

Monday 16.10.2023.

9:00-10:00 - Registration

10:00 – Opening ceremony

Session: Climate change, society and policy making / Chairs: Ines Pohajda and Armin Mešić

IL1 10:30-10:50- **Ines Sviličić Petrić**, Ruđer Bošković Institute, Zagreb, Croatia: „**Climate Change and the Future of Food**“

IL2 10:50-11:10- **Žana Počiča**, Agency for Mobility and EU Programmes, Zagreb, Croatia: „**Food and Climate in Horizon Europe Programme**“

IL3 11:10-11:30- **Nikola Biliškov**, Ruđer Bošković Institute, Zagreb, Croatia: „**Can technology solve the climate crisis?**“

OL 1 11:30-11:45- **Steinberger Andreja**, Ministry of Agriculture, Zagreb, Croatia, „**The process of creating eco-schemes aimed at mitigating and adapting to climate change**“

11:45-12:00- INEL- golden sponsor presentation

12:00-12:15 Coffee break

Session: Climate change and health risks Chairs / Chairs: Dubravka Rašić and Ivana Babić

IL 4 12:15-12:35- **Tomislav Meštrović**, Department of Nursing, University North, Croatia, "**A Recipe for Risk: Climate Change and the Rise of Microbial Foodborne Diseases**"

IL 5 12:35-12:55- **Sulimanec Antonija**, Institute for Medical Research and Occupational Health, Zagreb, Croatia „**Metals in fish: Benefits and potential risks for consumers**“

IL 6 12:55-13:15- **Jianbo Xiao**, Faculty of Science, University of Vigo, Spain "**Benefits of food bioactives on the offspring**"

OL 2 13:15-13:30- **Papac Zjačić Josipa**, Faculty of Chemical Engineering and Technology, University of Zagreb, Zagreb, Croatia „**Investigation of the aquatic toxicity of PET microplastic**“

13:30-14:15 Lunch break

14:15 – 15:30 Poster session I, posters P1-P14, moderator Dunja Šamec

Climate change, society and policy making

Climate change and health risks

Adaptation of different organisms to a changing environment

Session: Adaptation of different organisms to a changing environment/Chairs: Dunja Šamec and Danijela Poljuha

IL 7 15:00-15:20, **Selma Mlinarić**, Department of Biology, Josip Juraj Strossmayer University of Osijek, Croatia, "**Photosynthesis in a changing climate: Adapting to environmental challenges**"

IL 8 15:20-15:40, **Erna Karalija**, Faculty of Science, University of Sarajevo, B&H, "**Raising the progeny to fight back: from priming to transgenerational memory**"

IL 9 15:40-16:00, **Branka Salopek Sondi**, Ruđer Bošković Institute, Zagreb, Croatia „**Can we consider a wild cabbage (*Brassica incana*) as a pool of good genes for climate change adaptation in Brassica crops?**“

IL 10 16:00-16:20, **Ivana Šola**, Faculty of Science, University of Zagreb, Croatia, "**Phytochemical adaptation of microgreens to temperature and water stress**"

IL 11 16:20-16:40, **Maria Ponticelli**, Department of Science, University of Basilicata, Potenza, Italy, "**Impact of wastewater irrigation on polyphenol accumulation and antioxidant activity: a lettuce case**"

OL 3 16:40-16:55, **Anja Meljnak**, Department of Biology, Josip Juraj Strossmayer University of Osijek, Osijek, Croatia, „**Cheap thrills with microgreens and chlorophyll *a* fluorescence**“

17:00- Meeting of Section of Mycology and Mycotoxicology – Croatian Microbiological Society

Book promotion – Plijesni (engl. Fungi) (authors K. Markov, J. Pleadin, Ž. Jakopović, M. Zadravec and J. Frece)

18:00 - Networking- Conference Dinner & Party/ music:

'Impact Factor' bend - Ruđer Bosković Institute scientist and staff performance

Tuesday 17. 10. 2023

9:00-10:00 – Registration

Session: Challenges associated with climate change in food production / Chairs: Bojan Šarkanj and Ines Sviličić Petrić

IL 12 10:00-10:20- **Lorena Perić**, Ruđer Bošković Institute, Zagreb, Croatia "**Already in dire straits? Challenges to sustainability of bivalve aquaculture in the Adriatic Sea**"

IL 13 10:20-10:40, **Ivana Babić**, Ruđer Bošković Institute, Zagreb, Croatia "**Can we expect soil microbiome health to be affected by climate change?**"

OL 4 10:40-10:55- **Manuela Zdravec**, Croatian Veterinary Institute, Zagreb, Croatia „**Sustainable biocontrol methods of mycotoxins in seeds and cereals**"

OL 5 10:55-11:10- **Dubravka Rašić**, Institute for Medical Research and Occupational Health, Zagreb, Croatia „**Mycotoxins: The hidden hemp threats**"

OL 6 11:10-11:25- **Božo Smoljan**- „**An Overview of Processing Technologies and Application of PLA**"

OL 7 11:25- 11: 40- **Sama Rahimi Devin**, College of Agriculture, Shiraz University, Shiraz, Iran „**Sustainable Agriculture and Food Security**"

11:40-11:55- Coffee break

Session: Solutions for mitigating climate change and maintaining food safety / Chairs: Erna Karalija and Branka Salopek Sondi

IL 14 11:55-12:15- **Poljuha Danijela**- Institute of Agriculture and Tourism, Poreč, Croatia „**Two-Faced Invasive (Edible) Plants**"

IL 15 12:15-12:35- **Ivan Baccelli**, National Research Council of Italy, Florence, Italy „**Novel fungicides and bactericides inspired by natural molecules: plant disease protection by targeted modifications of a Trichoderma peptaibol**"

IL 16 12:35-12:55- **Jelena Samardžić**, Institute of Molecular Genetics and Genetic Engineering, University of Belgrade, Serbia "**Genome editing: A powerful tool to alleviate detrimental effects of climate change in plants**"

OL 8 12:55-13:10- **Alireza Rabiepour**, Department of Fisheries, Faculty of Natural Resources, University of Guilan, Rasht, Iran „**The role of marine resources as sustainable foods**"

OL 9 13:10-13:25- **Štrbac Lucija & Podravski Ema**, Altium International d.o.o., Zagreb, Croatia, „**Sustainable is retainable: A guide to a greener lab**"

13:25-14:15- Lunch break

14:15-15:30 – Poster sessions II, moderator: Bojan Šarkanj

Sustainable food production and management

Challenges associated with climate change in food production

Solutions for mitigating climate change and maintaining food safety

Session: Sustainable food production and management / Chairs: Anita Šalić and Ivna Vrana Špoljarić

IL 17 15:30-15:50- **Bruno Zelić**, Faculty of Chemical Engineering and Technology, University of Zagreb, Croatia "**Process development for the production of biofuels on a micro, laboratory, pilot and industrial scale**"

IL 18 15:50-16:10- **Tomislava Vukušić Pavičić**, Faculty of Food Technology and Biotechnology, University of Zagreb, Croatia "**The future of the water cycle - reclaimed water from the food industry**"

IL 19 16:10-16:30- **Dani Dordevic**, Faculty of Veterinary Hygiene and Ecology University of Veterinary Sciences Brno, Brno, Czech Republic "**Soap Production as an Environmentally Friendly Alternative for the Utilization of Frying Oil and Other Byproducts**"

IL 20 16:30-16:50- **Renata Tomerlin**, Podravka d.d., Koprivnica, Croatia "**Food packaging adjustment to the climate changes**"

16:50 – closing ceremony- awards and conclusions

LIST OF POSTERS:

- P 1 **Visualizing the environmental and social impacts of the global food production using longitudinal data**, Domagoj Frank
- P 2 **Health risk assessment of heavy metals and bisphenol A from baby water – A case study of Romanian market**, Elena Ungureanu, Andreea Mocanu, Corina Stroe, Gabriel Mustatea
- P 3 **From Online Questionnaires to In-Person Conversations: A View of Slovenia's Packaging Waste Scene**, Andreja Pogačar, Diana Gregor-Sveteč
- P 4 **The impact of climate changes on the development of mycotoxigenic fungi - is there a reason to be concerned about food and feed safety?** Natalija Atanasova-Pancevska, Dzoko Kungulovski, Sofija Kostandinovska
- P 5 **Composting of Sewage sludge and Green waste: influence of physical-chemical parameters on emission of CO₂**, Dajana Kučić Grgić, Martina Miloloža, Marijana Vidaković, Vesna Očelić Bulatović
- P 6 **Climate resilient health systems**, Nika Pavlović, Ivan Miškulin, Maja Miškulin
- P 7 **Impact of bisphenol A on flavonoid content and antidiabetic activity of onion (*Allium cepa* L.)**, Valerija Vujčić Bok, Anja Đorđević, Tena Špoljarić, Sanja Gagić, Željko Male, Ana-Marija Domijan
- P 8 **Antioxidant potential of barley grass grown under different light type**, Andrea Ermenić, Ivan Keser, Selma Mlinarić, Martina Varga, Martina Šrajer Gajdošik, Lidija Begović
- P 9 **Development of efficient method for in vitro micropropagation of ginkgo (*Ginkgo biloba* L.)**, Karalija Erna, Arnela Demir, Dunja Šamec
- P 10 **The influence of temperature stress on the mass share of chlorophyll, carotenoids, lycopene and porphyrins in young broccoli plants (*Brassica oleracea* L. convar. *botrytis* (L.) Alef. var. *cymosa* Duch.)**, Emilie Kokić, Jana Zekirovski, Dino Davosir, Ivana Šola
- P 11 **Proline priming of maize seeds can increase its drought tolerance**, Erna Karalija, Adisa Parić
- P 12 **Influence of the metal contamination of polypropylene packaging during the repeated recycling; leaching and toxicity assessment**, Matej Viljevac, Josipa Papac Zjačić, Zlata Hrnjak Murgić, Ana Lončarić Božić
- P 13 **The influence of low- and high-temperature water treatment on the ability of young broccoli plants (*Brassica oleracea* L. convar. *botrytis* (L.) Alef. var. *cymosa* Duch.) extracts to inhibit α -amylase and lipase enzymes**, Jana Zekirovski, Emilie Kokić, Dino Davosir, Ivana Šola
- P 14 **Influence of High Growing Temperature on Cytotoxicity of Broccoli Seedlings Extracts**, Daria Gmižić, Marija Pinterić, Ivana Šola
- P 15 **Environmentally friendly and biodegradable packaging materials - alternatives to plastic pollution**, Vesna Očelić Bulatović, Dajana Kučić Grgić, Martina Miloloža, Mario Kovač, Antun Jozinović
- P 16 **The impact of climate change on the water quality of Lake Butoniga**, Marija Gregov, Josip Čurko, Jasenka Gajdoš Kljusurić, Ana Jurinjak Tušek, Maja Benković, Tamara Jurina, Davor Valinger, Marin Matošić, Magdalena Ujević Bošnjak
- P 17 **Mycotoxin contamination and food safety in climate change scenario**, Josipa Golenja, Ines Mezga, Marija Kovač Tomas
- P 18 **Ethnobotanical study of medicinal plants and herbs in the wider vicinity of Valpovo**, Ljiljana Krstin, Zorana Katanić, Katarina Benčić, Tanja Žuna Pfeiffer
- P 19 **Bilberry as an indicator of temperate forest contamination in the Southeastern Europe**, Maja Lazarus, Tatjana Orct, Branko Petrincec, Jasminka Senčar
- P 20 **Effects of flood and drought on the phenolic composition of broccoli microgreens**, Magdalena Litrić, Ena Vilagoš, Ivana Šola
- P 21 **Agronomical biofortification of *Brassica oleracea* L. (var. *italica* and var. *botrytis*) using vitamin C**, Jan Pavić, Marko Šafran
- P 22 **Towards the better understanding of ecological requirements and key environmental drivers affecting the development of summer truffle (*Tuber aestivum*) fruiting bodies in Croatia**, Magdalena Jambrek, Lucia Pole, Olga Malev, Željko Zgrablić, Ana Pošta, Maja Ivani, Armin Mešić

- P 23 **Effect of climate change on aflatoxins presence in Serbian and Croatian maize**, Bojana Radić, Jelka Pleadin, Ana Vulić, Nina Kudumija, Radmila Radović, Elizabet Janić Hajnal, Mislav Anić, Jovana Kos
- P 24 **How does water availability influence the antioxidant capacity and bioaccessibility of phenolics from broccoli microgreens?**, Ena Vilagoš, Magdalena Litrić, Ivana Šola
- P 25 **Dietary mycotoxins (aflatoxins, fumonisins) exposure and predictive modelling in relations to consumers' health amidst climate change: An incentive towards mycotoxins legislation for Cameroon**, Wilfred Angie Abia, Lum Fochingong, Taty Brandy Perkwang
- P 26 **Pesticide residues in food: food safety control**, Igor Dubrović, Bojan Matijević, Ivana Čosić
- P 27 **Preliminary study on utilizing microchip electrophoresis with contactless conductivity detection for analysis of three basic amino acids and potential applications for dietary supplements analysis**, Iva Pukleš, Nikola Sakač, Bojan Šarkanj, Dean Marković, Marija Jozanović
- P 28 **Quaternary ammonium salt for potentiometric sensor fabrication**, Marija Jozanović, Marija Kraševac-Sakač, Daniele Marra, Nikola Sakač, Bojan Šarkanj, Dubravka Madunić-Čačić
- P 29 **From barley husk to laccase: fermentation, isolation, enzyme extraction and process optimization**, Marko Božinović, Bruno Želić, Anita Šalić
- P 30 **Composting – an opportunity to prevent the climate change**, Tea Sokač Cvetnić, Korina Krog, Maja Benković, Davor Valinger, Tamara Jurina, Jasenka Gajdoš Kljusurić, Ivana Radojčić Redovniković, Ana Jurinjak Tušek
- P 31 **Organic blueberry cultivation and processing**, Dina Tandarić, Ivana Dodlek Šarkanj, Natalija Uršulin Trstenjak, Dunja Šamec
- P 32 **Accumulation and depuration kinetics, and natural occurrence of microcystin-LR in basil**, Wannes H. R. Van Hassel, Mohamed F. Abdallah, Maria Gracia Guzman Velasquez, Christopher O. Miles, Ingunn A. Samda5, Julien Masquelier, Andreja Rajkovic
- P 33 **Evaluation of ginkgo (*Ginkgo biloba* L.) green waste (yellow leaves and seeds) as a source of bioactive compounds**, Iva Jurčević Šangut, Rebeka Oreški, Josipa Đelekovčan, Sara Gospočić, Dunja Šamec
- P 34 **The influence of freeze-drying, air-drying and oven-drying on the biflavones content of yellow ginkgo (*Ginkgo biloba* L.) leaves**, Lana Pavličević, Iva Jurčević Šangut, Dunja Šamec
- P 35 **Isolation and selection of yeasts for the production of bioethanol from the acid hydrolysate of beer pomegranate**, Renata Vičević, Bruno Želić, Dajana Kučić Grgić, Anita Šalić
- P 36 **Antioxidant activity of apple polyphenols determined by cyclic voltammetry using a biosensor**, Ivana Tomac, Ana-Marija Gotal, Goran Fruk, Bojan Šarkanj, Antun Jozinović, Tihomir Kovač, Ivana Flanjak, Ante Lončarić
- P 37 **Chocolate and candies: health risk or treat?**, Amna Trapo, Jasmina Sulejmanović, Elma Šehović
- P 38 **Agri-food risk management for sustainable food security/safety, and consumer/public health protection and reduced food loss/waste amidst climate change in Cameroon, sub-Saharan Africa**, Wilfred Angie Abia, Taty Brandy Perkwang, Esengwa Conalius Shum
- P 39 **Biocontrol potential of bacteriobiota and extracts of some wild growing *Centaurea* species**, Ivica Dimkić, Mihailo Nikolić, Milan Gavrilović, Katarina Kruščić, Nikola Unković, Jelica Novaković, Milica Ljaljević Grbić, Peđa Janačković
- P 40 **Where does nicotine in mushrooms from *Boletus* genus come from?** Andreja Jurič, Blanka Tariba Lovaković, Maja Lazarus, Branko Petrincec, Ivan Širić, Nikica Šprem, Irena Brčić Karačonji
- P 41 **Beneficial traits of native strain of *Trichoderma koningiopsis* agg. for sustainable agriculture – antioxidant potential and their influence on seed germination**, Olga Malev, Snježana Topolovec-Pintarić, Ana Pošta, Lara Čizmek, Sanja Babić, Ivana Kušan, Lucia Pole, Armin Mešić
- P 42 **Food waste management in the hospitality industry: review**, Bojan Matijević, Mirela Mabić