec¹, Mihaela Šatvar Vrbanić¹, Kristijan Konopka¹, Mile Markoski³, Tomislav Karažija¹

¹University of Zagreb Faculty of Agriculture, Croatia; ²University of Zagreb Faculty of Agriculture, Croatia, student; ³Faculty of Agricultural Sciences and Food, Skopje, North Macedonia; mpetek@agr.hr

PHACELIA TANACETIFOLIA BENTH. HONEY PLANTS-FOR NUTRITION AND HEALTH

Vera Popović¹, Elizabeta Miskoska Milevska², Viliiana Vasileva³, Valentin Kosev⁴, Jela Ikanović⁵, Vladimir Filipović⁶, Radmila Bojović⁷

¹Institute of Field and Vegetable Crops, National Institute for the Republic of Serbia, Novi Sad, Serbia,;

²Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, Blvd. 16-ta

Makedonska brigada, No. 3, Skopje, Republic of North Macedonia; ³Agricultural Academy, Maize

Research Institute, 5835 Knezha, Bulgaria; ⁴Institute of Forage Crops, Pleven, Agriculture academy,

Bulgaria; ⁵IPN - Institute for the Application of Science in Agriculture, Belgrade, Serbia; ⁶Institute for

Multidisciplinary Research, University of Belgrade, Kneza Višeslava 1, 11030 Belgrade, Serbia;

⁷University of Belgrade, Faculty of Agriculture; Zemun. Republic of Serbia; drvypopovic@gmail.com

QUALITY OF MIXED FLOUR DEPENDING OF WHEAT VARIETY

Dane Boshev, Sonja Ivanovska, Mirjana Jankulovska, Nadica Sandeva Atanasova

FZNH, UKIM, North Macedonia, Republic of; dboshev@yahoo.com

TOTAL MONOMERIC ANTHOCYANIN CONTENT AND ANTIOXIDANT ACTIVITY IN FRUITS OF BILBERRY (VACCINIUM MYRTILLUS L.)

Violeta Rakić¹, Vojkan Miljković², Milena Miljković³, Nataša Poklar Ulrih⁴

¹Toplica Academy of Applied Studies, Department of Agriculture and Food Technology Studies Prokuplje,

Čirila i Metodija 1, 18400 Prokuplje, Serbia; ²University of Niš, Faculty of Technology Leskovac, Bulevar

oslobođenja 124, 16000 Leskovac, Serbia; ³University of Niš, Faculty of Sciences and Mathematics,

Department of Chemistry, Višegradska 33, 18000 Niš, Serbia; ⁴Department of Food Science and

Technology, Biotechnical Faculty, University of Ljubljana, Jamnikarjeva 101, SI1000, Ljubljana, Slovenia;

violetachem@gmail.com

CORRELATION BETWEEN TOTAL POLYPHENOLS AND ANTIOXIDANT CAPACITY (DPHP, FRAP AND ABTS ASSAYS): PRINCIPLES AND LITERATURE INSIGHTS

Mirjana S.Jankulovska¹, Milena Jankulovska-Petkovska², Vesna Dimova³

¹Faculty of Agricultural Sciences and Food - Skopje, Ss Cyril and Methodius University in Skopje, North

Macedonia, Republic of; ²Faculty of Veterinary Medicine, Ss. Kliment Ohridski University, Bitola, North

Macedonia; ³Ss. Cyril and Methodius University in Skopje, Faculty of Technology and Metallurgy -

Skopje, North Macedonia; jankulovska@fznh.ukim.edu.mk

BIOACTIVE POTENTIAL OF AQUEOUS EXTRACTS FROM BULGARIAN HERBS:FLAVONOIDS AND PHENOLICS

Teodora Yaneva¹, Aneliya Georgieva¹, Bozhidar Bozadzhiev², Albena Parzhanova¹

¹Department of Food Technologies, Institute of Food Preservation and Quality, Agricultural Academy,

Plovdiv, Bulgaria; ²Department of Technology of grain, fodder, bakery and confectionery products,

University of Food Technologies - Plovdiv, Bulgaria; albenadsp@abv.bg

QUALITY PROPERTIES OF CHOCOLATE COVERED DRIED PLUMS

Ljubica Karakashova¹, Frosina Babanovska-Milenkovska¹, Marija Stevanovska¹, Viktorija Stamatovska²

¹Faculty of Agricultural Sciences and Food, University St. Cyril and Methodius, Skopje, North

Macedonia; ²Faculty of Technology and Technical Science, Veles, University St Kliment Ohridski - Bitola;

karakasoval@yahoo.com

PHYTOCHEMICAL SCREENING AND TOTAL POLYPHENOLIC CONTENT DETERMINATION OF POTATO SAMPLES

Maja Sencheva Petrevska¹, Mirjana Jankulovska², Igor Jordanov¹, Vesna Dimova¹

¹Faculty of Technology and Metallurgy, Ss. Cyril and Methodius University, Ruger Boskovic 16, P. O. Box

580, 1000 Skopje, Republic of Macedonia; ²Faculty of Agricultural Sciences and Food, Ss. Cyril and

Methodius University, Blvd. Aleksandar Makedonski bb, P. O. Box 297, 1000 Skopje, Republic of

Macedonia; vdimova@tmf.ukim.edu.mk

VCEAC PREDICTION FOR SET OF FLAVANONES

Maja Sencheva Petrevska¹, Mirjana Jankulovska², Igor Jordanov¹, Vesna Dimova¹

¹Faculty of Technology and Metallurgy, Ss. Cyril and Methodius University, Ruger Boskovic 16, P. O. Box

580, 1000 Skopje, Republic of Macedonia; ²Faculty of Agricultural Sciences and Food, Ss. Cyril and

Methodius University, Blvd. Aleksandar Makedonski bb, P. O. Box 297, 1000 Skopje, Republic of

Macedonia; vdimova@tmf.ukim.edu.mk

FRUIT GROWING, VITICULTURE AND WINE PRODUCTION

Date: Thursday, 09/Oct/2025

10:30am - 12:00pm

SES-O-FGVWP-01: Fruit Growing, Viticulture and Wine Production_Oral Presentation

Location: Labino Hall

Session Chair: **Marjan Kiprijanovski**, Faculty of Agricultural Sciences and Food

Session Chair: **Dragan Radivojević**, University of Belgrade Faculty of Agriculture

ENHANCING TREE GROWTH OF COLUMNAR APPLE CULTIVARS BY USING GIBBERELLINS

Biserka Milić, Nenad Magazin, Maja Milović, Goran Barać, Gordana Barać, Stefan Gligorić

University of Novi Sad, Faculty of Agriculture, Serbia; biserka.milic@polj.edu.rs

MICROALGAE-BASED BIOSTIMULANTS CHANGE PHYSIOLOGICAL, AGRONOMIC AND FRUIT QUALITY TRAITS OF 'SOLU RED' AND 'WAKEFIELD' RASPBERRIES

Jasminka Milivojević¹, **Slavica Spasojević**¹, Dragan Radivojević¹, Miloš Perišić²

¹Faculty of Agriculture, University of Belgrade, Serbia; ²Company "Floriva", Ivanjica, Serbia;

slavica.spasojevic@agrif.bg.ac.rs

SPRING FROST DAMAGE TO PLUM, CHERRY, AND SOUR CHERRY FLOWERS DURING THE 2025 SEASON IN ČAČAK

Ivan Glišić, Radmila Ilić, Gorica Paunović, Tomo Milošević

Faculty of Agronomy - Čačak, Serbia; glishoo@yahoo.com

EFFECT OF INTERSTOCK ON GROWTH AND CROPPING OF THE 'PACKAM'S TRIUMPH PEAR ON WILD PEAR SEEDLINGS ROOTSTOCK

Marjan Kiprijanovski, Nikola Saraginovski

Faculty of Agricultural Sciences and Food, North Macedonia, Republic of;

kiprijanovski.marjan@yahoo.com

FROM FIELD DATA TO EVIDENCE SYNTHESIS: A CASE STUDY ON PEAR FERTILIZATION

Radmila Ilić¹, Jelena Tomić², Boris Rilak², Ivan Glišić¹, Tomo Milošević¹

¹Faculty of Agronomy in Čačak, Serbia; ²Fruit Research Institute in Čačak, Serbia;

radmila.nikolic@kg.ac.rs

THE EFFECT OF SOME ALGINATE-BASED COATING SOLUTIONS ON THE QUALITY AND PHYSICOCHEMICAL CHARACTERISTICS OF BLUEBERRY FRUITS

Nikola Saraginovski¹, Gheorghe-Adrian Martau^{2,3}, Lavinia-Florina Calinolu^{2,3}, Marjan

Kiprijanovski¹, George Manganaris⁴, Dan-Cristian Vodnar^{2,3}

¹Faculty of Agricultural Sciences and Food, University of Ss. Cyril and Methodius University, Skopje, Republic of North Macedonia; ²Faculty of Food Science and Technology, University of Agricultural

Sciences and Veterinary Medicine of Cluj-Napoca, Romania; ³Institute of Life Sciences, University of

Agricultural Sciences and Veterinary Medicine of Cluj-Napoca, Romania; ⁴Department of Agricultural

Sciences, Biotechnology & Food Science, Cyprus University of Technology, 3603 Lemesos, Cyprus;

nikola_saraginovski@yahoo.com

10:30am - 12:00pm

SES-P-FGVWP-01: Fruit Growing, Viticulture and Wine Production_Poster Presentation

Location: Labino Hall

Session Chair: **Tosho Arsov**, Faculty for agriculture science and food, UKIM in Skopje

ENHANCING POLLINATOR ACTIVITY IN AGRICULTURAL SYSTEMS: STRATEGIES TO SUPPORT AND ATTRACT BENEFICIAL INSECT SPECIES

Slavica Čolić¹, Marijana Maslovarić¹, Naoel Admane², Clara Gerardin³, Slađan Stanković¹, Ivana Stanimirović¹

¹Institute for Science Application in Agriculture, Belgrade, Serbia; ²Mediterranean Agronomic Institute of

Bari, Bari, Italy; ³French wine and Vine Institute, Peyrole, France; slavicacoli@yahoo.com

COULD THE SIDE SUBSTITUTE THE KING? THE IMPORTANCE OF FLOWER POSITION IN AN APPLE CLUSTER

Slavica Spasojević, Jasminka Milivojević, Čedo Oparnica, Dragan Radivojević

University of Belgrade, Faculty of Agriculture, Serbia; slavica.spasojevic@agrif.bg.ac.rs

CHEMICAL FINGERPRINT OF POLLEN IN THREE HAZELNUT CULTIVARS USING RAMAN SPECTROSCOPY

Andelija Obradović¹, Ilinka Pećinar², Čedo Oparnica², Dragana Rančić², Marko Kitanović², Milica Fotirić Akšić²

¹Institute for Science Application in Agriculture, Serbia; ²Faculty of Agriculture, University of Belgrade, Serbia; aobradovic@pn.bg.ac.rs

DIFFERENTIATION OF FLOWER BUDS IN SOME PLUM CULTIVARS UNDER THE ECOLOGIC CONDITIONS OF SERBIA

Milica Fotirić AKšić¹, Anđelija Obradović², Dragan Milatović¹, Marko Kitanović¹, Milena Dordević³, Radosav Cerović⁴, Mekjell Meland⁵

¹University of Belgrade, Faculty of Agriculture, Serbia; ²Institute for Science Application in Agriculture, Belgrade, Serbia; ³Fruit Research Institute, Čačak, Serbia; ⁴University of Belgrade, Innovation Centre of the Faculty of Technology and Metallurgy, Belgrade, Serbia; ⁵Norwegian Institute of Bioeconomy Research – NIBIO, Ullensvang, Norway; fotiric@agrif.bg.ac.rs

ANALYSIS OF MORPHOLOGICAL AND CHEMICAL PROPERTIES OF HAZELNUT (CORYLUS AVELLANA L.) CULTIVARS GROWN IN SERBIA

Radmila Ilić, Ivan Glišić, Mirjana Radovanović, Gorica Paunović, Ljiljana Bošković-Rakočević, Tomo Milošević

Faculty of Agronomy in Čačak, Serbia; radmila.nikolic@kq.ac.rs

EFFECT OF GROWTH REGULATORS ON PEDICEL LENGTH AND DETACHMENT FORCE IN SOUR CHERRY

Stefan Gligorić, Nenad Magazin, Maja Milović, Jelena Kalajdzic, Gordana Barac, Biserka Milic
University of Novi Sad, Faculty of Agriculture, Serbia; stefan.gligoric@polj.edu.rs

DISTRIBUTION AND PRODUCTIVITY OF BILBERRY IN NATIONAL PARK PELISTER AND PRESPA REGION

Tosho Arsov, Silvana Manasievska, Mile Markoski, Tatjana Mitkova

Faculty for agriculture science and food, UKIM in Skopje; arsovt@fznh.ukim.edu.mk

IDENTIFICATION AND MAPPING OF OLD TREES OF AUTOCHTHONOUS APPLE AND PEAR VARIETIES IN THE MALEŠEVO REGION

Tosho Arsov¹, Despina Kitanova², Katerina Atanasovska³, Jasminka Andonovska⁴, Robertina Brajanoska², Marijana Shushlevska³

¹Faculty for agriculture science and food, UKIM in Skopje, North Macedonia, Republic of; ²Macedonian Ecological Society, RN Macedonia; ³Farmahem, Department for Environmental Consultancy, RN Macedonia; ⁴Association Center for medical herbs and berries Ambrozija; arsovt@fznh.ukim.edu.mk

12:30pm - 2:00pm

SES-O-FGWVP-02: Fruit Growing, Viticulture and Wine Production_Oral Presentation

Location: Labino Hall
Session Chair: **Mihail Petkov**, FASF
Session Chair: **Zeliha Gökbayrak**, Çanakkale Onsekiz Mart University

PHYSIOLOGICAL RESPONSES OF GRAPEVINE LEAVES IN RELATION TO LEAF AGE

Zeliha Gökbayrak¹, Sofia Ntontis², Mael Orcesi², Astrid Forneck²

¹Çanakkale Onsekiz Mart University, Faculty of Agriculture, Türkiye; ²University of Natural Resources and Life Sciences Vienna, Institute of Viticulture and Pomology, Austria; zgokbayrak@comu.edu.tr

GENOTYPIC AND PHENOTYPIC COMPARISONS OF MUSCAT HAMBURG AND KONČANKA GRAPE VARIETIES GROWN IN VINEYARDS IN THE R. N. MACEDONIA

Biljana Korunoska¹, Zlatko Prculovski², Vlado Pešić³, Krum Bošković², Nenad Bunjac³

¹UKIM, Institute of Agriculture, Skopje, North Macedonia, Republic of; ²UKIM, Faculty of Agricultural Sciences and Food, Skopje, North Macedonia, Republic of; ³University of Belgrade, Faculty of Agriculture, Beograd-Zemun, R. Serbia; markovskabiljana@yahoo.com

THE INFLUENCE OF DIFFERENT CONCENTRATION OF SULFUR DIOXIDE ON THE ORGANOLEPTIC PROPERTIES AND QUALITY OF WINE RIESLING IN BOTTLE

Mihail Petkov, Krum Boskov, Zlatko Prculovski, Kiril Stojanovski

FASF, North Macedonia, Republic of; petkovdmihail@gmail.com

SOME AGROBIOLOGICAL AND TECHNOLOGICAL CHARACTERISTICS OF THE VIOGNER VARIETY GROWN IN THE VELES VINEYARD

Zlatko Prculovski¹, Atanas Dimitrov², Mihail Petkov¹, Krum Boshkov¹, Biljana Korunoska¹

¹Faculty of Agricultural Sciences and Food - Skopje, North Macedonia, Republic of; ²Private sector; zprculovski@fznh.ukim.edu.mk

THE VARIETY AS A FACTOR INFLUENCING THE GRAPE QUALITY OF THE STANUSHINA CULTIVAR

Aleksandar Klincharov

Phd student, Kavadarci, North Macedonia, Republic of; aceklincharov@gmail.com

IMPACT OF EXTREME CLIMATIC CONDITIONS ON THE GRAPE QUALITY OF VRANEC AND SMEDEREVKA VARIETIES

Zlatko Prculovski, Mihail Petkov, Krum Boshkov

Faculty of Agricultural Sciences and Food - Skopje, North Macedonia, Republic of; zprculovski@fznh.ukim.edu.mk

12:30pm - 2:00pm

SES-P-FGVWP-02: Fruit Growing, Viticulture and Wine Production_Poster Presentation

Location: Labino Hall

Session Chair: **Zlatko Prculovski**, Faculty of Agricultural Sciences and Food - Skopje**THE INFLUENCE OF SELECTED YEAST STRAINS ON THE QUALITY OF WINE FROM THE "CABERNET SAUVIGNON" VARIETY****Sandra Georgievska**, Zlatko Prculovski, Dusko NedelkovskiVinarija Kamnik, North Macedonia, Republic of; sandra.krstevska.1307@gmail.com**THE TYPE OF PRUNING AS A FACTOR AFFECTING THE YIELD AND QUALITY OF TEMJANIKA GRAPES****Liljana Saltirov**, Zlatko Prculovski, Mihail Petkov, Krum BoskovAgronutriti, North Macedonia, Republic of; agronutrimk@yahoo.com**AMPELOGRAPHIC GRAPE QUALITY PARAMETERS OF TRAMINER CV CLONES GROWN UNDER AGROECOLOGICAL CONDITIONS OF CENTRAL SERBIA WINE REGION****Zoran Pržić**, Nebojša MarkovićUniversity of Belgrade Faculty of Agriculture, Serbia; zoranata4@yahoo.com**RISK ASSESSMENT OF ARSENIC AND NICKEL IN SOILS OF POTENTIAL VINEYARDS IN THE VRANJE REGION****Dušana Banjac**, Jordana Ninkov, Snežana Jakšić, Jovica Vasin, Stanko Milić, Milorad Živanov, Ivana Stanivuković

Institute of Field and Vegetable Crops, National Institute of the Republic of Serbia, Serbia;

dusana.banjac@nsseme.com**PROJECTION FOR THE DEVELOPMENT OF VITICULTURE IN R. N. MACEDONIA FOR THE PERIOD 2021-2040****Krum Boskov**¹, Zlatko Prculovski¹, Mihail Petkov¹, Petar Hristov¹, Ana Kotevska¹, Biljana Korunoska²¹FZNH Skopje, North Macedonia, Republic of; ²Institute of Agriculture, Skopje, North Macedonia, Republic of; krumboskov@gmail.com**THE IMPACT OF INORGANIC NITROGEN SOURCES ON FERMENTATION KINETICS OF INDIGENOUS AND COMMERCIAL WINE YEASTS****Mila Nikoloska**¹, Dzoko Kungulovski², Igor Pavlovski¹¹Research Center for Applied Microbiology and Biotechnology Dr. Kungulovski, Skopje, North Macedonia; ²Ss. Cyril and Methodius University of Skopje, North Macedonia, Republic of;milanikoloskaa@yahoo.com**QUALITY AND SENSORY PROPERTIES OF PLUM BRANDY****Jane Karakasov**, Mihail Petkov, Krum Boshkov, Zlatko PrculovskiFaculty of Agricultural Sciences and Food UKIM Skopje; jane123kara@gmail.com

VEGETABLE, FLOWER AND DECORATIVE PLANTS PRODUCTION

Date: Thursday, 09/Oct/2025

4:30pm - 6:00pm

SES-O-VFDPP-3: Vegetable, Flower and Decorative Plants Production_Oral Presentation

Location: Car Samoil Hall

Session Chair: **Gordana Popsimonova**, University Ss Cyril and Methodius, Skopje

Session Chair: **Svetlana Zeljković**, Faculty of Agriculture University of Banja Luka, Republic of Srpska/ Bosnia and Herzegovina

FROM STAGNATION TO SUSTAINABILITY: A LOW-COST TECHNOLOGY ROADMAP FOR MACEDONIAN TUNNEL CULTIVATION

Gordana Popsimonova, Rukie Agic, Zvezda Bogevska, Margarita Davitkovska

University Ss Cyril and Methodius, Skopje, North Macedonia, Republic of;

gpopsimonova@fznh.ukim.edu.mk

LETTUCE CULTIVATION IN THE WATER CULTURE FLOWING ON THE TIGRIS RIVER

Vedat Pirinc, Esra Batmaz, **Erhan Akalp**

DICLE UNIVERSITY FACULTY OF AGRICULTURE, Turkiye; akalperhan@gmail.com

SUBSURFACE IRRIGATION SYSTEMS FOR TOMATO (SOLANUM LYCOPERSICUM) AND PEPPER (CAPSICUM ANNUM) CULTIVATION

Erhan Akalp, Recep Taha Akinci, Vedat Pirinc

DICLE UNIVERSITY FACULTY OF AGRICULTURE, Turkiye; akalperhan@gmail.com

THE PRODUCTION OF TEMPEH SNACK

Irzada Taljic¹, Edita Saric², Esma Karahmet Farhat³, Aida Softic¹, Almir Toroman¹

¹University of Sarajevo, Faculty of Agriculture and Food Sciences, Bosnia and Herzegovina; ²Federal

Institut of Agriculture, Bosnia and Herzegovina; ³Josip Juraj Strossmayer University of Osijek, Croatia;

ltaljic@ppf.unsa.ba

ORGANIC SEEDS: BOTTLENECK FOR FURTHER DEVELOPMENT OF ORGANIC FARMING

Rukie Agic, Gordana Popsimonova, Zvezda Bogevska, Margarita Davitkovska

Ss. Cyril and Methodius University in Skopje Faculty of Agricultural Sciences and Food-Skopje, North

Macedonia, Republic of; rukieagic@fznh.ukim.edu.mk

4:30pm - 6:00pm

SES-P-VFDPP-03: Vegetable, Flower and Decorative Plants Production_Poster Presentation

Location: Car Samoil Hall

Session Chair: **Margarita Davitkovska**, Faculty of Agricultural Sciences and Food

Session Chair: **Biljana Ristakjovska Shirovska**, Faculty of Agricultural Sciences and Food, UKIM

EDIBLE FLOWERS AS SOURCE OF BIOACTIVE COMPOUNDS: A FUNCTIONAL FOOD PERSPECTIVE

Ana Vujošević, Sofija Kilibarda, Sandra Vuković, Aleksandar Ž. Kostić

University of Belgrade, Faculty of Agriculture, Serbia; ana@agrif.bg.ac.rs

EDIBLE FLOWERS IN DIET

Jasna Avdić Avdić¹, Ena Hodžić¹, Berina Becić², Alka Turalija³, Fikreta Behmen¹, **Irzada Taljic**¹

¹University of Sarajevo, Faculty of Agriculture and Food Sciences, Bosnia and Herzegovina; ²National

Museum of BiH; ³Faculty of Agrobiotechnical Sciences, Josip Juraj Strossmayer University of Osijek,

Croatia; ltaljic@ppf.unsa.ba

EFFECT OF LED LIGHTING ON THE GROWTH AND DEVELOPMENT OF LEMON BALM (MELISSA OFFICINALIS L.) EXPLANTS UNDER IN VITRO CONDITIONS

Svetlana Zeljković¹, Jelena Davidović Gidas¹, Mirela Kajkut Zeljković^{1,2}, Ana Miladinović¹,

Margarita Davitkovska³

¹Faculty of Agriculture University of Banja Luka, Republic of Srpska/ Bosnia and Herzegovina, Bosnia

and Herzegovina; ²Institute of Genetic Resources, University of Banja Luka, Republic of Srpska/Bosnia

and Herzegovina; ³University St. Cyril and Methodius Skopje, Faculty of Agricultural Sciences and Food,

North Macedonia; svjetlana.zeljkovic@agro.unibl.org

ETHNOBOTANICAL SURVEY OF LEAFY VEGETABLES IN NORTH MACEDONIA

Elizabeta Miskoska-Milevska, Marija Stevanovska, Zvezda Bogevska, Zoran T. Popovski

Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food - Skopje;

miskoska@fznh.ukim.edu.mk

FROM WASTE TO GROWTH: MUSHROOM RESIDUES IN HORTICULTURE

Zvezda Bogevska¹, Kristina Todorova², Mile Markoski¹, Gordana Popsimonova¹, Rukie Agic¹,

Margarita Davitkovska¹

¹Ss. Cyril and Methodius University in Skopje Faculty of Agricultural Sciences and Food-Skopje, North Macedonia, Republic of; ²Ekovita - Negotino, Republic of North Macedonia; zvezda@fzh.ukim.edu.mk

INFLUENCE OF ARTIFICIAL LIGHT ON TOMATO SEEDLING DEVELOPMENT IN THE PROTECTED ENVIRONMENT

Zvezda Bogevska, Aleksandar Simonovski, Gordana Popsimonova, Rukie Agic, Margarita Davitkovska

Ss. Cyril and Methodius University in Skopje Faculty of Agricultural Sciences and Food-Skopje, North Macedonia, Republic of; zvezda@fzh.ukim.edu.mk

PLANT SPECIES OF MEADOWS AND PASTURES FOR THE PRODUCTION OF EDIBLE FLOWERS

Alka Turalija, Vesna Gantner, Mirna Gavran, Ranko Gantner

Faculty of agrobiotechnical sciences Osijek, Croatia; alka.turalija@fazos.hr

SEED PRIMING EFFECTS ON GERMINATION OF PARSNIP (PASTINACA SATIVA L.)

Monika Vidak^{1,2}, Marija-Magdalena Kovačec¹, Zlatko Šatović^{1,2}, Boris Lazarević^{1,2}, **Klaudija Carović-Stanko**^{1,2}

¹University of Zagreb Faculty of Agriculture, Croatia; ²Center of Excellence for Biodiversity and Molecular Plant Breeding, Croatia; kcarovic@agr.hr

THE EFFECT OF TWO DIFFERENT FERTILIZERS ON THE QUALITY OF CYCLAMEN PERSICUM MILL.

Margarita Davitkovska¹, Vjekoslav Tanasković¹, Zvezda Bogevska¹, Gordana Popsimonova¹, Rukie Agic¹, Svjetlana Zeljković²

¹Faculty of Agricultural Sciences and Food, North Macedonia, Republic of; ²Agricultural Faculty, University in Banja Luka, University city, Blvd. vojvode Petra Bojovića 1A 78 000 Banja Luka, Bosnia and Herzegovina; margaritad@fzh.ukim.edu.mk

DIGITAL AGRICULTURE & NATURAL RESOURCES MANAGEMENT

Date: Thursday, 09/Oct/2025

10:30am - 12:00pm

SES-O-DANRM-01: Digital Agriculture & Natural Resources Management_Oral Presentation

Location: **Banket Hall**

Session Chair: **Svetoslav Malchev**, Fruit Growing Institute - Plovdiv

Session Chair: **Silvana Manasievska**, 16.12.1947

DIGITAL AGRICULTURE FOR SMARTER WATER MANAGEMENT: FROM DATA TO SUSTAINABLE DECISIONS

Rozalija Cvejć

University of Ljubljana, Slovenia; rozalija.cvejic@bf.uni-lj.si

SPATIAL DISTRIBUTION OF COPPER (CU) IN APPLE ORCHARDS IN THE RESEN REGION

Mile Markoski¹, Tatjana Mitkova¹, Ivan Minchev², Vjekoslava Tanaskovic¹, Marija Todorovska¹

¹Faculty of Agricultural Sciences and Food - Skopje, North Macedonia, Republic of; ²Hans Em Faculty of Forest Sciences, Landscape Architecture and Environmental Engineering;

mmarkoski@fznh.ukim.edu.mk

SPATIAL DISTRIBUTION OF COPPER IN THE SOILS UNDER ORCHARDS IN THE KUMANOVO REGION

Tatjana Mitkova¹, Mile Markoski¹, Marjan Kiprijanovski¹, Maja Naskovska¹, Ivan Minchev², Marija Todorovska¹

¹"Ss. Cyril and Methodius" University, Faculty of Agricultural Sciences and Food, 1000, Skopje, Republic of North Macedonia; ²Ss. Cyril and Methodius" University, Hans Em Faculty of Forest Sciences,

Landscape Architecture and Environmental Engineering, 1000, Skopje, Republic of North Macedonia;

tmitkova@fznh.ukim.edu.mk

WATERWAYS IN TRANSITION: INTEGRATING HYDROLOGY AND POLICY IN SKOPJE'S VARDAR AND PRISHTINA'S CULVERTED RIVERS

Ivana Angelova¹, Vlere Krasnik², Marija Vukelic Shutovska¹

¹SS. Cyril and Methodius University, Faculty of Agricultural Sciences and Food, Macedonia; ²University of Prishtina, Faculty of Civil Engineering, Kosovo; ivana.angelova@fznh.ukim.edu.mk

GREEN AGENDA FOR THE WESTERN BALKANS: SUPPORTING THE WESTERN BALKANS IN ADAPTING TO CLIMATE CHANGE

Alexander Erlewein, Irena Djimrevska

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, North Macedonia, Republic of;

irena.djimrevska@giz.de

12:30pm - 2:00pm

SES-O-DANRM-02: Digital Agriculture & Natural Resources Management_Oral Presentation

Location: **Banket Hall**

Session Chair: **Vjekoslav Tanaskovic**

Session Chair: **Ivana Angelova**, SS. Cyril and Methodius University, Faculty of Agricultural Sciences and Food

LINKING EUROPE AND AFRICA THROUGH SUSTAINABLE BIO-BASED SOLUTIONS

Svetoslav Malchev¹, Evgenia Mahler², Vjekoslav Tanaskovic³, Ordan Cukaliev¹, Daniela Germanova¹, Georgi Dimitrov Kornov¹

¹Fruit Growing Institute - Plovdiv, Bulgaria; ²Robert-Schmidt-Institut, Hochschule Wismar University of Applied Sciences: Technology, Business and Design, Germany; ³Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food - Skopje; svetoslav.m@outlook.com

THE INFLUENCE OF A SELF-REGULATING, LOW-ENERGY, CLAY-BASED IRRIGATION (SLECI) SYSTEM ON WATER PRODUCTIVITY AND YIELD IN MORINGA AND COWPEA CULTIVATION

H.A. Chaba^{1,2}, V. Tanaskovic³, O. Cukaliev³, H.T. Araya¹, N.A. Araya¹, M. Steyn², S. Trinath Suryadevara⁴, S. Malchev⁵, J. Siering⁶, S. Nechkovski³, T. Arsov³

¹Agricultural Research Council-Vegetable, Industrial and Medicinal Plants, Pretoria, South Africa;

²Department of Plant and Soil Sciences, University of Pretoria, Pretoria, South Africa; ³University of St. Cyril and Methodius, Faculty of Agricultural Sciences and Food, Skopje, North Macedonia; ⁴Institute of

Polymer and Production Technologies, Germany; ⁵Fruit Growing Institute – Plovdiv, Agricultural

Academy, Bulgaria; ⁶Robert-Schmidt-Institut, Hochschule Wismar University of Applied Sciences:

Technology, Business and Design, Germany; Chabahi@arc.agric.za

HYDRUS 2D SIMULATION OF WATER DYNAMICS UNDER SLECI AND DRIP IRRIGATION SYSTEMS AT BUAN IN BOTSWANA.

Khumoetsile Bratah Mmolawa, Simangalisso Madorobo

Botswana University of Agriculture and Natural Resources, Botswana; kmmolawa@buan.ac.bw

SUSTAINABLE AGRICULTURE NEEDS A HOLISTIC APPROACH: CASE STUDY KWANDABA, KWA-ZULU-NATAL, SOUTH AFRICA

A.T. Grundling^{1,4,5}, C.M. Swanepoel¹, T.C. Mapumulo¹, N.N.A. Ngcobo³, H.T. Araya², J.P. Le Roux¹

¹Agricultural Research Council-Natural Resources and Engineering, Pretoria, South Africa; ²Agricultural Research Council-Vegetable, Industrial and Medicinal Plant, Pretoria, South Africa; ³Agricultural Research Council-Economic Analysis, Pretoria, South Africa; ⁴Centre for Environment Management, University of the Free State, Bloemfontein, South Africa; ⁵Applied Behavioural Ecology and Ecosystem Research Unit, University of South Africa, Pretoria, South Africa; althea@arc.agric.za

MORINGA STEMS USED AS FEEDSTOCK FOR FUNCTIONAL BIOCHAR

N.A. Araya¹, A.T. Grundling^{1,3,4}, G. Sithole¹, S.K. Maleka¹, H.T. Araya²

¹Agricultural Research Council-Natural Resources and Engineering, South Africa; ²Agricultural Research Council - Vegetable, Industrial and Medicinal Plants, South Africa; ³Centre for Environment Management, University of the Free State, Bloemfontein, South Africa; ⁴Applied Behavioural Ecology and Ecosystem Research Unit, University of South Africa, Pretoria, South Africa; lbraimoN@arc.agric.za

4:30pm - 6:00pm

SES-O-DANRM-03: Digital Agriculture & Natural Resources Management_Oral Presentation

Location: Banket Hall

Session Chair: **Oner Cetin**, Dicle University

Session Chair: **Althea Grundling**, Agricultural Research Council

ALTERNATIVE USE OF INVASIVE PLANTS AS BIOCHAR FEEDSTOCK TO IMPROVE PLANT GROWTH AND SOIL WATER RETENTION

H.T. Araya¹, N.A. Araya², A.T. Grundling^{2,3,4}, S.K. Maleka², T.S. Nkuna¹, H.A. Chaba¹, M. Truter¹

¹Agricultural Research Council-Vegetable, Industrial and Medicinal Plants, Pretoria, South Africa; ²Agricultural Research Council-Natural Resources and Engineering, Pretoria, South Africa; ³Centre for Environment Management, University of the Free State, Bloemfontein, South Africa; ⁴Applied Behavioural Ecology and Ecosystem Research Unit, University of South Africa, Pretoria, South Africa; ArayaH@arc.agric.za

EVALUATING A NOVEL CLAY-BASED IRRIGATION SYSTEM FOR IMPROVING WATER PRODUCTIVITY IN ROSEMARY AND LAVENDER CROPS

O. Chukaliev¹, H.B. Stander², V. Tanaskovikj¹, G.M. Wolfaardt², S. Trinath Suryadevara³, S. Malchev⁴, J. Siering⁵, A. Martinovska Stojcheska¹, Z. Dimov¹, S. Nechkovski¹

¹University of St. Cyril and Methodius in Skopje, Faculty of Agricultural Sciences and Food, Skopje, North Macedonia; ²University of Stellenbosch, South Africa; ³Institute of Polymer and Production Technologies, Germany; ⁴Fruit Growing Institute – Plovdiv, Agricultural Academy, Bulgaria; ⁵Robert-Schmidt-Institut, Hochschule Wismar University of Applied Sciences: Technology, Business and Design, Germany; ordan.cukaliev@fznh.ukim.edu.mk

FIELD EVALUATION OF TOMATO CROP PRODUCTION UNDER SLECI IRRIGATION

O. Chukaliev¹, F. Kumi², V. Tanaskovikj¹, W.E.K. Agbesi^{2,3}, S. Trinath Suryadevara⁴, S. Malchev⁵, J. Siering⁶, S. Nechkovski¹, Z. Bogevska¹

¹University of St. Cyril and Methodius, Faculty of Agricultural Sciences and Food, Skopje, North Macedonia; ²Department of Agricultural and Mechanical Engineering, University of Cape Coast-UCC, Ghana; ³Department of Mechanical Engineering, Cape Coast Technical University, Ghana; ⁴Institute of Polymer and Production Technologies, Germany; ⁵Fruit Growing Institute – Plovdiv, Agricultural Academy, Bulgaria; ⁶Robert-Schmidt-Institut, Hochschule Wismar University of Applied Sciences: Technology, Business and Design, Germany; ordan.cukaliev@fznh.ukim.edu.mk

IRRIGATION WATER PRODUCTIVITY IN MAIZE CROP PRODUCTION UNDER SUSTAINABLE IRRIGATION TECHNIQUES

V. Tanaskovikj¹, S. Kwadwo Amponsah², O. Chukaliev¹, P. Amankwaa-Yeboah², S. Trinath Suryadevara³, S. Malchev⁴, J. Siering⁵, I. Janeska Stamenkovska¹, H. Azadi⁶, S. Nechkovski¹

¹University of St. Cyril and Methodius in Skopje, Faculty of Agricultural Sciences and Food, Skopje, North Macedonia; ²CSIR-Crops Research Institute – Fumesua, Ashanti Region, Ghana; ³Institute of Polymer and Production Technologies, Germany; ⁴Fruit Growing Institute – Plovdiv, Agricultural Academy, Bulgaria; ⁵Robert-Schmidt-Institut, Hochschule Wismar University of Applied Sciences: Technology, Business and Design, Germany; ⁶University of Liège, Belgium; vtanaskovic@fznh.ukim.edu.mk

SLECI IRRIGATION SYSTEM AS A CLIMATE-RESILIENT SOLUTION FOR SMALLHOLDER AGRICULTURAL PRODUCERS

V. Tanaskovikj¹, K. Mmolawa², O. Chukaliev¹, A. Cliff-Hill², S. Trinath Suryadevara³, S. Malchev⁴, J. Siering⁵, S. Nechkovski¹, M. Markoski¹, R. Kabranova¹, I. Iljovski¹

¹University of St. Cyril and Methodius in Skopje, Faculty of Agricultural Sciences and Food, Skopje, North Macedonia; ²Botswana University of Agriculture and Natural Resources-BUAN, Botswana; ³Institute of Polymer and Production Technologies, Germany; ⁴Fruit Growing Institute – Plovdiv, Agricultural Academy, Bulgaria; ⁵Robert-Schmidt-Institut, Hochschule Wismar University of Applied Sciences: Technology, Business and Design, Germany; vtanaskovic@fznh.ukim.edu.mk

SUSTAINABLE IRRIGATION TECHNOLOGIES FOR ARID ENVIRONMENTS: A PILOT STUDY ON SLECI IN GEM SQUASH CULTIVATION

V. Tanaskovikj¹, V. Shalimba², O. Chukaliev¹, S. Ambuga², K. Beyer³, S. Trinath Suryadevara⁴, S. Malchev⁵, J. Siering⁶, S. Nechkovski¹, M. Vukelikj Shutoska¹, M. Davitkovska¹

¹University of St. Cyril and Methodius in Skopje, Faculty of Agricultural Sciences and Food, Skopje, North Macedonia; ²Namibia University of Science and Technology, Department of Biology, Chemistry and Physics, Namibia; ³Ombe Guestfarm and Safari, Okahandja, Namibia; ⁴Institute of Polymer and Production Technologies, Germany; ⁵Fruit Growing Institute – Plovdiv, Agricultural Academy, Bulgaria;

⁶Robert-Schmidt-Institut, Hochschule Wismar University of Applied Sciences: Technology, Business and Design, Germany; vtanaskovic@fznh.ukim.edu.mk

Date: Friday, 10/Oct/2025

10:30am - 12:00pm	SES-O-DANRM-04: Digital Agriculture & Natural Resources Management_Oral Presentation Location: Banket Hall Session Chair: Marija Vukelic-Sutoska, FZNH Session Chair: Hintsu Araya, Agricultural Research Council (ARC) CHALLENGES AND IMPROVEMENT WAYS IN IRRIGATION MANAGEMENT IN MIDDLE EAST AND SOME ASIAN COUNTRIES Oner Cetin Dicle University, Turkiye; oner_cetin@yahoo.com ASSESSMENT OF PHYTOREMEDIATION POTENTIAL OF RYE COMBINED WITH MICROBIOLOGICAL FERTILIZERS ON PETROLEUM HYDROCARBONS MIXED SOIL Silvana Manasievska, Tatjana Mitkova, Mile Markoski ¹Ss. Cyril and Methodius[*] University, Faculty of Agricultural Sciences and Food, 1000, Skopje, Republic of North Macedonia; silvanam@fznh.ukim.edu.mk MECHANICAL COMPOSITION AND SELECTED CHEMICAL PROPERTIES OF THE SOILS IN THE GAZI BABA FOREST PARK Mile Markoski¹, Tatjana Mitkova¹, Marko Petek², Marija Todorovska¹, Ivana Angelova¹, Ana Jankulovska¹ ¹Faculty of Agricultural Sciences and Food - Skopje; ²University of Zagreb, Faculty of Agriculture, 10000 Zagreb, Republic Croatia; ana.jankulovska@students.fznh.ukim.edu.mk FIELD IRRIGATION FAILS TO ENSURE FOOD PRODUCTION - QUANTITATIVE HYDRO-SOCIOLOGICAL PERSPECTIVE Kiril Manevski¹, Kiril Manevski² ¹Chinese Academy of Sciences, China; ²Aarhus University, Denmark; kiril.manevski@agro.au.dk
12:30pm - 1:45pm	SES-P-DANRM-05: Digital Agriculture & Natural Resources Management_Poster Presentation Location: Banket Hall Session Chair: Ivana Angelova, Ss. Cyril and Methodius University, Faculty of Agricultural Sciences and Food Session Chair: Stojanche Nechkovski, Faculty of Agricultural Sciences and Food - Skopje REMEDIATION OF SOIL MIXED WITH PETROLEUM HYDROCARBONS WITH SORGUM AND MICROBIOLOGICAL FERTILIZERS Tatjana Mitkova, Silvana Manasievska, Mile Markoski ¹Ss. Cyril and Methodius[*] University, Faculty of Agricultural Sciences and Food, 1000, Skopje, Republic of North Macedonia; tmitkova@fznh.ukim.edu.mk COMPARISON OF CONVENTIONAL AND ORGANIC VITICULTURE: IMPACT ON COPPER ACCUMULATION AND SOIL CONTAMINATION IN ISTRIA, CROATIA Aleksandra Perčin¹, Ana Auguštin², Marija Poljak³, Ivana Šestak¹, Željka Zgorelec¹, Ivica Kisić¹ ¹University of Zagreb Faculty of Agriculture, Croatia; ²Graduate Study in Organic Agriculture and Agrotourism, University of Zagreb Faculty of Agriculture, Croatia; ³Doctoral Study in Agricultural Sciences, University of Zagreb Faculty of Agriculture, Croatia; apercin@agr.hr SELF-REGULATING LOW-ENERGY CLAY-BASED IRRIGATION (SLECI) Sai Trinath Suryadevara¹, Dr. Volker Weißmann¹, Vjekoslav Tanaskovic² ¹Institut für Polymer- und Produktionstechnologien gGmbH, Germany; ²University of St. Cyril and Methodius, Faculty of Agricultural Sciences and Food, Skopje, North Macedonia; suryadevara@ipwismar.de DRIP FERTIGATION AND BIO-BASED TECHNOLOGIES FOR EFFICIENT PEAR ORCHARD WATER MANAGEMENT Stojanche Nechkovski¹, Vjekoslav Tanaskovic¹, Ordan Chukaliev¹, Marjan Kiprijanovski¹, Mile Markoski¹, Tatjana Mitkova¹, Rozalija Cvejić², Nikola Saraginoski¹ ¹University of St. Cyril and Methodius in Skopje, Faculty of Agricultural Sciences and Food, Skopje, North Macedonia; ²University of Ljubljana, Biotechnical Faculty, Slovenia; nechkovski@yahoo.com ORGANIC C, P AND K STOCKS IN THE TOPSOIL AND SUBSOIL OF VINEYARDS IN CROATIA AND NORTH MACEDONIA Zdenko Lončarić¹, Mile Markoski², Hrvoje Hefer³, Milena Andrišić³, Daniel Rašić³, Ružica Lončarić¹, Ivana Zegnal³, Tatjana Mitkova², Marija Todorovska² ¹Faculty of Agrobiotechnical Sciences Osijek, Croatia; ²Faculty of Agricultural Sciences and Food - Skopje; ³Croatian Agency for Agriculture and Food Osijek, Croatia; zdenko.loncaric@fazos.hr

A SYSTEMIC APPROACH TO SMART FARMING ASSESSMENT: THE MLSAT TOOL IN THE AGRO-WELL PROJECT

Dushica Santa¹, Mijalche Santa⁴, Sonja Srbinovska¹, Martina Deskovska-Matovska¹, Ivana Janeska-Stamenkovska¹

¹Faculty of Agricultural Sciences and Food - Skopje, Ss Cyril and Methodius University in Skopje;

²Faculty of Economics-Skopje, Ss Cyril and Methodius University in Skopje, North Macedonia, Republic of; dsanta@fznh.ukim.edu.mk

IMPLEMENTATION OF AGRICULTURAL LAND MONITORING IN THE REPUBLIC OF CROATIA

Milena Andrišić¹, Hrvoje Hefer¹, Daniel Rašić¹, Ivana Zegnal¹, Inge Lazar¹, Zdenko Lončarić², Stjepan Husnjak³, Vedran Rubinić³

¹Croatian Agency for Agriculture and Food, Osijek, Croatia; ²Faculty of Agrobiotechnical Sciences, Josip Juraj Strossmayer University of Osijek; ³University of Zagreb, Faculty of Agriculture, Soil Science Department; milena.andrisic@hapih.hr

FIELD CROP PRODUCTION

Date: Thursday, 09/Oct/2025

10:30am - 12:00pm	SES-O-FCP-01: PHILIP MORRIS - Panel Discussion Location: <u>Car Samoil Hall</u> BEYAND THE LEAF: INNOVATION, RESEARCH & REGULATION
10:30am - 12:00pm	SES-P-FCP-01: Field Crop Production_Poster Presentation Location: <u>Car Samoil Hall</u> Session Chair: <u> Biljana Ristakjovska Shirgovska</u> , Faculty of Agricultural Sciences and Food, UKIM Session Chair: <u> Margarita Davitkovska</u> , Faculty of Agricultural Sciences and Food ENERGY POTENTIAL AND PERSPECTIVES OF BIOMASS DERIVED FROM WHEAT, BARLEY AND MAIZE <u>Igor Iljovski</u> , Ile Canev, Zlatko Arsov, Tatijana Prentovic, Vjekoslav Tanaskovikj, Biljana Ristakjovska Shirgovska FZNH, North Macedonia, Republic of; igoriljovski@gmail.com INFLUENCE OF INTERCROPPING MAIZE WITH CLIMBING BEAN ON FORAGE YIELD AND NUTRIENT COMPOSITION <u>Ivan Horvatić</u> , Zlatko Svečnjak, Dubravko Maćešić, Martina Kovačević, Hrvoje Sabolić, Darko Uher Faculty of Agriculture, Croatia; ihorvatic@hotmail.com INFLUENCE OF SOWING DATE AND VARIETY ON YIELD AND AGRONOMIC CHARACTERISTICS OF WINTER WHEAT IN EASTERN CROATIA <u>Dario Iljkić</u> Faculty of Agrobiotechnical Sciences Osijek, Croatia; diljkic@fazos.hr INFLUENCE OF SOWING RATIO COMMON VETCH WITH ITALIAN RYEGRASS ON FORAGE YIELD AND NUTRIENT COMPOSITION <u>Saša Prdun</u> , Dubravko Maćešić, Josip Cunj, Nikola Lesičar, Darko Uher Faculty of Agriculture, Croatia; sprdun@agr.hr
	NANO-FERTILIZATION AND ITS EFFECT ON THE CHEMICAL COMPOSITION OF 'CHERRY' TOMATO LEAVES AND FRUIT <u>Marina T. Stojanova</u> ¹ , Yalcin Kaya ² , Monika Stojanova ³ , Leka Mandić ⁴ , Dragutin A. Djukic ⁴ , Ivana Boskovic ⁵ ¹ University of Ss. Cyril and Methodius, Faculty of Agricultural Sciences and Food, Skopje, North Macedonia, North Macedonia, Republic of; ² Trakya University, Engineering Faculty, Edirne, Turkey; ³ Association for Scientific-research, Educational and Cultural Activities "Open Science", North Macedonia; ⁴ University of Kragujevac, Faculty of Agronomy, Cacak, Serbia; ⁵ University of East Sarajevo, Faculty of Agriculture, East Sarajevo, Bosnia and Herzegovina; mstojanova@fznh.ukim.edu.mk PROPERTIES OF SELECTED TURF MIXES ONE YEAR AFTER AUTUMN SEEDING <u>Stanko Kapun</u> , Tatjana Čeh, Mitja Zorman KGZS-ZAVOD MS, Slovenia; stanko.kapun@kgzs-ms.si
	STATUS AND PRODUCTION POTENTIAL OF OPIUM POPPY BASED ON A SWOT ANALYSES AND TOWS MATRIX <u>Zoran Dimov</u> ¹ , Ljupco Mihajlov ² , Igor Iljovski ¹ ¹ Faculty of Agricultural Sciences and Food, North Macedonia, Republic of; ² Faculty of Agriculture - Stip, North Macedonia; dimov632002@yahoo.co.uk
	THE INFLUENCE OF THE VARIETY ON THE TRITICUM SPELTA L. PRODUCTIVITY GROWN BY ORGANIC CONDITIONS IN SREM <u>Jela Ikanović</u> ¹ , <u>Vera Popović</u> ² , Elizabeta Miskoska-Milevska ³ , Ljubiša Živanović ⁴ , Snežana Janković ⁵ , Marina Antić ⁶ , Jelena Golijan Pantović ⁷ ¹ IPN - Institute for the Application of Science in Agriculture, Belgrade, Serbia; ² Institute of Field and Vegetable Crops, National Institute for the Republic of Serbia, Novi Sad, Serbia; ³ Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, Blvd. 16-ta Makedonska brigada, No. 3, Skopje, Republic of North Macedonia; ⁴ University of Belgrade, Faculty of Agriculture; Zemun. Republic of Serbia; ⁵ IPN - Institute for the Application of Science in Agriculture, Belgrade, Serbia; ⁶ University of Banja Luka, Faculty of Agriculture, Banja Luka, Bosnia and Herzegovina; ⁷ University of Belgrade, Faculty of Agriculture; Zemun. Republic of Serbia; drvnpopovic@gmail.com
12:30pm - 2:00pm	SES-O-FCP-02: Field Crop Production_Oral Presentation Location: <u>Car Samoil Hall</u> Session Chair: <u>Zoran Dimov</u> , Faculty of Agricultural Sciences and Food Session Chair: <u>Tatjana Prentovic</u> , Faculty of Agricultural Sciences and Food - Skopje, Ss. Cyril and Methodius University in Skopje

GRAIN YIELD POTENTIALS OF NEWLY IMPROVED OAT VARIETIES AT DIFFERENT SOWING DENSITIES

Nadi Aygen¹, Oğuz Bilgin², Alpay Balkan³

¹Tekirdağ Namık Kemal University Agricultural faculty, Türkiye; ²Tekirdağ Namık Kemal University Agricultural faculty, Türkiye; ³Tekirdağ Namık Kemal University Agricultural faculty, Türkiye; obilgin@nku.edu.tr

MUTANT DOUBLED-HAPLOID LINES OBTAINED BY COMBINED GAMMA RADIATION AND ANTHUR CULTURE APPLICATIONS

Şükriye Burcu Gülen¹, OĞUZ Bilgin², Damla Balaban Göçmen³, Alpay Balkan⁴

¹Tekirdağ Namık Kemal University Agricultural faculty, Türkiye; ²Tekirdağ Namık Kemal University Agricultural faculty, Türkiye; ³Tekirdağ Namık Kemal University Agricultural faculty, Türkiye; ⁴Tekirdağ Namık Kemal University Agricultural faculty, Türkiye; obilgin@nku.edu.tr

SUSTAINABLE NITROGEN MANAGEMENT IN MELON FARMING IN SOUTHERN TUNISIA: IMPLICATIONS FOR YIELD, FRUIT QUALITY, AND SOIL DYNAMICS

Fatma Wassar^{1,2}, Imen Ayadi^{1,3}, Ines Toumi², Neji Mahmoudi^{1,4}, Ridha ElBeji⁵, Mahmoud Bali¹, Rachid Boukchina^{1,2}, Latifa Dhaouadi^{2,6}, Jose Camara-Zapata⁷, Anna Tedeschi⁸, Souad ElHajjaji⁹, Francesco Garcia-Sanches¹⁰

¹Higher Institute of Water Sciences and Techniques of Gabès, Tunisia; ²Institute of Arid Regions, Laboratory of Eremology and Combating Desertification, Medenine, Tunisia, University of Gabès; ³Geological and Hydrological Systems Modeling Laboratory (LR16ES17), Earth Sciences department, Faculty of Sciences, University of Sfax-Tunisia; ⁴Research Laboratory: Biodiversity and Valorization of Bioresources in Arid Zones, Faculty of Sciences of Gabès, University of Gabès; ⁵El Beji Farm, Gabès Tunisia; ⁶Regional Center for Research in Oasis Agriculture, Dgueche-Tozeur; ⁷University Miguel Hernandez, Spain; ⁸National Research Council of Italy, Italy; ⁹Mohamed V University, Morocco; ¹⁰Mohamed V University, Morocco; fatmawassar@yahoo.fr

THE EFFECT OF DIFFERENT SOWING DENSITIES ON GRAIN YIELD AND QUALITY TRAITS IN KIRIK WHEAT

Oğuz Bilgin¹, Alpay Balkan², İsmet Başer³, Damla Balaban Göçmen⁴

¹Tekirdağ Namık Kemal University, Türkiye; ²Tekirdağ Namık Kemal University, Türkiye; ³Tekirdağ Namık Kemal University, Türkiye; ⁴Tekirdağ Namık Kemal University, Türkiye; ibaser@nku.edu.tr

INVESTIGATION OF CHANGES IN GRAIN YIELD AND SOME YIELD COMPONENTS IN HYBRIDS AMONG BREAD WHEAT MUTANTS

Bilge Koç¹, Alpay Balkan², İsmet Başer³, Oğuz Bilgin⁴

¹Tekirdağ Namık Kemal University, Türkiye; ²Tekirdağ Namık Kemal University, Türkiye; ³Tekirdağ Namık Kemal University, Türkiye; ⁴Tekirdağ Namık Kemal University, Türkiye; ibaser@nku.edu.tr

DOES A HIGHER ALFALFA SEEDING RATE RESULT IN HIGHER STEM AND PLANT DENSITY AND FORAGE YIELD?

Biljana Ristakjovska Shirogovska, Tatjana Prentovikj, Zoran Dimov, Igor Iljovski

Faculty of Agricultural Sciences and Food, UKIM, North Macedonia, Republic of; brshirogovska@fznh.ukim.edu.mk

GENETICS, BREEDING AND GENETIC RESOURCES

Date: Thursday, 09/Oct/2025

10:30am - 12:00pm	SES-O-GBGR-01: Genetics, Breeding and Genetic Resources_Oral Presentation Location: Kaneo Hall Session Chair: Ana Marjanović Jeromela, Institute of Field and Vegetable Crops Session Chair: Mirela Kajkut Željko, University of Banja Luka, Institute of Genetic Resources Session Chair: Sonja Ivanovska, Faculty of Agricultural Sciences and Food-Skopje GENOMIC BASES OF ENVIRONMENTAL ADAPTATION IN MONTENEGRIN SHEEP POPULATIONS Milena Đokić¹, Minja Zorc², Božidarka Marković¹, Slavko Mirecki¹, Aleksandar Martinović¹ ¹University of Montenegro, Biotechnical Faculty, Mihaila Lalića 15, 81000 Podgorica, Montenegro; ²University of Ljubljana, Biotechnical faculty, Groblje 3, Domžale, Slovenia; milena.dj1405@gmail.com SNP-BASED ASSOCIATION AND CANDIDATE GENES FOR A NOVEL DEVIATION FROM THE TYPICAL TRIFOLIATE LEAF TRAIT IN PHASEOLUS COCCINEUS Mirjana Jankulovska, Nadica Sandeva Atanasova, Sonja Ivanovska Faculty of Agricultural Sciences and Food-Skopje, North Macedonia, Republic of; mjankulovska@fznh.ukim.edu.mk GENETIC DIVERSITY OF MACEDONIAN WATERMELON LOCAL VARIETIES BASED ON SNP ANALYSIS Mia Knezovikj, Nadica Sandeva Atanasova, Sonja Ivanovska, Biljana Kuzmanovska, Mirjana Jankulovska Faculty of Agricultural Sciences and Food-Skopje, North Macedonia, Republic of; Mia.Knezovik@students.fznh.ukim.edu.mk MORPHOPHYSIOLOGICAL AND PRODUCTIVE TRAITS OF SMALL GRAINS SPECIES GROWN IN CONVERSION PERIOD Olivera Nikolić, Zorana Sreckov, Zorica Mrkonjic Educons University, Faculty of Ecological Agriculture, Sremska Kamenica, Serbia; olivera.nikolic@educons.edu.rs
12:30pm - 2:00pm	SES-O-GBGR-02: Genetics, Breeding and Genetic Resources_Oral Presentation Location: Kaneo Hall Session Chair: Milena Đokić, Biotechnical Faculty Session Chair: Mirjana Jankulovska, Faculty of Agricultural Sciences and Food-Skopje IDENTIFYING GENETICALLY MODIFIED ORGANISMS (GMOS) IN FOOD PRODUCTS ON THE MONTENEGRIN MARKET Luka Andrić University of Donja Gorica, Montenegro; luka.andric121@gmail.com A POSSIBLE INTERDEPENDENCE BETWEEN SOME MORPHOLOGICAL POLLEN FEATURES AND ITS GERMINATION IN FOUR MALUS SP. CULTIVARS Marina Mačukanović Jocić¹, Radosav Cerović², Marko Kitanović¹, Anđelija Obradović³, Mekjell Meland⁴, Milica Fotirić Aksić¹ ¹University of Belgrade, Faculty of Agriculture, Serbia; ²University of Belgrade, Innovation Centre of the Faculty of Technology and Metallurgy, Belgrade, Serbia; ³Institute for Science Application in Agriculture, Belgrade, Serbia; ⁴Norwegian Institute of Bioeconomy Research – NIBIO, Ullensvang, Norway; fotiric@agrif.bg.ac.rs SNP-BASED DIVERSITY ASSESSMENT OF MACEDONIAN LOCAL VARIETIES OF CUCUMBER (CUCUMIS SATIVUS L.) Sonja Ivanovska, Mirjana Jankulovska, Nadica Sandeva Atanasova Faculty of Agricultural Sciences and Food-Skopje, North Macedonia, Republic of; s.ivanovska@fznh.ukim.edu.mk DETERMINATION OF GENETIC DIVERSITY OF MACEDONIAN MILD EMBROIDERED PEPPER GENOTYPES BASED ON QUALITATIVE TRAITS Nadica Sandeva Atanasova, Sonja Ivanovska, Mirjana Jankulovska Faculty of Agricultural Sciences and Food-Skopje, North Macedonia, Republic of; nadicasa@fznh.ukim.edu.mk
12:30pm - 2:00pm	SES-P-GBGR-02: Genetics, Breeding and Genetic Resources_Poster Presentation Location: Kaneo Hall Session Chair: Milena Đokić, Biotechnical Faculty Session Chair: Mirjana Jankulovska, Faculty of Agricultural Sciences and Food-Skopje ALLELIC POLYMORPHISM OF MD-ACS1 AND MD-ACO1 GENES IN COLUMNAR APPLE (MALUS × DOMESTICA BORKH.) CULTIVARS Goran Barac, Biserka Milić, Nenad Magazin, Maja Milović, Gordana Barac Faculty of Agriculture, University of Novi Sad, Serbia; goran.barac@polj.edu.rs

BASIC MORPHOLOGICAL CHARACTERISTICS OF ORIENTAL VARIETIES FROM THE TYPES YAKA, DJEBEL AND BASMAK

Jane Aleksoski, Karolina Kochoska, Marjana Glusheska

Scientific Institute of Tobacco - Prilep, North Macedonia, Republic of; yaleksoski@gmail.com

CORRELATION ANALYSIS BETWEEN YIELD AND YIELD ATTRIBUTES IN SOME RICE (ORYZA SATIVA L.) VARIETIES

Brankica Spaseva¹, Ivo Mitrushev¹, Dane Boshev², Mirjana Jankulovska², Sonja Ivanovska², Dobre Andov¹, Danica Andreevska¹

¹Ss. Cyril and Methodius University in Skopje, Institute of Agriculture-Skopje, North Macedonia, Republic of;

²Ss. Cyril and Methodius University in Skopje, Faculty of Agricultural Sciences and Food -Skopje, Republic of Macedonia; vasileva.brankica@gmail.com

EVALUATION OF OIL AND PROTEIN CONTENT VARIABILITY IN CAMELINA GENOTYPES

Ana Marjanović Jeromela¹, Nada Grahovac¹, Dragana Rajković¹, Sandra Cvejić¹, Ankica Kondić Špika¹, Federica Zanetti²

¹Institute of Field and Vegetable Crops, Serbia; ²Dept. of Agricultural and Food Sciences (DISTAL), Alma Mater Studiorum - University of Bologna, Italy; ana.jeromela@ifvcns.rs.ac.rs

IMPORTANCE OF GENOMIC ANALYSIS IN INHERITANCE OF MILK PRODUCTION TRAITS IN HOLSTEIN COWS

Ivica Stancić¹, Vladan Ćirić², Nikola Stolic¹, Bratislav Pesic¹, Vesna Gantner³, Gojko Bunevski⁴

¹Toplica Academy of Professional Studies, Department of Agricultural and Food Studies, Prokuplje, Serbia; ²Semex PK BB, Belgrade, Serbia; ³Josip Juraj Strossmayer University in Osijek, Faculty of Agrobiotechnical Sciences, Osijek, Croatia; ⁴Faculty of Agricultural Sciences and Food, Skopje, North Macedonia; istancic62@gmail.com

IN VITRO COLLECTION OF GARLIC (ALLIUM SATIVUM L.) IN THE REPUBLIC OF SRPSKA: ESTABLISHMENT AND CONSERVATION

Mirela Kajkut Zeljković^{1,2}, David Ducanović¹, Marina Antić^{1,2}, Jelena Nikitović^{1,2}, Svetlana Zeljković², Vida Todorović²

¹University of Banja Luka Institute of Genetic Resources, Bulevar vojvode Petra Bojovića 1a, 78 000

Banja Luka, Bosnia and Herzegovina; ²University of Banja Luka Faculty of Agriculture, Bulevar vojvode Petra Bojovića 1a, 78000 Banja Luka, Bosnia and Herzegovina; mirela.kajkut@jgr.unibl.org

INFLUENCE OF WATERLOGGING ON TOLERANCE PERFORMANCE OF SELECTED TOMATO GENOTYPES FROM GENE BANK OF REPUBLIC OF SRPSKA

Sonja Umičević¹, Biljana Kukavica², Marina Antić^{1,3}, Mirela Kajkut Zekljović^{1,3}

¹Institute of Genetic Resources University of Banja Luka, Bosnia and Herzegovina; ²Faculty of Natural Sciences and Mathematics, University of Banja Luka; ³Faculty of Agriculture, University of Banja Luka; sonja.raseta@jgr.unibl.org

MOLECULAR PHYLOGENETIC CHARACTERIZATION OF LACTIC ACID BACTERIA ISOLATED FROM SORGHUM SILAGES BASED ON 16S RRNA GENE SEQUENCES

Berrin Okuyucu, M. Levent Özdüven, Emel Özkan Ünal

Tekirdag Namik Kemal University, Faculty of Agriculture, Dept of Animal Science Tekirdag / Turkey; berrinokuyucu25@hotmail.com

NEW PROGRAM FOR PROTECTION OF BIODIVERSITY IN ANIMAL HUSBANDRY IN THE REPUBLIC OF NORTH MACEDONIA 2025–2031

Kocho Porchu, Dragoslav Kocovski, Marija Zdravkovska, Gjoko Bunevski, Vlado Vukovic, Hrisula Kiprijanovska

FZNH, North Macedonia, Republic of; koco_porcu@yahoo.com

PRODUCTION CHARACTERISTICS AND NICOTINE CONTENT IN RECOGNIZED ORIENTAL TOBACCO VARIETIES OF THE PRILEP TYPE

Karolina Kochoska¹, Marija Srbinoska¹, Valentina Pelivanoska¹, Silvana Pashovska¹, Natasha Zdraveska¹, Romina Kabranova²

¹University St.Kliment Ohridski-Bitola,Scientific tobacco institute-Prilep,Republic of North Macedonia,

North Macedonia, Republic of; ²University "St. Kiril i Metodij"- Skopje, Faculty of Agricultural Sciences and Food, Republic of North Macedonia; karolina.kocoska@uklo.edu.mk

THE QUALITY OF SIMMENTAL CATTLE COMES FROM THE BREEDING FACILITY OF SIMMENTAL BREEDING BULLS OF SLOVENIA IN MURSKA SOBOTA

Marjan Špur

KGZS-ZAVOD MS, Slovenia; marjan.spur@kgzs-ms.si

EXPLOITING THE UNTAPPED POTENTIAL OF FRUIT TREE WILD DIVERSITY FOR SUSTAINABLE AGRICULTURE (FRUITDIV PROJECT)

Vlatko Andonovski¹, Nikolco Velkovski¹, Viktorija Brndevska Stipanovic¹, Ivana Janeska Stamenkovska²

¹University Ss. Cyril and Methodius in Skopje, Hams Em-Faculty of Forest Sciences, North Macedonia, Republic of; ²University Ss. Cyril and Methodius in Skopje, Faculty of Agricultural Sciences and Food-Skopje; vandonovski@sf.ukim.edu.mk

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