

## Ornamentals Workshop at Kanuga, 2010

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



Top photo - entomology participants. Bottom photo - plant pathology participants. Photos from Ornamental Workshop website.

In a most pristine setting, experts from across the country came together to exchange ideas, brainstorm critical issues and network with colleagues. Diagnosticians and researchers, extension educators and regulatory personnel, students and private consultants traveled to Hendersonville, NC, to participate in the 17<sup>th</sup> Ornamentals Workshop, September 20-24, 2010. From

its inception in 1976 at Crossnore, the Departments of Entomology and Plant Pathology of North Carolina State University have hosted the biennial conference which has grown in popularity from its original ten participants to over 150 in recent years. In 2004, the workshop moved to the Kanuga Conference Center located on 1,400 beautiful mountain acres in Hendersonville, NC.

Intended for entomologists and plant pathologists interested in ornamental crops, the workshop offers a well rounded program for each discipline. The 2010 plenary session featured talks on a systems approach to IPM and an update on thousand cankers disease. The NPDN was well represented by each of the five regions. Karen Snover-Cliff from the NEPDN and Amanda Hodges from the SPDN each gave presentations, as did NPDN diagnosticians Tom Creswell and Gail Ruhl from Purdue University, Melodie Putnam from Oregon State University, and Mary Kay Malinoski and David Clement from the University of Maryland.

Entomologists and plant pathologists have been attending the Ornamentals Workshop for 34 years. The program presentations, the family style meals and other scheduled social events provided

### Issue Highlights:

- Silver Y moth found in Lancaster County, PA
- Coffee berry borer found in Kona, HI
- Bioinformatics workshops
- Tip - multi-functional copier as a diagnostic tool
- e-learning modules released
- NPDN / APHIS exercises
- Tip - social networks
- PDIS 2.0 - new features



National Institute of  
Food and Agriculture

ample opportunities for networking and casual conversation with colleagues. The conference, known for its informal atmosphere and rustic setting, is marked by entertaining traditions like the Fungal and Bug Foray, the Moon Pie Decorating Contest, and the Best Images Competition between entomology and plant pathology.

Truly, the combination of brilliance, beauty and pleasure makes this workshop a worthwhile learning experience. 🌿

### Detection of Silver Y Moth, *Autographa gamma*, in Lancaster County, Pennsylvania

On September 13, 2010 APHIS-PPQ announced the confirmation of an adult male *Autographa gamma*, silver Y moth, in a baited trap in Lancaster County, PA. The silver Y moth has been intercepted at U.S. ports-of-entry in the past, but this is the first find in the United States.

The trap was located at a grape vineyard serviced by the Pennsylvania Department of Agriculture as part of the Farm Bill enhanced Cooperative Agriculture Pest Survey (CAPS) national grape commodity survey. The specimen was confirmed as *Autographa gamma* on July 30, 2010. It is a pest of concern because of its wide host range including vegetable crops, greenhouse plants, garden flowers and young trees.

[Click here](#) to read the official regulatory announcement. 🌿



Adult silver Y moth. Photo courtesy of Paolo Mazzei, Bugwood.org.

### Serious Coffee Pest Detected in Kona, Hawaii

The coffee berry borer, *Hypothenemus hampei*, has been found in several coffee farms in Kona, Hawaii. University of Hawaii at Manoa staff collected the beetles and brought them to the Hawaii Department of Agriculture for diagnosis on September 2, 2010. The identification of the beetle was confirmed on September 8, 2010, by the U.S. Department of Agriculture entomology laboratory in Riverdale, MD.

*Hypothenemus hampei* is a small beetle, native to Central Africa and found in many coffee-growing regions of the world, including Central and South America. It is not known how the coffee berry borer was introduced to Hawaii.

To read the official news release [click here](#) or for more information read the [new pest advisory - Coffee Berry Borer](#) from the State of Hawaii Department of Agriculture. 🌿



#### From the USDA Newsroom: **USDA Announces Funding to Address Threats to State and Private Forests**

Agriculture Secretary Tom Vilsack announced annual funding to help all states and trust territories sustain the nation's urban and rural forests, and to protect communities and the environment from wildfires, **insects, diseases and invasive species**.

[Click here](#) to read the full news release.




## NPDN-USDA APHIS Bioinformatics Workshops Held this Summer

Karen L. Snover-Clift, Cornell University  
and Laurene Levy, USDA-APHIS-PPQ-  
CHPST-NPGBL

The NPDN Diagnostics Subcommittee and members of USDA-APHIS-PPQ-CHPST-National Plant Germplasm and Biotechnology Laboratory (NPGBL) collaborated to provide diagnosticians training on Bioinformatics at the PPQ facility in Beltsville, Maryland that most of us refer to as "Building 580". Three training sessions took place during July and August of 2010. The NPDN offered this training to all 52 State and Territory members and Plant Industry diagnosticians.

Mark Nakhla, Gang Wei, Kurt Zeller and Wenbin Li of the CPHST-NPGBL conducted the training which included preparing PCR products for sequence analysis of viruses, fungi, bacteria and nematodes using software features like BioEdit and using NCBI Blast analysis to characterize

DNA sequence data; selection of fungal genes of interest and methods for characterizing molecular data, phylogenetics and population genetics; discussions of freeware and commercially available software for sequence analysis for further identification of plant pathogens. Additional information was provided regarding primer selection from sequence data and Blast searches. In all, twenty NPDN diagnosticians and state department of agriculture personnel

representing states across the nation attended the three training sessions offered. The workshops were so popular that additional sessions have been added for later this year. Two more sessions will be held the week of December 6, 2010. Also the staff is considering expanding this course and developing a "Bioinformatics Phase 2 Workshop" that would bring that first group of students back with their own segments of RNA or DNA, a request made by the attendees. 

# Diagnostic Updates



Participants from the August 23-25, 2010 workshop: from left to right, Ram Sampangi (Univ. of Idaho), Elizabeth Bush (Virginia Tech Univ.), Mark Nakhla (CPHST), Wenbin Li (CPHST), Weston Msikita (Maryland Dept. of Agriculture), Kevin Ong (Texas A&M Univ.), Kurt Zeller (CPHST), Melodie Putnam (Oregon State Univ.), Karen Rane (Univ. of Maryland), Gail Ruhl (Purdue Univ.), Brian Olson (Oklahoma State Univ.), Jen Olson (Oklahoma State Univ.), and Gang Wei (CPHST). Photo Karen Snover-Clift.



Participants from the July 12-14, 2010 workshop: bottom row, Jean Woodward (Univ. of Georgia), Bridget Meiring (Ohio State Univ.) Kurt Zeller (CPHST), Patricia Lopez (Univ. of Florida), Paul Vincelli (Univ. of Kentucky), back row: Raghuwinder (Nick) Singh (LSU Center) Rob Wick (Univ. of Massachusetts), Mark Nakhla (CPHST), Wenbin Li (CPHST), Febina Methew (North Dakota State Univ.), and Gang Wei (CPHST). Photo Karen Snover-Clift.



Participants from the August 25-27, 2010 workshop: from left to right, Wenbin Li (CPHST), Shouhua Wang (Nevada Dept. of Agriculture), Mark Nakhla (CPHST), Karen Snover-Clift (Cornell Univ.), Shawn Butler (North Carolina State Univ.), Kurt Zeller (CPHST), Rick Bostock (Univ. of California at Davis), and Gang Wei (CPHST). Photo Karen Snover-Clift.



## Use of a Multi-functional Copier as a Diagnostic Tool

Gail Ruhl, Purdue University, Department of Botany and Plant Pathology

Purchase a color copy machine that functions not only as a copier but also as a FAX machine and scanner that sends e-mails with attachments of color scans to networked individuals?

I must admit that the thought was daunting and I was skeptical at first! Wouldn't all of those functions on one machine increase the odds of something going wrong? Would this really save time? The answer is –it has not had a major problem in two years and “yes”, it has saved time.

Although we still take images of samples,

forward samples to specialists and summon specialists to the lab to see samples that cannot leave the lab due to size or permit specifications, when pressed for time, this multifunctional piece of office equipment simplifies my life by allowing me to scan in the submission form, accompanying information and the sample exhibiting symptoms and e-mail the scans to colleagues for assistance in diagnosis. Naturally we augment with digital images for those samples, such as fruit, that require 3-D, however I have found that even bulky samples, such as corn stalks and branches may be scanned successfully for image diagnostics, a function particularly useful on a Friday afternoon. ☺

Many different types of multi-function machines exist that scan in color , however, having a networked machine, such as our Toshiba e-studio 2830, makes it easy by sending the scan directly to an email address and allowing the user to choose the format (PDF , JPG, etc.), as well as, a range of resolutions. 🌿

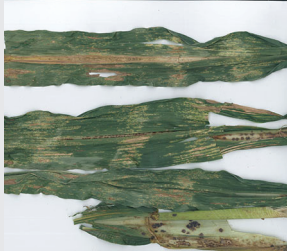
Did you know?

All Diagnostic Tips are archived separately on the NPDN website. Visit [www.npdn.org](http://www.npdn.org) and click on Diagnostic Tips in the left navigation column

## Nucleic Acid-Based Pathogen Detection Workshop

Paul Vincelli, University of Kentucky, Department of Plant Pathology

A hands-on workshop for applied plant pathologists on nucleic acid-based pathogen detection will be held at the




Scans of samples forwarded along with submission forms and background information to colleagues for their diagnostic input. Clockwise from bottom left: root compaction-soybean; *Physoderma*

brown spot-corn; unknown foliar symptoms-soybean; stalk rot associated with top dieback-corn; nutritional imbalance-corn; leaf scorch -possibly *Xylella*-maple; tar spot-silver maple.



University of Kentucky in Lexington. The workshop will begin on Tuesday, January 25, 2011, with introductory lectures and lab activities suited for those with little PCR experience. All participants—beginners and experienced alike—will attend from Wednesday morning, January 26, 2011, through mid-day Friday, January 28, 2011. During this time participants will design, execute, and interpret three real-time PCR experiments (SYBR® Green and Taqman® assays, including an assay for pathogen quantitation). Presentations and discussions will include theory of

real-time PCR, experimental controls, PCR inhibition, use of PCR kits, verifying amplicon identity, licensing, pathogen quantitation, arrays, minimizing contamination, troubleshooting, sequencing (direct vs. cloning), selecting fluorophores, and primer design. In-depth activities and discussions will be included on interpreting BLAST searches and the use of curated biotechnology databases. Registration will be \$250 and \$300 for Wednesday-Friday and Tuesday-Friday, respectively. For more information, email Paul Vincelli at [pvincell@uky.edu](mailto:pvincell@uky.edu). 

## New e-Learning Modules Released

Amanda Hodges, University of Florida, Department of Entomology and Nematology

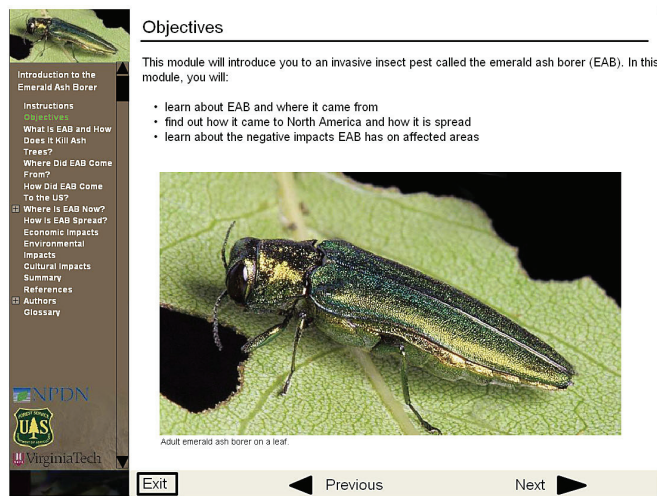
A new series of e-learning modules on the identification, monitoring, and management of the emerald ash borer, *Agrilus planipennis*, is now available on the NPDN Training Site at <http://cbc.at.ufl.edu/>.

Project Leader: Dave Close

Module Authors: Eric Wiseman, Sarah Dickinson, Dave Close and Heather Boyd. Virginia Tech Module Design: Sarah Dickinson. NPDN e-Learning Technical Assistance: Amanda Hodges, Howard Beck and Penny McCurry, University of Florida Clientele Advisory

Board: Joan Allen, Jay Banks, Nancy Bireley, Bob Breazeale, Debbie Dillion, Sharon Kearns, and Donna Williamson. Date published: June 2010

# Training and Education



**Objectives**

This module will introduce you to an invasive insect pest called the emerald ash borer (EAB). In this module, you will:

- learn about EAB and where it came from
- find out how it came to North America and how it is spread
- learn about the negative impacts EAB has on affected areas

Adult emerald ash borer on a leaf.

Technical Reviewer: Jodie Ellis, Purdue University. Module Reviewers: Stephanie D. Stocks, Protect U.S. Coordinator, Department of Entomology, University of Florida;

Eric Wiseman, Assistant Professor, Department of Forest Resources and Environmental Conservation; Eric Day, Manager, Insect Identification Laboratory, Department of Entomology, Virginia Tech. Date reviewed: September 2010

## NPDN Partner Program Highlights

A new educational initiative, Protect

U.S., the community invasive species network, was highlighted in the August edition of the NPDN newsletter. The module can be viewed at <http://protectingsnow.com/>.

As of September 20, 2010, PowerPoint Available for Educators

Module Title - Overview: Invasive Species that Affect Plants

Authors: Amanda Hodges and Stephanie Stocks, SPDN, Protect U.S., Entomology and Nematology Department, University of Florida/IFAS.

Reviewer Credits: Stephanie Bloem, USDA/APHIS/PPQ/CPHST; Rachel McCarthy, NEPDN, Department of Plant Pathology and Plant-Microbe Biology, Cornell University; and Julieta Brambila, USDA/APHIS/PPQ. 🌿

## Exercise Update

### States Get Practice with Joint NPDN, APHIS-PPQ Exercises

Sharon Dobesh, Kansas State University,  
Department of Plant Pathology

#### Introduction:

The purpose of this exercise is to rehearse communication and sample flow if a significant pest or pathogen is suspected and diagnosed. The goal of this exercise is to determine and practice these procedures when the situation is not critical, so that all participants understand their own role and responsibilities as well as those of others involved in the process of recognizing an event and reporting it. - excerpt from the PDIS exercise module.



The *Phoma glycinicola* photo sample used in the multi-state exercise. The sample was available for download from the PDIS Exercise page.

The exercise committee has been busy this summer working with USDA-APHIS-PPQ conducting NPDN exercises which were then followed by APHIS-PPQ full-scale or functional exercises. Full scale exercises require participants to act as they would in a live situation; functional exercises allow participants to simply talk about what their role would be in

the given situation and discuss the steps they would take. Each year APHIS-PPQ selects states in both the Eastern and Western APHIS regions to participate in these exercises.

During August 2-6, Maryland, Delaware, Ohio, and Indiana began their NPDN exercises. APHIS-PPQ chose the select agent - red leaf blotch on soybean (*Phoma glycinicola*), as the exercise pathogen.

Each state launched their exercise with a conference call including all of the participants involved in the exercise. Steps were then acted out according to the exercise Standard Operating Procedure (SOP) and recorded in the PDIS exercise module. Once the NIS Urgent Team confirmed the results, and appropriate communications were made, the NPDN portion of the exercise was completed. Maryland went on to conduct a full-scale exercise in Anne Arundel County during the week of August 16<sup>th</sup> while Delaware, Ohio and Indiana conducted functional exercises.

On September 13<sup>th</sup>, South Dakota launched their NPDN pre-full scale exercise using an emerald ash borer as the pest scenario. The APHIS-PPQ full scale exercise began the week of September 20<sup>th</sup> in Pierre, SD. Back in March of this year, Oregon also participated in an emerald ash borer exercise. 🌿

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

**Login and password required**

*Announcements ~ Membership information ~ Committee reports and meeting minutes ~ Documents and SOPs*

### OPERATIONS COMMITTEE

#### Operations Committee

Rick Bostock, Committee Chair, University of California at Davis, Department of Plant Pathology

The Operations Committee held a conference call on September 23, 2010 and discussed the following:

- NPDN budget delays, potential implications
- Ops Com meeting agenda
  - IT/Diagnosticians group agenda: short-term and long term goals, disaster recovery and data security, data sharing, national meeting
  - Progress on action items from last meeting
- NPDN programs and our ability to meet our mission with declining budgets and cuts among most LGU partners
- Positioning the NPDN to enhance our chances for continuation beyond 2012
- NPDN national meeting

The next conference call will be held on Thursday, October 28, 2010.

### DIAGNOSTICS COMMITTEE

#### Diagnostics Committee

Anne Vitoreli, Committee Chair, University of Florida, Department of Plant Pathology

The Diagnostics Committee held a conference call on September 9, 2010 and the following agenda items were discussed:

- Discuss minutes distribution
- Basic Techniques survey
- 7<sup>th</sup> IT-Diagnosticians meeting, Phoenix, AZ
- Lab accreditation update
- Beltsville trainings
- SOP updates
  - BSDM
- Other items?

Please refer to the website, [www.npdn.org/diagnostics](http://www.npdn.org/diagnostics), for complete minutes of this meeting. The next conference call will be held on Thursday, October 14, 2010.

### EDUCATION COMMITTEE

#### Training and Education Committee

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

The Training and Education Committee held a conference call on September 27, 2010 and the following agenda items were discussed on the call:

- What is needed from the new chair?
- Future needs and goals of each region
- New NPDN Teaching and Education brochure
- New NPDN brochure
- “Protect U.S.” update: “Overview: Invasive Species that Affect Plants” [www.protectingusnow.com/](http://www.protectingusnow.com/)
- Need for new e-Learning subject modules
- Other business items

The next conference call is scheduled for October 25, 2010.

EPIDEMIOL  
OLOGY  
COMMITTEE

**Epidemiology Committee**

Carla Thomas, Program Area Manager/Committee Chair, University of California at Davis, Department of Plant Pathology

The Epidemiology Committee held a conference call on September 28, 2010 and the following agenda items were discussed:

- IT/Diag./Epidemiology Meeting
- Topics to include in Epidemiology Report for the meeting
- Perry Poe from CDFA was introduced to the group. He will be serving in Casey Estep's role.

- Update on Data Sharing
- Update from Oregon State

The next Epidemiology conference call is scheduled for November 3, 2010. For complete minutes of this meeting visit the NPDN epidemiology page at [www.npdn.org/epidemiology](http://www.npdn.org/epidemiology).

EXERCISE  
COMMITTEE

**Exercise Committee**

Sharon Dobesh, Program Area Manager/Committee Chair, Kansas State University, Department of Plant Pathology

The Exercise Committee conducted a conference call on September 13, 2010 and the following agenda items were discussed:

- South Dakota exercise update
- SOP changes - particularly in 2f, 2h, 6l, 6m, 6n, and 7g. We will accept/approve this version of

the SOP during this call.

- Other business
- Next conference call schedule

The next conference call is scheduled for Tuesday, October 5, 2010.

NATIONAL  
DATABASE  
COMMITTEE

**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 9, 2010. The committee continues to work on reviewing the extensive NPDN Pest and Host lists. During this meeting the fungal pest codes according to scientific name were completed.

- Discussion of change submissions
- Discussion of the upcoming IT/Diagnostician/Epidemiology meeting

- Discussion of fungal scientific pest names beginning with T, U, V, W, X, Y, Z

Please refer to the website, [http://www.npdn.org/national\\_database](http://www.npdn.org/national_database), for the complete minutes of this meeting.

The next meeting will be held on Nov 2, 2010 at 1:30 PM EST.



## Security Tip of the Month: Social Networks

Michael Hill, Purdue University, CERIS

Technology advancements in recent years have made social networking sites such as Facebook, Twitter, and LinkedIn very popular. However, new advancements also create new security concerns. The one thing that makes social networking sites so effective is

**The one thing that makes social networking sites so effective is the same thing that makes them risky.**

the same thing that makes them risky. They are designed to share information instantaneously with trusted friends, colleagues, and family members. Unfortunately, if privacy settings are not set correctly, get changed, or never get set at all

then that private message you posted may be visible to the entire world. The result of this action could range from embarrassment all the way to physical endangerment. Some employers use information on social networking sites when interviewing potential employees to assess their personality. It is easy to see how damaging it can be if the wrong people see your private information.

The United States Computer Emergency Readiness Team (US-CERT) has created a web page on how to stay safe on social networking sites that is available at [www.us-cert.gov/cas/tips/ST06-003.html](http://www.us-cert.gov/cas/tips/ST06-003.html). The best advice that I can give is

to treat any information you post to social networking sites as public.

This will help protect you from posting anything sensitive that could come back to haunt you. 🌿



## IT News

### NPDN IT/ Diagnosticians'/ Epidemiology Meeting

Eileen Luke, Purdue University, CERIS

The IT/Diagnosticians'/Epidemiology meeting will take place on October 12-13, 2010. The afternoon of Wednesday, October 13<sup>th</sup> will be a combined meeting with the NPDN Operations Committee. Following on Thursday October 14<sup>th</sup> the NPDN Operations Committee will meet.

This year's meeting will be held at the Courtyard by Marriott hotel located in Chandler, AZ. Reservations can be made by contacting the hotel at (480) 855-8600 and mentioning NPDN to receive the group block rate of \$99/night. The cutoff date for the block of rooms has been extended to **Wednesday, September 29, 2010**, so please make your reservation immediately if you have not already done so. After this date there is no guarantee that rooms will be available and the room rate will also be higher. Additional information on the hotel can be found by visiting their website at [www.Marriott.com/Phxcf](http://www.Marriott.com/Phxcf).

You fly in to the Phoenix airport (Phoenix Sky Harbor airport) and the blue SuperShuttle rate for a round trip is \$44. You can make your shuttle reservation online at [www.supershuttle.com](http://www.supershuttle.com). 🌿

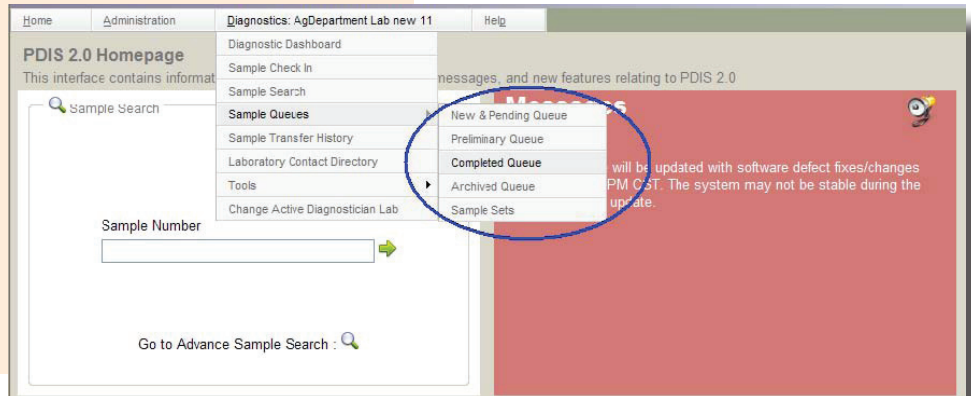
## PDIS 2.0 - New Features

Sharmila Dabade, Kansas State University, Department of Plant Pathology

PDIS users should try out the following three new features available in PDIS 2.0.

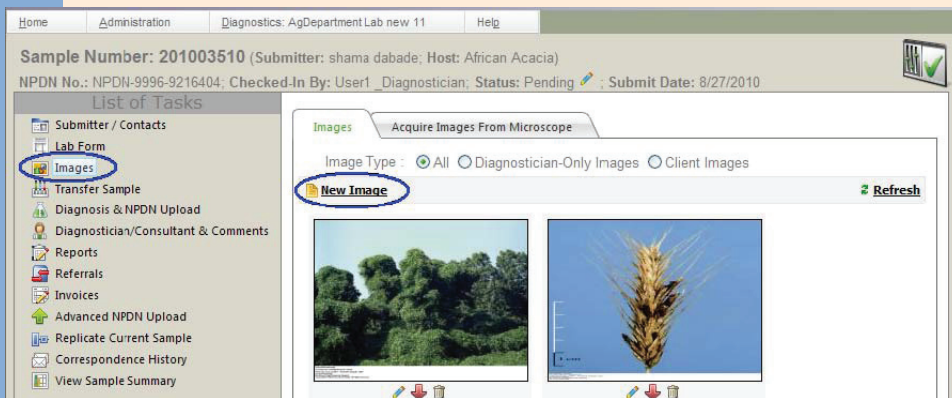
### 1. Menu for directly going to the desired queue

- Login and rollover mouse pointer to 'Diagnostics' menu and then 'Sample Queues'.
- Click on desired queue menu and it will directly open that queue.

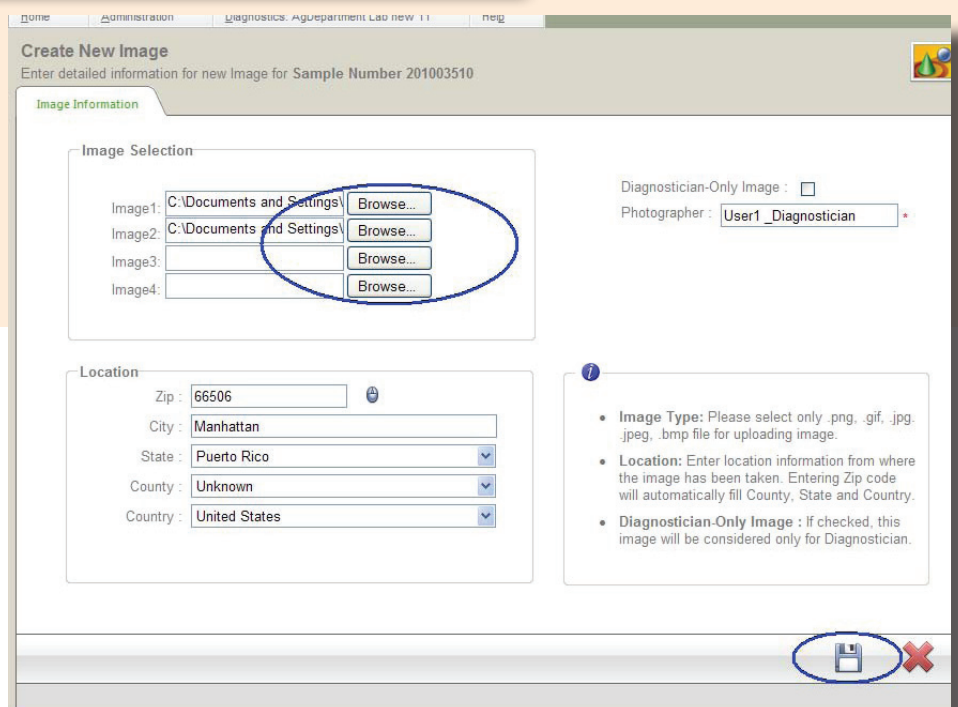


### 2. Uploading multiple images

- Go to sample dashboard of a desired sample.
- Click on 'Images' task on left hand side and then click on 'New Image' link.

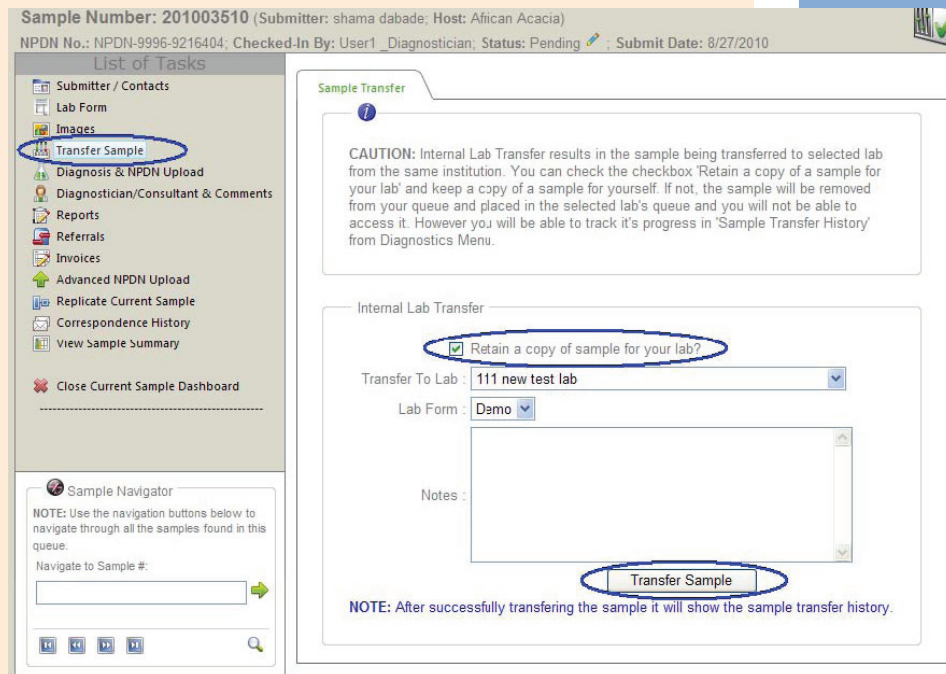


- One by one click on 'Browse...' buttons to select the image.
- After selecting multiple images click on 'Save' icon at the bottom to upload these images for the sample.



### 3. Replicate a sample before transferring it to the new lab

- Go to sample dashboard of a desired sample. **NOTE: Only samples from 'New & Pending' and 'Preliminary' queues can be transferred to the different labs from the same institution.**
- Click on 'Transfer Sample' task on left hand side.
- Check the checkbox 'Retain a copy of sample for your lab?' for retaining a copy.
- Click on 'Transfer Sample' button to transfer the sample. It will save a copy of a sample in your sample queue for your record and then transfer the sample to the other lab.



## NPDN Web Portal Update

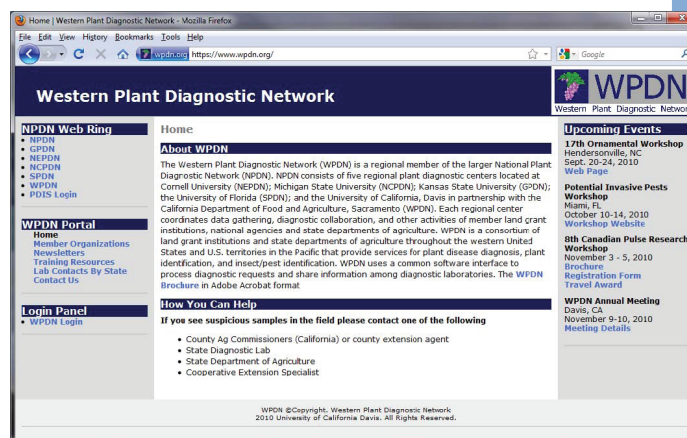
Andrew Coggeshall, University of California at Davis, Department of Plant Pathology

Designed to be a cooperative effort leveraging the IT skills within the network, the NPDN web portal is expected to soon host all the regional web sites.

Since the new NPDN website debuted at the 2009 National meeting, IT staff throughout the network have been working on transitioning the regional web sites over to the NPDN web portal. On September 9, 2010, the western region officially transferred its regional web site to the NPDN web portal. A key advantage for western portal users is that they

will now only need to use one account to access the NPDN or WPDN portal pages. The other regions are expected to complete their transitions over the next few months. 🌿

## Web Update





# Regional Updates



## Duo Wins Award Promoting Green Practices

On September 26<sup>th</sup> the New York State IPM Program honored Dr. George Hudler and Dawn Dailey O'Brien with the Excellence in IPM award for their longstanding work producing and editing *Branching Out*, an Integrated Pest Management newsletter used by industry



George Hudler and Dawn Dailey O'Brien at the NY State Fairgrounds. Photo courtesy of Sandra Jensen, Cornell University.

professionals. The two have been publishing *Branching Out* since 1994.

“We not only provide details of when to look and potentially treat problems, but when the window of opportunity has passed” says Hudler, Chair of the Department of Plant Pathology and Director of the Northeast Plant Diagnostic Network. [Click here](#) to read the full announcement.

Congratulations George and Dawn! 🌿

## Medfly Eradication Program Announced a Success

On September 1, 2010, Florida Agriculture and Consumer Services Commissioner Charles Bronson announced that eradication has been declared in the Mediterranean fruit fly (Medfly) outbreak in Palm Beach County. Regulations have been lifted and fruit movement is no longer prohibited. [Click here](#) to read the full announcement. 🌿



Photo courtesy of Scott Bauer, USDA Agricultural Research Service, Bugwood.org.

## National Events

**October 12-13, 2010**

IT/Diagnosticians/Epidemiologists  
Meeting and

**October 13-14, 2010**

Operations Committee Meeting  
Chandler, AZ

**December 1-3, 2010**

National CAPS Meeting  
Kansas City, MO

**December 12-15, 2010**

ESA Annual Meeting  
San Diego, CA

**November 6-8, 2011**

NPDN National Meeting  
San Francisco, CA

## Regional Events

**October 19-20, 2010**

GPDN/SPDN Meeting  
College Station, TX

**February 22-24, 2011**

NEPDN Meeting  
New Haven, CT

# Upcoming Events

Rachel McCarthy, Editor  
NEPDN  
Cornell University