

**Goce Delcev University – Stip  
Faculty of Agriculture**



**4<sup>th</sup> INTERNATIONAL MEETING  
AGRISCIENCE & PRACTICE  
(ASP 2024)**

**PROGRAMME**

**13 June 2024  
Stip, Republic of North Macedonia**

**SCIENTIFIC AND EDITORIAL COMMITTEE**

1. Emilija Arsov, PhD, North Macedonia (Chair)
2. Aco Kuzelov, PhD, North Macedonia
3. Biljana Balabanova, PhD, North Macedonia
4. Liljana Koleva Gudeva, PhD, North Macedonia
5. Ljupco Mihajlov, PhD, North Macedonia
6. Sasa Mitrev, PhD, North Macedonia
7. Violeta Dimovska, PhD, North Macedonia
8. Alen Mujčinović, PhD, Bosnia and Hercegovina
9. Dragomir Vlčev, PhD, Bulgaria
10. Stefan Georgiev Dragoev, PhD, Bulgaria
11. Velichka Nikolova Rodeva, PhD, Bulgaria
12. Marijan Bubola, PhD, Croatia
13. Sanja Radeka, PhD, Croatia
14. Musaj Pacarizi, PhD, Kosovo
15. Goran Škatarić, PhD, Montenegro
16. Danijela Raičević, PhD, Montenegro
17. Kiril Bahčevandziev, PhD, Portugal
18. Dejan Pljevljakusić, PhD, Serbia
19. Dragan Nikolić, PhD, Serbia
20. Jordana Ninkov, PhD, Serbia
21. Jovica Vasin, PhD, Serbia
22. Radivoje Jetvić, PhD, Serbia
23. Slavča Hristov, PhD, Serbia
24. Hatice Gülen, PhD, Turkey
25. Maryna Mardar, PhD, Ukraine
26. Taras Levsiukov, PhD, Ukraine

**ORGANIZING COMMITTEE**

1. Emilija Arsov, PhD (Chair)
2. Biljana Balabanova, PhD
3. Biljana Kovacevik, PhD
4. Biljana Atanasova, PhD
5. Daniela Todevska, PhD
6. Dimitar Nakov, PhD
7. Fidanka Ilieva, PhD
8. Fidanka Trajkova, PhD
9. Natalija Markova Ruzdik, PhD
10. Sanja Kostadinovik Velickovska, PhD
11. Elizabeta Davitkovska Barbareeva, BSc
12. Ivan Donev, BSc

<b><i>Time and place</i></b>	<b><i>Activity</i></b>
<b><i>13.06.2024 (Thursday)</i></b> <b><i>10<sup>00</sup>-10<sup>30</sup></i></b> <b><i>Faculty of Agriculture,</i></b> <b><i>Campus 2</i></b>	Arrival and registration of participants
<b><i>10<sup>30</sup>-11<sup>00</sup></i></b> <b><i>Assembly Hall</i></b> <b><i>Faculty of Agriculture,</i></b> <b><i>Campus 2</i></b>	<p>Opening ceremony</p> <p>Prof. d-r Emilija Arsov, President of the ASP 2024 Organizing Committee and Dean of Faculty of Agriculture, GDU – Stip</p> <p>Prof. Darko Lazarov, Vice-rector for investments and development, GDU - Stip</p> <p>Mr. Bube Trajkovski, Agrostart, agricultural company Acknowledgements Award</p> <p>ASP 2024 Participants Joint Photo</p>
<b><i>11<sup>00</sup>-11<sup>30</sup></i></b> <b><i>Faculty of Agriculture,</i></b> <b><i>Campus 2</i></b>	Coffee break
<b><i>11<sup>30</sup>-13<sup>00</sup></i></b> <b><i>Assembly Hall</i></b> <b><i>Faculty of Agriculture,</i></b> <b><i>Campus 2</i></b>	<p><b>Plenary presentation 1</b></p> <ul style="list-style-type: none"> <li>○ <b>Digital technologies – a step towards the new era of agricultural practices in the Balkan countries</b> - Mr. Blagoj Mukanov, MSc, AG Futura Technologies, Skopje, Republic of North Macedonia</li> </ul> <p><b>Panel discussion topic: “Application of precision agricultural practices: current state and challenges”</b></p> <p><b>Moderator of the panel discussion:</b></p> <ul style="list-style-type: none"> <li>○ Prof. d-r Verica Ilieva - Faculty of Agriculture, Goce Delcev University – Stip, Republic of North Macedonia</li> </ul> <p><b>Panelists:</b></p> <ul style="list-style-type: none"> <li>❖ Mr. Blagoj Mukanov, MSc, AG Futura Technologies, Skopje, Republic of North Macedonia</li> <li>❖ Mr. Goran Gorgievski, President of the Agribusiness Chamber at the Union of Chambers of Commerce of Republic of North Macedonia</li> <li>❖ Mr. Sotir Angelov, BMF, Zrnovci, Republic of North Macedonia</li> <li>❖ Mr. Goran Basovski, Associate in agrometeorology, Hydrometeorological Service of the Republic of North Macedonia</li> <li>❖ Prof. d-r Dimitar Nakov, Faculty of Agriculture, Goce Delcev University – Stip, Republic of North Macedonia</li> </ul>
<b><i>13<sup>00</sup>-13<sup>30</sup></i></b> <b><i>Faculty of Agriculture,</i></b> <b><i>Campus 2</i></b>	Coffee break

13 <sup>30</sup> -15 <sup>00</sup>	<p><b>Plenary presentation 2</b></p> <ul style="list-style-type: none"> <li>○ <b>Profitability of investment in field production and evaluation of spontaneous resources of medicinal plants in Serbia</b> – Dr. Dejan Pljevljakušić, Institute for Medicinal Plants Research “Dr Josif Pančić”, Belgrade, Serbia</li> </ul> <p><b>Panel discussion topic: “Opportunities and potential for production of medicinal, aromatic and spicy plants in the Republic of North Macedonia and the region”</b></p> <p><b>Moderator of the panel discussion:</b></p> <ul style="list-style-type: none"> <li>○ Prof. d-r Sanja Kostadinovik Velickovska - Faculty of Agriculture, Goce Delcev University – Stip, Republic of North Macedonia</li> </ul> <p><b>Panelists:</b></p> <ul style="list-style-type: none"> <li>❖ Dr. Dejan Pljevljakušić, Institute for Medicinal Plants Research “Dr Josif Pančić”, Belgrade, Serbia</li> <li>❖ Dr. Olivera Bicikliski – expert in the industry for medicinal cannabis, Republic of North Macedonia</li> <li>❖ Mr. Viktor Kolovski, MSc, Konimex Holding Kompanija, DOO</li> <li>❖ Prof. d-r Ljupco Mihajlov - Faculty of Agriculture, Goce Delcev University – Stip, Republic of North Macedonia</li> </ul>
------------------------------------	---

15<sup>00</sup> - 15<sup>30</sup>**POSTER PRESENTATION SESSION****Poster session 1. AGRICULTURE ECONOMY**

P 1.1. Despina Popovska Stojanov, Marija Gjosheva Kovachevikj, Lazo Dimitrov, Ivana Janeska Stamenkovska, Aleksandra Martinovska Stojcheska. EFFECTS OF STATE SUPPORT MEASURES ON YOUNG FARMERS IN NORTH MACEDONIA.

P 1.2. Silvana Pashovska, Trajko Miceski. THE APPLICATION OF CORPORATE SOCIAL RESPONSIBILITY IN THE TACTICS OF THE TOBACCO INDUSTRY.

**Poster session 2. PLANT BIOTECHNOLOGY**

P 2.1. Liljana Koleva Gudeva, Fidanka Trajkova. THE USAGE OF MODIFIED ATMOSPHERE PACKING (MAP) AS A USEFUL METHOD IN MAINTAINING THE QUALITY OF AGRICULTURAL PRODUCTS.

P 2.2. Natalija Markova Ruzdik, Ljupco Mihajlov, Verica Ilieva, Sasa Mitrev, Emilija Arsov, Biljana Kovacevik, Mite Ilievski, Daniela Todevska. ASSESSMENT OF GENETIC DIVERSITY AMONG BARLEY VARIETIES WITH DIFFERENT ORIGIN USING SIMPLE SEQUENCE REPEAT (SSR) MARKERS.

**Poster session 3. PLANT PRODUCTION**

P 3.1. Daniela Pelivanoska – Dameska, Ljupco Mihajlov. PRODUCTION CHARACTERISTICS OF SOME CAMELINA SATIVA VARIETIES IN THE PRILEP REGION.

P 3.2. Fidanka Trajkova, Liljana Koleva Gudeva. ANALYSIS OF SUB-SECTOR HERBS & SPICES: A CASE STUDY FROM NORTH MACEDONIA.

P 3.3. Karolina Kocoska, Valentina Pelivanoska, Natasha Zdraveska, Silvana Pashovska, Jane Aleksoski, Marjana Glusheska, Kristina Hristovska, Stefan Tosheski. WEATHER CONDITIONS AS A FACTOR AFFECTING THE SEED WEIGHT OF TOBACCO VARIETY PRILEP 66 9 IN THE YEAR 2023.

P 3.4. Plamena Yankova, Pavlina Naskova. COMPARATIVE TESTING OF BUTTERHEAD AND COS (ROMAINE) LETTUCE GROWN BY THE HYDROPONICS METHOD.

P 3.5. Mite Ilievski, Daniela Todevska, Dragica Spasova, Dusan Spasov, Biljana Atanasova, Natalija Markova Ruzdik, Boris Chapanov. INFLUENCE OF THE NON-WOVEN COVER CLOTH – AGRIL ON THE DEVELOPMENT OF SPRING CABBAGE IN THE OPEN FIELD.

#### **Poster session 4. PLANT PROTECTION**

P 4.1. Biljana Atanasova, Ilija Karov, Dusan Spasov, Dragica Spasova, Mite Ilievski. OCCURRENCE AND DAMAGES IN RICE CAUSED BY RICE WATER WEEVIL LISSORHOPTRUS ORYZOPHILUS KUSCHEL (COLEOPTERA: CURCULIONIDAE).

P 4.2. Biljana Konsuloska Gveroska. SUSTAINABLE USE OF MODERN BIOPREPARATIONS IN TOBACCO SEEDLINGS PROTECTION.

P 4.3. Gligor Bojkov, Emilija Arsov, Sasa Mitrev. DEVELOPMENT OF HYPOTHETICAL INFECTION MODEL BASED ON ENVIRONMENTAL VARIABLES FOR PLASMOPARA VITICOLA (Berk. & M.A. Curtis) Berl. & De Toni.

P 4.4. Biljana Kovacevik, Sasa Mitrev, Emilija Arsov, Natalija Markova Ruzdik, Daniela Todevska. THE ROLE OF ESSENTIAL OILS IN PLANT PROTECTION: EFFECTIVE BIOPESTICIDES OR JUST A MYTH?

P 4.5. Biljana Kovacevik, Sasa Mitrev, Emilija Arsov, Natalija Markova Ruzdik, Daniela Todevska. STROBILURINS – QUINONE OUTSIDE INHIBITORS: DEVELOPMENT, APPLICATIONS, AND RESISTANCE.

P 4.6. Marija Todorovska Ivkovikj, Marija Karbeska, Teodora Dimova, Igor Pavlovski, Dzoko Kungulovski. BIOLOGICAL CONTROL OF PYTHIUM SPP., THE CAUSAL AGENT OF TOBACCO ROOT ROT BY BACTERIAL STRAINS ISOLATED FROM COMPOST SAMPLES.

P 4.7. Natalija Atanasova-Pancevska, Dzoko Kungulovski, Denica Angelovska, Lina Mirkovik, Martina Stojanoska, Ognen Boskovski, Sofija Kostandinovska. IN VITRO EVALUATION OF SOIL BACILLUS STRAINS ISOLATED FROM THE BUCIM COPPER MINE FOR BIOCONTROL AGAINST GRAPEVINE DOWNY MILDEW.

#### **Poster session 5. QUALITY CONTROL AND FOOD SAFETY**

P 5.1. Sanja Kostadinović Veličkovska, Daniela Todevska, Zorica Temelkova, Dejan Pljevljakušić, Jelena Živković, Živko Davčev, Petar Davčev, Fidanka Ilieva. SHADE NETTING ON RASPBERRY AND BLACKBERRIES PRODUCED FROM SOUTH-EAST REGION OF NORTH MACEDONIA: EFFECT ON MORPHOLOGICAL CHARACTERIZATION, CHEMICAL COMPOSITION AND ANTIOXIDANT ACTIVITY.

P 5.2. Sanja Kostadinović Veličkovska, Saša Mitrev, Emilija Arsov, Daniela Todevska, Fidanka Ilieva, Augustin C. Mot and Radu Silaghi-Dumitrescu. DETERMINATION OF ANTIOXIDANT ACTIVITY OF COLD-PRESSED EDIBLE OILS FROM REPUBLIC OF NORTH MACEDONIA BY HEMOGLOBIN ASSAY.

P 5.3. Makarijoski Borche. MONITORING OF ACTIVE AND TITRATABLE ACIDITY IN WHITE BRINED CHEESE DURING RIPENING PERIOD.

P 5.4. Emira Zekiri, Natali Angeleska, Marija Todorovska Ivkovikj, Dzoko Kungulovski, Natalija Atanasova-Pancevska. INVESTIGATING SILAGE-DERIVED MICROBIAL ISOLATES FOR PROBIOTIC APPLICATIONS IN ANIMAL NUTRITION.

P 5.5. Milena Magerovska, Kristina Tomska, Elena Joshevska. THE IMPORTANCE OF MACRO AND MICRONUTRIENTS IN THE DIET.

P 5.6. Nevena Gruevska, Tatjana Kalevska, Slavjanka Dimitrova, Tanja Stojanovska. FRESH HOMEMADE SAUSAGES WITH ADDED STABILIZERS OF NATURAL ORIGIN.

P 5.7. Violeta Dimovska, Biljana Vitanovska, Fidanka Ilieva, Aleksandar Piperevski. RESEARCH ON THE COMPOSITION OF MADŽUN (GRAPE MOLASSES) PRODUCED FROM TABLE GRAPE VARIETIES.

P 5.8. Daniela Todevska, Sanja Kostadinovik Velickovska, Marjan Crvenkovski, Mite Ilievski, Biljana Kovacevik, Natalija Markova Ruzdik, Sanja Ristova, Krste Tasev. BIOACCUMULATION OF HEAVY METALS IN FRUIT OF SOME NEW TOMATO HYBRIDS.

#### **Poster session 6. SOIL SCIENCE AND HYDROLOGY**

P 6.1. Bojana Dimovska Gonovska, Biljana Jordanoska Shishkoska, Trajce Stafilov, Valentina Pelivanoska. SOIL ELEMENT ANALYSIS IN TOBACCO CULTIVATION AREAS OF THE PRILEP REGION: ENVIRONMENTAL AND AGRICULTURAL PERSPECTIVES.

P 6.2. Ankica Anastasova, Dimitar Nakov, Aleksandra Angjelevska, Aco Kuzelov, Fidanka Ilieva. ANALYSIS OF GROUNDWATER QUALITY IN SHALLOW WELLS BEFORE AND AFTER DISINFECTION WITH PERACETIC ACID.

P 6.3. Biljana Balabanova. ECO-TOXICOLOGICAL RISK ASSESSMENT OF E-WASTE SOIL POLLUTION.

#### **Poster session 7. VITICULTURE, ENOLOGY AND FRUIT PRODUCTION**

P 7.1. Biljana Korunoska, Krum Boškov, Zlatko Prculovski. COMPARATIVE STUDIES OF SOME QUALITY FACTORS THAT AFFECT THE PLACEMENT OF SOME TABLE VARIETIES ON THE MARKET IN THE R. N. MACEDONIA.

P 7.2. Dushko Nedelkovski, Venelin Roychev, Despina Popovska Stojanov, Marija Gjosheva Kovachevikj, Klime Beleski, Hristina Poposka, Dimitar Dimitrov. ALTITUDE AS A FACTOR ON THE AMPELOMETRIC CHARACTERISTICS OF THE LEAVES OF VRANEC VARIETY.

P 7.3. Dushko Nedelkovski, Venelin Roychev, Despina Popovska Stojanov, Marija Gjosheva Kovachevikj, Klime Beleski, Dimitar Dimitrov, Viktor Rajchin. VINEYARD LOCATION AS A FACTOR INFLUENCING THE FERTILITY OF VRANEC VINE VARIETY.

P 7.4. Teodora Dimova, Marija Karbeska, Marija Todorovska Ivkovikj, Dzoko Kungulovski. ANTIFUNGAL ACTIVITY OF COMPOST-DERIVED BACTERIA AGAINST CHALKBROOD FUNGUS ASCOSPHAERA APIS.

P 7.5. Marija Todorovska Ivkovikj, Igor Pavlovski Dzoko Kungulovski, Elena Petrovska. ISOLATION AND CHARACTERIZATION OF NATIVE YEAST STRAINS FROM THE MACEDONIAN INDIGENOUS GRAPE VARIETY STANUSINA.

P 7.6. Elena Bogeva, Štefan Ailer, Silvia Jakabová, Violeta Dimovska, Sasa Mitrev, Violeta Ivanova-Petropulos. FOURIER-TRANSFORM INFRARED SPECTROSCOPY FOR ANALYSIS OF STANUŠINA WINES PRODUCED BY HONEY ADDITION BEFORE FERMENTATION.

4<sup>th</sup> INTERNATIONAL MEETING, AGRISCIENCE & PRACTICE 2024

P 7.7. Zorica Temelkova, Marko Stojakovic, Violeta Ivanova-Petropulosb, Ferenc Kilarc, Klemen Lisjakd, Laslo Marke. MALDI-TOF-MS DETECTION OF PIGMENTS IN WINES DURING MACERATION.

**15<sup>30</sup>-15<sup>45</sup>**

Discussion and conclusions of the poster session

**15<sup>45</sup>-16<sup>00</sup>**

***Assembly Hall  
Faculty of Agriculture,  
Campus 2***

Closing ceremony

**16<sup>00</sup>**

**Hotel Izgrev – Stip**

ASP 2024 Joint Lunch



<https://zf.ugd.edu.mk/>

**PROGRAMME OF THE MEETING**

**4<sup>th</sup> INTERNATIONAL MEETING  
AGRISCIENCE & PRACTICE (ASP 2024)  
Faculty of Agriculture, Goce Delcev University, Stip  
13 June 2024, Stip, Republic of North Macedonia**