

North Carolina Pest News

Departments of Entomology and Plant Pathology



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In This Week's Issue . . .

CAUTION !

The information and recommendations in this newsletter are applicable to North Carolina and may not apply in other areas.

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FIELD AND FORAGE CROPS

From: Hannah Burrack, Extension Entomologist, and Cameron McLamb, Student Working

Tobacco Insect Scouting Report – June 6, 2014

It is our sixth week of tobacco scouting and this week brought a few changes. A small number of plants have shown signs of being infected with tomato spotted wilt virus and budworms have started making an appearance as well, mainly at our research station sites in Kinston and Rocky Mount.

Here is the week five scouting report:

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A healthy plant from one of our Piedmont locations.
Photo: Cameron McLamb

Scouting Report, Eastern 1 – Grower Standard Field

Insect observation	No. aphid infested plants	Flea beetles/plant	Percent tobacco budworm infestation	Hornworms/plant	Percent cutworm damaged plants	Other insects
Treatment needed?	0 – No treatment	0.02 beetles/plant – No treatment	0 – No treatment	0 – No treatment	0 – No treatment	8.4 thrips/plant 5% of plants infected with tomato spotted wilt virus

Scouting Report, Eastern 2 – IPM Field

Insect observation	No. aphid infested plants	Flea beetles/plant	Percent tobacco budworm infestation	Hornworms/plant	Percent cutworm damaged plants	Other insects
Treatment needed?	0 – No Treatment	0 – No treatment	0 – No treatment	0 – No treatment	0 – No Treatment	8.4 thrips/plant 6% of plants infected with TSWV

Scouting Report, Eastern 3 – Grower Standard Field

Insect observation	No. aphid infested plants	Flea beetles/plant	Percent tobacco budworm infestation	Hornworms/plant	Percent cutworm damaged plants	Other insects
Treatment needed?	0 – No treatment	0.06 beetles/plant – No treatment	0 – No treatment	0 – No treatment	0 – No treatment	37.4 thrips/plant

Scouting Report, Eastern 4 – IPM Field



Insect observation	No. aphid infested plants	Flea beetles/plant	Percent tobacco budworm infestation	Hornworms/plant	Percent cutworm damaged plants	Other insects
Treatment needed?	0 – No Treatment	0.02 beetles/plant – No treatment	3% budworm infested plants – No treatment	0 – No treatment	0 – No Treatment	48.5 thrips/plant

Scouting Report, Piedmont 1 – Grower Standard Field

Insect observation	No. aphid infested plants	Flea beetles/plant	Percent tobacco budworm infestation	Hornworms/plant	Percent cutworm damaged plants	Other insects
Treatment needed?	0 – No treatment	0.06 beetles/plant – No treatment	0 – No treatment	0 – No treatment	0 – No treatment	3.3 thrips/plant

Scouting Report, Piedmont 2 – IPM Field

Insect observation	No. aphid infested plants	Flea beetles/plant	Percent tobacco budworm infestation	Hornworms/plant	Percent cutworm damaged plants	Other insects
Treatment needed?	0 – No Treatment	0.06 beetles/plant – No treatment	0 – No treatment	0 – No treatment	0 – No Treatment	3.9 thrips/plant

Below are the scouting reports from the control plots for our experiments at the [Upper Coastal Plain Research Station](#) near Rocky Mount, NC, and the [Lower Coastal Plain Research Station](#) near Kinston, NC. For some of these experiments, the control plots receive no insecticide treatments for the entire season. For some of the experiments, we are interested in only caterpillar pests so all plants in the experiment, including the control plots, are treated in the greenhouse with imidacloprid to prevent other early season pests.

On Station, Kinston – Control plants with no insecticide treatment

Insect observation	No. aphid infested plants	Flea beetles/plant	Percent tobacco budworm infestation	Hornworms/plant	Percent cutworm damaged plants	Other insects
Treatment needed?	0 – No Treatment	0 – No treatment	10% budworm infested plants – No treatment	0 – No treatment	0 – No Treatment	1.5% of plants infected with tomato spotted wilt virus

On Station, Kinston – Control plants treated with imidacloprid

Insect observation	No. aphid infested plants	Flea beetles/plant	Percent tobacco budworm infestation	Hornworms/plant	Percent cutworm damaged plants	Other insects
Treatment needed?	0 – No Treatment	0 – No treatment	2% budworm infested plants – No treatment	0 – No treatment	0 – No Treatment	1% of plants infected with TSWV

On Station, Rocky Mount – Control plants with no insecticide treatment

Insect observation	No. aphid infested plants	Flea beetles/plant	Percent tobacco budworm infestation	Hornworms/plant	Percent cutworm damaged plants	Other insects
Treatment needed?	0 – No Treatment	0.55 beetles/plant – No treatment	0 – No treatment	0 – No treatment	0 – No Treatment	0 – No treatment

On Station, Rocky Mount – Control plants treated with imidacloprid

Insect observation	No. aphid infested plants	Flea beetles/plant	Percent tobacco budworm infestation	Hornworms/plant	Percent cutworm damaged plants	Other insects
Treatment needed?	0 – No Treatment	0.08 beetles/plant – No treatment	0 – No treatment	0 – No treatment	0 – No Treatment	0 – No treatment

Notes: Flea beetle sightings are down this week as the tobacco plants begin to mature, with budworms and thrips increasing.

More information

For last week scouting report, click [here](#).

(Originally posted at: <http://tobacco.ces.ncsu.edu/2014/06/tobacco-insect-scouting-report-june-6-2014/>)

FRUIT AND VEGETABLES

From: Hannah Burrack, Extension Entomologist

Other Moths That May be in Grape Root Borer Traps

A grower who recently started monitoring for grape root borer moths in their vineyard sent me images of moths he captured in [traps](#) June 2, wondering what they were.



Moths captured in grape root borer monitoring traps in late May, grower photo.

We typically do not capture grape root borers until July, and the moths in the traps certainly did not appear to be grape root borer moths, which are brown with yellow bands across their abdomen.



Female grape root borer moth. Photo: Hannah Burrack.

The pheromone lures used in grape root borer traps are known to cross-attract moths in the same family (the Sesiidae, or clear wing moths), but the moths captured also did not resemble the other common clearwing moth that can be captured in grape root borer traps, the [squash vine borer](#), which has a mostly black thorax and an orange abdomen.

I was stumped because I could not find any images resembling these moths in my go-to online image databases, so I contacted [Matt Bertone](#) in the North Carolina State University Plant Disease and Insect Clinic for assistance. With the assistance of [GigaPan images](#) from the [North Carolina State University Insect Museum](#), Matt Bertone was able to narrow down the likely candidates to the [red oak clear wing moth](#). In fact, one of the specimens (see the [snapshot zoom](#)) in the Insect Museum was collected by faculty member John Meyer from a grape root borer trap!



Red oak clear wing moths from grape root borer trap, grower photo.

We can add the red oak clear wing moth to the other “look-alikes” that may potentially be found in grape root borer traps. Growers monitoring for grape root borer should be prepared to distinguish between these species.

More information

[Do it yourself: Grape root borer monitoring – Entomology Portal](#)

(Originally posted at: <http://entomology.ces.ncsu.edu/2014/06/other-moths-that-may-be-in-grape-root-borer-traps/>)

Ambrosia Beetles in Perennial Fruit Crops

Damage from a cold winter can take a while to become apparent. This week, I received several questions about beetle damage in perennial fruit plants. When images accompanied these questions, it was clear who the culprit likely was.



Granulated ambrosia beetle damage to fig tree. Photo via client.

The distinctive “frass toothpick” extending from holes is due to feeding from granulated ambrosia beetles. Typically, these insects are attracted to stressed plants and are likely keying in on trees, bushes, or vines that sustained freeze damage this winter. They are also attracted to plants with “wet feet”, so good water management can often reduce attraction. Once beetles are present in plants, there is no effective management tool. [Steve Frank](#), who works on ornamental plants, has done work on timing of [preventative treatments](#), which can be quite effective. However, in most fruit crops, ambrosia beetle attack is a symptom, rather than the cause, of a problem. If the underlying issue is water management, then drainage or irrigation should be improved. If the issue is a freeze damaged plant, then the plant may succumb to its other injuries regardless of preventative treatment for ambrosia beetles. Therefore, growers should consider if the cause of the stress can be managed before undergoing an extensive management program.

More information

[How to beat the beetles](#) – [American Nurseryman](#)

[Granulated ambrosia beetles](#) – Entomology Pest Note

(Originally posted at: <http://entomology.ces.ncsu.edu/2014/06/ambrosia-beetles-in-perennial-fruit-crops-2/>)

ORNAMENTALS AND TURF

From: Steve Frank, Extension Entomologist

Gloomy Scale Crawlers are Active

Gloomy scale, *Melanaspis tenebricosa*, is an armored scale that is found on maples and other tree species. It becomes very abundant on landscape maples and can cause branch dieback and tree death in some cases. It is not unusual to find trees with nearly 100% of their trunk covered in scale. Street trees

are particularly prone to gloomy scale. I have never found one that didn't have it! Crawlers of this scale are active now and can be seen on bark and under scale covers. Control of this scale is complicated because crawlers emerge over 6 to 8 weeks so it is impossible to treat all the crawlers at once with horticultural oil or other contact insecticide. This is as opposed to scale such as euonymus scale in which all crawlers are produced within a narrow window of two weeks or so. However, horticultural oil can still be applied to



Gloomy scale on a maple branch. Photo: Steve Frank.

kill gloomy scale. We have tested several products against gloomy scale with mixed results. None provides consistent high levels of control. Products including Safari, TriStar, and Distance can provide some suppression. It is important to note that imidacloprid (e.g., Merit) is not effective on armored scale. More information on armored scale control can be found [here](#). Our [home page](#) has more information on our gloomy scale research program and a recent blog post. To see an overview of gloomy scale on urban trees watch our short [video](#).

Crapemyrtle Aphids

Crapemyrtle aphids are one of the most common pests of crape myrtle, but rarely require treatment. Small populations are present in Raleigh and have been building over the past couple weeks. Feedings by these aphids result in leaf yellowing and distortion, leaf drop, and honeydew deposits which of course lead to sooty mold. Crapemyrtle aphids are generally kept in check by natural enemies. When scouting for them I often find almost as many lacewing eggs, lady bug larvae, and other predators as aphids. Interestingly, there are no known parasitoids of this exotic aphid. A variety of chemicals are available should these aphids reach unacceptable levels in nurseries or landscapes. Some of the same chemicals recommended for aphids such as imidacloprid can be applied as a drench to protect against Japanese beetles later in the year. For more information on this pest including control options, visit <http://ecoipm.com/> and *Ornamentals and Turf Insect Note ENT/ort-31* at <http://www.ces.ncsu.edu/depts/ent/notes/O&T/shrubs/note31/note31.html>.



Crapemyrtle aphids. Photo: Steve Frank.



Crapemyrtle aphids. Photo: Steve Frank.

INSECT TRAP DATA

From: Alan A. Harper, Lenoir County

Light Trap Data from Lenoir County

June

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*****
                        Number of Adult Insects
*****
Date      HW      CEW      ECB      AW      AWC      GSB      BSB      TBW
*****
June 3      ----- Put up light trap -----
June 4         0         0         0         0         0         2         1         0
June 5         0         0         0         0         0         0         0         0
June 6         0         0         0         0         0         2         0         0
*****
    
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Abbreviations: HW = hornworms; CEW = corn earworms; ECB = European corn borers; AW = true armyworms; AWC = armyworm complex; GSB = green stink bugs; BSB = brown stink bugs; TBW = tobacco budworms

Recommendations for the use of 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 North Carolina State University, North Carolina A&T State University or North Carolina Cooperative Extension nor discrimination against similar products or services not mentioned. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage regulations and examine a current product label before applying any chemical. For assistance, contact an agent of North Carolina Cooperative Extension.
