

土壤-肥料-作物-环境国际论坛

International Forum on Soil, Fertilizer, Crop and Environment

(IFSFCE2020, Announcement No. 2)

Soil, as a basic component of the earth surface, has calmly and firmly supported the crops growth, and their yields and quality for a tremendously long time, and then sustained our human health, and the development of societies. Fertilizers, including chemical fertilizers, manures and biofertilizers, are the maximum materials we applied to the soil, which strongly affect the soil physical, chemical and biological processes, and ultimately affect the soil fertility, productivity and health conditions. Crops not only provide food resources for our human, but also surround us as the largest man-made landscape together with other environmental partners, such as different plants, various animals and natural landforms. Scientific fertilizer input and reasonable soil management are undoubtedly the key approaches to improve soil quality and health, harvest high yield and good quality of crops, and achieve the goal of green and sustainable environment. *The International Forum on Soil, Fertilizer, Crop and Environment* will be held online on December 9-10 of 2020, with the theme of “soil-fertilizer-crops and green development of agriculture”, to share the latest theoretical and technological progress in soil fertility, fertilizer management, and crop nutrient use research, discuss the potential future development trends in these and relevant fields, and promote possible exchanges and cooperation among scholars and relevant personnel. We hope that this forum will contribute more knowledge and technology to the green development of agriculture in China and other countries. Welcome to our forum.

Forum organizers

College of Natural Resources and Environment, Northwest A&F University, China

College of Resources and Environmental Sciences, Nanjing Agricultural University, China

College of Resources and Environment, Huazhong Agricultural University, China

Forum Dates

The forum will be held on line on Dec. 9th-10th, 2020, and the agenda is attached.

Forum Venue (Online + offline)

1. Online: *Voovmeeting* (international version of Tencentmeeting) and *Tencentmeeting* (domestic version), online ID and password will inform participants through email. Scholars who have not signed up for the conference can participate in the conference through online live broadcast. Live conference link: <https://meeting.tencent.com/l/LjKZJQCssdnu>

2. Offline Sub Venue:

- (1) Northwest A&F University: Conference room 307, College of Resources and Environment.
- (2) Nanjing Agricultural University: B211, College of Resources and Environmental Sciences
- (3) Huazhong Agricultural University: Room 204, College of Resources and Environment.

Lectures and posters

Plenary lectures: Given by invited speakers.

Special Symposium for Young Scientists: Young scientists to give oral presentations on their latest achievements in soil, fertilizer, crop and environment research fields.

Posters: For all scientists and graduates in soil, fertilizer, crop and environment research fields. Poster size, width 80 cm and height 120 cm in PDF. If you want to give a poster presentation, please contact Wei Zheng (zheng_wei@nwafu.edu.cn), and tell him your name, position (academic title), institution, and your lecture and poster title and abstract (<500 words) before Dec. 5, 2020.

Forum Organization Committee

Chairs:

Prof. Zhaohui Wang, Northwest A&F University, China
Prof. Shiwei Guo, Nanjing Agricultural University, China
Prof. Jianwei Lu, Huazhong Agricultural University, China

Organizing Committee:

Prof. Zhaohui Wang, Northwest A&F University, China
Prof. Shiwei Guo, Nanjing Agricultural University, China
Prof. Jianwei Lu, Huazhong Agricultural University, China
A/Prof. Xiaokun Li, Huazhong Agricultural University, China
A/Prof. Jinshan Liu, Northwest A&F University, China
A/Prof. Min Wang, Nanjing Agricultural University, China
A/Prof. Tao Ren, Huazhong Agricultural University, China
Dr. Mei Shi, Northwest A&F University, China

Steering Committee:

Prof. Fusuo Zhang, Chair, China Agricultural University
Prof. Jiabao Zhang, Institute of Soil Science, CAS
Prof. Qirong Shen, Nanjing Agricultural University, China
Prof. Jialong Lv, Northwest A&F University, China
Prof. Wenfeng Tan, Huazhong Agricultural University, China
Prof. Jianfeng Ma, Okayama University, Japan.
Prof. Petra Marschner, University of Adelaide, Australia
Prof. Paolo Nannipieri, University of Firenze, Italy
Prof. Jianguo Liu, Michigan State University, America

Secretary:

Dr. Mei Shi, Northwest A&F University, China
A/Prof. Min Wang, Nanjing Agricultural University, China
A/Prof. Zhifeng Lu, Huazhong Agricultural University, China
A/Prof. Wei Zheng, Northwest A&F University, China
Dr. Dabin Zhang, Northwest A&F University, China

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Wei Zheng(郑伟): Email: zheng_wei@nwafu.edu.cn. Mobile: +86 177 9179 1527

Plenary Speakers (According to the report order):

Prof. Jianguo Liu, Michigan State University, America

https://www.canr.msu.edu/people/jianguo_jack_liu

Lecture: Metacoupling framework and applications in sustainable development

Prof. Xueming Yang, Harrow Research and Development Centre, Agriculture and Agri-Food Canada

<https://profilis-profiles.science.gc.ca/en/profile/xueming-yang-ph-d?page=1>

Lecture: Legume cover crops as nitrogen source for corn in a conventional and an organic managed soybean-winter wheat-corn rotations

Prof. Jianfeng Ma, Okayama University, Japan

<http://www.rib.okayama-u.ac.jp/plant.stress/english/member.html>

Lecture: Cadmium accumulation in cereal crops

Prof. Petra Marschner, University of Adelaide, Australia

<https://www.adelaide.edu.au/directory/petra.marschner>

Lecture: Drivers of C and N cycling in semi-arid and arid climate

Prof. Hailin Zhang, Oklahoma State University, America

<https://agriculture.okstate.edu/departments-programs/plant-soil/people/faculty.html>

Lecture: Soil and nutrient management strategies in the US

Prof. Qirong Shen, Nanjing Agricultural University, China

<http://re.njau.edu.cn/info/1088/9209.htm>

Lecture: Manures and biofertilizers in green development of agriculture in China

Prof. Xinping Chen, Southwest University, China

<http://zihuan.swu.edu.cn/viscms/zihuanidex/jiaoshou4231/20190728/364608.html>

Lecture: Soil and plant nutrient management in China

Prof. Ismail Cakmak, Sabanci University, Turkey

<http://myweb.sabanciuniv.edu/cakmak/>

Lecture: Bridging the gap between agronomy and human health

Prof. Paolo Nannipieri, University of Firenze, Italia

<https://www.unifi.it/p-doc2-0-0-A-3f2a3d2b363030.html>

Lecture: The soil biological system and the nitrogen dynamic

Prof. Philip John White, King Saud University, Saudi Arabia

<https://www.hutton.ac.uk/staff/philip-white>

Lecture: The biofortification of cereal crops with zinc

Attachment: Agenda (Beijing Time)

Dec. 9 th (Beijing Time) 12月9日	Activity 主题	Participant 参会专家	Host 主持人
8:00-8:30	Opening 开幕致辞	Speech by leaders 领导致辞	Zhaohui WANG (王朝辉)
Plenary lectures 特邀报告			
8:30-9:10	Metacoupling framework and applications in sustainable development 可持续发展中的大数据耦联与应用	Jianguo LIU	Zhaohui WANG (王朝辉)
9:10-9:50	Legume cover crops as nitrogen source for corn in a conventional and an organic managed soybean-winter wheat-corn rotations 传统和有机大豆-小麦-玉米轮作管理中的豆科覆盖填闲与氮素供应	Xueming YANG	
9:50-10:30	Cadmium accumulation in cereal crops 谷类作物中镉的积累	Jianfeng MA	Shiwei GUO (郭世伟)
10:30-11:10	Drivers of C and N cycling in semi-arid and arid climate 干旱和半干旱条件下碳氮循环的驱动因素	Petra MARSCHNER	
11:10-11:50	Soil and nutrient management strategies in the US 美国的土壤与养分管理策略	Hailin ZHANG	
11:50-14:00 BREAK 午休			
14:00-14:40	Manures and biofertilizers in green development of agriculture in China 有机肥、生物有机肥与中国农业绿色发展	Qirong SHEN (沈其荣)	Jianwei LU (鲁剑巍)
14:40-15:20	Soil and plant nutrient management in China 中国的土壤与植物养分管理	Xinping CHEN (陈新平)	
15:20-16:00	Bridging the gap between agronomy and human health 农艺进步与人类健康	Ismail CAKMAK	
16:00-16:40	The soil biological system and the nitrogen dynamic 土壤生物系统与氮循环	Paolo NANNIPIERI	Jinshan LIU (刘金山)
16:40-17:20	The biofortification of cereal crops with zinc 禾谷类作物的锌强化	Philip John WHITE	
17:20-18:00	Summary for the invited presentation 特邀报告会议总结	Shiwei GUO (郭世伟)	

Dec. 10th (Beijing Time) 12月10日	Activity 主题	Participant 参会专家	Host 主持人
Special Symposium for Young Scientists 青年学者专场			
8:00-8:20	Microbial siderophore for rhizosphere health 铁载体与根际健康	Zhong WEI (韦中)	Wei ZHENG (郑伟)
8:20-8:40	Assembly of mycobiome in agriculture 农业真菌组构建	Cheng GAO (高程)	
8:40-9:00	Reexamining soil microbial community with a cell size perspective 基于细胞大小视角的土壤微生物群落特征初探	Bin MA (马斌)	
9:00-9:20	Root exudates mediate plant-soil feedbacks 根系分泌物介导的植物-土壤反馈	Jun YUAN (袁军)	
9:20-9:40	Microbial biogeography and their ecological functions in agricultural ecosystem 农田土壤微生物地理格局及其生态功能	Shuo JIAO (焦硕)	
9:40-10:00	Soil bacterial community and functions in response to long-term phosphate fertilizer application in dryland of Loess Plateau 旱地土壤细菌群落与功能对长期磷肥施用的响应	Jinshan LIU (刘金山)	
10:00-10:20	Spatio-temporal evolution of soil microbial communities in apple orchards with long-term organic substitution 苹果园长期有机替代土壤微生物群落时空演变	Wei ZHENG (郑伟)	Min WANG (王敏)
10:20-10:40	Potassium in rice-oilseed rape rotation system: from soil to table quality 稻油轮作中的钾：从土壤到餐桌的质量调控	Xiaokun LI (李小坤)	
10:40-11:00	Potassium on crop photosynthetic productivity: a systematic regulation of leaf expansion, photosynthesis and hydraulics 作物光合生产力与钾：叶片扩张、光合与水动力学过程的综合调控	Zhifeng LU (陆志峰)	
11:00-11:20	Genetic regulation of nitrogen use efficiency in Brassica napus: 油菜氮效率的基因调控	Guangda DING (丁广大)	
11:20-11:40	Mesophyll conductance influences quantitative estimation of water-use efficiency 叶肉导度影响植物水分利用效率的定量预测	Xiaoying GONG (巩晓颖)	
11:40-12:00	Nitrogen management in Citrus orchards of China: Challenges and implications 中国柑桔园氮素管理：挑战与启示	Yueqiang ZHANG (张跃强)	
12:00-13:40 BREAK 午休			

Dec. 10th (Beijing Time) 12月10日	Activity 主题	Participant 参会专家	Host 主持人
13:40-14:00	Soil magnesium and magnesium fertilizer in China 中国土壤镁素状况及镁肥的提质增效作用	Liangquan WU (吴良泉)	Zhifeng LU (陆志峰)
14:00-14:20	Boron acquisition in Brassica napus 甘蓝型油菜 中硼的吸收利用	Sheliang WANG (汪社亮)	
14:20-14:40	Iron deficiency in rice under drip irrigation on calcareous soil: Mechanism and regulation 石灰 性土壤上滴灌水稻缺铁机质与调控	Xinjiang ZHANG (张新疆)	
14:40-15:00	Status of micro-element nutrition of wheat grains in China 中国小麦籽粒微量元素营养现状	Mei SHI (石美)	
15:00-15:20	Absciscic acid-mediated modifications of radial apoplastic transport pathway play a key role in Cd uptake in hyperaccumulator Sedum alfredii 脱落酸介导的径向质外体转运途径的改变在超 积累东南景天吸收 Cd 中起关键作用	Qi TAO (陶琦)	
15:20-15:40	Fertilizer-based remediation material: Mechanisms and applications 基于肥料的修复材料：修复机理及应用	Zhen LI (李真)	
15:40-16:00	How to keep Chinese food system within the environmental limits 如何保证中国的食品安全	Yuanchao HU (胡元超)	
16:00-16:20	Building up dryland soil carbon and nitrogen pools via cultivation of green manure crops 种植绿肥作物提升旱地土壤碳氮库	Dabin ZHANG (张达斌)	Mei SHI (石美)
16:20-16:40	The mechanism of mulching maize yield increase 覆盖栽培提高玉米产量的机理研究	Ziyan LI (李紫燕)	
16:40-17:00	Mixture of controlled-release and normal urea to improve agronomic and environmental benefits for maize in Northeast China 控释尿素与常规尿素混 配改良东北玉米的农艺和环境效益	Yin WANG (王寅)	
17:00-17:20	Nitrogen, phosphorus and potassium demand of spring wheat and potential of reducing fertilizer application in Ningxia 宁夏引黄灌区春小麦氮磷 钾需求及化肥减施潜力	Xi'na WANG (王西娜)	
17:20-17:40	Booting stage is the key timing for late nitrogen application in improving grain yield and quality of wheat 孕穗期施氮肥提高小麦产量和品质	Cheng XUE (薛澄)	
17:40-18:00	The regulation of tillage practice and nitrogen rate for improving soil quality and wheat yield in Shandong 耕作模式与施氮量对山东土壤质量和 冬小麦产量的调控效应	Yong LI (李勇)	
18:00-18:20	Summary for the Special Symposium Closing ceremony 闭幕式	Jianwei LU (鲁剑巍)	