CALL FOR APPLICATIONS

The International Organisation for Biological Control - Asia and Pacific Regional Section
and International Center for Tropical Agriculture bring to you

MAXIMIZING OPPORTUNITIES FOR
BIOLOGICAL CONTROL IN ASIA'S CHANGING AGRO-LANDSCAPES
A HANDS-ON TRAINING COURSE

The Changing Face of Asia's Agriculture

Over the past decades, Asia's agriculture sector has changed dramatically from highly-diverse and dynamic smallholder-managed systems – in which farmers managed nutrient flows meticulously, or devised ingenious ways to use predatory insects and birds for pest control – into being one of the world's most intensified and productive farming systems. As Asian agriculture supports 60 percent of the world's population on barely 20 percent of global arable land, many things can be learned from Asian farming systems, but at the same time, there's ample cause for caution.

Global market forces and growing population are putting mounting pressure on Asia's countryside, which is now subject to the highest rates of land-use change, habitat loss and deforestation globally. Agro-landscapes are rapidly being simplified and homogenized, and natural habitats, including Asia's majestic primary forests, are being converted to paper & pulp, industrial plantations, or food crops. Diverse and species-rich agricultural natural habitat mosaics have, at the blink of an eye, made way for large swaths of genetically-uniform monocultures and desolate, managed tree-blocks. Low-input, smallholder-cultivated plots and traditional backyard gardens are fast becoming a thing of the past, as these are managed with ever-increasing inputs of chemically-synthesized pesticides and fertilizers.

The above trends are bringing about far-reaching agro-ecosystem decay and biodiversity loss, not only of Asia's charismatic mega-fauna but also – albeit, largely unquantified – of less conspicuous, yet highly-important arthropods.

Biodiversity provides multiple services to agro-ecosystems, and a diverse range of arthropod taxa are central to processes such as nutrient cycling, organic matter decomposition, crop pollination and insect biological control. With dwindling levels of on-farm biodiversity, Asia's agriculture sector runs the risk of shedding critical components of a system's ability to sustain crop productivity in light of multiple biotic/abiotic stressors.

Training Course

This one-week field course will be organized around a number of topics that are of immediate relevance to Asia's agriculture, such as invasive species, ecological intensification, biodiversity loss in agricultural settings, and landscape simplification. The short course will provide a primer to students and young professionals in how biodiversity affects biological control of pests - within the particular context of Asia's intensified agriculture. The course will use an approach that will pair lecture-style introductions to key topics by world experts with hands-on activities in order to reinforce key concepts.

Cross-cutting subject areas that will be covered in this course include: Biodiversity in tropical systems; diversity from landscape to farm-level scales; the importance of diversity & biological control on smallholder farms; and the importance of resource diversity to biological control.

The short course will not only celebrate Asia's historical contributions to the field of arthropod biological control, but equally highlight opportunities and threats for sustained biological control in present-day farming systems. The course will introduce novel concepts, tools and methodological approaches, and plant the seed for invigorated applied research on arthropod biological control in Asia's highly unique yet rapidly changing agro-landscapes.

Course details

Dates: September 02-09, 2017
Location: Beijing, China; Hanoi, Vietnam (concurrent)
Thematic focus: Landscape ecology and plant-pest-enemy volatile communication (China); Population/Community ecology and trophic ecology (Vietnam)
Methodology: Lectures, including interactive sessions through video-conferencing and web-based communication tools; Hands-on learning and laboratory/field trials

Core teaching body

Kris Wyckhuys, International Center for Tropical Agriculture
Yanhui Lu, Chinese Academy of Agricultural Sciences
Geoff Gurr, Fujian Agriculture and Forestry University / Charles Sturt University
Minsheng You, Fujian Agriculture and Forestry University
Nguyen Duc Tung, Vietnam National University of Agriculture
Pablo Imbach, International Center for Tropical Agriculture
Jonathan Lundgren, Ecydsis Foundation
Jean-Philippe Deguine, French Agricultural Research Centre for International Development
Lori Shapiro, Harvard University

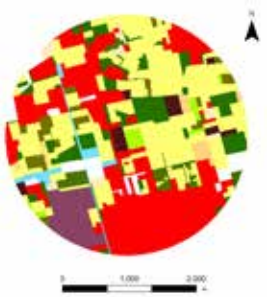
Application guidelines & registration fee

The course is open to **advanced-level graduate students and junior faculty**, either from Asia or beyond. At either location (Beijing; Hanoi), a maximum of 20 participants can be accommodated.

To apply, email your expression of interest to Dr. Kris Wyckhuys (k.wyckhuys@cgiar.org) and Ms. My Hoang (m.hoang@cgiar.org). **Applications should be received before May 1, 2017.**

A **registration fee** of US $250 will apply for developing-country participants, and US$ 400 for all other participants. Upon, request, limited travel support may be facilitated to developing-country participants. Visa application assistance will be provided.







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