



Cotton/Soybean Insect Newsletter

Volume 13, Issue #14

Edisto Research & Education Center in Blackville, SC

3 August 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

Jonathan Croft, county agent in Orangeburg County, reported sub-threshold numbers of soybean loopers in soybean (most of what I am seeing right now are green cloverworms...be sure of species!). Several other county agents reported that there was limited activity regarding insects in soybeans this past week.

Scouting Workshops (final one on 7 August!)

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

1. ~~18 July in Cameron, SC~~ (was a big success, thanks to Jonathan Croft and Charles Davis)
2. ~~31 July in Lake City, SC~~ (was a big success, thanks to Hannah Mikell)
3. **7 August at the Edisto REC near Blackville, SC** (again, so we can plan for lunch, please RSVP with either me [[greene4@clemson.edu](mailto:green4@clemson.edu)], Mary Katherine Bamberg [mbamber@clemson.edu], Joe Varn [jvarn@clemson.edu], or Marion Barnes [jbrns@clemson.edu]).

The trainings are free to attend, start in the morning, and end with lunch. See detailed agenda. Here are a few photos from our training this past Tuesday.



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Cotton Situation

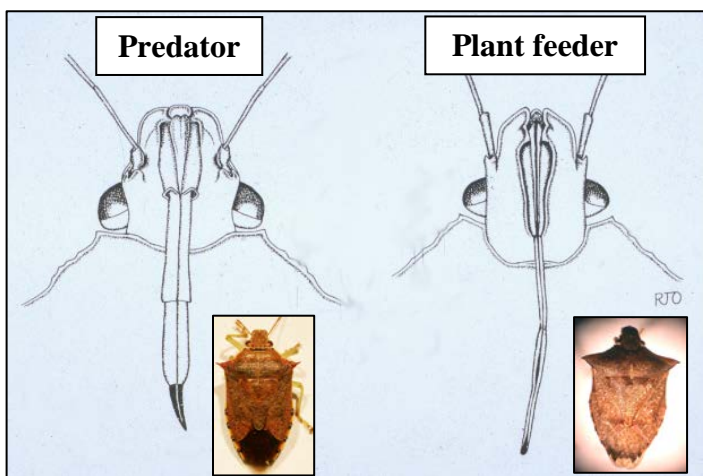
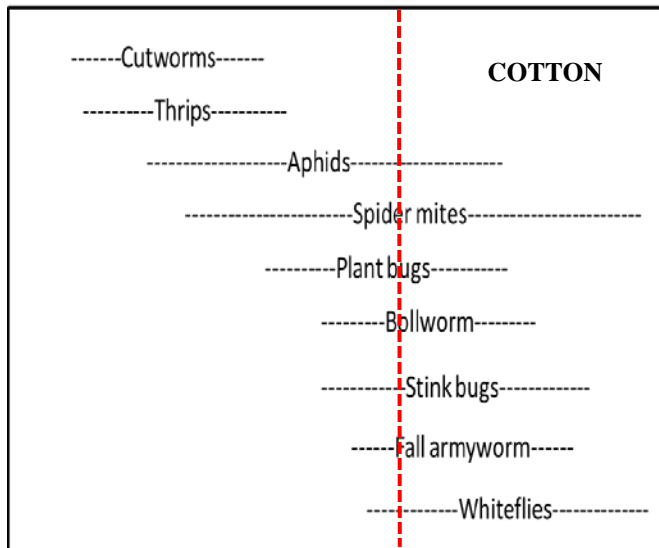
As of 29 July 2018, the USDA NASS South Carolina Statistical Office estimated that about 80% of the crop is squaring, compared with 75% the previous week, 88% at this time last year, and 92% for the 5-year average. About 45% of the crop is setting bolls, compared with 41% the previous week, 58% at this time last year, and 59% for the 5-year average. The condition of the crop was described as 28% excellent, 55% good, 14% fair, 3% poor, and 0% very poor. These are observed/perceived state-wide averages.

Cotton Insects

Stink bugs are the number one pest of cotton, especially this month – August is Stink Bug Month!

Aphids are gone, spider mites are sporadic, as the rains have kept most of them suppressed, and bollworm pressure is noticeable but not crazy high like it has been in the past. So, we should be most concerned about stink bugs right now. Proper identification of brown or green species is needed, as are well-timed applications of insecticide when boll-injury and insect counts meet or exceed thresholds. Our thresholds for stink bugs are variable (called the dynamic boll-injury threshold) and based on week of bloom. You should know in what week of bloom each field is that you check. Here is a photo of a freshly hatched egg mass from green stink bug I took yesterday. That is okra-leaf cotton in the background...not growing any hemp here! We observed many spined soldier bugs in soybeans this week, and they can be confused with brown stink bug. Look at mouthparts to be sure. Predator on left and plant feeder on right.

April May June July August September



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Continue to look for bollworm escaping control with the Bt toxins. There is some pressure out there, but my pheromone trap data indicate that this generation (flight) has peaked. Our last counts of adults in traps were down. Continue to look for eggs, but know that some are from tobacco budworm. Eggs should be counted on the top 20% of the plant and around each bloom. Look for larvae in terminals, squares, blooms, on top of bolls under bloom tags, and on the sides of bolls. Look for injured squares, blooms, and bolls. We have bollworm in our non-Bt cotton, but 2- and 3-gene cotton look good, for the most part. Use our thresholds published in the Pest Management Handbook:

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

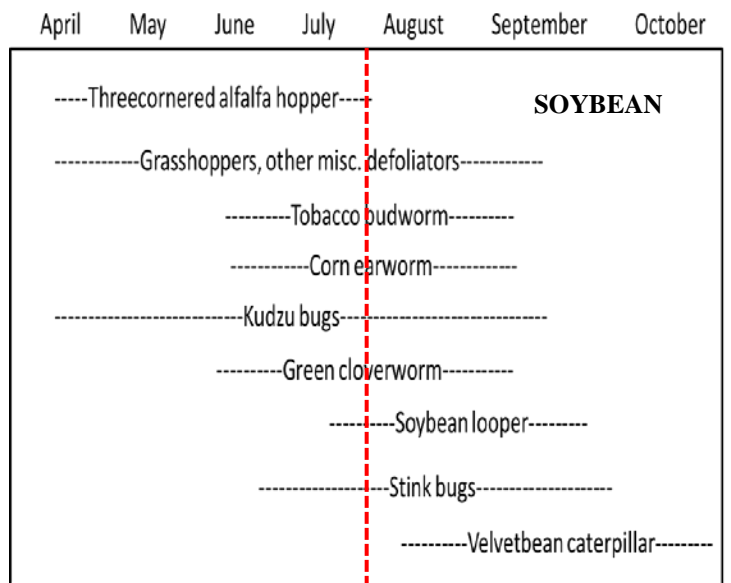


Soybean Situation

As of 29 July 2018, the USDA NASS South Carolina Statistical Office estimated that about 23% of the crop is blooming, compared with 20% the previous week, 52% at this time last year, and 43% for the 5-year average. The condition of the crop was described as 4% excellent, 75% good, 19% fair, 2% poor, and 0% very poor. These are observed/perceived state-wide averages.

Soybean Insects

We continue to be in good shape in soybeans. There are many green cloverworms (GCW) out there that might be confused with soybean



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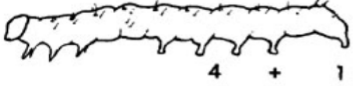












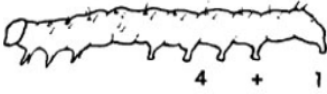



loopers (SBL). The small GCW caterpillars can crawl with a looping action, and the 3rd pair of abdominal legs can sometimes be difficult to see. Don't notice the small caterpillars "looping" on the drop cloth and assume they are SBL. Right now, there is a good chance they are the easier to kill GCW. We have seen a good many stink bugs in soybeans, and I did see a SBL moth in cotton today (pictured here), so they are here laying eggs, and we will see more issues with insects in soybeans during the coming weeks. Continue to use the guide below to hone your skills at identifying moths and larvae for the major species you will see in soybeans. Remember, your choice of insecticide depends on proper identification of species. Use this pictorial key to help with those identifications.



CLEMSON UNIVERSITY
 Prepared by Jeremy Greene, Professor of Entomology

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

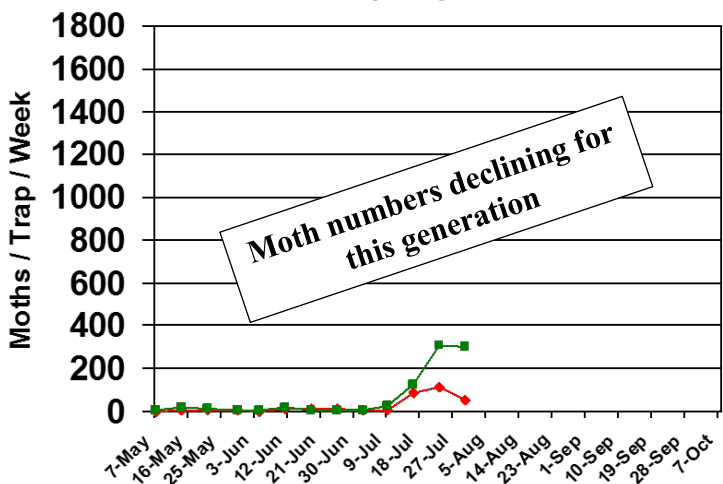


Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2017 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these

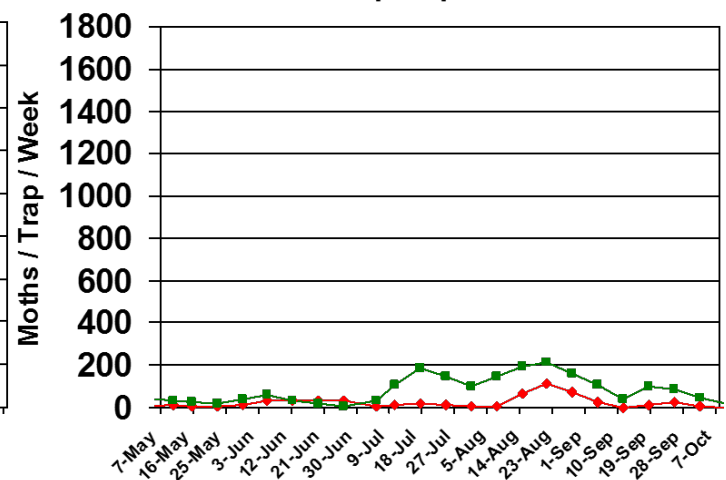
data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.



Pheromone Trap Capture SC - 2018

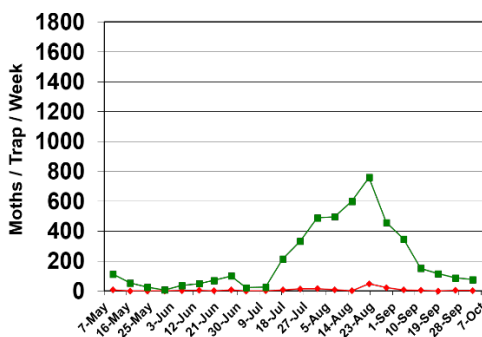


Pheromone Trap Capture SC - 2017

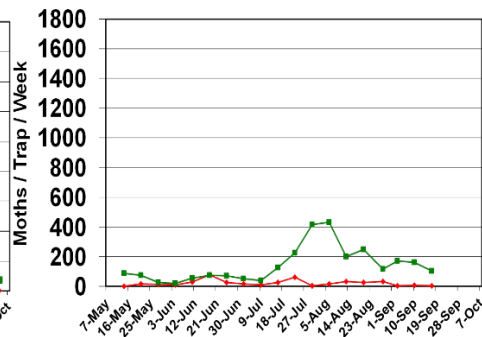


Trap data from 2007-2016 are shown below for reference to other years of trapping data from EREC:

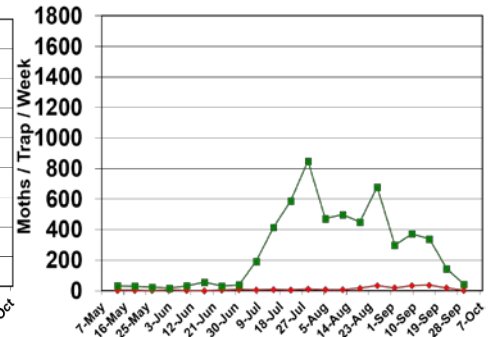
Pheromone Trap Capture SC - 2007



Pheromone Trap Capture SC - 2008



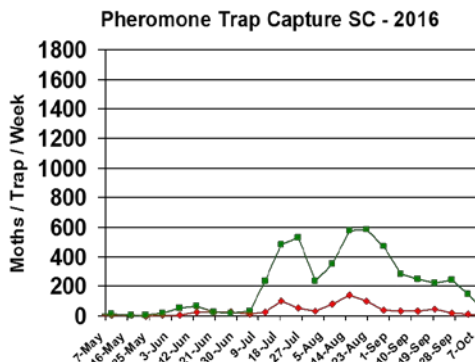
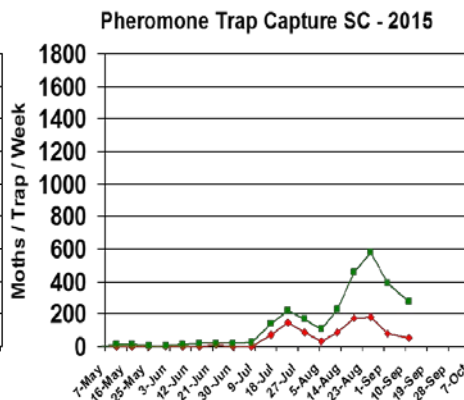
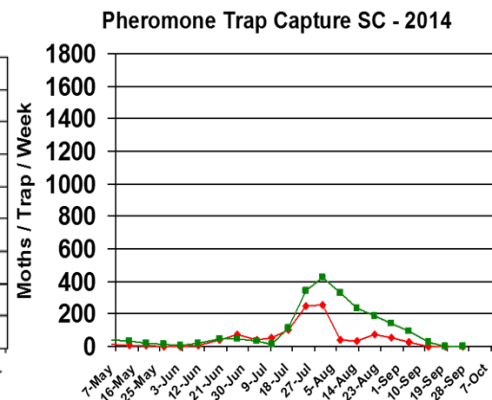
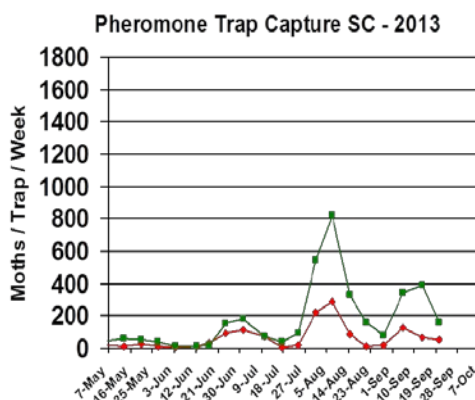
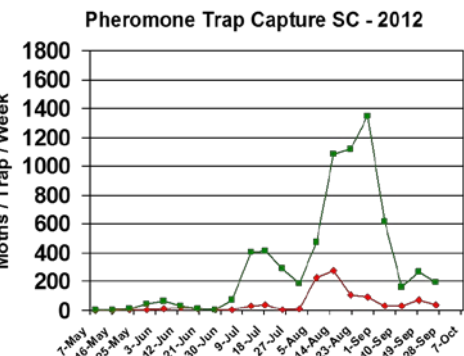
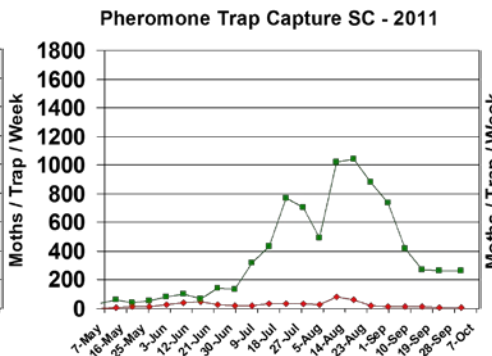
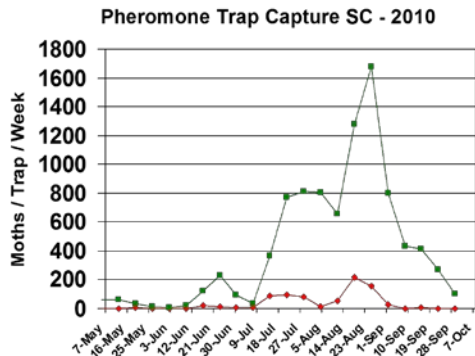
Pheromone Trap Capture SC - 2009



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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/>

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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