

# North Carolina Pest News

Departments of Entomology and Plant Pathology



Stephen J. Toth, Jr., editor  
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## CAUTION !

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

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[http://ipm.ncsu.edu/current\\_ipm/pest\\_news.html](http://ipm.ncsu.edu/current_ipm/pest_news.html)

## **FIELD AND FORAGE CROPS**

From: Jack S. Bachelier, Extension Entomologist

### **Overall Cotton Insect Situation**

Finally, I have a few pieces of good news for much of our cotton production area. Probably a good 40 percent or more of our cotton has moved to or beyond the five true leaf stage and has adequate to excessive moisture levels. Most of this cotton should be safe from further thrips damage. Also, much of our mid-May or later planted cotton, provided a seed treatment or at least a low rate of Temik was used, has experienced minimal thrips damage for the most part. Finally, this past week's cooler rainy weather has probably lowered, though certainly not eliminated, the potential for spider mite damage in the coming days or weeks. We are still a few weeks away from the onset of significant square production and the potential for pre-bloom plant bug damage.

### **Cotton Thrips**

Generally speaking, April planted cotton took a beating from both the weather, slow growing plants and heavy thrips pressure, irrespective of whether Temik or a seed treatment plus a foliar insecticide spray was used. Producers who used Avicta seed treatment for nematodes and expected better thrips control than with Gaucho Grande or Cruiser have been disappointed.

Two thrips samples of more than 100 adults were identified to species this past week at the North Carolina State University Plant Disease and Insect Clinic. Each showed an entire spectrum of thrips species. The first was taken from a Halifax County cotton field in which damage and adult and immature thrips were present after two Orthene sprays at medium to high rates (0.33 to 0.5 pound of active ingredient per acre) following the use of an at-planting material. Just over 94 percent of the adults were identified in the Plant Disease and Insect Clinic as western flower thrips. This finding may help explain the thrips control difficulties in this and perhaps other areas of the state. Even 100 percent western flower thrips would not be a cause for concern if the species were present at a level of one or two adults and/or immatures per plant. However, plants from this sample averaged 5 to 6 adults and higher numbers of immatures per plant; that is, high levels of this "hard-to-control" thrips. The second sample, taken from near the Jones/Onslow County line, contained 173 "easy-to-control" tobacco thrips adults and a higher level of immatures on just 30 plants, with no other species present in the sample; that is, also high levels. This one was harder to figure (in our projects' replicated tests this year, Orthene at 0.25 pound of active ingredient per acre has provided good control of all species except western flower thrips). Perhaps the second sample was an example of the extremely high thrips pressure found in some areas of the state this year.



Fig. 1. Some stand loss observed in May 4 planted cotton without an insecticide application. Image by Dan Mott.



Fig. 2. May 4 planted cotton with Temik 15 applied at 0.75 pound of active ingredient per acre. Image by Dan Mott.

### **Spider Mites in Cotton**

Although recent cooler rainy weather may have helped dampen our potential for mite damage, our unprecedented levels of foliar applications for thrips suggests that producers and consultants should still be vigilant for mites. For a review of scouting for spider mites on cotton in North Carolina, refer to the following web site: <http://ipm.ncsu.edu/cotton/insectcorner/text.html#tsm>. Although as a rule mite applications are scarce in North Carolina cotton, 2005 may have signaled the beginning an increase in this pest's status, perhaps as result of our greatly expanded use of seed treatments and the associated high use of follow-up foliar sprays these past few weeks.

## Upcoming Cotton Scouting Schools

Producers, summer scouts, consultants, and industry personnel are welcome to attend the following cotton scouting schools in North Carolina.

Robeson, Hoke and Scotland Counties: Thursday, June 15 from 10 a.m. to 12:00 noon at the County Extension Center, 116 West Prospect Street, Raeford. Contact Keith Walters (telephone: 910-875-3461; e-mail: [keith\\_walters@ncsu.edu](mailto:keith_walters@ncsu.edu)) or David Morrison (telephone: 910-277-2422; e-mail: [david\\_morrison@ncsu.edu](mailto:david_morrison@ncsu.edu)) for details.

Northampton County: Thursday, July 20 from 9:30 to 11:30 a.m. at the County Administration Building, Jackson. Contact Craig Ellison (telephone: 252-534-2711; e-mail: [craig\\_ellison@ncsu.edu](mailto:craig_ellison@ncsu.edu)) for details.

Halifax County: Thursday, July 20 from 1:30 to 3:30 p.m. at the Agricultural Building, Halifax. Contact Arthur Whitehead (telephone: 252- 583-5161; e-mail: [arthur\\_whitehead@ncsu.edu](mailto:arthur_whitehead@ncsu.edu)) for details.

## ORNAMENTALS AND TURF

From: Stephen B. Bambara, Extension Entomologist

### Oak Blotch Leafminers

This week we've seen an explosion of oak blotch leafminers in the Piedmont counties on oak. Caterpillars of a small moth in the genus *Cameraria* mine in the leaves primarily of white oak (oak leaves with rounded lobes) leaving brown blotches (Fig. 3). These blotches start small and may increase to the size of a dime or larger. There can be many blotches per leaf. There are several species of this moth that may attack oak leaves. Some of the caterpillars are gregarious and there may be several caterpillars in each blotch mine.

Now that the caterpillars are a bit larger, the mines are quite noticeable and the silvery blotches will begin to turn brown. A severe infestation can cause most of the leaf area to turn brown by mid summer. Leaves may drop prematurely. Two or three generations could be possible per season.

Control by insecticides is not effective and not practical. Trees are not likely to be killed. These caterpillars are present every year, but it seems to be worse this year than usual in many places. This insect overwinters as a larva in the leaf. Collecting and destroying fallen leaves may be a good idea this year. Oak trees often shed their leaves over a long period of time and may not drop them all until almost spring. If you are in an area surrounded by woods or neighbors with oak trees, there may be a plentiful supply of new caterpillars next year. Hopefully, the normally plentiful supply of parasitoid wasps will keep numbers lower.

In addition to the blotch leaf miner is a slug sawfly (wasp) larva that is skeletonizing oak leaves (Fig. 4) by removing the underside leaf tissue. For more information on this *Caliroa* sp. sawfly, see <http://www.fs.fed.us/r8/foresthealth/pubs/oakpests/p9.html>.



**Fig. 3. Damage to oak leaves by oak blotch leafminers. Image from Steve Bambara.**



**Fig. 4. Skeletonizing of oak leaves by slug sawfly larva. Image from Steve Bambara.**

### **Formica Ants in the Yard**

So far this spring I have had more reports about this ant than in any other year. Unfortunately, there is no common name for this ant. *Formica integra* is a large ant, but a little smaller than a carpenter ant. It is also bi-colored with both red and black. It is in the same genus as the Allegheny mound ant and the silky ant, both of which are mound builders and both of which feed on honeydew excreted by aphids and other sucking insect pests. This ant has a loose mound that might slightly resemble that of a low fire ant mound, but the ants are quite large in comparison. They do not dwell in homes. There is a good chance this ant also feeds on honeydew. It tends to show up adjacent to wooded areas. This ant has a voracious appetite. I have seen it overpower a weak beehive in two days. The nests can also branch out and cover an acre or more. I have observed them moving in troops from one end of my yard to the other once or twice a year, though I am not sure why they do this. A closely related species is *Formica subsericia* (Fig. 5), which is all black and has also been observed feeding on other insects.

If you decide that you need to control these ants, I recommend Sevin or Orthene be used for control of *Formica integra* on the mound. If wish to use a bait, it should be one listed for sweet-loving ants. Just because there are ants in the yard, does not mean they need to be eliminated. Most fire ant baits will not be attractive to these ants.



**Fig. 5. *Formica subsericia*. Image from Steve Bambara.**

## Wheel Bugs Now Rolling About the Landscape

Be on alert for brightly colored red and black *Hemiptera* nymphs. These immature wheel bugs (Fig. 6) are hatching and looking for other insects on which to feed. The solid gray adult will be about an inch in length and have the characteristic “gear wheel” atop the thorax. For more information on wheel bugs, see *Ornamental and Turf Insect Information Note No. 65* on the web at <http://www.ces.ncsu.edu/depts/ent/notes/O&T/shrubs/note65/note65.html>.



Fig. 6. Immature wheel bug. Image from Warren Spalding.

## Japanese Beetles Now in Season

This past week marked the first sightings for Japanese beetle adults in the Piedmont areas of North Carolina. Those areas that have received some rainfall can expect more emergence over the next few weeks. Adult feeding tends to skeletonize leaves. Though they eat many things, plants in the Roseaceae family and ornamentals such as crape myrtle are favorites. If you just can't tolerate them, Sevin gives foliar protection for five days at a time. Some of the pyrethroid products may give up to ten days of protection.

## Gloomy Scale on Maples

This week, two samples were received in the Plant Disease and Insect Clinic at North Carolina State University (<http://www.ces.ncsu.edu/depts/ent/clinic/>) containing gloomy scale on maples. Nymphs were active. Gloomy scale can cause twig die-back and the bark of maples to turn an ugly rough, black. (Fig. 7). This scale appears more like a fungus problem on the bark until closer inspection. There is more information in *Ornamental and Turf Insect Information Note No. 60* (<http://www.ces.ncsu.edu/depts/ent/notes/O&T/trees/note60/note60.html>). There are possible sprays, however, it would probably be better to try to treat for the scales by improving the growing condition of infested trees.

A soil sample should be taken from under infested trees and submitted to the North Carolina Department of Agriculture & Consumer Services Soils Laboratory. If the pH or nutrients are out of range, the soil should be amended. Too much fertilizer can be worse than too little. If there is

another period of prolonged drought stress this summer, the trees should be irrigated. Clients should consider removing the grass under the trees and mulching the soil to conserve soil moisture and to keep the roots cool. Anything within reason to optimize the vitality of the trees should be done.

The bark of unsprayed trees supports all kinds of predaceous mites, predaceous insects, parasitic fungi (including a bright reddish-orange colored one), parasitic insects, and other organisms in addition to the scales. By getting a tree into optimum growing condition, it should be less susceptible to damage by the scales, and the scales probably will not reproduce as prolifically. As a consequence of optimizing growing conditions, parasites and predators may control the scales almost completely.



**Fig. 7. Damage by gloomy scales on a maple tree. Image from Steve Bambara.**

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*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.*

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