

7th International Symposium on Integrated Field Science

**Biological Interactions in Arable land-
Grassland-Forest Continuums and their
Impact on the Ecosystem Functions**

October 10-12, 2009, Sendai, JAPAN

Organized by

Field Science Center, Tohoku University

Ecosystem adaptability Global COE, Tohoku University

Program

October 10 (Saturday)

10:00	Y. Nakai M. Saito		Opening address Scope of the workshop
10:15	P. M. Kotanen	Tronto Univ Canada	Habitat-specific effects of soil pathogens on seed germination.
10:55	K. Seiwa	Tohoku Univ	Is Janzen-Connell hypothesis valid in temperate forests?
11:15	M. Yamazaki	Tohoku Univ	Distance- and density-dependent seedling mortality and host specific differentiation of the fungal pathogen near the conspecific adult trees in a temperate forest.
11:30	A. Imaji	Tohoku Univ	Carbon allocation to defense, storage, and growth in seedlings of two temperate broad-leaved tree species
11:45	T. Shimada	FFPRI	Effects of seed size and chemical variation on seed fates in a deciduous oak species <i>Quercus serrata</i> .
12:05	LUNCH		
13:20	M. K. Lau	North Arizona Univ	Addressing complexity of biological interactions in natural systems with community genetics
14:00	K. Saito	Shinshu Univ	Arbuscular mycorrhizal communities in semi-natural grasslands
14:20	M. Saito	Tohoku Univ	Significance of AM fungi in revegetation process in a N-limited degraded ecosystem
14:40	POSTER SESSION		
15:40	X. L. Li	China Agric. Univ China	Arbuscular mycorrhizal fungi diversity and contribution to crop growth in agricultural fields
16:20	T. Ito	Tohoku Univ	Impact of Tubifex on dynamics of rice field ecosystem with empahsis on organic farming
16:40 17:20	M. Utomo	Lampung Univ Indonesia	Earthworm and Soil Carbon after Twenty One Years of Continuous No-tillage Corn- Legume Rotation in Sumatra, Indonesia
19:00	Welcome Reception (Hotel JAL City, Sendai)		

October 11 (Sunday)

9:30 POSTER SESSION

10:00	W. T. Baisden	GNS Science, New Zealand	Evidence for contrasting soil carbon dynamics in volcanic and non-volcanic soils: towards implications for climate change mitigation through land-use and management
10:45	H. Kanno	Tohoku Univ	Organic Carbon Accumulation in Andosols: (1) Unaccounted Andosols in Japanese forest soil
11:00	T. Takahashi	Tohoku Univ	Organic Carbon Accumulation in Andosols: (2) Contribution of aluminum-humus complexes to carbon accumulation in non-allophanic Andosols
11:15	M. Nanzyo	Tohoku Univ	Organic Carbon Accumulation in Andosols: (3) Occurrence of apatite and biotite in young and matured volcanic ash soils, and discussions on nutrient supply for ecosystems
11:30	General discussion		
	Closing remarks		
12:00			

October 12 (Monday)

Field excursion to Field Science Center (Naruko-Onsen, Osaki city)

POSTER SESSION

1	K. Akita	Tohoku Univ	Effects of winter-flooding on soil nutrients and rice yield in paddy field with organic farming
2	M. Ichihara	Sizuoka Univ	Increased agricultural landscape diversity enhances post-dispersal weed seed predation
3	K. Ono	FFPRI	Comparisons of early humification process between coniferous and hardwood forest: Effects of litter species on the compositional quality of soil organic matter in temperate forests in Japan.
4	K. Hirai	FFPRI	Importance of asymbiotic nitrogen fixation to nitrogen immobilization in decomposing green needles of Japanese cedar (<i>Cryptomeria japonica</i>)
5	A. Matsuo	Tohoku Univ	The relationship between reproductive success and clonal structure in a simultaneous flowering population of the monocarpic dwarf bamboo, <i>Sasa veitchii</i> var. <i>hirsuta</i> .
6	Y. Sato	Tohoku Univ	Evaluation of PorySilicate-Iron Sludge from Water Purification Plants as Paddy Soil Amendments
7	J. Shinagawa	Tohoku Univ	Effect of allophonic water treatment residual on paddy rice cultivation
8	K. Sugawara	NILGS	Clavicipitaceous endophytes in grass species; guardians against herbivores evolved from plant pathogen.
9	C. Tada	Tohoku Univ	Chemical and microbial characteristics of forest soil by the difference of forest management
10	R. Tajima	Tohoku Univ	Nitrogen cycle of agricultural system in Field Science Center, Tohoku University
11	T. Tateishi	Iwate Univ	Effects of periodic application of cattle slurry on soil microbial biomass in an Andisol grassland
12	M. Ueno	Tohoku Univ	Higher mortality of conspecific compared to heterospecific seedling beneath the adult for three hardwood species (仮)
13	R. Wagai	NIAES	Comparison of allophanic soils of contrasting carbon contents induced by agricultural management: organo-mineral interaction, carbon mineralization, and its temperature sensitivity
14	H. Yaginuma	Tohoku Univ	Influence of pH on soil washing and phytoextraction of Cd from soil, a case study using the paddy-field soil with a high pH
15	K. Yamada	Tohoku Univ	Aluminum bioavailability of aluminum-humus complexes in Andosols
16	T. Yamanaka	FFPRI	Actinorhizal plants and Frankia in Japan
