



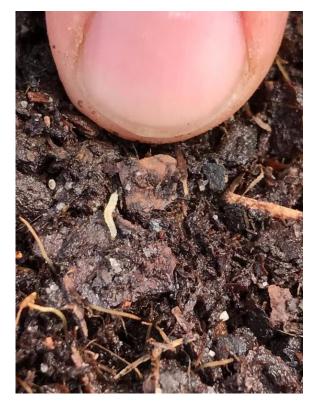


Eastern Region Nursery & Greenhouse Program Danny Lauderdale, Area Specialized Agent

Eastern NC Nursery News

April 2021

Red Headed Flea Beetle Alert: Scout Now for Larvae in Plants Left Over From Last Year



We are close to or have reached 400 GDD based on 50 degrees Fahrenheit as the base temperature in most locations in eastern NC. This should mean that larvae will soon or have already hatched from overwintering eggs in most locations. Here are a few GDD examples as of Tuesday, April 20.

Elizabeth City: 313 Tarboro: 363 Raleigh: 367 Rocky Mount/Wilson: 402 Greenville: 406 Goldsboro: 435 Fayetteville: 451 Wilmington: 676 (may already have adults in greenhouse overwintered plants)

It is possible that the Southeastern (Wilmington) area including surrounding counties may already have adults at this point in plants overwintered in greenhouses. So if you are in that area be on the lookout for adults particularly in plants remaining from

last year. On most plants overwintered outdoors we see the main first generation adult beetle emergence around the time Southern magnolias (*Magnolia grandiflora*) begin flowering.

If you have not scouted for larvae now is a great time to see if they are active in root systems. Check out this video on scouting. Scout on warm days within 30 minutes to 1 hour of irrigation by pulling plants out and looking at edges of root balls for larvae. If systemic products were not applied earlier before egg hatch then contact drenches can be done now to take out many of the first generation larvae before they pupate to become adults. Don't treat without scouting. Acephate 97UP at 12 ounces per 100 gallons of water has provided 92-100% control in my research trials when 1st generation larvae are active. *Steinernema carpocapsae* (Millenium-beneficial nematodes) at 250 million per 100 gallons, gave 98% and 100% control in two different studies), *Isaria fumosorosea* (Ancora--microbial insecticide) at 28 oz. per 100 gallons, gave 94% control in one study. Drench volume per container should be 6 ounces for a trade gallon, 8 ounces for a full gallon and 12 ounces for a 3 gallon plant if drenching is done as recommended about 1-2 hours after irrigation.

New susceptible plants potted this spring will benefit from granular imidacloprid applications incorporated in the substrate or topdressed after potting based on my observations the past few years. My demonstrations last year at Green Biz Nursery and Pender Nursery were very successful (at medium and high labeled rates) protecting plants through August even with no additional insecticide applications (at Green Biz Nursery). Replicated research trials with incorporated and topdressed imidacloprid granules were installed in late March this year to confirm and data collection of foliar damage will begin in late spring.

Drenches of other nursery labeled neonicotinoids like dinotefuran (only apply to plants rooted halfway to container wall), imidacloprid, and thiamethoxam will provide foliar protection also but depending on product and timing, they may not last as long as a granular application. Keep in mind that when these applications (including imidacloprid) are done after egg hatch you will only get about 50% control of larvae and adults have to feed on foliage to ingest but are typically quickly killed. Expect some slight early damage with these treatments but summer and fall foliage should be protected depending on application timing and whether or not repeat applications are made. Based on my experience and observations a single drench application of a neonicotinoid will not result in the protection of foliage for an entire growing season. April drench applications of imidacloprid to newly potted plants for example have provided protection until early August. Granular products seem better at providing longer protection.

Spruce Spider Mite and Southern Red Mite BOLO

Be on the lookout for southern red mites on broadleaf evergreen plants and spruce spider mites on conifers as we are in prime time for them right now. More information on each can be found at:

https://entomology.ces.ncsu.edu/2019/05/southern-red-mites-active-on-ornamentals/

https://content.ces.ncsu.edu/spruce-spider-mite

https://content.ces.ncsu.edu/north-carolina-agricultural-chemicals-manual/insect-control

Migrant Housing Internet Connectivity Program

The NC Farmwork Health Program and the NC Agromedince Institute have money to help provide internet connectivity at migrant farmworker housing locations. The program benefits for the farmworkers include:

-It is easier to communicate with farmworkers about outbreaks and emergencies. -Immediate access to telemedicine resulting in early detections, less exposure, and less missed time from work.

-Access to healthcare resources and health information.

-Access to English as Second Language (ESL) classes and other educational opportunities.

-Ability to connect with family and friends decreasing feelings of isolation and loneliness

Read more at https://communitydevelopment.ces.ncsu.edu/2021/04/migrant-housing-internet-connectivity-program/

Read more NC Cooperative Extension Eastern NC Nursery News and Information

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