Cotton/Soybean Insect Newsletter

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Pest Patrol Alerts

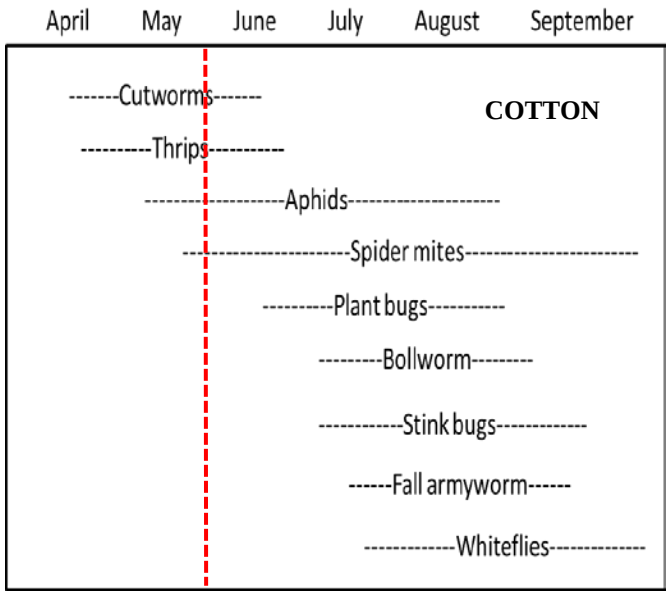
The information contained herein each week is available via text alerts that direct users to online recordings. I will update the short message weekly for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users 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 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

Well, the last couple of weeks of rain continues to dominate the discussion regarding just about anything related to producing cotton or soybeans. When I asked our county agents if they had any news to report this week about insects in cotton or soybeans, most of them gave me quotes like the following: "bugs better be able to swim if they are out up here" or "all of our insects are in life rafts!" – I just hope that we don't go from one extreme to the other. As you know, it can get dry quick in our soils. We are never more than about a week from a drought, right? ☺ Thrips continue to be the primary group of insects causing issues in cotton, and it remains too wet to get out sprays for thrips or the weeds. Weed control is likely the main concern at this point.



Scouting Workshops

Your ag-focused county agents and I will be offering some in-field scouting workshops for cotton and soybean insects this summer, so stay tuned for those dates. ***Tentatively***, the interactive workshops will be held on 18 July in Cameron, SC, and somewhere in the Pee Dee Region on 31 July. We might have another training in the southern portion of the state…still working on that one. The trainings will be free to attend, start in the morning, and end with lunch. Stay tuned for more information!

Cotton Situation

As of 27 May 2018, the USDA NASS South Carolina Statistical Office estimated that about 68% of the crop has been planted, compared with 48% the previous week, 75% at this time last year, and 73% for the 5-year average. These are observed/perceived state-wide averages.

Cotton Insects

Again, we continue to focus on management of thrips. Populations are high in some locations and low in others, clearly demonstrating that you have to get out and scout each field to know for sure. Here is a link to a video we did years ago (2013) about options for thrips, and, near the end of the video, I give a few tips about sampling for thrips. Nothing new here…just a refresher on sampling adults with a white cup and immatures with a dark background. https://www.youtube.com/watch?v=PVOQA3OXcpI

The remainder of the cotton crop will hopefully be planted by the end of next week (39 May…we don't plant cotton in June, right?). Here are a couple of photos of some demonstration plots we planted at Edisto REC with varying planting dates. Cotton planted in April (pictured far left below was planted on 26 April) missed some of the pressure from thrips, but cotton planted during the first week or so of May (right photo below planted on 3 and 10 May) seems to have sustained the most injury from thrips (although light), indicating that the thrips predictor tool was spot on for predicting risk in our area.

Recommendations for insecticide control of thrips after planting are shown below again. Remember, applications of insecticide for thrips after the 4-5-leaf stage are almost always "revenge killing" sprays that don't pay for themselves, and applications of acephate applied too late can also flare aphids and spider mites. So, don't do it! Radiant is another option for foliar control of thrips that will be less disruptive but more expensive. Our research has shown that the best time to spray for thrips is when they meet or exceed threshold during the 1-2-leaf stage, with the best results observed at the 1st leaf stage of growth. Recommendations for thrips are available in the 2018 Pest Management Handbook under *foliar sprays* at:
http://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html

THRIPS

Product (foliar sprays)	Product/acre	Lb ai/acre	Acre/gal	REI	PHI	Comments
dicrotophos **(R)** Bidrin 8 E	 3.2 oz	0.2	 40	6 d	30 d	3.2 oz limit pre-bloom
acephate Orthene/Acephate 97 Orthene/Acephate 90	 3.0 oz 3.2 oz	0.18	 - -	24 hr	21 d	
dimethoate Dimethoate 4 EC	 8.0 oz	0.25	 16	48 hr	14 d	
spinetoram Radiant 1 SC	 1.5-3.0 oz	0.0117-0.0234	 42.7-85.3	4 hr	28 d	Adjuvant recommended

Foliar treatments will be most effective when applied to cotton seedlings prior to unfolding of the second true leaf. A foliar insecticide treatment may be needed when two or more thrips are found per plant. Shake each plant (randomly select 25 or more) into a coffee cup or a similar utensil to facilitate counting. When most plants have severely damaged growing points and immature thrips are present, one or more foliar treatments may be needed to allow the plants to resume normal growth and development. Examine plants 5-7 days after the initial treatment, and treat again if immatures are still present on most plants. When the newly unfolded leaves of infested plants are free of damage, and plants appear to be growing at a normal rate, further applications of insecticides will have little benefit. Treatments applied beyond the four-leaf stage of growth may actually be counterproductive, as these would likely reduce beneficial populations and result in early-season problems with other pests. Although effective, acephate can flare populations of spider mites and aphids.

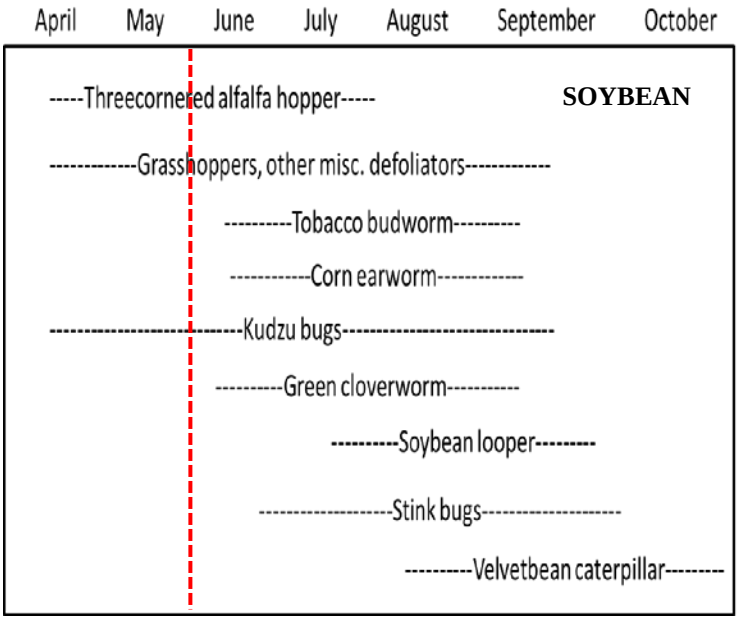
As we get through the thrips window, we need to start looking for spider mites and aphids on the young cotton crop. Early infestations are easy to miss and can build quickly. Potential for injury is dependent on numerous factors, but, basically, it is in scenarios where we have additive stressors, such as drought, injury from arthropods, limited fertility, etc, when we observe problems with aphids and spider mites. Otherwise, we can stand some of these arthropods. We will see what the coming weeks bring us regarding rainfall and pest abundance. You can easily monitor the weather from your home or truck, but you have to get into the field to assess the pests. Early season scouting does not take long and provides much information about the young crop. Walk across a few rows and look closely at some seedlings.

Soybean Situation

As of 27 May 2018, the USDA NASS South Carolina Statistical Office estimated that about 50% of our soybean crop has been planted, compared with 21% the previous week, 40% at this time last year, and 44% for the 5-year average. About 21% of the crop has emerged, compared with 15% the previous week, 25% at this time last year, and 27% for the 5-year average. These are observed/perceived state-wide averages. It has been dry and hot this week.

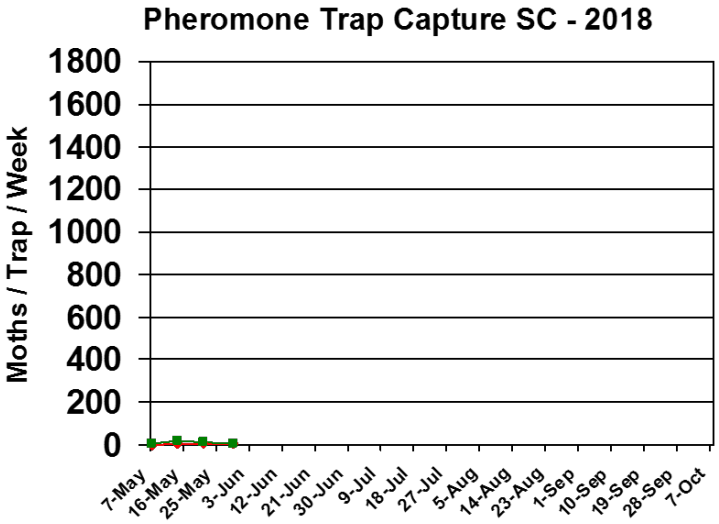
Soybean Insects

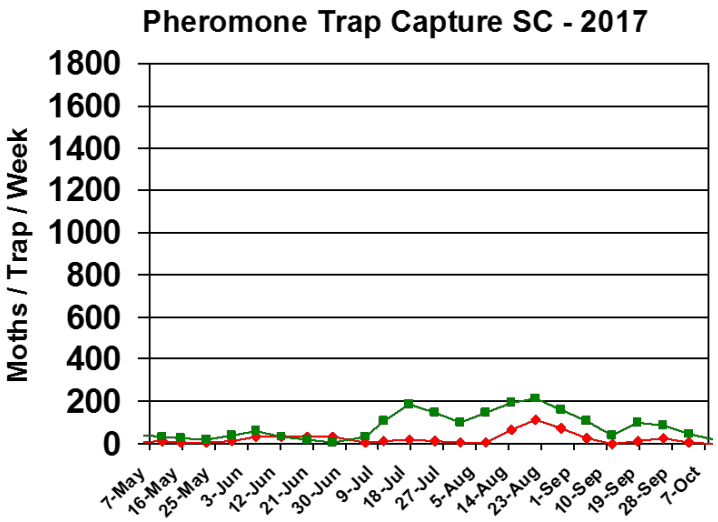
Again this week, there is not much to report regarding insect issues in soybeans for this past week. Because only about half of the crop has been planted, there are few issues with insects so far. If you take a look at the timeline chart above, you can see what major pests you are generally at risk for at this time of year. Those continue to include grasshoppers and threecornered alfalfa hoppers, with kudzu bugs not really an issue until later. You should scout the young crop as it emerges, though, to ensure that other problems are not present. Scout early soybeans for insects!



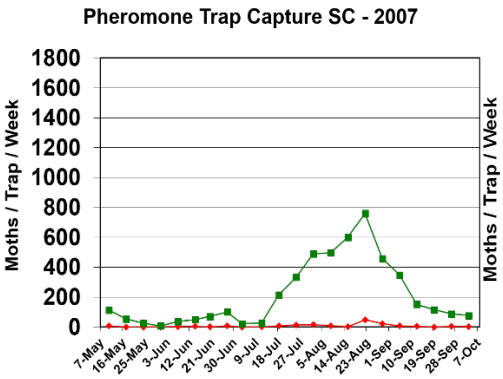
Bollworm & Tobacco Budworm

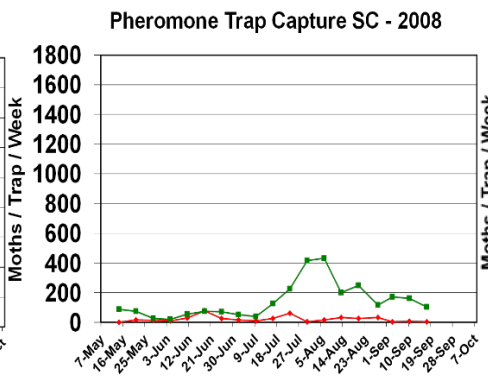
Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2017 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.

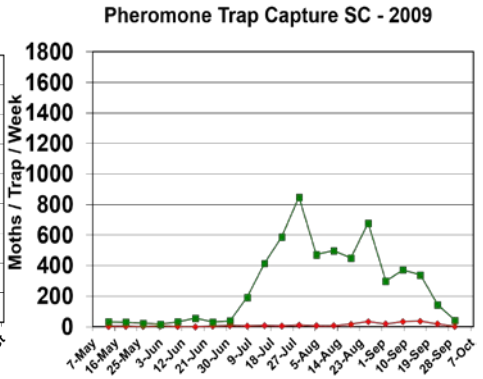


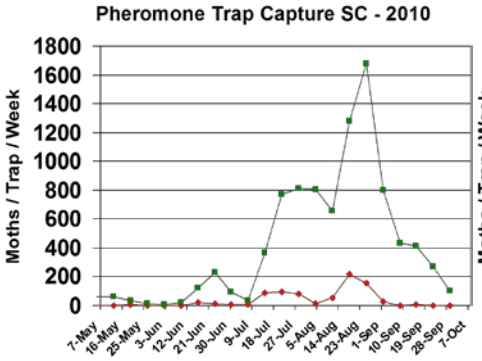


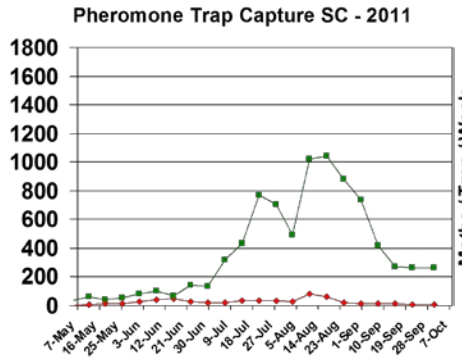
Trap data from 2007-2016 are shown below for reference to other years of trapping data from EREC:

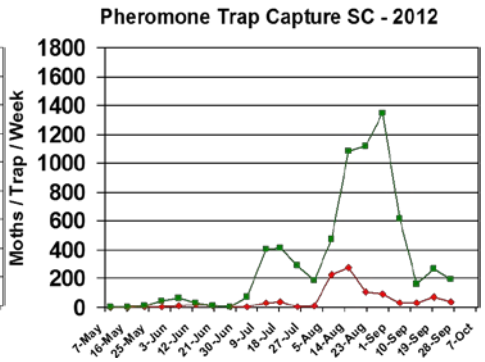


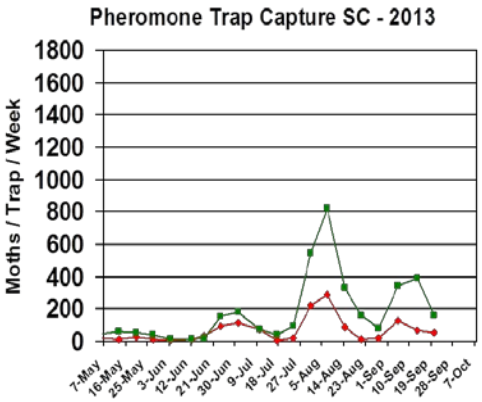


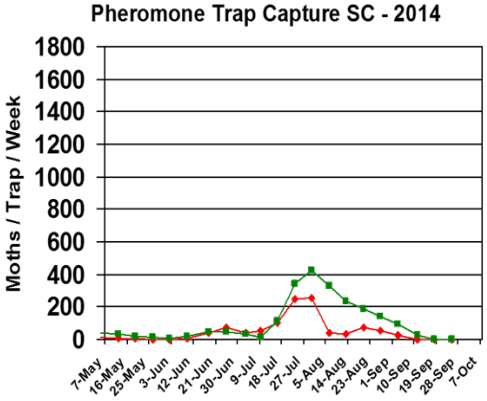


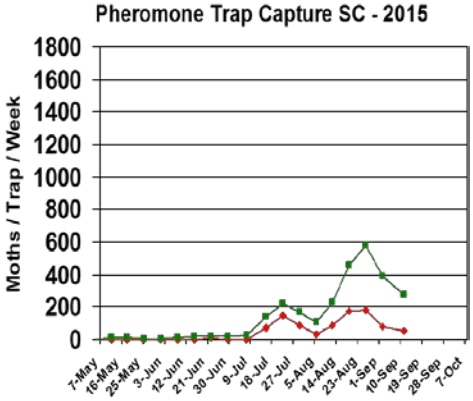


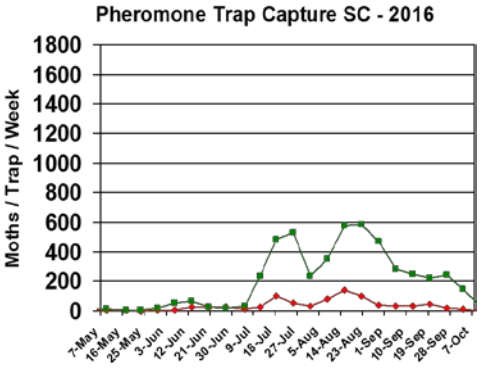








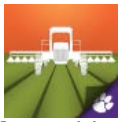




Pest Management Handbook – 2018

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

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

Sincerely,

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

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