First Detector Network News

NPDN
National Plant Diagnostic Network

August 2012
Volume 7,
Issue 8

European grapevine moth declared eradicated in Solano County, California

Stephanie D. Stocks, Department of Entomology and Nematology, University of Florida

European grapevine moth (*Lobesia botrana* or EGVM) is a known pest of berries throughout Europe, North and West Africa, the Middle East, Japan, and eastern Russia. A native to Italy, it has also been detected in Chile and the United States (Napa County, California in October 2009).

In June 2010, portions of Fresno, Lake, Mendocino, Merced, Napa, Solano, and Sonoma Counties were under quarantine. San Joaquin and Santa Clara counties were added in September 2010, while Nevada and Santa Cruz Counties were added in June 2011.

Solano County has been declared eradicated after no new detections had been made after multiple generations. However, those parts of the county that are within three miles of an EGVM find site in Napa County will remain regulated.

Four other counties were released from the regulated area in March of this year (Fresno, Mendocino, Merced, and San Joaquin), while Lake County was released in February. For more information on the quarantine areas, click here. The most current quarantine map (August 2012) can be found here.

This pest prefers grape and spurge laurel, but has also been reported on blackberry, gooseberry, red and black currant, olive, cherry, prune, persimmon, kiwi, pomegranate, barberry, carnations, and several other hosts can be found in the natural landscape (such as dogwood, dewberry, and Virginia creeper).

Damage includes webbing and feeding on flower clusters, feeding on green berries, and webbing and feeding of more mature fruit which becomes contaminated with frass. The fruit can also be exposed to secondary infections by *Botrytis* and damaged berries can attract secondary pests such as fruit flies, ants, and raisin moths.

The moth itself is 6-8mm in length with a wingspan of 11-13mm (females are slightly larger than males). The forewings are creamy white overlayed with pale yellow and mottled with bluish-gray markings. The hind wings are white with a dark grey outline. Both wings are fringed. The female looks similar to the male, but the hind wing is dark gray. The larvae reach 9-10mm at maturity and have a yellowish brown head. The abdomen can vary in color from yellowish green to whitish brown or brown.

Images of the adults, larvae, pupae, and damage to plants can be found here.

In This Edition:

New Protect U.S. educational material available

Stephanie D. Stocks, Department of Entomology and Nematology, University of Florida

Protect U.S., an NPDN First Detector partner program, has launched new scripted presentations for educators on Wheat Stem Rust, Ug99 and Potato Psyllids and their Associated Pathogens. Scripted presentations contain information on pest identification as all life stages, associated or vectored disease symptoms, scouting and monitoring information, and managment recommendations (chemical, biological, and cultural). These presentations are designed to be used by educators and can be adjusted as needed for various target audiences.

E-Learning modules for these topics, based in the scripted presentations, will be available by the first of October. These e-learning modules will be reviewed for Certified Crop Advisor (CCA) continuing education units (CEUs). All other Protect U.S. modules have already been approved for at least one CEU a piece and are available at no charge.

Other Protect U.S. topics include:

- Overview: Invasive Species that Affect Plants
- Laurel Wilt and the Redbay Ambrosia Beetle
- Citrus Greening Disease and the Asian Citrus Psyllid
- Plant Biosecurity: Overview for use at the College Level
- Spotted Wing Drosophila
- Giant African Land Snail

As of July 2012, Protect U.S. scripted presentations have been downloaded almost 60,000 times and more than 200 people have taken the modules.

In addition, Protect U.S. has developed several K-12 lesson plans on invasive species topics. These lesson plans are correlated to the National Science Education Standards (NSES) and contain:

- a scripted presentation on the topic
- activities and handouts for the students
- an e-learning module for the students

Harmful and Beneficial Organisms is a lesson plan designed for fourth grade and focuses on both native and introduced organisms that are benficial to the environment and those that are harmful to the environment.

Invasive Species and Population Growth is a lesson plan designed for seventh grade and focuses on how invasive species can function as disease agents, competitors, and predators and how they can affect population growth.

Biodiversity, Invasive Species, and Plant Biosecurity is a lesson plan designed for grades 9-12 and focuses on biodiversity, how invasive species affect biodiversity, who is involved in detecting invasive species, and plant biosecurity. It also features other plant biosecurity issues such as those that affect our food supply, the USDA Select Agents and Toxins list, and agroterrorism events of the last century.

Other Protct U.S. topics are under development including:

- Common and Exotic Diseases and Pests of Stone Fruits
- Thousand Cankers Disease
- Exotic Pests of Concern for Ornamental Plants

protect u.s.
community invasive species network

Florida Sentinel Plant Network Workshop held at Marie Selby Gardens

Stephanie D. Stocks, Department of Entomology and Nematology, University of Florida

Marie Selby Botanical Gardens in Sarasota, Florida was host to a Sentinel Plant Network Workshop on August 2. The sentinel Plant Network is an NPDN First Detector partner program. The workshop introduced participants to:

- the Sentinel Plant Network and its mission
- the perks of being a member
- how to scout for exotic pests and diseases
- some invasive pests and diseases of particular concern for Florida and how to identify them
- how to collect and submit arthropod pest and disease samples for identification
- how to take images for digital diagnosis

This workshop had eighteen participants representing seven different botanical gardens.

If you are interested in hosting a Sentinel Plant Network workshop, please contact Dan Stearns. If you would like more information on what the Sentinel Plant Network is, how to become a member of the Sentinel Plant Network, or how the network would benefit your garden, please click here.

NAPPO Phytosanitary Alert System

The North American Plant Protection Organization's (NAPPO) Phytosanitary Alert System is featured in this newsletter every month. Remember that this a great resource to keep up to date on the latest pest detections and quarantine information. The website features both official reports and unofficial alerts of pests for Canada, Mexico, and the United States.

They also have free subscriptions that are available for periodic email notifications of new postings on their website. Be sure to check it out regularly!

About NPDN:

The NPDN is a network of state and federal officials, land grant universities, and First Detectors whose mission is to detect, diagnose, and disseminate information regarding high consequence plant disease or pests. The NPDN was established in 2002 in response to a need for greater agricultural security.

Over the past eight years the NPDN has grown into an internationally respected consortium of plant diagnostic laboratories.

The five regions that make up the NPDN are the: NEPDN, SPDN, NCPDN, GPDN, and WPDN.

Please feel free to browse the links to the various regions to get a better idea of what is going on in your part of the country.

Proposed changes to the NPDN First Detector Newsletter format

The editors of the First Detector Newsletter are soliciting comments on the following proposed changes to the newsletter. These changes include:

- distributing the newsletter every two months (odd months) instead of every month
- blogging about new detections as they happen instead of waiting to put them in the newsletter
- going into more detail in the newsletter about any detections that have occurred during the previous month

Because we want to deliver a good product that is also user friendly and useful, we would like feedback from subscribers of the newsletter as to what they think of the proposed changes.

Please feel free to email Carrie Harmon, Amanda Hodges, or Stephanie Stocks with your comments or suggestions.

USDA CPHST ITP announces the release of two new keys

Stephanie D. Stocks, Department of Entomology and Nematology, University of Florida

USDA CPHST ITP has launched two new interactive keys for diagnosing Cerambycoid families and for diagnosing *Anastrepha* and *Toxotrypana* (Tephritidae).

The *Anastrepha* and *Toxotrypana* key was developed through collaboration between CPHST and an international team led by USDA Agriculture Research Service's Systematic Entomology Laboratory. Tephritidae includes some of the world's most economically important pests. As such, reliable identification of specimens is of utmost importance in early detection and eradication efforts. This identification tool contains illustrations, fact sheets with detailed descriptions, host plant information, distribution maps, and even a glossary. The team is also soliciting comments and suggestions for the improvement of this tool. To access it, click here.

In addition, a tool for diagnosing Cerambycoid families has also been launched. This product is the result of collaboration between CPHST and University of New Mexico. Cerambycoid beetles are an economically important group that affects agricultural crops, ornamental trees and lumber products, as well as trees in the natural ecosystem as wood boring pests. They are also known as the longhorned beetles or longicorns.

This key is the first of three for this group and contains illustrations, fact sheets with diagnostic information, geographic information, and economic importance information, and a glossary.

The team that created this resource is also soliciting comments and suggestions for the improvement of this tool. To access it, click here.

The NPDN First Detector Newsletter is published by the Southern Plant Diagnostic Network (SPDN)

Editors: Carrie L. Harmon, Stephanie D. Stocks, and Amanda Hodges

To submit news items in future editions of the newsletter, contact: clharmon@ufl.edu or sstocks@ufl.edu or achodges@ufl.edu

You can include a short descriptive paragraph, links, and related images or documents – don't forget to include author and image credits though.

Upcoming Meetings:

- September 13-15, 2012 - the Master Gardener Advanced Education Conference will be held in Pasco, WA - click here for more details.
- September 28-30, 2012 - the Ohio Master Gardener Volunteer State Conference will be held in Warren, OH - click here for more details.
- October 1-3, 2012 - Florida Master Gardener Continued Training Conference will be held in Clearwater Beach, FL - click here for more details.
- October 4-6, 2012 - the Purdue Master Gardener State Conference will be held in Noblesville, IN - click here for more details.
- October 24-26, 2012 - the Louisiana Master Gardener Conference will be held in Lake Charles, LA - click here for more details.
- November 11-14, 2012 - the Entomological Society of America Meeting will be held in Knoxville, TN - click here for more details.
- If you would like your meeting listed in the newsletter, let us know.

First Detector Training Opportunities:

- If you are hosting a First Detector Training Session, please post these on the NPDN First Detector Training website so that they can be listed here.

Do you tweet?

- Click here for updates.

Employment Opportunities:

- Please click here for more information.