



JIRCAS International Symposium 2014

Soil Environment and Crop Production: Toward Stable Crop Production in Developing Regions

Program

(09:00-09:30) Registration

(09:30) Opening

(09:30-09:40) Opening remarks

Masa Iwanaga, President, JIRCAS

(09:40-09:45) Welcome statements

Hirotsugu Amamiya, Director General, Agriculture, Forestry and Fisheries Research Council Secretariat, MAFF

Keynote Speeches (09:45-10:55)

Chair: Osamu Koyama, JIRCAS

(09:45-09:50) Introduction of Keynote Speaker

(09:50-10:20) Sustainable intensification through improved soil health in smallholder agriculture

William D. Dar, Director General, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)

(10:20-10:25) Introduction of Keynote Speaker

(10:25-10:55) Soil degradation: Challenge to achieving human security

Takashi Kosaki, Professor, Faculty of Urban Environmental Sciences, Tokyo Metropolitan University (President of Japanese Society of Soil Science and Plant Nutrition)

(10:55-11:15) Tea/Coffee Break (Group Photo)

Session 1: Improvement of crop productivity in infertile soils (11:15-12:40, 13:50-14:55)

Chairs: *Satoshi Tobita, Naruo Matsumoto (JIRCAS)*

(11:15-11:20) Introduction of Session 1

(11:20-11:40) Overview on soil fertility and crop production in SSA

Andre Bationo, Soil scientist and President, Action for Integrated Rural Development (AIRD)

(11:40-12:00) Nitrogen use and efficiency in East Asian agriculture - To a step for application to Africa

Shin-ichiro Mishima, National Institute for Agro-Environmental Sciences (NIAES)

(12:00-12:20) N2Africa: Delivering biological nitrogen fixation (bnf) technologies to African small-scale farmers for enhancing soil fertility and legume production

Nancy K. Karanja, University of Nairobi



(12:20-12:40) Biological Nitrification Inhibition (BNI) - Potential for reducing nitrification and N₂O emissions from agricultural systems

Guntur. V. Subbarao, Japan International Research Center for Agricultural Sciences (JIRCAS)

(12:40-13:50) Lunch

(13:50-14:10) Soybean yield is affected by previous crops and mycorrhizal fungal colonization under no P fertilizer condition -A Japanese study with applicability to developing regions-

Katsunori Isobe, Nihon University

(14:10-14:30) Agricultural use of indigenous phosphate rocks in Sub-Saharan Africa

Satoshi Tobita, Japan International Research Center for Agricultural Sciences (JIRCAS)

(14:30-14:50) *Pup1* and beyond: New ideas, traits and genes for higher phosphorus efficiency

Matthias Wisuwa, Japan International Research Center for Agricultural Sciences (JIRCAS)

(14:50-14:55) Review of Session 1

(14:55-15:15) Tea/Coffee Break

Session 2: Mitigation of soil salinity problems (15:15-16:25)

Chairs: Kazuhiro Suenaga, Mariko Shono (JIRCAS)

(15:15-15:20) Introduction of Session 2

(15:20-15:40) Sustainable technologies for crop production under salt-affected soil in India.

Dinesh K. Sharma, Central Soil Salinity Research Institute

(15:40-16:00) Soil salinization and its mechanism in checkdam farmlands in the Loess Plateau, China

Katsuyuki Shimizu, Faculty of Agriculture, Tottori University

(16:00-16:20) Genetic improvement of salt tolerance in soybean

Donghe Xu, Biological Resources and Post-harvest Division, Japan International Research Center for Agricultural Sciences (JIRCAS)

(16:20-16:25) Review of Session 2

(16:25-16:55) General Discussion

Chair: Takeshi Kano (JIRCAS)

(16:55-17:00) Closing Remarks

Masami Yasunaka, Vice President, JIRCAS