



<b>THU 11<sup>TH</sup> – SUN 14<sup>TH</sup> MAY</b>		<b>(Pre-Symposium Tour in Beijing)</b>
11 <sup>TH</sup>	Registration for Pre-Symposium Tour (10:00-22:00) in the Lobby of Beijing Comfort Suites	
12 <sup>TH</sup> - 13 <sup>TH</sup>	Two days Pro-Symposium Tour	
14 <sup>TH</sup>	Leave Beijing Comfort Suites and take High-speed train to Nanjing, time to be announced	

<b>SUN 14<sup>TH</sup> MAY</b>		<b>(Registration)</b>
14:00-20:00	Registration Open	First Floor Lobby in the Conference Area
18:00-20:00	Buffet dinner	Cafe bar of the 1 <sup>st</sup> Floor

<b>MON 15<sup>TH</sup> MAY</b>		<b>(Symposium Day 1)</b>	
08:30-9:00	<b>Opening Session</b> <i>(Grand Ballroom A 2<sup>nd</sup> Floor)</i>		Presiding: Hailin Zhang
	Opening talk & Welcome Address of SPAC	10 min	Hailin Zhang
	Welcome Address of SSSC	10 min	Renfang Shen
	J.B. Jones Award Presentation	10 min	Hailin Zhang
09:00-09:30	Group photo <i>(In the front of Hotel Building)</i> Morning Break <i>(Corridor of 2<sup>nd</sup> floor)</i>		
09:30-12:00	<b>Session I: Soil Testing and Fertilizer Recommendation Around the World</b> <i>(Grand Ballroom A 2<sup>nd</sup> Floor)</i>		Chair: John Ryan
	1.1 National action of soil testing and fertilizer recommendation for both food security and environmental sustainability in China	30 min	Fusuo Zhang Zhenling Cui
	1.2 Philosophy and practices of fertilizer recommendation in North America	30 min	Ray Ward
	1.3 Reflections on the challenges facing soil and plant analysis in developing countries	30 min	Abdul Rashid John Ryan
	1.4 Soil testing and fertilizer recommendations in Australasia and South Africa	30 min	George Rayment
	1.5 European perspective of soil and plant analysis	30 min	Hans-Werner Olf
12:00-13:00	Lunch <i>(Cafe bar of the 1<sup>st</sup> Floor)</i>		
13:00-15:00	<b>Session II: Fertilizer strategy and Soil health</b> <i>(Grand Ballroom A 2<sup>nd</sup> Floor)</i>		Chair: Michael Thompson
	2.1 Data mining for sustainable crop production: is mining soil nitrogen good or bad?	20 min	Deli Chen
	2.2 Developing an efficient soil testing and fertilizer recommendation system to improve fertilizer use efficiency	20 min	Liping Yang

	2.3	Potassium and banana-alfalfa intercropping improve soil microorganisms and reduce banana Fusarium Wilt Disease	20 min	Hong Li
	2.4	Soil health parameters in biofuel cropping systems	20min	Thompson Michael
	2.5	Using NIR and multi-nutrient soil extraction in implementing the intensity, buffering capacity, and quantity concept into fertilization recommendations	20 min	Arjan Reijneveld
	2.6	A proper way to calculate the fertilizer use efficiency	20 min	Huoyan Wang
15:00-15:30	Afternoon Break (Corridor of 2 <sup>nd</sup> floor)			
15:30-17:50	<b>Session III: Soil testing to improve crop yields and quality</b> (Grand Ballroom A 2 <sup>nd</sup> Floor)			Chair: Fang Chen
	3.1	A computer or smart phone based fertilizer recommendation	20 min	Ping He
	3.2	Feeding roots not soil to maximize root efficiency for soil P acquisition by maize on calcareous soils	20 min	Xiaoqiang Jiao
	3.3	Blueberry yield and soil properties response to long-term fertigation and broadcast nitrogen	20 min	Aime Jean Messiga
	3.4	Phosphorus uptake efficiency influenced by soil pH in an acidic Ultisol for maize production	20min	M. Abdulaha-Al Baquy
	3.5	Establishment of soil nutrient abundance for winter oilseed rape (Brassica napus L.) in China	20 min	Tao Ren
	3.6	The effects of mycorrhizas on N and P concentrations in grasses, legumes and soil treated with different levels of phosphorus.	20 min	Zolani Mkile
	3.7	Sulfur fertility evaluation of field and forage crops in the Northeastern USA	20 min	John Spargo
18:20-21:00	Welcome Banquet and Chinese Cultural Show (Grand Ballroom B&C 2 <sup>nd</sup> Floor)			

<b>TUE 16<sup>TH</sup> MAY</b> <span style="float: right;"><b>(Symposium Day 2)</b></span>				
08:00-08:30	Poster Setup (Corridor of the 2 <sup>nd</sup> floor)			
08:30-12:00	<b>Session IV: Chinese Soil Testing and Fertilizer Recommendation Project from 2005 to 2016</b> (Grand Ballroom A 2 <sup>nd</sup> Floor)			Chair: Xinping Chen
	4.1	An overview of Chinese soil testing and fertilizer recommendation project	20 min	Rongfeng Jiang
	4.2	Soil testing and fertilizer recommendation in spring maize in Northeast China Plain	20 min	Qiang Gao
	4.3	Soil testing and fertilizer recommendation in winter wheat in North China Plain	20 min	Youliang Ye
09:30-10:30	Morning Break and Poster Session (Corridor of the 2 <sup>nd</sup> floor)			
	4.4	Soil testing and fertilizer recommendation in citrus (or rice) in Southwest China	20min	Xiaojun Shi
	4.5	Soil testing and fertilizer recommendation in rape	20 min	Jianwei Lu
	4.6	Developing efficient regional fertilizer recommendation for China	20 min	Xinping Chen
11:30-13:00	Lunch (Cafe bar of the 1 <sup>st</sup> Floor)			
13:00-15:00	<b>Session V: Nutrient testing and management</b> (Grand Ballroom A 2 <sup>nd</sup> Floor)			Chair: Liping Yang
	5.1	Procedural differences in soil and fertilizer silicon determinations and implications	20 min	Jim Wang
	5.2	Comparison of four methods for determination of Humic Acid in Fertilizer Materials	20 min	Karim Shahbazi
	5.3	0.1M Ammonium Acetate as Extractant of Soil Available Potassium	20 min	Kambiz Bazargan

	5.4	Effect of ASI systematic approach on improve the potassium nutrient management for regional farmland	20min	Fang Chen
	5.5	Training workshops and proficiency testing contribute to much-needed improvement in the quality of acid sulfate soil testing in Australia	20 min	David Lyons
	5.6	Multiple Assessments of Trends in Soil Measurement Performance by Laboratories Across Methods and Time – Australasia	20 min	George Rayment
15:00-16:00	Afternoon Break and Poster Session <i>(Corridor of the 2<sup>nd</sup> Floor)</i>			
16:00-18:00	<b>Session VI: New Techniques for Agric. and Environ. Testing</b> <i>(Grand Ballroom A 2<sup>nd</sup> Floor)</i>			Chair: Rao Mylaparapu
	6.1	The development of isotope ratio mass spectrometer and it's application in environment	20 min	Xiao Ma
	6.2	Application of Gas Isotope Ratio Mass Spectrometer in soil and plant analysis	20 min	Teng Wen
	6.3	On improving the diffusion method for determination of $\delta^{15}\text{N-NH}_4^+$ and $\delta^{15}\text{N-NO}_3^-$ in soil extracts	20 min	Peiyi Zhang
	6.4	A novel element analyzer with online regeneration fillers	20min	Weizhen Sun
	6.5	A simple methods to vary soil heterogeneity in three dimensions in experimental mesocosms	20 min	Yongjie Liu
	6.6	Evaluation of a soil sampling strategy to evaluate soil nitrogen dynamics after slurry injection in field trials	20 min	Hans-Werner Olf
18:00-19:30	Buffet dinner <i>(Cafe bar of the 1<sup>st</sup> Floor)</i>			
19:00-21:00	<b>ISSPA International Governance Forum</b> (The place to be announced)			Chair: Vossie Wilsnach
	International Governance for Future International Soil and Plant Analysis Symposia		30 min	Warren Webber
	Discussions on directions and guidelines for the future management of ISSPA events		30 min	Facilitated by Chair
	Forum resolutions and action plan		30 min	Facilitated by Chair
	The Next ISSPA in 2019		30 min	

<b>WED 17<sup>TH</sup> MAY</b> <span style="float: right;"><b>(Symposium Day 3 – Field Trip)</b></span>				
08:00	Board bus in the front of the Hotel			
08:00-17:30	Field Trip			
17:30	Return to Hotel and dinner			
18:00-19:30	Buffet dinner <i>(Cafe bar of the 1<sup>st</sup> Floor)</i>			

<b>THU 18<sup>TH</sup> MAY</b> <span style="float: right;"><b>(Symposium Day 4)</b></span>				
08:30-09:50	<b>Session VII: Lab. Quality Control and Assessment</b> <i>(Hall A 2<sup>nd</sup> Floor)</i>			Chair: Leticia Sonon
	7.1	Quality assurance and problem solving techniques used in soil testing labs	20 min	Manjula Nathan
	7.2	Maintaining efficiency and quality in an agricultural laboratory	20 min	Kendal Henderson* and Hailin Zhang
	7.3	Quality Assurance and Quality Control programs at the University of Georgia Agricultural and Environmental Services Laboratories	20 min	Leticia Sonon
	7.4	Quality control in a commercial, accredited laboratory in New Zealand	20 min	Roger Hill

09:50-10:20	Morning Break <i>(Corridor of the 2<sup>nd</sup> floor)</i>		
10:20-11:40	<b>Session VIII: Soil Testing and Water Resources Protection</b> <i>(Grand Ballroom A 2<sup>nd</sup> Floor)</i>		Chair: Ping He
	8.1	Using soil test methodology to assess the bioavailability of particulate nutrients in sediments exported to the Great Barrier Reef, Australia.	20min Robert De Hayr
	8.2	Numerical investigation into the effect of root length distribution of wheat on seasonal water acquisition under a temperate maritime climate	20 min Kefeng Zhang
	8.3	Crop rotation and fertilization effect on nitrate content of soil	20 min Zoltan Toth
	8.4	Effects of Chinese Pine density on soil moisture and its temporal stability in Rocky Mountain Area of China	20 min Zitian Li
11:40-13:00	Lunch <i>(Cafe bar of the 1<sup>st</sup> Floor)</i>		
13:00-14:40	<b>Session IX: Measurement of Soil Properties</b> <i>(Grand Ballroom A 2<sup>nd</sup> Floor)</i>		Chair: John Spargo
	9.1	Effects of changing pH and exchangeable cations on dispersion behavior of different clay types	20min Yingcan Zhu
	9.2	Quantitative research on the relationship between salinity and crack length of soda saline-alkali soil	20 min Jianhua Ren
	9.3	Measurement of Exchangeable Cations in Soils as Influenced by EC and clay dispersion Level	20 min Moloud Rahman
	9.4	Suitability of computed tomography to map the compaction process using the example of cultivator and plough for two matric potentials	20min Julia Pöhlitz
	9.5	Micromechanism and macrophenomena of the interactions between soil particles	20 min Xinmin Liu
14:40-14:50	Closing Remarks		John Spargo

## LIST OF POSTERS

POSTER CODE	POSTER TITLE	POSTER AUTHORS
P1	Interactive effects of liming and straw retention on yield and nitrogen uptake in a double rice-cropping system	Ping Liao, Yongjun Zeng, Xiaohua Pan, Qinghua Shi, and Shan Huang*
P2	Determination of Suitable Extractants for Sulphur Availability Indices in Jasmine Rice growing Soils in Thailand	Nutruja Hirunburana, Paphatchya Sanitmatcharo, Somchai Anusontpornperm and Suphicha Thanachit*
P3	An Assessment of Heavy Metals Contamination within a Dumpsite Environment Using Pollution Indices	O. S. Shittu*, O. J. Ayodele, A. O. A. Ilori and A. T. Afuye
P4	Tillage systems and fertilization effect on seasonal CO <sub>2</sub> and N <sub>2</sub> O emissions for orthic luvisol under spring barley	Ján Horák, Dušan Igaz and Viliam Bárek
P5	Nutrient Uptake Patterns in Sugarcane Affected by Yellow Canopy Syndrome	Zofia A Ostatek-Boczynski, Davey Olsen and Bernard L Schroeder
P6	Leaching of Sulfonamide Antibiotics from a Farmland Entisol and Effects of Biochar Application	Chen liu, Zhiqiang Zhou, Yang He and Xiangyu Tang,*
P7	The effect of biochar on the soil hydrophysical properties	Dušan Igaz, Ján Horák, Viliam Bárek and Miriam Jarošová
P8	Analysis of plant available nutrients by use of ICP-MS, ICP-OES and MP-AES – simplifying the analytical approach in everyday analysis	Valentina Zivanovic*, Ivan Dragicevic and Tore Krogstad
P9	AgriLASA - the Southern African experience	Wilsnach, C.L., Barnard, R.O., Janse van Vuuren, J.A. and Pienaar, D., Visser, M.H.
P10	A Response of Cassava and Plant Nutrients Retention Ability to Different Rates of Bentonite and K-Fertilizer in Typic Paleustult	Apitsara Charoenphon, Dararat Aunsanee, Somchai Anusontpornperm and Suphicha Thanachit*
P11	Maize nitrogen nutrient uptake and accumulation in different regions of China	Qingsong Zhang, Zhenling Cui, Fusuo Zhang
P12	A rapid and multi-element method for the analysis of major nutrients in grass (Lolium perenne) using energy dispersive X-Ray fluorescence	Karen Daly, Denis Brennan and Anna Fenelon
P13	Fractionated Silicon from Different Soil Conditioners and its Availability Effect on Sugarcane Grown on Oxyaquic Haplustalf	Suphicha Thanachit*, Somchai Anusontpornperm and Panida Plodsunthia
P14	Growth monitoring of above ground parts of the plants in conditions of soil water content changes	Viliam Bárek, Peter Halaj, Alan Klimaj, Vladimír Kiš
P15	Multiparametric analysis of factors caused plant water stress	Peter Halaj, Viliam Bárek, Alan Klimaj, Vladimír Kiš
P16	Current potassium management practices and optimal application rates for rice production in China	Yulong Yin
P17	The responses of soil microbial activities to oil, lead, cadmium and their combined contaminations	Zhou Ji-hai, Cheng Kun, Jin Zhi-nong, Yuan Yinghong, Fan Houbao
P18	Comparative ecotoxicities of soil-plant interactive system from exposure to nanoparticles	Yu-Jeong Jeong, Kyungwha Baek, Sooyeon Lee *
P19	Determination of optimal nitrogen application rate for sustainable wheat production	Hao Ying, Youliang Ye, Zhenling Cui,* Xinpeng Chen, Fusuo Zhang
P20	Comparative Eco-toxicities of soil-plant interactive system from exposure to nanoparticles	Yu-Jeong Jeong, Kyungwha Baek, Sooyeon Lee *
P21	Potential of vetiver grass (Chrysopogon zizanioides L.) for phytoremediation of soils contaminated with heavy metals	Violina Angelova, Krasimir Ivanov, Huu Q. Lee
P22	Foliar fertilization of maize by zinc hydroxy nitrate spray	Krasimir Ivanov, Nguen Nguen, Tonyo Tonev, Violina Angelova

P23	Effect of biochar application on phosphorus sorption in a clay soil	Rolivhuwa Mudau and Jude J.O Odhiambo
P24	Effects of soil mulching on maize yield and water use efficiency across the precipitation and temperature gradients in China: a meta-analysis	Jian-Sheng Ye, Yue-Yuan Yu, Yan-Hong Gong
P25	Status of soil fertility in different regions of Ukraine	Oleg Maslov*, Mariia Symonenko and Kateryna Gubina
P26	Effects of Soil Amendments on Labile Organic Carbon and Soil Enzymes Activities in Upland Red Soil	Yuan Yinghong, Zhou Jihai, Huang Qianru, Fan Houbao
P27	Influence of temperature on molybdate reactive phosphorus analysis using real-world soil samples	Michael S. Hall, Samuel D.H. Poynter
P28	Evaluation of Si Supplying Capacity of Paddy Soils by 1 mol L <sup>-1</sup> HAc-NaAc Extraction Method	Liu Ming-Da*, Yang Dan, Wang Yao-jing, He Na, Zhang Yu-Long
P29	The variation of the soil minor elemental content during the wind erosion	Caixia Zhang
P30	Study of soil salinization profile characteristics interpretation based on electromagnetic inductor	Song Jiang-hui, Zhu Yong-qi, Chen Jian-hua, Yang-Guang, Wang Hai-jiang
P31	Potential Alterations of Chemical Composition of Cellulose Components in Soil Organic Matter during the Procedure of 0.1 M NaOH Extraction	Yujun Xu , Xi Chen , Hongjian Gao, Jingdong Mao, Michael L Thompson
P32	Quality improvement of analytical procedures and laboratories by VDLUFA EU Fertilizer Ring Test	J. Breue, B. Dittrich, H. Hartwig, G. Kießling, R. Neuenfeldt, I. Paradies-Severin, M. Schraml, K. Severin and W. Übelhör, H.-W. Olf
P33	Determination of hydroxylated polybrominated diphenyl ethers in plants by ASE-SPE combined with pre-column silylation derivatization-gas	Leilei Xiang, Fang Wang*
P34	Study on The Chemical Degradation Characteristics of Ionic Type Rare-Earth Mining in Xinfeng Country	Q. Zhang, X.M. Zhao*, X. Guo, G.Y. Wan, C.Y. Zhou, G.J. Jiang
P35	Rapid soil component analysis using Near-infrared reflectance spectroscopy	Haifeng Luo ; Duan mujun