

## **2025 PPCDL Workshop Course Descriptions v1.0 11-11-25**

### **ELISA Fundamentals Workshop**

This 2-day in-person workshop will cover all aspects of ELISA testing using commercially available kits. Lectures will cover the fundamentals of ELISA, different testing approaches and advantages and disadvantages of ELISA types with an emphasis on Good Lab Practice (GLP). The hands-on portion will give participants exposure to processing samples, the ELISA workflow and results interpretation.

Note: This workshop is not required in order to take the ELISA proficiency testing panel.

### **Seed Pathogen Testing Workshop on CGMMV, ToBRFV, Pospiviroids**

Seed Pathogen Testing Workshop is a 2-day workshop that has lectures and a hands-on training component. Lectures include a background of seedborne viral diseases of cucurbits and solanaceous plants and review of methods for the detection and identification of seedborne viral pathogens, focusing on nucleic acid extraction principles and methods of manual and high throughput extraction from seeds. The hands-on portion of the training will focus on manual and high throughput nucleic acid extraction from cucurbit and solanaceous seeds. Robotic nucleic acid extraction training will be provided on ThermoFisher Scientific KingFisher Apex nucleic acid purification systems.

### **Returning 2025! Phytoplasma Molecular Detection Workshop**

The Phytoplasma Molecular Detection Workshop will be returning in 2025. This 2-day workshop provides an introduction on Phytoplasmas, their taxonomy and disease symptoms associated with some of these bacterial pathogens of interest to APHIS PPQ. The hands-on portion of the training will focus on available phytoplasma-infected samples and cover sample preparation, DNA extraction/purification, molecular assays, and interpretation of results.

### **Sample Submission for Confirmatory Diagnostic Testing**

This virtual workshop will describe how to submit suspect samples, including Select Agents, for regulatory confirmatory diagnostic testing at the PPCDL. The presentation will focus on answering questions about the steps of the diagnostic process, sample quality, shipping procedures, and who needs to be contacted at various steps. Questions covered include: What determines if a sample needs confirmatory diagnostic testing? How to start the process of submission? Who needs to be informed or contacted? How are results reported and to whom? What materials need to be included in the shipment? Where is the suspect sample sent? How does one learn if steps are changed? Participants will also have ample time to ask their own questions.

### **Phytophthora 101 Workshop**

The *Phytophthora* 101 Workshop is a 4.5-day workshop that has lecture and hands-on components. Lecture materials include a review of *Phytophthora ramorum*, *P. austrocedri*, and the *P. kernoviae* complex, DNA extraction from leaf and woody host tissue, the real-time PCR protocols used for screening detection of *P. ramorum* (ITS and Elicitin), *P. austrocedri* (ITS and COX assays), and the *P. kernoviae* complex (ITS1 and ITS2), and interpretation of results. Each day will consist of a combination of lecture and lab work, as well as discussion of participant results, troubleshooting, and good lab practices to obtain optimal results.

### **Phytophthora austrocedri Workshop**

The *Phytophthora austrocedri* Workshop is a 1.5-day workshop that has lecture and hands-on components. Lecture materials include a review of *Phytophthora austrocedri*, DNA extraction from woody host tissue, and the real-time PCR protocol used for screening detection of *P. austrocedri*. The workshop will also include discussion of participant results, troubleshooting, and good lab practices to obtain optimal results. Participants must have taken Phytophthora 101 within the past three years to sign up for this workshop.