

FIRST DETECTOR NETWORK NEWS



NPDN
National Plant Diagnostic Network



May 2012
Volume 7,
Issue 5

Update on the Invasion of the Bean Plataspid

Ashley Poplin, Department of Entomology and Nematology, University of Florida, Wayne A. Gardner, Department of Entomology – Griffin Campus, University of Georgia, and Daniel R. Suiter, Department of Entomology – Griffin Campus, University of Georgia

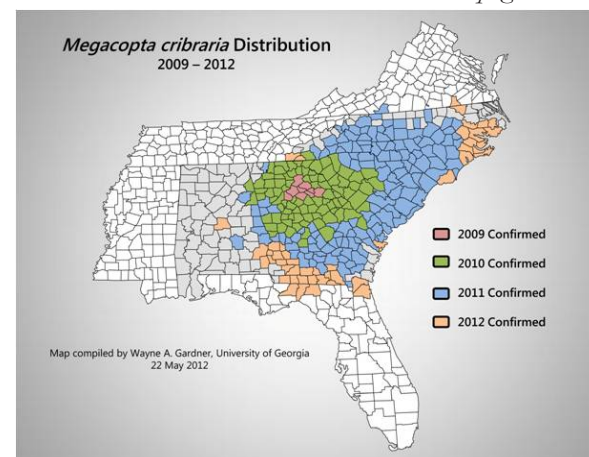
The bean plataspid *Megacopta cribraria* (Fabricius), known to some as the kudzu bug, lablab bug, or globular stink bug, is an invasive pest of soybean that recently immigrated to the United States. In October 2009, the bean plataspid was first reported in Georgia, USA. Until this time, species of the family Plataspidae were not known to occur in the Western Hemisphere. Populations of the bean plataspid have spread rapidly and the distribution has been confirmed in six southeastern states, including: Alabama, northern Florida, Georgia, South Carolina, North Carolina, and southern Virginia. See the map (right) showing the yearly distribution of the bean plataspid in its expanded North American range.

The bean plataspid has only on two developmental hosts in the United States: kudzu and soybean. The insect is credited with reducing the biomass of kudzu by as much as 33 percent over one growing season in northeast Georgia. However, when left unchecked on soybean, yields have been reduced an average of 18% in Georgia and South Carolina testing. The bean plataspid has been observed perching on a variety of plants, but most of these plants are not true hosts for

the insect. However, entomologists suspect that the adults are feeding on some of these hosts which include wisteria and figs.

The insect is also a nuisance pest for people and outdoor activities. The milder temperatures this past winter likely resulted in the overwintering adults appearing earlier than usual and before kudzu had sprouted. This resulted in an abundance of adult insects invading home landscapes and being a nuisance pest this spring. Once kudzu began growing, the nuisance factor declined.

continued on next page



Map (updated May 17, 2012) courtesy of Wayne A. Gardner, University of Georgia.

In This Edition:

- Update on the Invasion of the Bean Plataspid
- Additional counties in Kentucky and New York have been added to the emerald ash borer regulated area
- Montgomery Botanical Gardens hosts a Florida Sentinel Plant Network Training Workshop
- Florida launches a new website featuring invasive whitefly species

This same nuisance phenomenon is seen in the fall when kudzu and soybean are senescing and the adult plataspids are searching for overwintering sites. To manage the bean plataspid as a nuisance pest, homeowners are advised to cover all possible entry points of insects and to ensure windows and doors are properly sealed.

Managing this pest in soybean fields may be quite challenging. Pyrethroids are effective, but timing of applications may be critical for

avoiding re-infestations that require additional treatments. An egg parasitoid from Japan is also being assessed for its potential as a biological control agent.

Since the bean plataspid is a relatively new invasive species to the United States, research regarding this pest is ongoing. Please report any sightings of the bean plataspid to your local county agent. For additional information about the bean plataspid, please visit the [Featured Creatures website](#).



Top left image - bean plataspid on corn (image courtesy of Jeremy Greene, Clemson University, www.bugwood.org, #5426340). Middle left image - bean plataspid on a house (image courtesy of Daniel R. Suiter, University of Georgia, www.bugwood.org, #5407722). Bottom left image - bean plataspid on soybean (image courtesy of James Johnson, Georgia Forestry Commission, www.bugwood.org, #5443640). Top right image - adult bean plataspids (image courtesy of Daniel R. Suiter, University of Georgia, www.bugwood.org, #5407750). Middle right image - bean plataspid eggs (image courtesy of Paul Smith, University of Georgia, www.bugwood.org, #5429506). Bottom right image - bean plataspid nymphs (image courtesy of John Ruberson, University of Georgia, www.bugwood.org, #5440285).

Additional counties in Kentucky and New York have been added to the emerald ash borer regulated area

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

The Animal and Plant Health Inspection Service (APHIS) has added counties in Kentucky and New York to the emerald ash borer (EAB) regulated area in order to stop the spread of this pest to other parts of the United States. Anderson, Boyle, Bracken, Garrard, and Harding Counties join 21 other counties in Kentucky (all of which are located mostly in the northeastern part of the state). In addition, Albany County joins at least 9 other counties in New York (all of which are located primarily in the southern part of the state). In total, 15 states in the northeastern U.S. have detected EAB.

This pest has already killed more than 60 million ash trees in these areas and research is

ongoing to find a good biocontrol agent for long term management of this established pest. People are reminded not to move firewood from one area to another, especially out of the quarantine areas as it has been determined that this is a major source of EAB's spread.

If you have any questions about this pest or suspect that you have an EAB infestation (especially if you are outside of the quarantine area), please contact your local county agent so that appropriate action can be taken.

For more information about detection and management of EAB, please visit the [First Detector website](#) and take the EAB modules.

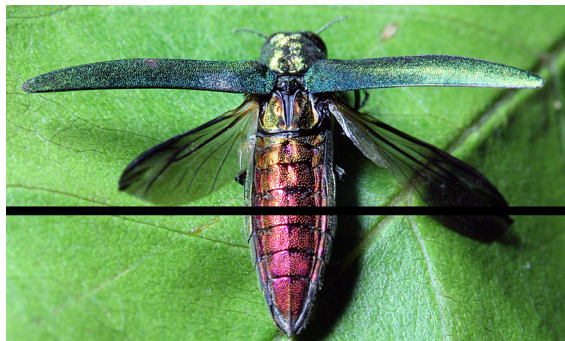


Image of EAB adult (left) courtesy of LDavid Cappaert, Michigan State University, www.bugwood.org, #2100048.

Image of EAB larva (right) courtesy of David Cappaert, Michigan State University, www.bugwood.org, #1460071.

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.



Montgomery Botanical Gardens hosts a Florida Sentinel Plant Network Training Workshop

Colette Jacono, Pest Survey Specialist, USDA-APHIS-PPQ

True to its trademark hospitality of by-gone days, the **Montgomery Botanical Center** in Miami, Florida opened the doors of its private, world class collection of palms and cycads this April to host a First Detector training specifically designed for public gardens in Florida. The one day event was developed by the Sentinel Plant Network (SPN), a collaborative initiative that partners the American Public Gardens Association (APGA), the National Plant Diagnostic Network (NPDN), and the USDA APHIS. The day's agenda touched on all aspects needed to support public gardens in the early detection of high-consequence pests and pathogens in their living plant collections.

Early in the day, Dr. Monica Elliott, UF/IFAS Fort Lauderdale Research and Education Center, led the attending horticulturalists on a tour of the grounds and shared firsthand knowledge on how to distinguish the symptoms of disease, which is relatively rare in palms, from their more common display of nutrient deficiency. Together the group scouted for signs of insect pests and shared knowledge on their identification and tips on their management.

Later, in the comfort and coolness of the conference room, presentations were offered on: recognizing upcoming target invasive species, utilizing NPDN diagnostic resources

and educational materials that are available online, and understanding how to collect and submit samples to the network for identification. Diagnostic services submitted to the NPDN will be free of charge for APGA members attending the workshop, an incentive that will allow gardens the unusual opportunity to develop a baseline of known pests and help in the recognition of new ones.

The 25 participants, representing the Montgomery Botanical Center, **Vizcaya**, **The Wertheim Conservatory**, the **USDA Subtropical Horticultural Research Station**, **Fairchild Tropical Gardens**, the **Naples Botanical Garden**, and the APHIS Plant Inspection Station in Jamaica, NY infused an atmosphere of camaraderie which, along with the enthusiasm of the presenters, Dr. Monica Elliot, Dr Colette Jacono (USDA/APHIS/PPQ), and Ms. Stephanie Stocks (UF Department of Entomology and Nematology) culminated in a pleasant and all around successful training event.

The Sentinel Plant Network is devoted to helping public gardens detect new pests and pathogens. More training workshops are being planned for botanical gardens in Central Florida this summer. If you are interested in attending, participating, or hosting an SPN training event, feel free to contact Colette.C.Jacono.



Left image courtesy of Dr. Patrick Griffith, right image courtesy of Dr. Keith Clancy.

Florida launches a new website featuring invasive whitefly species

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

Florida Whitefly is a website portal focused on Florida whitefly issues of concern to landscape professionals, homeowners, and the general public. It is a partnership between the University of Florida's IFAS Extension (UF/IFAS), UF Department of Entomology and Nematology, Florida Department of Agriculture and Consumer Services-Division of Plant Industry, UF/IFAS Extension-Broward County, UF/IFAS Extension-Lee County, UF/IFAS Extension-Miami-Dade County, UF/IFAS-Extension-Palm Beach County, Southern Plant Diagnostic Network, IPM Florida, and Pest Management University.

The **website** features three new invasive whiteflies that have become quite problematic in southern Florida, but are projected to spread into central Florida. They are Bondar's nesting whitefly (*Paraleyrodus bondari*), rugose spiraling whitefly (*Aleurodicus rugioperculatus*), and ficus whitefly (*Singhiella simplex*).

Information found on the website includes:

- Scripted presentations for educators covering: general whitefly introduction, other problems with whiteflies in Florida, current whitefly problems (including identification at all life stages, host lists, and damage caused), whitefly monitoring, and whitefly management (including biological, cultural, and chemical recommendations)

- E-Learning modules that can be taken for FDACS-AES Continuing Education Units (CEUs) at no charge
- Information on submitting samples for identification, county websites, FAQs, and photos

Florida Whitefly is a website portal focused on Florida whitefly issues of concern to landscape professionals, homeowners, and the general public. Florida Whitefly is a partnership between the University of Florida (UF), IFAS Extension, Department of Entomology and Nematology, Florida Department of Agriculture and Consumer Services-Division of Plant Industry, UF/IFAS Extension-Broward County, UF/IFAS Extension-Lee County, UF/IFAS Extension-Miami-Dade County, UF/IFAS-Extension-Palm Beach County, Southern Plant Diagnostic Network, IPM Florida, and Pest Management University.

Click here to download the flyer announcing the launch of the Florida Whitefly website.

Florida Whitefly Partners

Copyright 2012 | About This Site | Contact Us | University of Florida | Equal Opportunity Institution
Entomology and Nematology Bldg 970, Natural Area Dr, P.O. Box 110920, Gainesville, FL 32611-0920

Screen shot of the Florida Whitefly website - www.fwhitefly.org.

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!

Upcoming Meetings:

- June 6-7, 2012 - the New Mexico Master Gardener Conference will be held in Las Cruces, NM - click [here](#) for more details.
- June 22, 2012 - the Penn State Master Gardener Conference will be held in State College, PA - click [here](#) for more details.
- July 15-19, 2012 - the National Association of County Agricultural Agents Meeting will be held in Charleston, SC - click [here](#) for more details.
- July 19-21, 2012 - the Upper Midwest Regional Master Gardener Conference will be held in Chanhassen, MN - click [here](#) for more details.
- 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 - the Florida Master Gardener State Conference will be held in Lake Charles, LA - 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 Continued Training Conference will be held in Clearwater beach, FL - click [here](#) for more details.
- If you would like your meeting listed in the newsletter, let us know.

First Detector Training Opportunities:

- May 31 - June 1, 2012 - the Sentinel Plant Network will hold its South Central Region Training Workshop at the Dallas Arboretum in Dallas, TX - Click [here](#) for more details.
- 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.

The NPDN First Detector Newsletter is published by the Southern Plant Diagnostic Network (SPDN) © University of Florida. All rights reserved.

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.

