

# Welcome

Indonesia, host for the 11<sup>th</sup> International Conference of the East and Southeast Asia Federation of Soil Science Societies (ESAFS), the 5<sup>th</sup> group meeting of GRA Paddy Rice Research Group (PRRG) of Global Research Alliance (GRA), Global Soil Partnership and Asian Soil Partnership, and Oceania Node Meeting welcomes scientists and practitioners to Bogor to discuss several issues for development of sustainable agriculture.

The theme of 11<sup>th</sup> ESAFS conference is *Land for Sustaining Food and Energy Security*. The broad theme of soil and environmental sciences provides a great opportunity to explore the sciences and technologies related to land productivity and food production, sustainable land management, land degradation and remediation, soil quality and nutrient cycling, hydrology and water management, landuse and climate change, soil database and digital soil mapping.

This program is designed to provide a stimulating conference for all, regardless of participant background and speciality. By mixing plenary lectures, oral and poster presentations, exhibitions and the field tours, we have tried to balance specialist requirements with opportunities for broader discussion between people with different backgrounds, countries and disciplinary perspectives.

None of this would have been possible without our generous sponsors. Thank you to all for your support, and for helping to make 11th ESAFS conference such an exciting, rewarding and productive event.



Dr. Yuswanda A. Temenggung  
President ESAFS (2012-2013)  
President ISSS (2007-2015)



Prof. Dr. Budi Mulyanto MSc  
OC of 11<sup>th</sup> ESAFS, 2013

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# Sponsors

## Foundation sponsors



Indonesian Agency for Agriculture  
Research and Development  
(IAARD), Ministry of Agriculture



Bogor Agricultural  
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Food and Agriculture Organization  
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International Union of  
Soil Science

## Platinum sponsor



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Asia Pacific Resources International Limited (APRIL) is a leading fiber, pulp and paper manufacturer and one of the world's largest producers of bleached hardwood kraft (BHK) pulp. A global sales and marketing network sees APRIL's products used in over 60 countries around the world in liquid packaging, printing and writing paper, tissues, shopping bags, food packaging, magazines and books. APRIL's own flagship paper brand is PaperOne™ which has a fiber component made from renewable plantation sources. APRIL's first plantation development commenced in Riau Province in Sumatera, Indonesia in 1993. APRIL is now one of the world's largest pulp and paper companies and a leading developer of fiber plantations.

APRIL has been a pioneer and remains a leader in applying responsible and best-practice sustainable forestry management in every aspect of our operations. We adopt a landscape level approach for the development of our concessions, resulting in a mixed plantation, conservation and social landscape that maximize economic, social and ecological benefits.

Since 2005, APRIL has adopted a voluntary conservation policy whereby any areas identified as having high conservation value (HCV) on our own concessions are set aside and protected within conservation zones. The identification and delineation of these conservation areas are conducted by third-party experts using the Indonesia HCV Toolkit, which was developed by a range of Indonesian and international experts and stakeholders including NGOs.

Our commitment to HCV protection has delivered real conservation outcomes. As of 2012, about 20% of the total concession areas held by APRIL and its supply partners have been identified, set aside and protected as conservation zones, comprising of natural forest and indigenous tree species areas amounting to about 200,000 hectares. These areas provide an additional one-third to conservation areas set aside by the government in Riau Province.

Based on over a decade of research, our science-based water management systems in plantation and conservation areas help to minimize subsidence and reduce greenhouse gas emissions on degraded peat lands over the long term, as compared to pre-existing conditions when APRIL took over its concessions. We also conduct significant rehabilitation activity on our concessions, helping reforest and rehabilitate degraded areas.

APRIL is actively involved in research and development activities and scientific outreach. This includes collaborations and sharing of best practices with visiting scientists, academics and industry professionals from around the world, in the fields of forestry and conservation management.

Recently, APRIL in collaboration with the Indonesian Peat Society (HGI/Himpunan Gambut Indonesia), Indonesian Soil Science Society (HITI/Himpunan Ilmu Tanah Indonesia), Bogor Agricultural University (IPB/Institut Pertanian Bogor) and the Agency for the Assessment and Application of Technology (BPPT/Badan Pengkajian dan Penerapan Teknologi) conducted a joint research for the application of GPR (Ground Penetrating Radar) in the tropical peat soil of Kampar Peninsula area in Riau Province. The research is expected to contribute in the effort to develop a more reliable method to measure soil carbon pool.

Sustainable forestry plays a key role in Indonesia's economic development as part of a national strategy. It makes an important contribution to job creation, poverty alleviation and the improvement of health and education outcomes.

At APRIL, we firmly believe we are part of the solution to the challenge of balancing environmental conservation, social and economic development in Indonesia.

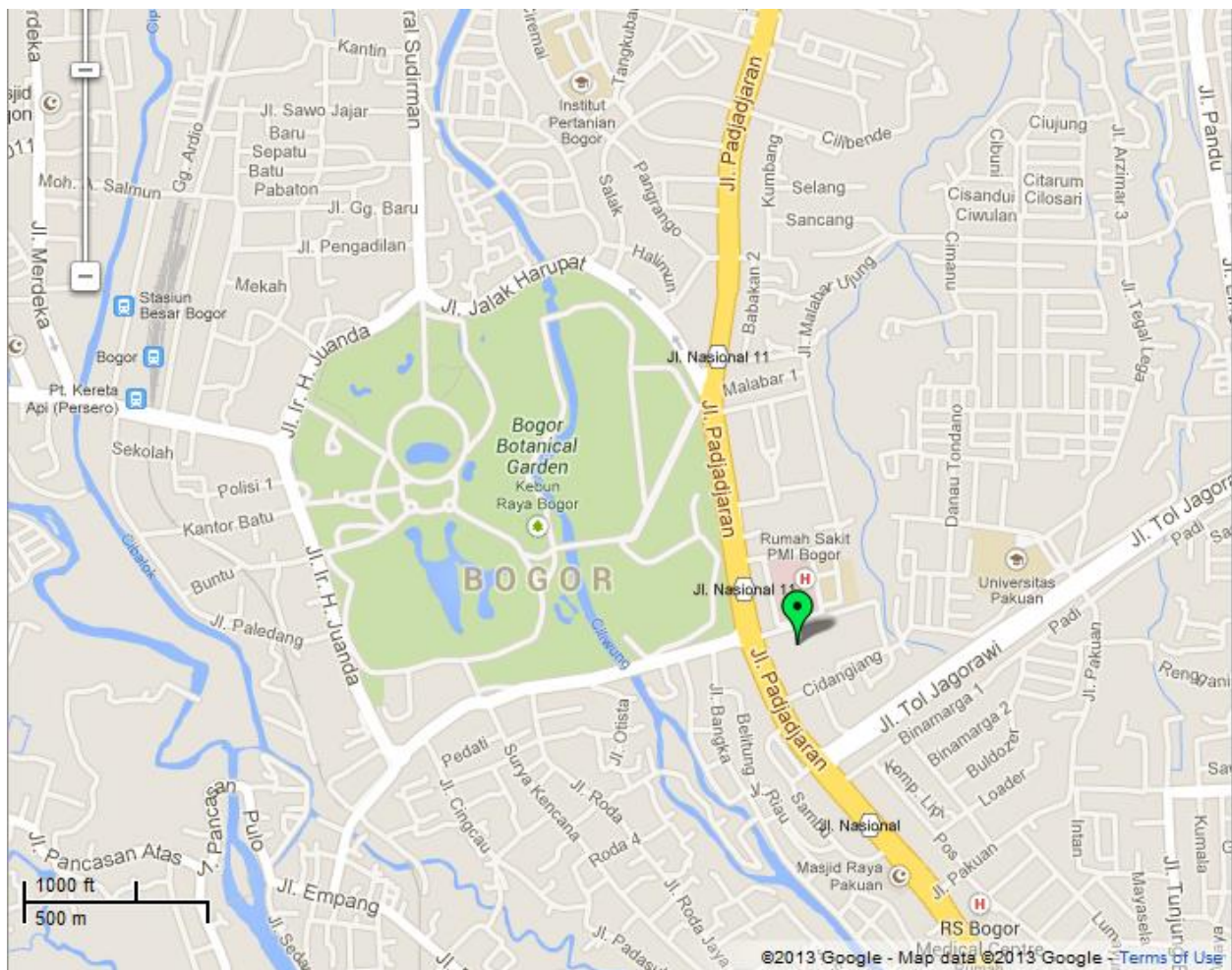
PT. Riau Andalan Pulp and Paper or also known as PT. RAPP or Riaupulp which operates in Indonesia is a member of APRIL.

# General Information

## IICC (IPB International Convention Center) address :

Botani Square Building 2nd Floor  
Jl. Raya Pajajaran  
Bogor – Jawa Barat  
16127  
Indonesia

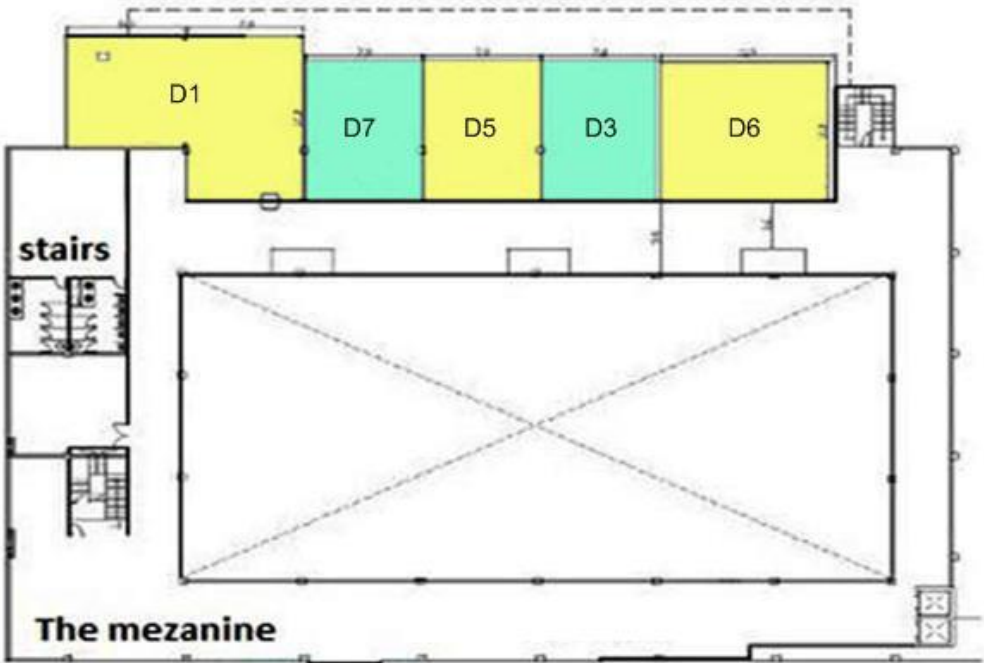
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# The Convention Hall and Rooms at the IICC

The Convention Hall and Rooms at the IICC



## **Money changers**

Money changer is available in Botani Square Lower Ground Floor Unit 1.  
Telephone: 0251 8400761. Opening Time: 10:00 – 22:00.

## **Catering**

Catering will be served on Monday and Tuesday. Morning and afternoon tea and lunch are included on Monday and Tuesday. On Wednesday lunch and evening dinner will be provided during the field tour.

There are several food stall and restaurants in the ground, first and third floor span from Japanese, Chinese, Indonesian and Western cuisine. Some fast food and Indonesian restaurant is also available surrounding the Plaza.

## **Exhibition**

The exhibition will take place at Hall 1 of the first floor. Some sponsors will show their products and information. The exhibition schedule is as follows:

Monday 21 October 2013	09:00 – 17:00
Tuesday 22 October 2013	08:30 – 17:00

## **Post Conference Tour**

If you have registered for the Post Conference Tour on October 23-24, please confirm at registration desk.

## **Poster Area, Set up and removal**

The poster area is located within the exhibition area on the Ballroom 1. Poster should be mounted next to their allocated poster reference number, which are numbered consecutively. The poster area will be open from 7.30 am. Poster must be removed at the end of the Conference, no later than 6 pm on Tuesday 22 October 2013. Posters remaining after 6 pm will be disposed off.

Poster presenters will be available to talk about their poster on Monday 21 October and Tuesday 22 October between 12.00-14.00 pm in the poster area.

## **Wifi**

Complimentary wireless internet will be available to all delegates throughout the conference at the IPB International Convention Centre. Please ask at the registration desk for the network login details.

## **Out and about Bogor**

Bogor is a city on the island of Java in the West Java province of Indonesia. The city is located in the center of the Bogor Regency 60 kilometers south of the Indonesian capital Jakarta. Bogor itself is a recognized as a municipality, it is an important economic, scientific, cultural and tourist center, as well as a mountain resort. In the Middle Ages, the city was the capital of Sunda Kingdom and was called Pakuan Pajajaran. During the Dutch colonial era, it was named *Buitenzorg* and served as the summer residence of the Governor-General of Dutch East Indies. The city was the administrative center of the Netherlands East Indies during the brief British control in the early 19th century. With several hundred thousand people living on an area of about 20 km<sup>2</sup>, the central part of Bogor is one of the world's most densely populated areas. The city has a presidential palace and a botanical garden one of the oldest and largest in the world. It bears the nickname "the Rain City" because of frequent rain showers. It nearly always rains even during the dry season.

## **Banks**

Bank in Indonesia are open 08:00 – 16:00 Monday to Thursday and 08:00 – 17:00 on Friday. Most bank are closed on weekends; however, some bank in major cities open for limited hours on Saturday. Currency exchange facilities are available at the airport and most major hotels. Automatic teller machine (ATMs) are available at a wide variety of outlets, including the conference site, and in most city streets.



## Currency

Indonesian currency is rupiahs. Almost all transaction in Indonesia should be in rupiah.

## Electricity

220 – 240V is standard in Indonesia. The typical cord is as follows:





## **Travel**

Blue Bird taxi operates in Bogor. Please Call: +62-251 2175358 for the service.

Buses are also available to go to Soekarno-Hatta International Airport from Bogor or vice versa. Please call Damri buses at +62-021 550 6430 or +62-21 798 08:08 for services. The buses operate from 03:00 am to 09:00 pm. The Damri buses station is located next to IPB ICC.

To go around Bogor, there is a bus (Trans Pakuan) which operates from 05:00 am to 21:00 pm. The bus station is just next to the IPB Baranangsiang parking area.

## **Shopping hours**

Shops vary in their opening hours, but normally are open from 10:00 to 21:00 for weekdays and 10:00 to 22:00 in the weekend. Some fast food restaurant such as KFC and McD and convenient stores such as Circle-K open 24 hours.

## **Tipping**

Service charges are not added to accounts by hotels and restaurants. You may tip taxi drivers, hotel porters and restaurant wait-staff (up to 10% of the bill) if you wish to acknowledge exceptional service. At any time, tipping is your choice.

## **Weather**

See the Indonesia Bureau of Meteorology website ([www.bmkg.go.id](http://www.bmkg.go.id)) for daily information.

# Schedule of 11<sup>th</sup> International Conference of ESAFS

## 21-24 October 2013

### Program Day 1: Monday 21 October 2013

8.00-09.00	Registration desk and poster installation	
09.00-09.20	2th floor, Ballroom 2 Official Opening: Report from Chair Organizing Committee (Budi Mulyanto) Welcome address by Bogor Agricultural University Rector (Herry Suhardiyanto) President of Indonesian Soil Science Society/ESAFS (YuswandaTemenggung)	
09.20-10.00	Keynote Speech	Welcome address of FAO
		Welcome address of IUSS
		Welcome address of Director General of IAARD, Ministry of Agriculture
10.00-10.15	Morning Tea	
	Plenary lecture	
	Chair: Fahmuddin Agus	
10.15-10.45	Speaker: Toshiyuki Wakatsuki School of Agriculture, Kinki University, presently Emeritus Professor of Faculty of Life and Environmental Science, Shimane University	
	Asian African Collaboration for Sustainable African Green Revolution through Sawah and Satoyama Eco-technology to Combat Global Food and Ecology Crisis in 2025	
10.45-11.15	Speaker: Muhajir Utomo Faculty of Agriculture, Lampung University, Lampung, Indonesia	
	Sustainable land management practices for mitigating greenhouse gas emission of forest plantation in peatland ecosystem	
11.15-11.45	Speaker: Alex Mc. Bratney Deputy Secretary General of International Union of Soil Sciences (IUSS) Faculty of Agriculture & Environment, The University of Sydney, NSW, Australia	
	The multi-faceted nature of soil security	
11.45-12.00	Photo session	
11.45-12.45	Lunch	
	ESAFS Business Meeting (VIP Room)	
12.45-13.30	Poster session and Exhibition	

## Paper Session

	Room EF (D1)	Ballroom 2 (D2)	Room B (D3)	Ballroom 3 (D4)	Room C (D5)	Room A (D6)	Room D (D7)
	Land Productivity & Food Production	Land Degradation and Remediation	Plant Nutrition, Biological Cycling and Soil Quality	Sustainable Lowland and Peatland Management	Hidrology and water managemet	Land Use and Climate Change	Soil Database and Digital Soil Mapping
	<b>Chair:</b> Kye Hoon Kim Yeong-Sang Jung	<b>Chair:</b> Takashi Kosaki A.Napoleon	<b>Chair:</b> Z.S. Chen Dermiyati	<b>Chair:</b> B.I.Setiawan Q.A Pawanhar	<b>Chair:</b> Le Thai Bat M. Nishida	<b>Chair:</b> P. Weerasinghe M. Aslam Ali	<b>Chair:</b> Ganlin Zhang Kusumo Nugroho
13.30-13.45	<b>Lecture:</b> Yuji Niino	<b>Lecture:</b> Rainer Horn	<b>Lecture:</b> Bijay Singh	<b>O1D4-Ryusuke Hatano</b>	<b>O1D5-Kazuyuki Yagi</b>	<b>O1D6-Yohei Hamada</b>	<b>O1D7-Tetsuhiro Watanabe</b>
		Soil degradation – How far are physical, chemical and biological processes and soil functions irreversibly affected on various scales and what are the consequences	Soil health implications of human alteration of the Nitrogen cycle	New angle of study on greenhouse gas emissions from tropical peatland	Monitoring and modeling mitigation options of methene emissions from rice fields by water management	Evaluation of gaseous carbon emission from a tropical peatland fire based on a plot-scale field experiment in central Kaliman-tan Indonesia	Distribution of clay minerals and their formation conditions in volcanic soils of Java and Sumatra Islands, Indonesia
13.45-14.00				<b>O2D4-Mahmud Raimadoya</b>	<b>O2D5-Budi Kartiwa</b>	<b>O2D6-Shin Abe</b>	<b>O2D7-Shinya Funakawa/Tetsuhiro Watanabe</b>
				Peat thickness acquisition with geo-radar	Improving irrigated agriculture through integrated and participatory water resources management in Pusur Watershed, Central Java	Effects of land-use change on organic matter distribution and composition in soil particle-size fractions of tropical lowland Bolivia	Clay mineral composition in soils developed under different geological and climatic conditions of Kalimantan, Indonesia

14.00-14.15	<b>O1D1- Xiyang Hao</b>	<b>O1D2-Iskandar</b>	<b>O1D3-Shin Ichiro Mishima</b>	<b>O3D4-S. Noviany, H, dkk</b>	<b>O3D5-Shah Moinur Rahman</b>	<b>O3D6-Rosnaeni Sakata</b>	<b>O3D7-Yiyi Sulaeman</b>
	Barley biomass yield, nitrogen and phosphorus uptakes from soil amended with anaerobically digested cattle feedlot manure (ADM)	Chemical characteristics of fly ash after 5 years deposition in landfill and its potential use for soil amelioration	Changes in nutrient store in surface and subsurface soil layer under different cropping system	Private-public partnership in developing well-managed plantation forest in peat landscape- a case in Sinar Mas Forestry and Patners	Effect of water management during early growth stage on nitrogen dynamics of paddy field	Dissolved N <sub>2</sub> O in relation to N <sub>2</sub> O emission in the oil palm plantation	Testing the transferability of soil-landscape models in Java, Indonesia
14.15-14.30	<b>O2D1-M.Velayutham/R. Shanti</b>	<b>O2D2-Asep Nugraha Ardiwinata</b>	<b>O2D3-Taiki Mori</b>	<b>O4D4-Anshari Gusti</b>	<b>O4D5-B. Rasyid</b>	<b>O4D6-Xi Li</b>	<b>O4D7-Muhrizal Sarwani</b>
	The "law of optimum" and soil test based integrated nutrient supply for soil fertility management in precision farming	Remediation of organochlorine-contaminated soil in Java Island using activated carbon	Phosphorus limitation on heterotrophic respiration in an acacia mangium plantation soil in South Sumatra, Indonesia	An assessment of anthropogenic disturbances on peat depth and carbon stock in Rasau Jaya peat dome, West Kalimantan Province,Indonesia	Drought tolerant criterion of wheat genotypes using carbon isotopes discrimination (CID) technique	Bayesian hierarchical models for soil CO <sub>2</sub> flux at the regional scale in central Hokkaido, Japan	Toward digital soil mapping in Indonesia
14.30-14.45	<b>O3D1- Narses S. Detera</b>	<b>O3D2-Masahiko Katoh</b>	<b>O3D3-Saeko Yada</b>	<b>O5D4-Ahmad Kurnain</b>	<b>O5D5-Myung Chul Seo</b>	<b>O5D6-Atfritedy Limin</b>	<b>O5D7-Vita R Cahyani</b>
	Fertility status of agricultural lands in pili, camarines sur, philippines	Improvement of animal compost to facilitate lead immobilization in contaminated soil	Rapid simultaneous determination of nitrogen and oxygen stable isotopes by IRMS	Bio-cycle farming systems on sub-optimum lands: optimizing internal nutrient flows in agricultural ecological on the tidal lowland systems	Risk assessment of draught and wet according to climate change scenario (RCP 8.5) at Suwon Region in Korea	Carbon balance estimate using biometric and eddy covariance method in a managed grassland of Hokkaido, Japan	Microbiota responsible for the formation of diagnostic horizons in rice fields

14.45-15.00	<b>O4D1- Chi-Ling Chen</b>	<b>O4D2-Keitaro Tawaraya</b>	<b>O4D3-Shuji Sano</b>	<b>O6D4-Lullie Melling</b>	<b>O6D5-Sri Rahayu Utami</b>	<b>O6D6-Fengky Florante Adji</b>	<b>O6D7-Sukarman</b>
	Nitrogen uptake efficiency by crop and leaching from farmland in Taiwan	Utilization of mycorrhizal fungi for remediation of post coal mining land in Indonesia	Rapid and convenient method for multiple evaluation of nitrate and available organic nitrogen of arable soils using a dual UV absorbance	Preliminary investigation - effect of oil palm trunk chips	Study of phosphorus fractionation as an impact of water stress and organic matter application in calcareous soil	Flux and dissolved concentration of major greenhouse gases in tropical peatland	Andosols: volcanic ash soils in Indonesia
15.00-15.30	<b>O5D1-Shamshudin Jusop</b>	<b>O5D2-Rodelio B. Carating</b>	<b>O5D3-Junta Yanai</b>	<b>O7D4-Arifin Fahmi</b>		<b>O7D6-Chun-Chih Tsui</b>	<b>O7D7-Shih-Hao Jien</b>
	Pyritization of the coastal plains in the Malay Peninsula: its effects on soil fertility and rice production	Land degradation assessment in the Philippines based on the FAO-LADA land use system approach	Evaluation of nitrogen status of agricultural soils in Java Island, Indonesia	Effect of peat layer on redox potential in peatland with sulphidic material substratum		Estimation of soil organic carbon sequestration in a michelia compressa plantation of Central Taiwan	The effects of pedogenesis and moisture regime on transformation and distribution of phosphorus in perhumid subalpine forest soils
15.30-16.00	<b>Coffee break</b>						



	<b>Chair: Supiandi Sabiham A. Wongmaneroj</b>	<b>Chair: Deddy Nursyamsi Pratiwi</b>	<b>Chair: Sudarsono Yuan Shen</b>	<b>Chair: Lullie Melling Gusti Anshari</b>		<b>Chair: Shen Renfang Hermansah</b>	<b>Chair: Kim Jeong Gyu Vita R. Cahyani</b>
16.00-16.15	<b>O6D1-Christianto Lopulisa</b>	<b>O6D2-Dar-Yuan Lee</b>	<b>O6D3-Anabella Bautista Tulin</b>	<b>O8D4-Budi Indra Setiawan</b>		<b>O8D6-Louis Pierre Comeau</b>	<b>O8D7-Kusumo Nugroho</b>
	Evaluation of soil fertility characteristics for maize production in South Sulawesi, Indonesia	Comparison of as sequestration in iron plaque and uptake by different genotypes of rice plants grown in As-contaminated paddy soils	Establishment of the nutrient supply capacity of acid soils planted with vegetables in the southern Philippines using double pot technique	Patterns of CO <sub>2</sub> flux in a bareland tropical peatland		Carbon dioxide fluxes and soil organic matter characteristics associated with land-use change in tropical peatlands of Jambi, Indonesia	Measuring the accuracy of peat ictoriacce map with 1 : 50.000 scale map in Jambi
16.15-16.30	<b>O7D1-Kazuyuki Inubushi/Muhammad Aslam Ali</b>	<b>O7D2-Zueng-Sang Chen</b>	<b>O7D3-Edgardo E. Tulin</b>	<b>O9D4-Siti Masreah Bernas</b>		<b>O9D6-Yutaka Shiratori</b>	<b>O9D7-D. Subardja</b>
	Effects of soil amendment on environment and yield in Southeast Asia	The effects of water management on the arsenic content of different parts of rice grown on as-contaminated soils	Isolation and characterization of soil micro-organisms from various soil environments for potential use as micronutrient bioinoculants	The potential of wild plants in swampland as compost and liquid organic fertilizer sources at south sumatra		Effects of surface drainage during fallow seasons on mitigating methane emissions from poorly-drained paddy fields in Japan	National soil classification

16.30-16.45	<b>O8D1-Atsushi Nakao</b>	<b>O8D2-Hao yen Chang/ Tai-Hsiang Huang</b>	<b>O8D3-Iranie Wijebandara</b>	<b>O10D4-Qurban Ali Panhwar</b>		<b>O10D6-Ayaka Hayashi</b>	<b>O10D7-Wahyunto</b>
	Fertility status and its determinant factors of cultivated soils in Java, Indonesia	Evaluation of water management effecting on the arsenic level of brown rice grown in Arsenic-contaminated soils	Phosphorus adsorption maximum as measured by the langmuir equation and its relationship to soil properties in coconut growing soils of Sri Lanka	Improvement of acid sulfate soils for sustainable rice cultivation in Malaysia		Greenhouse gas emissions from a leguminous Acacia Crassicarpa plantation on a peat swamp in West Kalimantan, Indonesia	Development degraded peatland zone by means ictoriac information system approach
16.45-17.00	<b>O9D1-Adha Fatmah Siregar</b>	<b>O9D2- Hung-Yu Lai</b>	<b>O9D3-Chih-Hsin Cheng</b>	<b>O11D4-Siti Nurzakiah</b>		<b>O11D6-Muhammad Aslam Ali</b>	<b>O11D7-WMDB Wickramasinghe</b>
	Sawah soil properties in relation to blast disease infection and Si availability at West Java and Lampung Provinces, Indonesia	Biosolid affects leaf area and transpiration rate of Rainbow Pink (dianthus chinensis) grown in Cadmium-contaminated soils	Sorption properties for black carbon (wood char) after long-term exposure in soils	Carbon stock stratification of swampy peatland		Silicate slag amendments in paddy soils for mitigating methane emission and sustaining rice	Prioritization of sub watersheds for soil conservation using GIS and remote sensing in Victoria reservoir catchment, Sri Lanka
18.00-21.00	Welcome Dinner at Cimory Restaurant						

Program Day 2: Tuesday 22 October 2013

	Plenary lecture
	Chair: Yuji Niino Co-chair: Kye Hoon Kim
09.30-10.00	Speaker: Supiandi Sabiham
	Faculty of Agriculture, Bogor Agricultural University
	Land use change and sustainable oil palm development in Indonesia toward self-reliance of energy in the future
10.00-10.30	Speaker: Rainer Horn
	Current Chair of Division 3 and President-elect of IUSS Christian Albrecht University, Germany
	Structure formation and management effects on gas storage and emission. How far can we forecast the effects on global change?
10.30-10.15	Coffee break
	Chair: Alex Mc. Bratney
10.15-12.15	Speaker: Representatives member countries Bangladesh, China, India, Indonesia, Japan, Korea, Malaysia, Philippines, Sri Lanka, Taiwan, Thailand, Vietnam
	Current and future soil science development
12.15-12.45	Lunch
12.45-13.30	Poster Session and Exhibition

## Paper session

	Room EF (D1)	Ballroom 2 (D2)	Room B (D3)	Room C (D6)	Ballroom 3
	Land Productivity & Food Production	Land Degradation and Remediation	Plant Nutrition, Biological Cycling and Soil Quality	Land Use and Climate Change	Activities report of Soil Science Society of each member country
	<b>Chair:</b> <b>Tsugiyuki Masunaga</b> <b>C. Lopulisa</b>	<b>Chair:</b> <b>Takashi Kosaki</b> <b>S.D.Tarigan</b>	<b>Chair:</b> <b>W.Wickramasinghe</b> <b>Darmawan</b>	<b>Chair:</b> <b>Dar-Yuan Lee</b> <b>Abdul Hadi</b>	<b>Chair:</b> <b>K. Kyuma</b>
<b>13.30-13.45</b>	<b>O10D1-Ki Yuol Jung</b>	<b>O10D2-Yulnafatmawita</b>	<b>O10D3-Chang YF/Chen Chi Tsai*</b>	<b>O12D6-Aflizar</b>	<b>Bangladesh</b> <b>SM Imamul Huq</b>
	Effect of sorghum residues incorporation on soil physical and chemical properties	Erosion dynamics and nutrient loss at three phases of corn growth under wet tropical region, West Sumatra Indonesia	Carbon-mineralization kinetics in three rural soils amended with woody biochar in Taiwan	Agro-ecological land use planning using surfer tool for sustainable land management in Sumani Watershed, West Sumatra Indonesia	Soil Science Society of Bangladesh at a Glance
<b>13.45-14.00</b>	<b>O11D1-Yeong-Sang Jung</b>	<b>O11D2-Dwi Setyawan</b>	<b>O11D3-Dermiyati</b>	<b>O13D6-Kaswanto</b>	<b>China</b> <b>Renfang Shen</b>
	Self-diffusible silicate fertilizer development and its application on cultivated soils in Korea	Landscape function analysis, a simple procedure for monitoring soil surface condition in rehabilitated mine sites	Change of fungal population and fungal diversity indices by application the mixture of composted organic waste extracts from cow manure, vermicompost, and agro-industrial wastes in Ultisol	An estimation of carbon stock in fine scale agroforestry systems in West Java, Indonesia	Main Activities of Soil Science Society of China (2011.9-2013.10)

14.00-14.15	<b>O12D1-Guadalupe Degame Calalang</b>	<b>O12D2-Akhmad Rizaly Saidy</b>	<b>O12D3-Darmawan</b>	<b>O14D6-Erwin Prastowo</b>	<b>Indonesia Yuswanda Temenggung</b>
	Towards a regional soil reference system for fertility assessment and monitoring in the highlands of Mindanao (Bukidnon, Philippines): soil morphology, potentiality, suitability and constraints identification in Miarayon village	Growth performance and metal concentration of maize ( <i>zea mays</i> l.) Grown in a fly ash amended soil	The role of intensive sawah as carbon sinker in tropical region; case of Dharmasraya, West Sumatra, Indonesia	Balance of carbon and sustainability index of rice field managed organically and conventionally in Sawangan, Magelang, Indonesia	Indonesian Society of Soil Science (ISSS): Program and Activities
14.15-14.30	<b>O13D1-Supriyadi</b>	<b>O13D2-Untung Sudadi</b>	<b>O13D3-Benito Heru Purwanto/Maruf Nurdin</b>	<b>O15D6-Sumbangan Baja</b>	<b>Japan Takashi Kosaki</b>
	Soil analysis for fertilizing recommendations on corn, rice, and cassava cultivation	In situ inactivation using ameliorants and fertilizers at rationale dosage as a non-invasive remediation strategy for heavy metal contaminated agricultural-land	Soil labile and recalcitrant carbon fraction in organic and conventional rice farm in Indonesia	Land use changes with a particular reference to spatial planning regulation at Mamminasata region: an analysis using geospatial information technology	



14.30-14.45	<b>O14D1-Sri Nuryani Hidayah Utami</b>	<b>O14D2-Mohammad Nurcholis</b>	<b>O14D3-Ainin Niswati</b>	<b>O16D6-Nurmiaty</b>	<b>Korea Kim Jeong Gyu</b>
	Nitrogen efficiency of goat manure and azolla on organic rice farming in Sambirejo, Sragen, Central Java, Indonesia	Environmental changes that may occur on the Yogyakarta sand beach caused by the iron mining	Soil respiration on cassava plantation subjected by soil amendment and antagonist plant for white rot fungi on Ultisols Tulang Bawang, Lampung	Land suitability assessment for maize cultivation using a fuzzy set approach in geographic information system (GIS)	Korean Society of Soil Science and Fertilizer 2013
14.45-15.00					<b>Malaysia Shamsuddin Jusop</b>
					The Malaysian Society of Soil Science (MSSS) Report 2012/2013
15.00-15.15	Coffee break				

	<b>Chair: WMADB Wickramasinghe Hermansah</b>	<b>Chair: Keitaro Tawaraya M. Nurcholis</b>	<b>Chair: Tsugiyuki Masunaga Iin Handayani</b>	<b>Chair: Muhajir Utomo Anjal Ani Asmara</b>	<b>Chair: Ali Jamil</b>
15.15-15.30	<b>O15D1-Baba Barus</b>	<b>O15D2-Budi Hadi Narendra</b>	<b>O15D3-Arief Hartono</b>	<b>O17D6-Abdul Hadi</b>	<b>Philippines</b> Nenita De La Cruz
	Development of sustainable agricultural paddy land in Bogor District	Nusa Penida critical Karst Island: the characteristics and prospects for rehabilitation	Phosphorus status and fractions of paddy soils in Java, Indonesia	Mitigation option for N2O emissions from peat soil cultivated to oil palm in Borneo	The Philippines Society of Soil Science and Technology, Inc (PSSST): 17 Years of Dedicated Service.
15.30-16.00	<b>O16D1-Nurhajati Hakim</b>	<b>O16D2-Pratiwi</b>	<b>O16D3-Eko Hanudin</b>	<b>O18D6-Wihardjaka</b>	<b>Sri Lanka</b> P. Weerasinghe
	Use of bio-agents for Tithonia cultivation as hedgerow in Ultisols	Utilization of tin mining overburden in Bangka Island as seedling media	Some soil chemical properties affecting aluminum and iron uptake by tea plant on Andisols	Greenhouse gases fluxes on different peat agroecologies at Central Kalimantan	The Activity Report of Soil Science Society of Sri Lanka (SSSSL)
16.00-16.15	<b>O17D1-Rosyida Prihatiningsih</b>	<b>O17D2-Adipati Napoleon</b>	<b>O17D3-Cahyo Prayogo</b>	<b>O19D6-Hermansah</b>	<b>Taiwan</b> <b>Yuan Shen</b>
	Farmers' knowledge on the role of shade trees in coffee based agroforestry systems in provision ecosystem services	Assessment of Pb content of motor vehicle emissions of origin on soil and plant in Pulau Semambu Village	Carbon sequestration and soil organic matter pools under bioenergy crops reverting from arable cropping	Strategy and action plan reducing emission from deforestation and land degradation in West Sumatra Indonesia	Activity Report of Chinese Society of Soil and Fertilizer Sciences (Taiwan)

16.15-16.30		<b>O18D2-S.D.Tarigan</b>	<b>O18D3-lin Handayani</b>		<b>Thailand Chawalit Hongprayoon</b>
16.30-16.45		Nutrients loss through surface runoff from different agricultural practices in plantation crops	Indigenous knowledge of soil quality in Bengkulu, Sumatra		Soil and Fertilizer Society of Thailand
16.45-17.00			<b>O19D3-Sanjib Kar</b>		<b>Vietnam Le Thai Bat</b>
			Influence of Different Organic Manures on Nitrogen Mineralization		Some Aspects on the Vietnam Society of Soil Science (VSSS)
17.00-17.15	<b>Closing ceremony at Ballroom 3</b>				

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P2D1	Mia Ermyanyla, Baba Barus, and Akhmad Fauzi	EFFICIENCY ANALYSIS OF RICE FARMING SYSTEM IN ORDER TO SUPPORT THE SUSTAINABLE FOOD AGRICULTURAL LAND IN KABUPATEN GARUT
P3D1	Samijan, Tri Reni Prastuti and Warsito	FIELD EVALUATION OF FERTILIZER RECOMMENDATION ON LOWLAND RICE BASED ON NUTRIENT MANAGEMENT (NM-RICE) WEBSITE IN CENTRAL JAVA INDONESIA
P4D1	Soetanto Abdoellah	SOIL ASPECT IN STANDARD OF COCOA SUSTAINABILITY CERTIFICATION
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P7D1	Stefanny Stefanny, Nelvia, and Al Ikhsan Amri	SOME EFFECTS OF GROWTH AMELIORANT COMPOSITION TWO VARIETIES OF RICE ( <i>ORYZA SATIVA.L</i> ) IN THE PEAT LAND
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P9D1	Sri Minarsih and Samijan	TEST THE EFFECTIVENESS OF LIQUID ORGANIK FERTILIZER ON GROWTH AND YIELD OF BROCCOLI PLANT (BRASSLIKE OLERACEA) IN JOGONAYAN VILLAGE, NGABLAK SUB-DISTRICT, MAGELANG DISTRICT
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P6D5	R. Erwiyono, Alifah, C. Bowo, and M. H. Pandutama	RESPONSE TO WATER STRESS AMONG SELECTED CLONES OF ROBUSTA COFFEE ON ALLUVIAL PLAIN
P7D5	Risma Neswati and Christianto Lopulisa	MAIZE PRODUCTIVITY ON THERE DIFFERENT CLIMATE REGION IN SOUTH SULAWESI, INDONESIA
P8D5	Popi Rejekiningrum and Hendri Sosiawan	IMPACT OF CLIMATE CHANGE ON AVAILABILITY AND ALLOCATION OF WATER RESOURCES: CASE STUDY OF CITARUM WATERSHED, WEST JAVA
P9D5	Mizuhiko Nishida, Koji Yoshida, Kazunari Tsuchiya, and Tomoki Takahashi	RELATIONSHIP BETWEEN AVAILABLE PHOSPHORUS AND TEMPERATURE IN PADDY SOIL UNDER SUBMERGED CONDITIONS
P1D6	Magfira Syarifuddin and Meli Fitriani	SOIL TEMPERATURE MODEL AS A USEFUL

		TOOL IN CARBON BUDGET ANALYSIS
P2D6	Prayitno, M.B, Sabaruddin, D. Setyawan and Y. Parto	ESTIMATING CO <sub>2</sub> FIXATION CAPACITY AT EARLY GROWTH OF OIL PALM IN PEAT SOIL
P3D6	Erna Suryani, Sofyan Ritung, and Djaja Subardja	DEVELOPMENT OF LAND EVALUATION METHOD IN INDONESIA
P4D6	R. Kartikawati and P. Setyanto	DYNAMICS OF GREENHOUSE GASES EMISSION ON INTENSIVE PADDY RICE
P5D6	Masato Nakamura, Fumiko Oritate, Yoshito Yuyama, Masaru Yamaoka, Nguyen Phuoc Dan and Dang Vu Bich Hanh	METHANE PRODUCTION IN PADDY SOIL TREATED WITH DIGESTED SLURRY FROM ANAEROBIC DIGESTER IN VIETNAM
P6D6	Zaimire Abudushalamu, Mariko Shimizu, and Ryusuke Hatano	EFFECT OF SOIL AGGREGATE SIZE, FERTILIZER MANAGEMENT AND SOIL SALINIZATION ON N <sub>2</sub> O PRODUCTION
P7D6	Jong-Eun Lee, Yeo-Uk Yun, Jin-II Lee, Moon-Tae Choi, Yun-Gyu Nam, and Sun-Ju Kim	EMISSION OF NITROUS OXIDE (N <sub>2</sub> O) AS NITROGEN APPLICATION RATES DURING PEPPER CULTIVATION AT FLAT UPLAND IN KOREA
P8D6	Wei Sheng Wei, Fei-Neng Wang and Ren Shih Chung	ACCUMULATION AND TRANSFORMATION OF SOIL CARBON UNDER GREENHOUSE CONDITIONS FOR SEVEN YEARS
P1D7	R.E. Subandiono, E. Suryani dan D.Subardja	MORPHOLOGY CHARACTERISTICS, PEDOGENIC PROCESSES AND WETLAND SOIL CLASSIFICATION AT MUSI
P2D7	Hikmatullah, Sofyan Ritung, Sukarman, Suparto, and Muhrizal Sarwani	SOIL MAPPING IN INDONESIA: STATE OF THE ARTS
P3D7	Yusuke Takata	WHO ARE THE SOIL INFORMATION USERS?
P4D7	Hyun.B.K., Sonn,Y.K., Park.C.W, Cho. H.J., Chun.H.J.,Song.K.C., Moon. Y.H., and Noh.D.C.	INVESTIGATION OF SOIL SURVEY ON RAPID CHANGES IN KOREAN LANDUSE
P5D7	Yeon-Kyu Sonn, Chan-Won Park*, Yong-Hee Moon, Byung-Keun Hyun, Kwan-Cheol Song, Hyun-Jun Cho, Hyen-Chung Chun, and Deog-Bae Lee	SPATIAL ANALYSIS OF SOIL CHARACTERISTICS IN PADDY FIELD
P29D2	Seung-Chang Hong, Soon-Ik Kwon, Min-Kyeong Kim, Mi-Jin Chae, Goo-Bok Jung and Kyu-Ho So	EFFECTS OF NICKEL CONTENTS IN SEEDLING MIXES ON EGRMINATION AND EARLY GROWTH OF CROPS

## Program Field Tour West Java

Day 1, 23 October 2013 (see complete program in booklet)

- 07.30-11.30 Bogor-Cibodas Botanical Garden
- 11.30-14.00 Indonesian Ornamental Crops Research Institute, Segunung  
Andosol profile, lunch
- 14.00-20.30 Saung Mang Ujo, Bandung  
Dinner  
Angklung performance
- 20.30 Hotel Fave, Bandung

Day 2, 24 October 2013

- 08.30 Bandung-Jakarta/airport
- 08.30 Bandung-Tangkuban perahu-Bogor/Jakarta
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## Program Field Tour Riau

Day 1, 22 October 2013

- 13.30-15.30 Moving from Bogor to Jakarta (Soekarno-Hatta International Airport)
- 18.30-20.30 Flying to Pekanbaru (Dinner at Restaurant)
- 21.00-23.00 Moving From Pekanbaru to Pangkalan Kerinci by bus (stay at Unigraha Hotel)

Day 2, 23 October 2013

- 08.00-09.30 RGE Technology Center tour: overview of APRIL business; soils and plant laboratories.
- 09.30-12.00 Lowland plantations, Pelalawan: visit mechanized nursery, in-field look at a) Water Management including electronic water gates;
- 12.00-12.30 Lunch at the field
- 12.30-16.30 b) 3<sup>rd</sup> rotation fiber production including soil characteristics, c) species and site treatment trials.
- 17.00- Arrive at Hotel-dinner

Day 3, 24 October 2013

- 07.30 Mineral soil plantations, Tesso: in-field look at a) fiber production and soil characteristics of 3<sup>rd</sup> rotation *A. mangium*; b) fiber species – site interaction trials
- 12.30 Lunch at the field, back to Pekanbaru Airport
- 15.00 Arrive at Pekanbaru Airport
- 18.40 Arrive at Soekarno Hatta International Airport, Jakarta