

## National Updates

### NPDN-USDA APHIS Diagnostician Training

Joy Pierzynski, Kansas State University  
 Karen L. Snover-Clift, Cornell University  
 Laurene Levy, USDA-APHIS-PPQ-CHPST-NPGBL

Laurene Levy and her NPGBL colleagues Vessela Mavrodieva, Sarika Negi, Mark Nakhla, Kristina Owens, Wenbin Li, Elizabeth Twieg, Renee DeVries and Deric Picton offered trainings that included biochemical and molecular techniques for the detection of pathogens that cause Citrus Greening, Potato Cyst, Plum Pox and Southern Wilt/Brown Rot.

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Foliar symptoms of citrus greening on grapefruit. One of the several pathogens that diagnostic training was offered for in early 2008 by the NPGBL in Beltsville, MD. (Photo J. M. Bove, [www.ipmimages.org](http://www.ipmimages.org))

The NPDN diagnostics subcommittee and members of USDA-APHIS-PPQ-CHPST-National Plant Germplasm and Biotechnology Laboratory (NPGBL) collaborated to conduct diagnostician hands-on laboratory training during

the early months of 2008. Joy Pierzynski of Kansas State University and Secretary of the NPDN diagnostics subcommittee coordinated this enormous task for the NPDN members.

The NPDN offered this training to all its 52 state and territory members and National Plant Industry diagnosticians.

### **Issue Highlights:**

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Due to the overwhelming interest in *Ralstonia solanacearum* R3B2 (the pathogen that causes Southern Wilt/Brown Rot) identification techniques, three classes were needed to accommodate everyone. During the PCN training session the NPGBL was joined by ARS Scientist Handoo Zafar of the ARS Nematology Laboratory in Beltsville, MD who provided information on the morphological characteristics to identify cyst nematodes.

In all, forty-four NPDN diagnosticians or colleagues attended (or are scheduled to attend) the six training sessions offered. Training sessions began in February and are scheduled to run through mid-April.

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 (8-10 diagnosticians per session versus 6).

PPQ is designing an addition to this facility in 2008 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. This facility improvement will result in increased NPGBL trainings 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.

## ***Future Trainings***

Laurene Levy and her NPGBL colleagues are planning to offer training this fall (most likely September or October) on Potato Cyst nematode. The NPDN diagnostics subcommittee will be coordinating this training opportunity.



Symptoms of *Phytophthora kernoviae* on rhododendron. Trainings on diagnosing this pathogen will be held in the spring of 2009 (Photo Central Science Laboratory, [www.forestryimages.org](http://www.forestryimages.org)).

Also in the Spring (most likely February or March 2009), we will be offering two workshops, one on a relatively new pathogen of interest, *Phytophthora kernoviae*, and one on the pathogen that causes Potato Wart, *Synchytrium endobioticum*. If you are interested in participating in any of these workshops, please contact Karen Snover-Clift at [kls13@cornell.edu](mailto:kls13@cornell.edu).

## ipmPIPE Featured as New PMN Webcast

Joining the growing number of webcasts on the Plant Management Network's [Focus on Soybean](#) is a new presentation describing the Integrated Pest Management Pest Information Platform for Extension and Education or ipmPIPE for short. Presented by Dr. Donald Hershman, University of Kentucky, the talk is titled [The ipmPIPE: A New Tool for Enhancing IPM Use in Soybean](#).

The ipmPIPE now involves monitoring and reporting pests of soybean and various legume crops, specifically soybean aphid and soybean rust, with other components in development.

Advances of the ipmPIPE over the existing IPM template include easy stakeholder access to pest incidence and distribution data, disease forecasting, and state-specific control recommendations, through a public website, on a near-real time basis. *Plant Management Network* is a not-for-profit science-based resource concentrated on improving crop management and production.

## Diagnostics Subcommittee Update

Karen L. Snover-Clift  
Committee Chair  
Cornell University  
Department of Plant Pathology

The NPDN diagnostics subcommittee held a conference call on March 13, 2008. During this meeting a number of issues were addressed. Please refer to the diagnostics subcommittee web page of the [NPDN web site](#) for complete minutes of this meeting (login and password required).

Topics of discussion included:

- Beltsville-NPDN diagnostician training planning.
- Lab accreditation progress.
- National Plant Board survey.
- Entomology documents, entomology minimum lab standards and submission of insect samples to diagnostic facilities.
- Joel Floyd's request for collaboration on a Lepidoptera Workshop.
- How to renew our laboratory permits using the on-line system.

The next conference call will be held on Thursday, April 10, 2008.

## Diagnostics Tip of the Month: Moist-chamber on Water Agar

Julia W. Thompson  
Missouri Department of Agriculture

A Petri dish with water agar makes an excellent moist-chamber for small samples pieces. The agar does not dry out as quickly as filter paper and provides the sample with even moisture.

Occasionally a pathogen will grow into the agar from the sample and form identifiable structures on the agar even before it does on the plant tissue itself.

# Diagnostic Updates



Apple leaf moist-chambered on water agar in a Petri dish sealed with Parafilm® (Photo Julia W. Thompson)

# National Database

## NPDN National Repository

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## National Database Subcommittee Update

Karen L. Snover-Clift  
Committee Chair  
Cornell University  
Department of Plant Pathology

### *Epidemiology Maps Training*

Training is now available to diagnosticians for viewing their lab's data overlaid with degree day data generated by Oregon State (Figure 1).

Two upcoming online training sessions, via Adobe Connect, are scheduled for **March 26, 2008** and **April 4, 2008** at **2:00pm EDT**.

Those that are interested in participating should contact either Mike Hill ([mhill@ceris.purdue.edu](mailto:mhill@ceris.purdue.edu)) at 765-494-9854 or Carla Thomas at 530-304-0689 ([cthomas@ucdavis.edu](mailto:cthomas@ucdavis.edu)) for further details.

The NPDN national database subcommittee met on March 12, 2008 to continue our work on reviewing the massive EPA pest and host lists and revising guidelines for uploading documents that will clarify how sample diagnoses should be transmitted to the National Repository at Purdue University. During this meeting a number of issues were addressed. Please refer to the national database subcommittee web page of the [NPDN web site](#) for complete minutes of this meeting (login and password required).

Topics of discussion included:

- Change submission requests.
- Creating guidelines to help the group review the database.
- Review of fungal disease common names beginning with the letter C.

The next meeting will be held on April 9, 2008.

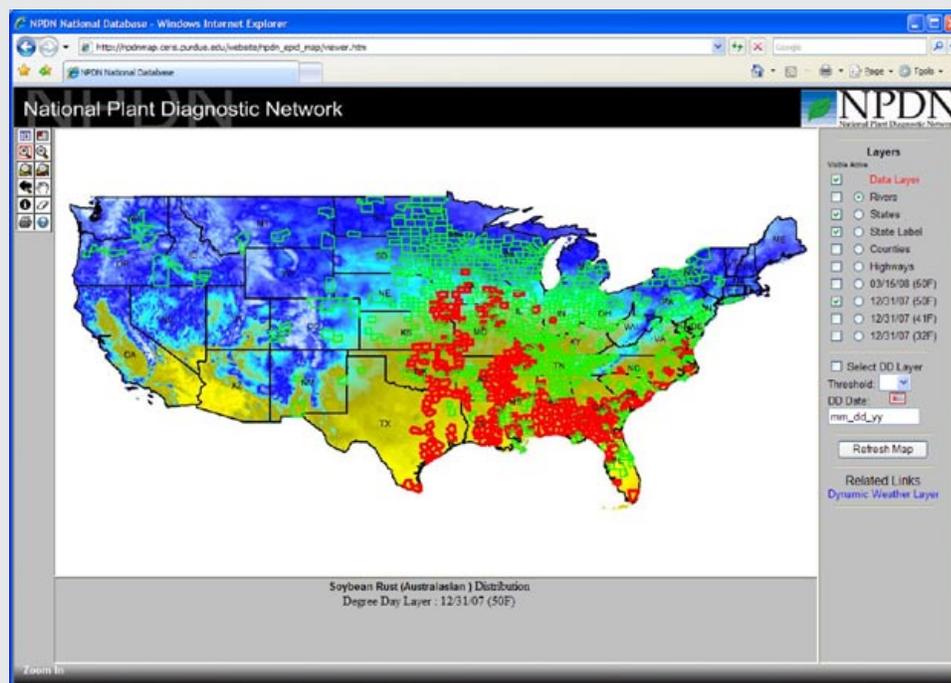


Figure 1: Example of 2007 soybean rust data overlaid with 50° F threshold.



## **North Central Region North Central Region Hosts 2008 Bark and Ambrosia Beetle Identification Workshop in March**

During the week of March 3rd the North Central region hosted a Bark and Ambrosia Beetle Identification Workshop. The workshop was held at Michigan State University. There were a total of 44 participants from around the country and even Puerto Rico.

The instructors included: Mr. Jim Labonte from the Oregon Department of Agriculture, Dr. Jim Zablotny from USDA-APHIS-PPQ in Michigan, Dr. Bob Rabaglia from USDA Forest Service, Forest Health Protection, Dr. Brian Kopper from USDA-APHIS-PPQ Eastern Regional Program Manager, and Dr. Anthony Cognato from Michigan State University.

The participants spent a majority of their time at microscopes keying out bark beetles, from a collection that was provided to them as well as networking with each other during laboratory time and the banquet.

## **Sirex Woodwasp Detected in Second Michigan County**

On February 19, 2008, the USDA Animal and Plant Health Inspection Service (APHIS) confirmed the detection of two female *Sirex noctilio* in Sanilac County, Michigan. One female specimen was collected on July 8, 2007, from a

Lindgren trap baited with the standard alpha and beta pinene lure. The other female woodwasp was collected on July 25, 2007, from a nearby un-baited intercept trap hung on a trap tree. Both traps were located on private property.

The *Sirex* survey area in Michigan is part of a multi-state detection and delimiting survey that has been ongoing for several years in high-risk areas throughout the United States. To date, cooperative State and Federal survey efforts have detected *S. noctilio* in 6 Pennsylvania counties, 2 Michigan counties (including Sanilac), 29 New York counties, and 1 Vermont county.

For more information on this pest and its current detection, please visit on the web:

NAPPO Phytosanitary Alert System:  
[\*Sirex noctilio\* Fabricius \(\*Sirex woodwasp\*\) in Sanilac County, Michigan - United States](#)



Adult *Sirex* woodwasp on Scots pine (Photo Kevin Dodds, [www.forestryimages.org](http://www.forestryimages.org))

# Regional Updates

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## NEPDN Regional Meeting Chadds Ford, PA February 26-27, 2008



Top: Gourmet Pom Pom mushroom grown at Phillips Mushroom Farm (Photo Heather Faubert). Bottom: NEPDN members enjoy a tour of Longwood Gardens (Photo Karen Scott).

NEPDN held its annual regional meeting at the Brandywine River Hotel in Chadds Ford, Pennsylvania February 26-27, 2008. The meeting was attended by Land Grant University diagnosticians from all twelve states in the region as well as a diagnostician from the Pennsylvania Department of Agriculture.

A few topics of discussion included the region's accomplishments over the past five years, changes to PDIS, IT/Diagnostician meeting updates as well as updates on first detector training.

A "Diagnosticians Round-Up" was held on the second day of the meeting and included presentations from Nancy Gregory, University of Delaware, on a number of odd discoveries and Rob Wick, University of Massachusetts, on a pimaricin efficacy experiment. The group enjoyed guided tours of the Phillips Mushroom Farm and Longwood Gardens in Kennet Square, PA.

## Northeast Region NEPDN Phase 2 DNA Extraction Training A Big Success

Northeast region diagnosticians got an opportunity to practice what they learned after participating in the Northeast Plant Diagnostic Network's "DNA Extraction Training for Diagnosticians" held on November 20, 2007 via web conferencing using Adobe Connect software.

As a continuation of this training, NEPDN regional staff sent interested participants plant material infected with *Phytophthora citricola* in late January 2008. Participants that received plant material followed the DNA extraction protocol outlined in the NPDN standard operating procedure for *Phytophthora ramorum*. DNA samples were then sent back to the regional center where Real-Time PCR was performed to determine if the DNA extractions were successful.

Participant results were discussed at the NEPDN regional meeting held in late February. Fifteen participants from ten states in the Northeast region participated in the second phase of this training. Participants found the hands on portion of the training extremely practical and would like to continue these types of trainings in the future.

## *National Events*

**March 31 - April 3, 2008, [Eastern Plant Board 2008 Annual Meeting](#), Charleston, West Virginia**

**April 6-9, 2008, [Southern Plant Board 2008 Annual Meeting](#), Nashville, TN**

**May 6 - 8, 2008, [Western Plant Board 2008 Annual Meeting](#), Cody, WY**

**July 26-30, 2008, [Centennial APS/SON Joint Meeting](#), Minneapolis, MN**

**August 10-14, 2008, [National Plant Board 2008 Annual Meeting](#), Solomons, Maryland**

**November 16-19, 2008, [ESA Annual Meeting](#), Reno, NV**

**March 24-26, 2009, [Sixth International IPM Symposium](#), Portland, OR**

**January, 2010, NPDN National Meeting, Miami, FL**

# Upcoming Events



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