Field Crop Newsletter
June / July 2010

SOYBEAN

Soybean Rust Update

The best information we have is that soybean rust is not in the Continental United States at this time with the exception of cultures maintained in laboratory or greenhouse settings. Soybean rust was found in Mexico in February, but chances are that it will soon be too hot for activity there. Sentinel plots for rust monitoring have been established in Georgia, Mississippi, Florida and Louisiana, and Extension and research personnel are currently scouting kudzu and other potential source plants in locations where rust has occurred in the past. The majority of the “eradication” was accomplished by Mother Nature with the extremely cold weather that extended well into Florida this past winter. Postcards will be mailed out with updates of Soybean Rust activity throughout June and July.

COTTON

Insect 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, Gauch Grande, Avicta, and Aeris, is recommended in cotton planted with conventional row-spacing (which is all but a tiny fraction of our 2009 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/](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!

**TOBACCO**

**Contact Sucker Control**

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

For C\textsubscript{8} – C\textsubscript{10} fatty alcohol products, a 4\% concentration is recommended for the 1\textsuperscript{st} application. A 4\% concentration translates to 2 gallons of product in 48 gallons of water per acre. For C\textsubscript{8} – C\textsubscript{10} fatty alcohol products, a 5\% concentration is recommended for the 2\textsuperscript{nd} (and possibly 3\textsuperscript{rd}) application. A 5\% concentration translates to 2 ½ gallons of products in 47 ½ gallons of water per acre.

For C\textsubscript{10} fatty alcohol products, a 3\% concentration is recommended for the 1\textsuperscript{st} application. A 3\% concentration translates to 1 ½ gallons of product in 48 ½ gallons of water per acre. For C\textsubscript{10} fatty alcohol products, a 3\% concentration is also recommended for the 2\textsuperscript{nd} (and possibly 3\textsuperscript{rd}) application. **However, remember that some chemical topping of small plants and slight leaf flecking are good indicators that the contact concentration is strong enough to give good sucker control.**

**Local Systemic/Systemic Sucker Control**

If your tobacco is “ready” for the Flumetralin (Prime+, Flupro, or Drexalin Plus)/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 1\textsuperscript{st} harvest.

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

With increasing scrutiny and regulations of MH and other residual pesticides on tobacco, it is wise to attempt to lower MH residues WITHOUT reducing sucker control. Here are a few suggestions that might be useful to your farming operation.

1. **Use a reasonable nitrogen rate** – Excess nitrogen stimulates sucker growth and delays maturity, which increases the probability of troublesome sucker regrowth in prolonged harvest seasons. A base nitrogen rate of 50 to 80 pounds per acre is suggested, plus adjustments for leaching

2. **Strive for a uniform crop** - Good plant uniformity in the field improves the chance for consistently good chemical sucker control.

3. **Maximize early sucker control with fatty alcohol contacts and flumetralin**

4. **Apply the labeled rate of MH properly**

**Insect Control**

The following table is taken from the 2010 Flue-Cured Tobacco Guide, page...
191. Please remember that Warrior should NOT be applied with 40 days of harvest.

<table>
<thead>
<tr>
<th>Insecticide</th>
<th>Aphid *</th>
<th>Budworm</th>
<th>Flea Beetle</th>
<th>Hornworm</th>
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<tbody>
<tr>
<td>Actara</td>
<td>Excellent</td>
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<td>Excellent</td>
<td>No</td>
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<tr>
<td>Assail b</td>
<td>Excellent</td>
<td>No</td>
<td>No</td>
<td>NR</td>
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<tr>
<td>Belt</td>
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<td>Good</td>
<td>No</td>
<td>Excellent</td>
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<tr>
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<td>No</td>
<td>Good</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>
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<tr>
<td>Demin</td>
<td>No</td>
<td>Good</td>
<td>No</td>
<td>Excellent</td>
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<tr>
<td>Lannate</td>
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<td>Orthene</td>
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<td>No</td>
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</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. Assail acts as an ovicide for tobacco budworms.
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.

CORN

This year corn planting has started out to be much different than we have historically been accustom to.
The lack of rain, followed by seasonal rains have caused corn to show various unique symptoms to plant leaves that are not normally seen. The attached guide is to be used as a tool in evaluating that nutrient needs of your crop.

WHEAT YIELD CONTEST

Just a reminder the 2010 Wheat Yield Contest rules and entry forms are located at the Onslow County Extension Office.
The deadline for entry forms is July 7th, 2010. 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!