



Cotton/Soybean Insect Newsletter

Volume 13, Issue #2

Edisto Research & Education Center in Blackville, SC

11 May 2018

Pest Patrol Alerts

The information contained herein each week 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 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

It is hot and dry almost everywhere. If you have received a shower recently, consider yourself lucky. There have been numerous calls about stink bugs being an issue on early corn. I took a handful of calls, texts, and emails in just the last few days about this topic. I contacted my colleague, Dr. Francis Reay-Jones, located at the Pee Dee REC in Florence, who covers insects important in corn. Dr. Reay-Jones put together a succinct statement about that topic for our county agents to use in answering these calls. He gave me the okay to quote him here:

Agents,

Jeremy and I (and a number of you I gather!) have received calls in recent days about stink bug issues in corn. I thought I would send an e-mail with some information that may be of interest.

Stink bugs can sometimes be economic pests at the seedling stage, and later, particularly during ear elongation stages. The data though are very limited, since it's challenging to do trials with stink bugs in corn. So I'm relying on the limited data available, mainly from NCSU.

Feeding at the seedling stage can lead to tillering, malformed plants, and sometimes plant death. Damage can occur particularly from V3 to V6 - after that, the growing point is above the soil surface and stink bug injury generally will not be significant in most cases until ear elongation (V12 to VT). From V3 to V6, consider a 10% plants infested with stink bugs as a threshold. **This does not happen too frequently**, as there are other hosts in the landscape such as wheat which are preferred. When wheat dries down, stink bugs can move into adjacent corn, but that often is not until after V6. So significant economic infestations of stink bugs can occur in seedling corn, but **this is not common in my experience**.

From V12 to VT, a threshold of 25% plants infested can be used. Infestations at this stage are much more common. Stink bugs will feed through the stem on the developing ear - this can cause significant injury and yield loss, since the whole ear can be malformed. This is the stage when most applications in South Carolina will need to be made, **though in many cases, a corn crop will not need to be treated**.

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2017 was a bad year for stink bugs in corn, and we did have problems from stink bug feeding at this time.

Once tassels appear, most of the damage to the ear has already occurred. This is why tank mixing a fungicide with an insecticide is often not effective, since the timing is usually not optimal for both at the same time.

From R1 to R4, use a threshold of 50% plants infested. At this point, feeding occurs on individual kernels - so impact on yield is much less than a completely malformed ear. **A 50% infestation at this point is rare.**

The brown stink bug is the main species we see in corn. Bifenthrin is the best product we have available. Control is very difficult because stink bugs are fairly protected by the foliage. Need a very good aerial applicator to even have a chance at decent control because of the small amount of water used.

Let me know if you have any questions or if you see any significant stink bug infestations.

Thanks,
Francis

Cotton Situation

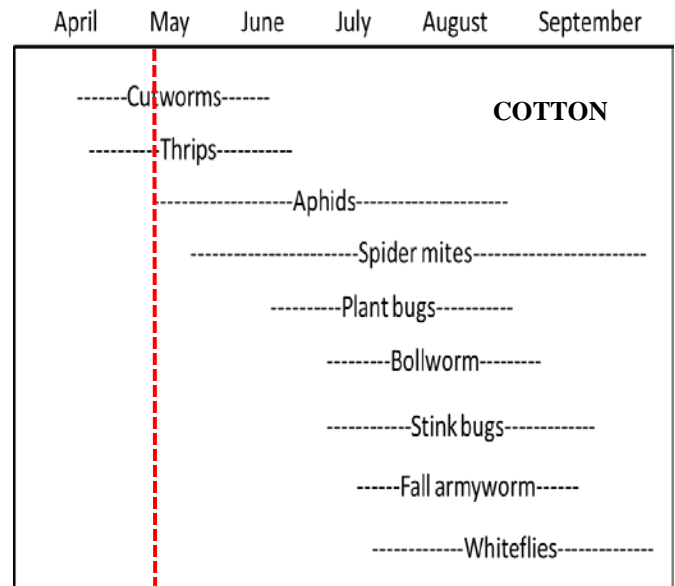
As of 6 May 2018, the USDA NASS South Carolina Statistical Office estimated that about 12% of the crop has been planted, compared with 3% the previous week, 32% at this time last year, and 23% for the 5-year average. These are observed/perceived state-wide averages. It has been dry and hot this week.

Cotton Insects

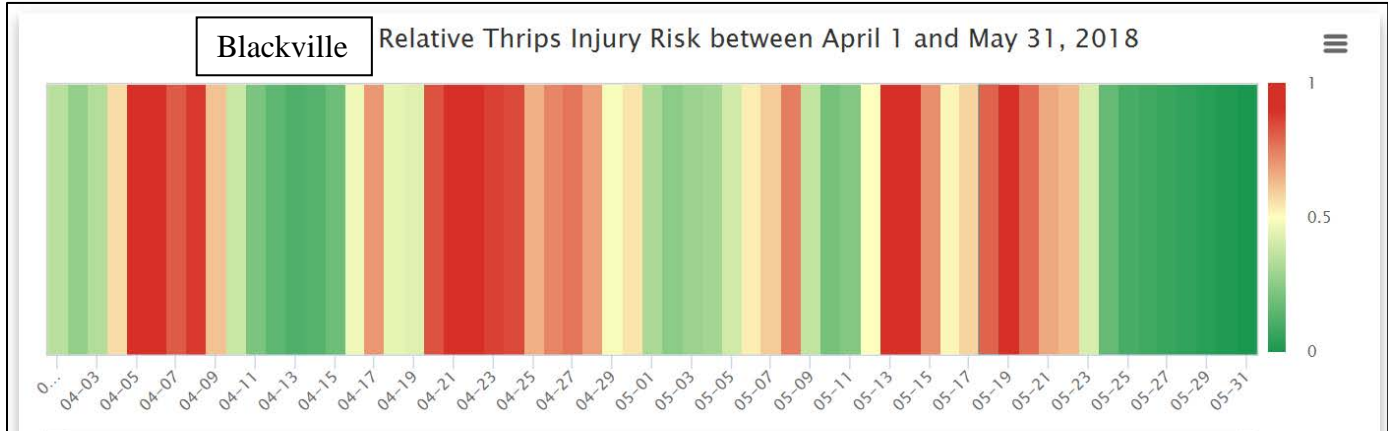
We covered grasshoppers last week, so check the previous newsletter for information on grasshoppers. We will turn our focus to thrips, as this crop emerges. The online model for predicting risk from thrips in cotton called **Thrips Infestation Predictor for Cotton (TIP)** (<http://climate.ncsu.edu/CottonTIP>) can be used to show **how important planting date is** for a specific location.



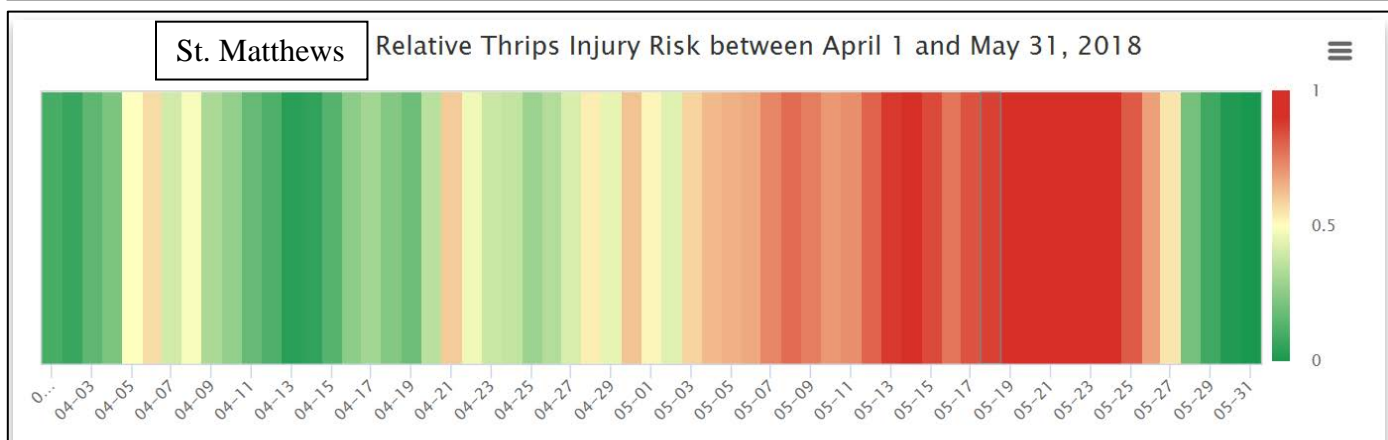
To use the TIP tool for cotton, select your field location on the map (zoom in and mark the field with a pin...the coordinates are displayed), enter your planned planting date, and hit 'Submit' to see the results. Below is what you see when you navigate to the site, select a planting date (I entered 18 May 2018), and mark a field location on the map. You then hit the 'submit' button. You will get a series of charts. In the lower portion of the Coastal Plain in the state (e.g. Blackville), risk is high for multiple planting dates, cotton planted in the middle portion of the Coastal plain in the state (e.g. St. Matthews) is now entering a high-risk time, and cotton planted during the end of May in the upper portion of the Coastal Plain in the state (e.g. Dillon) is going to be at high risk when it is up and growing.



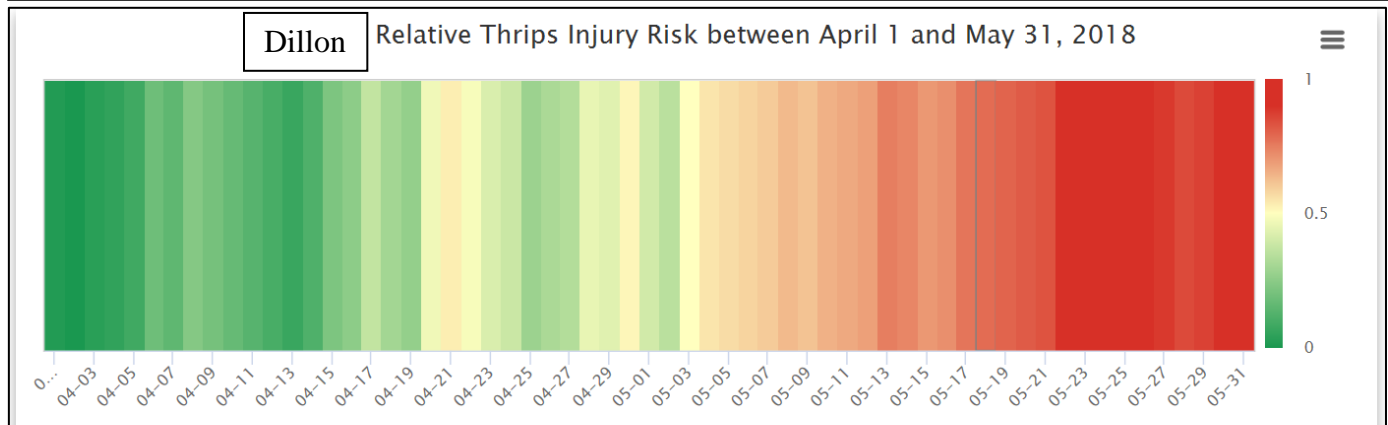
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Remember, this tool helps predicts risk from feeding injury from thrips based on planting date in Figure 2. Figure 3 will show you the predicted risk associated with each potential planting date. There are many at-plant options for preventative control of thrips. The chart to the right shows most of the legal options, except for acephate (Orthene) used as a seed treatment or as a hopper-box treatment. Those are also options. Counter (a corn insecticide/nematicide) is not labeled for use in cotton. Please do not use Counter in cotton.

Soybean Situation

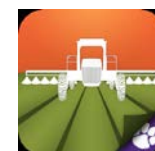
As of 6 May 2018, the USDA NASS South Carolina Statistical Office estimated that about 4% of our soybean crop has been planted, compared with 0% the previous week, 11% at this time last year, and 8% for the 5-year average. These are observed/perceived state-wide averages. It has been dry and hot this week.

Soybean Insects

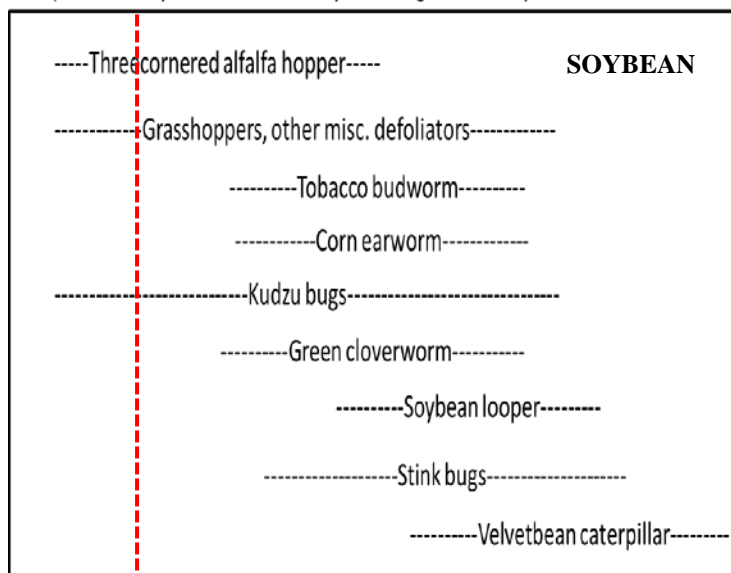
Because we are still early into planting soybeans, there are few issues with insects, but potential problems with grasshoppers (covered in the newsletter last week under the 'Cotton Insects' section) are possible. Keep an eye out for other early season issues with insects, such as threecornered alfalfa hopper (TCAH) and, potentially, kudzu bugs. Kudzu bugs were more numerous last year than they had been in several years. Both of these insects are stem feeders and can cause injury that is not visible until later. You can stand many more kudzu bugs than you can TCAH early in the season. TCAH insect can move in on early vegetative soybeans before we typically do much scouting and cause damage that goes unnoticed until much later. Stem girdling caused by TCAH feeding can weaken plants, cause stand loss, or lodging later, resulting in lost yield. We might be sustaining damage on early soybeans that we are not noticing. No reports of slugs or anything else on soybeans this past week. Don't forget your early soybeans. You might need more than just herbicides...go scout them for insects! It doesn't take long.

Insecticide Options for Thrips

- At-plant options
 - Do nothing...not an option...unless planting late?
 - Neonicotinoid seed treatments (thiamethoxam [Cruiser, Avicta] and imidacloprid [Gaucho, Aeris])
 - Hopper-box treatment (acephate)
 - In-furrow granular material
 - Aldicarb (Temik, AgLogic)
 - Phorate (Thimet)
 - In-furrow liquid material
 - Imidacloprid (Admire Pro, Velum T., etc.)
 - Acephate (Orthene, etc.)
 - A combination of the above
- Post-plant options
 - Foliar sprays (acephate, Radiant, etc.)



April May June July August September October



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Bollworm & Tobacco Budworm

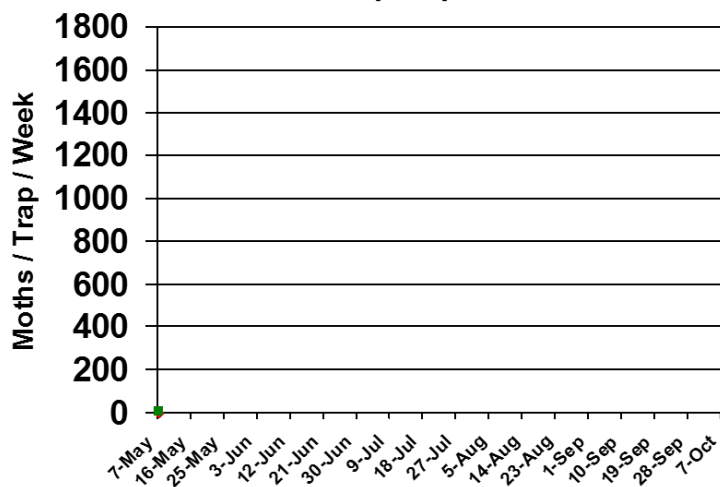


Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2017 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these

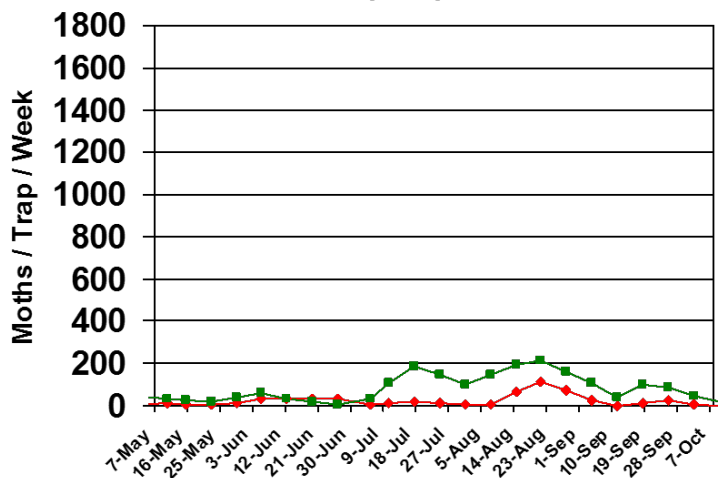
data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.



Pheromone Trap Capture SC - 2018

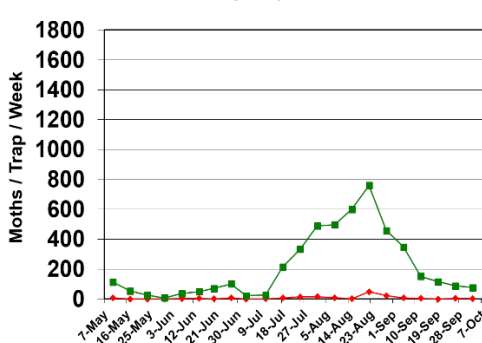


Pheromone Trap Capture SC - 2017

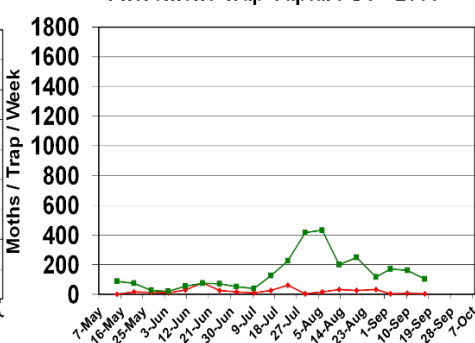


Trap data from 2007-2016 are shown below for reference to other years of trapping data from EREC:

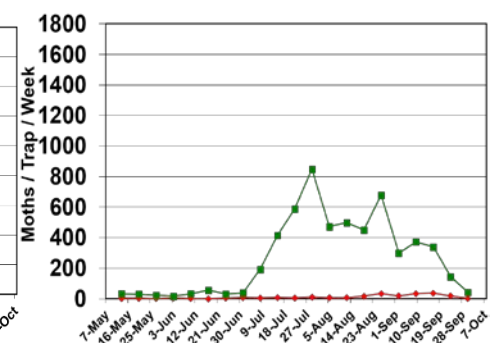
Pheromone Trap Capture SC - 2007



Pheromone Trap Capture SC - 2008



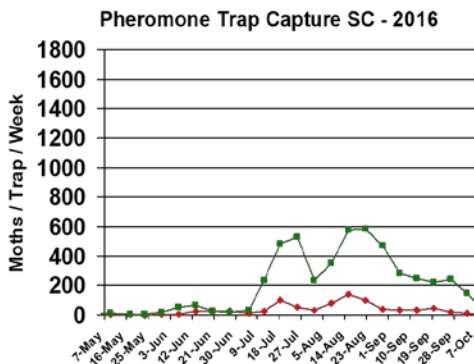
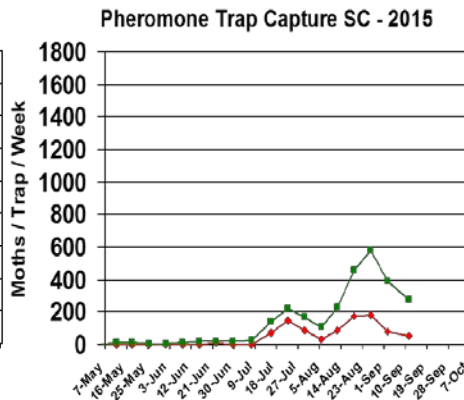
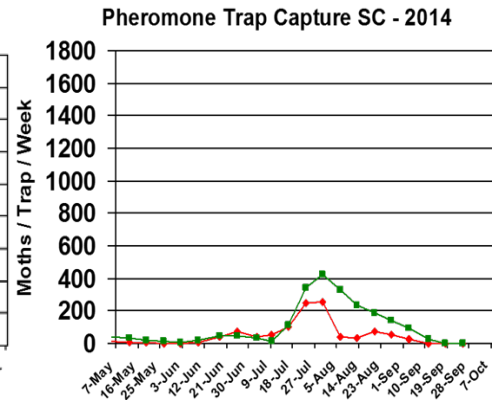
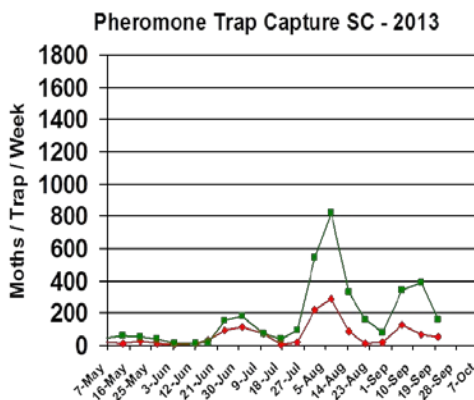
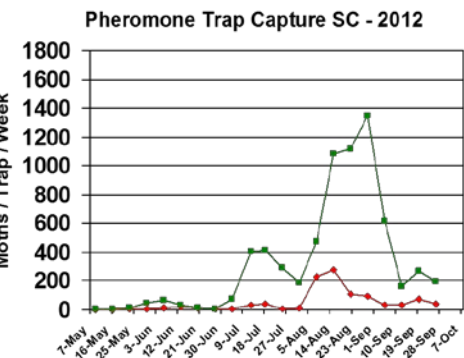
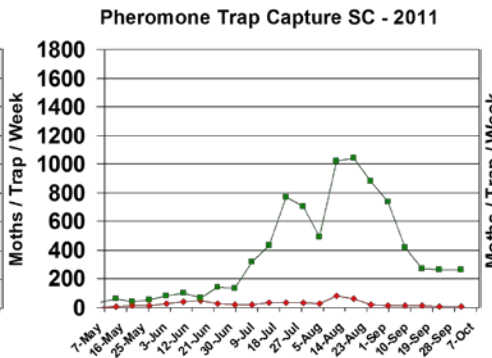
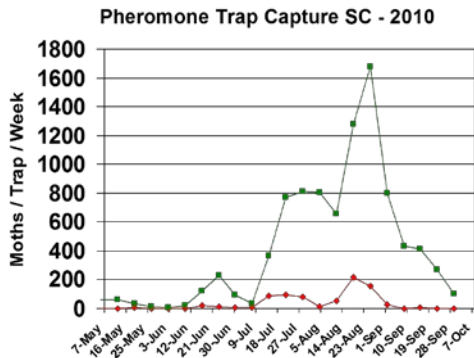
Pheromone Trap Capture SC - 2009



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Pest Management Handbook – 2018

Insect control recommendations are available online in the 2018 South Carolina Pest Management Handbook at: <http://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html>

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<http://www.clemson.edu/extension/mobile-apps/>

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For more Clemson University Extension information: <http://www.clemson.edu/extension/>

For historical cotton/soybean insect newsletters:

<http://www.clemson.edu/extension/agronomy/cotton1/newsletters.html>

Sincerely,

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



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