



### **CABI News Bulletin** Asia

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## **Working Together**

Operating under a UN-registered international treaty-level agreement, CABI's core areas of work are guided and influenced by our 49 Member Countries, who each have an equal role in our governance, policies and strategic direction.



- Membership of CABI gives national governments a leadership role in directing and influencing the global development agenda through the work of the organization and its international network of partners.
- Our members 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 whilst addressing global issues of concern such as food security and climate change.
- Interested countries can contribute to and benefit from what we do by joining CABI as an Associate Member Country or as a Full Member Country.

#### CABI's Regional Consultations with Member Countries and other Stakeholders

The planning and preparations for CABI's Regional Consultations in 2022 are well underway.

The triennial Regional Consultations serve as a mechanism for CABI to listen to and engage directly with its Member Countries and other stakeholders. They help us to develop CABI's three-year Medium-Term Strategy and feed strategic recommendations into CABI's Review Conference. The meetings have traditionally been attended in person but, due to Covid-19 travel restrictions, the Regional Consultation process next year will take place virtually and include:

- 1. Online stakeholder survey to be conducted between 31st January and 21st February 2022
- 2. Three virtual Regional Consultation meetings to be held in April and May 2022:
  - Asia-Pacific: 05:00-08:00 UTC (06:00-09:00 BST), Wednesday, 13th April 2022
  - The Americas and Europe: 13:00-16:00 UTC (14:00-17:00 BST), Wednesday, 27th April 2022
  - Africa: 12:00-15:00 UTC (13:00-16:00 BST), Wednesday, 11th May 2022

For details on CABI membership, please visit the following link: https://www.cabi.org/about-cabi/membership/

## **Products and Resources**

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

The Pest Risk Analysis (PRA) tool is a decision support tool that presents scientific information from the CABI Crop Protection Compendium (CPC) to aid the selection of appropriate measures for reducing risks associated with the introduction of plant pests and facilitating the safe movement of plants and plant products.

A decision support tool to assist risk assessors and risk managers to conduct a pest risk analysis for a plant commodity pathway or an individual pest, the PRA tool provides access to the relevant data in the Crop Protection Compendium (CPC) and a framework for the PRA process that is closely aligned to international standards. The PRA Tool is provided as an add-on to a subscription for the Crop Protection Compendium (CPC).

Pest Risk Analysis is the process of evaluating biological or other scientific and economic evidence to determine whether an organism is a pest, whether it should be regulated, and the strength of any phytosanitary measures to be taken against it [FAO (2017) Glossary of Phytosanitary Terms].

#### Features include:

- A framework in which risks associated with the importation of plant commodities and the introduction of pests into new areas can be identified and assessed
- PRA initiation 'By Pathway' or 'By Pest'
- Generation and categorization of pest lists associated with a commodity pathway
- Facilities for users to add new information and overrule existing Compendium data
- Links to relevant CPC datasheets
- A template to complete risk assessments for individual pests
- A template to assign management measures to each pest identified as a risk
- An editable output of all data and content added to a PRA session

#### Interested in subscribing to the CPC?

Contact our sales team: sales@cabi.org Find out more about the CPC: https://www.cabi.org/cpc/about/

## News and Updates



#### EAST ASIA

- A CABI delegation of staff from the CABI China office visited the Chinese Academy of Tropical Agricultural Sciences (CATAS, Haikou, Hainan Province) and delivered a training lecture on 'Working with International Organizations to Strengthen International Collaboration on Agriculture'. The delegation also met with Prof. Liu Guodao, Vice President of CATAS to discuss future collaboration.
- MARA-CABI Joint Lab students were given an Outstanding Graduate Master's Award. Ju-Hong Chen and Wen-Jing Li acquired their degrees, and both were supervised by Dr Jin-Ping Zhang from CABI East Asia, who is part of the "Biological control of brown marmorated stink bug" project. Moreover, the thesis "The occurrence and damage of *Halyomorpha halys* in kiwifruit orchards" by Ju-Hong Chen was awarded the excellent graduation thesis by Jilin Agricultural University.

#### SOUTH EAST ASIA

- CABI experts shared their expertise during a two-day international virtual training workshop on "Import Risk Analysis" for national regulatory authorities of the Philippine government organized by Winrock International. This international training was attended by 32 participants from the Philippine Department of Agriculture representing the Bureau of Plant Industry, Bureau of Animal Industry, Bureau of Fisheries and Aquatic Resources, Fertilizer and Pesticide Authority, National Meat Inspection Service, Food Development Center, Philippine Coconut Authority, Sugar Regulatory Administration and National Dairy Authority.
- Dr Sivapragasam Annamalai retired from his role as Regional Director for South-East Asia on 30 September 2021. He joined CABI-SEA as a Senior Scientist in October 2010



and in January 2017, he was appointed as the Regional Director for the centre. During his tenure, he developed new funding sources from national partners in Malaysia and Papua New Guinea including Food and Agriculture Organization - International Board for Plant Genetic Resources (FAO-ITPGR); Olam International: International Finance Corporation (IFC); Asia Development Bank (ADB) and Climate Change, Agriculture and Food Security (CCAFS). We thank Dr Sivapragasam for his leadership of CABI-SEA and his significant contribution to the organization. Meanwhile, Dr Feng Zhang will extend his role to be Regional Director for East and South-East Asia.

- Dr Sivapragasam and Mr Muhammad Faheem attended a meeting on the "Technical Committee of Improving by MARDI's Facility, Capacity Building and R&D in Biological Control (TRF) Project, No. 2/2021" on 2 November 2021. This meeting was part of the Joint-Laboratory Initiative between MARDI and CABI.
- Dr Feng Zhang attended and delivered a presentation on CABI's International Coconut Community (ICC) partnership at the 57th ICC Session and Ministerial Meeting, 26-28 October 2021, to strengthen partnerships between CABI and ICC, and to call for joint efforts with partners and donors towards more sustainable coconut production under global changes.

- Mr Muhammad Faheem presented a keynote on the "Evaluation of the production practices of underutilized Taro and the main challenges in Malaysia, Indonesia and the Philippines" via Zoom in the 1st International Webinar on Taro, organized by Central Bicol State University of Agriculture, Philippines on 19 November 2021. CABI, being one of the project partners, contributed to the baseline survey, communication and visibility. CABI is also responsible for producing a quarterly newsletter.
- The CABI experts from Malaysia and Pakistan conducted international virtual training on "Import Risk Analysis" for 30 participants from regulatory authorities of the Philippines, organized by Winrock International under the Building Safe Agricultural Food Enterprises (B-SAFE) project. The training helped participants familiarize themselves with assessing pest and disease risks related to the importation of agricultural products following the sanitary and phytosanitary agreement and food safety standards.
- CABI-SEA signed the Letter of Agreement for the project 'Cocopest: Information portal for major pests and diseases of coconut' with ICC.

#### SOUTH ASIA

- The launch of fall armyworm (FAW) monitoring project funded by the Foreign, Commonwealth and Development Office (FCDO), entitled "Affordable Sentinel Networks to Fight Invasive Alien Species in India," took place in September 2021. This project is a small pilot that will deliver a network to alert smallholder farmers of the presence of invasive alien species (IAS), with FAW used as a model organism. The consortium will combine sensor nodes and data science to deliver an affordable approach to alert smallholder farmers on IAS threats in India.
- A project on "Opportunities and challenges in Sanitary and Phytosanitary measures – Modernizing Sanitary and Phytosanitary (SPS) to facilitate trade in Asia" in eight Asia-Pacific countries, was secured with funding from the FAO. The project will analyze SPS related barriers faced by agricultural exports to key



markets by selected countries, identifying the reasons for such barriers and making recommendations on addressing them through greater collaboration and knowledge sharing with key stakeholders.

- A project entitled "Process Towards Strengthening National Soil Information Services" was initiated. This project secured a two-year grant from the Bill & Melinda Gates Foundation for the Soil Information Services (SIS) review to be conducted across several countries and global initiatives, such as World Soil Information Service (WoSIS) and Global Soil Information Service (GiOSIS). This investment will use approaches such as human-centred-design (HCD), impact assessment, and other participatory techniques. Participatory Action Research (PAR) will help to develop the outputs in ways that best capture SIS insights that are of most beneficial to the end users.
- A project entitled "An assessment of data management and FAIR data principles across the ACIAR research portfolio" was secured. Supported by the Australian Centre for International Agricultural Research (ACIAR), the project aims to encourage good data management practice in grants with a core data component, ensuring that data is released, used and reused responsibly and ethically, and that good practice continues sustainably throughout, and beyond, the lifetime of a programme.
- A paper presentation was delivered at the International Conference on "Global Perspectives in Crop Protection for Food

Security" (GPCP 2021) at Tamil Nadu Agricultural University (TNAU), Coimbatore held on 17 December 2021.

#### **CENTRAL AND WEST ASIA**

- Under the 'Enhancing technology based agricultural and marketing in rural Punjab' project, improved paddy drying practices were demonstrated. These practices encourage paddy processors to use plastic sheets in order to reduce post-harvest losses.
- More than 1500 rice growing farmers were registered on the ICT based direct marketing platform at <u>moonji.pk</u> The registered farmers will be able to sell their produce without engaging middlemen.
- Under the Better Cotton Initiative project, CABI has trained 75,476 farmworkers on decent work, child labour, women empowerment and health and safety practices. Also, a total of 800 male and female farmworkers were trained and supported in developing food orchards, from where they will be able to source food for their family.
- Under the Plantwise Plus programme, a digital toolkit user gathering workshop on enhancing knowledge through responsive digital advisory tools was conducted in Islamabad. Participants attended from across Pakistan and included those working in agriculture extension, plant doctors, input suppliers and dealers, research, academia and farmers.
- A two-day workshop for "Pest Risk Analysis for Invasive Species in Pakistan" was organized. The purpose was to identify invasive species that pose the greatest threat towards Pakistan's trade. Participants included quarantine and plant protection officers, national scientists, agriculture extension officers and academics. Expert entomologists and plant pathologists, with background knowledge of particular species or groups in Pakistan, also attended.
- A launch workshop was held on the project: 'Building the Policy Ecosystem for Organic Production Landscape in Pakistan,' chaired by Mr. Syed Fakhar Imam, the Federal Minister for National Food Security and Research (MNFS&R), who was also joined

by CABI's Senior Regional Director, Asia, Dr Babar E. Bajwa and Dr Khalid Abdullah, Cotton Commissioner at MNFS&R, as well as representatives from the federal and provincial governments, and the private sector. The project outcomes will focus on enhancing national organic standards and the transformation of institutional approaches from conventional to organic agriculture techniques.

- A workshop on Organic Agriculture Policy, titled "Technological Prospects of Integrated Pest Management (IPM), Biocontrol Commercialization for Sustainable Organic Agricultural Production in Pakistan" was held in November 2021. CABI encouraged the value chain actors involved in the production of organic cotton to align their efforts to benefit from the emerging demand for organic agriculture production.
- To strengthen horticultural value chains and whole family approaches for the benefit of smallholder farmers growing onion and tomatoes, the Strengthening Vegetable Value Chain Project (SVVCP) organized a capacity building workshop for agriculture extension staff with the aim of scaling out SVVCP interventions and farmer training on leadership skills and group management to introduce advanced agriculture practices and safe use of pesticides. A farmers' field day on 'Best Practice' seedling production was also conducted.
- Under the 'Capacity building of small scale potato growers in Punjab' project, six capacity building training sessions were conducted.
   A farmers' field day organized on 'Best production practices of potato crop' to enhance financial and production benefits of the potato growers also took place.
- CABI conducted a virtual road show event entitled 'Bio-Protection Consultations in Pakistan – a hybrid event' on 23 November 2021 at CABI Regional Bioscience Centre, Rawalpindi. The aim of the event was to engage the stakeholders in consultations for introduction and application of biologicalbased pest management approaches in Pakistan.

# Above and Beyond in the Line of Duty





**Dr Jinping Zhang** 

Project Scientist We appreciated Jinping's excellent field work this season, where she ensured the success of the invasive pest control project despite the challenges of COVID-19. In

addition, Jinping published 10 papers in 2021, greatly contributing to publicizing the achievements of CABI.



#### Bo Yuang

Finance Officer Bo performed very well in this quarter, helping to deliver financial targets and the successful office registration renewal. Bo's contributions to the budget process

and other activities are also greatly appreciated. She provides robust support towards the centre's operations and business development.



#### Dr Sathis Sri Thanarajoo Scientist

Sathis's significant contribution in the development of the Biosecurity Plan and Manual for the Coconut Industry in Papua New Guinea is applaudable. Sathis has also been supporting

other projects at the centre including a new engagement with Commonwealth Scientific and Industrial Research Organization (CSIRO) on molecular characterization of FAW in Malaysia.



#### **Muhammad Faheem**

Integrated Crop Management Advisor

Faheem achieved 15 years of service with CABI in 2021. We appreciate his excellent performance, commitment and loyalty to his work. His

organizational and professional skills contribute to developing and streng- thening linkages between CABI and partner organizations in Southeast Asian countries. Many congratulations to Faheem for this successful journey with us.



#### Roy Varkey

Administration Officer Roy meticulously scanned through thousands of pages of company websites extracting data and, in addition, populating the CABI BioProtection Portal, with India now part of it.



#### Abdul Rehman-

Deputy Director Programmes Abdul's services were recognized regarding his coordination with Better Cotton Initiative (BCI) project and smooth implementation of field activities. Moreover, he also

coordinates and supervises implementation of on-going projects at CABI's centre in Pakistan.

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.



Kritika Khanna

Business Development & Communications Officer Kritika contributed significantly to proposal development and securing projects. She has been instrumental in helping to develop new project work

for CABI. Not only did Kritika assist the scientific staff with the proposals, but she participated in all of the technical meetings with the external agencies and adeptly prepared complex budgets.



#### Neeraj Sharma

Finance Officer Neeraj independently prepared the 2021 budget and 2022-2024 budget projections in addition to key day-to-day work. Neeraj demonstrated

his commitment and hardworking attitude while preparing the budget.



#### Hamza Shahbaz Bhatti Program Officer

Hamza is playing a vital role in managing the maximum residue limits (MRL) project in Pakistan. He is coordinating with donors, partners and the teams on-theground for effective delivery of

activities. Moreover, he also played an instrumental role in the successful completion of the Aflatoxin Control project in Pakistan project.



#### **Sabyan Faris Honey**

Coordinator Bioscience Sabyan successfully coordinated the first Bio-Protection Consultations in Pakistan – a hybrid event held at Rawalpindi. The aim of the event was to engage

the stakeholders in consultations for introduction and application of biological-based pest management approaches in the country.



#### Muzzamil Farooq

Project Manager

Muzzamil moderated a series of workshops on Pest Risk Analysis in Pakistan. These workshops were attended by various stakeholders across the country. He is also successfully managed

his SPS project and built a good working relationship with donors and partners of the project.



made financial projections for 2022.

#### Zeeshan Butt

Coordinator Finance Zeeshan was recognized for his services towards finance management of CABI's centre in Pakistan and other CABI centres in Asia. He also prepared project budgets and

## Meetings/Events



#### EAST ASIA

 A series of meetings/preparations are already underway for the MARA-CABI Joint Laboratory for Bio-safety 2021 annual report. Moreover, a workplan for 2022 for further liaisons with the Chinese Academy of Agricultural Sciences (CAAS) and Chinese Ministry of Agriculture and Rural Affairs (MARA), will be developed to implement the CABI membership benefits package and China-CABI Joint Action Plan 2021-22.

#### SOUTH EAST ASIA

- A meeting to launch a new, online Standards and Trade Development Facility (STDF) Monitoring, Evaluation and Learning (MEL) Tool to promote innovation and improvements on MEL across STDF's Safer Spice project was held on 14th December 2021.
- A meeting on the "Technical Committee of Improving MARDI's Facility, Capacity Building and Research and Development in Biological Control (TRF)" project took place on 17th December 2021.

#### SOUTH ASIA

• The Global Data Conference is due to be attended by CABI digital development team experts in 2022.

#### **CENTRAL AND WEST ASIA**

- A meeting with government officials and relevant stakeholders to share the progress on "Enhancing Technology-based Agriculture and Marketing in Rural Punjab" project funded by Asian Development Bank (ADB) will be held in January 2022.
- Training for agriculture staff from all provinces of Pakistan on IPM of identified insect pests will be conducted in the first quarter of 2022.
- Training for farmers on bio-input (phytochemicals and bio fertilizers)

production techniques in Lasbela and Barkhan districts of Balochistan province to produce organic cotton will be conducted in 2022.





### Explore Our Recent Publications



- Barratt, B. I. P, Colmenarez, Y.C, Day, M. D., Ivey, P., Klapwijk, J. N., Loomans A. J. M., Mason, P. G., Palmer, W. A., Sankaran K. V. and Zhang, F. (2021). Regulatory challenges for biological control. In *Biological Control: Global Impacts, Challenges and Future Directions of Pest Management* (Ed PG Mason) pp. 166-196. CSIRO Publishing, Melbourne.
- Taylor, B., Casey, J., Annamalai S., Elizabeth, A. Finch, Beale, T., Holland, W., Murphy, S. T. and Finegold, C. (2021). Minimizing Pest and Disease Risks in Uncertain Climates: CABI Initiatives Developing New Technologies and Tools for Outreaching Early Warning to Farmers. Paper presented at the International Webinar on Monitoring and Early Warning of Plant Pest and Disease Epidemics in Response to Climate Change (Online and onsite workshop), 27-28 July, 2021. Organized by Food and Fertilizer Technology Center (FFTC), Bureau of Animal and Plant Health Inspection and Quarantine (BAPHIQ) and Council of Agriculture, and Taiwan Agricultural Research Institute (TARI), Taiwan, China.
- Chapter Chaudhary M. et.al (2021).
   Communications Framework for Integrated Pest Management of Fall Armyworm in Asia in B.M. Prasanna, Joseph E. Huesing, Virginia M. Peschke, Regina Eddy (eds). 2021. Fall Armyworm in Asia: A Guide for Integrated Pest Management. Mexico, CDMX: CIMMYT.
- Chapter- Zhang F. and Chaudhary, M. (2021). Uptake of Biological Control In Biological Control: Global Impacts, Challenges and Future Directions of Pest Management. CISRO publication. 822 pp
- Valdez, E. M., Rillon, G. S., Donayre, D. M. K., Martin, C. M., Kennedy, Cruz, B. D., Sandoval F. M., Joshi, R. C., Quilang, E. J. P., Faheem, M., and Annamalai, S. (2021). Fall Armyworm

*(Spodoptera frugiperda)* (J.E. Smith): A first record of damage on rice in the Philippines. Poster paper presented at the "Developing Smallholder Oriented IPM Strategies for Fall Armyworm *(Spodoptera frugiperda Smith)* Management". Online conference organized by CIFOR - ICRAF and partners from 24-25 August, 2021.

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- Li W. J., Chen J. H., Mi Q. Q., Zhuo F.Y., Dou S. H., Zhang, F., Shi, S. S., Zhang, J. P. (2021). Study on the biocontrol potential of *Anastatus japonicus* Ashmead (Hymenoptera: Eupelmidae) against *Riptortus pedestris* (Fabricius) (Hemiptera: Alydidae). *China Plant Protection* 41(7), 27-31.
- Li, Y. H., Zhang, F., Yang, F.-X., Xiao, C., Zhang, X.-M. and Chen, G.-H. (2021) Study on biological characteristics of *Leptopilina japonica*. [In Chinese with English abstract.] *Journal of Environmental Entomology* 43(1), 185-192. doi:10.3969/j.issn.1674-0858.2021.01.
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- Singh, G. M., Xu, J., Schaefer, D., Day, R., Wang, Z., and Zhang, F. (2021). Maize diversity for fall armyworm resistance in a warming world. *Crop Science* 1–19. https://doi.org/10.1002/csc2.20649
- Sivapragasam, A. (2021). Case Study 3

   Import risk analysis: Case of the Coconut Rhinoceros Beetle in the south Pacific with specific reference to the Papua New Guinea coconut industry. Presented at the The Building Safe Agricultural Food Enterprises (B-SAFE) project coordinated by WINROCK International and funded by the United States Department of Agriculture (USDA) under its Food for Progress (FFPr) program.
- Sivapragasam, A. (2021). Lead presenter on: Vegetables Insecticides Evaluation

   Harmonization of bio-efficacy testing protocols on key insects. Webinar presentation on 30th November, 2021 jointly organized by The ASEAN Pesticide Management Harmonization (PMH) project in collaboration with ASEAN, USDA and CropLife Asia.
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### Explore Our Recent Blogs and News Articles



#### Click on the picture to read the story



Expertise shared in helping farmers reduce crop losses at first International Conference on Food Loss and Waste



New study explores maize diversity for fall armyworm resistance in a warming world



BARI workshop on Fall armyworm management



Plant doctors help in fight against crop threats in Jammu, India



Cluster meeting of plant doctors conducted under CABI Plantwise programme



Plant doctors: fighting crop pests through integrated pest management



Aflatoxin control in Pakistan: A project which will change landscape of country's maize crop



Plantwise Bangladesh: supporting national crop monitoring



Food insecurity affects country's economy, politics'



Seminar on climate change held



Spotlight on farmers' training programme and release of fruit fly parasitoids in Pakistan



Saying "no" to harmful chemicals in cotton crop production



Spotlight on farmers' training programme and release of fruit fly parasitoids in Pakistan



A Step towards Climate Smart Agriculture and cost effectiveness



Hyperspectral data can discern invasive Parthenium hysterophorus weed from other crops and plant species



Project Launched-Mitigating pesticide residue limits on red chillies in Pakistan



CABI works in partnership to promote organic agriculture in Pakistan



Pest Risk Analysis workshop: spotting Pakistan's potential invaders



Aflatoxin risks highlighted to extension staff in Pakistan's Khyber Pakhtunkhwa province



Plantwise Pakistan: National Forum boosts stakeholder cooperation



Maize Lethal Necrosis Disease – the invasive threatening maize



Fall armyworm: CABI contributes to integrated pest management guide



Webinar series focuses on desert locusts



Virtual training workshop on 'Biopesticides and their Future Prospective for Pakistan'

### **Explore Our Videos**





Dr Babar E Bajwa on the Pakistan Centre



Aflatoxin control through the eyes of a maize grower in Punjab, Pakistan



Aflatoxin control in Pakistan



Biological control of fall armyworm in maize in Bangladesh



CABI - Working in partnership for an inclusive and sustainable future



Invasive Asia: Parthenium



Invasive Asia: White Fly



Invasive Asia: Red spider mite

## Acknowledgment

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

#### Asia

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Ministry of Agriculture and Rural Affairs, People's Republic of China



Australian Government Australian Centre for International Agricultural Research





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Swiss Agency for Development and Cooperation SDC