



## ***Cotton/Soybean Insect Newsletter***

**Volume 15, Issue #18    Edisto Research & Education Center in Blackville, SC    4 September 2020**

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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 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](https://twitter.com/bugdocisin) on Twitter.



### **News from Around the State**

**Charles Davis**, county agent in Calhoun County, sent the photos here of a bollworm he found in a cotton boll (2-gene Bt cotton) this week. He “seemed fat and happy,” Charles reported. Charles also found stink bugs in his observations but reported “damage was hard to find in the fields” he walked. Charles also reported “a lot of final growth regulator and insect sprays are going out this week as a parting shot. On the non-insect side, I see a lot of boll rot in some fields but also a lot of mildew. Hopefully, we will get some better weather this week. Cotton is opening fast. Some fields showing severe potassium deficiency are nearly defoliated and most bolls are open.” Send me your reports for this section!



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## Virtual Field Days

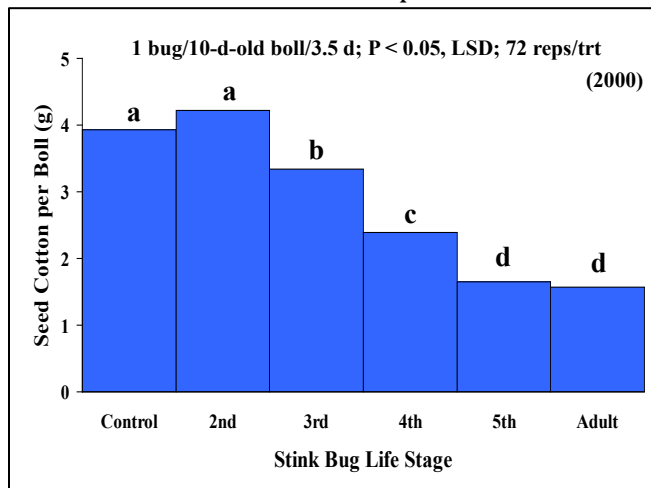
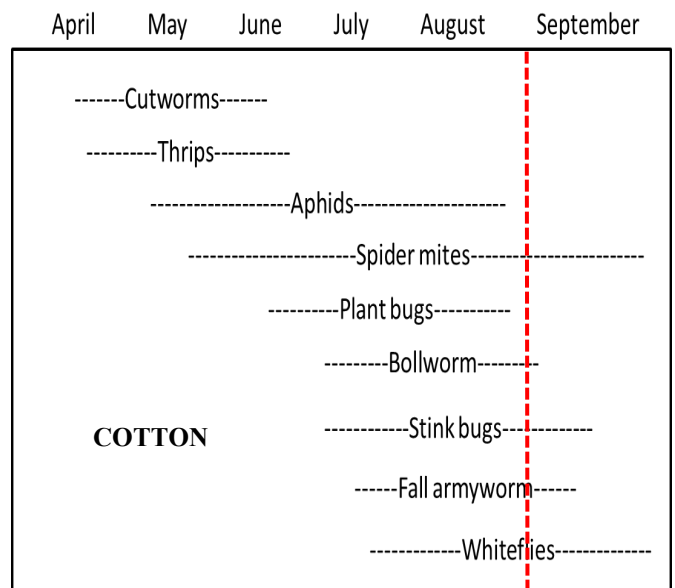
Clemson University is offering a handful of virtual field days this fall. The Edisto REC field day will go live on 10 September, but it should remain up for some time to allow folks to participate. Field days for the Baruch Institute and the Pee Dee REC are already posted at: [www.clemson.edu/fieldday](http://www.clemson.edu/fieldday)

## Cotton Situation

As of 30 August 2020, the USDA NASS South Carolina Statistical Office estimated that about 95% of the crop is squaring, compared with 93% at this time last week, 100% at this time last year, and 100% for the 5-year average. About 87% of the crop is setting bolls, compared with 83% at this time last week, 100% at this time last year, and 97% for the 5-year average. About 4% of bolls are opening, compared with 2% at this time last week, 35% at this time last year, and 24% for the 5-year average. The condition of the crop was described as 19% excellent, 54% good, 16% fair, 6% poor, and 5% very poor. These are observed/perceived state-wide averages.

## Cotton Insects

Captures of bollworm moths in pheromone traps have started going down, as has activity in the field. Despite a late flurry of activity from the species, additional injury in the field will subside very soon, and only later-planted cotton would need a look for bollworm at this point. Where bollworms leave it, stink bugs will take it. I call August “Stink Bug Month” for a good reason, but stink bugs don’t have calendars and go elsewhere just because it is September. Stink bugs can feed on hard pecans right through the shell, so they can certainly feed on bolls and seed until the picker comes through the field.



That being said, adult stink bugs have a choice, and they usually choose to leave cotton when there are no more soft bolls on which to feed. They move on to soybeans and finish off the season there. However, any immature stink bugs remaining in cotton don’t have a choice. They don’t have wings, so their only option is to continue feeding, and some of my early research showed that large nymphs can cause as much damage as adults. Pressure from stink bugs has increased lately in cotton and soybeans. Keep using the dynamic boll-injury threshold for stink bugs to finish the season. Most fields are probably getting close to the 6<sup>th</sup> or 7<sup>th</sup> week of bloom.

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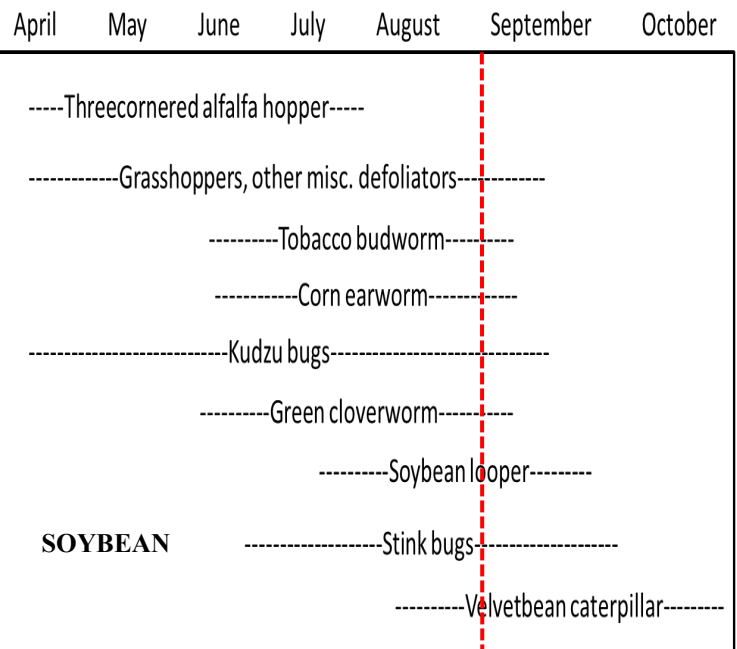
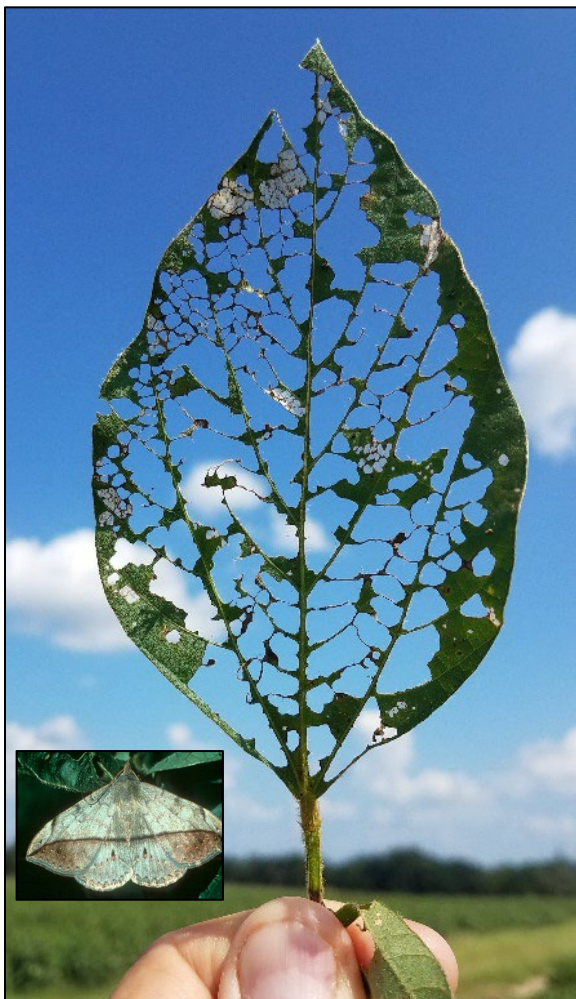


## Soybean Situation

As of 30 August 2020, the USDA NASS South Carolina Statistical Office estimated that about 86% of the crop is blooming, compared with 81% the previous week, 89% at this time last year, and 91% for the 5-year average. About 55% of the crop is setting pods, compared with 47% the previous week, 44% at this time last year, and 60% for the 5-year average. The condition of the crop was described as 30% excellent, 55% good, 7% fair, 4% poor, and 4% very poor. These are observed/perceived state-wide averages.

## Soybean Insects

Defoliation has continued to accumulate this week, as velvetbean caterpillar (VBC), soybean looper (SBL), and green cloverworm (GCW) gang up on unprotected soybeans. I have some soybeans that will be completely defoliated next



week, as this is what they look like this week. If you have yet to notice velvetbean caterpillar moths flying around, just look, and I bet you will flush and see them as you move through the field. See the figure I always include at the end of this section on soybean insects to refresh your memory on moth identification. Moths of VBC will be the ones with their wings out to the sides when at rest, and there will be a line going across the wings. It doesn't take long to go from an egg deposited on a soybean leaf to a large caterpillar with a belly full of sunlight-capturing leaf material. If you have not sprayed an insecticide in a couple of weeks, you certainly need to check for SBL, VBC, and GCW, and other defoliating species. You need to identify the species because SBL can be more difficult to control, as you know. A more expensive material will be needed if you still see small SBL while sampling. Use a

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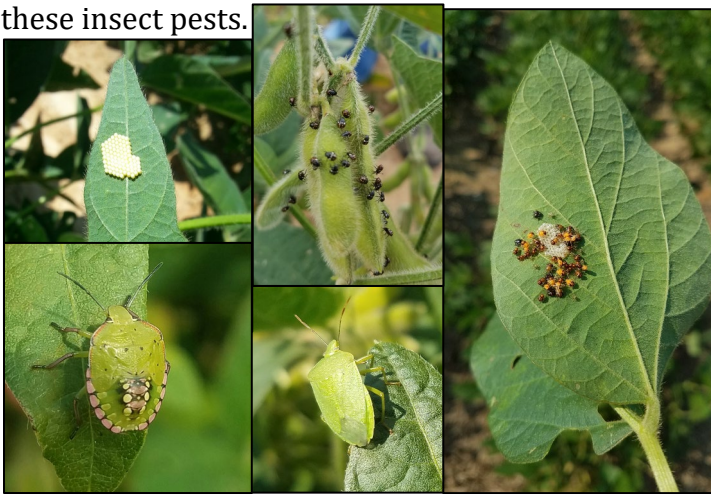
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drop cloth and a hand lens to identify the small caterpillars, as those are what you will deal with soon. So far this season, data from my insecticide efficacy trials have indicated that we are controlling VBC and GCW with just about anything sprayed, so it is good to know that VBC are back to normal and susceptible this season (at least those that migrated into my area). Apparently, we are also good with the lep-specific insecticides we recommend for control of SBL. I have not seen anything in the data that indicate we have a problem with with appropriate insecticides recommended for SBL. And, at least for another week, podworm (same species as bollworm or corn earworm) might still be in the mix also. I found these two in soybeans this week – podworm and SBL close on the shake sheet sample.

Finally, stink bugs and grasshoppers continue to reproduce in and damage soybeans. I have some soybeans we have sprayed twice with a very good insecticide for stink bugs, and they continue to hatch out from egg masses that are not killed by insecticides. Grasshoppers continue to do the same. See our Pest Management Handbook for more details and recommendations on insecticide choice for all of these insect pests.



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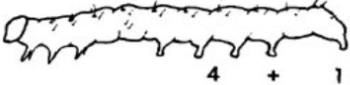


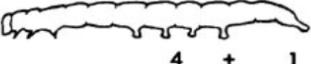








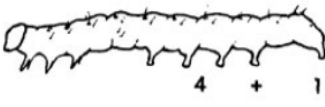



Be able to recognize larvae and moths! Use the chart here for identifying adults and larvae.

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(2017) Prepared by Jeremy Greene, Professor of Entomology

### FIELD KEY TO COMMON SOYBEAN CATERpillARS

	 4 + 1	<p><b>CORN EARWORM</b> 4 + 1 pair prolegs Curls up in hand Black "warts" on body</p>	
	 4 + 1	<p><b>VELVETBEAN CATERPILLAR</b> 4 + 1 pair prolegs Very active when handled</p>	
	 2 + 1	<p><b>SOYBEAN LOOPER</b> 2 + 1 pair prolegs Fatter at tail end Looping movement</p>	
	 3 + 1	<p><b>GREEN CLOVERWORM</b> 3 + 1 pair prolegs Not fatter at tail end Looping movement</p>	
	 4 + 1	<p><b>TOBACCO BUDWORM</b> 4 + 1 pair prolegs Curls up in hand Black "warts" on body</p>	

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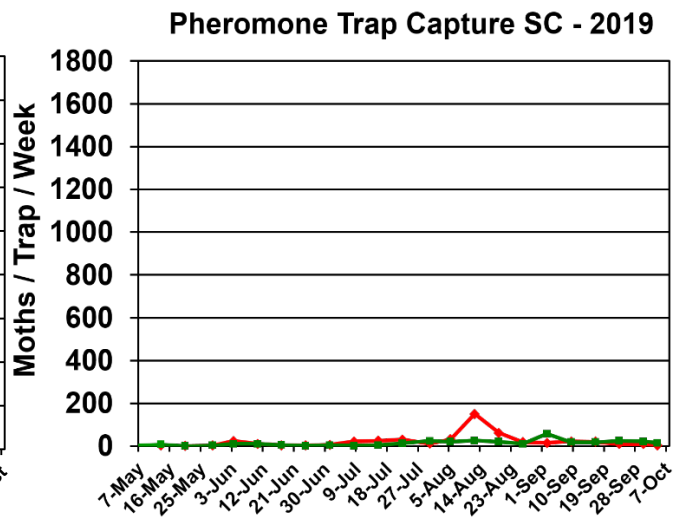
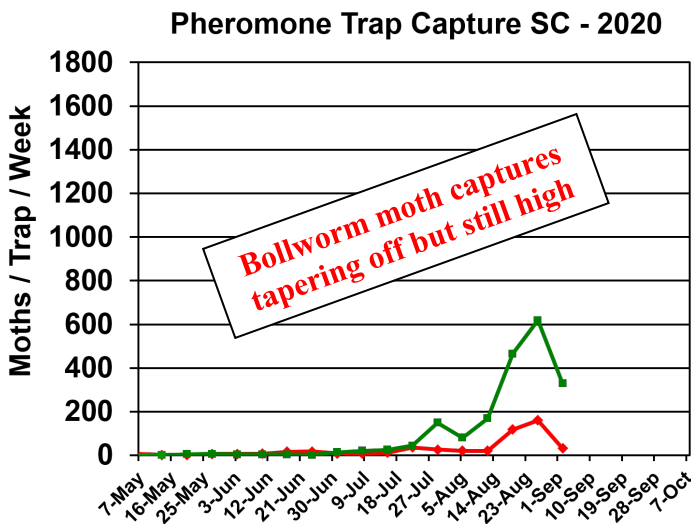




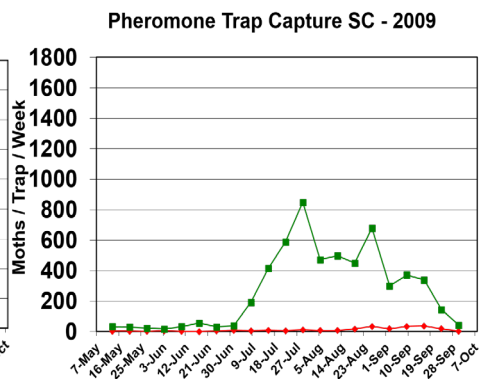
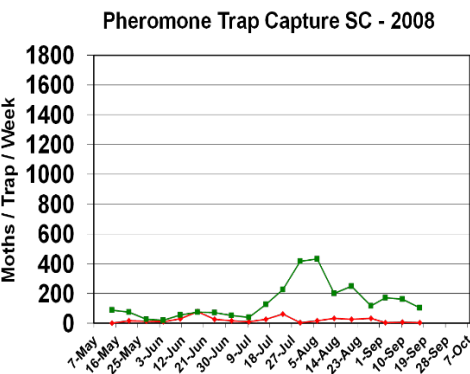
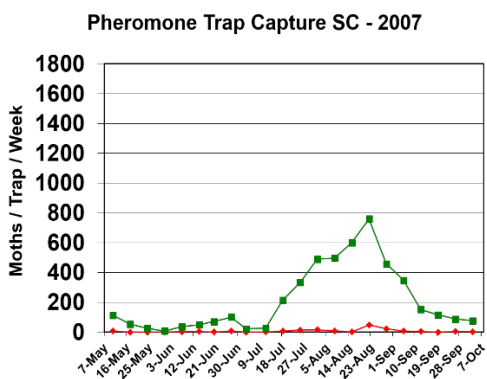
## Bollworm & Tobacco Budworm



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.



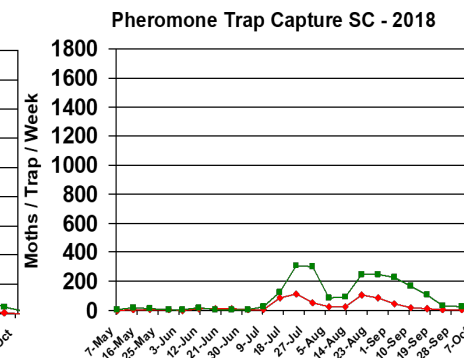
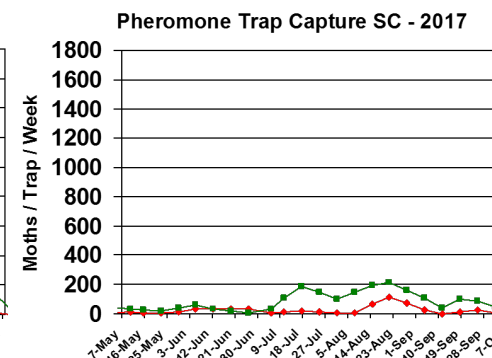
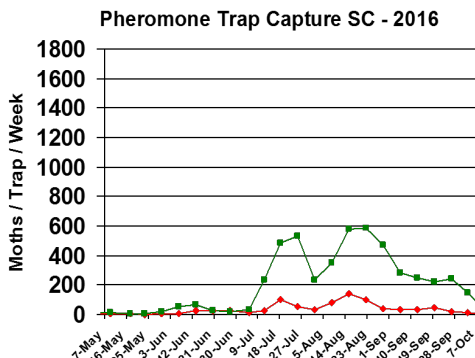
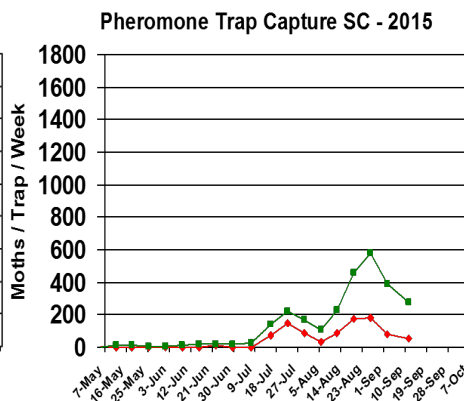
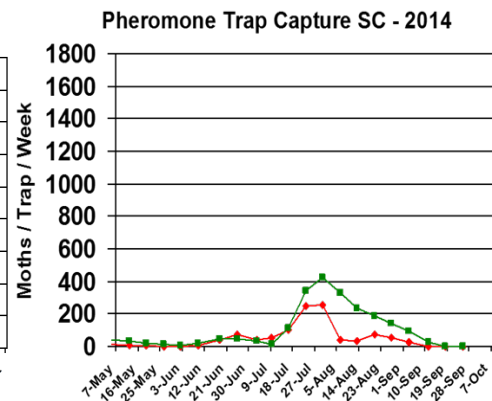
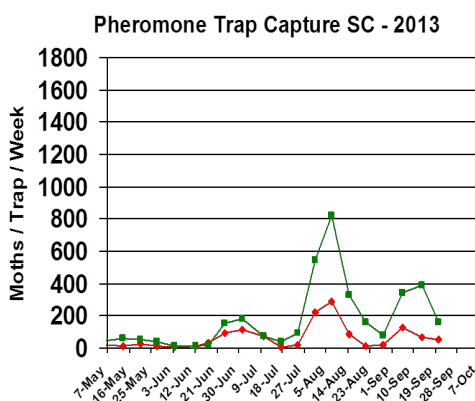
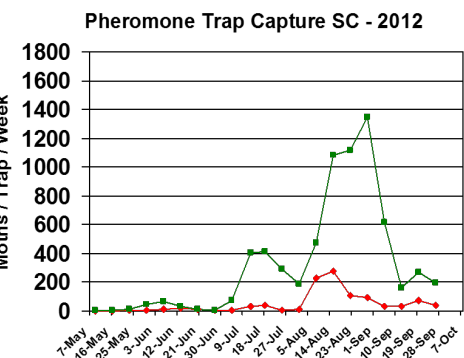
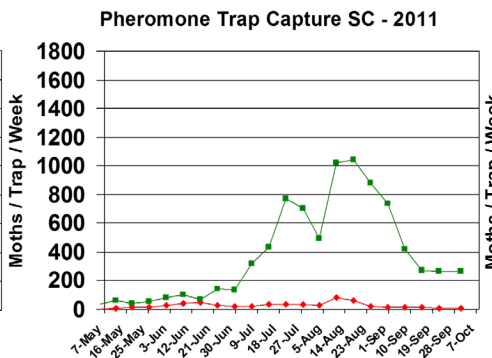
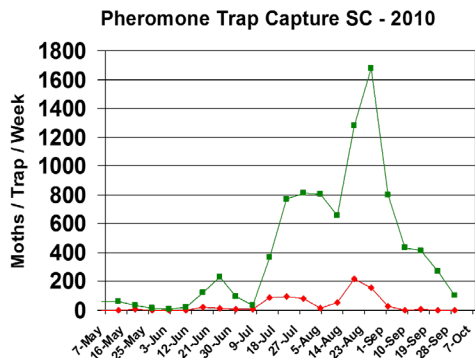
Trap data from 2007-2018 are shown below for reference to other years of trapping data from EREC:



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## **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>

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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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