



Cotton/Soybean Insect Newsletter

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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.



Row-Crop Field Day – Rescheduled for TOMORROW

Because of hurricane Dorian last week, we had to move our Row-Crop Field Day at Edisto REC, originally scheduled for 5 September 2019, to 12 September 2019. That is tomorrow!!! Peanuts will be covered in the AM tour, and all other crops (cotton, soybean, etc.) will be covered in the PM tour. Pesticide license and CCA credits will be offered.

News from Around the State

Chris Talley, county Ag agent in Anderson County, reported that he is seeing a lot of VBC in the Upstate. “Well above threshold levels,” he reported. This photo seems to confirm that! Soybean stalks with significant defoliation from VBC.

Cotton Situation

As of 8 September 2019, the USDA NASS South Carolina Statistical Office estimated that about 56% of the crop has bolls opening, compared with 40% at this time last week, 26% at this time last year, and 42% for the 5-year average. The condition of the crop was described as 4% excellent, 51% good, 34% fair, 11% poor, and 0% very poor. These are observed/perceived state-wide averages.



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Cotton Insects

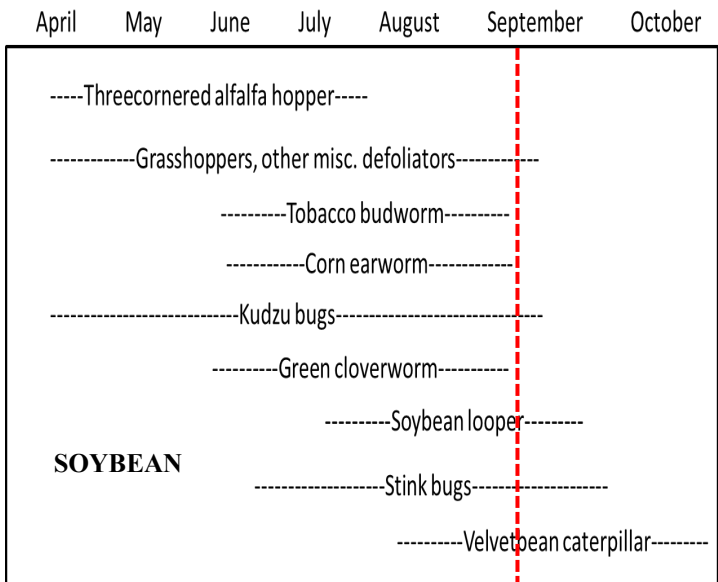
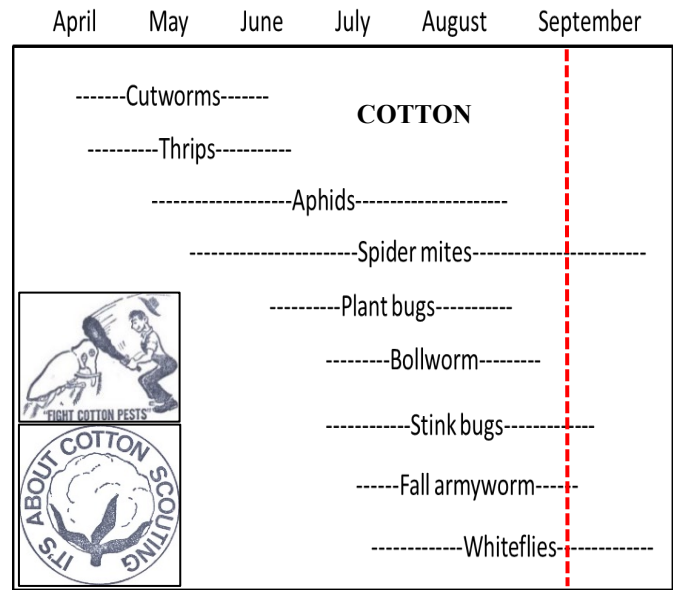
Well, hurricane Dorian decided to remain off the coast and not significantly hurt the bulk of our cotton crop. We were fortunate. Most of the crop is safe from injury from insects and spider mites. Only late-planted cotton would be experiencing issues with arthropods at this point, so we are pretty much done with cotton insects for 2019. Most of the crop is set, so do not count on any new fruit to contribute significantly to yields at this point. It is an early cotton crop this season. Get defoliation done on time, and harvest timely to maximize yields.

Soybean Situation

As of 8 September 2019, the USDA NASS South Carolina Statistical Office estimated that about 95% of the crop is blooming, compared with 90% the previous week, NA% at this time last year, and NA% for the 5-year average. About 53% of the crop is setting pods, compared with 45% last week, 74% at this time last year, and 78% for the 5-year average. The condition of the crop was described as 7% excellent, 63% good, 27% fair, 3% poor, and 0% very poor. These are observed/perceived state-wide averages.

Soybean Insects

We still have kudzu bugs, velvetbean caterpillar (VBC), green cloverworm, soybean looper (SBL), grasshoppers, stink bugs, and other species present in soybeans. There are still many very small caterpillars out there, and proper identification can be difficult on these small larvae. I cannot stress enough how important it is to be able to properly identify these species. Many of the caterpillars use a looping motion to crawl, so you cannot go by how they “walk” across the leaves or drop cloth. You need to count the pairs of abdominal prolegs (see the chart on adult and larval identification). You also need to be able to identify the moths that are flying around out there. Right now, VBC are the predominant moths in the field, but there are some SBL moths about also. I think everyone understands now the value of flushing and identifying moths in the field. It gives you a clear idea of what is coming after the eggs hatch. You should know how to identify your moths, as I push that skill each week with the photos of larvae and adults (moths) by species.



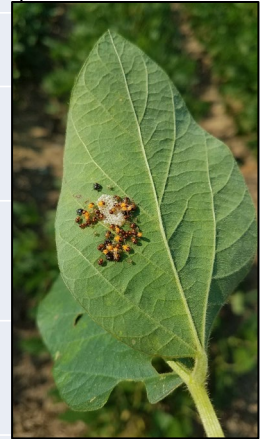
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Treatment thresholds (per rowft) for insects sampled with beat cloth.

Pest	Row width (inches)				
	38	30	21	14	7
stink bug	1	0.8	0.5	0.3	0.2
corn earworm*	2	1.6	1.1	0.7	0.4
velvetbean caterpillar	4-6	4	2.7	1.8	0.9
soybean looper	6-8	5.5	3.8	2.6	1.3

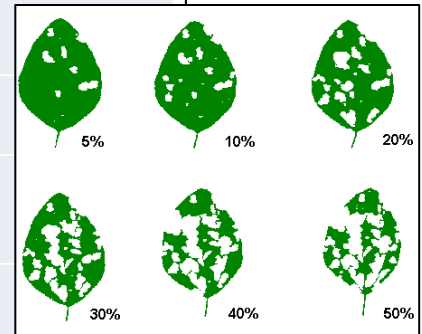
*this is the pod-feeding threshold for corn earworm



Treatment guidelines for soybean insects sampled with a sweep net.

Pest	Number per 10 sweeps	Comments
stink bug	1-2	
corn earworm	3	or 15% foliage loss
velvetbean caterpillar	10	or 15% foliage loss
soybean looper	15	or 15% foliage loss
kudzu bug	10 (nymphs)	1 nymph per sweep

For other foliage feeders use a threshold of 30% defoliation before first bloom, 15% after first bloom.



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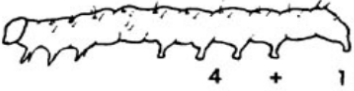


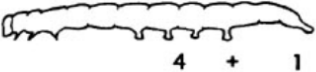









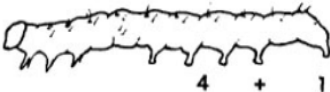



The pictures below will help you identify damaging caterpillars and the moths that deposit the eggs from which the larvae hatch. Being able to recognize the moths is a great skill to have, as it will let you know what to expect in the coming days when eggs are deposited and start hatching. Know these major species:

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FIELD KEY TO COMMON SOYBEAN CATERpillARS

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

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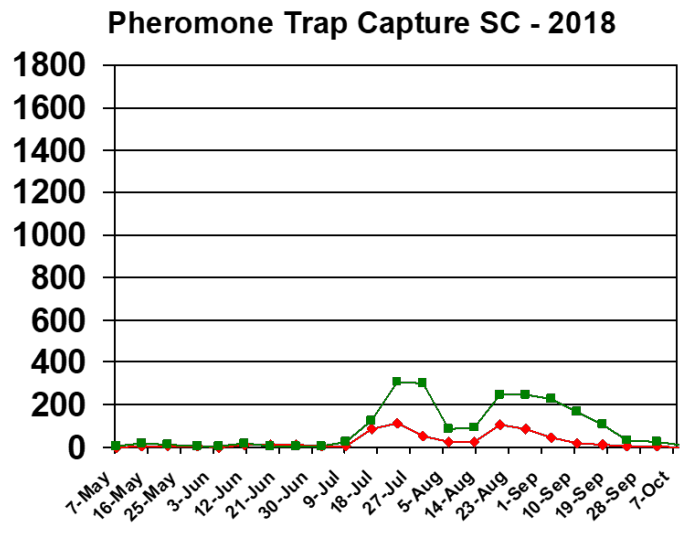
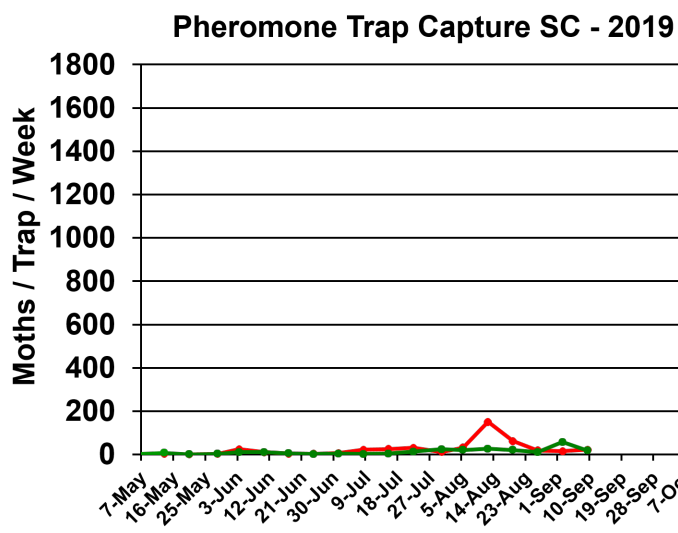
Bollworm & Tobacco Budworm



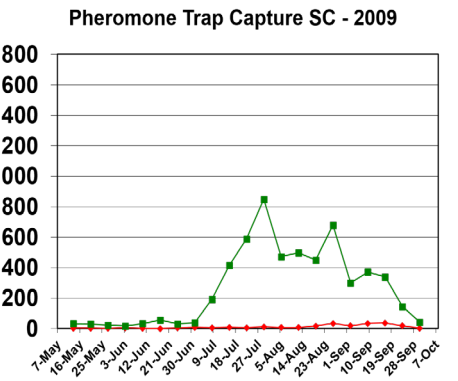
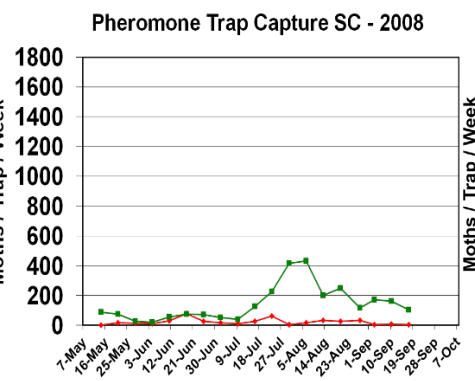
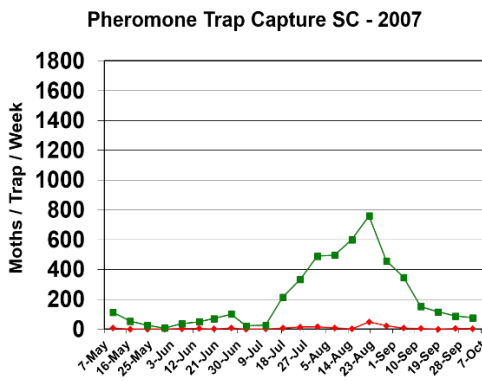
Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2018 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.



—●— TBW
—■— BW



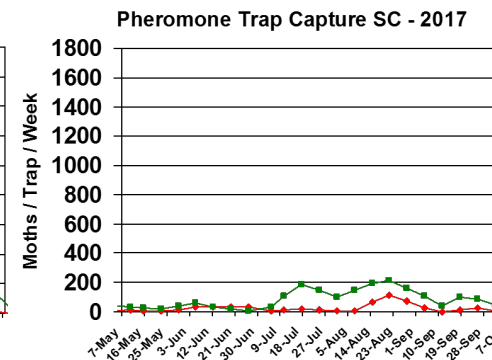
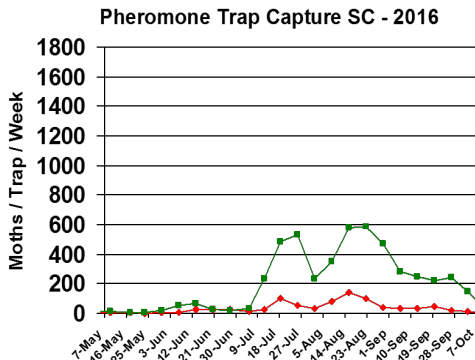
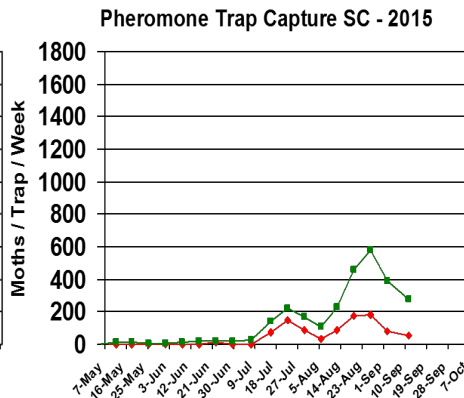
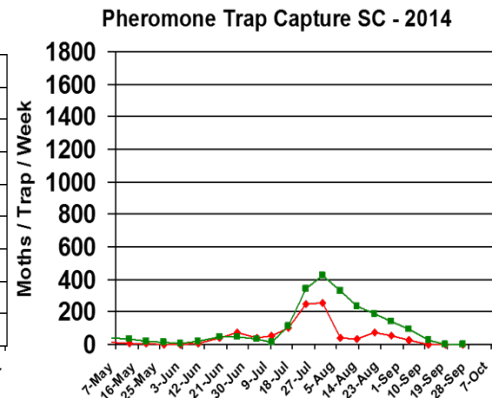
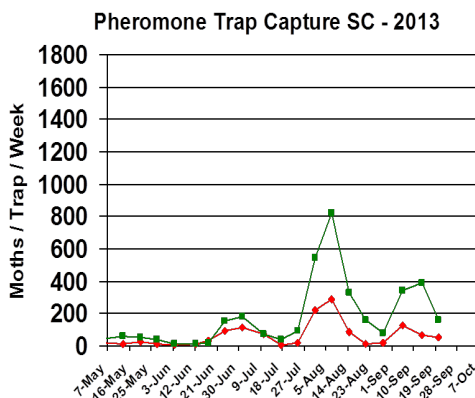
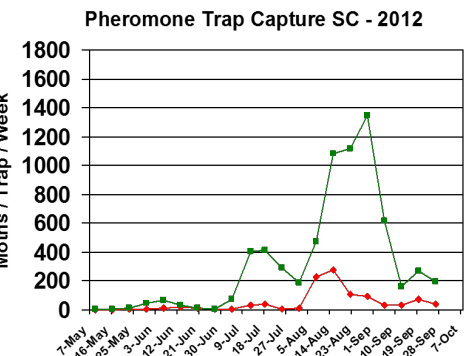
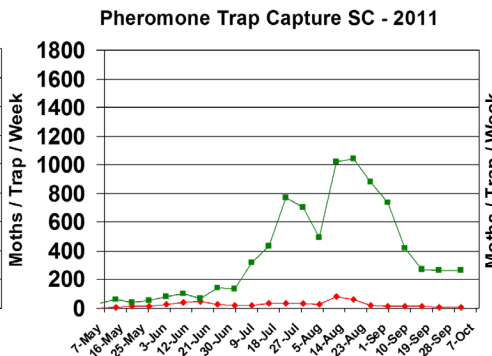
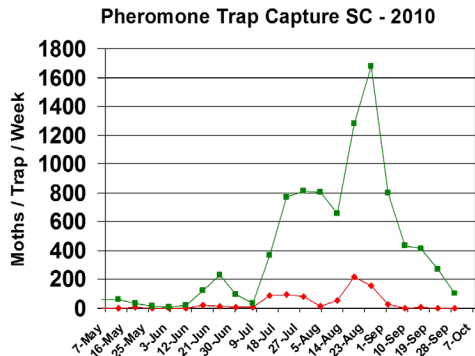
Trap data from 2007-2017 are shown below for reference to other years of trapping data from EREC:



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Pest Management Handbook – 2019

Insect control recommendations are available online in the 2019 South Carolina Pest Management Handbook at:

<https://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html>

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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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