

## National Updates



SPDN Soybean Rust Detection, Diagnostics, and Communications Training.

### SPDN Soybean Rust Detection, Diagnostics, and Communications (PIPE) Training

A week long training for soybean rust detection, diagnostics and communication for participants from Mexico was held at the University of Florida, Gainesville, FL. Support for this training was provided by the USDA-CSREES, the Southern Region IPM Center, the University of Florida, and the Southern Plant

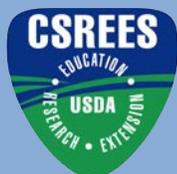
Diagnostic Network. Training topics included: ELISA, Immunostrip test, conventional and Real-Time PCR, hand lens microscopy, field scouting, the Pest Information Platform for Extension (PIPE) and response plan development.

Feedback was extremely positive; training participants appreciated the hands-on portions of the week, including ELISA, Immunostrip test, DNA extraction and conventional PCR, and observation of Real-Time PCR, as well as the opportunity to scout for the disease in a soybean sentinel plot and kudzu site. Participants mentioned that it was useful for them to see the size

and layout of an official sentinel plot, which they plan to replicate in several areas in Mexico. The PIPE portion of the training was well-received, and participants indicated they were interested in utilizing this resource for tracking soybean rust in North America, as well as using it for internal communications.

#### *Issue Highlights:*

- ◆ SPDN Soybean Rust Detection, Diagnostics, and Communications (PIPE) Training
- ◆ Proceedings of 2007 National NPDN Meeting Now Online
- ◆ Pest Information Platform for Education and Extension, FY 2007 Request for Concept Notes
- ◆ Diagnostic Tip of the Month: Foreceps Technique Useful for Isolating Pathogens
- ◆ Diagnostic Subcommittee Update
- ◆ Education and Training: Subcommittee Updates
- ◆ National Database Subcommittee Update
- ◆ NPDN National Database Web Site: Dictionary Code Request
- ◆ Update on Significant Pests and Pathogens from the SPDN: Gladiolus Rust and Sweet Potato Chlorotic Stunt Virus



# National Updates



## Proceedings of 2007 NPDN National Meeting Now Online

The proceedings of the 2007 NPDN National Meeting are now online at the Plant Management web site. You can access these proceedings at the following link:

<http://www.plantmanagementnetwork.org/proceedings/npdn/2007/>

## Pest Information Platform for Education and Extension, FY 2007 Request for Concept Notes

A call for concept notes for additions to the Pest Information Platform for Education and Extension has been released by the USDA CSREES.

The IPM community comprised of research, extension, and public policy leaders has interest in further expanding the IPM PIPE through a methodical approach that preserves the benefits already realized while bringing those benefits to other suitable IPM crop and pest situations.

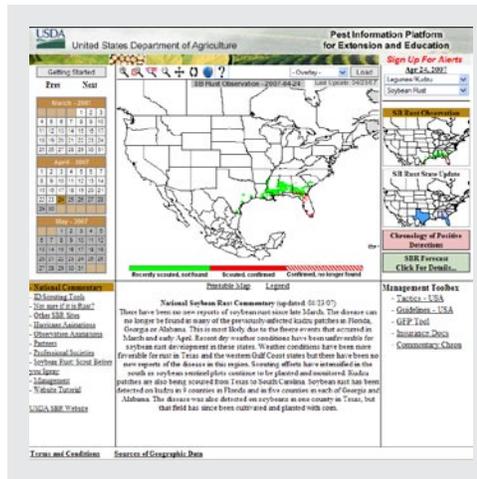
Potential funding from USDA's Risk Management Agency would be authorized by section 522(d) of the Federal Crop Insurance Act. The legislation provides funds for the purpose

of the development and implementation of risk management tools for use by agricultural producers to assist them in mitigating risks inherent in agricultural production.

Funding enhancement and expansion of the PIPE would provide producers with a coordinated framework for monitoring and managing pests of many crop plants and documenting pest management activities at the farm level.

In order to gather data on possible crop/pest combinations, estimated costs, and potential benefits of expansion, a call for submission of IPM PIPE Expansion Concept Notes has been requested. Information from these Concept Notes will be compiled and presented to RMA

with a request for new funding to be competitively distributed prior to the 2008 growing season. Concept Notes will be used to make the case for the level of funding for this competitive program and when funding is secured the request for full proposals will go out.



There is no commitment to provide any funding at this time. All Concept Note submitters will be specifically contacted when the RFP is released.

The submission deadline for concept notes is 5pm EDT, Friday, **May 4, 2007**. For more details on this request, please visit the following link: <http://www.ipmpipe.org/sc/docs/ConceptCall2007.cfm>.

## Forceps Technique Useful for Isolating Pathogens

Nancy Taylor

Plant and Pest Diagnostic Laboratory

Department of Plant Pathology

Ohio State University

There are several references that give guidelines for isolating fungal pathogens from plant tissues. While there are slight variations between the methods, there are a lot of commonalities. They all suggest:

- preliminary washing
- some form of surface sterilization except when an Oomycete is suspected
- one or two sterile water rinses
- blotting or air drying before plating

The isolation process can be slow and frustrating for the technician when the specimen material is difficult to remove from the washing/soaking solution or when it clings to the forceps as it is transferred to the blotting/drying paper (Fig. 1).



Figure 1. Small specimens cling to the forceps.

This problem is exacerbated when the specimen tissue is very small. A teasing needle or some other instrument may be needed to remove the specimen from the forceps (Fig. 2).

A solution to the problem of clinging specimen material involves:

- the appropriate type of forceps used
- how the forceps are held
- utilization of the surface tension of the soaking solution(s)

Bent tip forceps work better than curved or straight tip forceps, although these have their uses (Fig. 3).

Hold the forceps in a reversed position, which is counterintuitive to many first-time workers (Fig. 4).

## Diagnostic Tip of the Month



Figure 2. Using a teasing needle to remove the clinging specimen.



Figure 3. Various forceps used for isolations.

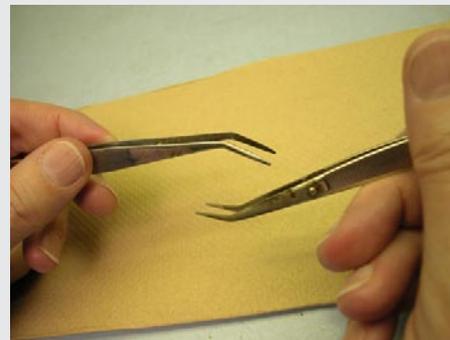


Figure 4. Hold forceps in a reverse position, shown on right.

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# Diagnostic Update

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By holding the forceps in a reversed position the bent end of the forceps can be used to “scoop”

the specimen along with a drop of the soaking solution on and between the forceps tips (Fig. 5).

The surface tension of the drop of soaking solution will help attach the specimen to the forceps as the specimen is removed from the soaking solution (Fig. 6).

Later, open the forceps slightly (Fig. 7) as the specimen is placed onto the blotting/drying paper.

As the drop is being absorbed by the paper the drop’s surface tension will detach the sample from the forceps. (Fig.

8 and Fig. 9).

Photos by Christine Woltjen – Ohio State University



Figure 5. “Scooping” the specimen from the soaking solution with a drop of soaking solution.



Figure 6. Specimen plus drop of soaking solution.

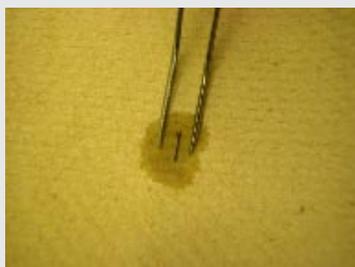


Figure 7. (Top Left) Utilizing surface tension to detach specimen, forceps open for illustration. Figure 8. (Top Right) Surface tension of solution detaches specimen from forceps. Figure 9. (Bottom Left) Specimen detached from forceps.

## Diagnostics Subcommittee Update

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

The NPDN Diagnostics Subcommittee held a conference call on April 12, 2007. During this meeting a number of issues were addressed. Please refer to the diagnostics subcommittee web page on the [NPDN web site](#) for complete minutes of this meeting (login and password required).

Topics of discussion included:

- Entomology representatives from each region.
- Update on the SOP formatting to PHP standards.
- Laboratory Accreditation Update
  - Working group representatives.
  - Scheduled Regional Center visits.
- Subcommittee membership structure brought to NPDN Operations Committee for input.
- Industry membership brought to NPDN Operations Committee for input.
- PIPE Update.

The next meeting will be held on **May 17, 2007**.

# Education and Training

## Improvements for the NPDN Training and Education Site

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

Mike Hill, CERIS at Purdue University visited Howard Beck, Jiannong Xin, Amanda Hodges, Carrie Harmon, and Bob McGovern at the University of Florida in Gainesville, Florida during the week of April 9, 2007. The existing database table design was discussed in detail, and a rough draft plan for improving and restructuring the First Detector training and education site was established. It was also determined that a more official uniform database policy needs to be drafted for First Detector training information. Some inconsistencies in the First Detector training database have resulted from non-uniform datasets. A draft training database policy is currently under review by the Training and Education Subcommittee. Subsequent and prior to Mike Hill's visit, Howard Beck, Jiannong Xin, and Amanda Hodges have been meeting extensively to discuss website improvement plans.

The NPDN site for registering First Detector Participant Information <http://cbc.at.ufl.edu/> is currently under construction as of **April 23, 2007**.

Although many of the features on the site are operational, we have decided to close the site in order to improve and simplify the user interface, correct problems in the database code, complete a detailed review of all datasets in order to remove anomalies, and change the computer language from PHP to Java.

The new and improved training and education web site (version 3.0) will be released no later than July 1, 2007. Thanks to all of you for your continued patience, education of First Detectors, and feedback regarding the First Detector training and education site. If you have concerns regarding the site that have not been submitted, please contact Amanda Hodges [achodges@ufl.edu](mailto:achodges@ufl.edu) with feedback, questions, or concerns as we are rebuilding the web site to better serve your needs.

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

- 1) You will be able to upload your participant data directly from an excel spreadsheet.
- 2) The open registration (Moodle password not required) for participants to signup for training sessions in advance of a meeting will be available on the main portal <http://cbc.at.ufl.edu/>.
- 3) Excel upload (i.e. batch entry) will be available after logging into the site.

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# Education and Training

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4) Session organizers will be able to clearly see their training sessions organized by the actual session

instead of a larger participant table.

5) The following user roles will be defined within the system: national coordinator(s), regional coordinators, state coordinators, and session organizers. In the long-term, each of the coordinator roles will be able to assist with troubleshooting and also view all participant and session data from their area of responsibility.

6) The new training and education web site will be compatible with the overall design of the revised NPDN portal once it is available.

7) Simplified help documents will be available for all educators utilizing the site.

A transition towards utilizing professional IT expertise from the University of Florida for your training database troubleshooting needs will occur following the website redesign. Amanda Hodges, extension entomologist and chair of the Training and Education Subcommittee, has assisted you with your training database questions on an interim basis. Amanda will continue to assist you as needed and will help transition UF-IFAS IT towards maintenance of the training database site.

## **Prior to July 1, 2007:**

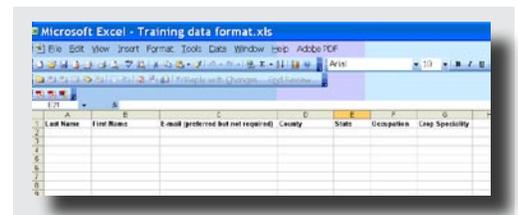
Please continue to maintain your First Detector Training (session and participant data).

Please visit the [First Detector Information Page](#) to download both the form for session and participant information.

The [session form](#) is available in a PDF format:

The image shows a PDF form titled "NPDN First Detector Training Session Information". It contains several sections: "Participant Information" with fields for First Name, Last Name, Organization, Region, Session Address, E-mail, Date of Training, City of Training, and State of Training. Below this is a "Type of Training" section with a list of options: "First Detector Expanded Awareness", "First Detector as First Detector Educator", "Advanced", and "Industry (check off the following option(s) you attend)". Under "Advanced", there are four sub-sections: "Module 1: The Mission of the NPDN and Agricultural Nematology", "Module 2: Understanding the First Detector Program", "Module 3: Quality and Service Program Information", and "Module 4: List and Sources of Diagnostic Tools/Reagents". Under "Industry", there are two sub-sections: "Survey and Related Activities" and "Module 5: Evidence-Based and Digital Sample Submission". At the bottom, there is a "Remarks" section and contact information for Amanda Hodges, including her title, department, and address in Gainesville, FL.

Participant Data entry is available through an [excel spreadsheet](#) that may be downloaded:



Please e-mail or mail your data to:

Amanda Hodges.

[achodges@ufl.edu](mailto:achodges@ufl.edu)

University of Florida

Entomology & Nematology Department

Natural Area Drive

PO Box 110620

Gainesville, FL 32611

During the data cleansing (cross-checking data records from both e-database systems and entering old data), Amanda Hodges may be in contact with individual session organizers as questions arise.

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The extensive data cleansing process will improve our mapping accuracy by insuring that all information is in the database.

Due to problems that have occurred with the database, the University of Florida will provide you as much assistance as needed, including entry of old data or data that you suspect is missing from the current data set. For further questions or to accommodate special requests, please contact Amanda Hodges [achodges@ufl.edu](mailto:achodges@ufl.edu).

Please send data requests relating to entry of older data (2006 or earlier) to Amanda Hodges no later than, Monday, **May 21, 2007**.

Please direct any questions you may have regarding these issues to Amanda Hodges at (352) 392-1901 ext. 199 or (352) 359-9118.

## Feedback from First Detectors Requested

Have you conducted First Detector training? Encourage your First Detectors to respond to the online, post-training survey <http://orb2.at.ufl.edu/CBC/NPDNEvaluation.html>. This link is also available on the 'In the News' section of the [First Detector Information page](#).

## First Detector Brochure

Cassandra Bates (Michigan State University), Gail Ruhl (Purdue University), and Amanda Hodges (University of Florida) have designed a brochure to promote First Detector education. The brochure is in the final editing stages and should be available no later than the beginning of May. Contact Amanda Hodges [achodges@ufl.edu](mailto:achodges@ufl.edu) to request copies of the brochure.

## NPDN Training and Education Subcommittee Update

The NPDN Training and Education Subcommittee met via conference call on Monday, April 16, 2007. Full conference call minutes are available on the training & education subcommittee web page on the [NPDN web site](#) (login and password required).

Highlights from the conference call included the following:

- NRI Crop Biosecurity Update.
- Access to other regional sites request was taken to web committee.
- PDIS AgAlert Training video will be available shortly on the GPDN server.
- NPDN First Detector Registration Site.
- First Detector Brochure.
- NACAA Meeting and National Master Gardener Conference Meeting Volunteers.

**Next Meeting is Monday, May 21, 2007 at 1 PM EDT.**

# Education and Training



# National Database

## National Database Subcommittee Update

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

The NPDN National Database Subcommittee met on April 11, 2007 to continue our work on reviewing the massive EPA Pest and Host lists and creating guidelines for uploading documents that will clarify how sample diagnoses should be transmitted to the National Repository at Purdue University. During this meeting a number of issues were addressed. Please refer to the national database subcommittee page of the [NPDN web site](#) for complete minutes of this meeting (login and password required).

Topics of discussion included:

- Suggestions for Virus Pest Codes changes sent to Virginia Russell.
- Change requests submissions.
- Submission of the article "Uploading of Plant Identification Samples" to the National Newsletter.
- Inclusion of Phase II fields in the Uploads Guideline document.

The next meeting will be held on **May 16, 2007**.

## Dictionary Code Request

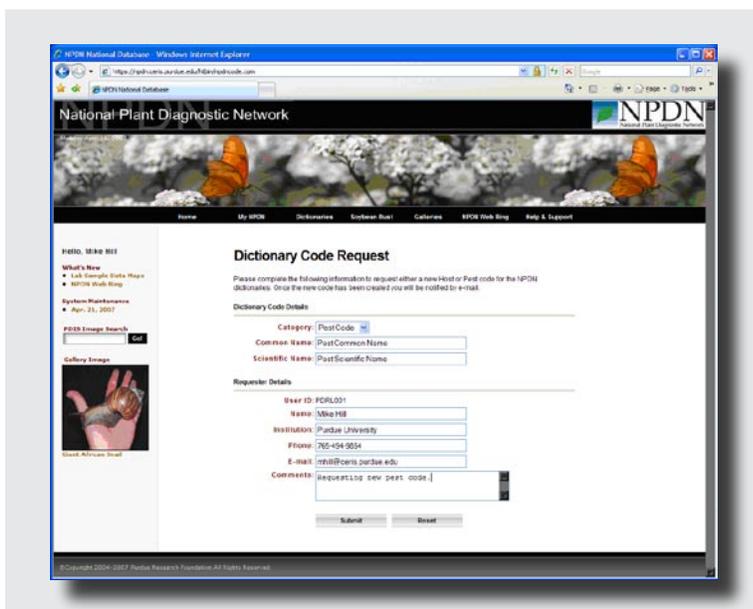
NPDN National Database Web Site  
Mike Hill  
CERIS Programmer/Analyst  
Purdue University

Dictionary codes can be requested through the [NPDN national database web site](#) by clicking on "Dictionary Codes" under the "Help & Support" menu and following these steps:

1. Select between a new host or pest code request.
2. Complete the common and scientific names.
3. Enter a valid e-mail address.
4. Submit the form by clicking on the "Submit" button.
5. A confirmation e-mail will be sent to the e-mail address provided.

PDIS users can continue to request host and pest codes through PDIS as described in the January 2007 edition of the NPDN newsletter.

Any questions related to dictionary codes should be directed to Mike Hill at (765)494-9854 or by e-mail at [mhill@ceris.purdue.edu](mailto:mhill@ceris.purdue.edu).



The screenshot shows a web browser window displaying the NPDN National Database website. The page title is "National Plant Diagnostic Network" and the URL is "http://webhome.purdue.edu/~nphill@ceris.purdue.edu". The main content area is titled "Dictionary Code Request" and contains a form for submitting a request. The form includes fields for "Category" (set to "Pest Code"), "Common Name", "Scientific Name", "Requester ID" (set to "PDR001"), "Name" (set to "Mike Hill"), "Institution" (set to "Purdue University"), "Phone" (set to "765-494-9854"), and "E-mail" (set to "mhill@ceris.purdue.edu"). There is also a "Comments" field with the text "requesting new pest code". The form has "Submit" and "Reset" buttons at the bottom.

## Southern Region Gladiolus Rust, *Uromyces transversalis* (Thum.), Detected in Florida

In February 2007, gladiolus rust was detected at a commercial production facility in Manatee County, Florida.

A second detection of this disease was made at a nursery in Hendry, County, Florida in March 2007.

First detected in the U.S. in Florida in 2006, gladiolus rust has the potential to cause significant economic

loss if it was to become established. Current regulatory activity surrounding this disease includes quarantine and eradication.

More information about these detections and this disease can be found on the web at:

[NAPPO Phytosanitary Alert System: Gladiolus Rust, \*Uromyces transversalis\* \(Thum.\), detected again in Florida](#)

[APHIS-PPQ Pest Alert: Gladiolus Rust: A New Threat](#)

## First Report of Sweet Potato Chlorotic Stunt Virus in North Carolina

Sweet potato chlorotic stunt virus (SPCSV) was detected for the first time in North Carolina. Two isolates of SPCSV were collected in North Carolina in 2001 and 2003.



Gladiolus rust (*Uromyces transversalis*) (Photo Anne-Sophie Roy EPPO, [www.ipmimages.org](http://www.ipmimages.org))

SPCSV was found in association with sweet potato feathery mottle virus (SPFMV). SPCSV and SPFMV together cause sweet potato virus disease which can cause serious yield losses in susceptible cultivars.

Molecular analysis of the two SPCSV isolates indicates that this is not a new introduction.

More information on this detection and disease can be found on the web at: [NAPPO Phytosanitary Alert System: First Report of Sweet Potato Chlorotic Stunt Virus in North Carolina – United States](#)

[Plant Disease: First Report of Sweet Potato Chlorotic Stunt Virus, a Component of Sweet potato Virus Disease, in North Carolina](#)

# Regional Updates

# Upcoming Events

## *National Events*

**July 11-13, 2007**, [SPDN Soybean Rust Identification Short Course](#), Quincy, FL

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

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

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

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

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

## *Regional Events*

**May 7-9, 2007**, [SPDN Invasive Arthropod Workshop](#), Clemson, SC

[Mary McKellar](#), Editor  
NEPDN  
Cornell University

