# International Online Symposium on Soil C and N Dynamics by Land Use, Management and Climate Changes

Main Topics:

- ✓ Carbon sequestration?
- ✓ Greenhouse gases emission
- Plants production?
- ✓ Soil fertility?
- ✓ Effect of Climate Changes?
- ✓ Soil mineral and organic components?

<u>Date :</u>

September 28 - 29, 2020 <u>Venue:</u> Zoom Cloud Meeting for most participants,

and Yamagata University for participants who can attend in Tsuruoka, Japan

UGRS

UGAS, Iwate University

<u>Organizer & Contact:</u>

Prof. Weiguo CHENG (Yamagata University, Japan) Phone: +81-235-28-2824

E-mail: cheng@tds1.tr.yamagata-u.ac.jp

Sponsor:

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Yamagata University

## Program (1)

OM: Opening message; KN: Keynote; OC: Oral Communication; P: Poster Presentation

Monday, 2020/9/28					
Time in Japan	Session / Presentation Presenter, Affiliation		Time in Presenter country		
8:00	Start registration online				
	Opening Ceremony				
<b>OM 1</b> 9:00-9:10	Opening welcome message from Dean of UnitedProf. UEMURAGraduate School of Agricultural Sciences, IwateMatsuo, IwateUniversityUniversity		Japan 9:00-9:10		
OM 2	Opening welcome message from Dean of Faculty	Prof MURAYAMA	Japan		
9:10-9:20	of Agriculture, Yamagata University		9:10-9:20		
ОМ 3	Opening welcome message and introduction of the		Japan		
9:20-9:30	IOS from Organizer		9:20-9:30		
	Session 1: Natural and Artificial Wetlands				
KN 1	Effects of mire disturbance by Sika deer on physico-chemical properties of peat soils and	Prof. INUBUSHI Kazuyuki, Chiba University	Japan		
9:30-10:00	greenhouse gas flux in Ozegahara Mire, Japan		9:30-10:00		
<b>KN 2</b> 10:00-10:30	Soil and vegetation characteristics along hydrologic gradient in marl- and peat- dominated wetlands in Everglades, Florida	Prof. Jay P. Sah, Florida International University	USA (last day) 21:00-21:30		
	Coffee/Tea Break	Oniversity			
<b>KN 3</b> 10:40-11:10	Peatland restoration at Kayu Tangi Conserved Area: A pilot project	Prof. Abdul Hadi, Lambung Mangkurat University	Indonesia 8:40-9:10		
OC 1	Extractable carbohydrate as affected by long term	Dr. Nguyen-Sy Toan, The University of Danang	Vietnam		
11:10-11:30	conversion from forest to rice paddy		9:10-9:30		
OC 2	The warming winter accelerated methane	Pre-Dr. WU Xian,	China		
11:30-11:50	emissions during subsequent rice growing season from paddy fields	Huazhong Agricultural University	10:30-10:50		
OC 3	$CH_4$ emission from paddy field with dry direct	Dr. NAKAJIMA Miyuki, NARO-Tohoku	Japan		
11:50-12:10	seeding		11:50-12:10		
OC 4	Dry direct seeding as an adaptive technology in	Dr. Crisanta S. Bueno, University of the	Philippines		
12:10-12:30	drought-prone rainfed in the Philippines	Philippines Los Baños	11:10-11:30		
12:30-13:30	Lunch Break in Japan				

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### Program (2)

OM: Opening message; KN: Keynote; OC: Oral Communication; P: Poster Presentation

Monday, 2020/9/28					
Time in Japan	Session / Presentation	Presenter/ Affiliation	Time in Presenter country		
	Session 2: Agricultural Lands and Climate Change				
<b>KN 4</b> 13:30-14:00	Investigating the mitigation mechanisms of methane emissions from paddy field by biochar application Prof. Amnat Chidthaisong, King Mongkut's University of Technology Thonburi				
<b>KN 5</b> 14:00-14:30	Rice straw cover effects on soil erosion and carbon, nitrogen, and phosphorus loss from maize fields	Prof. Woo-Jung Choi, Chonnam National University	Korea 14:00-14:30		
<b>OC 5</b> 14:30-14:50	Effects of raised water level on greenhouse gas fluxes in boreal croplands on peat soil	Dr. Sanna Saarnio, Natural Resources Institute Finland	Finland 8:30-8:50		
<b>OC 6</b> 14:50-15:10	Effects of field management on soil organic carbon Dr. WATANAB in upland fields in Thailand Takeshi, JIRC/		Japan 14:50-15:10		
<b>OC 7</b> 15:10-15:30	VNIR hyperspectral imaging of soil organic matter in agricultural soils	Dr. Julien Guigue, Technical University of Munich	Germany 8:10-8:30		
15:30-15:40	Coffee/Tea Break				
<b>OC 8</b> 15:40-16:00	Effects of different land-use patterns on soil microbial biomass carbon, nitrogen contents and enzyme activities in rocky mountains of Northern China	Dr. KONG Yuhua, Henan Agricultural University	China 14:40-15:00		
OC 9	Study of soil chemical properties and nitrogen	Pre-Dr. Patria N.	lu den este		
16:00-16:20	dynamics in paddy fields with different cropping patterns in Central Java Indonesia	Kusumawardani, Universitas Gadjah Mada	Indonesia 14:00-14:20		
16:00-16:20 OC 10 16:20-16:40	• • • • • • • •				
OC 10	patterns in Central Java Indonesia Co-elevated $CO_2$ and temperature affect biomass, chemical composition, and decomposability of rice	Universitas Gadjah Mada Dr. Hyun-Jin Park, Chonnam National	14:00-14:20 Korea		
OC 10 16:20-16:40 OC 11	patterns in Central Java Indonesia Co-elevated $CO_2$ and temperature affect biomass, chemical composition, and decomposability of rice residues Effects of prior upland cropping on nitrous oxide emission from rice-growing seasons – comparing	Universitas Gadjah Mada Dr. Hyun-Jin Park, Chonnam National University Pre-Dr. XU Peng, Huazhong Agricultural	14:00-14:20 Korea 16:20-16:40 China		

Online Party (18:00-19:00)

Pre-Dr: who will receive Ph.D degree soon.

#### Program (3)

OM: Opening message; KN: Keynote; OC: Oral Communication; P: Poster Presentation

Tuesday, 2020/9/29				
Time in Japan	Session / Presentation Presenter/ Affiliation		Time in Presenter country	
8:00	Start registration online			
	Session 3: Forests and Treelands			
KN 6	Effect of changes in throughfall on soil GHG fluxes	Prof. XU Xingkai,	China	
9:00-9:30	under a mature temperate forest, northeastern China: measurement and meta-analysis	Chinese Academy of Sciences	8:00-8:30	
KN 7	Nitrogen saturation in forest ecosystems in central	Prof. SASE Hiroyuki, Asia Center for Air	Japan	
9:30-10:00	Japan, recovery or progress?	Pollution Research	9:30-10:00	
OC 14	Soil quality under integrated crop-livestock system	Dr. Silvio Y. Ushiwata, Universidade do Estado de Mato Grosso	Brazil (last day)	
10:00-10:20	– a case study in Middle-West Brazil		22:00-22:20	
OC 15	Soil carbon, nitrogen and phosphorus changes of	Dr. TAN Ngai Paing, Universiti Putra Malaysia	Malaysia	
10:20-10:40	oil palm fields with different planting age		9:20-9:40	
10:40-10:50	Coffee/Tea Break			
OC 16	Effects of different fertilizer applications on SOC	Dr. TANG Shuirong, Hainan University	China	
10:50-11:10	mineralization and composition in rubber plantation, Hainan, China		9:50-10:10	
OC 17	Spatial variability of soil properties reflecting field	Dr. Wong Mum Keng,	Malaysia	
11:10-11:30	management practices in a matured oil palm ecosystem	The Genting Plantation	10:10-10:30	
OC 18	Nitrogen fertilizer reducing and green manure	Pre-Dr. LUO Yue,	China	
11:30-11:50	planting modulate runoff nitrogen and phosphorus loss in citrus orchard	Huazhong Agricultural University	10:30-10:50	
OC 19	Soil carbon dynamics in the apple orchard under	Prof. ITO Daiyu,	Japan	
11:50-12:10	the changing climate	Hirosaki University	11:50-12:10	
40 40 40 00	Lunch Ducch in Janan			

12:10-13:30 Lunch Break in Japan

#### Session 4: Poster Presentations (13:30-17:00)

13:30-14:30 P1~P16

14:30-15:30 P18~P32

15:30-16:30 Free chat

16:30-17:00 Farewell Massage

#### Poster presentations (1)

No.	Presenter	Affiliation	Country in	Title
P1	Dr. FURUKAWA Yuichiro	Niigata Prefecture	Japan	Fertilization management for organic ricecultivation in weed coexistenceenvironment
P2	Dr. YASHIMA M. Miwa	Chiba University	Japan	A soil C and N recovery trial using green manures in a decontamination site of Fukushima area
P3	SATO Makiba	Chiba University	Japan	Effect of pellet compost on CO₂ and N₂O production and plant growth in Andosols and Chernozem
P4	TAIRA Hidetoshi	Chiba University	Japan	Cyanobacteria as candidates for remediation of degraded soils
P5	Dr. PARK Hyun-Jin	Chonnam National University	Korea	Soil salinity effects on soil carbon content and rice yield in reclaimed coastal tideland paddies with different cultivation years
P6	SEO Bo- Seong	Chonnam National University	Korea	Estimation of electrical conductivity of saturated soil paste from 1:1, 1:2, 1:5 soil-water extracts in soils with different texture
P7	Dr. WU Haohao	Chinese Academy of Sciences (Beijing)	China	Responses of soil DOM quantity and quality to freeze–thaw and litter manipulation with contrasting soil water content: a laboratory
P8	Dr. WU Haohao	Chinese Academy of Sciences (Nanjing)	China	The role played by vegetation water use strategies in the response of gross primary productivity to drought across China: integration of flux tower, satellite data, and process-based model
P9	GONG Shanshan	Henan Agricultural University	China	Seasonal dynamics of soil active carbon and nitrogen under 5 different ages of <i>Platycladus</i> <i>orientalis</i> artificial forest in rocky mountains of
P10	HU Jinli	Huazhong Agrcultural University	China	The effect of zero-valent iron addition on the process of returning straw to paddy fields
P11	JIANG Mengdie	Huazhong Agrcultural University	China	Prior nitrogen fertilization regulates CH <sub>4</sub> emissions from rice cultivation by increasing soil carbon storage in a rapeseed-rice rotation
P12	NA Liping	Huazhong Agrcultural University	China	Evaluating the impact of earthworm on urea- <sup>15</sup> N utilization and potential environmental pollution
P13	SU Ronglin	Huazhong Agrcultural University	China	Organic matter mineralization in different horizons of paddy soil responses to temperature change
P14	XIAO Hengbin	Huazhong Agrcultural University	China	Land use and fertilization impacts on nitrogen in water body
P15	SUN Zheng	UPMC University Paris 06	France	Interests of Rock-Eval® thermal analysis on soil organic matter
P16	XU Wenxian	Hainan University	China	Improvement of soil properties and enzyme activities of young rubber plantation in Hainan through kudzu mulching

#### Poster presentations (2)

No.	Presenter	Affiliation	Country in	Title
P17	LI Jinqiu	Hainan University	China	Effects of water and fertilization management on $CH_4$ and $N_2O$ emissions in double -rice paddy fields in tropical regions, China
P18	Udkham Phansa	Chiang Mai University	Thailand	Remediation of Chlorpyrifos Contaminated Soil Using Biochar
P19	Le Duc Tam	National Institute of Medicinal	Vietnam	Effects of nitrogen levels on growth and yield of <i>Lactuca indica</i> L. in Hanoi, Vietnam
P20	Tran Khanh Bao	The University of Danang	Vietnam	Effects of burning rice straw on bulk soil properties and water extractable carbohydrate of a rice paddy
P21	Dr. Helena Lina Susilawati	Indonesian Agricultural Environment Res. Ins	Indonesia	Estimation of $CO_2$ emission as affected by oil palm plantation on tropical peatland
P22	Ramdhana Karimah	Universitas Gadjah Mada	Indonesia	Effect of soluble organic nutrient extracted from goat dung on microbial respiration, nutrient content and growth of water spinach <i>(lpomea reptans</i> )
P23	Meilania Nugraheni	Sinar Mas Forestry, Hokkaido University	Indonesia	Effect of disturbances on greenhouse gas emissions of Indonesian and Malaysian peat soils
P24	Wibowo Wisnu Aji	Univ. Gadjah Mada, Yamagata University	Indonesia	Effect of long-term application of high dose manure on soil carbon, nitrogen and rice growth in Tsuruoka, Japan
P25	Asih Indah Utami	Univ. Gadjah Mada, Yamagata University	Indonesia	Soil C and N contents affected by soil mixing: comparison of organic and conventional rice farming
P26	Riza Kurnia Sabri	Univ. Gadjah Mada, Yamagata University	Indonesia	Soil carbon decomposition, nitrogen mineralization, and rice yield in Andosol organic farming paddies after the lands reconstructed in Tochigi, Japan
P27	Margi Asih Maimunah	Univ. Gadjah Mada, Yamagata University	Indonesia	Effect of weeding frequencies on soil nitrogen and crop yield in organic rice farming
P28	Putu Oki Bimantara	Yamagata University	Indonesia	Changes in soil properties as affected by slash and burn agriculture in a Japanese Satoyama, Shonai, Yamagata
P29	SHIONO Hiroyuki	Yamagata Prefecture	Japan	Methods of reducing methane emission from paddy fields with rice straw incorporated in a cold region of Japan
P30	Sarah Kentsch	UGAS, Iwate University	Japan	Using image analysis and deep learning techniques to detect invasive species in forests and wetlands
P31	Md. Rakibul Hassan	UGAS, Iwate University	Japan	Interactive effect of long-term elevated CO <sub>2</sub> and temperature on the apple ( <i>Malus domestica</i> ) tree and its mitigation technique
P32	Valensi Kautsar	UGAS, Iwate University	Japan	Continued and discontinued excessive compost manure application on dissolved CO <sub>2</sub> , CH <sub>4</sub> and rice yield: two years pot experiment

