

Longhorned Beetle's Trip Ends in Baltimore

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

On March 28, Customs and Border Patrol (CBP) announced their agency's first interception of a brown fir longhorned beetle at the Baltimore Port.



Brown fir longhorned beetle, *Callidiellum villosulum*. Photo courtesy of CBP.

The brown fir longhorned beetle, *Callidiellum villosulum*, is a coniferous pest in its native China. From 1999–2005, it was intercepted in several midwestern states primarily on artificial Christmas trees imported from China

which contained centerposts made from Chinese fir.

On February 22, 2005, APHIS issued a [Federal Order](#) suspending certain wood craft imports from China after four recalls within a consecutive six month period; the last of which was the result of the Maryland Department of Agriculture's interception of multiple

Callidiellum villosulum beetles that had emerged from kiln dried certified artificial Christmas trees manufactured in China.

***Callidiellum villosulum* is not currently established in the U.S.**

This recent interception arrived in a container of crafts at the Baltimore Port on March 4, 2011. CBP selected the container for a routine trade enforcement

inspection and ordered it moved to its central examination station. During the inspection, CBP officers noticed that the wood crating was made of non-compliant wood packing material and on March 17 the adult beetle was discovered during a comprehensive examination of the container's contents.

On March 21, a local USDA entomologist identified the insect as *Callidiellum villosulum*, the brown fir longhorned beetle and over the weekend of March 26, it was confirmed as such by the National Identifier at the Systemic Entomological Laboratory (SEL) at USDA-ARS.

Callidiellum villosulum is not currently

Issue Highlights

- NPDN awards — call for nominations
- Diagnostic tip: FTA cards
- Bugwood image recruiting
- Advanced diagnostic training
- New National Repository pest groups/synonyms software
- Latest APHIS Federal Orders



National Institute of Food and Agriculture

established in the U.S. but APHIS considers it to be a significant quarantine pest of concern. Additionally, the North American Forest Commission assessed the threat as that of very high risk due in part to the suitable climatic conditions at various ports of entry and the uncertainty of how well it could adapt to North American trees. (Read the full risk assessment [here](#).) 🌿

NPDN Awards – Call for Nominations

NPDN Awards Committee,
Sharon Dobesh-Chair, Karen
Snover-Clift & Rick Bostock

At the 2nd NPDN National Meeting in December 2009, the First Detector Awards were introduced for the first time. With the upcoming 3rd NPDN National Meeting the Awards Committee has expanded the opportunity to nominate those who have greatly contributed to NPDN activities!

Have you seen someone produce some exceptional First Detector Training materials? Do you know someone that should be recognized for their outstanding or innovative service? Have you ever received a sample and asked yourself...what in the world was this person thinking when they sent in this sample? With the First Detector Awards we are hoping to highlight superior educational programs and trainers. With the Outstanding Service Award we are hoping to recognize those who have gone above and beyond the call of duty, and with the Rotten Tuber Award we are hoping to share unique sample situations, odd suggestions and outlandish sample materials with our colleagues.

Please nominate deserving individuals for at least one of the following NPDN award categories:

NPDN FIRST DETECTOR AWARDS

- Outstanding First Detector Educator Training Award
- Outstanding Team First Detector Educator Training Award
- Outstanding Promotion of the Online Crop Biosecurity Course

NPDN OUTSTANDING SERVICE AWARDS

- NPDN Outstanding Service Award
- NPDN Outstanding Team Service Award

NPDN ROTTEN TUBER AWARD FOR MOST UNIQUE SAMPLE SUBMISSION

(1st, 2nd, 3rd, Honorable Mention)



All three call for nomination instructions and formats are posted at www.npdn.org/. Award packets are due to Sharon Dobesh (sdobesh@ksu.edu) by August 1, 2011. Please contact Sharon Dobesh if you have any questions about award submissions! 🌿

The Turkish Fig Caper: a story of intercepted fig cuttings

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

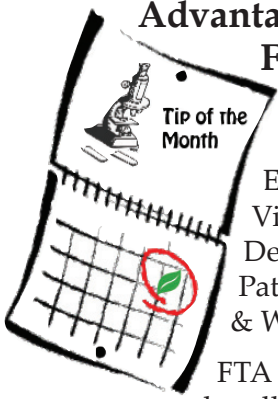
This incident occurred in early 2011 and is an example of how pests can be sent through various delivery services. A bundle of fig cuttings came through the Turkish and US Postal Service without any inspection.

John Preece, the curator of the USDA Repository at UC Davis, tells the story: "A local, private fig breeder went onto eBay and ordered and purchased cuttings of a fig cultivar that were shipped direct from Turkey with no import permit, phytosanitary inspection, etc.

Upon inspection, it was found that the cuttings were covered with mite eggs..." Read the full story (on pg 6) in the [WPDN Winter 2011 First Detector News](#). 🌿

Diagnostic Updates

Advantages of Using FTA Cards in the Diagnostic Lab



Elizabeth Bush,
Virginia Tech,
Department of Plant
Pathology, Physiology
& Weed Science

FTA cards simplify the handling, storage and processing of nucleic acids. FTA cards lyse cells, denature proteins and protect nucleic acids from nucleases and oxidative and UV damage. DNA captured on an FTA card can be ready for PCR or other downstream applications in less than 30 minutes (no extraction necessary).

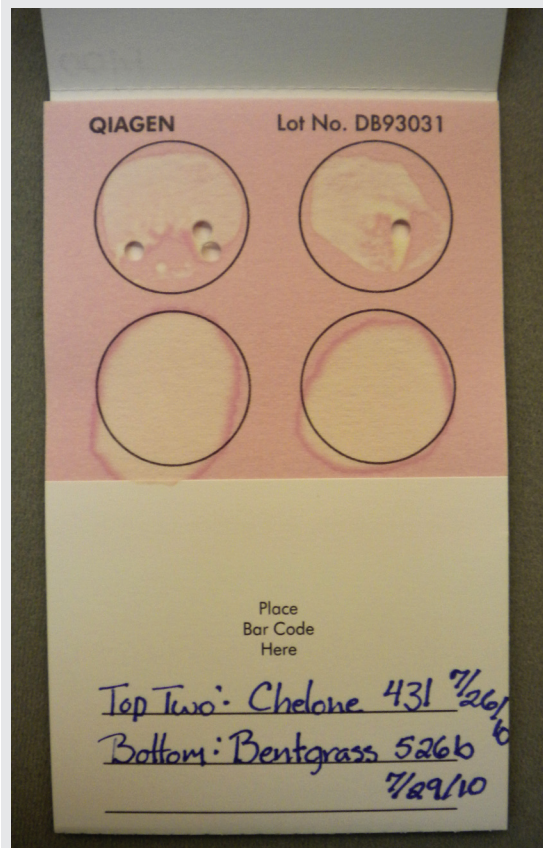
There are a number of advantages to using this technology in a busy diagnostic lab. For example, nucleic acids from a culture, plant tissue or sample suspension (e.g. vascular tissue in nuclease-free water) can be quickly captured onto an FTA card. This captured sample can be used immediately or stored for later use. In our diagnostic lab we have found this quality very helpful when working with isolates that we would like to sequence later (when plant sample pressure eases and we have time), for example. We no longer have to maintain a clean culture/continue to transfer a culture over a long period of

time until laboratory staff has time to extract the DNA.

To prepare FTA-captured samples for downstream applications, small disks are excised from the card using a hole-punch device and the disks are washed and ready for downstream applications, such as PCR, in about 30 minutes. FTA cards are great for archiving DNA samples/positive controls or for storing DNA for later sequencing or other downstream applications. FTA cards with captured sample nucleic acid can be stored at room temperature for years.

Sample nucleic acid captured on FTA cards can also move interstate without a permit.

A number of vendors sell Whatman™ FTA cards and the required purification solution used to wash the hole-punched FTA disks before downstream applications, such as PCR. There are a number of different options regarding card sizes and shapes. I prefer to use the "indicator" FTA cards, which change from



FTA 4-spot indicator card showing disks removed from top two circles. Photo courtesy of Elizabeth Bush, Virginia Tech.

pink to white when the sample is applied and also prefer the "four spot cards". Whatman™ is continuing to improve this technology and, I think, now has a

card that does not require a purification/wash step.

Our laboratory has used FTA cards for capturing DNA from cultures of fungi and oomycetes: excise a shape/size from an actively growing culture that corresponds with the shape/size of the target on the FTA card. Then place the mycelia-side down on the FTA card and allow to sit for two minutes. Remove the mycelia/agar from the FTA card and allow the card to dry before storage or washing/downstream application. Our lab has used DNA captured by this method successfully in PCR amplification in preparation for sequencing.

We have also used the FTA card technology for the tomato bacterial canker pathogen, *Clavibacter michiganensis* subsp. *michiganensis*, by placing a small piece of tomato vascular tissue in nuclease-free water in a microfuge tube for approximately two minutes, then transferring the suspension to the FTA card. DNA captured using this method was used successfully in a PCR application.

One final precaution: Through personal communication I know some laboratories, have not found FTA cards as successful as extraction when sequencing due to smaller amounts of final PCR product. Our laboratory is working toward optimizing a protocol using FTA cards as a component of a reliable *Phytophthora*-sequencing protocol.

References:

FTA Nucleic Acid Collection, Storage and Purification, Whatman Ltd 2007-2009. Online at www.whatman.com/ 

Image Recruiting to Advance IPM and Diagnostic Resources

Joseph LaForest, University of Georgia, Center for Invasive Species and Ecosystem Health

Photographers often ask us what images are still needed or what images we are looking to add to the Bugwood Image Database. Our answer is based on the projects we currently have and what images are already in the image database. To make it easier for us to



Image Recruiting

make our recruiting lists available and be able to mark off those

species that we have a representative set of images for, we have developed a new image recruitment page from <http://images.bugwood.org>. The new page has three sections:

1. THE TOP 25

We count the number of times a subject appears across all of the lists and post a list of the top 25 insects, diseases, plants, wildlife and nematodes. As new images are sent in, we review the available images and determine if we have a representative set. Once we do, it is checked off the recruiting list and new species move up to the top 25.

article continues on page 7...

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

DIAGNOSTICS
COMMITTEE**Diagnostics Committee**

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

The Diagnostics Committee held a conference call on March 17, 2011 and the following agenda items were discussed:

- Next IT/diagnostician meeting
- NPDN National Meeting: poster and workshops
- National Plant Disease Recovery Plans and NPDN SOP's
- SOP updates

- Surge capacity survey results
- Training opportunities
- New calendar feature on NPDN website

Please refer to the website, www.npdn.org/diagnostics, for complete minutes of this meeting. The next conference call will be held on Thursday, April 21, 2011.

EPIDEMIOLOGY
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 March 4, 2011 and the following agenda items were discussed:

- Roll-out of new products
- National Meeting Program Committee
- Update on training plans and repository access

- Update on web sites

Please refer to the website, www.npdn.org/epidemiology, for complete minutes of this meeting. The next conference call will be held on Thursday, April 19, 2011.

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 March 8, 2011 and the following agenda items were discussed:

- Overview of Oklahoma and Kansas exercises
- Updated SOP – nematology contact added

- ETKnet status
- Chain of communication SOP

The next conference call is scheduled for April 12, 2011.

National Database Committee

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

Following the last newsletter, the National Database Subcommittee held a conference call on March 16, 2011. The subcommittee continues to work on reviewing the extensive NPDN pest lists. The agenda included:

- Discussion of change submissions

- Discussion of pest grouping software
- Discussion of Arachnid, termite, planthopper, Odonata and Orthoptera
- Discussion of Insect file and contacts

The next meeting will be held on April 20, 2011.

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 March 7, 2011 and the following agenda items were discussed on the call:

- NPDN T&E poster for APS
- Possible conference call for all the state T&E coordinators
- Update on the Sentinel Plant Network
- Training calendar for the national site

- NACAA-conflicts with APS
- Master Gardeners National Conference
- Protect U.S. & NPDN
- How to Conduct First Detector Training-Revised draft document for review
- Final version of regional training maps

The next conference call is scheduled for April 25, 2011.

Website Committee

Karen Scott, Committee Chair, Cornell University, Department of Plant Pathology and Plant-Microbe Biology

The Web Committee conducted a conference call on March 14, 2011. Agenda items discussed on the call included the move of the web portals to a server with updated operating system allowing features of Drupal modules to operate properly. The calendar module is now viewable on the "Home" page of the

national site and is available for all committee chairs to post upcoming events, calls and meetings. Mike Hill provided an overview of the Drupal conference held in Chicago, IL.

The next conference call is scheduled for April 12, 2011.

2. TAXONOMIC RECRUITING

Many people work only with specific taxonomic groups. This is the easiest way to see what subjects are being requested for a given taxon.

3. PROJECT LIST RECRUITING

Since individual projects drive out recruitment efforts, Project List Recruiting is very helpful to find out what projects are currently in progress and what images are needed to better represent the related subjects.

Both the Taxonomic and Project List Recruiting pages show a list of subjects, the number of images currently available, whether or not recruiting is complete, and whether or not a “Best of the best” image set has been selected to represent that species. The Project List Recruiting pages also show a status report. Since this is a new addition to the system, very few subjects are marked as complete (despite having over 300 images available). We are in the process of reviewing the available images and re-select many of our “featured image sets” for the subjects. Our hope is to allow for peer-review of the images for a subject to continue improving the quality of the services that we provide to NPDN and the diagnostic community. 🌿

The Top 25		
Overall - Insects - Diseases - Plants - Wildlife - Nematodes		
Subject Name	Scientific Name	Current Images
summer fruit tortrix moth	<i>Adoxophyes orana</i>	17
oak splendour beetle	<i>Agrius biguttatus</i>	28
citrus greening	<i>Candidatus Liberibacter asiaticus</i>	52
Siberian silk moth	<i>Dendrolimus superans sibiricus</i>	16
light brown apple moth	<i>Epiphyas postvittana</i>	13
bark beetle	<i>Hylurgops palliatus</i>	26
goldenhaired bark beetle	<i>Hylurgus ligniperda</i>	25
Leptographium root disease	<i>Leptographium truncatum</i>	0
white satin moth	<i>Leucoma salicis</i>	17
Asian gypsy moth	<i>Lymantria dispar asiatica</i>	46
Japanese pine sawyer	<i>Monochamus alternatus</i>	31
blue stain	<i>Ophiostoma piceae</i>	6
Mediterranean pine engraver beetle	<i>Orthotomicus erosus</i>	10
oak ambrosia beetle	<i>Platypus quercivorus</i>	0
Egyptian cottonworm	<i>Spodoptera littoralis</i>	13
brown spruce longhorn beetle	<i>Tetropium fuscum</i>	23
false codling moth	<i>Thaumotobia leucotreta</i>	38
pine shoot beetle	<i>Tomicus destruens</i>	1
oat grass	<i>Acroceras zizanioides</i>	0
leek moth	<i>Acrolepiopsis assectella</i>	0
city longhorn beetle		
creeping croftonweed		
goldspotted oak borer		
orange spiny whitefly		
citrus long-horned beetle		

Taxonomic Recruiting

- **Plants**
- **Wildlife and other animals**
- **Diseases**
 - Fungi
 - Bacteria
 - Viruses
- **Nematodes**
- **Insects**
 - Coleoptera
 - Lepidoptera
 - Hymenoptera
 - Thysanoptera
 - Diptera
 - Isoptera
 - Hemiptera
 - Orthoptera
 - Blattodea

Project List Recruiting	
Title	Description
Pests not Known to Occur in North America	Various southern insects introduced to the north. Images they need to verify an identification and create resources for educating others if the pest were to be introduced.
Cooperative Agricultural Pest Survey	The Cooperative Agricultural Pest Survey performs annual surveys for a wide variety of pests that may affect agriculture in the United States. By providing images to illustrate these pests and diseases, we seek to enable state and federal partners to have a readily available source of images to be used in educational and public relation materials.
WSSA WeedList	The Weed Science Society of America has partnered with the Bugwood Image Database in the hopes of illustrating every weed on the WSSA Weed List. Although this is currently an unfunded project, we are pursuing grant opportunities along these lines and are seeking cooperation from additional partners.
Urban Forest Inventory Pest Early Detection	The USDA Forest Service has been working with a wide array of stakeholders to build an expansion of the iTree street inventory program that would be able to alert users to new pest or disease introductions in the urban forest based on the signs and symptoms of the trees. We have been recruiting images to illustrate some of the known pests.
Southern Plant Diagnostic Network	The Southern Plant Diagnostic Network created a list of organisms that are either known to be a problem on crops in the south or could be a problem if they were introduced. Images supporting this list are used by diagnosticians, extension agents, crop consultants and other people involved in scouting and managing pest and disease problems.
Northern Plains IPM Guide	The Northern Plains IPM Guide is intended to provide current effective management options for insect and other arthropod pests and for plant pathogens affecting all major field crops grown in North Dakota, South Dakota, Nebraska, Iowa and Kansas. The organisms featured in this recruiting effort are mentioned in the guide.

NPDN / USDA – APHIS 2011 Advanced Diagnostic Training

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) plan to continue offering the extremely valuable training workshops for a number of pathogens and techniques throughout this year. New this year are hands-on training offerings for citrus leprosis virus, sweet orange scab (*Elsinoë australis*) and citrus black spot (*Guignardia citricarpa*). Participants of these meetings are expected to cover their travel, lodging and meal expenses. There is no registration charge for the meeting or for meeting materials; these expenses are covered by our colleagues at USDA-APHIS-PPQ-CPHST-NGBTL. If you are interested in participating in any of these workshops please refer to the information provided and contact Karen Snover-Clift at kls13@cornell.edu.

2011 Workshops:

Additional sessions will be added for different dates based on demand.

NEW

Citrus Leprosis Virus (CiLV)

April 25–27, 2011, 2.5 day session
Monday–Wednesday at noon.

Covers: Classroom presentation of the disease biology and virus characteristics for this interesting plant virus. Hands-on RNA extraction and one-step conventional and real-time PCR testing. Discussion and interpretation of results.

HLB (Citrus Greening)

April 27–29, 2011, 2.5 day session
Wednesday at noon–Friday.

Covers: Classroom presentation of the disease biology, brief update on current research and diagnostic protocols. Hands-on sample selection, DNA extraction, conventional and real-time PCR. Discussion and interpretation of results.

Phytophthora ramorum 101 (to include *P. kernoviae*)

April 5–9, 2011 or June 13–17, 2011, 4.5 day session Monday–Friday.

Covers: Classroom presentation of the morphology and taxonomy (Dr. Gloria Abad invited guest lecturer) and disease biology and detection. Hands-on DNA extraction, conventional PCR (nested and multiplex), real-time PCR (ITS and Elicitin), and interpretation of results. A discussion relevant to proficiency test data analysis is also included.

Ralstonia solanacearum

May 10–12, 2011, 3 day session Tuesday–Thursday.

Covers: Classroom presentation of the disease biology and detection techniques. Hands-on training on detection using Immunostrips, culturing and isolation, DNA extraction and molecular detection using PCR from plants and cultures. Lab includes the determination of Biovar using a microplate assay. Discussion and interpretation of results follows the lab portion.

Sweet Orange Scab (SOS) &
Citrus Black Spot (CBS)

NEW

May 24–26, 2011, 3 day session Tuesday–Thursday.

Covers: Classroom discussion of the biology, morphology and culturing. Hands-on DNA extraction and sample selection, conventional and real-time PCR detection of each pathogen. Discussion and interpretation of results follows the lab portion. 🌿

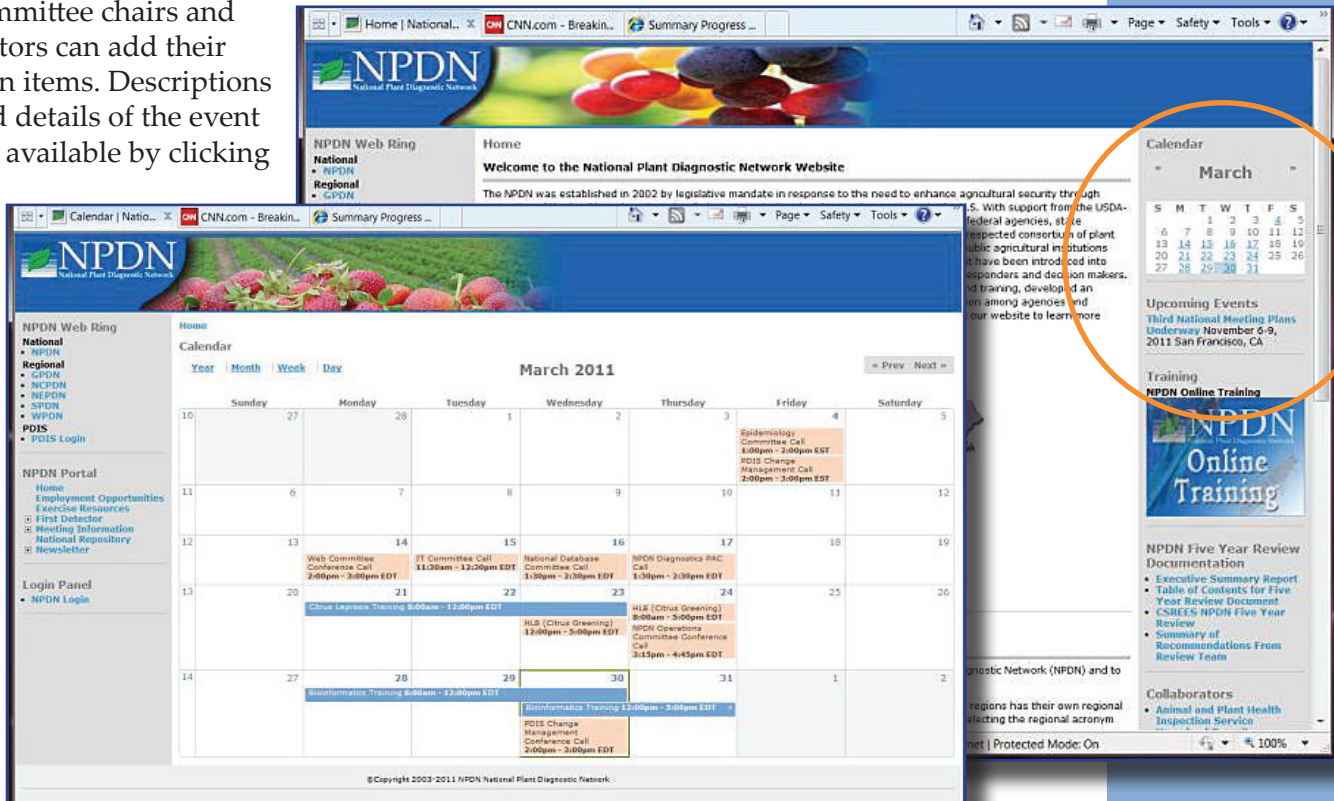
New Calendar Feature on NPDN Website

Karen Scott, Cornell University, Department of Plant Pathology and Plant-Microbe Biology

A calendar has been added to the national home page that allows for conference calls, meetings, events and training sessions to be posted in one location. The calendar is viewable with public access and committee chairs and editors can add their own items. Descriptions and details of the event are available by clicking

on the title. Confidential information such as conference call numbers and access codes should not be included in the description but can be added with a link to a password protected page if necessary. Training sessions for all web portal editors will be announced soon for web editors or those wanting a refresher. 🍃

IT News



Pest Groups/Synonyms Software - Phase 1

Mike Hill and Eileen Luke, Purdue University, CERIS

Software developments to provide pest groups/synonyms have been underway for several months and are now ready to be placed into the production environment. In order to provide a smooth transition, these changes will be phased in over the next few months. Pest

groups will provide the following key features:

1. Support for entries without common names (legacy data)
2. Group entries by unique genus and species
3. Ability to add synonyms based upon unique genus and species




National Repository CERIS

The first phase of this software implementation will include making the necessary structural changes to the underlying database and is targeted to be completed by the end of March. A major benefit of this phase is that diagnostic labs can begin uploading legacy data for pest entries that do not have common names.


The second phase of implementation will include changes to the software to enable users to view this data within the National Repository. Changes will

be made to both the query software for the dictionary as well as the reporting software. It is important to note that these changes will be made as transparently as possible and users will still be able to use the National Repository site as they do today.

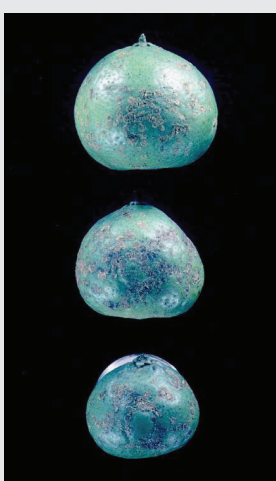
Stay tuned to upcoming newsletters for additional information regarding the pest groups/synonyms software. If you have any questions please contact Mike Hill (mhill@ceris.purdue.edu) or Eileen Luke (lukee@purdue.edu). 

National News *cont...*

APHIS Federal Orders

Florida and Arizona that have been harvested or packed but not yet shipped prior to the issuance of the Federal Order are not subjected to its labeling requirements. However, all other conditions outlined in the Federal Order must be met. 

APHIS Revises Federal Order for Sweet Orange Scab (*Elsinoë australis*)



Sweet orange scab on tangerine. Photo courtesy of Florida Division of Plant Industry Archive, Florida Department of Agriculture and Consumer Services, Bugwood.org.

On March 23, APHIS revised the Federal Order for sweet orange scab (SOS) to add the entire States of Florida and Arizona to the list of quarantine areas. The revised Order also adds conditions to allow the movement of regulated fruit from the quarantine areas. More information on SOS, the revised Federal Order, the APHIS-Approved Packinghouse Procedures for *Elsinoë australis*, and APHIS-Approved Fungicides for *Elsinoë australis* for Use in Plant Nurseries can be found on the APHIS website at www.aphis.usda.gov/plant_health/plant_pest_info/citrus/sweet_orange.shtml.

On March 25, APHIS clarified portions of the Federal Order saying that citrus fruit from

Federal Import Quarantine Order for Host Materials of Tomato Leafminer, *Tuta absoluta*

On March 9, APHIS updated the Federal Order replacing SPRO#: DA-2010-15, dated April 28, 2010. The revised Federal Order updates the list of countries where the tomato leafminer, *Tuta absoluta*, is known to occur and amends the current trapping requirements by reducing the minimum trapping rate of 40 traps per hectare to 30 traps per hectare. APHIS will require that shipments of tomato fruit from countries where the tomato leafminer are known to occur meet additional import requirements to prevent the introduction and establishment of *T. absoluta*.

APHIS will prohibit the entry of plants for planting of *Solanum* spp., *Datura* spp.

and *Nicotiana* spp., which are also hosts of *T. absoluta*, from countries where the tomato leafminer is known to occur pending the completion of a Pest Risk

Analysis (PRA) and the implementation of appropriate mitigation measures. [Click here](#) to read the official announcement and Federal Order. 🌿



GPDN Spring 2011 Webinar Series

Sharon Dobesh, Kansas State University,
Department of Plant Pathology

The GPDN webinar series is well underway and half over. The following webinars remain:

the screen, then “Start Audio Conference”. This will list three options, choose “Receive call from meeting” and enter your phone number. If this does not work, there is a manual conference number 1-866-910-4857, participant code 447113. If you have any questions regarding this

Regional News

3/30/11	Tamara Jackson	Nematodes of Corn: Tools and Tidbits for Diagnosticians
04/06/11	Gary Franc	Microbes in the atmosphere: bacteria should get frequent-flyer miles
4/13/11	Bill Jacobi	Firewood survey
04/20/11	Janet Knodel	Bed bugs, wheat stem sawfly, or wheat midge

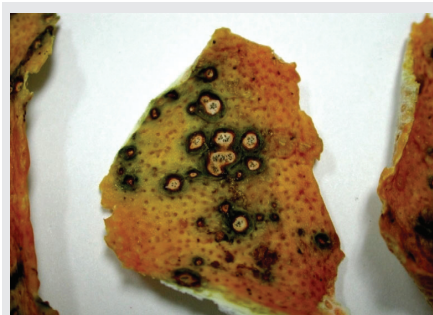
The webinars are open to anyone who would like to join at 10:00 a.m. CT/9:00 a.m. MT. To join go to <http://connect.ksre.ksu.edu/gpdnseminars/>. Once there click on “Audio” at the top of

seminar series or connecting, contact Sharon Dobesh at sdobesh@ksu.edu or 785-532-1340. All previous webinars are recorded and can be viewed later at www.gpdn.org along with those from 2008 through 2010. 🌿



Revised Federal Order for Citrus Black Spot, *Guignardia citricarpa* in Florida

On March 8, APHIS issued a revised Federal Order which included additional conditions for the movement for regulated fruit from quarantine areas. [Click here](#) to read the full Federal Order and the Aphis-Approved Packinghouse



Citrus black spot on orange. Photo by Cesar Calderon, USDA APHIS PPQ, Bugwood.org.

Procedures for *Guignardia citricarpa*, Causal Agent of CBS. 🌿



The Status of the European Grapevine Moth (EGVM) Eradication Effort in California


Monica Cooper, UC Cooperative Extension, and Lucia Varela, UC IPM Program

European grapevine moth was first reported in North America, from Napa County in September, 2009. In response, a regulatory program was developed to focus on pest detection and containment efforts such as trapping, quarantines, and treatment programs. The program is coordinated locally by Agricultural Commissioners; directed statewide by the California Department of Food and Agriculture (CDFA), nationally and internationally by the United States Department of Agriculture (USDA). Populations of this insect have not been detected in North America outside California.

The trapping program in 2010 deployed pheromone-baited delta traps in all vineyard regions of California, at densities of 16 to 25 traps per square mile. As a result, male moths were found in traps in ten California counties: Fresno, Mendocino, Merced, Monterey, Napa, San Joaquin, Santa

Clara, Santa Cruz, Solano and Sonoma. Napa County populations were the largest: more than 100,000 males were trapped, compared with 127 males in all other counties combined. During an aggressive treatment program, populations in Napa County decreased from 99,236 moths caught during the first flight to 1,278 and 279 in the second and third flights respectively. Of the ten counties with detections, only eight counties have areas under quarantine. A quarantine program is established if two or more moths or any other life stage is detected in a generation. Since only one moth was detected in each of Monterey and Santa Cruz counties, no quarantines were established. Areas of several counties had very low detections, applied treatments, and had no catches during the third flight of 2010. If no moth is caught during the 2011 growing season—at a density of 100 traps per square mile—these areas may qualify to be removed from the quarantine.

Research programs were also developed to address the need for reliable scientific information on pest biology and identification. Researchers evaluated the effectiveness of detection and management tools such as traps, lures and pesticides.

Read the results from research projects conducted in 2010 in the [WPDN Winter 2011 First Detector News](#). 

The **California Department of Food and Agriculture**, Plant Health and Pest Prevention Services Division is recruiting to fill the position of **Branch Chief, Pest Management and Prevention** at the Plant Pest Diagnostics Center. For further information please contact Deborra Murphy at dmurphy@cdfa.ca.gov or at (916) 654-0317.

Applications can be sent to:

California Department of Food and Agriculture
PHPPS- Plant Administration
1220 N Street Room 221
Sacramento, CA 95814
Attn: Deborra Murphy

The **Montana Department of Agriculture** is recruiting for an **Entomologist**. Hurry, applications are due by midnight on April 7!

Visit <https://svc.mt.gov/statejobsearch/listingdetails.aspx?id=4615> for the full job description and application requirements.

National Events

August 6-10, 2011
[APS-IPPC Joint Meeting](#)
Honolulu, HA

August 7-11, 2011
National Plant Board 2011 Annual Meeting
Denver, CO

November 6-9, 2011
NPDN National Meeting
Berkeley, CA

November 13-16, 2011
[ESA 59th Annual Meeting](#)
Reno, NV

Regional Events

April 5-6, 2011
NCPDN Regional Meeting
Ames, IA

Job Opportunities

Upcoming Events