Cotton/Soybean Insect Newsletter

Volume 17, Issue #12     Edisto Research & Education Center in Blackville, SC     21 July 2022

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
James Thomas, a local crop consultant, reported that “aphids certainly crashed...glad we had moisture during the infestation. Finding enough stink-bug damaged bolls late in 2nd week of bloom to piggy back insecticide with growth regulator and boron. Drake Perrow, consultant in Calhoun County, also reported that aphids have crashed in his part of South Carolina. Jonathan Croft, county agent in Orangeburg County, reported that he received a couple of calls this week about kudzu bugs, and he is still reporting low numbers of caterpillars.

Scouting Workshops (NEXT WEEK)
Plans are set for our 2022 in-field, in-person workshops devoted to scouting for insect issues in cotton and soybeans, everything peanuts with Dr. Dan Anco, and weed identification with Dr. Mike Marshall. Dates and locations for these scouting workshops are listed below. Information about preregistration is on the flyers and on the attached announcements. Attendance could be limited to the first 50 participants that preregister for each session/workshop, so sign up quickly. For more details, see attached announcements.

- 27 July in Florence, SC, at the Pee Dee REC (2200 Pocket Road, Florence, SC 29506).
  Morning Session – Cotton/Soybean Scouting Workshop (Greene)
  Afternoon Session – Peanuts (Anco)
• 28 July in Cameron, SC, at Lone Star Plantation (102 Po Boy Court, St. Matthews, SC 29135).
  Morning Session – Cotton/Soybean Scouting Workshop (Greene)
  Afternoon Session – Peanuts (Anco)
• 29 July in Blackville, SC, at the Edisto REC (64 Research Road, Blackville, SC 29817).
  Morning Session – Cotton/Soybean Scouting Workshop (Greene)
  Afternoon Session – Weed Identification and Control (Marshall)

**Cotton Situation**
As of 17 July 2022, the USDA NASS South Carolina Statistical Office estimated that about 85% of the crop is squaring, compared with 69% the previous week, 73% at this time last year, and 71% for the 5-year average. About 42% of the crop is setting bolls, compared with 28% the previous week, 34% at this time last year, and 30% for the 5-year average. The conditions of the crop were 12% excellent, 62% good, 20% fair, 5% poor, and 1% very poor. These are reported statewide averages.

**Cotton Insects**
**Aphids** – What a difference a week makes. The rainfall we have had lately has undoubtedly kept cotton canopies moist and most likely facilitated a fungal epizootic for cotton aphids. Populations of the cotton aphid have crashed (photo at right) in the lower and central portion of the state, for sure. Aphids had gotten bad enough to make some folks spray for them, but aphid sprays last week would have been a waste of money and time. It is almost always better to wait out aphids for the natural control of the fungus. I had areas to put out two aphids trials last week, but those were canceled this past Monday, when I discovered they were gone.

**Plant bugs** – As we get closer to stink bug month (August), we can worry less about plant bugs, as our control tactics for stink bugs will provide control of plant bugs. Any cotton not yet to the 3rd week of bloom should be checked for plant bugs. Again, use a sweep net for adult plant bugs before bloom (threshold is 8 bugs per 100 sweeps), and switch over to using a drop cloth (black fabric preferred) (threshold is 3 bugs per 5 rowft) to find the fast-crawling, green nymphs. Once you start spraying for stink bugs, plant bugs will be coincidentally controlled with those applications.
Spider mites – I have heard no reports of spider mites getting out of control. The thunderstorms and heavy rains will keep spider mites beat back. When it stops raining, we will likely see issues with spider mites pop back up.

Bollworm – Captures of bollworm moths in our pheromone traps yesterday (Wednesday) were the highest (75/trap/2 nights) so far this year, but those counts did not make the weekly total catch reported in this newsletter issue. Those data will be shown in the chart for next week, and I expect more moths in the air, more eggs in the field, and pressure from larvae to start picking up rapidly. We observed larvae of *H. zea* in non-Bt cotton and grain sorghum this week, so the flight out of corn is ongoing.

Stink bugs – Stink bugs are in the field, especially on any cotton planted early (end of April and early May). It was easy to spot several different species this week. When you quickly find two stink bugs in one boll, there are too many in that field. Do you know what week of bloom you are in for each field you manage? You need to know that to properly manage stink bugs using the dynamic boll-injury threshold.

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Public Service Activities

The mention of any commercial product in this publication does not imply its endorsement by Clemson University over other products not named, nor does the omission imply that they are not satisfactory.
**Soybean Situation**
As of 17 July 2022, the USDA NASS South Carolina Statistical Office estimated that about 39% of the crop is blooming, compared with 28% the previous week, 26% at this time last year, and 20% for the 5-year average. The conditions of the crop were 8% excellent, 74% good, 18% fair, 0% poor, and 0% very poor. These are reported statewide averages.

**From the SC Soybean Specialist (Dr. Michael Plumblee)**
“Nothing much to report this week, other than walking fields and seeing soybean loopers and kudzu bugs.”

**Soybean Insects**
We are still dealing with many different species, but I have not heard of any one species causing significant issues yet. We are seeing more soybean loopers show up, so that species has already started to migrate to our state. Also, kudzu bugs seem to be the most numerous species in many soybean fields, but don’t be too anxious to control them. We need to wait until they lay eggs that hatch before we get too concerned about kudzu bugs. We can often wait until we need to put out an insecticide for some other insect before we control kudzu bugs. Because kudzu bugs only have a couple of generations per year, we can target reproducing populations and control them efficiently. If you remember from our work years ago on kudzu bugs when they first showed up in soybeans in the USA, our insecticide trials clearly showed that we have many materials that will do an excellent job on kudzu bugs. There were some odd things we discovered, though. For example, the pyrethroids are great for kudzu bugs, especially bifenthrin, but cyfluthrin and beta-cyfluthrin only killed about 50% of kudzu bugs. That was truly an odd discovery.

Start looking for moths now as you walk soybean fields. If you sharpen your skills on identifying the moths in the field, you will know what species are going to cause problems when the eggs hatch. Study up on the next page!
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 2007-2020 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.

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/pestmanagement2022/2022pmhmaster.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 SC Crops 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