



## Conference Food and Climate Change PROGRAMME

Day 2: 16th October 2021

Online: Google Meet:

### 10:00 – Welcoming address by the Organising Committee

#### *SESSION IV: Climate change- related challenges in food production*

(chair: Bojan Šarkanj; Dunja Šamec)

10:15-10:30- **Wilfred A. Abia**, University of Yaounde, Yaounde, Cameroon: **Food Security Concerns, Climate Change, and Sea Level Rise in Coastal Cameroon**

10:30-10:45- **Hela Houissa**, Laboratory of Molecular Physiology of Plants, Center of Biotechnology of Borj-Cedria, Hammam-Lif, Tunisia: **Climate effect on *Aspergillus flavus* and aflatoxins occurrence in Pearl millet (*Pennisetum glaucum*) from Tunisia**

10:45-11:00- **Ana Rita Mateus**, National Institute for Agricultural and Veterinary Research (INIAV) Portugal: **Development and validation of QuEChERS followed by UHPLC-ToF-MS method for determination of multi-mycotoxins in pistachio nuts**

11:00-11:15- **Sanja Čavar Zeljković**, Centre of Region Haná for Biotechnological and Agricultural Research, Czech Advanced Technology and Research Institute, Palacky University, Czech Republik: **Abiotic stress changes the nutritional value of lettuce**

#### **POSTER SESSION I Responses to climate changes**

11:15-11:45 (chair: Sanja Čavar Zeljković)

1. **Dinko Štetić**: Climate change and agricultural production: the impact of temperature increase on grain production
2. **Tihana Marček**: The promising approach in raising the drought tolerance of wheat
3. **Rea Vrtodušić**: The impact of climate change on fruit growing and fruit quality
4. **Sandra Skendžić**: The impact of climate change on agricultural invasive insect pest
5. **Ivna Vrana Špoljarić**: The impact of climate change on marine phytoplankton and food quality
6. **Željka Fiket**: Climate Change and Truffles
7. **Ivana Stanić**: Influence of soil geochemistry on the chemical composition of the summer truffle (*Tuber aestivum*)
8. **Ana Pošta**: Ecological characteristics of commercially most important truffle species (*Tuber* spp.) in Croatia

11:45-12:15 (chair: Dunja Šamec)

9. **Ana Smolko**: Some fundamental insights into mechanisms affecting response to salt and osmotic stress in Brassicaceae family
10. **Ivana Šola**: High temperature susceptible vs. resistant metabolic parameters in broccoli (*Brassica oleracea* L. convar. botrytis) seedlings
11. **Jan Špiclin**: The effect of silver nanoparticles (AgNPs) on the oxidative stress of alfalfa (*Medicago sativa* L.)



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12. Erin Begović: Effect of copper(II) sulfate concentration on morphometric parameters, chlorophyll and proline concentrations of *Triticum aestivum* L. (common wheat)
13. Marija Polić Pasković: Impact of different seed treatments on processing tomato seedlings root mycorrhization
14. Emanuela Paduraru: The neuroprotective role of vitamin C in zebrafish treated with lead and deltamethrin

## POSTER SESSION II Climate changes impact on food safety and nutrition value

12:15 – 12:45 **Micotoxins** (chair: Bojan Šarkanj)

15. Tihomir Kovač: Environmental factors changed due to climate are affecting secondary metabolism of *Aspergilli*
16. Marija Kovač: Mycotoxin analytics – importance of chromatography in UHPLC-MS/MS method development
17. Kousar Aghebatbin: Mycotoxins, climate change and food safety under the Persian environment: what do we know?
18. Tina Lešić: Cyclopiazonic acid in industrially and traditionally produced Croatian dry-fermented sausage
19. Ana Rita Mateus: Challenges of mycotoxins decontamination processes for pistachio (*Pistacia vera* L.)
20. Elizabet Janić Hajnal: Occurrence of bikaverin in maize harvested in the Republic of Serbia
21. Jovana Kos: Occurrence and seasonal variations of aflatoxins in maize from the Republic of Serbia
22. Bojana Radić: Occurrence of fumonisins in maize produced in Northern Serbia during 2012- 2017

12:45-13:15 **Nutrients and Phytochemicals** (chair: Predrag Putnik)

23. Ivana Dodlek Šarkanj: Honeybee Products Used as Food and Medicine
24. Anela Topčagić: Determination of total proteins, starch and gluten in cereal foods
25. Ana Plasajec: Electrochemical detection of polyphenols in food samples
26. Anela Topčagić : Macronutrients quantification and antioxidant activity of soy products
27. Praveenkumar Pandiyan: Effects of Lemon and Pomelo peel extracts on quality and melanosis of Indian white prawn during chilled storage
28. Ajeet Soni: Effective treatment of curry (*Murraya koenigii*) and moringa (*Moringa oleifera*) leaves extracts on quality changes and melanosis of Pacific white shrimp (*Litopenaeus vannamei*) during chilled storage
29. Danijela Bursać Kovačević: Hurdle technology and 3D printing for environmentally friendly production of functional fruit juices
30. Nika Pavlović: Implications of climate change on food safety

13:15 -14:00- Break



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### **SESSION V: Sustainable food production and management (chairs: Goran Palijan; Marija Kovač)**

14:00-14:15: **Danijel Jug**, Faculty of Agrobiotechnical Sciences Osijek, Josip Juraj Strossmayer University of Osijek, Osijek, Croatia: **Different agricultural concepts as potential response to climate changes in crop production**

14:15-14:30: **Željka Mesić**, Faculty of Agriculture, University of Zagreb, Zagreb, Croatia: **Sustainable food products – habits and attitudes of Croatian consumers**

14:30- 14:45: **Khashayar Mahdiany Bora**, Faculty of Natural Resources, University of Guilan, Sowmeh Sara, Iran: **The positive impacts of dietary algae as a vegan source on urging public into healthier foods and mitigating climate change**

14:45-15:00: **Narcisa Smječanin**, University of Sarajevo, Faculty of Science, Department of Chemistry, Sarajevo BiH: **Content of flavonoids and antioxidant activity in bee honey from Bosnia and Herzegovina**

### **POSTER SESSION III Environmental Chemistry**

15:00-15:45 (chair: Goran Palijan)

31. **Mirel Subašić: Phytoremediation of cadmium polluted soils**
32. **Bojan Matijević: Dairy Industry Wastewater: treatment methods and innovative solutions**
33. **Laura Kozjak: Geochemical characteristics of Medimurje county waters in terms of climate change**
34. **Ana Jurinjak Tušek: Potential of NIR spectroscopy coupled with Artificial Neural Network modeling for prediction of oil-in-mint aqueous extract emulsion droplets diameter produced in continuously operated microfluidic device**
35. **Elena Ungureanu: Occurrence of microplastic in drinking water**
36. **Paula Patrčević: Biodegradation of PS and PVC microplastics by Bacillus subtilis**
37. **Bruna Babić: Determination of pesticide toxicity after photolysis**
38. **Marija Gregov: Bromate formation during ozonation and effect of ammonium addition**
39. **Dorian Delić: Remediation of phthalate-contaminated waters**
40. **Kristina Bule: Degradation of polyolefins by Fenton and Photo-Fenton processes**
41. **Andrea Sironić: Food as fuel: How to determine amount of biogenic component in liquid fuels**

### **SESSION VI: Solutions for climate change mitigation and maintaining food safety**

(chair: Anita Šalić; Željka Fiket)

15:45- 16:00: **Đani Đorđević**, Faculty of Veterinary Hygiene and Ecology, University of Veterinary Sciences Brno, Czech Republic, **Edible and biodegradable matrices developed by food processing byproducts**

16:00-16:15: **Alireza Hodhodi**, Faculty of Natural Resources, University of Guilan, Sowmeh Sara, Iran, **Applications of agar film for food packaging with the aim of environmental protection**

16:15-16:30: **Tamara Djerđ**, Department of Biology, Josip Juraj Strossmayer University of Osijek, Osijek, Croatia: **Improving food safety through optimization of mosquito population control measures and their adaptation to climate change**



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16:30-16:45: **Višnja Stepanić**, Ruđer Bošković Institute, Zagreb, Croatia, **Development of phytotoxic natural molecules as complementary herbicidal agents is supported by machine learning study**

**16:45- Closing remarks**