

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



**3<sup>rd</sup> INTERNATIONAL MEETING  
AGRISCIENCE & PRACTICE  
(ASP 2023)**

**PROGRAMME**

**19 - 20 April 2023  
Stip, Republic of North Macedonia**

### **3<sup>rd</sup> INTERNATIONAL MEETING, AGRISCIENCE & PRACTICE 2023**

#### **SCEINTIFIC AND EDITORIAL COMMITTEE**

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2. Aco Kuzelov, PhD, North Macedonia
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16. Danijela Raičević, PhD, Montenegro
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21. Jovica Vasin, PhD, Serbia
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1. Emilija Arsov, PhD (Chair)
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3. Biljana Kovacevik, PhD
4. Daniela Todevska, PhD
5. Dimitar Nakov, PhD
6. Fidanka Ilieva, PhD
7. Fidanka Trajkova, PhD
8. Natalija Markova Ruzdik, PhD
9. Sanja Kostadinovik Velickovska, PhD
10. Elizabeta Davitkovska Barbareeva, BSc
11. Ivan Donev, BSc

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Time & Place	Activity
<b>19.04.2023</b> <b>(Wednesday)</b> <b>8:30-9:30</b> Reception desk Faculty of Agriculture, Campus 2	<b>Arrival and registration of participants</b>
<b>19.04.2023</b> <b>(Wednesday)</b> <b>8:30-9:30</b>	<b>DISPLAY OF POSTERS</b> Poster presentation shall be delivered at registration desk for their display
<b>19.04.2023</b> <b>(Wednesday)</b> <b>9:30-10:15</b> Assembly Hall Faculty of Agriculture, Campus 2	<b>Opening ceremony</b>  <b>Prof. d-r Emilija Arsov</b> , Chair of the Organizing Committee of ASP 2023 and Dean of the Faculty of Agriculture, UGD – Stip  <b>Mr. Ljupco Nikolovski</b> , Minister of Agriculture, Forestry and Water Management of Republic of North Macedonia  <b>Acknowledgments awarding ceremony</b> <b>ASP 2023 Group photo</b>
<b>19.04.2023</b> <b>(Wednesday)</b> <b>10:15 – 10:30</b>	<b>Coffee break</b>

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<b>19.04.2023</b> <b>(Wednesday)</b>  <b>10:30-12:00</b>  Assembly Hall  Faculty of Agriculture, Campus 2	<b>Plenary presentations</b>  <b>Plenary presentation 1: Current situation with grain crops production in Republic of North Macedonia - Mr. Ognen Orovčanec</b> , AGROUNIJA DOOEL, Republic of North Macedonia  <b>Plenary presentation 2: Variability of agroecological systems and its effect on small grains production in Serbia - Prof. d-r Radivoje Jevtić</b> , Institute of Field and Vegetable Crops, Novi Sad, Serbia  <b>Panel discussion: Current situation with grain crops production in the region</b>  <b>Moderator of the panel discussion: Prof. d-r Verica Ilieva</b> - Faculty of Agriculture, Goce Delcev University – Stip, Republic of North Macedonia  <b>Invited panelists:</b>  <b>Mr. Ognen Orovčanec</b> – AGROUNIJA DOOEL, North Macedonia  <b>Prof. dr. Radivoje Jevtić</b> - Institute of Field and Vegetable Crops, Novi Sad, Serbia  <b>Prof. d-r Mite Ilievski</b> - Faculty of Agriculture, Goce Delcev University – Stip, Republic of North Macedonia
<b>19.04.2023</b> <b>(Wednesday)</b>  <b>12:00-13:00</b>	<b>Cocktail</b>

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<b>19.04.2023</b> <b>(Wednesday)</b> <b>13:00-14:00</b>  Assembly Hall Faculty of Agriculture, Campus 2	<b>Presentations from representatives of agricultural companies</b>  <b>Moderators of the section:</b> Prof. d-r Fidanka Trajkova, Prof. d-r Fidanka Ilieva AGRO SOLAR LTD <ul style="list-style-type: none"> <li>• <b>Drying vegetables and fruits with solar energy and heat pump</b></li> </ul> AGFUTURA TECHNOLOGIES <ul style="list-style-type: none"> <li>• <b>How AgFutura Technologies contributes to the digitalization of the agricultural sector in Macedonia</b></li> </ul> PINNA ROBOTICS, SKOPJE <ul style="list-style-type: none"> <li>• <b>Robotics for Agri Food Production: Opportunities and Challenges</b></li> </ul> MLADEN LILOV, UNIVERSITY OF CHEMICAL TECHNOLOGY AND METALLURGY, BULGARIA <ul style="list-style-type: none"> <li>• <b>Balanced, complex liquid fertilizers for foliar application</b></li> </ul>
<b>19.04.2023</b> <b>(Wednesday)</b> <b>14:00 – 14:15</b>	<b>Coffee break</b>
<b>19.04.2023</b> <b>(Wednesday)</b> <b>14:15-15:15</b> Assembly Hall Faculty of Agriculture, Campus 2	<b>Oral presentations</b> Moderators of the section: Prof. d-r Emilija Arsov, Prof. d-r Biljana Kovacevik

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14:15-14:25	Vesna Župunski, Radivoje Jevtić <b>Ramularia leaf spot - a potential threat to barley production in North Macedonia</b>
14:25-14:35	Gligor Bojkov, Emilija Arsov, Sasa Mitrev <b>Impact of disease severity on infected bunches upon a yield of grape variety Vranec, caused by <i>Plasmopara viticola</i> (Berk. &amp; M.A. Curtis) Berl. &amp; De Toni</b>
14:35-14:45	Dusan Spasov, Biljana Atanasova, Biljana Kovacevik, Dragica Spasova, Mite Ilievski <b>Effect of boron (B) nutrition on development of gray mold in pepper (<i>Capsicum annuum</i> L.)</b>
14:45-14:55	Ivana Potočnik, Tanja Drobnjaković, Svetlana Milijašević-Marčić, Jelena Luković, Miloš Stepanović, Dejan Marčić, Emil Rekanović <b>Biological control of green mould disease and mushroom fly using biofungicide <i>Bacillus subtilis</i> Ch-13 and botanical insecticide azadirachtin (technical solution)</b>
14:55-15:05	Dzansel Bukovec, Marija Todorovska Ivkovic, Ana Nikolovska, Sofia Kostandinovska, Natalija Atanasova-Pancevska, Dzoko Kungulovski <b>Biological control of scab disease (<i>Venturia inaequalis</i>) using <i>Bacillus</i> isolates in <i>in vitro</i> and <i>in vivo</i> conditions</b>
15:05-15:15	<b>Section discussion and concluding remarks</b>
19.04.2023 (Wednesday) 15:15-15:30	<b>Coffee break</b>

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<b>19.04.2023</b> <b>(Wednesday)</b> <b>15:30-17:00</b> Assembly Hall Faculty of Agriculture, Campus 2	<b>Oral presentations</b> Moderators of the section: Prof. d-r Liljana Koleva Gudeva, Prof. d-r Biljana Balabanova
<b>15:30 – 15:40</b>	Ljupco Mihajlov, Natalija Markova Ruzdik <b>Opportunities – alternatives for application of agroecological measures and use of post-harvest residues</b>
<b>15:40 – 15:50</b>	Branislav Stanković, Slavča Hristov, Jelena Miočinović, Dimitar Nakov <b>The influence of the personal hygiene and health of milkmen improvement on the milk safety and composition on small dairy farms</b>
<b>15:50 – 16:00</b>	Dimitar Nakov, Aco Kuzelov, Slavča Hristov, Katerina Belichovska, Branislav Stanković, Jelena Miočinović <b>Mastitis make changes in the antioxidant enzymes capacity of raw milk from dairy cows in early lactation</b>
<b>16:00 – 16:10</b>	Irena Petrova, Violeta Ivanova-Petropulos, Liljana Koleva-Gudeva, Sasa Mitrev <b>Optimization of rapid and simple HPLC-DAD method for analysis of glycoalkaloids solanine and chaconine in potatoes</b>
<b>16:10 – 16:20</b>	Natalija Atanasova-Pancevska, Dzoko Kungulovski, Elena Usta Petrova, Nikola Radmanovik, Ognen Boskovski, Edi Frcovski, Hristijan Premcevski, Sofija Kostandinovska

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	<b>The influence of different climatic types on the number of <i>Bacillus</i> spp. isolated from soil in North Macedonia</b>
<b>16:20 – 16:30</b>	Dzoko Kungulovski, Natalija Atanasova-Pancevska, Elena Damcevska- Josifovska <b>Isolation, screening and characterization of cellulolytic bacteria from different soil samples from Pelagonia region</b>
<b>16:30 – 16:40</b>	Violeta Ivanova-Petropulos, Borimir Vojnoski, Isidro Hermosín-Gutiérrez <b>Phenolic profile of Macedonian red wines</b>
<b>16:40 – 17:00</b>	<b>Section discussion and concluding remarks</b>
<b>19.04.2023 (Wednesday) 14<sup>00</sup>-14<sup>30</sup> All-day event Hallway Faculty of Agriculture, Campus 2</b>	<b>Poster Section presentation and discussion</b>
<b>PS1</b>	Silvana Pashovska, Katerina Kareska <b>Analysis of the state of tobacco production in Macedonia with special reference to the young working population</b>
<b>PS2</b>	Irena Petrova, Liljana Koleva Gudeva, Fidanka Trajkova <b>Microtuberization – possibility for development of seed material from potato (<i>Solanum tuberosum</i> L.)</b>



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PS3	<p>Marija Pockovska, Svetlana Glogovac, Ankica Kondić Špika, Fidanka Trajkova, Liljana Koleva Gudeva</p> <p><b>Molecular evaluation of four pepper androgenic regenerants</b></p>
PS4	<p>Marija Pockovska, Fidanka Trajkova, Liljana Koleva Gudeva</p> <p><b>Determination of photosynthetic pigments in fruits from pepper androgenic plant</b></p>
PS5	<p>Mite Ilievski, Dragica Spasova, Biljana Atanasova, Dusan Spasov</p> <p><b>Corn production in R. Macedonia and possibilities for its cultivation without interventional irrigation</b></p>
PS6	<p>Daniela Todevska, Sanja Kostadinovic Velickovska, Igor Iljovski, Biljana Kovacevik, Fidanka Ilieva, Marjan Crvenkovski</p> <p><b>Introduction and determination of new tomato hybrids</b></p>
PS7	<p>Jane Aleksoski</p> <p><b>Heterothic effect of some quantitative traits in F1 diallel hybrids of various tobacco types</b></p>
PS8	<p>Biljana Jordanska Shishkoska, Valentina Pelivanoska, Marija Srbinoska</p> <p><b>Macronutrient availability of different oriental tobacco varieties grown under the same conditions</b></p>
PS9	<p>Valentina Pelivanoska , Biljana Jordanoska Shishkoska</p> <p><b>Soil fertility as a prerequisite for sustainable tobacco production in the municipality of Dolnen</b></p>

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<b>PS10</b>	<p>Iljovski Igor, Canev Ile, Todevska Daniela</p> <p><b>Using the BBCH scale and growing degree days to identify the growth stages of winter oilseed rape genotypes in the Skopje region</b></p>
<b>PS11</b>	<p>Sasa Mitrev, Emilija Arsov</p> <p><b><i>Acidovorax citrulli</i>- causing Bacterial Fruit Blotch of watermelon fruits in Strumica region</b></p>
<b>PS12</b>	<p>Vesna Krsteska, Stanislava Lazarevska, Biljana Jordanoska Shishkoska</p> <p><b>Monitoring of the species from Noctuidae family in tobacco fields using light trap</b></p>
<b>PS13</b>	<p>Katerina Temelkovska, Gorica Pavlovska, Valentina Pavlova, Viktorija Stamatovska</p> <p><b>Sensory characteristics of cold pressed sunflower oil with the addition of aromatic herbs</b></p>
<b>PS14</b>	<p>Tanja Stojanovska, Tatjana Kalevska, Daniela Nikolovska Nedelkoska, Eleonora Delinikolova</p> <p><b>Oleogels – Innovative technology for replacing animal fats in meat products</b></p>
<b>PS15</b>	<p>Daniel Simakoski</p> <p><b>Phenotypic and exterior comparison of Salers beef cattle with other beef cattle breeds</b></p>
<b>PS16</b>	<p>Borche Makarijoski</p> <p><b>Microbiological quality of Macedonian white brined cheese</b></p>
<b>PS17</b>	<p>Daniela Nikolovska Nedelkoska, Biljana Risteska, Tatjana Kalevska, Vesna Antoska Knights, Vezirka Jankuloska, Sashko Martinovski</p>

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	<b>Implementation and functioning of HACCP principles in the Macedonian wineries: A multiple case study</b>
<b>PS18</b>	Sanja Kostadinovic Velickovska, Fidanka Ilieva, Daniela Todevska <b>Chemical composition and antioxidant activity of XAD-7 extracts from lingonberry (<i>Vaccinium vitis-idaea</i> L.)</b>
<b>PS19</b>	Tatjana Blazhevska,, Valentina Pavlova, Viktorija Stamatovska, Vesna Knights, Mihajlo Sviderski, Eleonora Delinikolova  <b>The presence of <i>Escherichia coli</i> and <i>Enterococcus</i> in the water of the fifth canal and black river near Bitola</b>
<b>PS20</b>	Biljana Balabanova, Verica Ilieva, Sasa Mitrev  <b>Reducing greenhouse gas emissions in agriculture: challenges and possibilities</b>
<b>PS21</b>	Fidanka Ilieva, Antonio Petrov, Sanja Kostadinovic Velickovska, Violeta Dimovska, Daniela Todevska  <b>Quality of red wines from Vranec, Merlot and Frankovka grape varieties fermented by two different yeast strains</b>
<b>PS22</b>	Ivan Boev  <b>Isotopic (<math>^{87}\text{Sr}/^{86}\text{Sr}</math>) determination of wine from the Tikves area</b>
<b>19.04.2023 (Wednesday)</b> <b>All-day event</b> Hallway	<b>Display of exhibition stands of agricultural companies</b>

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<b>19.04.2023</b> <b>(Wednesday)</b> <b>18:00</b> <b>Hotel Izgrev –</b> <b>Stip</b>	<b>Gala dinner</b>
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<b>Time &amp; Place</b>	<b>Activity</b>
<b>20.04.2023</b> <b>(Thursday)</b> <b>9:00-10:00</b> Reception desk Faculty of Agriculture, Campus 2	<b>Arrival and registration of participants</b>
<b>20.04.2023</b> <b>(Thursday)</b> <b>10:00-11:30</b> Assembly Hall Faculty of Agriculture, Campus 2	<b>Plenary presentation 3</b> <b>Constructive alignment between objectives, teaching and learning activities, student competencies and assessment methods in higher education - Prof. dr. Slavča Hristov</b> , Faculty of Agriculture, University of Belgrade, Serbia  <b>Panel discussion: Digital transformation of active learning and teaching in a blended environment</b>  <b>Moderator of the panel discussion:</b> <b>Prof. d-r Dimitar Nakov</b> , Faculty of Agriculture, Goce Delcev University – Stip, Republic of North Macedonia <b>Invited panelists:</b>

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	<p><b>Prof. d-r Slavča Hristov</b> - Faculty of Agriculture, University of Belgrade, Serbia</p> <p><b>Prof. dr. Emilija Arsov</b> - Faculty of Agriculture, Goce Delcev University – Stip, Republic of North Macedonia</p> <p><b>Mr. Efremco Nikolov</b> - High school teacher and Vice president of Agricultural Vocational High Schools, Republic of North Macedonia</p>
<p><b>20.04.2023</b> <b>(Thursday)</b> <b>11:30-12:00</b></p>	<p><b>Coffee break</b></p>
<p><b>20.04.2023</b> <b>(Thursday)</b> <b>12:00-13:30</b></p> <p>Assembly Hall Faculty of Agriculture, Campus 2</p>	<p><b>European funding opportunities - possibilities and challenges</b></p> <p>Moderators of the section:</p> <p>Prof. d-r Biljana Kovacevik, Prof. d-r Natalija Markova Ruzdik, Asst. prof. d-r Biljana Atanasova</p>
<p><b>12:00-12:15</b></p>	<p>Biljana Balabanova, Verica Ilieva, Sasa Mitrev</p> <p><b>Carbon Initiative for Climate-resilient Agriculture – CARBONICA”, HORIZON EUROPE, 101087233</b></p>
<p><b>12:15-12:30</b></p>	<p>Dimitar Nakov</p> <p><b>Building a network for cooperation and multidisciplinary scientific approach in the field of animal welfare, COST Action CA21124 LIFT: LIFTING FARM ANIMAL LIVES – LAYING THE FOUNDATIONS FOR POSITIVE ANIMAL WELFARE (LIFT)</b></p>
<p><b>12:30-12:45</b></p>	<p>Vineta Srebrenkovska, Biljana Balabanova</p> <p><b>Plastics monitoring detection remediation recovery, COST ACTION, CA20101, PRIORITY</b></p>

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<b>12:45-13:00</b>	Violeta Ivanova Petropulos <b>CEEPUS programme - opportunities and challenges”</b>
<b>13:00-13:15</b>	Fidanka Trajkova, Sasho Risteski, Lazo Dimitrov <b>Utilization of digital and IT tools in agriculture sector, SOCIO-ECONOMIC IMPACT OF THE COVID-19 CRISIS IN AGRICULTURE, UNDP Local Office Skopje, North Macedonia</b>
<b>13:15-13:30</b>	<b>Section discussion and concluding remarks</b>
<b>13:30-14:00</b> Assembly Hall Faculty of Agriculture, Campus 2	<b>Group photo</b> <b>Closing ceremony</b>



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## **PROGRAMME OF THE MEETING**

**3<sup>rd</sup> INTERNATIONAL MEETING  
AGRISCIENCE & PRACTICE (ASP 2023)  
Faculty of Agriculture, Goce Delcev University - Stip  
19 - 20 April 2023, Stip, Republic of North Macedonia**