

Best Presentation Award ICDRA2024

*Highlighted are the JICA/SATREPS research

<<Committee selection category>>

Oral Presentation

- 1) **Kari Lagan**¹, Rachel Brennan¹

¹Department of Civil and Environmental Engineering, The Pennsylvania State University, USA

Title: Leveraging acidification pretreatment of dairy digestate to increase duckweed protein yields while decreasing ammonia volatilization and water use

Poster Presentation

- 1) **Sara Nouere**^{1,2}, Martin Schaffer^{1,2}, Antonio Malacrino^{3,4}, Christoph Walcher⁵, Christoph Vorburger^{5,6}, Shuqing Xu^{1,2}

¹Institute of Organic and Molecular Evolution (IOMe), Johannes Gutenberg University Mainz, Germany

²Institute for Evolution and Biodiversity, University of Munster, Germany

³Department of Agriculture, Università degli Studi Mediterranea di Reggio Calabria, Italy

⁴Department of Biological Sciences, Clemson University, USA

⁵Swiss Federal Institute of Aquatic Science and Technology (Eawag), Switzerland

⁶Institute of Integrative Biology, ETH Zurich, Switzerland

Title: Real-time evolution of plant chemical defenses in natural communities

- 2) **Riku Takei**^{1,2}, Masaaki Morikawa^{1,2}

¹Division of Biosphere Science, Graduate School of Environmental Science, Hokkaido University, Japan

²SATREPS

Title: Isolation and application of plant growth promoting bacteria for production using methane fermentation digested liquid

- 3) **Sunisa Srisopa**^{1,4}, Thanapat Thepubon^{2,4}, Pairaya Choeisai^{1,4}, Krit Choeisai¹, Kengo Kubota^{3,4}

¹Faculty of Engineering, Khon Kaen University, Thailand

²Department of Soil Science and Environment, Faculty of Agriculture, Khon Kaen University, Thailand

³Department of Frontier Sciences for Advanced Environment, Graduate School of Environmental Studies, Tohoku University, Japan

⁴SATREPS

Title: Biogas production performance on co-digestion of tapioca starch factory wastewater and duckweed by continuous stirred tank reactor

4) **Ewout Crombez**^{1,2}, Quinten Bafort^{1,2}, Yves van de Peer¹⁻⁴ on behalf of the European Duckweed Network⁵

¹Center for Plant Systems Biology, Belgium

²Department of Plant Biotechnology and Bioinformatics, Ghent University, Ghent, Belgium

³Department of Biochemistry, Genetics and Microbiology, University of Pretoria, South-Africa

⁴College of Horticulture, Academy for Advanced Interdisciplinary Studies, Nanjing Agricultural University, China

⁵Funded by Research Foundation Flanders (FWO)

Title: The Charm(s) of Duckweed 2.0: breathing new life into the duckweed knowledge hub website

5) **Hathaipat Thongthung**^{1,3}, Sirinapa Chungopast^{2,3}, Krittaya Petchpoung⁴, Chanwit Kaewtapee^{1,3}

¹Department of Animal Science, Faculty of Agriculture, Kasetsart University, Thailand

²Department of Soil Science, Faculty of Agriculture at Kamphaeng Saen, Kasetsart University, Thailand

³SATREPS

⁴Kasetsart University Research and Development Institute, Kasetsart University, Thailand

Title: Use of duckweed as a feed ingredient

<General selection category>

Poster presentation

1) **Clarie Smith**¹, Antony Bishopp², Sian Bray¹, Levi Yant^{1,3}

¹School of Life Sciences, University of Nottingham, United Kingdom

²School of Bioscience, University of Nottingham, United Kingdom

³Department of Botany, Faculty of Science, Charles University, Czechia

Title: Loss of auxin signaling components in duckweed is linked to a loss of body plan

complexity

- 2) **Elias, R.**¹, Barragan Borrero, V.¹, Buendia, D.^{1,2}, Dombey, R.¹, Parteli, C.¹, Ponce, A.¹, Krasnovid, F.^{1,2}, Mari-Ordonez, A.¹

¹Gregor Mendel Institute of Molecular Plant Biology, Vienna, Austria

²Vienna Biocenter PhD program, Doctoral School of the University of Vienna and Medical University of Vienna, Austria

Title: Development of callus induction and plant regeneration protocols for stable transformation in duckweeds

- 3) **Boumay Bouaravong**¹, Jarinya Rittiram¹, Nattha Nitwatthanakul¹, Sirinart Chio-Srichan², Arak Tira-umphon¹

¹School of Crop Production Technology, Institute of Agricultural Technology, Suranaree University of Technology, Thailand

²Synchrotron Light Research Institute, Thailand

Title: Difference in morphology and biochemical of *Wolffia* from nature water sources in different regions of the Lao PDR

- 4) **Tomomi Sugiyama**^{1,3}, So Nakamura^{1,3}, Hidehiro Ishizawa^{2,3}, Daisuke Inoue^{1,3}, Michihiko Ike^{1,3}

¹Division of Sustainable Energy and Environmental Engineering, Osaka University, Japan

²Department of Applied Chemistry, University of Hyogo, Japan

³SATREPS

Title: Modification of synthetic duckweed microbiome using predatory bacteria and its potential to enhance plant growth

- 5) **Yuparat Saimee**^{1,3}, Kousuke Kuwai^{1,3}, Hidehiro Ishizawa^{2,3}, Daisuke Inoue^{1,3}, Michihiko Ike^{1,3}

¹Division of Sustainable Energy and Environmental Engineering, Osaka University, Japan

²Department of Applied Chemistry, University of Hyogo, Japan

³SATREPS

Title: Taxonomical structure and functional properties of *Wolffia* microbiome and their effect on *Wolffia* growth