Cotton/Soybean Insect Newsletter

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Pest Patrol Alerts

The information contained herein each issue is available via text alerts that direct users to online recordings. I will update the short message weekly 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 the 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

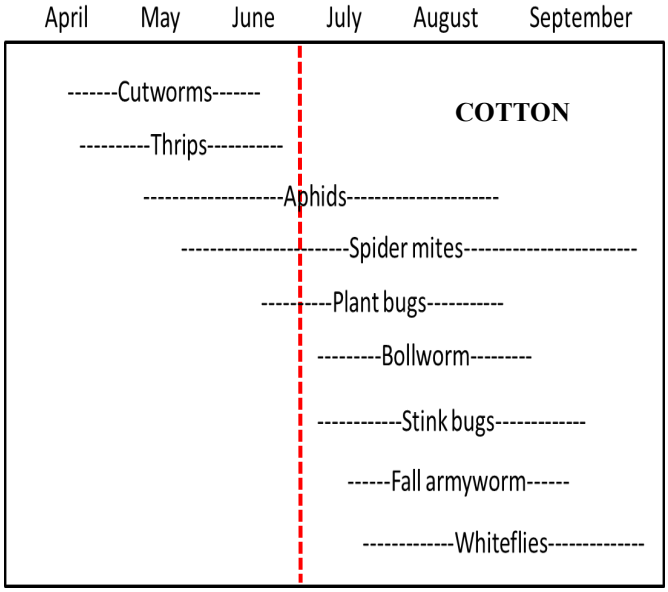
Marion Barnes, county agent in Colleton County, reported that he has a grower or two seeing increased numbers of kudzu bugs in soybeans this week. We talked about kudzu bugs infesting field margins initially and potentially using border sprays to control the pest around field perimeters – a cost-saving approach that might work well and buy some time until whole-field applications are needed for podworm, stink bugs, etc. **Margo Huggins**, industry rep with Americot, provided the photo here of cotton aphids, a lady beetle adult, and some lady beetle eggs (orange mass) near a cotton terminal.

Cotton Situation

As of 28 June 2020, the USDA NASS South Carolina Statistical Office estimated that about 96% of the crop has been planted, compared with 94% at this time last week, 100% at this time last year, and 100% for the 5-year average. About 33% of the crop is squaring, compared with 20% at this time last week, 50% at this time last year, and 36% for the 5-year average. About 2% of the crop is setting bolls, compared with 0% at this time last week, 7% at this time last year, and 2% for the 5-year average. The condition of the crop was described as 1% excellent, 37% good, 28% fair, 15% poor, and 19% very poor. These are observed/perceived state-wide averages.

Cotton Insects

We surveyed 8 pre-bloom cotton fields for tarnished plant bug (TPB) and square retention in Barnwell, Calhoun, and Orangeburg Counties this past week, and we found that none of the fields exceeded the sweep-net threshold of 8 bugs per 100 sweeps (we did 3,200 sweeps total and found 148 TPB adults across the 8 fields for an average of 4.6 TPB/100 sweeps). Several individual fields were close (6-7 TPB/100 sweeps), but we are calling them sub-threshold levels, particularly because square retention was very high (89-97%) in all fields. We will return to these fields in a couple of weeks (post-bloom) to check them again for TPB (about 2nd week of bloom). This was a limited survey attempt, so consider that small sample size for what it is – a small sample. I still think that we have legitimate concerns with TPB in some small percentage of fields – the difficulty comes in locating those fields. All the more reason to hire a consultant/scout to look for problems. Please see previous newsletters for proper identification of plant bugs and some of the other arthropods that look similar.



Also, keep watching infestations of aphids and scouting for symptoms of the Cotton Leaf Roll Dwarf Disease (CLRDD) we have been discussing.

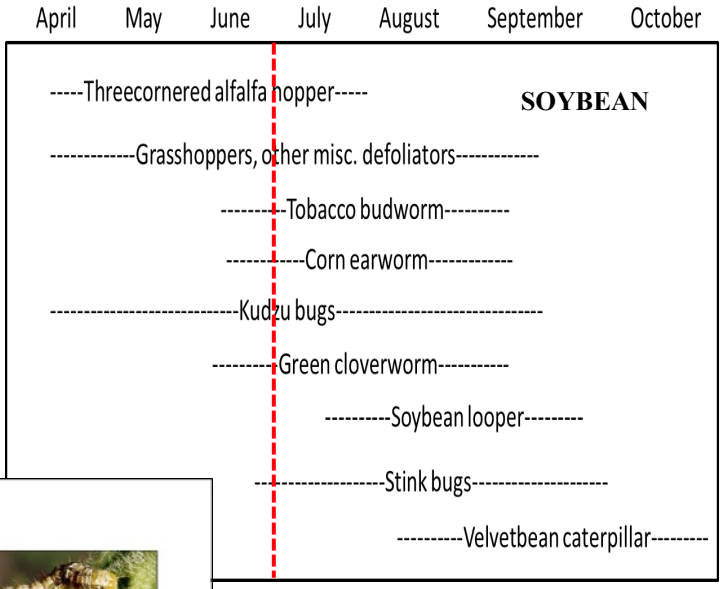
Finally, we easily collected corn earworm, *Helicoverpa zea*, out of non-Bt corn this week for lab bioassays, and the larvae were getting close to being ready to pupate. So, these caterpillars will craw down corn stalks and dig into the ground to form a chamber for pupation. Many will emerge after complete metamorphosis into moths, and the process of finding mates and another host for their offspring will result in oviposition in blooming cotton and soybeans. Numbers of *H. zea* (called corn earworm in corn, bollworm in cotton, and podworm in soybeans) being caught in my pheromone traps went up this week, indicating that some are likely already emerging from corn fields. We will need to start scouting blooming cotton for bollworm soon.

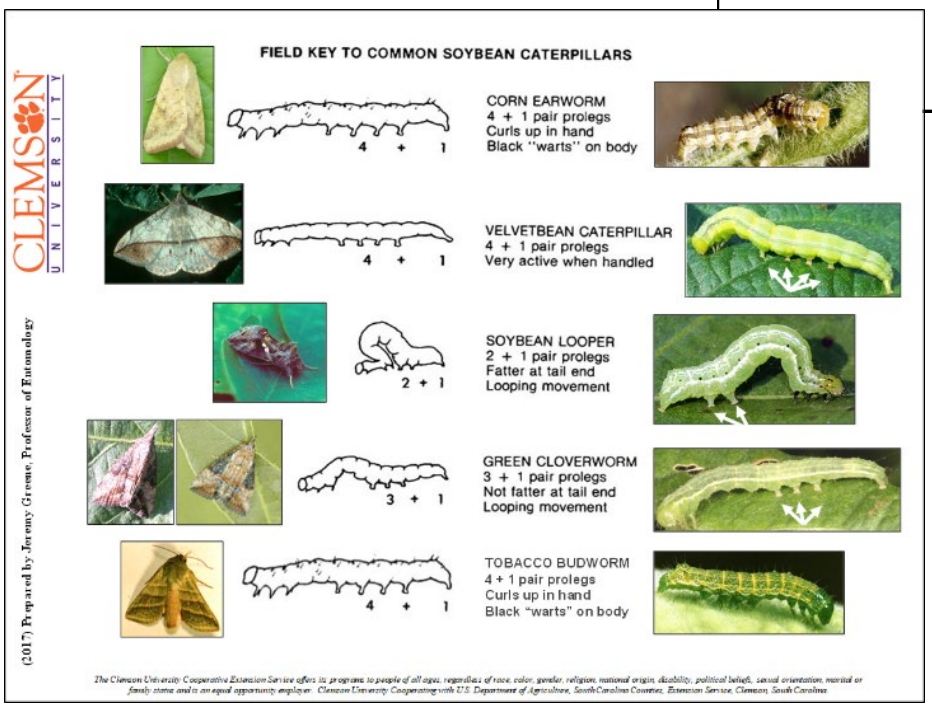
Soybean Situation

As of 28 June 2020, the USDA NASS South Carolina Statistical Office estimated that about 89% of the crop has been planted, compared with 80% the previous week, 89% at this time last year, and 91% for the 5-year average. About 75% of the crop has emerged, compared with 65% the previous week, 72% at this time last year, and 82% for the 5-year average. About 3% of the crop is blooming, compared with 0% the previous week, 3% at this time last year, and 3% for the 5-year average. The condition of the crop was described as 15% excellent, 61% good, 10% fair, 5% poor, and 9% very poor. These are observed/perceived state-wide averages.

Soybean Insects

Again this week, arthropods do not seem to be causing widespread issues in soybeans, but we starting noticing a dramatic increase in the number of kudzu bugs. Years ago, when we did research on treatment thresholds for kudzu bugs, we determined that the best timing for insecticide use was when nymphs were detected on most canopy observations or when 1 nymph was detected per sweep in sweep-net sampling. Border sprays for high numbers of adults along field edges might be a good strategy to stall reproduction.





Also, we have been noticing a marked difference in deer injury to soybeans not planted with aldicarb (AgLogic) in furrow versus those planted with it. Where I have 5 lb/acre of AgLogic in furrow, damage is reduced, for sure, as we have observed in the past. Finally, it is never too early to start looking for moths and getting to know how to recognize the adult stage of many different pest species we see as larvae in the crop.

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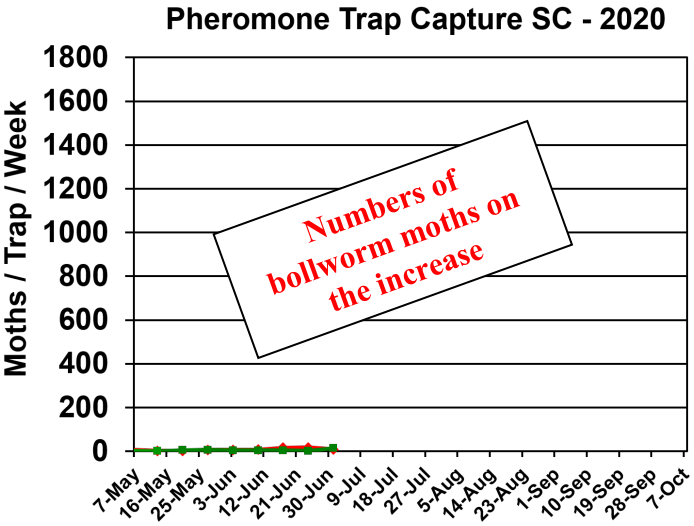
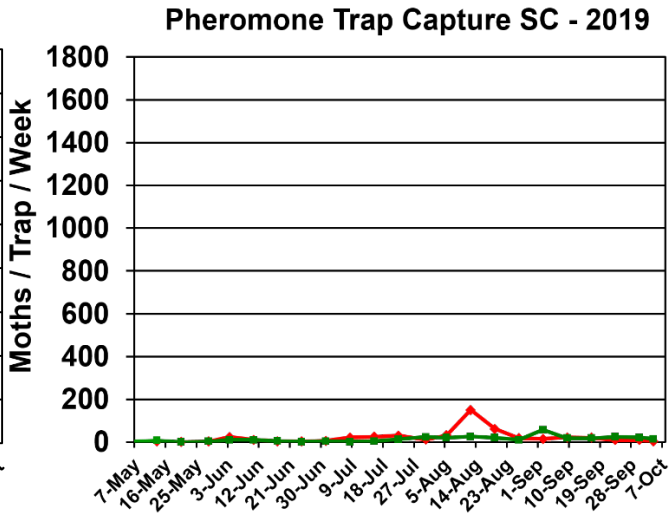
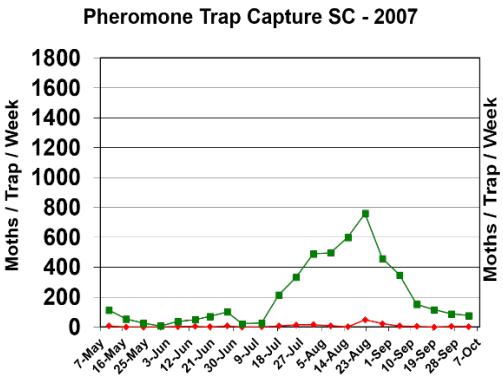
Bollworm & Tobacco Budworm

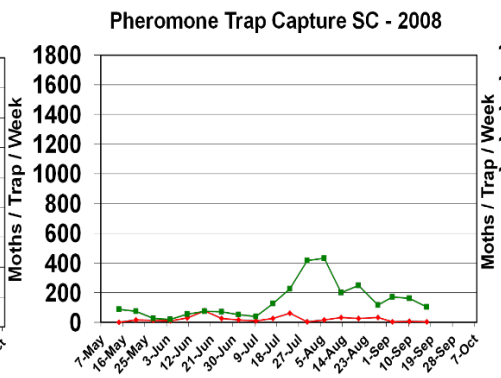
Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2007-2019 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.

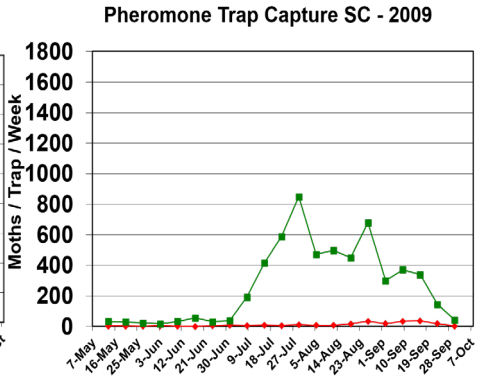


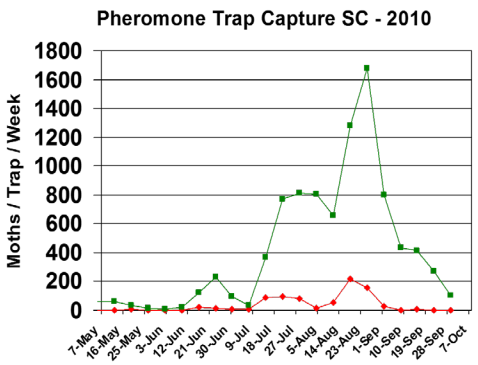


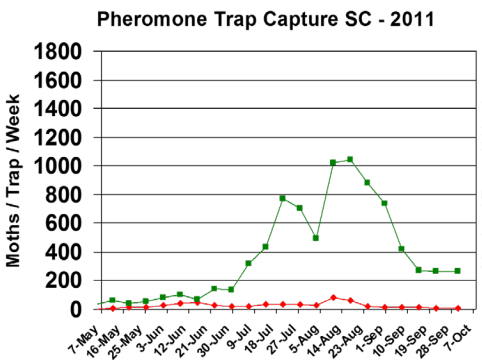
Trap data from 2007-2018 are shown below for reference to other years of trapping data from EREC:

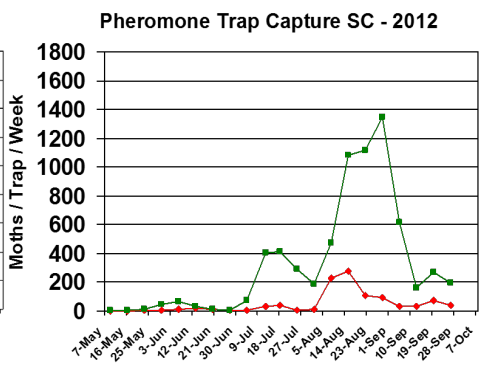


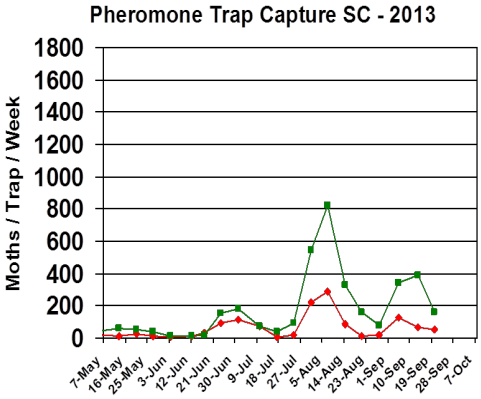


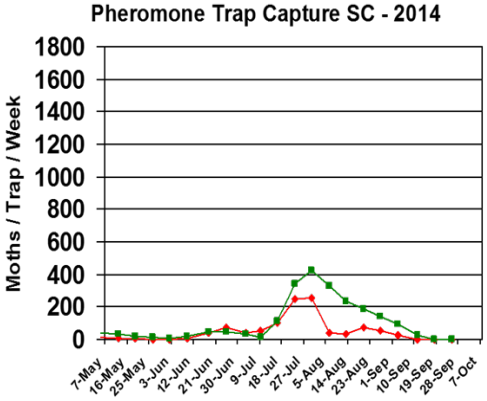


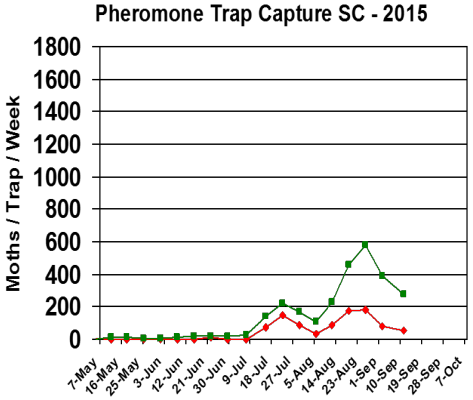


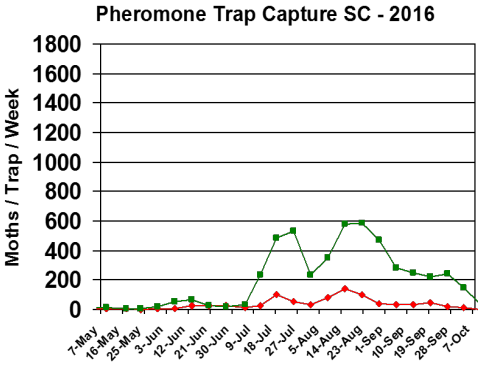


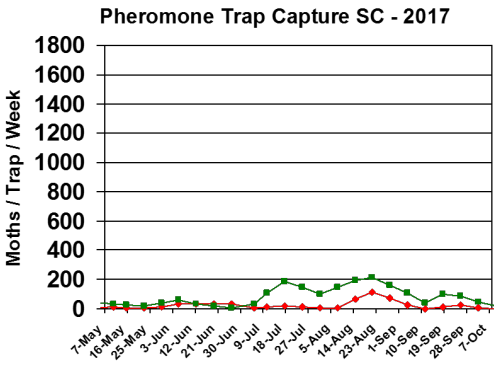


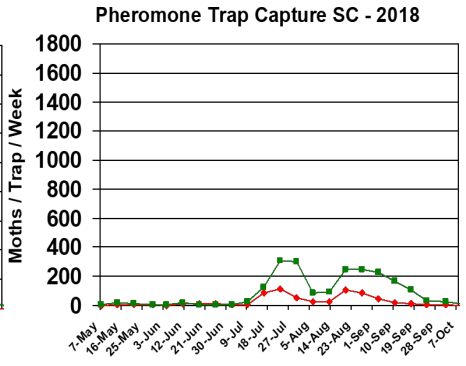








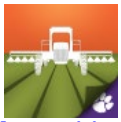




Pest Management Handbook – 2020

Insect control recommendations are available online in the 2020 South Carolina Pest Management Handbook at:
https://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html

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

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