

NPDN News

Volume 8 Issue 6, June 2013

NORTHEAST SENTINEL PLANT NETWORK WORKSHOP HELD IN MORRISTOWN, NEW JERSEY

SPN Managers: Rachel McCarthy, NEPDN, and Dan Stern, American Public Gardens Association (APGA)

After taking the month of May off for the APGA Annual conference in Phoenix, AZ, the Sentinel Plant Network team resumed its workshop schedule with an event for public garden professionals in the Northeast region. The Northeast workshop took place on June 24 and 25 at the Frelinghuysen Arboretum in Morristown, New Jersey, part of the Morris County Parks Commission. Charley Zafonte, Director of Horticulture & Natural Resources, and the entire staff of the Frelinghuysen Arboretum were gracious hosts and made us feel right at home. The arboretum is beautiful — 127 acres of pristine gardens, woodlands and meadows featuring a distinctive collection of trees and shrubs.

The 40 workshop participants included representatives from 17 public gardens, the Nature Conservancy and USDA-APHIS. It was a pleasure to have George Nelson, SPHD from NJ and Vic Jacobsen, USDA Port Director from APHIS's JFK Airport Plant Inspection Station in NY participate in the workshop and share their perspectives on the topics.

NPDN's Rich Buckley and Sabrina Tirpak, from the Plant Diagnostic Clinic at Rutgers gave an excellent pest and pathogen walk and gave attendees some terrific insights on how to sharpen their observation skills and scout more effectively! Not an easy feat given the large group size, but despite the heat and

humidity people kept right in step with our witty pest expert duo.

Charley Zafonte led a tour through the arboretum to highlight their new SPN interpretive signs featuring the emerald ash borer and the Asian longhorned beetle (ALB). Each sign displays the appropriate threat-specific QR code, which links to the respective threat-specific landing page on SPN's new mobile website, www.sentinelplantnetwork.org. It is great to see these signs in the garden and the different ways they can be incorporated into a collection. One of the ALB signs

EAB DETECTED IN NORTH CAROLINA IN REGIONAL NEWS



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Issue Highlights

- CPHST response to Phytophthora ELISA kit shortage
- Quality Corner: Ask the expert with Kathy Burch
- Incorporation of standard scientific name for fungi into the National Repository
- Bark & ambrosia beetle academy
- Entomology lecturer position at Texas A&M

was placed next to a large sugar maple with an ALB trap hanging in it! Great idea!

In addition to learning about SPN's newest resources, participants collaborated on the development of youth education activities for the Plant Heroes program (www.planterheroes.org). This proves to be a great exercise at each workshop! This time one of the groups working on a high school age program acted out a role playing sketch using bullying to help demonstrate how invasive insects and pathogens bully our native trees.

SPN has two remaining workshops this summer. The next will be at Lauritzen Gardens in Omaha, NE,



Rich Buckley talks to participants in the Rose Garden at the Frelinghuysen Arboretum on the pest walk (left). The comprehensive emerald ash borer sign in front of a white ash (right).

© Rachel McCarthy, Cornell Univ.

July 9–10 and shortly thereafter out to the Bloedel Reserve on Bainbridge Island, WA, to wrap up the series July 24–25. For more information on the Sentinel Plant Network, contact Rachel McCarthy at rachel.mccarthy@cornell.edu.

CPHST Response to the Phytophthora ELISA Kit Shortage

Pat Shiel, USDA-APHIS-PPQ-CPHST

As you are probably aware, there is currently a critical shortage of the USDA approved Phytophthora ELISA kits used in the processing of *Phytophthora ramorum* samples for regulatory and survey samples. This situation has arisen during the active testing season for compliance agreements in nurseries shipping from regulated areas and survey activities in many states. Because of this, NPDN has been engaged at the request of CPHST to determine how many kits are currently present in NPDN labs to facilitate accommodation of priority nationwide testing needs for the upcoming months. NPDN has responded by providing a timely and thorough inventory of current test distribution through the use of the NPDN listserv and other communication outreach means. This rapid response provided critical information for developing contingencies and broadening options for meeting program needs.

Analysis of national testing programs for *Phytophthora ramorum* indicates that: based on current trends enough stock is available for compliance agreement testing in the US regulated states for the current testing season with a potential for a small test kit deficit by the end of the current testing season. At this point, it also appears that overall testing capacity with the NPDN for current survey and trace-forward sampling is sufficient for the remainder of this season as well.

However, changes in the situation may occur if nurseries or environmental sites testing positive for *Phytophthora ramorum* are found. **The advised course of action at this point is for NPDN labs that have ELISA test kits retain these and continue testing on your previous test schedule using the current protocol.** If your lab does not currently have enough test kits to complete scheduled testing for this year, please contact Karen Snover-Clift at NPDN to describe your testing needs and arrange with other NPDN labs to receive needed kits.

In order to plan for any potential change in the current testing schedule, PPQ is currently in the process of developing alternative means for this critical test, including other available ELISA test kits and the use of Immunostrips to detect Phytophthora. Rapid responses to revise current testing methods are underway at the USDA-APHIS-PPQ-CPHST Beltsville lab to determine if alternative testing strategies can be used to fulfill program needs. We are hopeful that this analysis of alternative methods will be completed well before the current stock of test kits are exhausted. In addition, PPQ will remain alert to any changes in the current season testing environment that may necessitate expediting approval of an alternative testing method.

PPQ greatly appreciates the NPDN response to this situation and values the partnership with NPDN in safeguarding US agriculture and natural resources.

“Ask the Expert” with Kathy Burch

Karen Snover-Clift and Dawn Dailey O'Brien, Department of Plant Pathology and Plant-Microbe Biology, Cornell University



QUESTION: You often mention that quality management systems are all about continual improvement, can you elaborate on this?

I think it goes without saying that perfection will never be achieved. But who doesn't want to be as close to perfect as possible? Similarly, process improvement is something, although desired, is never completely finished. Instead it continues on forever; thus, the phrase “continual improvement”. If we become satisfied with the status quo and fail to continue to improve our work processes, our laboratory will become stagnant and in essence obsolete.


Although continual improvement is the natural outcome of any functioning quality management system, to be successful, it requires commitment, planning, structure, leadership, participation and engagement. It is everyone's responsibility!! The steps involved with continual improvement are really quite simple. They include:

- Identification of the problem;
- Analysis of the data and the processes;
- Determination of the root cause of the problem;
- Generating of ideas for solutions
- Implementation of desired solution;
- Monitoring to ensure that the solution was effective.

Each of the continual improvement steps mentioned above, have been integrated into the NPDN STAR-D quality management system through: conducting internal audits, documenting and addressing corrective and preventive actions, performing management reviews and analyzing customer feedback. As these processes are implemented at each of the NPDN laboratories, the benefits generated will soon become evident. Some of the benefits of a quality management system focused on continual improvement can include:

- Increased productivity/reduction of waste
- Improved product quality/error reduction
- Increased adaptability
- Improved moral

I am happy to say that as a member of the audit team at several of the NPDN laboratories, I was able to observe firsthand how some of these benefits have already been realized through the implementation of the STAR-D quality management system.

If I could leave you with just one thought, it would be, “You don't have to be perfect, you just need to keep heading in the right direction. And continual improvement is the way to do just that!!!” 

About Kathy

Kathy Burch is the USDA-APHIS-PPQ-CPHST Senior Quality Manager. She has 20+ years of quality management system experience and is a vital resource for NPDN members providing guidance during the development of the STAR-D program.

The Ninth Meeting of the Continental Dialogue on Non-Native Forest Insects and Diseases

Location: Pittsburgh Convention Center, Pittsburgh, Pennsylvania
Date: November 4–5, 2013

For more information about the meeting contact Leigh Greenwood at The Nature Conservancy (lgreenwood@tnc.org; 406-544-5099) or the meeting facilitation team at RESOLVE: Debbie Lee (dlee@resolv.org; 202-965-6381) or Beth Weaver (bweaver@resolv.org; 202-965-6211).

Diagnostics Committee

Sara May, Committee Chair, Department of Plant Pathology and Environmental Biology, Penn State

The Diagnostics Committee conducted a conference call on June 13, 2013, and the following agenda items were discussed:

- ELISA Phytophthora Kits and Cepheid Tube Issue
- Committee Conference Calls

The diagnostics committee has opted to try free conference calls, with each caller paying their own long distance fees. This option was selected over using a service like Adobe Connect, which requires participants to be at their computer and also requires a USB microphone and headset.

- Other Topics -two requests for NPDN leadership

Sara May will address the following issues by email:

- Committee membership
- Training links
- Pythium web-based training
- Diagnostician's Cookbook

The next Diagnostics conference call is scheduled for August 22, 2013. ☺

Visit the NPDN homepage at www.npdn.org for more information on specific Program Area Committees. Login and password required

National Database Committee

Linnea Skoglund, Committee Chair, Montana State University, Department of Plant Sciences and Plant Pathology

The National Database Committee met via Adobe Connect on May 15, 2013, and the following agenda items were discussed:

There was a request to add a location for the International Space Station, the source of a recent sample. The committee agreed to this and asked that Eileen Luke, Mike Hill and Cindy Music investigate how this can be done. Other requests included adding the common name "cotton" to *Gossypium* sp/spp. The request to add "pepper" to the common names for pepper (ornamental) was rejected as this is coded as an ornamental. There needs to be a new vegetable code for pepper – *Capsicum* sp/spp.

A list of definitions for the lab methods in the database is being circulated for comments.

The One Name For Fungi project is progressing. Workbooks will be sent out to this committee after that group meets in June. Our role is to make recommendations on how the changes can be integrated into the database.

The next conference call will be held July 10, 2013. ☺

Training and Education

Rachel McCarthy, Committee Chair, Department of Plant Pathology and Plant-Microbe Biology, Cornell University

The Training and Education Committee conducted a conference call on May 13, 2013, and the following agenda items were discussed:

- First Detector module reviews – waiting for comments on disease diagnosis and photography modules
- State First Detector conference call review - 36 people attended across the country. Well received and was useful, helped people navigate through resources. Site could be also serve as a bigger resource for accessing tips, videos, First Detector page, blogs, Facebook etc.
 - With reduced funding for First Detector training need to promote e-learning modules
 - Newsletters, Facebook and Twitter -put in Facebook and Twitter links to increase traffic and increase awareness of additional resources, need help with increasing our social networking skills. Stephanie Porter agreed to help with this
- Remind NPDN that Certified Crop Advisors (CCA) folks get education continuing credits for First Detector training

The next Training and Education call will be held July 15, 2013. ☺




National Repository CERIS

Incorporation of the Standard Scientific Name for Fungi into the National

Repository *Nancy Gregory, University of Delaware, and Mike Hill and Eileen Luke, Purdue University*

Accurate scientific names are critical when developing a standardized working list of proper names for pests or pathogens. No matter where a fungal pathogen is discovered, it is important that it is consistently identified, labeled and referenced. This helps to provide accurate sharing of information and prevent miscommunication in pest screening. The NPDN formed the NPDN National Database Committee several years ago which has been hard at work creating a working list of standardized names for the NPDN Pest Dictionary. Recently, a revision to the international standard naming convention for fungi has been developed. Previously, fungi were named according to the International code of Botanical Nomenclature, but a new naming convention, the International Code of Nomenclature of Algae, Fungi and Plants (ICN) has been adopted in 2013. The new system of naming fungi addresses the problem and confusion when two or more different scientific names are used for the same species. As of January 1, 2012, Latin description was no longer required and new taxa can be published electronically. As of January 1, 2013, new names of fungi must be registered in MycoBank and only one name will be used for fungi. The concept is simple, but the new naming convention will need to be implemented and associated synonyms should be documented in order to provide the “best” working list to the diagnosticians and other groups such as USDA-APHIS.

Working collaboratively, the University of Delaware (UD), USDA-ARS and Purdue University were awarded Farm Bill funding for a project on incorporation of the new naming convention into the NPDN database. USDA-ARS provides the subject matter expertise and standardized naming, and Purdue University will develop the software to incorporate the new naming convention with synonyms and search capabilities. The diagnosticians on the Database Committee will provide review to the IT group at Purdue to ensure that

the updated standard fungal names and associated synonyms are correct in the repository and data entry systems, in order to provide consistent and accurate search capabilities and reporting methods. A test area has been set up for the software design with prototypes being developed to demonstrate functionality. Software will be demonstrated to UD and USDA collaborators, and the next phase of review will be done through the Database Committee. Stay tuned for more information as this project develops. If you have further questions on pathogen naming, please contact Nancy Gregory (ngregory@udel.edu), Mike Hill (mikehill@purdue.edu) or Eileen Luke (lukee@purdue.edu). 

TRAINING & EDUCATION

Mark the calendar: Bark & Ambrosia Beetle Academy!

The Forest Entomology Lab at the University of Florida is pleased to invite you to a comprehensive workshop on bark and ambrosia beetles in May 2014.

- Are you a professional identifier or researcher with beetle-related projects?
- An extension agent with clients in forestry, horticulture or natural resources?
- A landowner or a naturalist interested in bark and ambrosia beetles?

You probably need to understand bark and ambrosia beetles, their classification, damage and biology! Learn from a team of experts through hands-on labs, field demonstration and lectures. Choose one or all three modules: Regional Applied Focus, Hardcore Identification and Understanding the Bug.

See details and sign up for updates at www.ambrosiasymbiosis.org/academy/

~Jiri Hulcr, University of Florida

First Detection of the Emerald Ash Borer Made in North Carolina

On June 17, Agriculture Commissioner Steve Troxler signed an emergency quarantine order restricting the movement of hardwood firewood, ash nursery stock and other ash materials from Granville, Person and Vance counties following the confirmation of the emerald ash borer (EAB) in trees there. This marks the first time emerald ash borer has been found in the state.

North Carolina is the 20th state in the country to confirm the presence of the destructive pest, following the discovery of an adult beetle and other signs of borer activity in trees in Granville County by staff with the North Carolina Forest Service. Additional surveying found signs of EAB activity in the bordering counties of Person and Vance.

To read the full press release visit www.ncagr.gov/



Adult emerald ash borer on a leaf.

© Jared Spokowsky, NYSDAM, Bugwood.org

JOB OPPORTUNITIES



The Department of Entomology at Texas A&M University, College of Agriculture and Life Sciences, seeks applicants for a fulltime, annually renewable, 9-month non-tenure track lecturer position.

The incumbent would be asked to teach the courses listed below:

QUALIFICATIONS: A doctorate in Entomology or closely related discipline or Master's degree in Entomology or closely related discipline with 1-2 years related experience is required. Experience having served as a teaching assistant in entomology at the college level is highly desirable. Preferred qualifications include evidence of successfully coordinating educational programs, classes and projects; evidence of successfully planning, implementing, and evaluating classes, events, workshops, short courses, and other activities; evidence of producing high-quality educational curriculum and materials; and evidence of successful use of the Internet to deliver education programs and materials.

Course Assignments will vary by semester, but may include:

- Introduction to Forensic Sciences
- Veterinary Entomology
- Biology of Insects
- Medical Entomology
- Undergraduate Seminar
- Applied Forensic Entomology

APPLICATION PROCEDURES: Applications should be sent in electronic format (preferred) to t-gold@tamu.edu and include a letter of interest describing your qualifications to teach the specific courses listed, highest academic degree and any other relevant information; curriculum vita; transcripts; and the names and contact information for at least three references. Review of the applications will continue until the position is filled.

This is a partial announcement. The full announcement can be viewed as a pdf at <https://insects.tamu.edu/index.html>

UPCOMING EVENTS

National Events

August 4–8, 2013

National Plant Board 2013 Annual Meeting
Louisville, KY

August 10–14, 2013

2013 APS-MSA Joint Meeting
Austin, TX

November 10–13, 2013

Entomology 2013
Austin, TX

PHOTO OF THE MONTH

Rust, *Puccinia pelargonii-zonalis*.

A single lesion on the underside of an infected leaf. This lesion looks like a happy face.



Sandra Jensen, Cornell University,
Bugwood.org

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CONTRIBUTE

Share Tips and News with Your Colleagues

Recently write an article for a trade journal? Do you have a tip, announcement, regional news or network update you would like to include in the *NPDN News*? Email Rachel McCarthy at rachel.mccarthy@cornell.edu



Have a tip you would like to share with your fellow diagnosticians? Or a technique you would like to learn more about?

Email Gail Ruhl at ruhlg@purdue.edu

Rachel McCarthy, Editor
NEPDN, Training and Education Coordinator
Cornell University



National Institute
of Food and
Agriculture