



CABI News Bulletin **Asia**

ISSUE 2 & 3 | APR – AUG 2021

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Messages

from CABI Liaison Officers/Executive Council Members

China has been working in partnership with CABI for four decades on a wide range of agricultural research and development areas. The China-CABI partnership reached a milestone in 2008 when the Ministry of Agriculture and Rural Affairs, China - CABI Joint Laboratory for Biosafety was established at the Institute of Plant Protection, Chinese Academy of Agricultural Sciences (CAAS). The Joint Lab has undertaken over 30 international collaborative projects ranging from applied research to technology transfer, scientific exchange and training, and promotion of south-south cooperation. To support the Sustainable Development Goals and address new global challenges posed by COVID-19, CAAS and CABI will work more closely through the Joint Lab network, expand partnerships, and deepen the collaboration scope for improving global food and nutritional security, greater innovation, and sustainable development of healthier and equitable food systems.



Mr Zhang Yahui

Director General, Department of International Cooperation, Chinese Academy of Agricultural Sciences, and CABI Liaison Officer for China

Over the past decades, CABI has been doing excellent research and advocacy service works in Vietnam, particularly in the field of plant protection with the proven Plantwise models. Various collaborations have been successfully carried out between CABI, Plant Protection Department of the Ministry of Agriculture and Rural Development, Vietnam and Vietnam Academy of Agricultural Sciences, as well as private sector organizations. CABI's work is always aligned to help tackle the latest challenges faced by Vietnam's agricultural sector, such as new diseases and agro-ecological value chain management. CABI's publication service is also highly valuable for research and universities in Vietnam. We look forward to continuing our work with CABI to support the agro-ecological transformation process in Vietnam.



Dao The Anh

Associate Professor, PhD., Vice-President, Vietnam Academy of Agricultural Sciences and CABI Liaison Officer for Vietnam

Working Together

to tackle global challenges with Member Countries



Membership of CABI enables national governments to play an active role in directing and influencing the global development agenda through our work and our network of partners. CABI Member Countries set our strategic direction which means that our work in development, research and scientific publishing helps Member Countries to tackle their problems in agriculture and the environment while addressing global issues of concern such as food security and climate change. Membership of CABI can be viewed as an international extension of a Member Country's national capabilities in agriculture and the environment. We can also help link Member Countries, donors and partners, to facilitate triangular and multilateral collaboration and regional and international development initiatives. Through its programmes and projects, CABI works in partnership with Member Countries, donors and partners to help farmers grow more and lose less, combat threats to agriculture and the environment and improve access to scientific information. For example:

- CABI's prestigious Plantwise programme has supported over 54 million smallholder farmers worldwide to help reduce crop losses, increase food security and improve livelihoods.
- CABI and partners use a novel combination of earth observation technology, real-time field observations, and plant-pest lifecycle modelling to deliver a science-based Pest Risk Information Service (PRISE) for countries in Sub-Saharan Africa.
- The CABI-led Fall Armyworm Research Collaboration Portal, launched to help facilitate greater collaboration on fall armyworm research, is the official platform for the Fall Armyworm Research for Development International Consortium.
- CABI has trained more than 22,000 farmers and 35,000 workers as part of the Better Cotton Initiative to help Pakistan's cotton industry reduce losses of around \$350m/year incurred through poor production, transport and storage practices.

Membership types and benefits

There are two types of country-level memberships: Full Member Country and Associate Member Country. A Full Member Country enjoys voting rights at formal governance sessions and meetings, while Associate membership enables a country to join CABI faster. An Associate Member Country has observer status at Executive Council meetings and the formal governance sessions within Review Conferences.

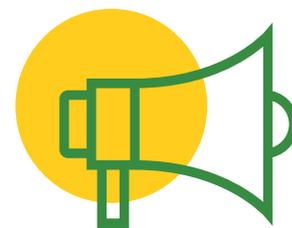
Products and Resources



CABI supports study, practice and professional development through our array of publishing products, research services and support tools.

	Product	More information
Core Database and ebooks	CAB Abstracts <ul style="list-style-type: none"> www.cabdirect.org 	https://www.cabi.org/publishing-products/cab-abstracts/
	Global Health <ul style="list-style-type: none"> www.cabdirect.org 	https://www.cabi.org/publishing-products/global-health/
	Global Health Practitioner Interface <ul style="list-style-type: none"> www.cabdirect.org/globalhealth 	https://www.cabi.org/publishing-products/global-health/
	CAB eBooks <ul style="list-style-type: none"> www.cabi.org/cabebooks 	https://www.cabi.org/publishing-products/ebooks/
Resources	AgBiotechNet <ul style="list-style-type: none"> www.cabi.org/agbiotechnet/ 	https://www.cabi.org/publishing-products/agbiotechnet/
	Animal Science <ul style="list-style-type: none"> www.cabi.org/animalscience/ 	https://www.cabi.org/publishing-products/animal-science-database/
	Environmental Impact <ul style="list-style-type: none"> www.cabi.org/EnvironmentalImpact 	https://www.cabi.org/publishing-products/environmental-impact/
	Forest Science <ul style="list-style-type: none"> https://www.cabi.org/forestscience 	https://www.cabi.org/publishing-products/forest-science-database/
	Horticultural Science <ul style="list-style-type: none"> https://www.cabi.org/horticulture 	https://www.cabi.org/publishing-products/horticultural-science/
	Leisure Tourism <ul style="list-style-type: none"> https://www.cabi.org/leisuretourism 	https://www.cabi.org/publishing-products/leisure-tourism-database/
	Nutrition and Food Sciences <ul style="list-style-type: none"> https://www.cabi.org/nutrition 	https://www.cabi.org/publishing-products/nutrition-and-food-sciences-database/
	VetMed Resource <ul style="list-style-type: none"> www.cabi.org/vetmedresource/ 	https://www.cabi.org/publishing-products/vetmed-resource/
Compendia	Animal Health and Production Compendium <ul style="list-style-type: none"> www.cabi.org/ahpc 	https://www.cabi.org/publishing-products/animal-health-and-production-compendium/
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	Invasive Species Compendium <ul style="list-style-type: none"> www.cabi.org/isc 	https://www.cabi.org/publishing-products/invasive-species-compendium/
Full Text	CAB Reviews <ul style="list-style-type: none"> www.cabi.org/cabreviews/ 	https://www.cabi.org/publishing-products/cab-reviews/
	Distribution Maps of Plant Pests <ul style="list-style-type: none"> www.cabi.org/dmpp 	https://www.cabi.org/publishing-products/distribution-maps-of-plant-pests/
	Distribution Maps of Plant Diseases <ul style="list-style-type: none"> www.cabi.org/dmpd 	https://www.cabi.org/publishing-products/distribution-maps-of-plant-diseases/
	Descriptions of Fungi and Bacteria <ul style="list-style-type: none"> www.cabi.org/dfb/ 	https://www.cabi.org/publishing-products/descriptions-of-fungi-and-bacteria/

News and Updates



EAST ASIA

- The 13th Steering Committee Meeting of MARA- CABI Joint Laboratory for Bio-Safety followed by a high level dialogue was successfully held virtually. The Joint Laboratory has reported 'outstanding progress' on all aspects of its work during 2020 despite the challenges posed by the ongoing COVID-19 pandemic. The event featured presentations by senior officials from both parties: Mr Peng Tingjun, Deputy Director General, Department of International Cooperation, MARA and CABI Executive Council Member for China, Professor Wu Kongming, Vice President of CAAS, Professor Zhou Xueping, Director General of IPPCAAS, Dr. Daniel Elger, CEO of CABI, Dr. Dennis Rangi, CABI's Director General, Development and Dr Ulrich Kuhlmann, CABI's Executive Director, Global Operations.
- The MARA-CABI Joint Laboratory impact study was successfully concluded by the publication of a comprehensive CABI Study Brief, titled [MARA-CABI Joint Laboratory: 12 years of achievement](#)'. Since its establishment in 2008, the Joint Lab (located at IPP-CAAS) has successfully implemented 32 international cooperation projects on research and technology transfer within plant protection.
- The opening ceremony of the Anhui-CABI Joint Laboratory for Agricultural Pest Control, which was followed by a Technical Workshop on fall armyworm, took place in June at the Anhui Academy of Agricultural Sciences, Hefei, Anhui Province. The laboratory will greatly enhance the MARA-CABI Joint Lab outreach and network within China.

SOUTH EAST ASIA

- Online training on fall armyworm (*Spodoptera frugiperda*) diagnostics, ecology and its



- management was held in the Philippines. Forty-nine participants from various departments, including the Philippine Rice Research Institute (PhilRice), the Department of Agriculture, Regional Crop Pest Management Centre's, local government units, the Crop Protection Division, the Food and Agriculture Organization of the United Nations (FAO), and CABI, joined the three-day training which was facilitated by Mr. Faheem – Integrated Crop Management Advisor, based at the CABI centre in Selangor, Malaysia.
- The CABI's Regional Director for South East Asia shared his experiences on strategies for fall armyworm resistance management during a webinar conducted by GrowAsia on the need for coordinated action on resistance management.

SOUTH ASIA

- A Letter of Agreement was signed between CABI and FAO-Regional Office for Asia and the Pacific, Bangkok for a Technical Cooperation Project entitled “Regional Guidelines and Concept Note preparations for coordinative surveillance and early warning for sustainable management of transboundary plant pests in Asia”.
- The e-learning course - Crop Pest Management Course was delivered to Plant Doctors and other stakeholders.



CENTRAL AND WEST ASIA

- CABI signed a contract with the Pakistan Agricultural Research Council (PARC) to implement a project entitled “Regulatory harmonization in Pakistan for minimum residue levels and biopesticides.” The project is funded by USDA through the USAID with the objective to use microbial-based biopesticides to control key pests, especially at the end of the crop growing period of chilies, when pesticides mostly contribute to residues at harvest time.
- The Better Cotton Initiative project supported rural women and entrepreneurs in establishing rabbit and poultry farms and a setup of small-scale flour mills during COVID-19. The aim is to empower rural women so that they could increase incomes and improve their livelihoods.
- An ICT-based direct marketing platform <https://moonji.pk/> has been developed for rice growing farmers at Sheikhpura and Hafizabad, by the ‘Technology based Agri and Marketing’ project team. Moreover, a farm input activity survey has also been conducted where more than 1500 farmers have been registered for input financing.
- The value chain approach is delivering community-wide benefits to smallholder farmers. The interventions introduced by the “[Strengthening Vegetable Value Chain in Pakistan](#)” project have increased crop yield and improved production by 18%, 33% and 20% for tomato, onion and potato respectively. Under ‘best practice’ consignments, these vegetables have



proved that the project interventions bring a significant increase in gross profit by 133%, 318% and 121% for tomato, onion and potato respectively.

- H.E. Mr Wouter Plomp, Ambassador of the Kingdom of the Netherlands in Pakistan visited village 37-D in Okara district under RVO funded “Capacity Building of Potato Growers” project. Interactive sessions were held with farmers (men and women) regarding their experience of best practices of growing potato.

New PlantwisePlus programme launched to help farmers produce more and higher quality food

A new CABI-led worldwide programme – PlantwisePlus – has been launched to help support low and lower-middle income countries to predict, prepare themselves for and prevent plant health threats in a changing climate reducing crop losses and empowering farmers to increase income, food security and food safety by producing more and higher quality food.

PlantwisePlus will build on CABI’s Plantwise and Action on Invasives programmes, which have already helped millions of farmers in over 30 countries diagnose and treat pest threats and reduce crop losses by strengthening national plant health systems. PlantwisePlus will help reduce crop losses and empower farmers to increase incomes, food security and food safety by producing more and higher quality food.

For the first 3-years of the programme, PlantwisePlus will test new interventions in 6-7 countries in Africa, Asia and the Americas. These include enhanced digital advisory tools to boost climate resilient agriculture and greater availability of more sustainable biological plant protection products.

Dr Ulrich Kuhlmann, PlantwisePlus Programme Executive, said, “Public extension plays a significant role in agriculture, but the numbers of staff are insufficient to reach all smallholder farmers who often have to turn to agro-input dealers for plant health advice. However, these often lack the capacity to provide accurate diagnoses and sound crop health advice – without an overreliance on chemical pesticide controls, where the hazards are not always realised by farmers, as part of an Integrated Pest Management Plan.”

“PlantwisePlus will enhance the on-going elements of Plantwise and Action on Invasives but will also introduce brand-new elements to address gaps and opportunities identified through lessons learnt. This will help smallholder farmers have increased incomes and grow safer and higher quality food through sustainable approaches to crop production.”

PlantwisePlus will seek to accelerate the availability of nature-positive and low-risk plant protection products to reduce reliance on high-risk farm inputs. The new programme will also create and transform employment to support economic development and contribute to consumer demand for safer, higher quality and locally produced food to drive the uptake of safer production practices.

Dr Kuhlmann added, “PlantwisePlus will bridge the gap where at the national and regional level there is no consistent or coordinated mechanism for detection of and response to pest outbreaks, or for providing the technical support needed to identify plant health problems and deliver effective solutions.”

PlantwisePlus will draw upon a range of existing CABI open access products and projects. These include the CABI BioProtection Portal – a free tool to enhance the awareness and uptake of biocontrol and biopesticide products by growers and advisors – and the Plantwise Knowledge Bank and factsheet app.

Above and Beyond in the Line of Duty



CABI is keen to acknowledge its staff who perform their tasks with a passion. We are confident that their insights and skills will greatly benefit our organization and partners. We look forward to them developing their skills and making an impact in their respective areas.



Qianqian Mi
Admin and Research
Assistant

Qianqian received the 'Publications Recognition Award' for 2021 as a CABI early career researcher, publishing a paper, titled 'Biology, Ecology, and Management of *Erthesina fullo* (Hemiptera: Pentatomidae): A Review' as author in the high impact factor journal 'Insects'. She also made valuable contributions to biocontrol research activities at the MARA-CABI Joint Laboratory.



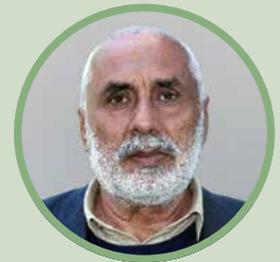
Dr Min Wan
Senior Project
Coordinator

We appreciated Min's excellent performance on leading an impact study on the MARA-CABI Joint Laboratory for Bio-safety. The bilingual CABI Study Brief 37, published in May, has been highly recognized by both Chinese partners and CABI, and will contribute to publicizing the achievements of the cooperation between CABI and China.



Zeeshan Butt
Finance Coordinator

Zeeshan achieved 15 years' service with CABI in June 2021. His contribution towards the financial progress of the Pakistan centre is commendable and he has been active in delivering high performance and success. Many congratulations, and thank you, to Zeeshan for the considerable contribution he has made to the work of the organization.



Dr Kauser Iqbal Khan
Agriculture Economist

Kausar achieved 15 years' service with CABI in February 2021. We would like to thank him for his hardworking attitude and organizational skills. His colleagues greatly appreciate his confidence and ability to complete work to a very high standard.



Special Announcement

An introductory session on CABI publishing products will be organized in CABI Asia Centres with key stakeholders during the 4th quarter of 2021. These are rich information resources and knowledge tools from CABI for our Member Countries to explore and take advantage of. Hopefully, through our joint efforts, an even greater uptake and usage by our Member Countries can be achieved.

Meetings/Events



EAST ASIA

- CABI will actively engage in the Association of South East Asian Nations (ASEAN) action plan on fall armyworm session which will take place during the 23rd meeting of the “Experts Working Group on Harmonisation of Phytosanitary Measures in ASEAN.”
- CABI will help IPP-CAAS in organizing the international training course on ‘Green Prevention and Control Technology of Main Crop Diseases and Pests.’

SOUTH EAST ASIA

- An international webinar on “Monitoring and Early Warning of Plant Pest and Disease Epidemics in Response to Climate Change” was held in July 2021. The webinar was co-organized by The Food and Fertilizer Technology Center (FFTC) for the Asian and Pacific Region, Bureau of Animal and Plant Health Inspection and Quarantine (BAPHIQ), Council of Agriculture, Taiwan Agricultural Research Institute (TARI), and Asia-Pacific Association of Agricultural Research Institutions (APAARI).
- CABI, in collaboration with SciDev.Net and the Advanced Center for Agricultural Research and Education (ACARE), Yezin, and the Agricultural University, Myanmar, organized training titled “Online Masterclass on Effective Scientific Communication for extension workers” in Myanmar in July 2021.

SOUTH ASIA

- A series of virtual consultations and webinars will be coordinated under the FAO- Technical Cooperation Programme project entitled “Regional Guidelines and Concept Note preparations for coordinative surveillance and early warning for sustainable management of transboundary plant pests in Asia” for participating countries: India, Pakistan,

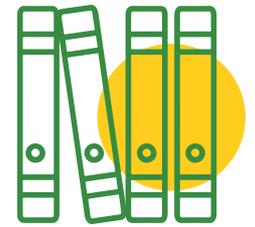
Vietnam, Cambodia, Bangladesh and Indonesia.

- National webinars on Tourism Case Studies, Crop Protection Compendium and CABI Academy in collaboration with SPUR Info Solutions, will be held in September 2021.
- To enhance the awareness of CABI Abstracts with key stakeholders, a national webinar, in collaboration with EBSCO will be conducted in September 2021.

CENTRAL AND WEST ASIA

- In Action Track 1 of the UN “Ensure Access to Safe and Nutritious Food for All”; USDA will organize an Expert-to-Expert Engagement (E2E) on U.S. Innovations for Food Systems Change Series, Innovations for Production of Safe Food. This dialogue will be organized by The World Food Center at University of California, Davis, in collaboration with the Global Food Initiative (GFI) of the University of California Office of the President. CABI will participate as panelist during the E2E dialogues and share the learnings and experience of the [“aflatoxin control in Pakistan”](#) project supporting the adoption of innovative biocontrol products for aflatoxin control in South Asia.
- A series of four training sessions will be conducted to strengthen the capacity of national agricultural systems on the concept of biological management of aflatoxins.
- A baseline survey of chili crops will be conducted in Sindh Province with the objective to collect chili fruit samples prior to the first harvest and to analyze for the presence of pesticidal residues.

Explore Our Recent Publications



- Avila, G., Chen, J., Li, W., Alavi, M., **Mi, Q.**, Sandanayaka, M., **Zhang, F., Zhang, J.** (2021). Seasonal abundance and diversity of egg parasitoids of *Halyomorpha halys* in kiwifruit orchards in China. *Insects* 12(5), 428. <https://doi.org/10.3390/insects12050428> (open access)
- Bermond, G.B., **Li, H.**, Guillemaud, T., **Toepfer, S.** (2021). Genetic and phenotypic effects of hybridization in independently introduced populations of the invasive maize pest *Diabrotica virgifera virgifera* in Europe. *Journal of Entomological and Acarological Research* 53, 9559. <https://doi.org/10.4081/jea.2021.9559>
- Geng, Y., Dong, Y., Huang, W., Zhao, L., Tu, X., **Li, H.** (2021). Migratory locust habitat dynamics remote sensing monitoring in Dagang Reservoir, Tianjin. *Journal of Plant Protection* 48(1), 122-128. https://caod.oriprobe.com/articles/60707827/Dynamic_remote_sensing_monitoring_of_oriental_migr.htm
- **Li, H.**, Liu, L., Li, T., Cheng, Y., Zhang, A., **Wan, M., Zhang F.** (2021). Research progress on major insect pests of *Spodoptera* and their natural enemies. *China Plant Protection* (5), 23-33. [https://doi.org/10.1016/S2095-3119\(20\)63291-9](https://doi.org/10.1016/S2095-3119(20)63291-9)
- LI, Q., Zhao, J., Tian, J., Wang, Y., Zhang, J., Yang, S. (2020). Gene cloning, bioinformatic analysis and tissue-specific expression of the atypical odorant receptor in *Halyomorpha halys* (Hemiptera: Pentatomidae). *Chinese Journal of Plant Protection* 47(6), 1219-1227. <https://doi.org/10.13802/j.cnki.zw-bhxb.2020.2020056>
- **Li, H.**, Zhang, Y., Wang, G., Lowry, A., Huang, W., Dong, Y., Shang, S., **Luke, B.** (2021). The effects of vegetation type on *Oedaleus decorus asiaticus* oviposition and



hatching success. *Environmental Entomology* <https://doi.org/10.1093/ee/nvab029> (open access).

- Li, W., Gao, Y., Hu Y., Chen, J., **Zhang, J.**, Shi, S. (2021). Field cage assessment of feeding damage by *Riptortus pedestris* on soybean in China. *Insects* 12(3), 255; <https://doi.org/10.3390/insects12030255> (open access)
- **Wan, M.**, Chen, J., **Li, H., Zhang, J., Yuan, B., Zhang, Q., Zhang, F.**, Wu, K., Zhou, X., **Kuhlmann, U.** (2021). MARA-CABI Joint Laboratory: 12 years of achievement. CABI Study Brief 37: Impact. <https://dx.doi.org/10.1079/CABICOMM-62-8148>
- Yan, J., Véték, G., Pal, C., **Zhang, J.**, Gmati, R., Fan, Q.H., Gunawardana, D. N., Farkas, P., Burne, A., Anderson, D., Balan, R.K., George, S., Farkas, P., Li, D. (2021). ddRAD sequencing: An emerging technology added to the biosecurity toolbox for tracing the origin of brown marmorated stink bug, *Halyomorpha halys* (Hemiptera: Pentatomidae). *BMC Genomics* 22, 355. <https://doi.org/10.1186/s12864-021-07678-z> (open access).

Explore Our Recent Blogs and News Articles



Click on the picture to read the story



CABI helps build capacity of government stakeholders in Pakistan to tackle aflatoxins with biological controls



Sustainable cotton production 'through the eyes' of a Better Cotton farmer



'Outstanding progress' made in all aspects of MARA China-CABI Joint Lab despite COVID-19 pandemic



Kamla Bai charts her journey of empowerment from farmworker to women village trainer for CABI



Maize growers of Punjab helped to manage aflatoxins through biological control technology



Punjab wheat growers hope to boost productivity with combine harvester and wheat straw chopper



Scientists exchange expertise on biocontrol agents for the management of devastating fall armyworm



MARA-CABI Joint Laboratory sets its sights on becoming a world recognized Centre of Excellence



CABI joins forces with FAO to tackle desert locust and fall armyworm pests in Asia Pacific region



Bundling agricultural services under the Seeing is Believing project in India



Using natural solutions to overcome crop toxins and increase Pakistan's maize production



Farmer praises CABI's postharvest training to help boost Pakistan's smallholder tomato production



CABI scientists share knowledge on fall armyworm diagnostics, ecology and its management in Philippines



How Nutrient Management Digital Tools are Helping to Combat Climate Change



Webinar discusses sustainable management of fall armyworm



Project launched to help mitigate pesticide residue limit export violations on red chillies in Pakistan



Dutch Ambassador to Pakistan meets small-scale potato farmers for update on potato capacity-building project

Acknowledgment

We gratefully acknowledge our Member Countries, donors and partners, particularly national agricultural institutions for their support to CABI.

We would also like to acknowledge the CABI teams working on projects throughout Asia who contributed to this News Bulletin.

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CABI is an international intergovernmental organisation, and we gratefully acknowledge the core financial support from our member countries (and lead agencies) including:



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and Rural Affairs,
People's Republic of China



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International Agricultural Research



Agriculture and
Agri-Food Canada



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