

# 1st PhotosynthOS Conference in Osijek

April 24, 2023 (Monday)

|                                |   |   |
|--------------------------------|---|---|
| 8.30-9:30                      | <i>Registration</i>   |   |
| 9.30-10:00                     | <i>Conference opening</i>   |   |
| 10:00-11:00<br>Plenary lecture | <u>Hazem M. Kalaji</u> , Piotr Dąbrowski, Edyta Sierka, Dario Piano, Piotr Golonko, Jacek Mojski, Zuzanna Jaszczuk, Adam Adamski    | An advanced biological feedback system enables plants to regulate their supplemental lighting in greenhouse conditions        |
| 11:00-11:15                    | <i>Coffee break</i>   |   |
| 11:15-11:30                    | <u>Hrvoje Lepeduš</u>   | A brief historical overview and scientific impact of chlorophyll a fluorescence measurements in Croatia during first 20 years |
| 11:30-11:45                    | <u>Selma Mlinarić</u>   | Loving the curves: discovering the shapes of the OJIP transient   |
| 11:45-12:00                    | <u>Domagoj Šimić</u> , Selma Mlinarić   | Chlorophyll a fluorescence and beyond: Recent advancements and future prospects   |
| 12:00-13:00                    | Poster section  |   |
|                                | <u>Dominika Mlynarikova Vysoka</u> , Marek Kovar, Marek Zivcak, Lucia Jasenovska, Maria Barboricova, Andrej Filacek, Marian Brestic | Effect of UV-B radiation on primary photosynthetic processes of lettuce plants  |
|                                | <u>Lucia Jasenovská</u> , Marián Brestič, Mária Barboričová, Andrej Filaček, Marek Živčák   | Screening of the effects of monochromatic light in microgreens using analysis of chlorophyll fluorescence kinetics            |
|                                | Mirta Tkalec, Sandra Vitko, Ana Talanga Vasari, Smiljana Goreta Ban, <u>Branka Salopek-Sondi</u>                                    | Photosynthetic adaptation of kale to abiotic stresses   |
|                                | <u>Sandra Vitko</u> , Tamara Vuk, Nataša Bauer, Željka Vidaković-Cifrek   | Salt and osmotic stress influence photosynthetic performance of <i>Arabidopsis thaliana</i> with modified DMS3 expression     |
|                                | <u>Mária Barboričová</u> , Andrej Filaček, Marián Brestič   | Evaluation of the sensitivity of photosynthetic parameters in conditions of drought and high temperature                      |
| 13:00-14:00                    | <i>Lunch break</i>  |   |

**April 24, 2023 (Monday)**

|                          |   |  |
|--------------------------|---|--|
| 14:00-14:15              | <u>Vlatko Galić</u> , Tatjana Ledenčan, Antun Jambrović, Zvonimir Zdunić, Ivana Podnar Žarko, Domagoj Šimić | Photosynthetic activity shows different breakpoints in response to increasing temperatures between maize maturity groups                                     |
| 14:15-14:30              | <u>Marija Viljevac Vuletić</u> , Ines Mihaljević  | Application of chlorophyll fluorescence in fruit science   |
| 14:30-14:45              | <u>Lovely Mahawar</u> , Marian Brestic  | Impact of the foliar application of zinc oxide nanoparticles on photosynthesis and physiology of <i>Raphanus sativus</i> L. under salinity stress            |
| 14:45-15:00              | <u>Jasenka Antunović Dunić</u> , Vesna Peršić, Günther Zellnig, Vera Cesar                                  | The effect of cadmium on photosynthesis and chloroplast ultrastructure in <i>Spirodela polyrhiza</i> : age-related susceptibility                            |
| 15:15-15:30              | Maja Mazur, <u>Lovro Vukadinović</u> , Antun Jambrović, Vlatko Galić, Domagoj Šimić                         | Unveiling the potential of chlorophyll a fluorescence as a highthroughput phenotyping method in maize breeding and research                                  |
| 15:30-15:45              | <b>Coffee break</b>   |  |
| 15:45-17:00              | <b>Poster section</b>   |  |
|                          | <u>Andrej Filaček</u> , Marek Živčák, Mária Barboričová   | Non-invasive methods reveals the significance of alternate electron fluxes in photoprotection of different wheat genotypes under nitrogen deficit conditions |
|                          | <u>Milan Mirosavljević</u> , Sanja Mikić, Ankica Kondić-Špika, Vesna Župunski, Carl-Otto Ottosen, Rong Zhou | The effect of heat stress on chlorophyll fluorescence in Pannonian wheat varieties   |
|                          | Bruno Komazec, Željka Vidaković-Cifrek, <u>Petra Peharec Štefanić</u>                                       | Effect of silver nanoparticles and ions on photosynthetic performance and oxidative stress induction in <i>Chlorella vulgaris</i>                            |
|                          | Bruno Komazec, Petra Peharec Štefanić   | Effect of copper oxide nanoparticles and ions on photosynthetic performance and oxidative stress induction in <i>Chlorella vulgaris</i>                      |
|                          | <u>Karla Košpić</u> , Renata Biba, Petra Peharec Štefanić, Biljana Balen, Mirta Tkalec                      | Coating-dependent effects of silver nanoparticles on photosynthetic performance of tobacco seedlings   |
|                          | <u>Boris Lazarević</u>  | Chlorophyll fluorescence imaging in assessing crop abiotic stress  |
|                          | <u>Zorana Katanić</u> , Selma Mlinarić, Jurica Duvnjak, Katarina Šunić, Valentina Španić                    | Effect of drought on photosynthetic performance of wheat during stem elongation stage  |
| <b>Conference dinner</b> |   |  |

**April 25, 2023 (Tuesday)**

|                            |   |  |
|----------------------------|---|--|
| 9:00-10:00 Plenary lecture | <u>Marek Živčák</u> , Andrej Filaček, Marián Brestič  | Simultaneous measurements of chlorophyll fluorescence to study photosynthetic regulation in plants exposed to environmental stresses |
| 10:00-10:15                | <b>Coffee break</b>   |  |
| 10:15-10:30                | <u>Katarina Šunić</u> , Zorana Katanić, Valentina Španić  | Photosynthetic efficiency of winter wheat ( <i>Triticum aestivum</i> L.) infected with Fusarium head blight in controlled conditions |
| 10:30-10:45                | <u>Vesna Peršić</u> , Jasenka Antunović Dunić, Georg Drezner and Vera Cesar   | Exploring winter wheat genotypes' response to physiological drought: insights into the photosynthetic performance                    |
| 10:45-11:00                | <u>Jurica Duvnjak</u> , Zorana Katanić, Valentina Španić  | Different responses of wheat varieties to drought stress assessed by chlorophyll a fluorescence                                      |
| 11:00-11:30                | <b>Poster section</b>   |  |
|                            | <u>Marek Kovar</u> , Marek Zivcak, Dominika Mlynarikova-Vysoka, Lucia Jasenovska, Maria Barboricova, Andrej Filacek, Marian Brestic | Photosynthetic responses of a collection of sorghum genotypes to salinity  |
|                            | <u>Anja Melnjak</u> , Juan Alberto Limón Santana, Vesna Peršić  | Hungry for sulfur: the interplay of photosynthesis, starch, and anthocyanins   |
|                            | <u>Lana Suman</u> , Selma Mlinarić, Mislav Krvavica, Ljiljana Krstin, Tanja Žuna Pfeiffer   | Photosynthetic performance of sun and shade leaves in solitary <i>Sorbus domestica</i> L. trees                                      |
|                            | <u>Lidija Begović</u> , Selma Mlinarić, Vlatko Galić, Ivan Abičić, Alojzije Lalić, Vera Cesar                                       | Impact of differing weather conditions on photosynthetic performance of three field- grown barley cultivars                          |
| 11:30-12:30                | <b>Lunch</b>  |  |

