

Oral Session Program

Room No.1		
A: Water and Soil Management - Water Resuse System and Water Use Efficiency -		
1-1	Nov.17 11:00-11:15	Productivity and Nutrient Balance in a Rice-Soil System Continuously Irrigated with Treated Municipal Wastewater Putri Aditya Padma Pertiwi · Luc Duc Phung · Toru Watanabe
1-2	Nov.17 11:15-11:30	ZnO Nanoparticles in Irrigation Water Increases the Micronutrient Content of Rice Grains with No Adverse Effects on Plant Growth and Rice Yield Shinta Dhewi Afriani · Luc Duc Phung · Arun Kumar · Toru Watanabe
1-3	Nov.17 11:30-11:45	Water Reuse System Effects on Actual Water Distribution Management Activities in Large Paddy Irrigation Scheme in Japan Adonis Russell Ekpelikpeze · Atsushi Ishii · Masayoshi Satoh
1-4	Nov.17 11:45-12:00	Irrigation efficiency and water productivity of paddy fields considering return flows (Case study: Guilan, Iran) Mohammad Reza Yazdani · Hamed Ebrahimian · and Fatemeh Alipour Mobaraki
1-5	Nov.17 12:00-12:15	Research Trend of Water Use efficiency in Paddy Field Keigo Noda · Muhamad Khoiru Zaki · Emmanuel Okiria
1-6	Nov.17 12:15-12:30	Water-saving with combined use of skip furrow irrigation and simplified surge flow irrigation Junya Onishi · Hiroshi Ikeura · Gaukhar K. Paluashova · Yulia I. Shirokova · Haruyuki Fujimaki
1-7	Nov.17 12:30-12:45	Optimizing the lateral dripline spacing of drip-irrigated aerobic rice to increase water productivity and profitability under the water-limited condition Kristine Samoy-Pascual · Rubenito M. Lampayan · Alaissa T. Remocal · Ricardo F. Orge · Takeshi Tokida · Masaru Mizoguchi
Room No.1		
A: Water and Soil Management - Innovative Technologies for Agricultural Water Management -		
1-8	Nov.17 13:20-13:35	A Data-Driven Approach to Estimate the Spa-Temporal Distribution of Agriculture Groundwater Withdrawal in intensive pumping area - A case of Central Taiwan Hua-Ting Tseng · Hwa-Lung Yu
1-9	Nov.17 13:35-13:50	Classification of groundwater extraction behavior using an unsupervised learning approach:a case study in Yunlin, Taiwan Yu-Kai Tseng · Shih-Yao Lee · Hwa-Lung Yu
1-10	Nov.17 13:50-14:05	Estimation of multipurpose scope of a large dam through reservoir operation model: Nam Ngum Reservoir, Lao PDR Aastha Lamichhane · Keigo Noda
1-11	Nov.17 14:05-14:20	Sustainable management and operation on sand movement of through-type adjustable check dam Kuo-Wei Liao · Chia-Hung Hsia · Chia-Yang Lee · Chun-Che Tai
1-12	Nov.17 14:20-14:35	Quantitative assessment of impact of return flow from paddy fields on river regime using a distributed rainfall-runoff model Takao Nakagiri · Hiroki Maekawa · Haruhiko Horino · Shinji Sakurai
1-13	Nov.17 14:35-14:50	Leak detection of an irrigation pipeline system using field-measured transient pressures in Sado Island in Japan Yohei Asada · Tetsuya Suzuki · Masaomi Kimura · Issaku Azechi · Toshiaki Iida

Room No.2		
A: Water and Soil Management - Moisture and Nutrient Dynamics in Soil -		
2-1	Nov.17 11:00-11:15	Effects Of Continuous Rainfall Events On Soil Moisture Content Chu Kang · Pei Yuan Chen · Xiang Feng Hong · Jia Wei Liu · Yi Heng Li
2-2	Nov.17 11:15-11:30	Effect of soil temperature and rainfall before transplantation on nitrogen dynamics in paddy soils under different organic fertilizer levels Kaisei Ide · Tasuku Eigen · Peter Muchuno Alfred · Nobuhito Sekiya · Kunio Watanabe
2-3	Nov.17 11:30-11:45	Nitrogen balance in paddy fields applied with various amount of rice bran in winter Tasuku Eigen · Peter Mchuno Alfred · Nobuhito Sekiya · Kunio Watanabe
2-4	Nov.17 11:45-12:00	Source-Reduction Approach for Fertilizer Non-Point Source Control in Agricultural Farmland Ya-Zhen Huang · Chihhao Fan
2-5	Nov.17 12:00-12:15	Synthesis of Hierarchical Chitosan-Based Sponge for Nutrient Recovery from Anaerobic Digestate as Eco-friendly Fertilizers Yu-I Lin · Yu-Lun Liao · Po-Yen Wang · Shu-Yuan Pan
2-6	Nov.17 12:15-12:30	Temperal Changes of Soil Microbial Community in Cabbage Plantation after Chemical Fertilization Yo-Jin Shiau · Syu-Ruei Jhang · Charles C.-K. Chou · Chia-Wei Lee · Yi-Ying Chen · Chih-Chung Chang · Wei-Nai Chen · Chih-Feng Chiang · Horng-Yuh Guo · Pao Wang
Room No.2		
A: Water and Soil Management - Water Quality and Bio-Ecological Systems -		
2-7	Nov.17 13:20-13:35	Categorization of Water Quality Environment of the Ariake Sea Based on Cluster Analysis with Kriging Method Toshinori Tabata · Kazuaki Hiramatsu · Masayoshi Harada
2-8	Nov.17 13:35-13:50	Seasonal and diurnal variations in methane emissions via plant and ebullition from a rice paddy Tatsuya Kobayakawa · Shoichiro Hamamoto · Dingwen Cui · Ma Xuping · Masako Kajiura · Takeshi Tokida · Taku Nishimura
2-9	Nov.17 13:50-14:05	Spatial autoregressive analysis of available nitrogen in paddy soils at a rice farming community level Nobuhito Sekiya · Ayaka Mae · Peter Mchuno Alfred · Beno Kiwale Anton · Tasuku Eigen · Saki Yamayoshi · Masaru Sakai · Kunio Watanabe
2-10	Nov.17 14:05-14:20	Physical habitat assessment for <i>Zacco platypus</i> 's life cycle using PHABSIM in Bokha stream Lee Hyeokjin · Park Jinseok · Jang Seongju · Hong Rokgi · Song Inhong
2-11	Nov.17 14:20-14:35	Estimation of ecological stream flow for <i>Zacco platypus</i> based on hydraulic and water quality simulation Jinseok Park · Younghwan Son · Inhong Song
2-12	Nov.17 14:35-14:50	A Coupled TOPMODEL-soil erosion Model: Towards having a Compact Decision Support Tool for Evaluating Hydrological Ecosystem Services Emmanuel Okiria · Keigo Noda

Room No.3		
A: Water and Soil Management - Sustainable and Effective Irrigation Operation and Management -		
3-1	Nov.17 11:00-11:15	Water Level Detection from Agricultural Canal CCTV Images using CNN Deep Learning Model Kwihoon Kim · Maga Kim · Pureun Yoon · Jehong Bang · Jin-Yong Choi
3-2	Nov.17 11:15-11:30	Quantification of Algal Bloom in an Agriculture Reservoir by Using Time-Lapse Images at Local Point Akinori Ozaki · Masayoshi Harada · Kanae Hasegawa · Kazuaki Hiramatsu · Toshinori Tabata
3-3	Nov.17 11:30-11:45	Influence of Nutritional Status on Suppression of Algal Overgrowth by Bactericidal Effect of Copper Ions Tran Thi Lan Huong · Masayoshi Harada · Kazuaki Hiramatsu · Toshinori Tabata · Akinori Ozaki
3-4	Nov.17 11:45-12:00	The influence of canopy temperature reference baselines for two high yielding rice genotypes in computations of the crop water stress index in different water regimes Samuel Godson-Amamoo · Tasuku Kato · Keisuke Katsura
3-5	Nov.17 12:00-12:15	The Dynamics of Government and Farmer's Collaboration in Uganda's PIM system based on Japan's experience AYELLA Paul · ISHII Atsushi · SATOH Masayoshi
3-6	Nov.17 12:15-12:30	Optimization of Cultivated Area in a Water Harvesting System with Plastic Sheet and Tank. Nana J. B. · Abd El Baki H. M. · Erukudi A. · Fujimaki H.
Room No.3		
A: Water and Soil Management - Land Use and Irrigation Management Technologies -		
3-7	Nov.17 13:20-13:35	Evaluation of the recycled wastewater application for agricultural irrigation in Kinmen area, Taiwan Li-Chi Chiang · Ci-Jyun Liao
3-8	Nov.17 13:35-13:50	Design optimal layout of branched pipeline network for collective irrigation in upland field Seongju Jang · Jinseok Park · Hyeokjin Lee · Inhong Song
3-9	Nov.17 13:50-14:05	Paddy Responses to the Reduction of Irrigation Water by Applying the Sheet-Pipe Subsurface Irrigation Chusnul Arif · Satyanto Krido Saptomo · Budi Indra Setiawan · Muh Taufik · Willy Bayuardi Suwarno · Masaru Mizoguchi
3-10	Nov.17 14:05-14:20	Land Use/Land Cover Change Impact on Hydrology Using SWAT Model in Mun - Chi River Watershed, Northeast Thailand Kharlon Ibrianto Putra · Keigo Noda
3-11	Nov.17 14:20-14:35	Using Field Meteorological Data for Prediction of Irrigation Water Requirement - a Case Study of an Irrigated Land Located at Xinpu Town in Hsinchu county, Taiwan Shih-Wei Chiang · Hsien-Cheng Lin · Yi-Ju Tung · Jia-Haur Jeng
3-12	Nov.17 14:35-14:50	Analysis of Climate Patterns on A Rice-Producing Area in the Northern West Java of Indonesia Budi I. Setiawan · Riani Muharomah · Natsuki Yoshikawa · Takanori Nagano · Satyanto Krido Saptomo · Chusnul Arif

Room No.4		
B: Disaster Risk Management and Adaptation - Climate Change Impact Assessment and Adaptation -		
4-1	Nov.17 11:00-11:15	Investigation of meteorological drought characteristics over the Paddy-dominated Central Division of Odisha, India Shu Surendra Kumar Mishra · Sabyasachi Swain · Ashish Pandey
4-2	Nov.17 11:15-11:30	WAVE+ based drought index and climate change risk assessment Che You Liu · Shao Yiu Hsu · Hao Hua Lin
4-3	Nov.17 11:30-11:45	Graphical innovative and polygon trend analyses of climate indices variability in Chungcheong provinces, South Korea Bashir Adelodun · Golden Odey · Hyungon Cho · Seulgi Lee · Khalid Adeola Adeyemi · Kyung Sook Choi
4-4	Nov.17 11:45-12:00	Assessing the impact of changes in water use period on interactions between agricultural production and water resources Asari Takada · Takeo Yoshida · Yasushi Ishigooka · Atsushi Maruyama · Ryoji Kudo
4-5	Nov.17 12:00-12:15	An assessment of livelihood diversification of smallholder rice farmers in the coastal area of Nghe An province, Vietnam Tien D. N. Ho · Bien T. Vu · Son T. Ngo · Phuong T. Tran · Phuc H. Thai
4-6	Nov.17 12:15-12:30	Detection of Accumulated Cracking Damage in the in-Service Concrete Irrigation Structure by Acoustic Emission and Related Non-Destructive Testing Parameters Nadezhda Morozova · Kazuma Shibano · Yuma Shimamoto · Sena Tayfur · Ninel Alver · Tetsuya Suzuki
Room No.4		
B: Disaster Risk Management and Adaptation - Flood and Inundation -		
4-7	Nov.17 13:20-13:35	Prediction of inflow into low-lying lake by machine learning trained with simulated rainfall events Kei Awano · Masaomi Kimura · Tsumugu Kusudo · Atsushi Yamamoto · Atsushi Okayama · Yutaka Matsuno
4-8	Nov.17 13:35-13:50	Exploiting Machine Learning Models for Daily Streamflow Forecasting in the Tonle Sap Lake Basin Sopheha Rom Phy · Junichiro Takeuchi · Masayuki Fujihara
4-9	Nov.17 13:50-14:05	High-Resolution Flood Inundation Modelling in Wide Floodplain of Cambodian Mekong Delta Using a GPU-Accelerated Two-Dimensional Hydrodynamic Model Sarit Chung · Junichiro Takeuchi · Masayuki Fujihara
4-10	Nov.17 14:05-14:20	Flood inundation analysis on the tributary basin level considering enhancement of flood mitigation function of rice paddies in Kuma River left side basin Yushi Suzuki · Takehide Hama · Riho Yamaguchi · Takeo Oshima · Kimihito Nakamura
4-11	Nov.17 14:20-14:35	Evaluation and Usage of the Flood-retarding Function of Low-Lying Paddies in Basin-wide Flood Control Akihiko Sawata · Shinichi Goto · Takao Masumoto
4-12	Nov.17 14:35-14:50	Construction of Reservoir Water Level Prediction Model using Encoder Decoder LSTM and Effect of Input Variables Tsumugu Kusudo · Atsushi Okayama · Kei Awano · Atsushi Yamamoto · Masaomi Kimura · Yutaka Matsuno

Room No.5 C: Regional Resource Management and Rural Planning - Local Approach for Regional Resource Management and Rural Planning -		
5-1	Nov.17 11:00-11:15	The Influence of Relative Humidity and Curing Temperature on the Characteristics of Cement at Early-age Rio Okajima · Masahiro Hyodo · Hidehiko Ogata · Daiki Atarashi · Akio Ishigami
5-2	Nov.17 11:15-11:30	Characteristics of the simple diversion weirs constructed in Zambia and their improvements Alex Lushikanda Kabwe · Hidehiko Ogata · Masahiro Hyodo · Yoshihiro Sagawa · Yoshinao Adachi
5-3	Nov.17 11:30-11:45	Sustainable Intensification of Paddy Rice Farming Using Treated Municipal Wastewater: Evidence from A Three-year Field Study Luc Duc Phung · Dung Viet Pham · Toru Watanabe
5-4	Nov.17 11:45-12:00	Life History of the Introduced Red Swamp Crayfish <i>Procambarus clarkii</i> in a Pond of Okayama, Western Japan in Relation to Control Measurements in Rural Areas Quang-Tuong Luong · Rika Shiraishi · Kazuyoshi Nakata
5-5	Nov.17 12:00-12:15	Sustainable Terraced Rice Paddy Areas Yamaji Eiji
5-6	Nov.17 12:15-12:30	Resilience Education Program in Iitate Village for the Young Generation Hiroaki Sugino · Masaru Mizoguchi
Room No.5 C: Regional Resource Management and Rural Planning - Modelling and Assessing for Regional Resource Management and Rural Planning -		
5-7	Nov.17 13:20-13:35	Spectrum optimization models of water resources management Hung-Hsuan Shen · Ming-Che Hu
5-8	Nov.17 13:35-13:50	Optimal Irrigation Water Allocation among Different Growth Stages Yu-Syuan Cai · Gene Jiing-Yun You
5-9	Nov.17 13:50-14:05	Assessing the Impact of Grain Trade on South Korea's Water and Land Security Golden Odey · Bashir Adelodun · Seulgi Lee · Khalid Adeyemi · Kyung Sook Choi
5-10	Nov.17 14:05-14:20	Water-Energy-Food-Carbon Nexus Analysis in Paddy Fields under Climate Change Pu Reun Yoon · Jin-Yong Choi · Jeongwoo Son · Seung-oh Hur
5-11	Nov.17 14:20-14:35	Verification of an interdisciplinary model for assessing land sustainability goals in Taiwan Meng-Ju Chung · Pei-Yuan Chen
5-12	Nov.17 14:35-14:50	Evaluation of Agricultural Ecosystem Services Exemplified by Croplands in Yunlin, Taiwan Kuan-Ting Lin · Chien-Hui Syu · Yi-Ting Zhang · Tsang-Sen Liu · Horng-Yuh Guo · Shu-Yuan Pan

Room No.6		
D: ICT and Smart Tech. in Agriculture and Ecosystem Management - Remote Sensing -		
6-1	Nov.17 11:00-11:15	Investigation of Different Vegetation Descriptors for Soil Moisture Estimation Using a Water Cloud Model (WCM) Ashish Pandey · Dhananjay Paswan Das · Abhishek Semwal · Sandeep Chaurasia
6-2	Nov.17 11:15-11:30	The comparison Between Japanese Topographic and Bathymetric DTM and the Latest DTM in Japan Maulana Ibrahim Rau · Natsuki Yoshikawa · Atriyon Julzarika · Horacio Manuel Massique · Tomokazu Nakamura · Hiroya Sato
6-3	Nov.17 11:30-11:45	Mapping of high-resolution paddy rice extent in IADA Barat Laut Selangor Malaysia Rudiyanto · Fatchurrachman · Norhidayah Che Soh · Ramisah Mohd Shah
6-4	Nov.17 11:45-12:00	Estimation of rice lodging severity and soil available nitrogen in a paddy field based on UAS images Nozomi Sato · Takeshi Tusji · Yasuhiro Iijima · Nobuhito Sekiya · Kunio Watanabe
6-5	Nov.17 12:00-12:15	Geospatial Mapping Using the Latest DTM to Extract Detailed Topography and Bathymetry Atriyon Julzarika · Maulana Ibrahim Rau · Natsuki Yoshikawa
Room No.6		
D: ICT and Smart Tech. in Agriculture and Ecosystem Management - Machine Learning -		
6-6	Nov.17 13:20-13:35	An inexperienced flood prediction at a drainage pumping station in lowland using an advanced neural network model, coupled with a physical model and transfer learning Nobuaki Kimura · Hiroki Minakawa
6-7	Nov.17 13:35-13:50	Comparison of Machine Learning Techniques for Estimating Runoff about Predicting Time Scale Maga Kim · Jin-Yong Choi
6-8	Nov.17 13:50-14:05	Prediction of Saltwater Wedges by Machine Learning Hiroya Sato · Natsuki Yoshikawa
6-9	Nov.17 14:05-14:20	Development of Object Detection Algorithm for Classification of Maturity Stages of Persimmon Fruits Atsushi Yamamoto · Makoto Shinoda · Tsumugu Kusudou · Atushi Okayama · Takeshi Nakamura · Chika Takemura · Mayu Sugiura · Hiroyoshi Sugiura · Masaomi Kimura · Yutaka Matsuno

Room No.7		
D: ICT and Smart Tech. in Agriculture and Ecosystem Management - Innovative Technique and System -		
7-1	Nov.17 11:00-11:15	The Self-sovereign Identity for Agri-food Supply Chain Kai-Yuan Lin · Masaru Mizoguchi
7-2	Nov.17 11:15-11:30	Experimental Investigation on Portable Fishway Structure for Upstream Migration of the Kissing Loach (<i>Parabotia curtus</i>) Mitsuki Hamaguchi · Naoki Takahashi · Kazuyoshi Nakata
7-3	Nov.17 11:30-11:45	Development of a portable fishway system suitable for the upstream migration of pink salmon (<i>Oncorhynchus gorbusha</i>) Naoki Takahashi
7-4	Nov.17 11:45-12:00	ICT Experiments on a mountain forest Monitoring System in Iitate Village, Fukushima Masaru Mizoguchi · Yasuhiro Itakura
7-5	Nov.17 12:00-12:15	Determination of Irrigation Depth for Mungbean considering Weather Forecast and Cost for Water under a Saline Condition Haruyuki Fujimaki · Junya Onishi · Hassan M. Abd El Baki · Kristina Toderich
7-6	Nov.17 12:15-12:30	Performance of Agricultural Field Water Table Control System with Remote Telemetry and Control Unit Satyanto Krido Saptomo · Chusnul Arif · Willy Bayuardi Suwarno · Budi Indra Setiawan · Rusianto