

15th International Symposium on Integrated Field Science

“Biological Interactions for Sustainable Agriculture”

Sponsor and organizer: Field Science Center, Graduate School of Agricultural Science,
Tohoku University

Co-sponsors: International Education and Research Center for Food and
Agricultural Immunology (CFAI), Applied Biodiversity Center,
Graduate School of Agricultural Science, Tohoku University
Research Center for Fungal and Microbial Dynamism, Shinshu
University

Date: March 13-15, 2018

Venue: Graduate School of Agricultural Science, Tohoku University
(Aobayama campus), Sendai city, Miyagi, Japan

Program

March 13 (10:00 – 17:00)

- | | | |
|--------|---|-------------------------------|
| 11:00~ | | Registration |
| 13:00 | Makoto Osada
(Director of Field Science Center, Tohoku University) | Welcome address |
| 13:10 | Masanori Saito
(Field Science Center, Tohoku University) | Perspectives of the symposium |

Part 1: Function and management of soil microorganisms in agro-ecosystems with special reference to arbuscular mycorrhizal fungi

- | | | |
|-------|---|--|
| 13:30 | Jan Jansa
(Institute of Microbiology, Academy of Sciences of the Czech Republic) | Utilization of organic nitrogen by arbuscular mycorrhizal hyphae in soil - zooming into the hyphosphere microbiome |
| 14:00 | Zakaria Solaiman
(School of Agriculture and Environment, University of Western Australia) | Use of biochar for sustainable agriculture (tentative) |
| 14:30 | Yoshihiro Kobae
(NARO Hokkaido Agric. Res. Cent.) | Toward the high-resolution functional analysis of arbuscular mycorrhizal symbiosis in field crops |
| 15:00 | | Coffee break & Poster preview |
| 15:30 | | Lightning talk for poster presentation |
| 16:00 | Baodong Chen
(Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences) | The role of AM symbiosis in plant adaptation to drought stress |
| 16:30 | Katsuharu Saito
(Shinshu University) | Molecular mechanisms underlying P translocation and metabolism in arbuscular mycorrhizal fungi. |
| 17:00 | Akyol Turgut Yigit
(Graduate School of Life Science, Tohoku University) | Effect of AMF inoculation on the root fungal and bacterial communities of bunching onion |

Welcome Reception

March 14 (9:30 – 13:00)

9:30

Poster presentation

Part 2: Frontiers of sustainable rice production system

- | | | |
|-------|----------------|--|
| 10:30 | Lixiao Nie | Research progress and the limiting factors of direct seeding rice in central China
(Huazhong Agricultural University) |
| 11:00 | Ryosuke Tajima | Phenotyping of root system architecture using root model
(Field Science Center, Tohoku University) |
| 11:30 | Sugihiro Ando | Analysis of disease-suppression effect of microorganisms included in nursery soils for organic farming of rice
(Graduate School of Agricultural Science, Tohoku University) |
| 12:00 | Toyoaki Ito | Recovery of tsunami-affected paddy soil using calcium materials for sustainable agriculture
(Field Science Center, Tohoku University) |
| 12:30 | Masanori Saito | Closing remark |

March 15

Field trip (Nature and agriculture around Sendai city, Kawatabi Field Science Center)

Call for poster presentation.

Any poster presentation relating to sustainable agriculture or field science is welcome. Especially, presentation by students is encouraged, even if it is preliminary. Deadline of abstract submission for poster and oral presentations is January 31, 2018.

Contact: Prof. Masanori Saito