## Eastern Region Nursery and Greenhouse Program Danny Lauderdale, Area Specialized Agent







## **Eastern NC Nursery News**

February 2018

Find the latest information about nursery production in Eastern NC below!

Visit Danny's Website

### Red-headed Flea Beetle Update

Timely highlights from research trials and observations:

- 1. Insects overwinter as eggs in nursery substrate, most likely not easy to find now since in fall they were likely laid along primary roots in the interior of the rootball.
- 2. First generation larvae hatch may begin as early as 250-300 GDD. Often hard to find until about 400 GDD. We are at the following GDD on Feb. 22 as I write this and gaining every day:

Wilmington area = 230
Benson area and Greenville area = 165
Raleigh area = 140-165
Wilson area = 150
Smithfield area and Tarboro area = 145



Red-headed flea beetle eggs found on outside of rootball in summer of 2017.

Calculator. Make sure to enter your zip code, 50 degree F as base temperature, and current year as the date range.

- 3. Later on when you start to find larvae by non-destructive scouting (pulling plants from containers to look for larvae on the outside of rootball) then you might consider trying drenching on a limited basis in some areas of high infestation. There is no evidence at this point of any product effectiveness if applied before egg hatch. I will be working on that over the next month or two with pre-hatch systemic drench trials. Here is what has been effective in research trials that is labeled so far for contact drenching larvae when detected:
- a. From Dr. Brian Kunkel, University of Delaware, IPM Extension Specialist
  - -Steinernema carpocapsae, entomopathogenic nematodes, applied via drench with special handling and application procedures.
  - -Metarhizium anisopliae Strain F52 (Met52 is one product), entomopathogenic fungi, applied via drench application.
  - -16 ounces of bifenthrin (Bifenthrin Nursery 7.9F) per 100 gallons water and drenched at a volume of 8 ounces per 6" of container diameter. (granular bifenthrin incorporation has not proven effective).
- b. From Danny Lauderdale, NC Cooperative Extension
  - -Acephate 97UP controlled 92% of first generation larvae at rate of 16 fl. oz./100 gallons water and drenched at a volume of 12 ounces per 3 gallon container. Determine drench volume by trial and error to allow full saturation of media without leaching.

\*\*This information is based on replicated research trial results and should be implemented with caution in small isolated areas to determine effectiveness at your site before implementing on any large scale. Contact Danny Lauderdale for more information. Always follow all label instructions.\*\*

# Southern Nursery IPM Resources Online

There are many great resources for nursery production that can be found online. Four of my favorites are:

- 1. <u>IPM for Select Deciduous Trees in</u> Southeastern US Nursery Production
- 2. IPM for Shrubs in Southeastern US Nursery Production: Vol I
- 3. <u>IPM for Shrubs in Southeastern</u> <u>US Nursery Production: Vol II</u>
- 4. 2017 Southeastern US Pest
  Control Guide for Nursery Crops and
  Landscape Plantings











# Be on the lookout for Spotted Lantern Fly

A new invasive insect is

threatening to enter North Carolina. This planthopper was first detected in Pennsylvania in 2014 and has been found as far south as Virginia.

For more information check out this link from NCDA&CS Plant Protection: <u>Spotted Lanterfly</u> <u>PestWatch</u>



Spotted Lanternfly Adult

### Center for Applied Nursery Research Azalea Evaluation Program

The Center for Applied Nursery Research is a nonprofit organization which provides funding and facilities for green industry, needs driven



A few of the 150 azalea cultivars evaluated in the program.

research under an operational nursery setting at McCorkle Nurseries, Inc. in Dearing, GA. It is a partnership between the nursery industry and the University of Georgia. Since 1997 they have done some great work that should not be overlook by growers throughout the southeast. One such program is the azalea evaluation program conducted from 2014-2017. 150 cultivars representing rebloomers and single season bloomers were collected and evaluated for flower size, azalea lace bug damage, spring peak bloom and duration, and fall peak bloom and duration. The results can be found on their website link below along with other plant evaluation information and project information.

**Azalea Evaluation Program** 

### **Important Dates**

May 24, 10 AM - 2 PM, Pesticide Disposal Collection, Wilson County Agricultural Center, Contact Tommy Batts, Extension Agent, at 252-237-0111.

August 8, 4 - 8 PM, Castle Hayne Nursery Twilight Field Day, Castle Hayne Research Station, Contact Danny Lauderdale for more information.

Pesticide disclaimer: Recommendations for the use of agricultural chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by NC Cooperative Extension nor discrimination against similar products or services not mentioned.

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The Eastern Region Nursery and Greenhouse Program at NC Cooperative Extension is your source for research-based production information for greenhouse and nursery crops in Eastern North Carolina.

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