ON-FARM TESTS

Donnie Riggs and Barry Shepard are cooperators for two Onslow County Corn Variety Tests. The Riggs Variety Test is located on Swansboro-Belgrade Road in Maysville and the Shepard Variety Test is located off of King Road in Jacksonville (off the Holly Shelter Road and Highway 53). There are approximately 18 different varieties present from Trisler, NK Seed, Seed Consultants, Augusta Seed, Dekalb, Pioneer, and Dyna-Gro. The two different check varieties have been provided by Pioneer and Dekalb.

Gary Hardison and Glenn Rhodes of Richlands Farms, Inc. have two soybean tests this year as well. One test is a variety comparison, and the other is comparing earlier and later maturing varieties. Both tests will be located just off of US 258/NC 24 near Gregory Fork Road in Richlands.

Signs are present at all locations, so please feel free to visit these tests at your convenience. Results from each test will be mailed out at the end of the year.

COTTON

Insect Management in Cotton

Thrips

Because thrips have the potential to cause significant yield losses and maturity delays this pest group must be controlled every year. Unfortunately, thrips damage appears to have become worse in recent years due to the dry weather trend; large numbers of flying adult thrips abandon host plants (such as weeds and various crops like wheat) in search of younger, greener hosts, such as cotton seedlings. However, there are four thrips control options to consider for your cotton 1.) treated seed, 2.) at-planting granular insecticide, 3.) foliar application, or 4.) some combination of the above.
An at-planting, systemic insecticide or seed treatment such as Cruiser, Gaucho Grande, Avicta, and Aeris, is recommended in cotton planted with conventional row-spacing (which is all but a tiny fraction of our 2008 cotton acreage). Keep in mind that dry weather may retard the uptake and performance of the systemic insecticide product used. Also, extended cool weather may delay plant growth, keeping the plants susceptible longer and exceeding the products intended time frame. Due to the variability of our weather, a foliar spray may be warranted when a systemic insecticide fails to control thrips. As a post-emergent, correct timing and a good insecticide rate are the primary consideration to treat thrips. With high thrip populations in southern North Carolina, consider 0.25 lb a.i per acre the standard rate for Orthene, or the equivalent.

Insect Thresholds
Here are some action thresholds for some important cotton pests.

**Bollworms and Tobacco Budworms:**

*Conventional Cotton*

Pre-bloom
- 15 bollworms per 100 terminals
  OR
- 8 bollworms per 100 squares

Post-bloom
- 10 or more eggs per 100 terminals
  OR
- 2 to 3 eggs per 100 fruiting forms

*Transgenic Bt Cotton*

Larval
- 3 second-stage (1/8” or larger) bollworms per 100 squares or bolls

OR
- 2 second-stage bollworms on 2 consecutive scouting trips

OR
- 1 second-stage bollworm on 3 consecutive scouting trips

**Stinkbugs:**

Damaged Bolls
- 10 to 50 percent stinkbug internal damage to quarter-sized bolls, plus presence of stink bugs

**Plant Bugs:**

Pre-bloom (Thresholds to be used when square retention rate drops below 80%).
- 8 plant bugs per 100 sweeps

Post-bloom
- 15% dirty blooms. Count any brown anthers as damage. This threshold should be used with other assessments.
  OR
- 10-30% initial internal damage to quarter-sized bolls (assessed as overall bug damage).

Please feel free to contact me with questions concerning other insect threshold counts, and insecticide recommendations.

**Black Light Traps**

It is still important to monitor the progression of the major bollworm moth flight with black-light traps. This is especially true if you are planting non-Bt cotton and single-gene Bt varieties (Bollgard). NC Cooperative Extension is operating a network of black-light traps in the cotton growing areas of NC. You can find updated reports of moth captures from most of these traps on the internet at

http://ipm.ncsu.edu/cotton/insectcorner/
The Onslow County black-light trap is located in the Richlands community near Gregory Fork Road and US258/NC24. The trap data will be updated on each Monday, Wednesday, and Friday during the months of July and August. Thanks to Richlands Farms Inc. for their cooperation with the trap again this year!

Contact Sucker Control
The 1st contact (fatty alcohol sucker control producer) application should be made when 50% of plants reach the button stage. A 2nd contact application should be made 3-5 days after the 1st application. In irregular growth fields, a 3rd contact application may be necessary.

For C8 – C10 fatty alcohol products, a 4% concentration is recommended for the 1st application. A 4% concentration translates to 2 gallons of product in 48 gallons of water per acre. For C8 – C10 fatty alcohol products, a 5% concentration is recommended for the 2nd (and possibly 3rd) application. A 5% concentration translates to 2 ½ gallons of products in 47 ½ gallons of water per acre.

For C10 fatty alcohol products, a 3% concentration is recommended for the 1st application. A 3% concentration translates to 1 ½ gallons of product in 48 ½ gallons of water per acre. For C10 fatty alcohol products, a 3% concentration is also recommended for the 2nd (and possibly 3rd) application.

Local Systemic/Systemic Sucker Control
If you tobacco is “ready” for the Prime+/MH tankmix application but the tobacco is drought-stressed OR you plan to harvest within 7 days of application, apply the Prime+ alone. Apply the MH once environmental conditions improve or after 1st harvest.

This approach will improve MH performance and reduce MH residues as well.

Insect Control
The following table is taken from the 2009 Flue-Cured Tobacco Guide, page 187. Please remember that Warrior should NOT be applied with 40 days of harvest.

<table>
<thead>
<tr>
<th>Insecticide</th>
<th>Aphid a</th>
<th>Budworm</th>
<th>Flea Beetle</th>
<th>Hornworm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actara</td>
<td>Excellent</td>
<td>No</td>
<td>Excellent</td>
<td>No</td>
</tr>
<tr>
<td>Assail b</td>
<td>Excellent</td>
<td>No</td>
<td>No</td>
<td>NR</td>
</tr>
<tr>
<td>B. Thuringiensis spray</td>
<td>No</td>
<td>Moderate</td>
<td>No</td>
<td>Excellent</td>
</tr>
<tr>
<td>Demin</td>
<td>No</td>
<td>Good</td>
<td>No</td>
<td>Excellent</td>
</tr>
<tr>
<td>Fullfill</td>
<td>Good</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Lannate</td>
<td>Fair</td>
<td>Moderate</td>
<td>Good</td>
<td>Excellent</td>
</tr>
<tr>
<td>Orthene</td>
<td>Excellent</td>
<td>Moderate</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
<tr>
<td>Provaso</td>
<td>Excellent</td>
<td>No</td>
<td>Excellent</td>
<td>No</td>
</tr>
<tr>
<td>Sevin</td>
<td>No</td>
<td>No</td>
<td>Good</td>
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<td>Tracer</td>
<td>No</td>
<td>Good</td>
<td>No</td>
<td>Excellent</td>
</tr>
<tr>
<td>Warrior</td>
<td>No</td>
<td>Moderate</td>
<td>No</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

Note: Moderate also means the insecticide may be less consistent.
No = Not recommended.

a Aphid control ratings are based on maximum labeled rates.
b Aphid rating for Assail is based on limited data.
c B.t. is sold under a variety of trade names.
d B.t. products seem to be more effective against budworms as the season progresses.
e In some tests, Orthene, Lannate and Warrior have performed at a good level against budworms.
WHEAT YIELD CONTEST

Just a reminder the 2009 Wheat Yield Contest rules and entry forms are located at the Onslow County Extension Office. The deadline for entry forms is July 7th, 2009. Prizes will be given for the top three growers.

Who is eligible?
- Any person who produce wheat in Onslow County.

Acreage?
- Three or more continuous acres with four straight sides are required.

Measurements?
- The county extension agent will help with the measurements of each field, as well as the completion of the entry forms.

So, be sure to call and set up a time for me to come out to your field. I look forward to a lot of participation this year!

Spotlight for June
Our New Extension Employee

My name is Larry Kent and as of March 2, 2009 I am the Program Assistant at your Onslow County Cooperative Extension office. I will be working with the Onslow County Water Quality Monitoring program, and the Agriculture Agents in their programs here in Onslow County.

Originally from Greenville, Michigan I have been associated with and/or living in Onslow County for the past number of years. Some of you may already know me as I have been working with the Onslow County Farmers' Market as a volunteer for the past four years.

Agriculture is my passion. If there is anything I can do to help you, please feel free to contact me at 910-340-0009 or email me at: Larry_Kent@ncsu.edu. I look forward to working with each and all of you.