

NPDN News

The Newsletter of the National Plant Diagnostic Network

Volume 1, Issue 4, July 2006

National Updates

Plum Pox Confirmed in New York State

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



Symptoms of plum pox virus on plum. (Photo Ralph Scorza, USDA, ARS-Appalachian Fruit Research Station, Keaneysville, W.Va)

For the first time in New York State (NYS), the Plum Pox Virus (PPV) was detected by the Cornell University Plant Disease Diagnostic Clinic in a sample of two Plum (*Prunus* sp.) trees while performing laboratory testing for the NYS Department of Agriculture &

Market's (NYSDAM) National Plum Pox Survey. The trees and surrounding area located in Niagara County, NY were re-sampled immediately. Eight samples were collected from the originally positive trees and 53 samples were collected from the surrounding area. Seven of the eight samples from the original trees tested positive. All the surrounding area samples tested negative, no virus found. All samples were tested using Enzyme-linked Immunosorbent Assay (ELISA) and real-time Polymerase Chain Reaction (PCR) both validated and approved testing

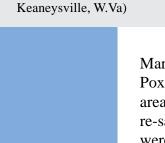
methods. On July 10, 2007, NYSDAM received positive confirmation from the USDA-APHIS-PPQ-CPHST laboratory in Beltsville, MD. The USDA has determined the strain to be "D" which is the strain found in Canada and Pennsylvania.

This year's survey effort will increase to include an additional 20,000 samples to the originally planned 10,000 samples already in progress.

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Issue Highlights:

- ◆PPV Confirmed in NY State
- ◆ Potato Cyst Nematode Update
- ♦ Pink Hibiscus Mealybug in Cayman Islands
- ♦ Volunteers Needed for NPDN Booth at APS Meeting
- ◆ NPDN Education and Training Updates
- ◆IT Updates from the PDIS Development Team
- ♦ NPDN Diagnostic Subcommittee Update
- ◆ National Repository Updates
- ◆Regional News from the NEPDN, SPDN and WPDN



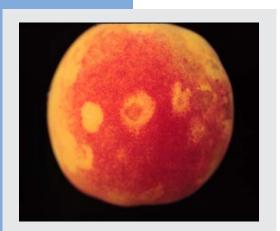


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A one mile area around the positive find will be surveyed and all host trees sampled and sent to

the Cornell laboratory. An eradication effort is in the planning stages.



PPV symptoms on peach. (Photo Dr. Ken Hickey, Pennsylvania State University)

Plum Pox, also known as Sharka, is a viral disease of stone fruit trees such as plum, peach, and apricot. It has been a devastating disease in Europe since the early 1900s, where it was first reported in Bulgaria, then spread throughout Europe.

In recent years the disease has spread to the Americas, first being found in Chile in 1992, in the orchards of Adams County,
Pennsylvania, in 1999, and in Ontario and Nova Scotia, Canada in 2000. PPV was originally on the select agent list but was removed in March 2005 due to the fact that it does not spread easily and intentional introduction would be difficult. The disease remains localized at this time and it is hoped that it will be contained and eradicated before it has a chance to spread to other parts of the North American continent.

For more information about this confirmation, please visit on the web:

<u>USDA Laboratory Confirms Plum Pox</u> <u>Virus in New York</u>

Update on Potato Cyst Nematode

Potato cyst nematode, Globodera pallida, has been detected in a second field in Idaho as part of the ongoing efforts to survey for this pest conducted by APHIS and the Idaho State Department of Agriculture (ISDA). This second detection was made in another field within the same farming operation as the detection on June 13, 2006 in northern Bingham County. The two positive fields are approximately 0.5 miles apart. APHIS and ISDA will continue efforts to conduct delimiting surveys of adjacent and associated fields and facilities. More information on this find can be found on the web at: Update on Potato Cyst Nematode, Globodera pallida, NAPPO, Phytosanitary Alert.

Pink Hibiscus Mealybug in Cayman Islands

Amanda Hodges Department of Entomology and Nematology University of Florida

On June 21, 2006, the pink hibiscus mealybug, *Maconellicoccus hirsutus*, was confirmed in the Cayman Islands. The pink hibiscus mealybug is an extremely polyphagous pest that may infest ornamental, citrus, and vegetable crops.

The tropical climate of the Cayman Islands is well-suited for establishment in the Cayman Islands, and government officials were screening for this invasive species prior to its arrival.

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Pink hibiscus mealybug, *Maconellicoccus hirsutus* (Photo FDACS-DPI)

Due to the pink hibiscus mealybug's establishment in Florida and concerns relating to shipment of potentially infested plant material, the NPDN partnered with the National IPM Centers, USDA-APHIS, and the National Plant Board to submit a USDA-CSREES critical needs grant. A component of this grant funding included a national training session on the pink hibiscus mealybug in June of 2005. Topics included taxonomic, management and regulatory issues with the pink hibiscus mealybug. Several international participants attended the workshop, including attendance from the Cayman Islands. Subsequent to the Pink Hibiscus Mealybug workshop training, Dr. Greg Hodges of the Florida Department of Agriculture and Consumer Services and taxonomic instructor for the Pink Hibiscus Mealybug workshop has been working with the Cayman Islands government to confirm identifications.

For more information about this most recent confirmation, please visit on the web:

Pink Hibiscus Mealybug, Cayman Islands Government Web Site

For more information about pink hibiscus mealybug including a slide-mounting video tutorial that was developed for the 2005 training session, please visit hibiscus mealybug web site.

training session, please visit the pink hibiscus mealybug web site maintained by Dr. Lance Osborne, University of Florida.

The NPDN also has a pink hibiscus mealybug SOP that is available on the NPDN web site diagnostic subcommittee page (login and password required).

Volunteers Still Needed for NPDN Booth at APS Meeting

Karen Scott NEPDN IT Cornell University

Volunteers are still needed to work the exhibit booth at the 2006 APS.CPS.MSA joint meeting in Quebec City, Canada on July 30th, July 31st and August 1st. The schedule has one hour blocks that need to be filled. We need to have at least one IT and one Diagnostician at all times and it would be extremely helpful to have one Regional Director as well. The

current schedule is posted (as an Excel file) on the NPDN web site under "Meeting Information."

Please check your calendars and let Lee Duynslager (duynslag@msu.edu) or Karen Scott (kas8@cornell.edu)

know when you would like to work the booth.



National

Updates

Photo Gordon Holloway

National Updates

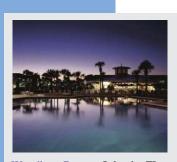
NPDN Noontime Discussion at APS Meeting

The NPDN National Operations Committee is

hosting an informal get together for state NPDN representatives at the APS Meeting in Quebec on July 30th from 12:30 to 2:00 pm at the Hilton in the Ste-Foy/Porneut.

- •Hear about the current status of the NPDN.
- •Learn about and discuss future directions of the Network.
- •Provides an opportunity to interact with the national NPDN operations committee and other state representatives.
- •Hear about plans for the National NPDN meeting in January 2007.

Please feel free to stop by any time. Light refreshments will be provided.



Wyndham Resort, Orlando, FL

Save the Date!

Annual Meeting Planning Team Karen L. Snover-Clift Department of Plant Pathology Cornell University

The NPDN National Meeting is scheduled for January 28-31, 2007 to be held at the Wyndham

Orlando Resort in Orlando, Florida.

A call for poster submissions will begin in early August so start thinking about what you would like other members and collaborators to learn about how the NPDN has impacted your program.

We are asking that each State member submit a poster so we can all learn from each other.

Registration will begin October 1, 2006. Please plan to register early as we believe this will be a popular event!

Diagnostic **Updates**

Diagnostics Subcommittee Update

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

The Diagnostics Subcommittee held a conference call on July 13, 2006. During this meeting a number of issues were address. Please refer to the NPDN web site diagnostic subcommittee page (login required) for complete minutes of this meeting.

Topics discussed on this call included:

• More suggestions for the Diagnostic section of the NPDN National Meeting in Orlando.

Suggestions included:

- -A genome based diagnostic resource project out of Colorado State.
- -Sentinel plants designed to lose chlorophyll when exposed to certain compounds. Adaptable to plant pathogens?

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- Discussion of the addition of another entomology based SOP for Soybean Aphid
- Discussion of including entomology links on the NPDN web site homepage.
- Progress of Biosafety cabinet and permit status survey (completed and on the web site)
- Standard Operating Procedures, updates being made to Ralstonia, SBR and SOD
- Need status confirmations for Bacterial Leaf Streak, CVC, and Philippine Downy Mildew
- The next meeting will be held on **August 10, 2006**.

Education and Training Subcommittee Update

Amanda Hodges Department of Entomology and Nematology University of Florida

The NPDN Training & Education Subcommittee held a special topic conference call on Friday June 30, 2006 in order to discuss the new NPDN Training & Education web site http://cbc.at.ufl.edu/. Several suggestions for improving the web site were made during the call. One major outcome was to include plans for improving advertisement of sessions for training to facilitate the use of the new web site by participants (currently under development). Full conference minutes can be viewed under the working group

minutes on the Training & Education
Subcommittee web page at NPDN web site training and education page (login and password required).

Education and Training

The NPDN Regional Educational Coordinators met via conference call on Friday, July 14, 2006 to discuss monthly training & education updates. Web site updates and plans for the APS meeting were the main focus of the discussion. Full conference minutes can be viewed under the working group minutes on the Training & Education Subcommittee web page at NPDN web site training and education page (login and password required).

The NPDN Training and Education Subcommittee met via conference call on Monday, July 17, 2006. Updates and suggestions for improving the NPDN Training & Education web site were the main topic of discussion. An update of activities from the NRI Crop Biosecurity online learning system was provided. Full conference minutes can be viewed under the working group minutes on the Training & Education Subcommittee web page at NPDN web site training and education page (login and password required).

The NPDN Training & Education Subcommittee welcomes the following new members:

- -Alisa DeGeorge, University of Maryland, NEPDN representative -Gail Ruhl, Purdue University, NCPDN representative -Gerry Snyder, Kansas State University,
- -Gerry Snyder, Kansas State University, NRI Crop Biosecurity project

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Please direct any questions, comments, or suggestions that you have concerning the new NPDN First Detector information page or the NPDN training site to Amanda Hodges achodges@ufl.edu

Please visit the following NPDN posters at the upcoming APS meeting in Quebec City, QC, Canada:

"The National Plant Diagnostic Network (NPDN) Training and Education Program for First Detectors" Hodges, A., T. Momol, G. Wisler, M. McKellar, R. Hoenisch, S. Perry, and N. Zidack. AP-384.

"The Role of Entomology in the National Plant Diagnostic Network (NPDN)" Hodges, A., T. Momol, G. Wisler, R. Hoenisch, D. Gilrein, S. Perry, and C. Klass. AP-847

IT Updates

From the PDIS Development Team

Did ya know?

Judy Dizon PDIS Development Team Kansas State University



- Diagnosticians can send referral emails to their contacts regarding the current sample being diagnosed. Please refer to the User Manual found at the login page of http:/www.pdis.org and see "Referrals and Transfers" section for more information.

-When a diagnostician does a status replication for a sample in a sample set, the "Date Completed" is replicated as well.

For IT Personnel: How to unlock multiple users?

Sharmila Dabade PDIS Development Team Kansas State University

- 1. After logging in, click on the "Users" link under the "IT Menu" on the left hand side.
- 2. Click on the "Show Locked Users for Unlocking" button to see the list of all locked users.
- 3. Click on the chexboxes on the right for selecting the individual users or click on the checkbox on top for selecting all locked users.
- 4. Click on the "Unlock Selected Users" button on top or bottom of the list for unlocking the users.
- 5. After clicking on the "Unlock Selected Users" button, selected users witll be unlocked and removed from the locked list.

For more information, please click on the "Help" link under the Main Menu on www.pdis.org.

National Database Subcommittee Update

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

The National Database Subcommittee met on June 12, 2006 to continue our work on reviewing the massive EPA Pest and Host lists and creating 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 <u>NPDN web site</u>
<u>National Database subcommittee page</u>
(login required) for complete minutes of this meeting.

Topics of discussion included:

- Data System other than PDIS
 need to be included in
 Diagnostician Guidelines for
 Sample Reporting to the
 National Repository. This
 document needs to be completed
 by the October IT/Diagnostician
 Meeting.
- Discussion of the review process for change requests.
- Discussion of how to handle submission with only a symptom unity and no known pathogen.
- Tidwell review by nematologist of the nematology section.
- The next meeting will be held on **August 9, 2006**.

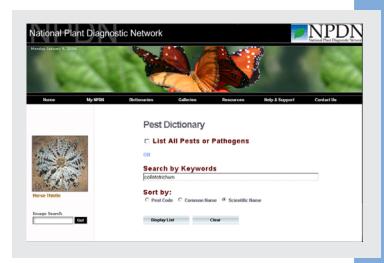
NPDN National Repository Web Site

Mike Hill Programmer Analyst Purdue University

User Accounts

Access is available to diagnosticians to the NPDN National Repository for searching their diagnostic lab records. Diagnosticians may request a user ID and password by sending an e-mail to npdn@ceris.purdue.edu with their name, telephone number, and diagnostic lab contact. Once their account has been approved they will be notified by phone with their login information. The URL for logging into the NPDN National Repository is located at http://npdn.ceris.purdue.edu.

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Database

National

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Reports

Reports provide diagnosticians with the ability to search their lab's data based on sample or enter dates, pest, host, and sample IDs. The results can then be displayed in either a record summary report or a single record raw data report. All reports include buttons to save the results in a text or Excel format.

My NPDN

The My NPDN option allows users to change their password or update their profile. The profile contains contact information about the user.

Contact Us

For more information or assistance please contact Mike Hill at (765)494-9854 or by e-mail at mikehill@purdue.edu.

Regional Updates



NEPDN Receives Provisional Approval for Sudden Oak Death Testing

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

As you may recall from a previous newsletter, Nancy Gregory of the University of Delaware, gave us a thorough overview of the National Plant Protection Laboratory Accreditation Program and its development for the accreditation and standardization of plant diagnostic labs involved in analysis and diagnosis of regulatory samples.

Recently, the Cornell University Plant Disease Diagnostic Clinic, which also serves as the NEPDN Regional Center, applied and received our inspection, performed the necessary panel testing, and received provisional approval to perform traditional methods of molecular testing for the Sudden Oak Death pathogen, *Phytophthora ramorum*. Three members of the laboratory were individually approved; Patty Clement, Mary McKellar, and Karen Snover-Clift. They are currently undergoing additional panel testing using a real-time PCR protocol.



Rhodendron leaf collected as part of sudden oak death National survey.
(Photo Kent Loeffler, Cornell University)

ELISA positive samples from within our region can now be sent to the Cornell Laboratory for not only the DNA extractions but also the PCR testing. All samples producing positive results (now referred to as PAS, *Potentially Actionable Samples*) still need to be confirmed at the National level in the CPHST-Beltsville laboratory. However, the Cornell laboratory can minimize the number of negative samples being funneled to the National confirmatory laboratory since the negative samples can be completed at the Cornell laboratory.



Southern Region

SPDN Advisory Committee

The Southern Plant Diagnostic Network (SPDN) is establishing an Advisory Committee to aid its mission of enhancing agricultural security through rapid detection of introduced pathogens and pests and significant outbreaks of indigenous pests.

A planning meeting will take place at the upcoming annual meeting of the American Phytopathological Society (APS):

Quebec City, Canada Quebec City Convention Centre Room 207 Monday, July 31, 2006 5:00-6:30 pm

Please contact SPDN Director, Dr. Bob McGovern <u>rjmcgov@ufl.edu</u> for more information, comments or suggestions.

SPDN Networks with the Caribbean Region

Several SPDN members from the University of Puerto Rico and the University of Florida attended the 42nd annual Caribbean Food Crop Society Meeting in San Juan, Puerto Rico, July 9-14. 2006 http://www.uprm.edu/agricultura/cfcs/.

The following presentations relating to SPDN/NPDN programs were delivered:

"Entomology and Training and Education Programs in the NPDN" A. Hodges "Towards a Caribbean Regional Diagnostic Network" T. Momol and J. Xin

Regional Updates

"Training in Support of Pest Survey and Detection in Puerto Rico"
C. Estevez de Jensen and R. Franqui



Western Region

Alaska Hosts Diagnostician Training Workshop in Fairbanks

Carla Thomas
Department of Plant Pathology
UC Davis

Melodie Putnam
Department of Botany and Plant
Pathology
Oregon State University

Western Plant Diagnostic Network members in Alaska hosted a hands-on microscope workshop, distance diagnostics, and First Detector Training in Fairbanks on June 6, 7 and 8.

The meeting was attended by Extension and State Department of Agriculture staff from throughout the state. Participants received advanced training on use of the DDDI diagnostics system, which is funded jointly by the University of Alaska, Fairbanks, and by the National Plant Diagnostic Network.

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Melodie Putnam, Director of the Oregon State

University Plant Clinic, provided training on use of the system, how best to use the digital imaging capability, and hands-on instruction in capturing images through microscopes.

Carla Thomas, Western Region
NPDN Deputy Director, provided the
First Detector training, with an
emphasis on Asian soybean rust.
Participants also received all six
modules of the NPDN First Detector
Training; six of the participants also
received NPDN First Detector
Educator Training. Angie Ambourn,
Entomologist with the USFS, gave
instruction on high risk forest pests.
The local TV station came and filmed
a news story on the training.

Thank you to Michele Herbert and Cathy Turner for organizing a very productive workshop. "It has certainly helped me with the microscope and camera confidence" says Janice Chumley, Kanai Peninsula District.

Melodie reports that both the number of samples and quality of the samples submitted has increased substantially since the training.

WPDN Alaska Diagnostician Training Workshop June 2006



Participants received advanced training on use of the DDDI diagnostics system, which is funded jointly by the University of Alaska, Fairbanks, and by the National Plant Diagnostic Network.



Workshop participants use diagnostic keys to identify an unknown ant specimen.



Angie Ambourn, Entomologist with USFS gave instruction on high risk forest pests.

Photos Carla Thomas, UC Davis

National Events

July 29-August 2, 2006: American Phytopathological Society Annual Meeting, Quebec City, Canada

Upcoming Events

August 13-18, 2006: National Plant Board Meeting, Milwaulkee, WI

September 25-29, 2006: 15th Ornamental Workshop on Diseases and Insects, Crossnore/Kanuga, Hendersonville, NC

October 16-17, 2006: <u>IT-Diagnosticians Meeting</u>, Kansas City, MO. More information to follow!

November 29 – December 1: National Soybean Rust Symposium, St. Louis, Missouri

December 3-6, 2006 and December 7-8, 2006: 4th International Bemisia Workshop and International Whitefly Genomics Workshop, Hawk's Cay Resort, Duck Key, Florida, Abstracts due August 1st!

December 10-13, 2006: Entomological Society of America Annual Meeting, Indianopolis, IN

January 28-31, 2007, NPDN National Meeting, Orlando, FL.



