



Cotton/Soybean Insect Newsletter

Volume 13, Issue #10

Edisto Research & Education Center in Blackville, SC

6 July 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

Chris Talley, county agent covering many of the Upstate counties (Anderson, Abbeville, Cherokee, Greenville, Oconee, Pickens, and Spartanburg), reported that he found some sugarcane aphids on some early grain sorghum in Anderson County this week. **Charles Davis**, county agent covering Calhoun and Richland Counties, sent the photo of aphids shown here and reported that “all is relatively quiet in the Calhoun County cotton fields with the exception of a growing aphid population. I have heard reports of a few spider mites, but the showers seem to be keeping the lid on them for now. Square retention looks good and older cotton is blooming.” **Drake Perrow**, a producer and consultant in Cameron, SC, reported that “aphids getting high in a good many fields. Also, spider mites showing their ugly head in droughty cotton. Picking up some plant bugs but square retention still good. Sure do not want to put out anything to flare spider mites more.” **Carl Sanders**, a local producer reported today that some of his cotton in the second week of bloom has flared squares and fruit on the ground from stink bugs and plant bugs. He admitted that he should have probably looked more closely at his cotton before now, and he said to tell everyone to get out there and scout your crops!



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Scouting Workshops

Your ag-focused county agents and I will be offering three **in-field scouting workshops** for cotton and soybean insects this summer. The interactive workshops will be held:

1. **18 July in Cameron, SC** (please RSVP with either Jonathan Croft [croft@clemson.edu] or Charles Davis [cdvs@clemson.edu], so we can plan for lunch)
2. **31 July in Lake City, SC** (please RSVP with either Hannah Mikell [hmikell@clemson.edu] or 803-435-8429] or Jacob Stokes [stokes3@clemson.edu], so we can plan for lunch)
3. **7 August at the Edisto REC near Blackville, SC** (again, so we can plan for lunch, please RSVP with either me [green4@clemson.edu], Mary Katherine Bamberg [mbamber@clemson.edu], Joe Varn [jvarn@clemson.edu], or Marion Barnes [jbrns@clemson.edu]).

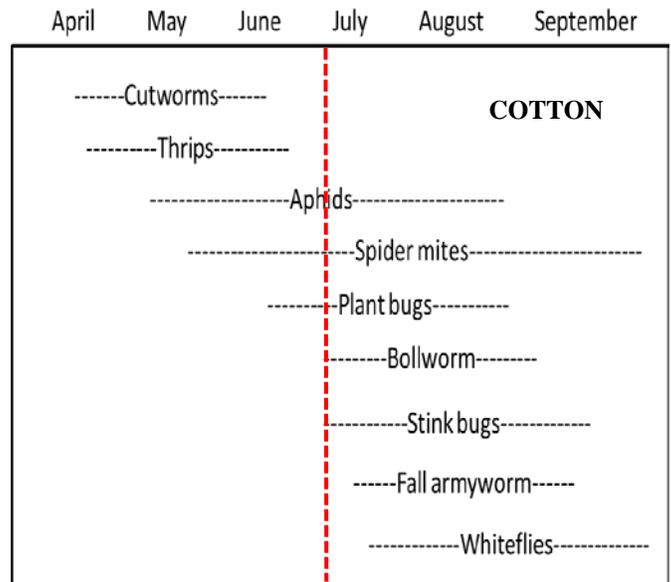
The trainings will be free to attend, start in the morning, and end with lunch. Stay tuned for more information. Detailed information will be sent out as each training date approaches.

Cotton Situation

As of 1 July 2018, the USDA NASS South Carolina Statistical Office estimated that about 35% of the crop is squaring, compared with 23% the previous week, 43% at this time last year, and 39% for the 5-year average. About 0% of the crop is setting bolls, compared with 0% the previous week, 3% at this time last year, and 6% for the 5-year average. The condition of the crop was described as 11% excellent, 72% good, 17% fair, 0% poor, and 0% very poor. These are observed/perceived state-wide averages.

Cotton Insects

Well, we have insects in cotton now, don't we? Aphids, spider mites, plant bugs, early stink bugs, etc, are out there, especially in the earliest planted fields. Spider mites could be an issue in your early planted cotton that missed rains and looks a little droughty. I would definitely check those fields for spider mites. Take a hand lens with you always. Rain is good for spider mites, so spray rain, if you can! Aphids are easy to find, with some spots in fields heavily infested. There is a report of the aphid fungus in Georgia, so we could get some natural control at some point...could be soon...could be later. I would treat aphids only if spots of heavily infested plants are just too numerous or enough of the field is moderately and uniformly infested, as most fields are not under drought stress (although we can always use a rain event) but are growing well. The neonicotinoids might not provide good control, but if you are going over with growth regulator and have moderate-to-heavy aphids, you might want to put the neonic in the tank. Here are our recommendations for treating aphids in cotton:



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APHIDS

Product	Product/acre	Lb ai/acre	Acre/gal	REI	PHI	Comments
sulfoxaflor Transform 50 WG	0.75-1.0 oz	0.23-0.031	-	24 hr	14 d	End user stocks only
acetamiprid Assail 30 SG Assail 70 WP (Intruder 70)	1.5-2.5 oz 0.6-1.1 oz	0.025-0.05	- -	12 hr	28 d	Ovicidal activity on caterpillars
dicotophos Bidrin 8	8.0 oz	0.5	16	6 d	30 d	16 oz limit post bloom
flonicamid Carbine 50 WG	1.4-2.8 oz	0.044-0.088	-	12 hr	30 d	
thiamethoxam Centric 40 WG	1.25-2.0 oz	0.031-0.05	-	12 hr	21 d	5 oz limit for season
imidacloprid Couraze 4 F Couraze 2 F Admire Pro 4.6	1.0-2.0 oz 2.0-4.0 oz 0.9-1.7 oz	0.031-0.0625	64-128 32-64 75-142	12 hr	14 d	
clothianidin Belay 2.13	3.0-5.0 oz	0.05-0.083	25.6-42.6	12 hr	Pinhead square	1 application for season

Treat only when high numbers of aphids are severely infesting plants, populations are building, and the margins of terminal leaves are drooping. Aphids will cause more damage when plants are suffering from lack of moisture, and there are few signs of natural control agents. If there is evidence of widespread parasitism (dead aphids, tan colored and swollen in appearance) and/or fungal pathogens (diseased aphid bodies have a grayish-green colored fuzzy appearance) an insecticide should not be applied. Avoid unnecessary insecticide applications, as subsequent reductions in beneficial populations can result in damage from bollworm and fall armyworm.



Reports of plant bugs continue to come in, so continue to scout for tarnished plant bug (TPB) using square retention counts and sweep nets until you get to the first week of bloom. Square retention should be at or above 80% and TPB numbers below 8 per 100 sweeps. You will likely see numbers of adults decline as we move into flowering cotton. You will want to use a black drop cloth to check for immature TPB

in flowering cotton. The smaller nymphs will look like very fast green aphids on the drop cloth. If you missed the earlier newsletters, check those out for more photos of plant bugs, but here are a couple of photos of an adult and immature TPB.



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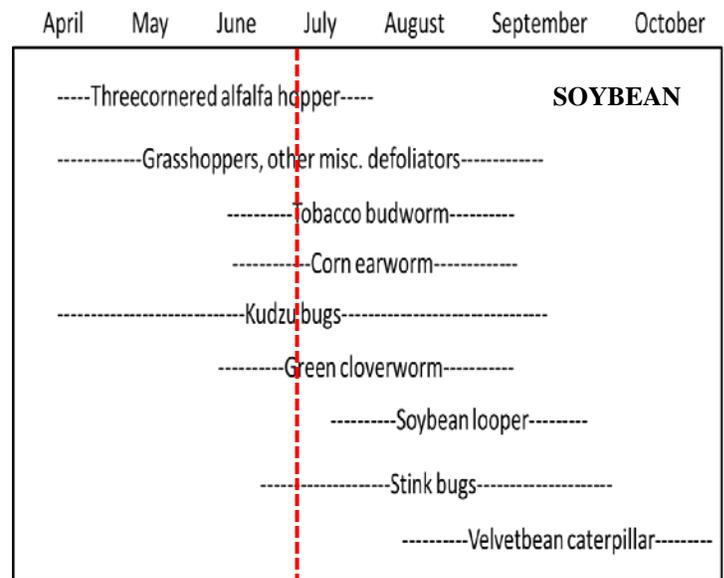
Also, stink bugs are still numerous in corn, and they will be moving to cotton soon, as blooms turn into bolls. Get ready to check boll injury and look for stink bugs. Also, bollworm moths will be emerging from pupae in the ground in corn fields soon. So, keep an eye out for moths as you flush them walking cotton, and start checking for eggs. Finally, we have been seeing some fall armyworms in corn, and that is early for this migratory species. We might need to keep a close watch on this species this season. At least for now, get a good handle on where you are with aphids and plant bugs, checking also for spider mites, and know that more species diversity is heading your way in cotton soon!

Soybean Situation

As of 1 July 2018, the USDA NASS South Carolina Statistical Office estimated that about 93% of our soybean crop has been planted, compared with 93% the previous week, 95% at this time last year, and 92% for the 5-year average. About 87% of the crop has emerged, compared with 86% the previous week, 88% at this time last year, and 82% for the 5-year average. About 1% of the crop is blooming, compared with 0% the previous week, 10% at this time last year, and 5% for the 5-year average. The condition of the crop was described as 0% excellent, 70% good, 25% fair, 5% poor, and 0% very poor. These are observed/perceived state-wide averages.

Soybean Insects

I sound like a broken record on early season insects in soybeans, but don't neglect looking at vegetative soybeans for stem feeders like threecornered alfalfa hopper (TCAH) and kudzu bugs. I haven't seen many kudzu bugs this season, so they might be low again this year. However, we have observed many TCAH on wild hosts, and injury to soybean has already been reported. You need to have several per sweep or per rowft to justify treating, and that is a lot of TCAH. You should know if you have an issue with TCAH, if you are checking, but you have to go to each field and scout to know! We have a graduate student doing some experiments with caged TCAH on soybeans, so I hope to have more information to report about this pest in the near future. Thankfully, soybeans are very forgiving, and we can lose some of the stand to 4- and 6-legged animals before yield loss results. Scout early soybeans for insects!



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Bollworm & Tobacco Budworm

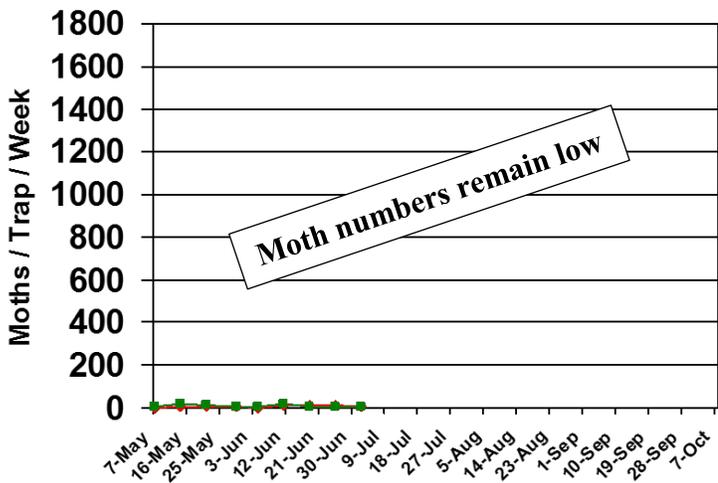


Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2017 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these

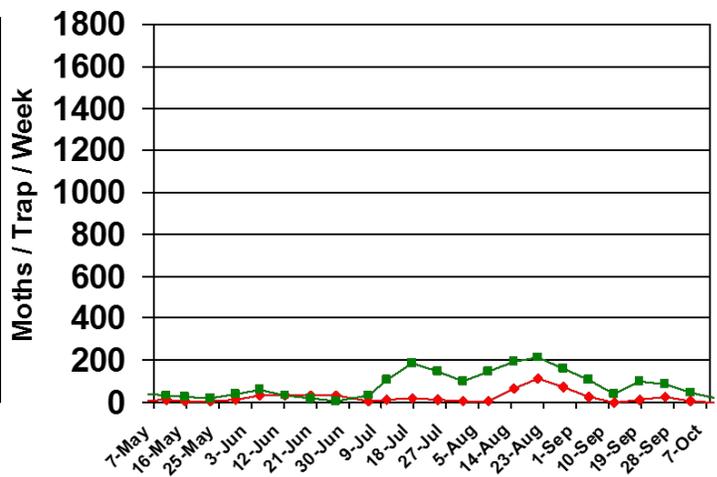
data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.



Pheromone Trap Capture SC - 2018

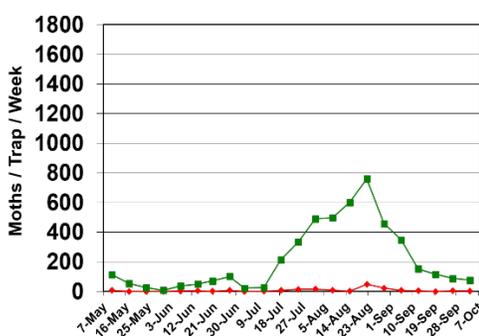


Pheromone Trap Capture SC - 2017

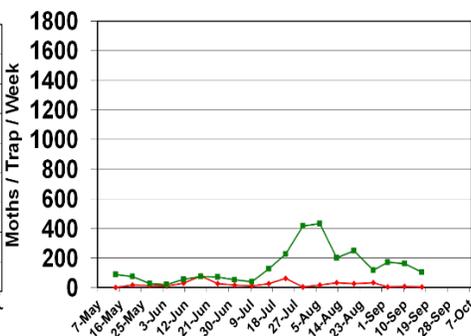


Trap data from 2007-2016 are shown below for reference to other years of trapping data from EREC:

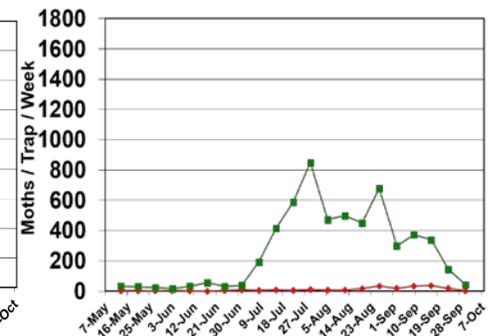
Pheromone Trap Capture SC - 2007



Pheromone Trap Capture SC - 2008



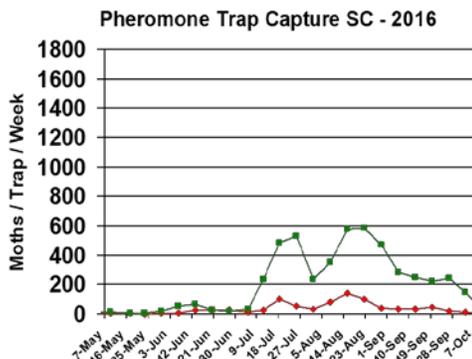
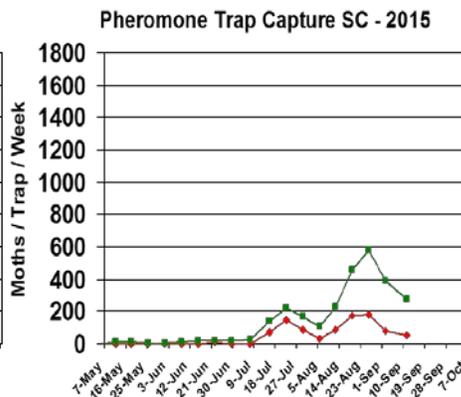
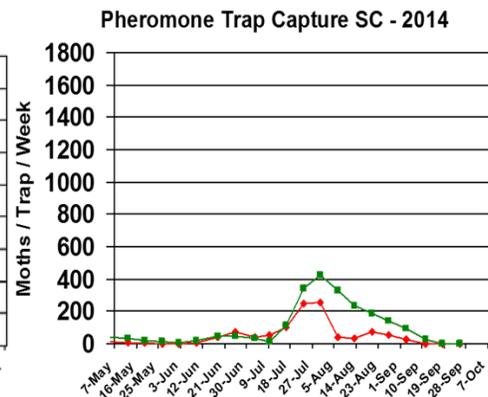
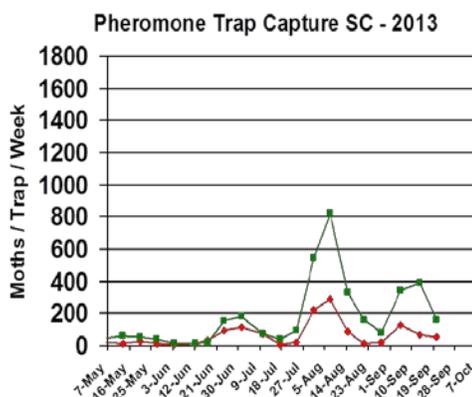
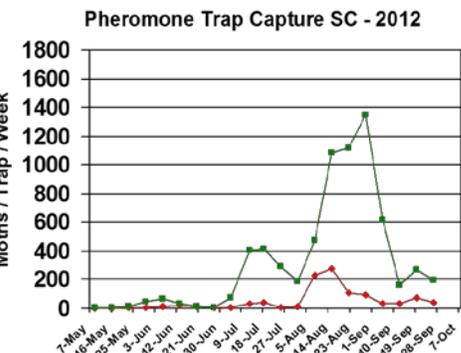
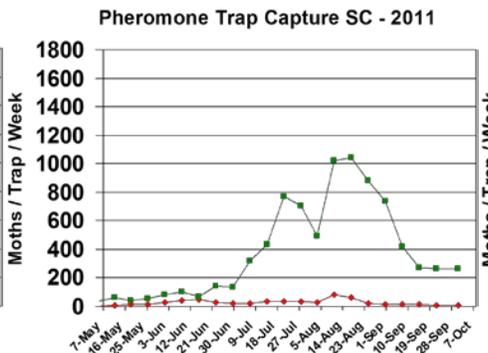
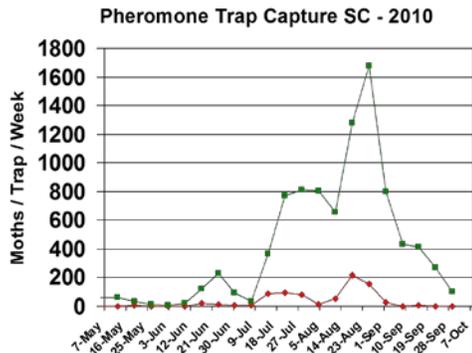
Pheromone Trap Capture SC - 2009



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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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