

National Updates

Emerald Ash Borer in Pennsylvania

On June 26, 2007, APHIS confirmed the detection of emerald ash borer (EAB), in the Cranberry Township of Butler County, Pennsylvania. This is the first detection of this pest in Pennsylvania.

This detection was made by APHIS personnel conducting visual inspections for ash decline along the Pennsylvania/Ohio border following the confirmed detection of EAB on the Ohio side of the border. APHIS

officials observed and investigated ash tree decline in the parking lot of a commercial establishment and captured two suspect specimens that have been confirmed to be EAB.

In response to this latest detection, APHIS will cooperate with the state of Pennsylvania to carry out delimiting surveys around the affected area. Furthermore, an investigation will be conducted to determine the origin or nursery source of the affected trees and evaluate the immediate area for other possible pathways through which EAB may have been introduced.

APHIS will provide education and outreach materials to Pennsylvania State Parks to raise awareness about the pest and the risks associated with the movement of firewood.

For more information on this report, please visit on the web: NAPPO [Phytosanitary Alert: Emerald Ash Borer \(*Agrilus planipennis*\) in Pennsylvania](#)



Emerald ash borer. (Photo Howard Russell, Michigan State University, www.forestryimages.org.)

Issue Highlights:

- ◆ Emerald Ash Borer in PA
- ◆ USDA Announces Additional Funding for Emerald Ash Borer and Potato Cyst Nematode Eradication
- ◆ NPDN Review Documents Now Posted
- ◆ NPDN Town Hall Meeting to be Held at 2007 APS Meeting
- ◆ Diagnostic Tip of the Month: Techniques for Frequently Finicky Fungi Fond of Foiling Identification
- ◆ Diagnostic Subcommittee Update
- ◆ Education and Training Updates: Improvements to the NPDN Training and Education Web Site, Feedback Requested from First Detectors, Swede Midge Presentation Available
- ◆ National Database Subcommittee Update
- ◆ NPDN Upload Guidelines Version 1.0 Released
- ◆ 4th Annual IT/Diagnostician's Meeting Announcement
- ◆ WPDN: Digital Diagnosis Images Nip Plant Disease in Bud

National Updates

USDA Announces Additional Funding for Emerald Ash Borer and Potato Cyst Nematode Eradication

On July 6, 2007, USDA Agriculture Secretary Mike Johanns announced the availability of an additional \$11.3 million in emergency funding for the emerald ash borer (EAB) program and \$500,000 for the potato cyst nematode (PCN) program in Idaho.

USDA will provide this emergency funding to states with established EAB programs and quarantines to support pest detection, control, and regulation of host material that will mitigate the risk of further spread of the pest, as well as outreach and education to the general public.

A portion of the funding will also be provided to targeted uninfested states at risk for EAB for additional survey and response if a detection of the pest should occur. Early detection of new infestations is critical to enhancing USDA's ability to eradicate such incursions and contain the pest within quarantine areas.

The \$500,000 for PCN is in addition to nearly \$24 million in emergency funding that has already been dedicated toward PCN surveillance and eradication

activities in Idaho--the only state with PCN.

Specifically, the funding will advance intensive survey activities in seed potato fields, packing facilities and storage sheds. State and federal agricultural officials will also continue soil fumigations and quarantine enforcement to eradicate PCN in Idaho.

The complete USDA press release can be found on the web at:

[USDA Announces Additional Funding for Emerald Ash Borer and Potato Cyst Nematode Eradication](#)



White potato cyst nematode on root. (Photo Bonsak Hammeraas, www.ipmimages.org)

NPDN Review Documents Now Posted

The NPDN five year review documents are now posted on the NPDN web site home page for member review. Feedback on these documents is appreciated. Please direct your comments to Carrie Harmon, Assistant Director, SPDN, clharmon@ifas.ufl.edu and Ray Hammerschmidt, Director NCPDN, hammers1@msu.edu.

NPDN Town Hall Meeting at 2007 APS Meeting

The NPDN will hold a town hall meeting on July 29, 2007 from 1:00 to 3:00 pm in the Sunrise Room at the 2007 APS Meeting in San Diego, CA.

Diagnostics Subcommittee Update

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

The NPDN diagnostics subcommittee held a conference call on July 12, 2007. 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:

- Update on the subcommittee membership structure.
- 4th IT-Diagnosticians Meeting Plans- November 28-29, 2007.
- Reminder of SOP review to authors.
- Article on insect sample mailing procedures.
- Call for topics for the APS diagnostics subcommittee meeting.
- Request for information on obtaining positive controls.
- Announcement of the release of the NPDN Upload Guidelines version 1.0
- Reminder for SOP authors to consider submitting documents to PHP.

The next meeting will be held on **August 9, 2007**.

Diagnostic Tip of the Month: Techniques for Frequently Finicky Fungi Fond of Foiling Identification

Tom Creswell
Manager, Plant Disease and Insect Clinic
North Carolina State University
Raleigh, NC



Figure 1. To avoid direct contact with water while still providing high humidity use a wire screen to lift incubated material off the wet paper towels. (Photo Tom Creswell, NCSU)

Some tissues rot quickly using the standard incubation technique of placing samples directly on wet paper towels. To avoid direct contact with water while still providing high humidity use a wire screen to lift incubated material

off the wet paper towels (Figure 1). A cheap set of screens can be made by sawing off a 6 inch diameter PVC pipe into 1-2 inch segments, to which are glued circles of nylon window screening (Figure 2).

Incubating woody tissue for fruiting structures that never seem to appear:

Wisdom from Chuck Hodges, retired Forest Service Pathologist, who is the real brains behind ID of obscure fungi at the NCSU clinic, recommends this practice.

Continued on page 4...

Diagnostic Update



Figure 2. A cheap set of screens can be made by sawing off a 6 inch diameter PVC pipe into 1-2 inch segments, to which are glued circles of nylon window screening. (Photo Tom Creswell, NCSU)

Diagnostic Tip of the Month

Continued from page 3...

If surface contaminants appear on woody stems during prolonged incubation then simply

rinse them off, and put them back in the incubation chamber. It may be necessary to gently rub the stem or use a soft brush. The contaminants will come back, but in the meantime the pathogen may have had a chance to sporulate. Repeated application of this technique has worked with very



Figure 3. Incubate stems upright in large graduated cylinders with a small amount of water in the bottom. (Photo Tom Creswell, NCSU)

stubborn fungi that take weeks to sporulate. Patience is a virtue here.

Richard H. Anacker, Plant Disease Specialist with the Maryland Department of Agriculture shares this technique for obtaining sporulation on woody tissues. Incubate stems upright in large graduated cylinders with a small amount of water in the bottom (Figure 3). Cover the top with Parafilm or foil.

This method works most of the time, even with canker fungi that only sporulate during a specific time of the season.

For those of you not in areas with water use restrictions; Rich also suggests prolonged washing (at least 1 to 2 hours) to remove inhibitors before isolating from roots. He has automated this process by building a manifold

with stations for washing several root samples at once.

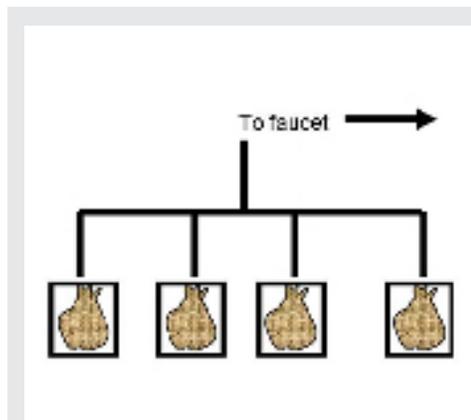


Figure 4. Richard Anacker's "In-the-sink" method for removing inhibitors to isolation. (Illustration by Richard Anacker, Maryland Department of Agriculture)

The diagram in Figure 4 illustrates his in-the-sink method which consists of tying roots in a cheesecloth bag, placing this in a beaker and directing a gentle stream of water into the beaker,

letting the overflow run down the drain. About an hour of this washing, followed by letting the roots air dry slightly before plating, increases the percentage of successful root isolations when inhibitors are present.

For isolating fungi that form sclerotia in pure culture, Chuck Hodges uses a rapid technique that avoids any reduction in viability of the fungus. He cleans surface contaminants by placing a single sclerotium onto the surface of plain water agar. Under a dissecting scope, he rolls it around several times with a probe or forceps, then moves it to a new clean area of the plate and repeats the rolling 2-3 times. This has worked well with several species of sclerotia-forming fungi and is especially helpful for tiny sclerotia that may be killed by other means of surface decontamination.

Training and Education Updates

Amanda Hodges
Subcommittee Chair
University of Florida
Department of Entomology and
Nematology

Improvements for the NPDN Training and Education Site

The new and improved training and education web site (version 3.0) was released on **Monday, July 2, 2007**.

Thanks to all of you for your continued patience, education of First Detectors, and feedback regarding the First Detector training and education site.

If you have concerns regarding the site that have not been submitted, please contact Amanda Hodges achodges@ufl.edu with feedback, questions, or concerns as we are rebuilding the web site to better serve your needs.

Some of the features you can expect for the new and improved training web site include the following:

- 1) You will be able to upload your participant data directly from an excel spreadsheet.
- 2) The open registration (Moodle password not required) for participants to sign up for training sessions in advance of a meeting will be available on the main portal <http://cbc.at.ufl.edu/>.
- 3) Excel upload (i.e. batch entry) will be available after logging into the site. This feature will be available to workshop coordinators, state coordinators, and regional coordinators.
- 4) Session organizers will be able to view their training sessions organized by the actual session

instead of a larger participant table.

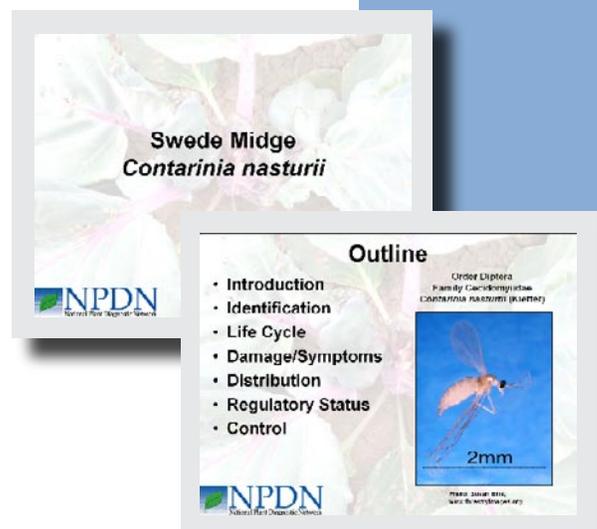
- 5) The following user roles will be defined within the system: national coordinator(s), regional coordinators, state coordinators, and session organizers. In the long-term, each of the coordinator roles will be able to assist with troubleshooting and also view all participant and session data from their area of responsibility.
- 6) The new training and education web site will be compatible with the overall design of the revised NPDN portal (anticipated release of the new NPDN portal is summer/fall 2007).
- 7) Simplified help documents will be available for all educators utilizing the site.

Feedback from First Detectors Requested

Have you conducted First Detector training? Encourage your First Detectors to respond to the [online, post-training survey](#). This link is also available on the 'In the News' section of the [First Detector Information Web Page](#).

Swede Midge, *Contarinia nasturii*
training module by Ellis, Hoepfing, and Hodges now available on the [NPDN modules Web Page](#).

Education and Training



National Database

National Database Subcommittee Update

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

The National database subcommittee met on July 11, 2007 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 National database subcommittee web page of the [NPDN web site](#) for complete minutes of this meeting (login and password required).

Topics of discussion included:

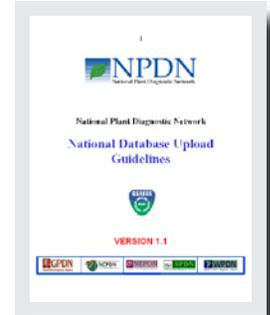
- Review of change submissions.
- Upload Guidelines Draft version 2.4.
- Review of Bacteria Codes.
- 4th IT/Diagnosticians Meeting-date change and city selected.

The next meeting will be held on **August 8, 2007**.

NPDN Upload Guidelines Version 1.0 Released

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

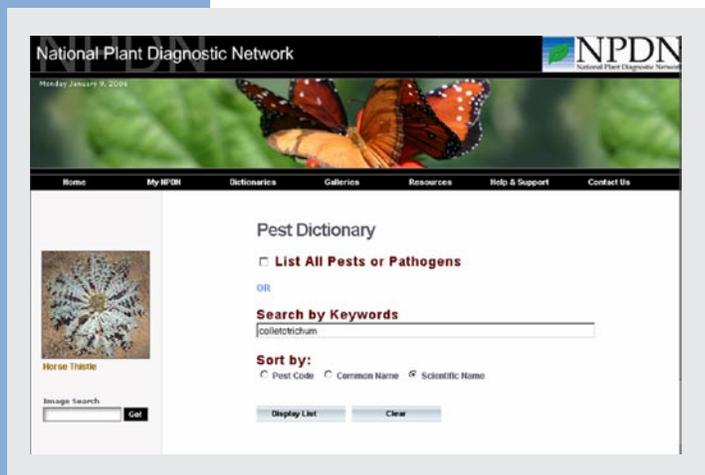
I bet all of you users of the National repository were just thinking, “Boy, it would be nice to have some guidelines to follow when I am submitting samples to the National repository”. Well you are in luck! The NPDN National database subcommittee has been working on the NPDN Upload Guidelines for months. The document contains information on phase one and two fields, confidence level terms, method used options, PDIS entries, DDIS entries, and policies.



One of the most informative sections addresses how to submit specific samples such as plant identifications as a diagnosis, inconclusive samples, survey samples, water environments, PIPE data, multiple results, and more.

Please review the document and share your thoughts with any member of the NPDN National database subcommittee.

Links to the NPDN Upload Guidelines Version 1.0 can be found on the National database subcommittee web page, under “[Documents](#)”, and the NPDN diagnostics subcommittee web page, under “[File Cabinet](#)” (login and password required to access both of these pages).



4th Annual IT/Diagnostician's Meeting

Mike Hill

CERIS Programmer/Analyst
Purdue University

The 4th annual IT/Diagnostician's meeting will be held at the Adam's Mark hotel in St. Louis, MO on November 28-29, 2007.



Members of the PDIS change management team will meet for a half day on Tuesday November 27th. The IT/Diagnostician's meeting will begin on Wednesday November 28th at 8:00am and conclude on Thursday November 29th at noon. PDIS users will meet for a half day in the afternoon on November 29th.

Stay tuned to future newsletters for more information!

Western Region



Digital Diagnosis Images Nip Plant Disease in Bud

Becky Philips

WSU Today

(Reprinted with Permission)

Last spring, a small, nondescript moth alighted on a family apple tree in western Washington. Before it had time to make itself at home, however, it was whisked away by a vigilant crop consultant and identified as the Cherry Bark Tortrix (*Enarmonia formosana*), an exotic pest which has been slowly migrating down from British Columbia.

Thanks to the Distance Diagnostics through Digital Imaging system - coordinated through the WSU Puyallup Research and Extension station - the emerging pest, whose larvae bore into the bark of fruit trees, was prevented from establishing a new territory in Washington.

Today, crops of all types across the state can benefit from speedy and accurate diagnosis of disease and pest infestations through DDDI. The Web-based service allows growers, crop advisors, county extension agents and Master Gardener plant clinics to take digital photos of diseased plants, insects or weeds and send them to evaluation sites where they are identified by experts.

"The network lets experts across the state view a single sample and reach a consensus," said Norm Dart, WSU Puyallup Extension coordinator and manager of the DDDI system. "With many eyes looking at a single sample we get a more accurate diagnosis."

Originally developed at the University of Georgia, the DDDI system was seen as a biosecurity tool for early detection of exotic or introduced organisms which could affect national animal health and consumer food safety. The system offers rapid, secure sharing of information with appropriate personnel and agencies.

Continued on page 8...

Regional Updates



Adult Cherry Bark Tortrix (*Enarmonia formosana*). (Photo Ian Kimber, www.forestryimages.org)

Regional Updates

Continued from page 7...

Today, the system is in place in ten states including Washington, Oregon, Idaho and Alaska.

having plants or insects identified should bring samples to their local county extension agents or Master Gardener clinics where trained personnel will enter their materials into the system.

In Washington, sixteen counties currently participate in the DDDI network which includes 13 First Detector Labs, primarily based at WSU County Extension offices and research stations. Each lab is equipped with microscopes, a digital camera and computers - all available as a free resource for Washington residents.

In Whitman County, the public may contact county extension agent Ken Hathaway in Colfax to submit a sample via DDDI. Email: klhathaway@wsu.edu, or call: 509-397-6290.

The Washington DDDI system is funded by grants from the Western Plant Diagnostic Network – a branch of the National Plant Diagnostic Network. The grants are administered locally by Tim Murray in the WSU Department of Plant Pathology. See more online @ <http://www.puyallup.wsu.edu/dddi/index.html>.



DDDI training session. (Photo Norman Dart, WSU Extension Puyallup)

According to Dart, the network not only facilitates identification of new, emerging and rare plant diseases, weeds and insect pests - it is also important as a statewide repository for plant health data. As samples go through the system, evaluators get a real-time quantitative view of seasonal disease or pest incidence across the state - allowing extension agents to warn growers of impending problems.

DDDI also offers the benefit of faster turn-around time – samples no longer have to spend days traveling through the mail. Quicker diagnosis helps crop growers save time and money when managing disease outbreaks. Homeowners who are interested in

National Events

July 28-August 1, 2007, [APS-SON Joint Meeting](#), San Diego, CA

August 19-23, 2007, [National Plant Board Meeting](#), Honolulu, HI

December 9-12, 2007, [ESA Annual Meeting](#), San Diego, CA

December 12-14, 2007, [2007 National Soybean Rust Symposium](#), Louisville, KY

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

Upcoming Events



[Mary McKellar](#) Editor
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9 Volume 2 Issue 7