



Workshop
Agroecology – Agriculture Green Development
(AGD)
Co-design of the collaborative program

10-12 April, 2019

Venue: Rm 5-219, College of Resources and Environmental Science Building
China Agricultural University

Objectives of the workshop: To discuss and select the most relevant PhD/postdoc/teaching co-supervised projects to begin with in the AGAD international lab



The workshop is supported by the French Embassy in China

DETAILED AGENDA

Wednesday, April 10	
9:00	Opening speech (Fusuo Zhang, Philippe Grieu, Christophe Salon)
	Theme 1: The framework of AGD
	Chair by Jianbo Shen
9:15	the Framework of Agriculture Green Development Speaker : Shen Jianbo (CAU-CRES) (15'+ 15' discussion)
9:45	Agriculture in France: current major challenges and major research in agroecology Speaker: Nicolas Munier-Jolain (INRA) (15'+ 15' discussion)
10:15	Break and take a group photo in front of the building
	Beginning of presentation and discussion of projects (20' presentation, 10' discussion)
	Theme 2: Cropping system design
	Chair by Drs. Nicolas Munier-Jolain/Chaochun Zhang
10:30	Design and multicriteria assessment of diversified low input cropping system prototypes to decrease pesticides and fertilizers use and improve water use efficiency Speaker : Laurent Bedoussac (INRA-Toulouse), potential co-supervisors Wenfeng Cong / Chaochun Zhang
11:00	Diversity of cropping systems and diversity of performances in north China plains: multisector evaluation and analysis of trade-offs Speaker : Nicolas Munier-Jolain (INRA-Dijon), potential co-supervisors Chaochun Zhang / Wenfeng Cong
11:30	Designing future cropping systems in China: Concept and Progress Speaker : Wenfeng Cong (CAU-CRES), potential co-supervisor Laurent Bedoussac
12:00	Valuation ecosystems services in agro-ecosystems Speaker: Fan Fan (CAU-CRES)
12:30	Lunch at Ganyuan Restaurant
	Theme 3: Multi-cropping system functions
	Chair by Drs. Philippe Debaeke / Wenfeng Cong
14:00	Benefits of multicropping systems help us gain insight into cropping system design Speaker : Chaochun Zhang (CAU-CRES), potential co-supervisors Nicolas Munier-Jolain
14:30	Enhanced P use efficiency in multicropping system Speaker : Xiaoyan Tang (Sichuan Agricultural University), potential co-

	<p>supervisor</p> <p>15:00 Determination of soybean yield potential, optimal variety type and crop management under present and future climate: a France-China comparison Speaker : Philippe Debaeke (INRA-Toulouse), potential co-supervisors Wenfeng Cong / Chunjie Li</p> <p>15:30 Break</p> <p>16:00 Impact of cover crops on N₂O emissions by soils Speaker : Bernard Nicolardot (Agrosup-Dijon), potential co-supervisors Ying Zhang /Wenfeng Cong</p> <p>16:30 Nitrogenous pollution released from cropping systems Speaker : Ying Zhang (CAU-CRES), potential co-supervisor Bernard Nicolardot</p> <p>17:00 Analyzing the effect of agro-ecological cropping practices on the quality of maize establishment Speaker : Jay Ram Lamichhane (INRA-Toulouse), potential co-supervisors Chunxu Song /Chaochun Zhang</p> <p>17:30 Plant beneficial microbes and their roles in biocontrol Speaker : Chunxu Song (CAU-CRES), potential co-supervisor Jay Ram Lamichhane</p> <p>18:00 Impact of soil and irrigation heterogeneities on plot production and environmental impacts – a modeling approach Speaker : Philippe Debaeke (INRA-Toulouse), potential co-supervisors Wenfeng Cong / Chunjie Li</p> <p>18:30 Functional characterization of native and selected Legumes root systems Speaker : Philippe Debaeke (INRA-Toulouse), potential co-supervisors Wenfeng Cong / Chunjie Li</p> <p>19:00 End of day and Dinner at the Ganyuan Restaurant</p>
Thursday, April 11	<p>Theme 4: Plant-soil-microbe processes of cropping systems Chair by Drs. Manuel Blouin/Jingjing Peng</p> <p>9:00 Assessment of biocontrol methods in crops Speaker : Sylvain Jeandroz (Agrosup-Dijon), potential co-supervisors Jingjing Peng</p> <p>9:30 Soil microbiota in the mediation of interspecies interactions intercropping Speaker : Junling Zhang (CAU-CRES), potential co-supervisor Barbara Pivato</p> <p>10:00 Role of mycelium network and associated bacteria in cereal-legume mixed cropping systems Speaker Diederik VanTuinen (INRA-Dijon), potential co-supervisor Gu Feng</p>

10:30	Cooperation between mycorrhizal fungus and P solubilizing bacteria enhance soil P utilization Speaker :Gu Feng (CAU-CRES) , potential co-supervisor Diederik VanTuinen
11:00	Break
11:30	Understanding the mobilization and recycling of organic P in sylvo-arable agroforestry systems to improve sustainability Speaker : Ciara Pistochi (SupAgro_Montpellier) , potential co-supervisors Lin Zhang
12:00	Combined responses of bacterial and fungal communities to global change: a meta-analysis approach Speaker: Marion Prudent (Dijon) , potential co-supervisors Sanfeng Chen
12:30	Lunch at Ganyuan Restaurant
	Theme 4: Plant-soil-microbe processes of cropping systems (continued) Chair by Drs. Sylvain Jeandroz / Chunxu Song
14:00	Impact of intercropped plant species and varieties on the rhizosphere microbiota Speaker : Barbara Pivato (INRA-Dijon) , potential co-supervisor Junling Zhang
14:30	Role of root-rhizosphere microbiome in plant productivity and plant health Speaker : Jingjing Peng (CAU-CRES) , potential co-supervisor
15:00	Adaptive strategies for tolerance to heat stress, water stress or combined heat and water stresses in a range a grain legumes species Speaker : Marion Prudent (INRA-Dijon) , potential co-supervisors Sanfeng Chen
15:30	Paenibacillus beijingensis BJ-18 provides nitrogen for plants and promotes plant growth, nitrogen uptake and metabolism Speaker : Sanfeng Chen (CAU-Life Sci.) , potential co-supervisor Marion Prudent
16:00	Break
16:30	Studying cluster root development in white lupin: an organ dedicated to efficient phosphate acquisition from the soil Speaker : Benjamin Péret (CNRS-Montpellier) , potential co-supervisors Jianbo Shen/Kemo Jin/Lingyun Cheng
17:00	Building up a better soil for AGD by “smart” root Speaker : Kemo Jin (CAU-CRES) , potential co-supervisor Benjamin Péret
17:30	Assessing the impact of keystone Lumbricid earthworms (keystone species) on greenhouse gasses, soil quality, water fluxes, carbon sequestration and productivity in an agricultural context – a multifunctional approach Speaker : Manuel Blouin (Agrosup-Dijon) , potential co-supervisors Chong

	Wang
18:00	Adaptation of a MOOC on Agroecology to the Chinese context Speaker : Chiara Pistochi
18:30	End of day and Dinner at Ganyuan