

2015 June Newsletter

PLANT BUG DAMAGE ON PRE-SQUARING COTTON

(Dr. Dominic Reisig & Dr. Keith Edmisten)



"Black Flag" Cotton

Plant Bugs (Lygus) on young cotton can take out terminals and cause black flag. (shown in the pictures above) Growers in northeastern NC (mainly above the sound) are seeing these symptoms on 6-7 leaf cotton. Just 20 minutes of Plant Bug feeding can destroy terminals. Cool weather can increase the amount of black flag, also called crazy cotton, so warmer weather will help. Given good conditions, the cotton can recover later in the season, without yield loss. The plant bugs we are seeing now are from a generation that developed on weeds.

Plant Bug Management on Pre-Square Cotton (Dr. Dominic Reisig)

1. Sweep cotton fields and count adults. Realize that bugs will be heavier in field edges, so move around. A sample of 25 sweeps per location (one set of 25 "swooshes") should be adequate.
2. Where you sweep, look for black flag, wilted leaves, or injured terminals (photo). If you see this injury, and have plant bugs present, spray if the number of injured terminals is greater than **1 plant in 10 feet of row**. My recommendation is to use a neonicotinoid at the highest labeled rate at this point in the season. They tend to be less effective as the season goes on, but should do the trick, while preserving some beneficials. Examples include Admire Pro, Belay and Centric.
3. Monitor the situation after the spray. A visit and sweeping 24 hours following the spray should give you a good idea of knockdown. Since you've swept and know the plant bug numbers prespray, another good visit would be 4-5 days later. See if plant bugs have migrated in again and if the terminal damage is holding steady or increasing.
4. One you hit squaring, you need to use a threshold that incorporates plant bug numbers with square retention measurements.

Plant Bug Management on Squaring Cotton (Dr. Dominic Reisig)

Weekly checks of upper square retention is the most efficient way to assess if plant bugs can be ruled out as economic concern at that time or if sweeping for the adults and nymphs is needed. An upper square retention rate of 80% or more usually indicates that plant bugs are not present at damaging levels. If it is less than 80%, sweep 6-8 or 10 locations, away from field edges, looking for live adult and immature plant bugs. A threshold of 8 plant bugs per 100 sweeps usually indicates that a spray is needed at that time. When cotton is about one week into blooming, a 5ft black beat cloth is more accurate than the sweep net for plant bug.

What Insecticide Should I Use? (Dr. Dominic Reisig)

Generally, neonicotinoid-class insecticides work well early in the season before flowering, and often at lower rates. (Examples include: Admire Pro, Belay, Centric, Intruder, Trimax Pro, etc.) Later in the season,

neonicotinoids generally do not work as well. Dr. Reisig recommends that you do not spray a pure neonicotinoid product more than once a season. To counteract resistance, rotate insecticides. Also, make sure you check the labels to see how much can be applied to a crop in a season. If plant bugs are still an issue later on, or require a second spray, check to see that aphids are not common in the field. If they are, you should **not** use a neonicotinoid again. Switch to a product like Carbine, Transform, or one of the more effective pyrethroids. If aphids are not a concern, **you should still not** use a stand-alone neonicotinoid product for the second spray, but should switch to one of the pre-mixed products (like Endigo, Swagger, etc.) or an organophosphate/carbamate-only product (Bidrin, Orthene, Vydate, etc) Many of these products are also affective against stink bugs; eliminating stink bugs can be beneficial during the period of boll formation. The downside to these products is that they kill beneficial insects and put you at risk for bollworm and spider mites.

To Read Dr. Dominic Reisig's & Dr. Keith Edmisten's full articles on plant bug management go to:
<http://cotton.ces.ncsu.edu/>

NC Cooperative Extension is HIRING!

CONSUMER HORTICULTURE AGENT

**WE'RE
HIRING!**

This position will be housed in Beaufort County. He or she will be responsible for consumer horticulture in Beaufort, Hyde, Tyrrell, & Washington counties. They will be responsible for working with the Master Gardener Volunteer organization, answering client calls related to consumer horticulture, assisting the staff deliver educational programs, and serve as the pesticide coordinator.

For more information on this position and to apply online, go to: <https://jobs.ncsu.edu/postings/52073>

Contact Natalie Wayne for more information:
252.926.4489 or natalie_wayne@ncsu.edu

North Carolina Wheat Yield Contest 2015

If you are picking high yielding wheat & want to enter the 2015 NC Wheat Yield Contest, call Andrea at 252.542.9300!

There are 9 awards given out total, with the top awards being:

1st place State-wide Winner: Large plaque and \$175

1st place Regional Winner: Small plaque and \$75

GRAND PRIZE: Trip for two to the commodity conference! (All 9 winners will be eligible for the grand prize, one will be selected at random for the grand prize)



For NC Wheat Yield Contest Rules and Information go to:
<http://www.smallgrains.ncsu.edu/yield-contest.html>



Grain Bin Safety Precautions

from the "Wheat Beat" (NC Small Grain Growers Association)

Whenever possible, don't enter a grain bin. If you must enter the bin, as a farm owner/operator you should:

- Break up crusted grain from the outside of the bin with a long pole. When using a pole, check to see that it doesn't come into contact with electric lines.
- Wear a harness attached to a properly secured rope.
- Stay near the outer wall of the bin and keep walking if the grain should start to flow. Get to the bin ladder or safety rope as quickly as possible.
- Have another person, preferably two people, outside the bin who can help if you become entrapped. These people should be trained in rescue procedures and should know and follow safety procedures for entering the confined space.
- Grain fines and dust may cause difficulty in breathing. Anyone working in a grain bin, especially for the purpose of cleaning the bin, should wear an appropriate dust filter or filter respirator.
- Stay out of grain bins, wagons and grain trucks when unloading equipment is running.
- If it is necessary to enter the bin, remember to shut off the power to augers and fans. It is a good idea to lock out any unloading equipment before you enter a bin to prevent someone from unintentionally starting the equipment while you are in the bin.
- Children should not be allowed to play in or around grain bins, wagons or truck beds.
- Where possible, ladders should be installed inside grain bins to for an emergency exit. Ladders are easier to locate inside a dusty bin if there are brightly painted stripes just above or behind the ladder.
- If you become trapped in a bin of flowing grain with nothing to hold onto but you are still able to walk, stay near the outside wall. Keep walking until the bin is empty or grain flow stops. If you are covered by flowing grain, cup your hands over your mouth, and take short breaths until help arrives.
- If another person becomes submerged in grain, assume he is alive and begin rescue operations immediately. Turn on the fan to move air into the bin. Cut large holes around the bin, approximately 5 ft. up from the base, to empty grain. (If you cut too many holes, the bin may collapse on you.) Use the front-end loader of a tractor, an abrasive saw or an air chisel. A cutting torch is a last resort – it could cause a fire or an explosion from dust and fumigant residue.