



Cotton/Soybean Insect Newsletter

Volume 18, Issue #16 Edisto Research & Education Center in Blackville, SC

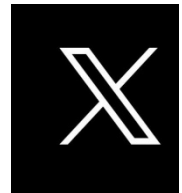
24 August 2023

Pest Patrol Alerts ***(new instructions below, if you have stopped receiving text alerts)***

Some of the information contained herein each issue is available via text alerts that direct users to online audio 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. Subscribers can just click on the link in the text to hear the update. Users can subscribe for text message alerts for my updates by signing up online at <https://www.syngenta-us.com/pest-patrol> by scrolling down on this landing page, entering your information, and including your mobile number. Select 'South Carolina' from the list, and you can sign up for multiple states at the same time. Pest Patrol Alerts are sponsored by Syngenta. Thank you!

Updates on Twitter

When noteworthy events happen in the field, I will be sending them out quickly via X (formerly Twitter). If you want to follow those quick updates, follow me at [@BugDocIsIn](https://twitter.com/BugDocIsIn) on X (I liked the Twitter name better).



News from Around the State

Charles Davis, county agent in Calhoun County, reported observing “boll damage from stink bugs in Richland County yesterday. These were big bolls so the damage was done earlier. He was going back across the field with a last shot of growth regulator [and put] some bifenthrin in the tank [because] damage was easy to find...I am sure the stinks haven't left the scene of the crime.” **Jay Crouch**,

county agent covering Newberry, Saluda, Edgefield, York, and Chester Counties, reported there being a “couple of last sprays going out in cotton for stink bugs. Found VBC in some group VI beans today. Defoliation well under threshold right

now.” **Jonathan Croft**, county agent covering Orangeburg County, reported that he “checked some cotton in Orangeburg this week that needed to be sprayed for stink bugs.” **Chris Talley**, county agent in Oconee County, reported “seeing a few green cloverworms in the Upstate but not tremendous amounts yet.”





Upcoming Field Days

Our annual fall field days are almost here. Stay tuned for more details on the topics that will be covered. There will be pesticide and CCA credits offered, and most field days include lunch also!

- 31 August – Field Day at Pee Dee REC in Florence, SC
- 7 September – Peanut Field Day at Edisto REC in Blackville, SC
- 14 September – Piedmont Field Day at the Simpson Station
- 21 September – Row-Crop Field Day (cotton, soybeans, etc.) **and** Vegetable/Fruit Field Day (sweet potatoes, pumpkins, tomatoes, watermelons) at Edisto REC in Blackville, SC

Cotton Situation

As of 20 August 2023, the USDA NASS South Carolina Statistical Office estimated that about 89% of the crop is setting bolls, compared with 83% the previous week, 90% at this time last year, and 89% for the 5-year average. About 6% of the crop has bolls opening, compared with 3% the previous week, 5% at this time last year, and 5% for the 5-year average. The conditions of the crop were reported as 6% excellent, 60% good, 31% fair, 2% poor, and 1% very poor. These are reported statewide averages.

Cotton Insects

Bollworm – Captures of bollworm moths in our pheromone traps stayed higher again this week than they did all last year. That is at least several weeks in a row higher than all last year. We rated some bollworm injury in a late-planted test in non-Bt cotton this morning, and the damage was widespread, with bollworms easily found in squares and blooms. In our weekly checks of bollworm escaping Bt control in my plots, boll damage was at 15, 3, and 0% in the non-Bt, 2-gene, and 3-gene Bt cotton, respectively. This is low pressure, but it is sustaining for weeks now.



Spider Mites – Keep checking for populations of spider mites because they are building in some locations. A good rain or stout irrigation tend to alleviate problems with spider mites, and there are some good miticides, but they can be expensive.

Stink Bugs – I observed **A LOT** of stink bugs and leaffooted bugs this afternoon when pulling bolls for assessments of stink bug injury in a test I sprayed a few weeks ago. Reproducing adults were easily observed, and boll damage from stink bugs was **VERY HIGH**.






Continue to use the dynamic boll-injury threshold by week of bloom to manage the complex, and you should be in good shape. The decision cards we made years ago (shown here) summarize how to use the threshold.


Decision aid for stink bug thresholds in Southeast cotton

- 1 Pull random sample of quarter size diameter bolls, avoid field edges. (boll sizes between 0.9" and 1.1")
- 2 1 boll / acre, no less than 25 / field.
- 3 Sort bolls into two piles: those with and those without, obvious external lesions.
- 4 Crack and inspect bolls with external lesions for internal damage (boll wall warts, stained seed or lint).
- 5 If threshold is not met for that week, (see chart) check the remaining bolls for internal damage.
- 6 Treat field only if the threshold is met for that week.



0.9"

Bolls should fit through the large hole but not the small one.




1.1"

Week of bloom	Threshold (% internal boll damage)
1	50%
2	30%
3	10%
4	10%*
5	10%*
6	20%
7	30%
8	50%


*Consult state guidelines for scouting intervals.


Decision aid for stink bug thresholds in Southeast cotton

Stained seed and lint




Boll wall warts







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External lesions



Boll diameter should be between 0.9" and 1.1"

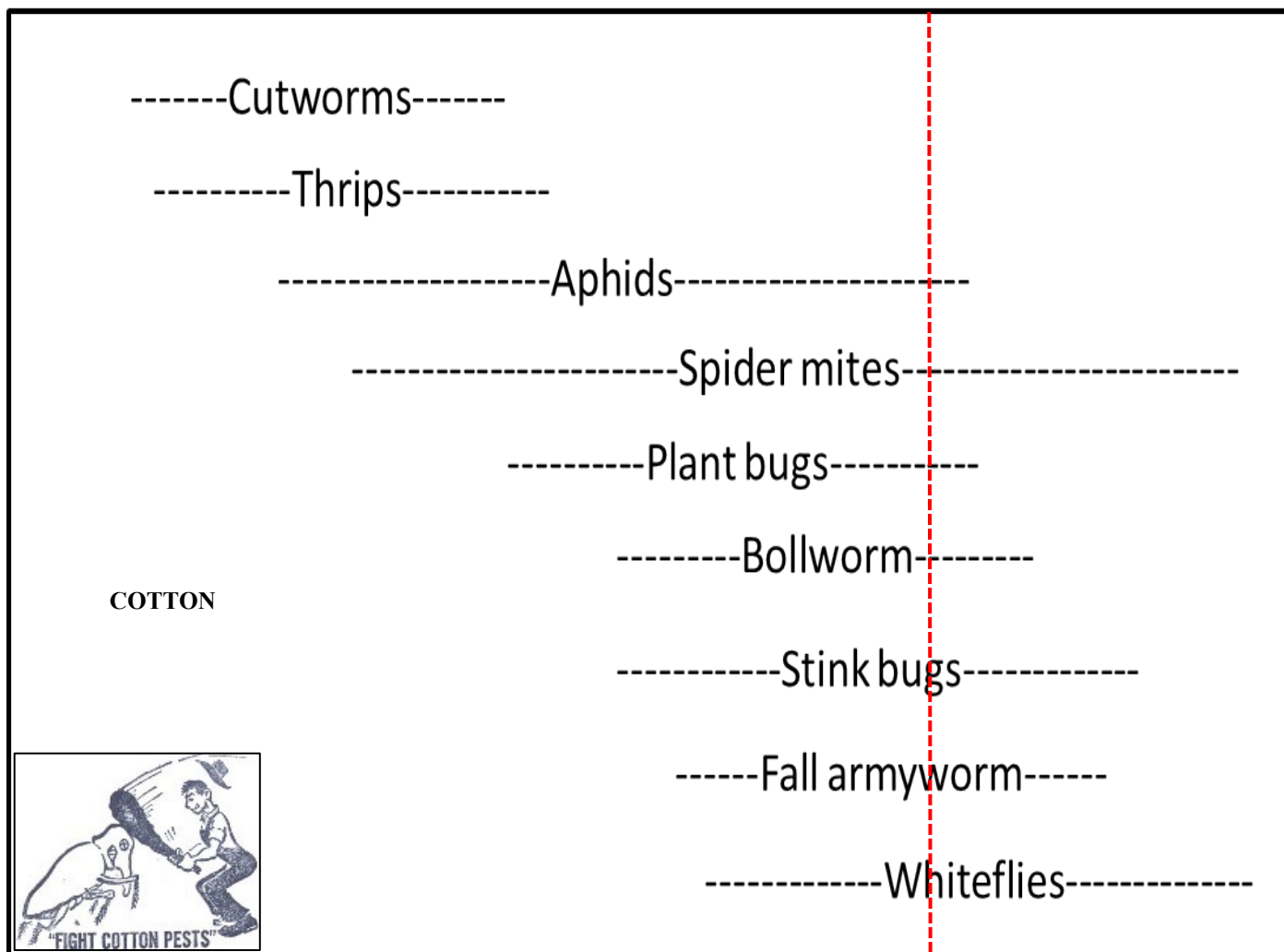


Quarter size boll





April May June July August September



Soybean Situation

As of 20 August 2023, the USDA NASS South Carolina Statistical Office estimated that about 81% of the crop is blooming, compared with 73% the previous week, 76% at this time last year, and 79% for the 5-year average. About 51% of the crop is setting pods, compared with 39% the previous week, 42% at this time last year, and 40% for the 5-year average. The conditions of the crop were reported as 8% excellent, 60% good, 24% fair, 5% poor, and 3% very poor. These are reported statewide averages.

Soybean Insects

Again this week, more insect activity is showing in soybeans. We are seeing more green cloverworm, soybean looper, and velvetbean caterpillar each time we go into soybeans. Defoliation is picking up as those migratory species move into our area. Kudzu bugs and stink bugs are also building, and the grasshoppers will not quit.



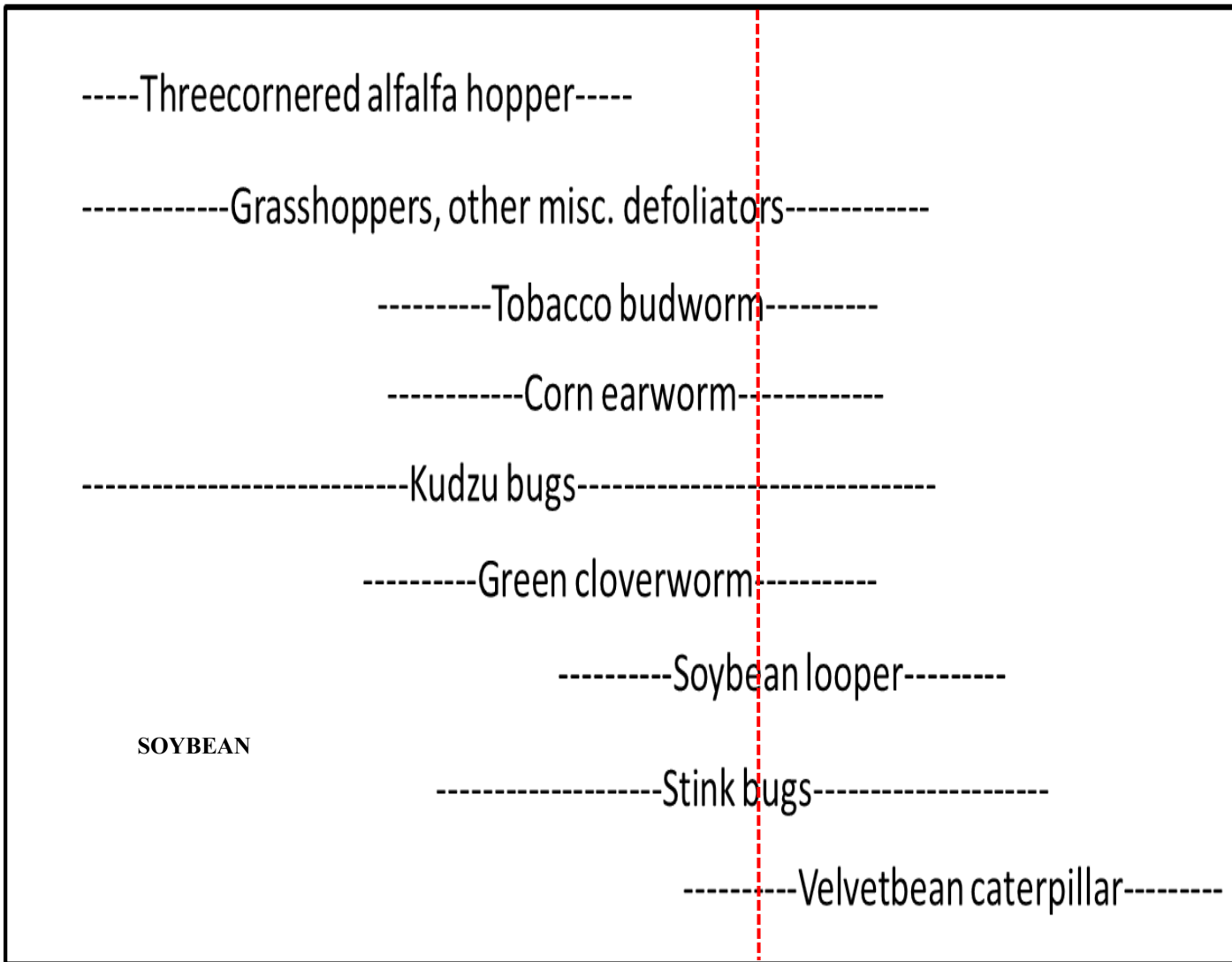


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April May June July August September October

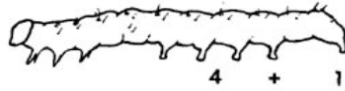


SOYBEAN

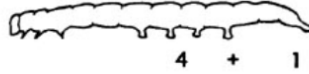


As moth activity increases, deposited eggs will yield caterpillar pests on soybeans. It is good skill to be able to identify adult moths flying around in fields. Use this chart to study moth and caterpillar identification.

FIELD KEY TO COMMON SOYBEAN CATERpillARS



CORN EARWORM
4 + 1 pair prolegs
Curls up in hand
Black "warts" on body



VELVETBEAN CATERPILLAR
4 + 1 pair prolegs
Very active when handled



SOYBEAN LOOPER
2 + 1 pair prolegs
Fatter at tail end
Looping movement



GREEN CLOVERWORM
3 + 1 pair prolegs
Not fatter at tail end
Looping movement



TOBACCO BUDWORM
4 + 1 pair prolegs
Curls up in hand
Black "warts" on body



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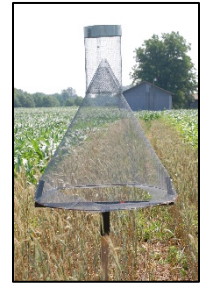


Bollworm & Tobacco Budworm

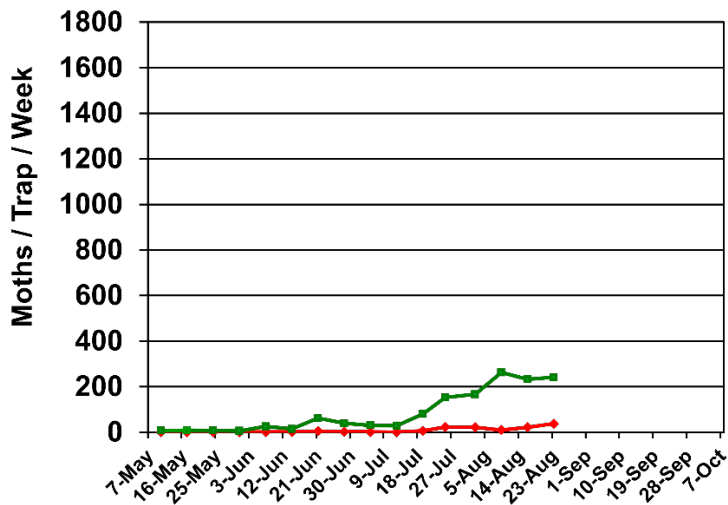


Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2007-2022 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these

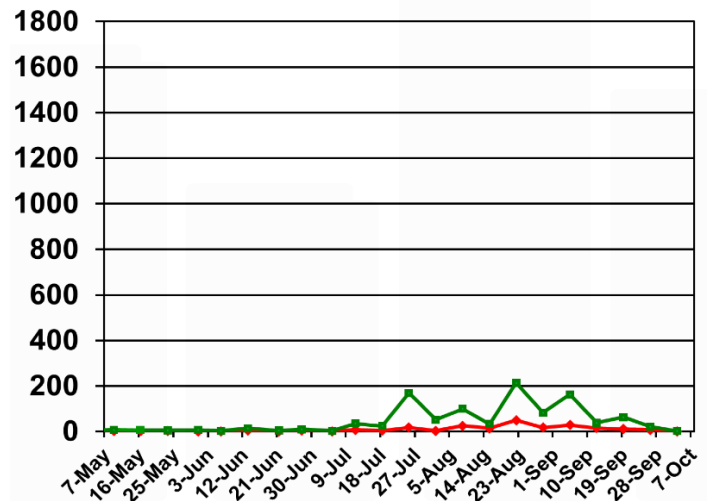
data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state but are useful for general trends.



Pheromone Trap Capture SC - 2023

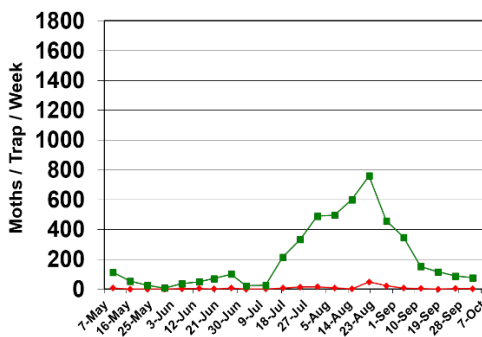


Pheromone Trap Capture SC - 2022

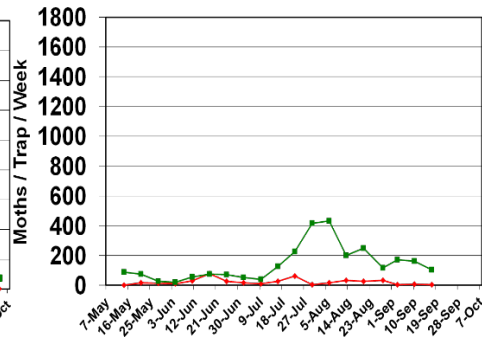


Trap data from 2007-2021 are shown below for reference to other years of trapping data from EREC:

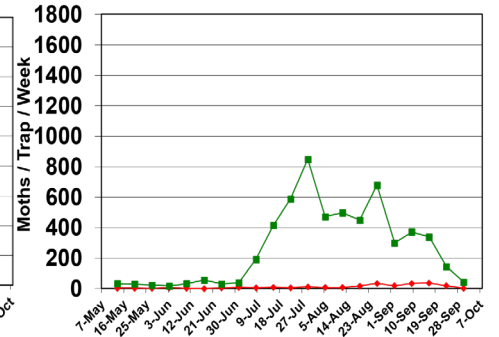
Pheromone Trap Capture SC - 2007



Pheromone Trap Capture SC - 2008



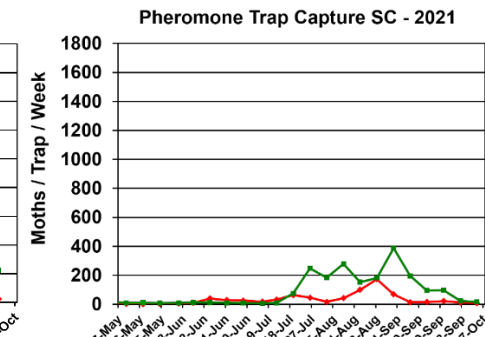
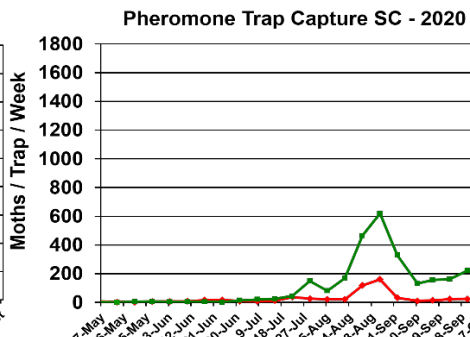
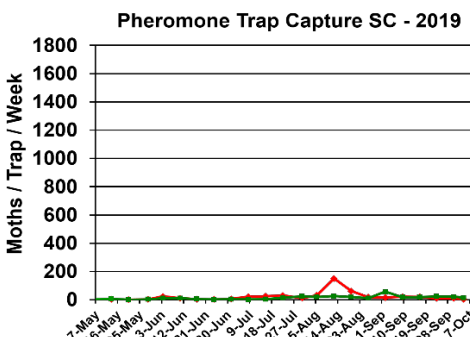
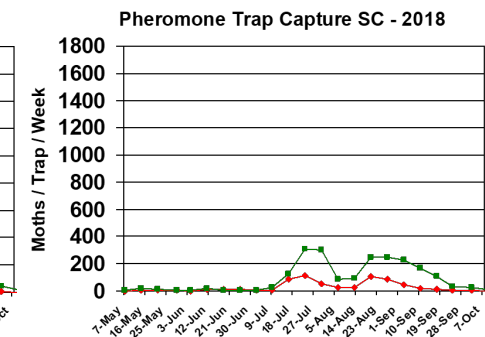
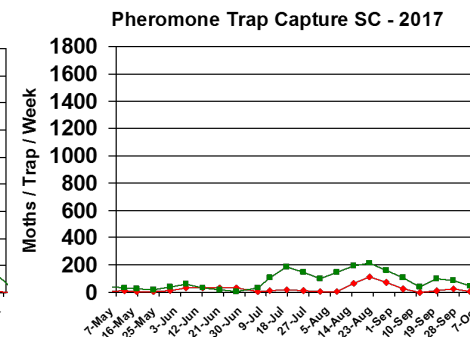
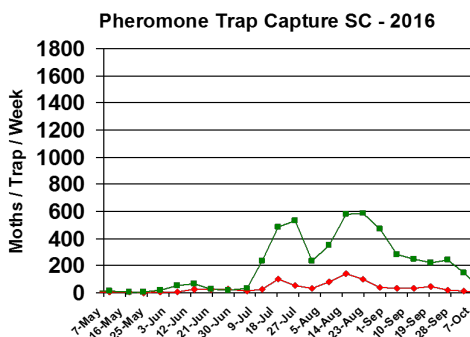
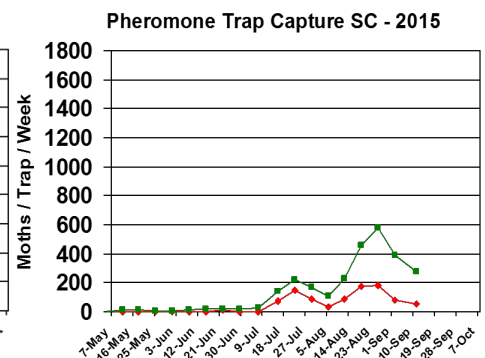
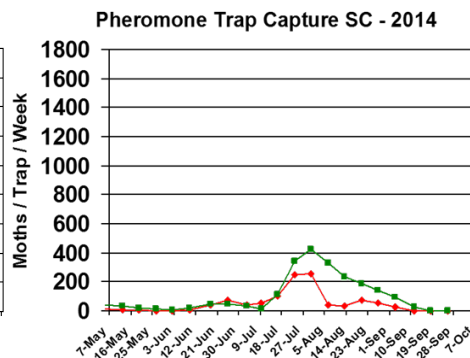
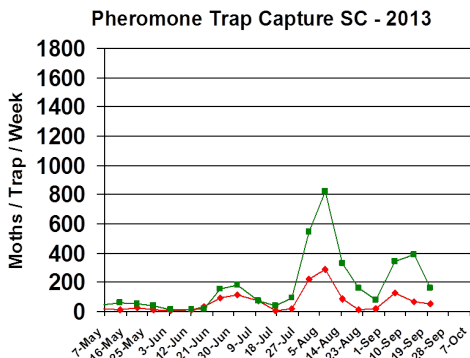
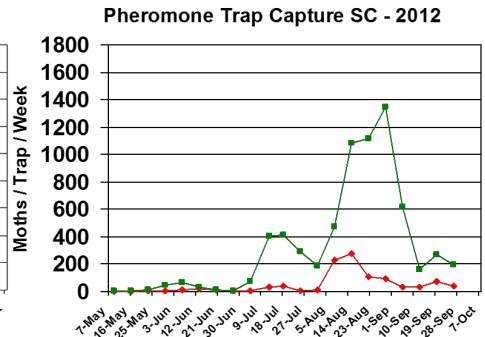
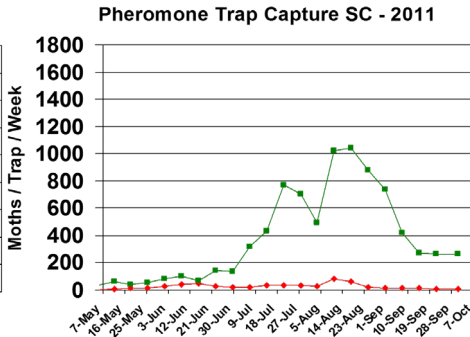
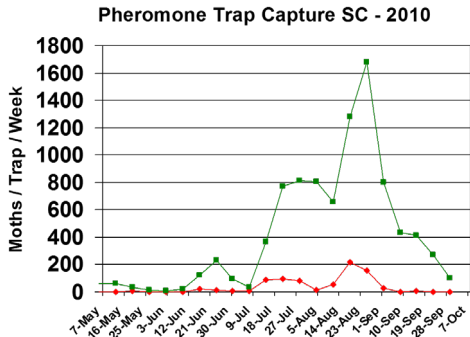
Pheromone Trap Capture SC - 2009





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Pest Management Handbook – 2023

Insect control recommendations are available online in the 2023 South Carolina Pest Management Handbook at:

<https://www.clemson.edu/extension/agronomy/files/pest-management-handbook-clemson-extension.pdf>

South Carolina Crops Blog

The SC Crops Blog contains content about production of major row crops at the following link, if you want more information: <https://blogs.clemson.edu/sccrops/>

Archived issues of the Cotton/Soybean Insect Newsletter can be viewed at a convenient link on the SCCrops page. Contact **Dr. Michael Plumblee**, if you have any questions about the blog.

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):

<https://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



Visit our website at:
<http://www.clemson.edu>