

NPDN News

Volume 8 Issue 1, January 2013

NEW FIRST SUBMISSION REPORT FORMAT

Martin Draper, USDA-NIFA and Mike Hill, CERIS, Purdue University

Some of you may have already noticed the new format of your first submissions by state reports from the NPDN National Repository. The report format was recently revised to identify the diagnostic lab that processed the sample. For those who may be unfamiliar with these reports, they are generated on a daily basis. The reports include pests/pathogens that are submitted to NPDN as confirmed for the

first time within a state. It is important to recognize that the reports describe the presumed initial incidence of a pest in your state, as defined by the first time that pest was reported to NPDN. In actuality, the newly reported pest or pathogen may not be important, but even a common pest that has never been reported into the database will show up on the report the first time it is entered for your state. Until the data set becomes more robust, some fairly common pests are showing up in the first submission reports. These reports are pest code driven which means that, if the pest code has not been reported previously, any confirmed submissions for that pest code will show up on these reports. Let's say apple scab is found all over your state, but it has never been submitted to your lab so you have never reported it. The first time it is reported to the National Data Repository, apple scab will be included on your

It is important for diagnosticians in the state a pest is found to know what is happening in their state so they can respond appropriately.

daily first submission report. The host is also included in the report, but does not impact the reporting of the pest codes. For example, if two entries for the same pest code on different hosts are reported as confirmed for a state, only the first record will show up on the first submission report.

For various reasons, samples from your state

THOUSAND CANKERS DISEASE FOUND IN NORTH CAROLINA



© Curtis Utley, CSUE, Bugwood.org

Crown thinning and dieback associated with the end stage of thousand cankers disease.

Issue Highlights

- Diagnostic tip: solution for clamping branches
- New diagnostic tools released
- Malacology workshop at UC Davis
- New website for the National Repository
- *In Regional News:* TCD in NC, GPDN diagnostician receives award and invasive plant early detection training in MT

may be diagnosed in another lab in your state or in a lab in another state. It is important for diagnosticians in the state a pest is found to know what is happening in their state so they can respond appropriately. How would you know what new thing appeared if you didn't make the diagnosis? Well in a perfect world, the diagnostician in the other lab might drop you a note or give you a call out of courtesy. However, the reality is that these things happen in the heat of the diagnostic season and an extra call or note is an extra thing to do and all diagnosticians are very busy. Sometimes the diagnosing lab doesn't know if the pest discovery is new or significant for that state. Sometimes the diagnosis comes from a research lab that is not in tune with the network function of national surveillance and sometimes there are concerns about client confidentiality. The lapse in communication happens for a multitude of reasons.

Users who have regional or national access will receive these reports via email on a daily basis.

The recent change to include the reporting lab specifically addresses that concern. Now when you

read your daily report (assuming there was a new report in the previous 24 hours), you can say, "Oh my goodness! The state lab in West Arkachusetts (NOTE: this is neither a state nor a province applying for statehood and is not a recognized NPDN lab) reported apple scab in my state. I had better find out more information."

Users who have regional or national access will receive these reports via email on a daily basis. All other users can view these reports online by visiting https://npdn.ceris.purdue.edu/report_firstocc_search.php (NOTE: This website requires a username and password).

Listed below is an example which shows the type of information that is included in these daily email reports:

How do you use your report data? Do you use it to engage your department faculty? Do you share it with your SPHD and SPRO? These might be good ways to elevate your profile in your department or state. It might also create an educational opportunity for new faculty or staff who may not be as familiar with the who, what, why and how of NPDN.

If you have any questions regarding these reports please contact NPDN staff at (765) 494-9854 or by email at npdn@ceris.purdue.edu.

NPDN First Submission by State Report for 01/30/2013

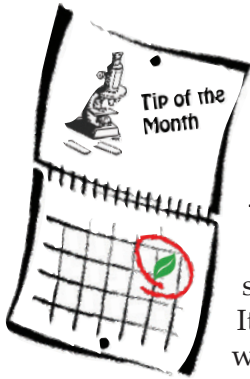
Date of Search: 01/30/2013
 Time of Search: 2:22pm EST
 Sorted By: State
 Number of Records: 1

*Note: Report contains records of pests, weeds, or diseases submitted to the NPDN Repository for the first time in that state for that pest code. Please note *Phytophthora sp./spp.* will be a different code than *Phytophthora parasitica* and each will have its own "first submission" for a state record. It is NPDN Policy that records submitted to the NPDN repository are final results, not presumptive positives. It also is NPDN policy that diagnoses of regulatory significance are not to be submitted to the NPDN repository until after the SPRO and SPHD have been notified of the diagnostic result.

Sample Date	State	Diagnostic Lab	Pest	Host Common Name
01/30/2013	IN	IN 9995 CERIS Test Data	Use for CERIS Testing only [Experiens conpago]	Unknown; No Site Specified

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DIAGNOSTICS



Solution for Clamping Branches in the Diagnostic Laboratory

Jennifer Olson, Assistant Extension Specialist/Diagnostician, Plant Disease and Insect Diagnostic Laboratory, Oklahoma State University

Do you ever get large branches or logs that need to be sectioned into smaller pieces? It can be difficult to cut into the wood if you do not have a tool to secure it. Traditional bench clamps or vises will work, but may not be the best solution since the branches may loosen or spin in the process of sectioning.

We recently installed a bench chain vise in our laboratory. This tool is designed to clamp pipes and it is exceptional for holding branches tightly and maintaining them in the proper position for cutting. We use this tool routinely for pine wilt testing and removing wood chips for culture analysis.

Although other models are available from various suppliers, we chose the bench chain vise from Northern Tool

Equipment (item number 153790) which states that it holds $\frac{1}{2}$ inch to 6 inch diameter pipes (in our case, branches or logs). This tool sells for \$89.99 and is heavily used in our lab. 🌿



Fig 1. The bench chain vise is mounted on the right end of the counter. Mounting at the end of the counter is recommended since you turn a handle to tighten the chain. The composite material of lab benches is hard, so use a sharp drill bit and a drill with variable speed. We drilled slowly to prevent friction and damage to the counter.



Fig 2. Lay the log or branch on the top of the vise. The portion that you desire to cut should point towards you, away from the counter.

Fig 3. Drape the chain over the top of the log or branch.

Fig 4. Using your left hand, push the chain slightly in to latch it and turn the handle with your right hand to tighten the chain.

Fig 5. Once the chain is tight, the log or branch is ready to be cut or chipped with one of your laboratory tools.

Fig 6. The log shown in this demonstration measures slightly less than 6 inches in diameter.

Fig 7. The tool also works will for smaller diameter branches and logs.

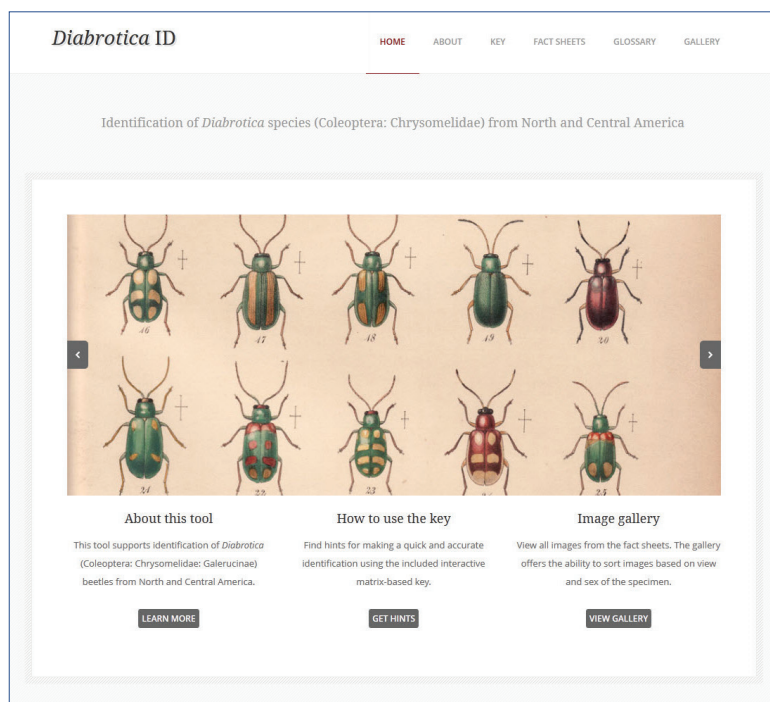
© Jen Olsen, Oklahoma State University

New Diagnostic Tools Released

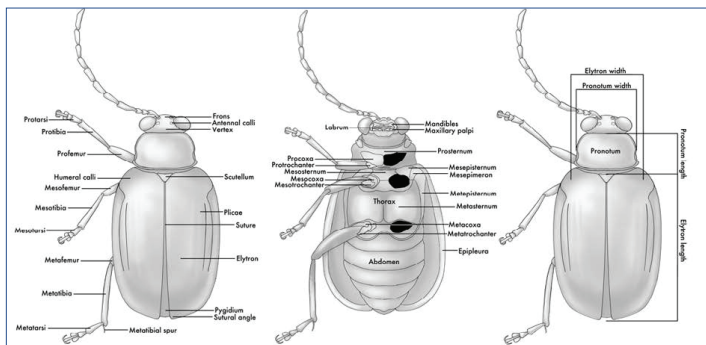
Terrence Walters, USDA-APHIS-PPQ-S&T-FCL-ITP Coordinator and Amanda Redford, USDA-APHIS-PPQ-S&T-FCL-ITP Tool Developer

USDA-PPQ-Science & Technology’s Identification Technology Program (ITP) is pleased to announce the release of its latest identification tool, “*Diabrotica* ID: Identification of *Diabrotica* species (Coleoptera: Chrysomelidae) from North and Central America”.

Diabrotica ID is designed to support identification by non-experts of *Diabrotica* species that originate from North and Central America. The tool offers a number of options to the user for supporting their particular identification process: 1) a filterable image gallery, 2) an interactive matrix key, 3) searchable fact sheets with a variety of images and diagnostic, distribution and host plant information, and 4) an extensive glossary. For the tool, the authors recognize 112 valid *Diabrotica* species and subspecies in North and Central America. *Diabrotica* is considered to be one of the most



<http://idtools.org/id/beetles/diabrotica>



Screenshot of *Diabrotica* anatomy illustration featured on glossary page.

economically important genera of leaf beetles. Species within this genus feed on flowers, leaves and roots of a wide variety of agricultural crops, vegetables, fruits and ornamentals and are vectors of viral and other lethal plant diseases. Many species are commonly intercepted at U.S. ports of entry. 🌱

The developers of *Diabrotica* ID would appreciate any comments about the value and usefulness of this tool and learning of any problems you encounter when accessing or using the tool. Please contact Alex Konstantinov (email alex.konstantinov@ars.usda.gov) with any comments or questions about tool content, or Amanda Redford (email amanda.j.redford@aphis.usda.gov) with accessibility or functionality issues in the tool.

To learn about Lucid key development software, visit www.lucidcentral.org. For information concerning other CPHST-developed identification tools for plant protection and quarantine, contact Amanda Redford.

NPDN UC Davis Malacology Workshop, March 26-28

Last day to register online: Friday, March 08, 2013

<https://registration.ucdavis.edu/>

Price per ticket:
\$475.00

Tuesday, March 26

- General review of invasive mollicutes
- Medical aspects of mollicutes
- Vector aspects of mollicutes, all with David Robinson

Field trip to see giant apple snails and hunt on campus for specimens for the workshop.

Wednesday, March 27 & 28

- Invasive slugs with Rory McDonnell
- Dissection with Patrick Marques
- Anatomy and dissection with Greg Bartman

The emphasis of the workshop is taxonomy, dissection and identification through keys.

Coffee breaks and lunch included. A banquet is planned for the evening of March 27.

PRESENTERS

Rory Mc Donnell, Ph.D., is a snail and slug specialist in the Department of Entomology, University of California at Riverside. He has published a total of 28 peer-reviewed papers, including two books on the slug faunas of California and Kentucky. He also completed the first thorough gastropod surveys in these states, which resulted in the discovery of five new invasive species. He is currently working with colleagues in Wisconsin on the development of a guide to the slug fauna of that state. Dr. Mc Donnell has also published on the population genetics of invasive slugs, on the population dynamics of protected gastropod species in Europe and on the natural enemies of pest gastropods. He has been invited to present his research findings in both Europe and throughout the US. Dr. McDonnell is a Councilor-at-Large of the American Malacological Society, Chair-Elect of the Awards Committee of the International Branch of the Entomological Society of America, a member of the editorial board of The Scientific World Journal and has been invited to talk about his research on national television and radio. He is currently working on the chemical ecology of the giant African snail and on the biological control of invasive gastropods in Californian nurseries.

David G. Robinson completed his doctorate in Paleontology/Malacology at Tulane University in 1991. Since 1995, he has been the National Malacology Specialist for USDA APHIS, headquartered in Philadelphia. Dr. Robinson is responsible for the final identification for APHIS of mollusk interceptions from all parts of the world submitted from all US ports. He conducts taxonomic training of port identifiers and back-up identifiers in Malacology, AQI PPQ-CBP Officers in mollusk interceptions and associated Public Health concerns. He also serves as the authority dealing with quarantine-significant mollusks, their exclusion at ports and their control within the country.

Patrick Marquez received his BS in Agricultural Biology from Cal Poly Pomona in 1991. He started with USDA in 1994 as a Plant Protection & Quarantine Officer at the Port of Long Beach, CA. From 1999-2003, Patrick became a Port Entomologist at JFK International Airport after having worked a few months at SFO International Airport (1999). From 2003-2007, he moved to Seattle as a Port Entomologist where he took on Malacology as a specialty (2003) becoming the Western Region Domestic Malacology Identifier identifying pests from maritime, air and land borders. From 2007-2009, Patrick worked at the US/Mexico border at the Otay Mesa Border crossing. From 2009 to Present, he works as the Port Entomologist/Malacologist at the LAX Plant Inspection Station. Patrick has gained extensive experience working at the various ports of entry identifying both foreign and domestic mollusks.

Greg Bartman graduated from California State Polytechnic University, Pomona, with a Bachelor of Science degree in Agricultural Biology in 1994. He began his career with USDA APHIS PPQ in 1994 as an inspector in the Port of Long Beach, Ca. In 1998 he became the Entomology Identifier at the Plant Inspection Station in Los Angeles. While responsible for identifying all insect orders, the Port of L.A. needed someone to study and specialize in mollusk identifications and Greg took on the task. Since then, he has served as acting National Malacologist for the USDA on numerous occasions. He has worked closely with Dr. David Robinson and Dr. Suzete Gomes'. In between identifications, Greg spends time curating and digitizing the port mollusk collection in addition to other identifier duties.

New Records of European Wireworm Pests and Other Click Beetles (Coleoptera: Elateridae) in Canada and the USA

Hume Douglas, Entomology - Ottawa Plant Laboratory, C.F.I.A., Canada

Here is an article I published last year with information on plant pests in the Northeast US that may have been overlooked because it was in an Ontario journal.

Abstract

The predatory wireworm *Hemicrepidius niger* (L.) is newly reported from North America (Canada: Ontario and New Brunswick). The agricultural pest species *Athous haemorrhoidalis* (Fabricius) is newly recorded from North America (Canada: Ontario and USA: Massachusetts). New provincial and state records are reported for the Palaearctic agricultural pest species *Agriotes lineatus* (L.) (USA: Massachusetts and Canada: Prince Edward Island) and *Agriotes obscurus* (L.) (Canada: Prince Edward Island). New national, provincial or state records are listed for 14 native North American species. 🌿



© entomart, via Wikimedia Commons

Athous haemorrhoidalis.

This article was first published in *The Journal of the Entomological Society of Ontario*, 142: 11–17, December 2011. The full article can be accessed via pdf at this open access link http://www.entsocont.ca/files/files/Journal/2011/3_JESO_142_Douglas_11_17.pdf

2013 Advanced Diagnostic Workshops

If you are interested in participating in any of these workshops contact Karen Snover-Clift at kls13@cornell.edu. Thank you!

- Bioinformatics, February 26–28, 3 days
- Phytophthora, March 5–8, 3.5 days
- Potato Wart, March 11–12, 2 days
- Bioinformatics, March 13–15, 3 days
- Citrus pathogens, March 19–22, 4 days
- Citrus Greening-HLB, March 26–28, 3 days

PCR protocols & updates are on Bugwood—visit the Diagnostician's Cookbook

- 1 Media recipes
- 2 Diagnostic tests
- 3 Other related topics
 - 3.1 Fungal culture storage
 - 3.2 Bacterial culture storage
 - 3.3 Oomycete culture storage
- 4 NPDN diagnostic tips
- 5 Diagnostic lab manuals





Auditor Exchange Quality Quiz

Directions: Unscramble the 5 words below to uncover concepts that are pertinent to internal auditors. Then, using the 10 circled letters, unscramble the answer to the final question.

1. L Q T I A U Y _ _ _ _ _ _

2. U T E C M S R O _ _ _ _ _ _ _

3. G E T N A E M M A N
_ _ _ _ _ _ _ _ _

4. R P O P C T E I E N
_ _ _ _ _ _ _ _ _ _

5. M T O O N I U T E D A N C
 _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Unscramble the circled letters above to answer the following question:

Question: What the records left behind?

Answer: an _ _ _ _ _ _ _ _ _ _

see page 11 for the answers...

New Website, Same URL

npdn.ceris.purdue.edu

Mike Hill and Eileen Luke, CERIS, Purdue University

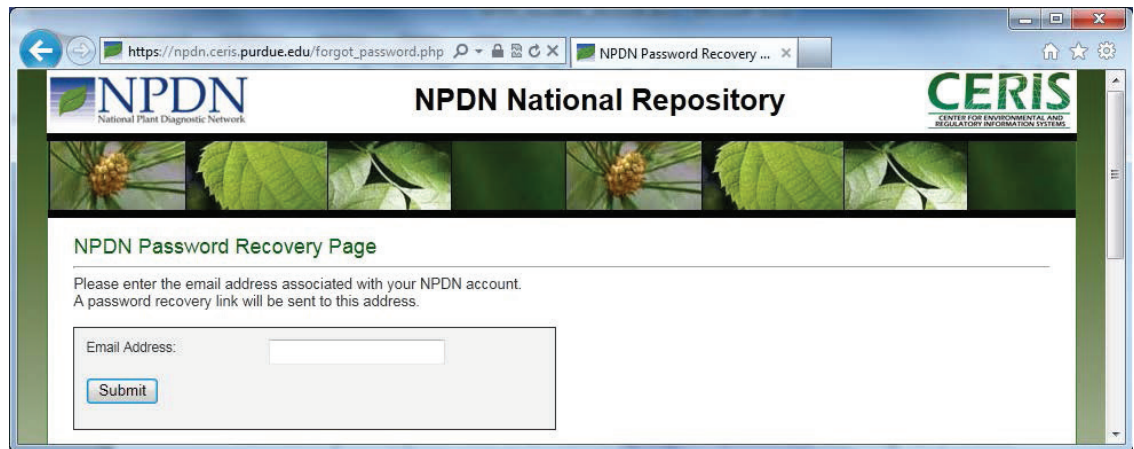
The NPDN National Repository was moved to a new web site on January 1, 2013. However, the URL remained the same and the site can be accessed at <https://npdn.ceris.purdue.edu>.

One of the biggest changes on the new site is that the username and password have changed and are now the same as the username and password that you use to access the NPDN portal sites (npdn.org, gpdn.org, ncpdn.org, nepdn.org, spdn.org and wpdn.org).

If you do not already have an NPDN portal account, but previously had an account to the NPDN National Repository please send us an email at npdn@ceris.purdue.edu indicating

that you need a new account created. If you do have an account to the NPDN portal, but have forgotten your password, you can reset it by visiting https://npdn.ceris.purdue.edu/forgot_password.php. Please make sure to enter your e-mail address associated with the NPDN portal.

Please feel free to contact Mike Hill (mikehill@purdue.edu) at (765) 494-9854 or Eileen Luke (lukee@purdue.edu) at (765) 494-6613 if you have any questions about the NPDN National Repository and we will be happy to help. 🍃



REGIONAL NEWS



AgriLife Research Associate Recognized for IPM Work

Featured in AgriLife TODAY

Texas A&M AgriLife Research's Jacob Price has been awarded the Southern Region Integrated Pest Management Center's new "Friends of Southern IPM Graduate Student Award."

The award program recognizes graduate students with extraordinary potential to contribute to the development and implementation of research, Extension or implementation of integrated pest management in the Southern Region of the U.S., according to the guidelines.

Price, a senior research associate in Amarillo and diagnostician for the Great Plains Diagnostic Network, was the sole honoree in the doctorate category. He is a doctoral student at Texas Tech University in the plant and soil sciences department and serves part time as an instructor in the biological sciences department at Amarillo College.

The Southern Region IPM Center is one of four regional centers funded by a grant from the U.S. Department of Agriculture's National Institute of Food and Agriculture Integrated Research, Education and Extension Competitive Grants Program – Integrated Pest Management. 🍃



Invasive Plant Early Detection and Rapid Response Training

Hilary Parkinson, Plant Sciences & Plant Pathology,
Montana State University

Want to contribute to Montana's EDRR program and get applicator credits to boot? Take the online "invasive plant early detection and rapid response training: courses!"

This three-course series has been designed to promote early detection and rapid response (EDRR) across the state of Montana and the region. The goal of EDRR is to recognize high priority plants and take action to manage them while populations are still small,

meaning they can be eradicated or controlled with much less cost financially and environmentally. In order to make EDRR work, you need to know how to identify plants you encounter in the field.

Courses cover plant anatomy terms critical to plant identification; diagnostic features of Montana's Priority 1A-2A species; and diagnostic features of Montana's Priority 2B-3 species.

Interested? Go on-line to: <http://msuextension.org/learn/invasiveplants> to create an account (see the "Enrollment Instruction and Helpful Tips" link) and start the first course. Courses must be completed sequentially and you must score at least 70% on the quiz to receive credit and advance to the next course.

Credits:

Private applicators: 1 credit/course (maximum of 3 credits)

Commercial/government: 2 credits/course (maximum of 6 credits)

Questions? Contact Hilary Parkinson, (406) 994-1871, hilary.parkinson@montana.edu.

GPDN Webinar Series for 2013

Sharon Dobesh, Kansas State University, Department of Plant Pathology

We are pleased to announce the 2013 GPDN Webinar Series. This year the webinar series will begin in January. All webinars begin at 10:00 am CT/9:00 am MT.

The following is the schedule as it currently stands. We are still working with speakers to firm up the TBA dates.

The webinars are open to anyone who would like to attend. To join go to <http://connect.ksre.ksu.edu/gpdnseminars/>. Once therebr

,"Enter as a Guest" by typing in your name and affiliation. Next, click on "Audio" at the top of the screen, then "Start Audio Conference". This will list three options: choose "Receive a call from the

meeting (Dial-out)" 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 seminar series or connecting, contact Sharon Dobesh at sdobesh@ksu.edu or 785-532-1340. All webinars are recorded and can be viewed later at www.gpdn.org along with those from 2008 through 2012 that are available.

Date	Speaker	Topic
1-16-2013	Aaron Palmateer, University of Florida	Impatiens Downy Mildew
1-23-2013	Kate Evert, University of Maryland	Powdery Mildew on Vegetable Crops
1-30-2013	TBA	
2-6-2013	Ioannis Tzanetakis, University of Arkansas	Virus Diseases of Brambles – Diagnosis and Relative Importance
2-13-2013	Bill Bockus, Kansas State University	Durability of Disease Resistance in Kansas Wheat Cultivars
2-20-2013	Jody Fetzer, Hillwood Estate, Washington D.C.	Mites – From bad to beneficial – in Gardens and Greenhouses
2-27-2013	TBA	
3-6-2013	Dawn O'Brien, Cornell University Rachel McCarthy, Cornell University	Update on Star-D Sentinel Plant Network



Northeast Plant Diagnostic Network

Branching Out: Features from the Past for the Future is available from Branching Out, Department of Plant Pathology, Cornell University, 334 Plant Science Building, Ithaca, NY 14853. Cost \$30 (includes postage and handling); checks made out to Cornell University or order online at <http://branchingout.cornell.edu/FeatureBookInfo.html>



Haywood County under Quarantine for TCD

On January 3, 2013 the North Carolina Department of Agriculture and Consumer Services placed Haywood County wood products under quarantine due to a recent detection of thousand cankers disease in the Great Smoky Mountains National Park.

“This marks the first time the disease has been detected in the state, and by placing restrictions on a variety of plant material and wood products, we hope to keep the disease from spreading into other counties,” said Agriculture Commissioner Steve Troxler. “Something as simple as moving firewood from an infected area to an uninfected county could increase the risk of spreading this disease.”

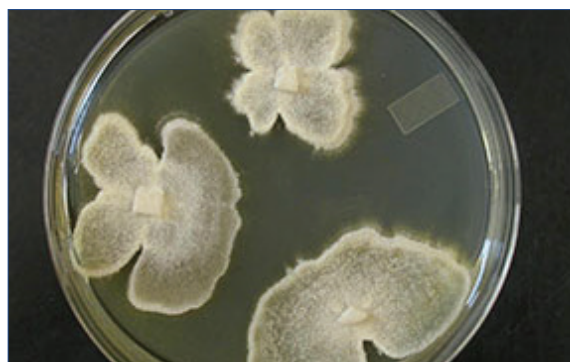
“This marks the first time the disease has been detected in the state...we hope to keep [it] from spreading into other counties,” said Ag. Comm. Troxler. ”

The following items fall under the quarantine restrictions: walnut plants and plant parts including firewood, lumber, logs, stumps, roots, branches and composted and uncomposted chips. Regulated items cannot be moved outside the county. Exceptions to the quarantine restrictions include nuts, nut meats, hulls,

processed lumber with square edges that is 100 percent bark free and kiln-dried and finished wood products without bark, such as furniture, instruments and gun stocks.

NCDA&CS Plant Industry Division and NC Forest Service personnel will continue to monitor counties across North Carolina for the presence of this disease.

[Click here](#) to read the full press release or visit NCDA&CS at www.ncagr.gov/paffairs/news-rel.htm.



(Top) Sporulating *Geosmithia* in PDA agar. (Bottom) Walnut twig beetle galleries and *Geosmithia morbida* cankers on black walnut.

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©K. Snover-Cliff, Cornell University, Bugwood.org

UPCOMING EVENTS

National Events

August 4–8, 2013
National Plant Board 2013 Annual Meeting
Louisville, KY

August 10–14, 2013
2013 APS-MSA Joint Meeting
Austin, TX

November 10–13, 2013
Entomology 2013
Austin, TX

Regional Events

March 26–28, 2013
Malacology Workshop
Davis, CA

June 24–27, 2013
4th Int'l. Symposium on Tomato Diseases
& 28th US Annual Tomato Disease Workshop
Orlando, FL

PHOTO OF THE MONTH

**Tubercularia
cankers**
Sporodochia on
stem of *Daphne* sp.



© Bruce Watt, University of
Maine, Bugwood.org

www.bugwood.org

CONTRIBUTE

Share Tips and News with Your Colleagues

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



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

Email Gail Ruhl at ruhlg@purdue.edu

Auditor Exchange Quality Word jumble answer key: 1. Quality, 2. Customer, 3. Management, 4. Perception, 5. Documentation

Question: What the records left behind? An audit trail.

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



National Institute
of Food and
Agriculture