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North Carolina Pest News

Departments of Entomology and Plant Pathology

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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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See current and archived issues of the *North Carolina Pest News* on the World Wide Web at:
http://ipm.ncsu.edu/current_ipm/pest_news.html

FIELD AND FORAGE CROPS

From: Jack S. Bacheler, Extension Entomologist

Thrips on Cotton

With cotton planting now seriously underway across most of the state and with a few acres being planted in the past two weeks, reports of thrips problems should begin this coming week. During the next few weeks, our earliest planted cotton will be the most prone to thrips damage. If recent warmer weather also brings with it adequate to good moisture levels, headaches from thrips should be less than the past two years. However, even under good growing conditions, seed treatments will still require a foliar insecticide within three weeks of planting. In a typical year, thrips levels are the highest from about mid May through the first week of June.

Spider Mites and Cotton Aphids

Although we can get damaging levels of mites and cotton aphids on seedlings, this is very rare in North Carolina. Still, it doesn't hurt to check for these pests beginning at about five to six weeks after planting, perhaps targeting scouting to begin approximately two weeks after a foliar application for thrips behind seed treatments. Expect mite or aphid outbreaks to be less likely following Temik, particularly if a foliar treatment for thrips was not needed.

Other Insect Pests of Cotton

In North Carolina, it would be very unusual to have high enough levels of plant bugs to cause injury to pre-squaring cotton, so that potential pest can be put on the back burner at this time. Finally, it will be interesting to see if the widespread the Easter freeze has "knocked back" our stink bug levels this year.

From: John W. Van Duyn, Extension Entomologist, Vernon James Center, Plymouth

Wheat Insect Situation

Rain fell this week and alleviated much of the drought stress of the last few weeks. Most fields are heading and have entered a critical period, in terms of foliage-loss and head damage. Last week's article in the *North Carolina Pest News* dealt with armyworms, and sweep-net counts taken this week in many fields below the Albemarle Sound have again indicated that most fields have armyworm infestations at some level. Day-time sweep-net counts do not adequately account for armyworms since they return to the ground level during day and await darker hours when they move up the plant and feed. Most armyworms observed were in the small to mid-sized category. It is the larger caterpillars that do most damage and, therefore, there is still time to scout fields and control above-threshold populations. See *Extension Service Bulletin AG-521, Scouting Small Grains in North Carolina* (http://ipm.ncsu.edu/grain/smgrain521.html), for wheat scouting information.

Aphids are also abundant in wheat fields at this time. At one site a consultant reported high numbers of aphids in wheat heads of all fields of a farm planted to one variety but not others. In this case the threshold of 25 aphids per head was exceeded in the infested variety but not others. Our sweep-net samples of the past week have collected many aphids and, also, usually high numbers of lady beetle adults and larvae. In most cases these and other biological control agents (e.g., wasp parasites, syrphid fly maggots, and aphid fungus disease) effectively deal with aphids. However, in fields where biological control has been reduced by earlier insecticide application aphids have a much better chance to flourish. Scouting should emphasize those fields sprayed earlier for cereal leaf beetle and other insects. Aphid scouting information can be found at the address given above.

Our goal of the sweep-net sampling this week was to measure brown stink bug levels and collect some of the bugs for field cage experiments (to measure the effect of brown stink bug feeding on wheat gain). In areas where brown stink bug was abundant the last two seasons, the numbers collected have been low this season. Interestingly, catches in sweep-net samples and pheromone traps were relatively high before the April freeze but have not retuned to those levels since the freeze. It seems that many of the bugs were killed by low temperature. While this may seem odd for an insect adapted to a much colder climate (brown stink bug if found much further north of North Carolina), it is possible for insects that have broken their winter dormancy (and have become active) to be more sensitive to a sudden cold snap, especially when temperatures drop to the mid-20s or lower.

From: Stephen B. Bambara, Extension Entomologist

Fire Ants in Pastures

Recently, there have more questions on managing fire ants in pastures. As one might expect, there are greater restrictions in settings involving livestock. Situations differ and product labels are peculiar in this area. In response, I have prepared *Forages and Pastures Insect Note No. 4* (http://www.ces.ncsu.edu/depts/ent/notes/forage/rifanote04/rifanote04.htm) with my best general recommendations.

ORNAMENTALS AND TURF

From: Christine A. Casey, Extension Entomologist

Mid-May "Look-Fors”

In mid-May, look for the first bloom of doublefile and black haw viburnums, weigela and spirea (350 to 380 degree days). This indicates the following: lilac borer and lesser peachtree borer adult emergence (control immature insects seven to 10 days later with Astro, Permethrin Pro, Perm-Up or Onyx), holly leafminer adult emergence (control immature insects seven days later with Conserve), and euonymus scale crawler hatch (control crawlers now with horticultural oil and apply Safari for season-long control).

From: Stephen B. Bambara, Extension Entomologist

"Frozen" Dead Flies

Last week we received our first telephone call about dead flies stuck to twigs. It is an unusual sight and may cause undue concern to gardeners. These flies are adults of the seedcorn maggot (Fig. 1), which is sometimes a pest of agriculture. Seedcorn maggot flies are grayish-brown in color and about one-fifth of an inch in length. The legs are black and there are bristles scattered on the body. Some seedcorn maggot flies become infected with a fungus of the genus *Entomophthora*. Infected flies are swollen and have pinkish bands on the abdomen. Sometimes, gray *Entomophthora* spores are visible on the fly and on the substrate nearby. This fungus apparently causes the flies to land on protruding objects such as any twigs, clotheslines, and fence posts. The flies cling there and usually die in the afternoon as their abdomens swell with fungal strands inside.

Early the next morning, the fungal spores are released into the air while the humidity is high. The spores infest other seedcorn maggots. Although the fungus-infected flies appear to be damaging the plant, these adult flies are harmless. The seedcorn maggot is found throughout North Carolina. Seedcorn maggots feed primarily on decaying organic matter, but sometimes infest the seeds and seedlings of vegetables. The dead, fungus-infected flies are sometime abundant on the dead twigs of dogwood and crape myrtle in the spring. Most of the damage is caused by the maggot stages that sometimes kill germinating vegetable seeds. This results in poor stands and replanting. Injury is usually most severe during wet, cold seasons and on land rich in organic matter. Typically no control measure is necessary on ornamentals. The presence of fungus-infected flies indicates a natural control factor at work. For control of the maggots in vegetable gardens and field crops, shallow planting in well-prepared seed beds sufficiently late in the season to get quick germination of the seed is probably the best means of control. Prompt replanting or resetting of damaged crops usually works well. In addition, the maggots are easily controlled by planting treated seed.

Fig. 1. Adult flies of the seedcorn maggot. Image by Steve Bambara.


Fig. 2. Earwig. Image by Jim Baker.

Earwigs

An outbreak of earwigs (Fig. 2) was recently reported from Northampton County. In a severe infestation, earwigs may nibble on tender foliage of vegetable or bedding plants. They do not bite or sting. Mostly, they are just annoying or repulsive to homeowners. Earwigs are vulnerable to most pesticides labeled for a particular site.

The following is an excerpt of comments regarding earwigs from Dr. David Shetlar at Ohio State University:

"The European earwig overwinters in the adult stage, usually in the soil, under rocks or landscape timbers and in thick mulch. In [early spring], females enlarge a chamber in the soil or under rocks or logs and deposit a clutch of eggs. The females clean and move the eggs periodically. Within a couple of weeks, the tiny earwig nymphs hatch and the female opens up a small burrow to the soil surface. The tiny nymphs forage on warmer nights on insects and soft plant materials, especially emerging seedlings. Each day, the nymphs return to the burrow which is protected by the parent.

“When the nymphs are about half grown, usually in mid-May to early June, they are too large to fit into the original nest and they often begin to disperse. This is the time that observant gardeners begin to see groups of earwigs clustering under flaps of loose bark on tree trunks, in the petals of flowers (especially rose, peony, and day lily), or under flower pots left on the porch."

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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