Пт 20.08.2021 15:27 **教育培**训学院培训服务部 <u>xkjs@mail.hzau.edu.cn</u>

News script for CICA seminar

Dear Sir/Madam,

Here is the news script for CICA Smart Agriculture Application and Development Seminar, please check the document.

Best regards,

Huazhong Agricultural University.

CICA SECRETARIAT
C H A N C E R Y
Incoming No. 14-7/751
Date 23.03.2021

CICA Smart Agriculture Application and Development Seminar (Phase II) is held in Huazhong Agricultural University

CICA Smart Agriculture Application and Development Seminar (Phase II) is held in Huazhong Agricultural University (HZAU) from August 18 to 19, 2021. A total of 510 teaching and research staffs from institutions of higher learning, research institutes and government departments of 10 member states of CICA participated in this seminar. They are from Kazakhstan, Thailand, Turkey, Palestine, Tajikistan, Uzbekistan, Bangladesh, Egypt, Iraq and China.

Dr. Longfu Zhu, Dean of College of Plant Science and Technology of HZAU, delivered a speech on the opening ceremony. He mainly introduced the general situation of HZAU, the major contents and significance of this seminar. He hoped that through this seminar, agricultural cooperation within the framework of CICA would be really promoted, exchanges and sharing of smart agriculture among member countries would be really strengthened, and the agriculture of all countries would achieve greater development.

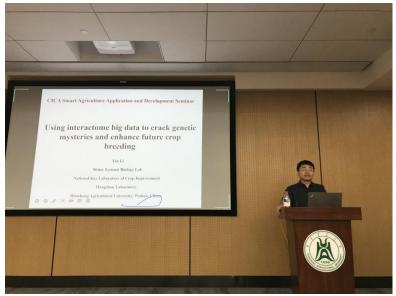


The lectures in the seminar were given in English and simultaneous interpretation for Russian was provided. Centering on biological big data and smart breeding, smart equipment and smart production, agricultural big data and agricultural decision model, 12 experts from HZAU, Beijing Love Conon of Samos, Guangzhou XAG Technology

Limited Co., FengNong shareholding corporation, Guangxi Hi Sugar Technology Co., Green Care Agricultural Technology Co. and other institutions presented academic reports.



In the theme lecture of "biological big data and smart breeding", Professor Lin Li from HZAU emphasized the importance of smart breeding in smart agriculture, introduced the definition and utilization of biological big data, and exemplified their applications in directed breeding. Prof Tingting Guo from HZAU introduced pattern discovery, predictive modeling, and biotechnology innovations in plant breeding and genetics. She explained how plants interact with the environment and how to improve breeding strategies for crop production. She also gave detailed examples to illustrate the application of these knowledge. Dr. Jianming Guo, founder and CEO of Beijing Aikenong Technology Co., Ltd., introduced the current situation and trends of Agriculture in China, looked into the future of smart agriculture, and shared real cases of empowering agriculture with digital tools.



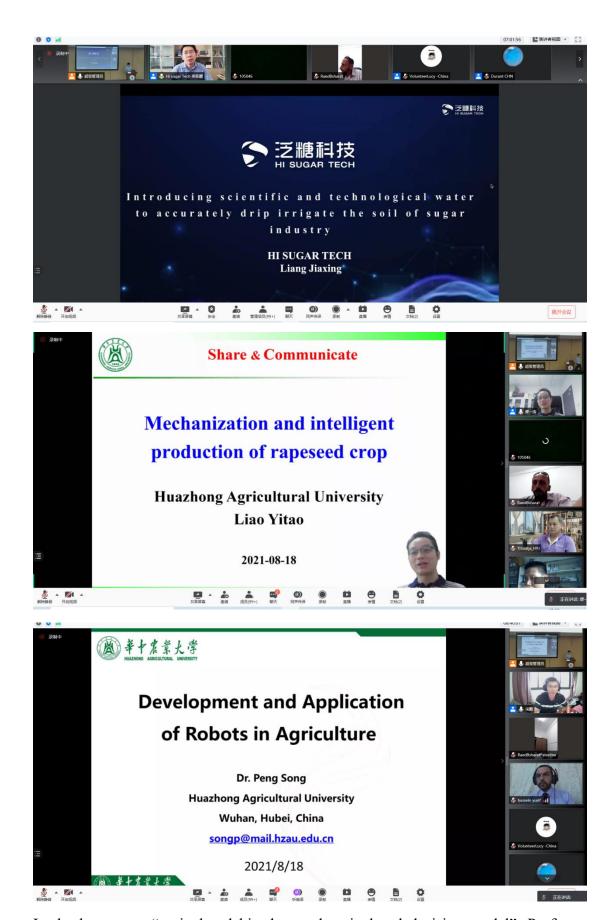




In the lecture with the theme of "smart equipment and smart production", Sean

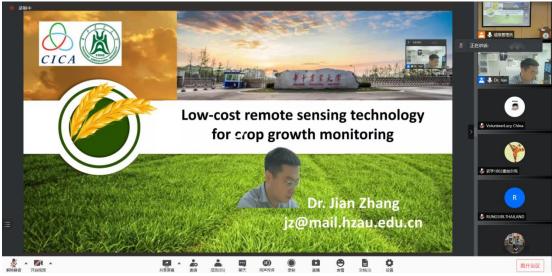
Wang, senior vice president of Guangzhou XAG Technology Limited Co., promoted that progress in three areas are required to be made to realize comprehensive perception, independent decision-making and automatic execution of humanization or less unmanned agricultural production. The three areas include agricultural production infrastructure, precise digital intelligent agriculture equipment and agricultural PaaS and SaaS centered cloud edges, software and hardware integrated collaborative wisdom agricultural production system. Kashing Lueng, Senior Vice General Manager of Guangxi Hi Sugar Technology Co., gave the lecture named "Introducing Scientific and Technological Water to Accurately Drip Irrigate the Soil of Sugar Industry", in which he showed us a clear sugar industry chain, pinpointed the current challenges in this chain and introduced the solutions to intelligent sugar industry and excellent achievements of Hi Sugar Tech's innovative practice. Prof. Yitao Liao from HZAU described the methods, current progress, and potential of multi-applying of machines in rapeseed production, introduced the equipment used in the ploughing, planting and harvesting of rapeseed, and shared the ongoing research status on rapeseed smart production. Associate Prof. Peng Song from HZAU, in his lecture "Development and Application of Agricultural Robot", introduced the types of agricultural robots and their applications in picking, weeding and spraying, presented the latest research progress of agricultural robots, and shared his prospective insights into their future development.





In the lecture on "agricultural big data and agricultural decision model", Prof. Hang Xiong from HZAU, gave a lecture on empowering rural society by digital innovations. He explained the key technologies supporting smart farming, such as sky - space - land system, agricultural model and blockchain technology, illustrated the policies that Chinese government implements for constructing digital countryside and smart agriculture since the 13th five-year plan, and shared serveral real cases bof a smart farming command system for government's use and a smartphone application for crop farmers' use. Focusing on the technical bottleneck of low-cost remote sensing technology and field crop growth assessment, catering to the demand of agricultural research and production, Associate Prof. Jian Zhang from HZAU shared relevant low-cost and efficient remote sensing monitoring methods and cases of crop growth from different aspects such as leaf, individual plant, population (plot, farm). Prof. Ran Meng from HZAU gave a brief overview of crop growth monitoring, introduced the unique value of multi-scale, multi-source remote sensing technology in crop growth monitoring and shared its research progress in remote sensing monitoring of diseases and pests, inversion of key physiological and biochemical parameters of crops, etc. Eshine Li, CTO of Fengnong Stock Modern Agricultural Service Group Company explained the definition of DAP, introduced its function in areas ranging from data to intelligence and to accurate decision-making, which includes real-time monitoring, data recording, collaborative analysis, intelligent decision-making, information management, product traceability and other applications. He also shared the smart farm solutions of large-scale field hosting, orchard base hosting and local digital agricultural industry upgrading. Xunling Zheng, Chairman of GREENCARE Agricultural Technology Co. explained the concept of precision agriculture, pinpointed that they have collected more than 3,000 nutritional diagnostic indicators for horticultural and agricultural crops and he also gave advice on the development of precision agriculture in China.







- An overview of crop growth monitoring
- Fundamentals of remote sensing
- Case studies

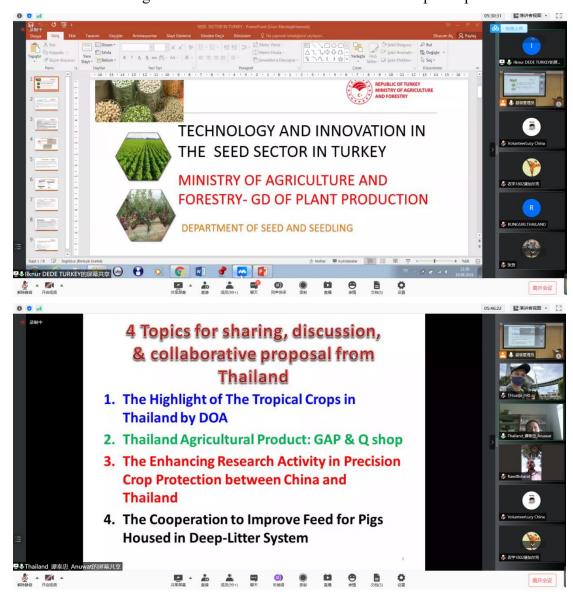






In the part of smart-agriculture roundtable exchange, four foreign participants shared their local agricultural production and Showed the intention to cooperate with member states of CICA. Ilknur Dede from the Ministry of Agriculture and Forestry of Turkey pointed out that her department has been dedicated to the legislation for seeds, and to producing seeds of high quality that meets the international standards of the European Union. She also expressed her opinion that more use of smart agricultural techniques, knowledge and technology is expected after the pandemic, since the concerns for more production of food and enabling the food security is rising in the world. Dr.Anuwat Kumpeangkeaw from the Ministry of Agriculture and Cooperatives in Thailand focused on the mechanization and digitization of agriculture in Thailand and illustrated the key role of smart devices and

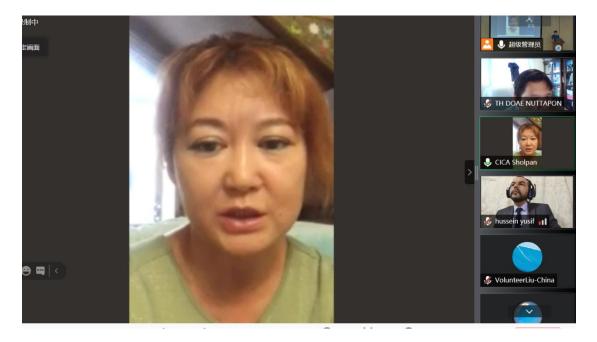
equipment in global agricultural problems. Mr. Nisit Boonpeng from the Ministry of Agriculture and Cooperatives of Thailand pointed out that to further advance the development of agriculture, more services on the analysis, inspection, and quality certification of agricultural inputs production and products quality export promotion and other areas of concerns are imperative in Thailand, and the enforcement of the Three Regulatory Acts under the department's jurisdiction is required. Dr. Anuchit Chamsing from the Ministry of Agriculture and Cooperatives of Thailand also shared the utilization status of agricultural machines in Thailand with other participants.



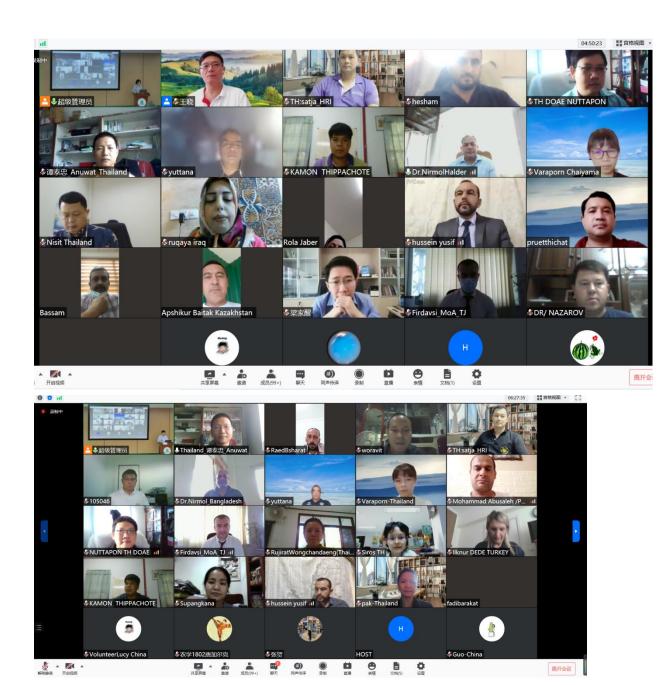




In the Q&A session after each lecture, students actively leave messages and ask questions, which were answered in a timely manner by the professors. Sholpan Yelkeyeva from the CICA Secretariat highly praised this seminar, and she commented that China has held a perfect seminar under the framework of CICA, and the success of this seminar is a remarkable contribution to achieving the United Nations Sustainable Development Goals in eradicating poverty and hunger. Dr. Nirmol from Bangladesh left a message saying that the teachers' reports were wonderful and he wants to thank the teachers for presenting such impressive reports.



Some trainees submitted online questionnaire for feedback. Nuttapon Chaiyawannakarn from Thailand expressed his feeling that, "I am pleased to make information exchange and discuss the experience of other countries." Chulalak Suttirord from Thailand considered the lectures to be very good information in smart agriculture. Dr Nirmol Kumar Halder from Bangladesh was deeply appreciative of the lectures and knowledge shared by the experts. Ilknur Dede from Turkey thanked China for organizing such a good online seminar and proposed that there were also improvements to be made, for example, more practical applications could be included. Yousef from Palestine responded that "I feel good with abundant and interesting information, but actually I would like to visit some more expert places such as labs and research centers." In the questionnaires, participants all expressed their willingness to participate in the third phase seminar, and to have further cooperation and exchanges with Chinese experts.



CICA Smart Agriculture Application and Development Seminar is one of the foreign exchange programs of the Ministry of Foreign Affairs of China that is undertaken by HZAU. It is jointly organized by the College of Education and Training and the College of Plant Science and Technology. The third phase of the seminar will be held from October 17 to 21, 2021.

The Conference on Interaction and Confidence Building Measures in Asia, abbreviated as "CICA", is an Asian security forum initiated by Kazakhstan's first President Nazarbayev in the 47th UN General Assembly on October 5, 1992. China is

committed to formulating and implementing multilateral confidence-building

measures aimed at enhancing peace, security, and stability in Asia, and strengthening

cooperation in related fields. Currently, the organization has 27 member states, 9

observer states and 5 observer organizations. The permanent executive agency of

CICA is its Secretariat, located in Nur-Sultan, the capital of Kazakhstan.

Editing: Jun Liu, Liqiong Xu

Examining: Lin Li