Pest Patrol Alerts
Some of the information contained herein each issue is available via text alerts that direct users to online recordings. I will update the short message often for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting pestpat7 to 97063. Step two: reply to the confirmation text you receive by texting the letter “y” to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

Updates on Twitter
When noteworthy events happen in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at @bugdocisin on Twitter.

News from Around the State
Jonathan Croft, county agent covering Orangeburg County, reported that he “looked at fields of beans this week that had very few worms in them and then a few fields that were spray immediately because of high VBC numbers. A lot of cotton is rapidly cutting out, and lower bolls are starting to open. Fields I checked for stink bug damage were below threshold.” Also, I get photos of the caterpillar species shown here each year. Anyone have a guess? It is part of the defoliating complex but is usually not very numerous. You guessed it – larvae of the silverspotted skipper.

Upcoming Field Days
Here are some dates for upcoming field days. I will provide more detailed information as it is available.
- Fall Field Day at the Pee Dee REC – 1 September 2022
- Peanut Field Day at the Edisto REC – 8 September 2022
- Fall Field Day at the Simpson REC – 15 September 2022
- Agronomic Crop Field Day at the Edisto REC – 22 September 2022

Cotton Situation
As of 14 August 2022, the USDA NASS South Carolina Statistical Office estimated that about 87% of the crop is setting bolls, compared with 81% the previous week, 88% at this time last year, and 81% for the 5-year average. About 2% of the crop has

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bolls opening, compared with 1% the previous week, 0% at this time last year, and 2% for the 5-year average. The conditions of the crop were 15% excellent, 51% good, 32% fair, 1% poor, and 1% very poor. These are reported statewide averages.

**Cotton Insects**

**Aphids** – Done...just food for predators now.

**Plant bugs** – Done...just part of the boll-feeding complex now and are treated with stink bugs.

**Spider mites** – Done...unless it stops raining.

**Bollworm** – Not done. Captures of bollworm moths in our pheromone traps decreased some this past week, but there are more moths in the field, it seems. This time of year, female moths are abundant in the field and not around traps that catch male moths almost exclusively, so the pheromone traps compete with females in the field each day. However, trap data from last night (not reflected in the trap data chart in this issue) were extremely high, so we will likely see an increase in activity for the rest of August and into early September. There are a lot of moths flying around in cotton and soybeans right now. Eggs are still easy to find. I mentioned last week that a recent bioassay with bollworm larvae on VIP showed more tolerance to the protein. So, bollworm is not done yet, especially on late-planted cotton with time to make more bolls.

**Stink bugs** – Stink bugs are the #1 insect pest group of cotton in South Carolina, and it is still “stink bug month,” so, they will need attention until the last bolls to harvest are 20+ days old. All life stages (hatching eggs, nymphs, and adults) are all present, and I continue to observe primarily brown and southern green stink bugs in the crop. Use the dynamic boll-injury threshold as detailed on the images I left below in the newsletter again this week.
STINK BUG SCOUTING DECISION AID

A pocket-size scouting decision aid was developed for use in the Southeast to encourage (1) enhanced adoption of stink bug scouting in cotton, (2) better field identification of stink bug-included boll damage symptoms, and (3) use of recommended scouting procedures. This publication describes the decision aid and how to use it. The aid relies on the latest dynamic thresholds for stink bug boll (cotton) based on week of bloom. It provides the following scouting steps:

• A “dynamic” threshold by week of bloom, table, recommended scouting procedures, measuring tools to help select the correct boll size range for damage assessments, and images of internal and external stink bug-induced boll damage.

The aid should greatly improve stink bug management because the dynamic threshold is based on the cotton growth stage when the crop is most susceptible to stink bug damage. It relies on lower thresholds during weeks of maximum susceptibility (weeks 1 through 3 in the bloom period) and higher thresholds during stages of lower vulnerability (weeks 1 to 2 and weeks 5 to 9 of the bloom period).

DESCRIPTION AND USE

The front (Figure 1) side of the 3-by-3-inch decision aid provides recommended scouting procedures.

1. Select a random sample of the correct size bolls.
2. Ate an adequate number of bolls.
3. Sort the bolls into two piles, those with and those without damage.
4. Confirm bolls between the thinnest and thickest or cut them open with a knife and inspect all internal boll and stalk tissues for internal boll damage.
5. Moth the threshold is not met, check the remaining bolls for external damage.
6. Test the “dynamic” threshold has been met for that week.

Figure 1. Front side of 3-by-3-inch decision aid showing scouting procedures, boll size selection range, and internal boll-damage thresholds by week of bloom.

COTTON

Table: Stink Bug Scouting

<table>
<thead>
<tr>
<th>Month</th>
<th>Cutworms</th>
<th>Thrips</th>
<th>Aphids</th>
<th>Spider mites</th>
<th>Plant bugs</th>
<th>Bollworm</th>
<th>Stink bugs</th>
<th>Fall armyworm</th>
<th>Whiteflies</th>
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**Soybean Situation**
As of 14 August 2022, the USDA NASS South Carolina Statistical Office estimated that about 71% of the crop is blooming, compared with 59% the previous week, 74% at this time last year, and 71% for the 5-year average. About 35% of the crop is setting pods, compared with 27% the previous week, 31% at this time last year, and 32% for the 5-year average. The conditions of the crop were 8% excellent, 60% good, 27% fair, 3% poor, and 2% very poor. These are reported statewide averages.

**Soybean Insects**
We continue to have several important species of caterpillar and bug pests in soybeans at treatable levels. The most important caterpillars right now are the soybean looper (SBL) and velvetbean caterpillar (VBC). As I mentioned last week, these migratory species fly into our state and lay eggs, with larvae quickly hatching out and defoliating soybeans. It can happen very quickly with VBC. Except for once in my career several years ago, VBC are easy to control with pyrethroid or Lepidoptera-selective insecticides. We have several very good insecticide options for SBL, but make sure that is the species you have before you spend the extra money.
Kudzu bugs and stink bugs make up most of the bug issues in soybeans.
Pyrethroids, except for anything with cyfluthrin, are very good on kudzu bugs. We saw the same species of stink bugs this week: redbanded stink bug (RBSB), southern green stink bug (SGSB), brown stink bug (BSB), and the brown marmorated stink bug (BMSB).
As moth activity increases, deposited eggs will yield caterpillar pests on soybeans. It is good skill to be able to identify adult moths flying around in fields. Use this chart to study moth and caterpillar identification.
Bollworm & Tobacco Budworm

Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2007-2021 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state but are useful for general trends.

Bollworm numbers will go up next week!

Trap data from 2007-2020 are shown below for reference to other years of trapping data from EREC:
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Pest Management Handbook – 2022
Insect control recommendations are available online in the 2022 South Carolina Pest Management Handbook at:
https://www.clemson.edu/extension/agronomy/pestmanagment2022/2022pmhmaster.pdf

South Carolina Crops Blog
The SC Crops Blog contains content about production of major row crops at the following link, if you want more information:  https://blogs.clemson.edu/sccrops/
Archived issues of the Cotton/Soybean Insect Newsletter can be viewed at a convenient link on the SCCrops page. Contact Dr. Michael Plumblee, if you have any questions about the blog.

Free Mobile Apps: “Calibrate My Sprayer” and “Mix My Sprayer”
Download our free mobile apps called “Calibrate My Sprayer” and “Mix My Sprayer” that help check for proper calibration of spraying equipment and help you with mixing user-defined pesticides, respectively, in custom units (available in both iOS and Android formats):
http://www.clemson.edu/extension/mobile-apps/

Need More Information?
For more Clemson University Extension information: http://www.clemson.edu/extension/
For historical cotton/soybean insect newsletters: https://www.clemson.edu//extension/agronomy/cotton1/newsletters.html

Sincerely,

Jeremy K. Greene, Ph.D.
Professor of Entomology

Visit our website at: http://www.clemson.edu

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