



Agricultural  
Challenges to  
Climate  
Change

# Conference program

## Tuesday 19/9/2023

<b>08:30 – 10:00</b>	<b>Registration</b>
<b>10:00 – 11:30</b>	<b>Opening Ceremony</b>
<b>11:30 – 12:00</b>	<b>Coffee break</b>
12:00 – 13:00	Plenary Lectures Moderators: Danijel Jug, Fani hatjina, Mark Reiter
12:00 – 12:30	Maya Zachut, Jayasimha Rayalu Daddam, Daniel Daniel, Gitit Kra, Uzi Moallem, Yuri Portnick, Hadar Kamer, Yaniv Lavon EFFECTS OF PLANT POLYPHENOL SUPPLEMENT ON REDUCTION AND WELFARE MARKERS IN HEAT STRESSED DAIRY COWS
12:30 – 13:00	David Lopes MONITORING AND MODELING OF CROP PESTS AS IMPORTANT PARTS OF AN IPM APPROACH IN A AGRICULTURAL WARNING SYSTEM IN AZORES ISLANDS, PORTUGAL
<b>13:00 – 14:30</b>	<b>Lunch</b>
14:30 – 16:00	Plenary Lectures Moderators: Danijel Jug, Fani hatjina, Mark Reiter
14:30 – 15:00	Heike Knicker "BLACK NITROGEN" A POTENTIAL SLOW-RELEASE FERTILIZER WITH C SEQUESTRATION POTENTIAL?
15:00 – 15:30	Fani Hatjina SUSTAINABLE APICULTURE AND CHALLENGES UNDER MODERN AGRICULTURE AND CLIMATE CHANGE
15:30 – 16:00	José Dörner, Dorota Dec, Felipe Zúñiga, Iván Ordóñez, Jorge Ivelic THE RELEVANCE OF SOIL STRUCTURE CONSERVATION IN GRAZING SYSTEMS ON ANDOSOLS OF SOUTHERN CHILE
<b>16:00 – 16:30</b>	<b>Coffee break</b>
<b>19:00 – 20:00</b>	<b>Outdoor walking tour with an expert guide, through the Tvrđa fortress and Osijek old town</b>



# Wednesday 20/9/2023

10:00 – 11:00

Lectures

Moderators: Maja Telišman Prtenjak, Branko Grisogono

Section 1

10:00 – 10:10

**Keynote speaker: Branko Grisogono**

Branko Grisogono, Željko Večenaj, Branimir Omazić  
CLIMATE CHANGE IN THE PERSPECTIVE OF MEDITERRANEAN AND  
CROATIAN AGRICULTURE - PERSONAL OVERVIEWS

10:10 – 10:20

Ana Firanj Sremac, Branislava Lalic  
FAIRNESS CA20108 – THE FRAMEWORK FOR FAIR  
MICROMETEOROLOGICAL MEASUREMENTS

10:20 – 10:30

Peter Szabo, Rita Pongracz  
ANALYSIS OF A FOREST FIRE DANGER INDEX OVER THE PANNONIAN REGION

10:30 – 10:40

Imelda Somodi, Krisztina Dóra Konrád, Andraž Čarni, Mirjana Ćuk, Zoran  
Galić, Adrienn Gyalus, Alen Kiš, Annamária Laborczi, Siniša Ozimec, László  
Pásztor, Ranko Perić, Ivan Pilaš, Klára Szabados, Gábor Szatmári, Ivana  
Vitasović-Kosić, Ákos Bede- Fazekas  
IMPROVING POTENTIAL NATURAL VEGETATION MODELS TO SERVE  
CLIMATE CHANGE ASSESSMENT

10:40 – 10:50

Rita Pongracz, Anna Kis, Peter Szabo  
ANALYSIS OF THE PÁLFAI DROUGHT INDEX FOR HUNGARY FOR 1975–2100

10:50 – 11:00

**Discussion**

11:00 – 11:30

**Coffee break**

11:30 – 13:00

Digital Agriculture and Climate Resilience: Embracing 5G Solutions

**Presentation Topics:**

- Digital Agriculture Master Study – Students Experience
- Open-Source GNSS Solutions for Accurate Positioning in Precision Agriculture with 5G
- The Future of Plant Performance Modeling: 5G, AI, and Data Integration
- 5G and Remote Sensing: Networking Solutions for Climate Monitoring
- 5G for Resilience: Disaster Preparedness and Recovery in Networks

**Panel discussion:**

5G Agora: Navigating Climate-Resilient Agriculture in the Digital Era

13:00 – 14:00

**Lunch**



14:00 – 15:00

Lectures

Moderators: Irena Jug, Srdjan Šeremešić

Section 2

14:00 – 14:10

**Keynote speaker: Danijel Jug**

Danijel Jug, Irena Jug, Boris Đurđević, Bojana Brozović, Vladimír Smutný, Vesna Vukadinović, Monika Marković, Ivan Kovaček

CROP RESIDUES MANAGEMENT AS ONE OF THE MAIN FACTORS OF CONSERVATION AGRICULTURE

14:10 – 14:20

Srdjan Šeremešić, Pia Euteneuer, Martin Kulhánek, Barbara Simon, Bojan Vojnov, Miloš Rajković, Stanko Milić

LUMBRICUS TERRESTRIS ENHANCEMENT CHANGES SOIL MOISTURE AND TEMPERATURE REGIME IN MAIZE CROPPING

14:20 – 14:30

Irena Jug, Boris Đurđević, Edward Wilczewski, Bojana Brozović, Vesna Vukadinović, Monika Marković, Ante Bubalo, Antonija Kojić, Danijel Jug

POTENTIAL OF CONSERVATION AGRICULTURE PRINCIPLES AS RESPOND ON CLIMATE CHANGES IN CROP PRODUCTION

14:30 – 14:40

Eyal Ben-Simchon, Dvory Namdar, Kinneret Rozenblat, Yonatan Fireman, Roza Ayalkibet, Zenawi Tadesse, Anat Peleg, Zvika Amitai, Uri Goldfisher, Maor Levi, Guy Yogev, Oren Shelef

AGRODIVERSITY FOR CLIMATE RESILIENCE? STUDYING DIMENSIONS OF DIVERSITY IN AGRICULTURE

14:40 – 14:50

Branimir Omazić, Maja Telišman Prtenjak, Mislav Anić

FROST RISK IN CURRENT AND FUTURE CLIMATE

14:50 – 15:00

**Discussion**

15:00 – 15:30

**Coffee break**

15:30 – 16:30

Poster section

Moderators: Petra Sviličić, Jorge Ivelic-Sáez

Petra Sviličić

THE ROLE OF AGROMETEOROLOGY DEPARTMENT OF CROATIAN METEOROLOGICAL AND HYDROLOGICAL SERVICE IN SUPPORTING AGRICULTURAL SECTOR

Amra Semić, Helena Filipović, Marina Mitrović

INFLUENCE OF FLOODING ON SOIL QUALITY AND SOIL PROTECTION STRATEGY FROM HARMFUL CONSEQUENCES

Jorge Ivelic-Sáez, José Dörner, Dante Pinochet, Susana Valle, Dorota Dec, José Luis Arumí, Sergio Radic-Schilling, Iván Ordoñez, Fracisco Sales, Camila Sandoval, Raúl Lira

IS IT POSSIBLE TO PROTECT THE NATURAL RESOURCES WITHIN THE ECOSYSTEMS ASSOCIATED WITH LIVESTOCK FARMING IN MAGALLANES? A THEORICAL APPROACH

Ivona Djurkin Kušec, Goran Kušec

EUROPEAN LIVESTOCK PRODUCTION IN THE ERA OF CLIMATE CHANGE- WHAT CAN WE EXPECT?

Ivana Čavlina Tomašević, Višnjica Vučetić

CLIMATE CHANGE AND WILDFIRE RISK IN THE EASTERN CROATIA

Vladimir Ivezić, Vladimir Margeta

AGROFORESTRY PRACTICES IN EASTERN CROATIA



Marija Kristić, Vladimir Ivezić, Vladimir Zebec, Jurica Jović, Meri Engler, Ingrid Olsen  
VALUE CREATION AND ECOSYSTEM SERVICES OF EUROPEAN SEAWEED INDUSTRY BY REDUCING AND HANDLING POTENTIALLY TOXIC ELEMENTS (PTE) FROM BREEDING TO SOIL

Katarina Perić, Tihomir Čupić, Goran Krizmanić, Branimir Tokić, Marijana Tucak  
THE IMPORTANCE OF ALFALFA AS A MULCHING MATERIAL IN THE CARBON SEQUESTRATION TECHNIQUE

Branimir Tokić, Katarina Perić, Marijana Tucak, Goran Krizmanić, Tihomir Čupić

THE EFFECTS OF SELECTED TECHNIQUES IN CARBON FARMING

Brigita Popović, Meri Engler, Lara Ergović, Gordana Bukvić, Ante Bubalo, Goran Herman

THE ROLE OF BIOSTIMULANTS ON YIELD COMPONENTS AND QUALITY CAPACITY OF SUGAR BEET IN UNFAVORABLE CLIMATIC CONDITIONS

**20:00 – 00:00**      **Gala dinner**

## Thursday 21/9/2023

10:00 – 11:15      Lectures  
Moderators: Jurica Jović, Mira Pucarević

### Section 3

**10:00 – 10:10**      **Keynote speaker: Seyed Hosseini**

Seyed Hosseini, Benoit Le Rumeur, Clement Le Verge  
THE POSITIVE CONTRIBUTION OF SILICON AND ALGAE-BASED BIOSTIMULANTS TO SUSTAINABLE AGRICULTURE IN THE CURRENT CLIMATE CHANGES

10:10 – 10:20      Gabriella Kanižai Šarić, Ivan Kovaček, Ivana Potočnik, Svetlana Milijašević-Marčić, Ivana Majić

THE POTENTIAL OF TRICHODERMA SP. IN BIOCONTROL

10:20 – 10:30      Marija Galić, Anita Lucia Tupek, Željka Zgorelec, Nikola Bilandžija, Tajana Krička, Darija Bilandžija  
SEASONAL VARIABILITY OF SOIL RESPIRATION UNDER DIFFERENT MAIZE HYBRIDS

10:30 – 10:40      Benoit Le Rumeur, Seyed Hosseini  
LONG TERM APPLICATION OF SOIL BIOSTIMULANT POSITIVELY CONTRIBUTES TO THE SOIL HEALTH AND CROP PRODUCTION

10:40 – 10:50      Vlad Stoian, Roxana Vidican, Larisa Corcoz  
FUNGAL ENDOPHYTES IN ROOTS OF SOYBEAN

10:50 – 11:00      Mira Pucarević, Nataša Stojić, Dunja Prokić, Ljiljana Ćurčić, Linda Mitić  
ARE PLASTIC MULCHES A SOURCE OF MICROPLASTICS AND OTHER POLLUTANTS IN THE AGROECOSYSTEM?

**11:00 – 11:15**      **Discussion**

**11:15 – 11:45**      **Coffee break**



11:45 – 13:00 Lectures  
Moderators: Nikica Prvanović Babić, Robert T. Burns

#### Section 4

**11:45 – 11:55 Keynote speaker: Tina Bobić**

Tina Bobić, Pero Mijić, Vesna Gantner, Mirjana Baban, Maja Gregić  
THE INFLUENCE OF MICROCLIMATE PARAMETERS ON DAIRY COW'S  
BODY TEMPERATURE

11:55 – 12:05 Robert T. Burns, Robert Spajić  
METHANE EMISSIONS REDUCTION FROM MANURE MANAGEMENT

12:05 – 12:15 Nikica Prvanović Babić, Ante Plećaš, Mirjana Baban, Martina Lojkić,  
Iva Getz, Tugomir Karadjole, Goran Bačić, Nino Maćešić, Silvio Vince,  
Ivan Folnožić, Branimira Špoljarić, Ivan Butković, Juraj Šavorić, Marko  
Samardzija  
INFLUENCE OF GLOBAL WARMING AND HEAT STRESS ON EQUINE  
REPRODUCTION

12:15 – 12:25 Mirjana Baban, Martina Hasija, Jelena Ramljak, Nikica Prvanović Babić,  
Maja Gregić, Pero Mijić, Tina Bobić  
THE IMPACT OF CLIMATE CHANGES ON THE HEALTH AND WELFARE OF  
HORSES

12:25 – 12:35 Zlatko Puškadija, Marin Kovačić, Josipa Štavalj, Bojana Brozović, Bojan  
Stipešević  
DIGITAL SCALE AS A TOOL FOR MITIGATING NEGATIVE IMPACT OF  
CLIMATE CHANGE ON HONEY BEE COLONY

12:35 – 12:45 Siniša Ozimec, Denis Deže  
EFFECTS OF CLIMATE CHANGE ON THE HABITAT DIVERSITY IN KOPAČKI  
RIT NATURE PARK (CROATIA)

**12:45 – 13:00 Discussion**

**13:00 – 14:00 Lunch**

14:00 – 15:15 Lectures  
Moderators: Mark Reiter, Pavlína Smutná

#### Section 5

**14:00 – 14:10 Keynote speaker: Mark Reiter**

Mark S. Reiter, Joseph Haymaker, Bethany Wolters, John Mason  
IMPROVING SOIL HEALTH AND CROP PRODUCTIVITY BY UTILIZING  
DIVERSE AND HIGH-RESIDUE COVER CROPS

14:10 – 14:20 Bojana Brozović, Irena Jug, Boris Đurđević, Iva Rojnica, Marija Ravlič,  
Vesna Vukadinović, Danijel Jug  
SOYBEAN WEEDINESS IN CONSERVATION TILLAGE SYSTEMS

14:20 – 14:30 Iva Rojnica, Bojana Brozović, Irena Jug, Boris Đurđević, Marija Ravlič,  
Danijel Jug  
WEED OCCURRENCE IN SOYBEAN UNDER DIFFERENT CONSERVATION  
TILLAGE AND LIMING

14:30 – 14:40 Vladimír Smutný, Pavel Nerušil, Antonín Kintl, David Kincl, Antonín Šedek  
EXPERIENCES WITH CULTIVATION OF MAIZE WITH UNDER-SOWING  
COVER CROPS IN THE CZECH REPUBLIC



- 14:40 – 14:50 Ivica Kisić, Dalibor Jurina, Marija Galić, Igor Bogunović, Aleksandra Perčin, Ivan Dugan  
EFFECTS OF LEGUMES AND FALLOW ON SOIL AND YIELD SPRING CROPS
- 14:50 – 15:00 Pavlína Smutná, Petr Elzner, Vladimíra Horáková  
WINTER WHEAT VARIETAL TESTING FOR ORGANIC FARMING SYSTEM
- 15:00 – 15:15 **Discussion**
- 15:15 – 15:45 **Coffee break**
- 15:45 – 17:00 Lectures  
Moderators: Vladimir Ivezić, Tihana Sudarić
- Section 6
- 15:45 – 15:55 **Keynote speaker: Itamar Glazer**  
Itamar Glazer  
AGRICULTURE CHALLENGES TO CLIMATIC CHANGES: HARNESSING SCIENCE AND TECHNOLOGY IN ISRAEL
- 15:55 – 16:05 Eyal Ben-Simchon, Zafir Grinhut, Maor Levi, Guy Yogev, Jonathan Fireman, Oren Shelef  
AGROFORESTRY FOR CLIMATE RESILIENCE IN DRYLANDS? TREE-CROP INTERACTIONS MEDIATED BY MICROCLIMATE
- 16:05 – 16:15 Karel Niederhafner, Vojtěch Lukas, Jiří Blaha, Petr Širůček, Jakub Elbl, Daniel Žižala  
MAPPING OF SOIL SPATIAL VARIABILITY BY SOIL SAMPLING IN OPTIMIZED SAMPLING GRID
- 16:15 – 16:25 Tanja Šumrada, Živa Alif, Ana Novak  
INCREASING KNOWLEDGE AND ADOPTION OF CLIMATE PRACTICES BY ENGAGING FARMERS IN INNOVATIVE GROUP LEARNING: A RANDOMIZED CONTROLLED TRIAL
- 16:25 – 16:35 Zdenko Lončarić  
SHOULD THE USE OF FERTILIZERS WITH 60 mg Cd PER kg PHOSPHORUS PENTOXIDE BE ALLOWED IN CROATIA?
- 16:35 – 16:45 David Kranjac, Krunoslav Zmaić, Tihana Sudarić, Lucija Bencarić, Maja Petrač  
THE ROLE AND IMPORTANCE OF THE AGMEMOD MODEL IN MONITORING AND EVALUATION OF THE CAP IN THE REPUBLIC OF CROATIA
- 16:45 – 17:00 **Discussion**

## Friday 22/9/2023

- 09:00 – 16:00 **Excursion (Nature park Kopački rit, Wine degustation, Monument of Batina Battle, Lunch at Baranja house, Street of the forgotten time etc.)**

