

## National Updates

### NPDN- USDA APHIS *Phytophthora kernoviae* and *Phytophthora ramorum* Training

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The NPDN diagnostics subcommittee and members of USDA-APHIS-PPQ-CHPST-National Plant Germplasm and Biotechnology Laboratory (NPGBL) collaborated to conduct diagnostician hands-on, real-time PCR laboratory training for *Phytophthora kernoviae*. This training also included a section on the new Elicitin targeting PCR assay released for the identification of *Phytophthora ramorum*. Four training sessions took place during February and March of 2009. The NPDN offered this training to all of its 52 state and territory members and plant industry diagnosticians.

Kurt Zeller of CPHST-NPGBL conducted the training which included an introduction to *P. kernoviae* and a review of *P. ramorum*. Kurt was joined by NPGBL support scientists

Gang Wei, Kate Rappaport, and Deric Picton. Additionally, the participants were given the opportunity to conduct hands-on, real-time PCR testing using two protocols, ITS-1 and ITS-2, for the identification of *P. kernoviae* and the new real-time, Elicitin protocol for *P. ramorum*. Vessela Mavrodieva provided a very well received segment on how to interpret results using the existing assays and the new Elicitin assay with a mock set of data and several flow diagrams created by the NPGBL as diagnostic aides.

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### **Issue Highlights:**

- ◆ NPDN-USDA APHIS *Phytophthora kernoviae* and *Phytophthora ramorum* Training
- ◆ California Citrus Research Board Positions Available
- ◆ Diagnostic Tip of the Month: Forceps Tip
- ◆ First Detector Training for the Master Gardener – Contributors Needed
- ◆ NEPDN 2009 Annual Regional Meeting
- ◆ Establishment of New Quarantine Areas in Virginia for European Gypsy Moth
- ◆ Expansion of Mediterranean Fruit Fly Quarantine Area in San Diego County, California

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Gloria Abad, PPQ Molecular Diagnostics Lab, was asked by the NPGBL to present

morphological data on *P. kernoviae* because of her expertise in *Phytophthora* taxonomy.

In all, twenty-three NPDN diagnosticians, state department of agriculture personnel and industry personnel from numerous states across the nation (including a representative from Puerto Rico) attended the three training sessions offered this Spring.

The NPGBL is located in the PPQ facility in Beltsville, MD that most of us refer to as “Building 580”. Recent renovation to the NPGBL lab area has resulted in the NPGBL operating larger training classes (Eight to ten diagnosticians per session versus six).

PPQ is designing an addition to this facility that will increase the space for PPQ programs but has also planned for a

dedicated set of training labs and a classroom for the lecture portion of training. If funding for the construction of this facility is approved it will result in an increased number of NPGBL training sessions per year and larger class sizes when needed.

As the NPGBL develops and validates new detection methods they will use these training sessions as a mechanism to transfer methods to diagnosticians in the NPDN, State Departments of Agriculture, and PPQ programs.

### ***Upcoming training sessions***

Laurene Levy and her NPGBL colleagues are planning to continue this very valuable collaboration between USDA-APHIS and NPDN and offer new workshops in the Fall of 2009. We will be offering a workshop on the pathogen that causes Potato Wart, *Synchytrium endobioticum*. We are scheduling Potato Wart workshops for September and October of 2009 and currently have 24 people signed-up for the training.

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*Phytophthora kernoviae* on rhododendron leaves. ( Photo Paul Beales, Central Science Laboratory, [www.ipmimages.org](http://www.ipmimages.org). )

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During these training sessions there was an expressed interest in a “*P. ramorum* 101” hands-on lab training that would include all of the basics such as the DNA extraction process, conventional and real-time PCR.

If you are interested in participating in any of these workshops, please contact Karen Snover-Clift at [kls13@cornell.edu](mailto:kls13@cornell.edu).

## National Updates

### 2009 USDA-APHIS Training Participants



February 10-12, 2009 training participants: Heather Faubert (University of Rhode Island), Kurt Zeller (CPHST), Laurene Levy (CPHST), Gail Ruhl (Purdue University), Bruce Watt (University of Maine), Clarrissa Balbalian (Mississippi State University), Kate Rappaport (CPHST), Karen Snover-Clift (Cornell University), Karen Rane (University of Maryland), Nancy Gregory (University of Delaware), Vessela Mavrodieva (CPHST), Gang Wei (CPHST).

Not shown above: February 17-19, 2009 training participants: Albert Patton, (Texas A&M University), Jason French (New Mexico State University), Cheryl Smith (University of New Hampshire), Deb Schneider (University of New Hampshire), Judy O'Mara (Kansas State University).

March 3-5, 2009 training participants: Aaron Trippe (Oregon DOA), Melodie Putnam (Oregon State University), Dave McCann (West Virginia University), Eliazabeth Schrum (Kansas State University).

March 10-12, 2009 training participants: Anne Vitoreli (University of Florida), Jim Stack (Kansas State University), Elizabeth Bush (Virginia Tech University), Cheryl Blomquist (CDFA), Suzanne Lathan (CDFA), Francisco Avila (AGDIA), Rob Wick (University of Massachusetts).

## California Citrus Research Board Positions Available

The California Citrus Research Board is now accepting applications for the following positions:

- Laboratory Director
- Field Department Director
- Laboratory Biologist (two positions)

For complete descriptions of these positions, please visit the [employment opportunities web page](#) on the [NPDN web site](#).

## Diagnostic Tip of the Month

### Diagnostic Tip of the Month Forceps Tip

Deborah Schneider  
University of New Hampshire  
Plant Diagnostic Lab,  
UNH-PDL

To protect the tips of forceps, slide one side of the forceps over the edge of a beaker and store the forceps the edge to keep the tips from getting bent.

Interested in submitting a diagnostic tip of the month? Contact Gail Ruhl ([ruhlg@purdue.edu](mailto:ruhlg@purdue.edu))

## Training and Education

### First Detector Training for the Master Gardener - Contributors Needed

In 2008, the NPDN education and training committee formed a workgroup to develop educational materials to train master gardeners as first detectors. The committee has identified key regulatory, quarantine and emerging pests, diseases and weeds of interest to master gardeners with an emphasis on issues of landscape ornamentals from each of the five NPDN regions.

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Using a beaker to prevent forceps tips from getting bent.

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This list is considered dynamic and will change over time as new threats emerge.

In partnership with Bugwood wiki, these training materials consisting of fact sheets, images and Powerpoint presentations are currently housed at (<http://wiki.bugwood.org/NPDNMG-Training>).

### Why Master Gardeners?

Initially the NPDN first detector training program focused on training individuals involved in field crops. Master gardeners represent a very large group of willing individuals that have not been utilized to their fullest potential as first detectors:

- There are 1,000 active training programs in all 50 states.
- Based on 1998/1999 study (USDA-CSREES, 2005), ~ 17,000 volunteers enrolled each year.
- Master gardeners are an integral component of extension programs in many states including:

### Public outreach

- Staffing booths at community events
- Horticultural advice services
- Staffing diagnostic clinics

### Education

- Teaching and presenting to garden clubs
- Web site development

# Training and Education

### Interest in Contributing?

Members of the NPDN education and training committee are actively seeking assistance with the content of the insects, diseases and weeds categories. Submissions for the current list of organisms are first priority but submission of other emerging or existing plant pests, diseases or weeds will also be accepted. Interested individuals should contact Joe LaForest at [laforest@uga.edu](mailto:laforest@uga.edu) or call him at (229) 386- 3298.

The committee will review submitted materials and help with its development.

The screenshot shows a web browser window displaying a page on Bugwood Wiki. The page title is "First Detector Training for the Master Gardener". The page content includes the NPDN logo and a paragraph explaining the purpose of the page: "The National Plant Diagnostic Network Training and Education Committee has created this page to provide an easily accessible source of information, presentation materials, and images related to the detection of exotic or newly introduced plant pests. Below, you will find links to fact sheets on the species of concern to the NPDN. At the end of the fact sheet, you will find a gallery of images that are representative of these organisms and a link to download presentation materials that may be used to educate various groups such as master gardeners, garden clubs and homeowners about these pests." Below this text is a "Contents" section with links to "1 Insects", "2 Diseases", and "3 Weeds". The "Insects" section is expanded, showing a list of insect species with links to their respective fact sheets, including African Citrus Psyllid, Arrowhead scale, Asian Ambrosia Beetle, Asian Gypsy Moth, Asian Longhorned Beetle, Citrus Longhorned Beetle, Bed Bugs, Sweetpotato whitefly, Brown marmorated stink bug, Cassava mealybug, Chili Thrips, Coffee mealybug, Hemlock Woolly Adelgid, Japanese wax scale, Light Brown Apple Moth, Old World Bollworm, Pine Shoot Beetle, Potato psyllid, Red Palm Mite, Redbay Ambrosia Beetle, Sirex Woodwasp, Spodoptera litura, Sugarcane silk floss aphid, and Suni Bua.

# Regional Updates



## Northeast Region

### NEPDN 2009 Annual Regional Meeting

Members of the NEPDN met on March 17-19, 2009 in New Brunswick, New Jersey on the Rutgers University campus for the 2009 NEPDN regional meeting.



NEPDN members visit the USDA APHIS-PPQ Plant Inspection facility in Linden, NJ as part of their regional meeting. Bottom: Ana Margina, Botanist, USDA-APHIS-PPQ, shows her collection she uses for seed identification. (Photos Mary McKellar, Cornell University)

Meeting participants included: Karen Snover-Clift (Cornell University), Mary McKellar (Cornell University), Karen Scott (Cornell University), George Hudler (Cornell University), George Fox (Cornell University), Carolyn Klass (Cornell University), Joan Allen (University of Connecticut), Bo Bolough (Connecticut Agricultural Experiment Station), Nancy Gregory (University of Delaware), Bruce Watt (University of Maine), Karen Rane (University of Maryland), Bess Dicklow (University of Massachusetts), Rob Wick (University of Massachusetts), Cheryl Smith (University of New Hampshire), Sara May (Pennsylvania State University), Seong Hwan Kim (Pennsylvania Department of Agriculture), Eileen Luke (Purdue University, CERIS), Heather Faubert (University of Rhode Island), Rich Buckley (Rutgers University), Sabrina Tirpak (Rutgers University), Ann Hazelrigg (University of Vermont), Dave McCann (West Virginia University) and John Baniecki (West Virginia University).

In addition to spending a day in the meeting room reviewing regional business, participants toured the USDA APHIS-PPQ Plant Inspection and fumigation facilities in Linden, NJ. Participants learned about plant inspections at the east coast's third largest port at Port Elizabeth, NJ, and met the port director and the inspection station's insect, plant disease and weed identifiers. The tour of both facilities was extremely educational and enlightening. Our hosts were very accommodating and we are grateful for the time they spent showing us around and answering our questions.



**Southern  
Region**

## **Establishment of New Quarantine Areas in Virginia for European Gypsy Moth**

The Animal and Plant Health Inspection Service (APHIS) confirmed that the population levels of European gypsy moth, in Bland and Pulaski Counties, and the City of Radford, Virginia, have reached the threshold levels to trigger the establishment of quarantine areas. The gypsy moth (GM) populations for Bland and Pulaski Counties, and the City of Radford, reached this level in late 2008.

GM is an introduced highly destructive insect of approximately 300 species of trees and shrubs.

For more information, please visit on the web: [NAPPO Phytosanitary Alert System: Establishment of New Quarantine Areas in Virginia for European Gypsy Moth \(\*Lymantria dispar\*\) - United States](#)



**Western  
Region**

## **Expansion of Mediterranean Fruit Fly Quarantine Area in San Diego County, California**

On February 19, 2009, APHIS has expanded the designated Mediterranean fruit fly (Medfly) quarantine area in the El Cajon area of San Diego County, California, to now include parts of the Spring Valley area of San Diego County, California.

From November 7 through February

5, 2009, APHIS, in cooperation with the California Department of Food and Agriculture and the San Diego County Agricultural

Commissioner, confirmed the detection of 22 adult Medflies on 16 separate residential properties in the El Cajon/Spring Valley area. Also, two Medfly larvae were detected at one separate residential property and one residential property on which adults were also detected in the El Cajon area. These detections triggered the establishment and expansions of this quarantine area.

Fruit fly traps have been deployed at protocol levels to conduct a delimitation survey surrounding the detection sites. The population control treatment, known as sterile insect technique (SIT), is being conducted in two separate areas including a 50.60-square-mile area surrounding detection sites in the El Cajon area and a 9-square-mile area surrounding the detection site in the Spring Valley area. SIT is an eradication tool which consists of the aerial release of sterile male Medflies to inundate the detected wild population to reduce reproduction.

For more information, please visit on the web: [NAPPO Phytosanitary Alert System: \*Ceratitis capitata\* \(Mediterranean fruit fly\) – Second Expansion of a Quarantine Area in San Diego County, California - United States](#)

# **Regional Updates**

# Upcoming Events

## *National Events*

**August 1-5, 2009, [2009 APS Annual Meeting, Portland](#), Oregon**

**August 26-27, 2009, [2009 Soybean Rust Short Course](#), Quincy, FL**

**December 6-10, 2009, NPDN National Meeting, Miami, FL**

**December 9-11, 2009, [2009 National Soybean Rust Symposium](#), New Orleans, LA**

**December 13-16, 2009, [2009 Entomological Society of America Annual Meeting](#), Indianapolis, IN**

[Mary McKellar](#), Editor  
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