9th International Symposium on Integrated Field Science

"Soil and Environment"

Purpose of the symposium:

An understanding of the interactions between agricultural activities and environment is central for sustainable agriculture. Especially, soil which supports crop productions has a crucial role in these interactions.

The aim of this international symposium is to provide a multidisciplinary forum for exchanging innovative ideas and methods for studying the interactions between agricultural activities and soil, understanding its complexity and its functioning.

In the present symposium, the special session on environmental disaster caused by the catastrophic earthquake followed by Tsunami will be held with reference to sustainability of soil. Another disaster by Tsunami in Indonesia, 2004, and its effect on soils will be presented by Dr. F. Agus in this session. In the second session, we will focus on green house gases (GHG) and nitrogen which may cause global warming and water pollution. Poster session is open for those who are interested in these topics.

Date: 3 September, 2011 (9:30 – 17:00)

Venue: Kawauchi Kita Campus Room A101-102, Tohoku University

Organized by

Field Science Center, Graduate School of Agricultural Science, Tohoku University

Co-organized by

Strategic Japanese-Chinese Cooperative Program "Comparative study of nitrogen cycling and its impact on water quality in agricultural watersheds in Japan and China" (JST-NSFC)
Tohoku University Global COE "Ecosystem Adaptability"

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National Institute for Agro-Environmental Sciences
Project of Integrated Compost Science (PICS), Tohoku University

Secretary General:

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Field Science Center,
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Program

9:30	Saito, M.	Opening address

Session 1. Environmental Disaster caused by Earthquakes

9:40	Nanzyo, M.	Impacts of Tsunami (March 11, 2011) on paddy field soils in Miyagi Prefecture, Japan
10:05	Agus, F. et al.	Soils affected by Tsunami - The effect of Tsunami on arable fields in Aceh, Indonesia in 2004
10:35	Nishio, T.	"Na-no-Hana Project" for recovery from the Tsunami disaster by producing salinity-tolerant oilseed rape lines
11:00	Takeda, A.	Behavior and phytoavailability of radiocaesium in surface soil

Session 2: Nitrogen, Green House Gasses and Agriculture

11:25	Cai, A., Yan, X.	A Great Challenge to Solve Nitrogen Pollution from Intensive Agriculture
11:50		Lunch
13:00		Poster presentation
14:00	Yan, X., Cai, Z.	Integrated greenhouse gas emissions from Chinese rice paddies
14:25	Yagi, K.	Analysis of research stocktaking in the Paddy Rice Research Group of the Global Research Alliance on agricultural greenhouse gases
14:50	Mu, ZJ. et al.	Soil greenhouse gas fluxes and net global warming potential from intensively cultivated vegetable fields in southwestern China
15:10	Deng, M. et al.	Modeling N_2O emission from Andosols in an intensive dairy farming region, Japan
15:25		Coffee Break
15:40	You, M.	Possible nitrogen removal through denitrification in the watershed scale
16:05	Oo, A. Z. et al.	Spatial differences in soil properties, crop yield and methane emission from paddy rice cascade
16:20	Theint, E. E. et al.	Influence of different Ca amendments on CH_4 emission under Na-salinized paddy soil
16:35	Hatano, R.	Mitigation of impact of nitrogen cycling associated with agriculture and food consumption on regional environment
16:50		Closing remark

Chair Persons: M. Saito, T. Takahashi, M. Nanzyo,

Poster Session

P1	Kimura, S. et al.	Comparison of Nitrogen Budgets in Agricultural Watersheds
P2	Hayakawa, A. et al.	Spatio-temporal variation of riverine N and P concentration in the Lake Hachiro watershed.
P3	Kohyama. K. et al.	The relationship between Nitrogen load and river water quality in several catchments in different area sizes
P4	Itahashi, S. et al.	Risk evaluation of the groundwater pollution by the agriculture origin nitrogen in a middle-sized agricultural watershed
P5	Tsushima, K. et al.	Effects of silicate fertilizer application on growth and yield of rice with organic culture
P6	Akita, K. et al.	Aquatic Biota in Winter Flooded Paddy Field with Organic Farming-Case Study in Field Science Center, Tohoku University, Japan-
P7	Xia, Y. et al.	Diurnal pattern of nitrous oxide emissions from a sewage-enriched river: references to IPCC indirect emission factor
P8	Liu, X. et al.	Effect of long-term fertilization on greenhouse gases emission in paddy soils, China
P9	Azuma, J., Saito, M.	Determination of phytase labile organic phosphate in organic manures
P10	Kusunoki, A. et al.	Effect of water management on vivianite crystallization on rice roots
P11	Yoshimoto, R. et al.	Effect of soil components on adsorption of Pepper Mild Mottle Virus by Japanese soils
P12	Yamamoto, T. et al.	Isolation of plant growth-inhibiting compounds from acidulocompost; a garbage compost processed under thermoacidophilic conditions
P13	Miyazawa, M. et al.	Effect of chemical treatment on mineralization of C and N in Andosols rich in Al-humus complexes
P15	Enami, M. et al.	Andosols-Cambisols sequence on the Ohira Hills in central Miyagi Prefecture, northeastern Japan
P16	Nishiue, A. et al.	Studies on faint podozolization observed in the Andosols around Kuwanuma on the eastern footslope of Funagata Volcano in midwestern Miyagi Prefecture, Japan
P17	Goto, T.	Experience as a member of JOCV in Caoson village, Vietnam
P18	Nakai, Y. et al.	Report on Agri- Reconstruction Project (ARP).

Welcome Reception will be held at “Kita no Kazoku”, Dai-Ichi Seimei Tower Build. from 18:30.