

## New Leadership for the Diagnostic Network

*Carrie Harmon, Department of Plant Pathology, University of Florida*

There is a new Executive Director in the NPDN; Rick Bostock handed the gavel to Jeff Jones at the Town Hall in



Providence, RI, August 2012. Jeff received his PhD in Plant Pathology at Virginia Tech in 1980, joined the faculty of the UF Plant Pathology Department in 1998 and served as the Interim Chair of the UF Department of Plant Pathology 2009–2010. Dr. Jones has studied bacterial plant pathogens and their variation as measured by phenotypic and

genotypic analyses. Much of his work has focused on bacterial spot disease of pepper and tomato and resistance mechanisms in bacteria-plant interactions. He also teaches UF's Bacterial Plant Pathogens course and has served as the SPDN Regional Director since 2009. Dr. Jones commented on the current state of NPDN, "During the past three years in which I have been associated with NPDN, I have been very much impressed with the coordination and productivity within the network. NPDN members are passionate and have given the network an excellent reputation nationally. It has been a strong learning curve for me, but fortunately, working with the other directors, associate directors and

other members of NPDN has made the transition much easier. We have had a major challenge associated with the reduced funding within NPDN over the last couple of years, but as a result of the efforts of many within the network, we have managed to offset some of this impact by leveraging NPDN funds with other funding to get the overall mission done. I am optimistic about the future of NPDN and its impact on diagnostics."

### New Director in the Northeast

*George Hudler, Department of Plant Pathology and Plant-Microbe Biology*

Leadership in the Northeast Plant Diagnostic Network entered a new era

on September 1, 2012 as Dr. Marc Fuchs officially replaced Dr. George Hudler as the Regional Director. Marc is a native of France with an educational



### Issue Highlights

- 2012 Ornamentals workshop
- STAR-D auditor training at Cornell University PDDC
- National Repository tip: request for new pest/host codes

background in agricultural studies and microbiology that eventually lead to development of his expertise in plant virology and a PhD from the University of Louis Pasteur in Strasbourg. With diploma in hand, Marc moved to the Cornell NYS Agricultural Experiment Station in Geneva, NY where he spent the next six years working on virus diseases of vegetables with Prof. Dennis Gonsalves. In 1997, Dr. Fuchs moved back to France for seven years, then to return to the Geneva Station as an Assistant Professor in 2004. In 2010, his internationally prominent research and outreach programs on vegetable and fruit crop viruses lead to his promotion to Associate Professor and he promises to be a leader in the field for many years to come. In addition to his new role as the NEPDN Regional Director, Marc is a member of the National Clean Plant Network and is an active participant in several professional societies, including APS. 🌿

## 2012 Ornamentals Workshop

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

Plant pathologists and entomologists gathered again at the Kanuga Conference Center in beautiful Hendersonville, North Carolina for the 18<sup>th</sup> Ornamentals Workshop on Diseases and Insects, September 24–28, 2012. Faculty from the departments of Plant Pathology and Entomology at North Carolina State University have been organizing this biennial event since the mid-seventies and this year the workshop attracted 121 participants from across the country with people coming as far as Hawaii and Belgium to participate. This year's theme was "Old Friends, New Foes".

Targeted for entomologists and plant

pathologists working with ornamental crops, the workshop offered another well-rounded program for all. Bjorn Gehesquiere of Institute for Agricultural and Fisheries Research, Belgium, opened the joint plenary session with a talk on his research on boxwood blight where it appeared there over a decade ago. Dan Herms, Ohio State University, spoke on the destabilization of insect populations in urban environments and Frank Koch, USDA-Forest Service, wrapped up the plenary talks with a presentation on modeling and the movement of firewood.

The NPDN was well represented by each of the five regions. Amanda Hodges, University of Florida, Tom Creswell, Purdue University, and Mary Kay Malinoski and David Clement from the University of Maryland each gave presentations during a joint session on mobile apps for diagnosis and IPM.



Cornellians in attendance at the workshop.  
Photo courtesy of Dawn Dailey O'Brien,  
Cornell University.

Talks on updates or current research for thousand cankers disease, *Phytophthora* pathogens, impatiens downy mildew and emerald ash borer were presented. The next Ornamentals Workshop is scheduled for the fall of 2014. 🌿

## NPDN STAR-D First Auditor Practice Workshop

*Karen Snover-Clift, Department of Plant Pathology and Plant-Microbe Biology, Cornell University*

The first STAR-D auditor practice workshop was held at the Cornell University Plant Disease Diagnostic Clinic (PDDC) in Ithaca, NY, on September 11–13, 2012. Seven STAR-D auditors who were trained at an ISO-17025 auditor training in Gainesville last September performed the practice audit on Cornell's PDDC. The focus of this workshop was to provide an opportunity for auditors to hone their auditing skills on a facility that is in the process of implementing the NPDN STAR-D laboratory accreditation requirements and standards.

Kathy Burch, Senior Quality Manager of USDA-APHIS-PPQ- CHPST, served as the lead auditor for this workshop. The six remaining auditors were divided into groups and although all auditors were present for all aspects of the audit each group focused on a section of Cornell's STAR-D system. Anne Vitorelli (University of Florida) and Geoffrey Dennis (USDA-APHIS-PPQ-CHPST) lead with questions pertaining to document control, records and non-conformances, sample handling and personnel. Judy O'Mara (Kansas State University) and Ron French (Texas A&M University) took over the questioning for test methods, equipment, reference materials and accommodations and environmental conditions. Jason French (New Mexico State University) and Pat Sheil (USDA-APHIS-PPQ- CHPST) finished the audit with questions referring to subcontracting, purchasing, customer feedback, corrective and preventative actions, internal audits and management reviews.

Karen Snover-Clift, NPDN Quality Manager, served as the laboratory's quality manager for the workshop with

PDDC's diagnostician Sandra Jensen and technician Molly Swartwood Towne, being present to answer the auditors' questions and to demonstrate the laboratory's functions. Dawn Dailey O'Brien, NPDN Quality Coordinator, coordinated and documented the entire workshop.

The practice audit occurred over a three day period. On the first day, the auditors developed the auditor checklists using the PDDC's quality manual, quality procedures and work instructions. The actual audit began on day two with Kathy Burch conducting an opening meeting with laboratory staff and department administrators. The opening meeting provided details to the staff about how the audit would be conducted. The auditors then went to the audit with their checklists in hand to conduct the audit. When finished with the laboratory staff, the auditors met privately to review their findings. Day three began with more discussions of their findings and preparations of non-conformances. Kathy Burch conducted a closing meeting for the Cornell staff that included a summary of the non-conformances and remarks regarding good laboratory practices and procedures that auditors observed during the audit and thought deserved recognition. While the main purpose of the audit was to provide practice for the auditors, the Cornell PDDC's staff also benefited by getting feedback on how they were developing their laboratory accreditation system.

## Diagnostic Updates



Sandra Jensen, PDDC diagnostician, talks to the auditors in the lab. Photo courtesy of Dawn Dailey O'Brien, Cornell University.

These practice sessions are only possible due to the Farm Bill funding support. Two more practice audits are scheduled

#### Other STAR-D events coming up:

- 2<sup>nd</sup> QMS training in Ames, IA to be scheduled in late winter or early spring 2013
- An ISO-17025 auditor training

Look for a survey asking about timing and interested personnel

starting with one in November in Sparks, NV hosted by Shouhua Wang at the Nevada Department of Agriculture laboratory and followed in February in Gainesville, FL hosted by Carrie Harmon and Anne Vitorelli at the SPDN regional center laboratory. If funding is available, a fourth audit may be conducted at the GPDN regional center lab at Kansas State University with Judy O'Mara hosting the group. 🍃

## IT News

### NPDN National Repository - Request for New Pest/Host Codes

Mike Hill, CERIS, Purdue University, Nancy Gregory,

Department of Plant and Soil Sciences, University of Delaware and Eileen Luke, CERIS, Purdue University

So far this year there have been over 500 records

that have been uploaded with the "ZZZZZZZ - Not on List"

pest code and over 1,600 records that

have been uploaded with the "99998 - Not Found on List"

host code. We wanted to take a moment

and provide a refresher on when these codes should

be used. These codes should only be used when a

sample is uploaded with a pest or host

that does not match any existing pest or host entries in the dictionaries.

Whenever records are uploaded under these "Not Found" codes a request should also be emailed to [npdncodes@ceris.purdue.edu](mailto:npdncodes@ceris.purdue.edu) to create a pest or host code for that sample. PDIS users have an option to request the code within the PDIS software, DDDI users have the request automatically generated for them, and users of the online data

entry system can make a request using the dictionary code request option under the help menu as shown in the screenshot.

All other users can send the request directly to us by emailing [npdncodes@ceris.purdue.edu](mailto:npdncodes@ceris.purdue.edu) and

providing the scientific name along

*article continues on page 6...*

#### Dictionary Code Request

Please complete the following information to request either a new Host or Pest code for the NPDN dictionaries. Once the new code has been created you will be notified by e-mail.

##### Dictionary Code Details

Category:

Common Name:

Scientific Name:

##### Requester Details

User ID: RLTEST01

Name:

Institution:

Phone:

E-mail:

Alternate E-mail:

Comments:

Visit the NPDN homepage at [www.npdn.org](http://www.npdn.org) for more information on specific Program Area Committees.  
Login and password required

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## National Database Committee

Nancy Gregory, Committee Chair, University of Delaware, Department of Plant and Soil Sciences

The National Database Committee held a conference call on September 12, 2012, and the following agenda items were discussed:

- Discussion was held regarding changes and consolidation of some codes for *Sclerotinia* and *Sclerotium*. Upload Guidelines will be revised over the next few months to educate toward consistency.

- Some Insect lists are still under review.
- The “One Name for Fungi” project will be underway soon with funding from the Farm Bill.

The next conference call is scheduled for December 12, 2012.

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## Training and Education Committee

Dick Hoenisch, Committee Chair, University of California at Davis, Department of Plant Pathology

The Training and Education Committee conducted a conference call on September 17, 2012, and the following agenda items were discussed:

- Module review update
- National conference call with all the state T&E coordinators

- Training session updates
- Bugwood wiki fact sheets
- Online Master Gardener modules

The next meeting will be held on Monday, November 19, 2012.

*Pest/Host Codes continued from page 4...*

with the common name. You will then receive a separate e-mail indicating that the code has been created or providing an alternative code you can use. It can take up to 8 weeks to get a code

Pest Code	Common Name	Genus
XXXXXXC	Additional Sample Requested	Identification Analysis
XXXXXXF	Adequate Sample	Identification Analysis
XXXXXXO	Ethylene Air Analysis	Identification Analysis
XXXXXXA	Insufficient Sample	Identification Analysis
XXXXXXH	Miscellaneous Debris	Identification Analysis
XXXXXXX	No Pathogen Found	Identification Analysis
XXXXXXG	No Pest Found	Identification Analysis
XXXXXXB	Normal Plant Growth	Identification Analysis
XXXXXXL	Plant Identification	Identification Analysis
XXXXXXR	Potting soil Amendments	Identification Analysis
XXXXXXD	Refer'd to Private Testing Lab	Identification Analysis
XXXXXXN	Referred to Specialist	Identification Analysis
XXXXXXV	Scat/ Dung	Identification Analysis
PPAGABA	Seed; Plant Mis-identification	Identification Analysis
XXXXXXE	Undetermined Injury or Pest	Identification Analysis
XXXXXXJ	Vegetative Dicot Seedling	Identification Analysis
XXXXXXI	Vegetative Monocot Seedling	Identification Analysis

created, depending upon how many code requests are in the queue, so it is a good idea to request the code as soon as possible.

If the sample being uploaded is an unknown pest/pathogen then the code “FGFSQAD – Unknown” should be used and if the host/site is unknown then the code “99999 – No site specified” should be used. There is also a whole range of pest codes available under the name of “Identification Analysis”. The screenshot (left) shows the different types of pest/pathogens that can be represented by these codes including “Insufficient Sample”, “No Pathogen Found”, and “No Pest Found”.

Any questions or corrections concerning the pest and host dictionaries can be emailed to [npdncodes@ceris.purdue.edu](mailto:npdncodes@ceris.purdue.edu). We appreciate all of the feedback we have received so far which allows us to make the dictionaries as accurate and up-to-date as possible. 🌿

## Regional News



# WPDN

Western Plant Diagnostic Network

### How a New Invasive Ambrosia Beetle is Threatening Western Trees

*Dick Hoenisch, Department of Plant Pathology, University of California, Davis*

An ambrosia beetle named polyphagous shot hole borer (PSHB), in the genus *Eurwallacea* sp., is an invasive pest that attacks oak and avocado trees, causing branch dieback and eventually death. The beetle bores into the trees and spreads a *Fusarium* fungus species that, in turn, attacks the vascular tissue of the tree and disrupts water and nutrient flow. Both the fungus and the beetle were discovered on several backyard avocado trees in residential

neighborhoods and a commercial avocado grove in Los Angeles County in February and March 2012. Box elder (*Acer negundo*), castor bean (*Ricinus communis*), avocado (*Persea americana*), English oak (*Quercus robur*), California coast live oak (*Quercus agrifolia*), big leaf maple (*Acer macrophyllum*), silk tree (*Albizia julibrissin*), sweetgum (*Liquidambar styraciflua*), coral tree (*Erythrina coralladendron*), Titoki tree (*Alectryon excelsus*), California sycamore (*Platanus racemose*), and blue palo verde (*Cercidium floridum*). The beetle was previously misidentified as the tea shot hole borer; however, subsequent DNA sequencing at the University of California, Riverside revealed the beetle to be different from the tea shot hole borer. The name polyphagous shot hole borer has been suggested for the beetle. No effective solutions for eradicating

the beetle have been found. PSHB is very small and hard to see. The beetle holes penetrate 1–4 cm (0.4–1.57 inch) into the wood and there are often many exit holes on an infested tree. Females are black colored and about 1.8–2.5 mm (0.07–0.1 inch) long, about the size of a sesame seed. Males are much less common than the females, and are rarely found. They are small, wingless and brown colored, about 1.5–1.67 mm (0.06–0.065 inch) long. The exit hole is 0.85 mm (0.033 inch) in diameter. A new species of *Fusarium* is inoculated into its hosts by the beetle. The fungus destroys the food and water conducting systems of the tree, eventually causing stress and dieback. The larvae of the beetles within the beetle galleries in infected trees feed on the fungus, forming a symbiotic relationship between the fungus and beetle. 🌿



Adult female PSHB. Photo courtesy of Akif Eskalen, Center for Invasive Species Research.

Also in the  
*WPDN Summer 2012 News*

Laurel Wilt in the Southeast US and  
its Consequences for the West

## National Events

November 11–14, 2012

Entomology 2012, ESA 60<sup>th</sup> Annual Meeting

Knoxville, TN

## Upcoming Events