



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

**2nd INTERNATIONAL MEETING
AGRISCIENCE & PRACTICE (ASP 2019)**

PROGRAMME OF THE MEETING

**12th April 2019
Stip, Republic of North Macedonia**



Time Activity

12.04.2019 (Friday) 8³⁰-9³⁰ <i>Faculty of Agriculture, Campus 2</i>	Arrival and registration of participants
12.04.2019 (Friday) 9³⁰-10⁰⁰ <i>Assembly Hall Faculty of Agriculture, Campus 2</i>	Opening ceremony Prof. d-r Ljupco Mihajlov, President of the Organizing Committee of ASP 2019 and Dean of the Faculty of Agriculture, GDU – Stip Mr. Ljupco Nikolovski, Minister of Agriculture, Forestry and Water Management of Republic of North Macedonia Prof. d-r Blazo Boev, Rector of Goce Delcev University – Stip Acknowledgments awarding ceremony
12.04.2019 (Friday) 10⁰⁰-11⁰⁰ <i>Assembly Hall Faculty of Agriculture, Campus 2</i>	Panel discussion Motivation approaches for transfer of knowledge, research and innovations and their implementation Moderator: Prof. d-r Blazo Boev, Rector of Goce Delcev University – Stip Invited panelists: Mr. Jovan Despotovski – director of the Fund for innovations and technological development, Republic of North Macedonia Prof. d-r Dzoko Kungulovski - Department of Microbiology and Microbial Biotechnology, Institute of Biology, Faculty of Natural Sciences and Mathematics, UKIM – Skopje, Republic of North Macedonia Prof. d-r Annika Michelson - HAMK University of Applied Sciences, Finland



	Plenary presentation 1 Integrating studies and entrepreneurship. Case: ELOSA OSK. Prof. d-r Annika Michelson, HAMK University of Applied Sciences, Finland
12.04.2019 (Friday) 11⁰⁰-11³⁰ <i>Assembly Hall</i> <i>Faculty of Agriculture,</i> <i>Campus 2</i>	Moderators: Asst. Prof. d-r Emilija Arsov; Prof. d-r Mite Ilievski Presentations from representatives of agricultural companies – associates of Faculty of Agriculture, GDU – Stip Presentation 1: Biogenesis – bioagents Violeta Josifova, Biogenesis company, Belgrade, Serbia
12.04.2019 (Friday) 11³⁰-12³⁰ <i>Faculty of Agriculture,</i> <i>Campus 2</i>	Coffee break/Cocktail
12.04.2019 (Friday) 12³⁰-13⁵⁰ <i>Assembly Hall</i> <i>Faculty of Agriculture,</i> <i>Campus 2</i>	Oral presentations Sections: Plant protection; Viticulture, enology and fruit production Moderators of the sections: Prof. d-r Sasa Mitrev, Prof. d-r Violeta Dimovska
12³⁰-12⁴⁰	Maja Petrusheva, Sasa Mitrev, Emilija Arsov First report of health condition of potato samples from border crossings in the Republic of Macedonia
12⁴⁰-12⁵⁰	Radivoje Jevtić, Vesna Župunski, Mirjana Lalošević The impact of climate change on shift of predominant rust pathogens in Serbia
12⁴⁰-12⁵⁰	Dusan Spasov, Biljana Atanasova, Dragica Spasova, Mite Ilievski The use of predators for the control of <i>Frankliniella occidentalis</i> (Thysanoptera: Thripidae) for pepper in protected area



12⁵⁰-13¹⁰	Natalija Atanasova-Pancevska, Dzoko Kungulovski, Violeta Boskovska, Ivan Kungulovski <i>Paenibacillus alvei</i> DZ-3 with high antifungal activity protects apple fruits against <i>Botrytis cinerea</i> gray mold
13¹⁰-13²⁰	Dzoko Kungulovski, Natalija Atanasova-Pancevska, Marija Todorovska-Ivkovic, Ivan Kungulovski Selection and characterisation of wild yeasts of winery interest from dog rose (<i>Rosa canina</i> L.)
13²⁰-13³⁰	George Michev Process and device for <i>in vivo</i> preparation of grape /wine/ foodstuffs from grapes
12.04.2019 (Friday) 13³⁰-13⁵⁰	Section discussion and concluding remarks
12.04.2019 (Friday) 12³⁰-13⁵⁰ Classroom 10 Faculty of Agriculture, Campus 2	Oral presentations Sections: Quality control and food safety Moderators of the sections: Prof. d-r Aco Kuzelov, Prof. d-r Sanja Kostadinivik Velickovska, Prof. d-r Elena Joshevska
12³⁰-12⁵⁰	Plenary presentation 2 Influence of deep autolysis on the quality and shelf life of meat Prof. dr. Stefan Dragoev, University of Food Technologies, Technological Faculty, Plovdiv, Bulgaria
12⁵⁰-13⁰⁰	Jasmina Stojiljkovic, Metodija Trajchev, Milena Petrovska, Dimitar Nakov The influence of different concentrations of plant essential oils on growth and reproduction of <i>Salmonella enteritidis</i>
13⁰⁰-13¹⁰	Gordana Dimitrovska, Marija Petkovska, Ljupce Koshoski, Elena Joshevska, Katerina Bojkovska



	The effect of different starter cultures on quality and sensory characteristics on kashkaval cheese
13¹⁰-13²⁰	Biljana Balabanova Analytical challenges in chemical characterization of medicinal and aromatic plants
13²⁰-13³⁰	Valentina Pavlova, Gordana Šebek, Tatjana Blazhevskaja, Ljubica Kostadinova Nutritive and sensory characteristics of fermented cucumber
13³⁰-13⁴⁰	Julijana Sazdova, Goran Antonievski, Dejan Metodijeski, Aco Kuzelov Applicable guidelines for the existing rules for labelling food products
12.04.2019 (Friday) 13⁴⁰-14⁰⁰	Section discussion and concluding remarks
12.04.2019 (Friday) 14⁰⁰-14²⁰ Classroom 11 Faculty of Agriculture, Campus 2	Oral presentations Sections: Plant production, Plant biotechnology, Agricultural economics Moderators of the sections: Prof. d-r Ljupco Mihajlov, Prof. d-r Liljana Koleva Gudeva
12³⁰-12⁵⁰	Plenary presentation 3 Breeding of abiotic stress in barley - problems, achievements and perspectives Prof. dr. Darina Valcheva, Prof. dr. Dragomir Valchev - Agricultural Academy, Institute of Agriculture, Karnobat, Bulgaria
12⁵⁰-13¹⁰	Plenary presentation 4 Representative of the company Panamin-agro, Austria
13¹⁰-13²⁰	Annika Michelson A virtual plant production management platform



13²⁰-13³⁰	Kiril Bahcevandziev Use of seaweed extracts in the lettuce (<i>Lactuca sativa</i> L.) production
13³⁰-13⁴⁰	Brankica Spaseva, Ziad Al Chami, Sandra Angelica De Pascali, Ivana Cavoski, Francesco Paolo Fanizzi Waste materials derived bio-effectors used as growth promoters for strawberry plants. An agronomic and metabolomic study
13⁴⁰-13⁵⁰	Fidanka Trajkova, Liljana Koleva Gudeva Genetically modified crops - current state, issues and perspectives
13⁵⁰-14⁰⁰	Silvana Pasovska, Trajko Miceski Perspectives and possibilities for development of tobacco production in the Republic of Macedonia
12.04.2019 (Friday) 14⁰⁰-14²⁰	Section discussion and concluding remarks
12.04.2019 (Friday) All day event* <i>Hallway</i> <i>Faculty of Agriculture,</i> <i>Campus 2</i> <i>*Participants with poster presentation shall place the posters at poster display boards immediately after their registration</i>	Poster session Moderators of Poster sessions: Prof. d-r Fidanka Trajkova, Prof. d-r Dragica Spasova, Asst. Prof. d-r Natalija Markova Ruzdik, Asst. prof. d-r Biljana Kovacevik, Asst. Prof. d-r Biljana Balabanova, Prof. d-r Fidanka Ilieva Poster session: Agricultural economics [AE] Goran Mihajlovski Placement of information systems in agribusiness [AE 1] Maja Angjeleska, Kristina J. Gacoska The impact of social marketing on improving consumer awareness of the importance of spice in food [AE 2] Poster session: Plant biotechnology [PBT]



Mariya T. Zhelyazkova, Svetlana Y. Georgieva, Deyana G. Gencheva

Main molecular markers in plant genetics - mini review [PBT 1]

Detelina Petrova, Milena Petrova, Maria Rogova, Miroslava Zhiponova, Petia Hristova, Ganka Chanova

Assessment of antimicrobial and antioxidant activities of *Nepeta nuda* plant extracts [PBT 2]

Ivana Velesanova, Fidanka Trajkova, Liljana Koleva Gudeva

Spectrophotometric determination of the content of photosynthetic pigments in some decorative species grown in *in vitro* and *in vivo* conditions [PBT 3]

Biljana Balabanova, Maja Lazarova, Blazo Boev

Improving the dominance of surface dust absorption vs. bulk deposition in moss tissue cross bio-indication process of metals deposition in environment [PBT 4]

**Poster session:
Plant production [PPD]**

Ilija Risteski, Karolina Kocoska

New perspective male sterile hybrid lines of burley tobacco [PPD 1]

Karolina Kocoska, Ilija Risteski

The size and number of middle belt leaves in some varieties of wild tobacco [PPD 2]

Dragomir Valchev, Darina Valcheva

Study of the influence of leaf fertilizer Panamin Agro on plant growth, resistance to biotic and abiotic stress, productivity and quality of the grain in wheat and barley [PPD 3]

Adrijana Burovska, Dragica Spasova, Biljana Atanasova, Dusan Spasov, Mite Ilievski



Chemical composition of oats grown in conditions of organic production [PPD 4]

Daniela Dimovska, Ljupco Mihajlov, Fidanka Trajkova, Liljana Koleva, Gudeva, Igor Iljovski

The influence of organic fertilizers on the growth and yield of broccoli (*Brassica oleracea* L.var. *italica*) [PPD 5]

Monika Gligorova, Ljupco Mihajlov

Specifics of symbiotic nitrogen fixation in leguminous plants - with a view of chickpea (*Cicer arietinum* L.) [PPD 6]

Alexander Tomov, Detelina Petrova, Aneliya Raicheva, Ganka Chaneva

Comparative study of hydroponically and aquaponically cultivated plant species [PPD 7]

Verica Ilieva, Natalija Markova Ruzdik, Ljupco Mihajlov, Mite Ilievski

Assessment of agro-morphological variability in rice by multivariate analysis [PPD 8]

Ljupco Mihajlov, Biljana Kovacevik, Natalija M. Ruzdik, Vesna Z. Paneva

Arsenic uptake and translocation in soybean plants in neutral soil environment [PPD 9]

Grozi Delchev

Impact of some herbicides and herbicide combinations on sowing characteristics of coriander [PPD 10]

**Poster session:
Plant protection [PPR]**

Cvetanka Kulukovska, Emilija Arsov, Sasa Mitrev

One step real-time polymerase chain reaction using for the detection of *PLUM POX POTYVIRUS* [PPR 1]



Miroslava Zhiponova, Galina Ivanova, Emilija Arsov, Detelina Petrova, Sasa Mitrev, Ganka Chaneva

Phytoplasma infection causes physiological changes in systemic pepper leaves [PPR 2]

Vesna Krsteska, Stanislava Lazarevska, Petre Stojanoski

Global warming and increased influx of pests on tobacco [PPR 3]

Grozi Delchev

Efficacy of some herbicides and herbicide tank mixtures in durum wheat (*Triticum durum* DESF.) [PPR 4]

Biljana Kovacevik, Mitrev Sasa

Phenotypic and pathogenic characterization of *Colletotrichum* spp. associated with bitter rot on apple fruits in post-harvest storage [PPR 5]

Poster session:

Quality control and food safety [QCFS]

Katerina Bojkovska, Nikolche Jankulovski, Goran Mihajlovski, Elena Joshevska, Gordana Dimitrovska

Consumer preferences as determinant of the successful quality management of dairy products [QCFS 1]

Kristina J. Gacoska, Maja Angjeleska

Application of spices in the dairy industry [QCFS 2]

Ismaili Muhhareem, Makarijoski Borsche, Presilski Stefche, Trajchevski Sasho

Sensory evaluation of probiotic yoghurt inoculated with different starter cultures [QCFS 3]

Ismaili Muhhareem, Makarijoski Borsche, Presilski Stefche, Trajchevski Sasho

Starter cultures effect on pH and SH dynamics of inoculum during fermentation period of probiotic yoghurt [QCFS 4]

Hristina Eftinzijioska, Gorica Pavlovska



Stability of oil from oilseed rape with garlic under various conditions [QCFS 5]

Daniela Nikolovska Nedelkoska, Tatjana Kalevska, Natalija Atanasova-Pancevska, Mitko Karadelev, Zora Uzunoska, Dzoko Kungulovski

Evaluation of bactericidal activity of selected wild macrofungi extracts against *Escherichia coli* [QCFS 6]

Marija Menkinoska, Tatjana Blazhevskaa, Viktorija Stamatovska

Comparison of the rheological characteristics of bio-fortified flour obtained from soft wheat varieties Treska and Radika [QCFS 7]

Vangelica Jovanovska, Dimitra Jovanovska, Darko Veljanovski, Mila Arapchevska, Katerina Shambevskaa

Hygienic sanitation in the dairy industry in the production of cow cheese as a factor for obtaining a hygienically correct product according to the EU standards for standardization and certification [QCFS 8]

Dilyana Gradinarska, Daniela Mitreva, Katya Yalkova-Yorgova, Desislava Vlahova-Vangelova, Aco Kuzelov

Effect of extended aging upon textural aspects of traditional bulgarian dry-cured ham [QCFS 9]

Maria Momchilova, Dilyana Gradinarska, Dinko Yordanov, Todorka Petrova, Ivan Bakalov, Nikolay Penov, Nadezhda Petkova

Influence of the sterilization process on the physicochemical and nutritional properties of meat vegetable pate [QCFS 10]

Mila Arapcheska, Zehra Hajrulai – Musliu, Risto Uzunov, Jovanka Tuteska, Vangelica Jovanovska

Gas chromatography analysis of omega-3 fatty acids content in fish oil supplements [QCFS 11]

Dragan Ilievski, Biljana Trajkovska, Aleksandra Grozdanovska, Ljupche Kochoski



Raw milk microbiological quality influence on protein content [QCFS 12]

Petya Boyanova, Petar Panayotov, Atanaska Bosakova-Ardenska, Vladimira Ganchovska

Non – destructive study of acid milk coagulation [QCFS 13]

Tatjana Kalevska, Daniela Nikolovska Nedelkoska, Viktorija Stamatovska, Zora Uzunoska, Sasko Martinovski, Vezirka Jankuloska

Evaluation of the quality of raw milk for yogurt production [QCFS 14]

Darko Andronikov, Aco Kuzelov, Nako Taskov, Kiro Mojssov, Aco Janevski, Sonja Jordeva, Saska Golomeova

Quantitative characteristics of rabbit hybrids [QCFS 15]

Sanja Kostadinović Velickovska, Violeta Dimovska, Fidanka Ilieva, Ljupco Mihajlov, Biljana Kovacević

Chemical composition, antiradical and antimicrobial activity of extracts and cold-pressed edible oils from Macedonian nutty fruits [QCFS 16]

Poster session:

Soil science and hydrology

Tatjana Blazhevskaja, Marija Menkinoska, Valentina Pavlova, Zora Uzunoska

The content of inorganic nitrogen in the water from the fifth channel near the City of Bitola [SSH 1]

Poster session:

Viticulture, enology and fruit production

**Hristina Poposka, Dusko Mukaetov, Dusko Nedelkovski
Yield and mineral composition of grapevine as affected by magnesium and iron foliar [VEFP 1]**

Venelin Roychev, Dushko Nedelkovski



	Investigation of the correlations between quantitative traits which determine yield in the vine cultivar Bolgar and the hybrid combination Bolgar x Russalka 1 [VEFP 2] Dushko Nedelkovski, Klime Beleski, Goran Milanov, Venelin Roychev, Violeta Dimovska Potential and possibilities of Rebo - new grapevine variety (<i>Vitis vinifera</i> L.) in growing conditions in Republic of Macedonia [VEFP 3] Kire Panovski, Violeta Dimovska, Fidanka Ilieva, Darko Mindev Agro-biological and technological characteristics of Rkatsiteli wine grape variety, grown in Tikveš vineyards [VEFP 4] Efremco Nikolov, Dimitrija Angelkov, Violeta Dimovska, Fidanka Ilieva Vineyard irrigation systems controlled online through GMS module [VEFP 5]
12.04.2019 (Friday) 14⁰⁰-14³⁰	Poster Section concluding remarks
12.04.2019 (Friday) All-day event <i>Hallway</i> <i>Faculty of Agriculture,</i> <i>Campus 2</i>	Display of exhibition stands of agricultural companies
12.04.2019 (Friday) 14³⁰-15⁰⁰ <i>Assembly Hall</i> <i>Faculty of Agriculture,</i> <i>Campus 2</i>	Closing ceremony
12.04.2019 (Friday) 15³⁰ <i>Restaurant of Goce Delcev University, Stip</i>	Gala lunch