Coordinators

Dr. Sally Miller Department of Plant Pathology 1680 Madison Ave. Wooster, OH 44691 USA Phone: 01-330-263-3678 Fax: 01-330-263-3841 E-mail: miller.769@osu.edu

Dr. Luis Cañas Department of Entomology 1680 Madison Ave. Wooster, OH 44691 USA Phone: 01-330-263-3818 Fax: 01-330-263-3686 E-mail: <u>canas.4@osu.edu</u>

Local Organizer

Ms. Nuris Acosta Department of Entomology 1680 Madison Ave. Wooster, OH 44691 USA Phone: 01-330-263-3935 Fax: 01-330-263-3686 E-mail: nuris.acosta@gmail.com

APPLICATION DEADLINE June 1, 2017 Maximum 15 participants

Registration Fee: \$250 (non-refundable)

Course Fee: \$4,000

Includes instruction/bench fee, materials, transportation to/from Cleveland OH airport, and local travel, meals and lodging. Course fee is non-refundable after July 1, 2017.

Cooperating Departments, Institutions and Agencies

The Ohio State University Department of Plant Pathology Department of Entomology Office of International Programs in Agriculture Purdue University Virginia Tech USDA Animal and Plant Health Inspection Service (APHIS) National Plant Diagnostic Network International Plant Diagnostic Network US Agency for International Development







THE OHIO STATE UNIVERSITY COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Pest and Disease Diagnostics for International Trade and Food Security

An International Short Course

Aug 21-Sep 1, 2017 The Ohio State University OARDC Wooster, OH USA



Why Take This Course?

Accurate identification of plant diseases and insect pests is the first step in integrated pest management. It is also a linchpin in international agricultural trade, freedom from pests and as diseases is a pre-requisite to phytosanitary certification. Plant disease and pest diagnosis in both and laboratory settings field requires extensive training and hands-on experience in traditional and modern diagnostic methods.

The Ohio State University will conduct a 2-week, lab-based short course providing intensive training in classical and modern plant disease and insect pest diagnostics for up to 15 participants. Training in data management, networking, and Sanitary/Phytosanitary (SPS) issues that affect international trade will also be provided.

Instructors experienced in plant disease and pest diagnostics and international trade/SPS issues from The Ohio State University, the National Plant Diagnostic Network, the International Plant Diagnostic Network, other universities, and federal and state agencies will provide hands-on training.

A comprehensive training manual and flash drive containing all training materials and presentations will be provided.

The Course

Introduction to SPS Issues

 International agreements and standards, pest risk assessment, hazard analysis and pest risk management

Plant Disease and Pest Diagnostic Technology Training

- Hands-on laboratory and distance diagnosis, use of microscopy, imaging, culturing, taxonomic keys, internet resources, determinative tests, serology, end-point and quantitative PCR, isothermal DNA amplification
- Diagnosis of diseases caused by viruses, bacteria, phytoplasmas, fungi, fungal-like pathogens, nematodes

- Identification of the major groups of insect pests
- In depth case studies of critical pathogen and insect pest groups, e.g. *Ralstonia solanacearum*, Lepidoptera: Pyralidae and Noctuidae

Pest Diagnostic Data Management
Standard forms and databases
* US PDIS

Train-the-Trainer Program

 Monitoring, sampling/sample submission, art and science of plant disease and pest diagnosis, communication protocols, writing SOPs for high risk pest and pathogen diagnosis