



## *Cotton/Soybean Insect Newsletter*

Volume 18, Issue #8 Edisto Research & Education Center in Blackville, SC

23 June 2023

### **Pest Patrol Alerts**

Some of the information contained herein each issue is available via text alerts that direct users to online 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. 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. Alternatively, you can sign up online at <https://www.syngenta-us.com/pest-patrol/south-carolina>

### **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 [@BugDoclsIn](https://twitter.com/BugDoclsIn) on Twitter.



### **News from Around the State**

All news has been consistent. It is wet. Although the situation is not funny, here are a few quotes, with some humorous commentary in a couple of them, from several of our Extension agents. The frustration is real, but there is comedic relief in the misery, if you look for it.

- “Saw two thrips this week in a kayak paddling for their lives. No, haven’t seen anything up this way, nor heard any reports. Rain keeping everything down or at least keeping everyone out of the fields anyway.”
- “No news in my counties. We are just trying to stay dry from all the rain.”
- “No insect news for me. Rain has had everything shut down this week.”
- “Four inches of rain. Bugs on life support.”

I did receive the photo of defoliation in 5-leaf cotton from Jerry Adams, a crop consultant. He said it was more prominent than it should have been. He asked me what I thought was causing it, and I stated it looked like grasshoppers or some species of defoliating beetle but that I wasn’t sure. He and the grower spotted a few grasshoppers. I advised them that the damage is mostly cosmetic, at this point, and that I wouldn’t spend any money on insecticide just yet. They will continue to monitor the field. If anyone else is seeing this and knows what this is, other than my guesses from just seeing the photo, please let me know.





## **Insect Scouting Workshops for 2023**

We will offer several insect scouting workshops for cotton and soybeans in various locations across the state. We will have a morning program in the field scouting for and talking about important insects in the two crops. We will end the workshop with lunch. We have the following dates and locations planned:

- Pee Dee Region of the state – 18 July at the SC Cotton Museum in Bishopville, SC, or at the Pee Dee REC in Florence, SC (location to be decided on soon)
- Barnwell County area – 19 July at the Edisto REC near Blackville, SC
- Calhoun or Orangeburg County area – 20 July, with the location to be announced later

## **Cotton Situation**

As of 18 June 2023, the USDA NASS South Carolina Statistical Office estimated that about 11% of the crop is squaring, compared with 1% the previous week, 12% at this time last year, and 19% for the 5-year average. The conditions of the crop were reported as 2% excellent, 63% good, 34% fair, 1% poor, and 0% very poor. These are reported statewide averages.

## **Cotton Insects**

**Bollworm** – Populations of bollworm are picking up in pheromone traps as moths (see chart below). Infestations in corn (as corn earworm) are increasing, and we will likely see peak damage in and collect larvae from March-planted non-Bt corn next week. This generation will pupate in the soil under corn soon and emerge later as moths seeking a new flowering host as bollworm (cotton) or podworm (soybeans). Refresh your scouting skills soon.

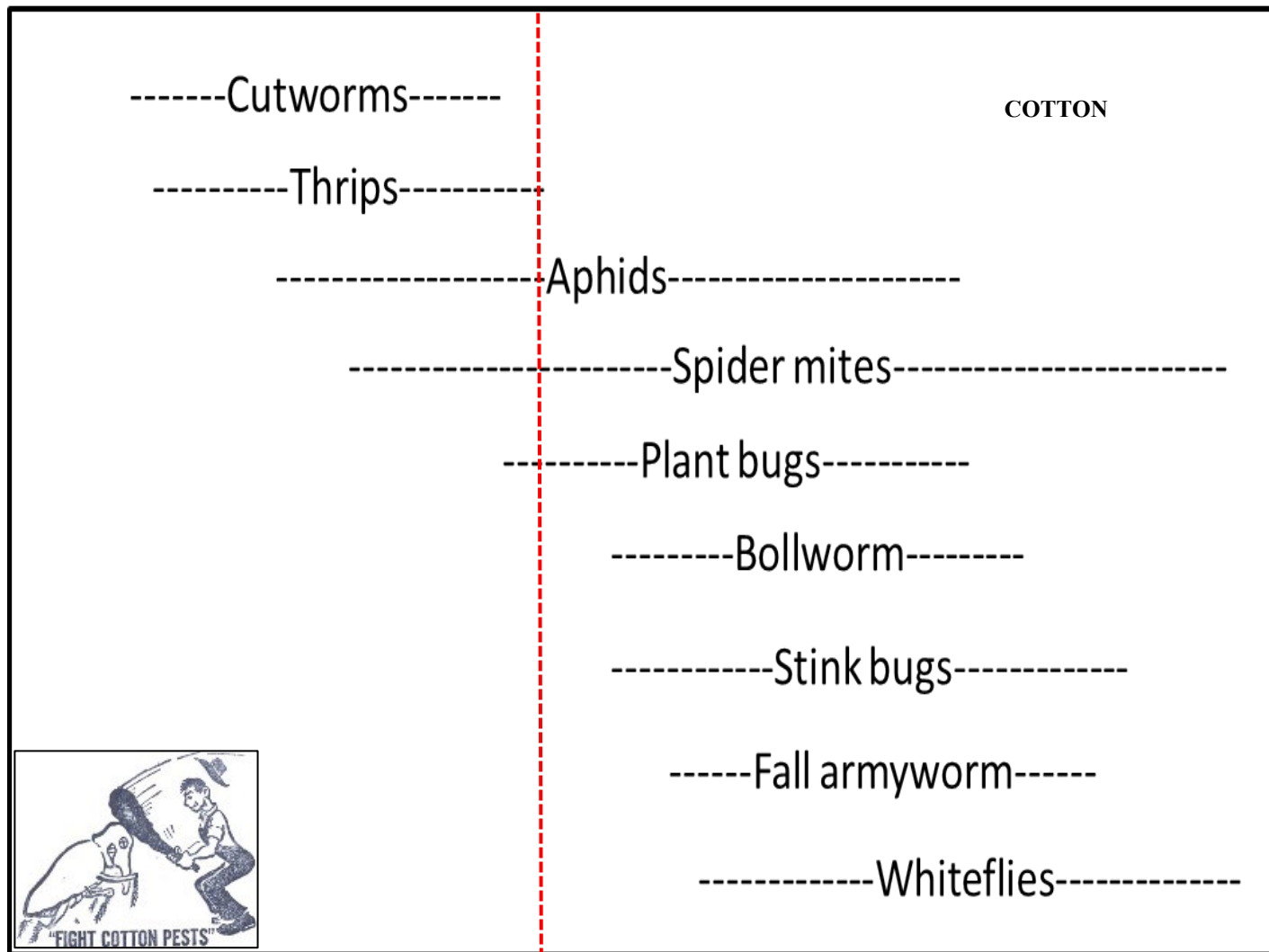
**Aphids** – Populations of aphids are picking up in spots, and this rain will likely promote increases. Start watching for aphids, but, again, don't get too concerned, unless you see tremendous numbers on very young plants. Despite widespread reports of the Cotton Leafroll Dwarf Virus (CLRDV) transmitted by cotton aphid in recent years, we still do not see an economic benefit to treating aphids in cotton (unless it is really, really, really bad on young plants).

**Plant Bugs** – As cotton starts to square in the crop, we need to be running a sweep net to check for plant bugs, predominantly the tarnished plant bug (TPB), *Lygus lineolaris*. We had reports last week out of Georgia that large populations of TPB adults were observed with sweep nets in young, squaring cotton. So, start sweeping squaring cotton for TPB adults, and monitor square retention. In pre-blooming cotton, we need to sweep for TPB and use a treatment threshold of 8 per 100 sweeps. We also need to monitor square retention and look for reasons for it dropping below 80%. I like to look at first position fruiting sites on the top several nodes with easy-to-see squares. If you monitor these positions each week, it will make estimates of square retention easy. Because plant bugs feed on squares, blooms, and small bolls, they can affect fruit retention. If square retention drops below 80%, and plant bugs are at or above threshold, a treatment decision should be made. However, remember that square shed can occur from physiological reasons also. The rainy weather this week might turn into hot, sunny weather next week. I expect that some square shed might occur just because of plant physiology reacting with the change in weather. Check for both square retention and counts of TPB. Don't use retention counts alone.





April      May      June      July      August      September



**Soybean Situation**

As of 18 June 2023, the USDA NASS South Carolina Statistical Office estimated that about 82% of the crop has been planted, compared with 69% the previous week, 89% at this time last year, and 83% for the 5-year average. About 65% of the crop has emerged, compared with 52% the previous week, 74% at this time last year, and 69% for the 5-year average. The conditions of the crop were reported as 2% excellent, 84% good, 13% fair, 1% poor, and 0% very poor. These are reported statewide averages.

**Soybean Insects**

Again this week, problems with insects in soybeans have not been reported. We should continue to watch out for problems with grasshoppers, kudzu bugs, and threecornered alfalfa hopper. As moth activity picks up, we will see migratory species (namely the defoliating caterpillars, such as soybean looper, green

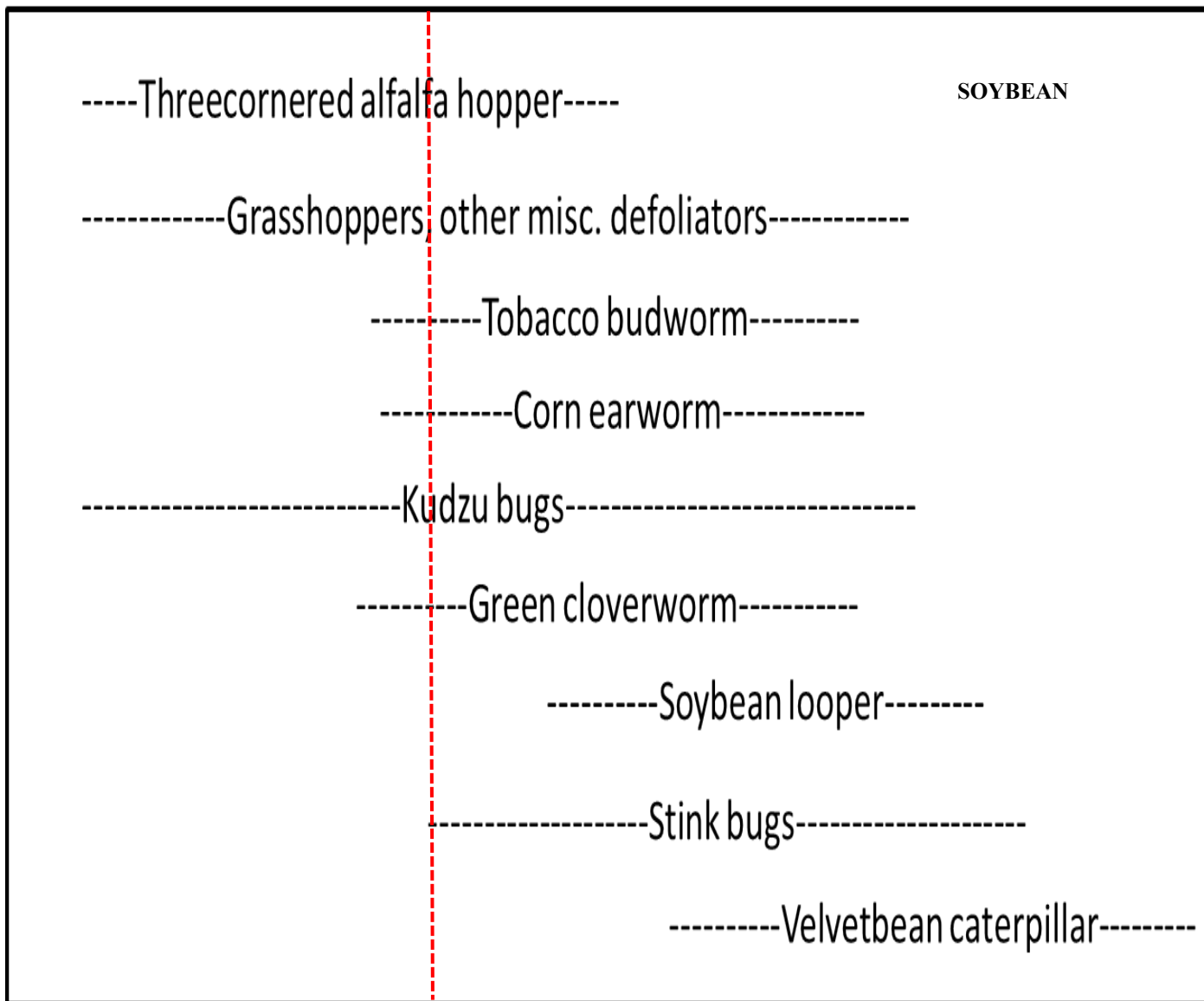
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cloverworm, and velvetbean caterpillar) move into the state. Also, species that successfully overwinter here, such as podworm and many of the stink bugs, will become an issue soon. Stink bugs are increasing on corn right now, as is corn earworm. Corn earworms will turn into podworms soon enough and be problematic in soybeans at and after blooming.

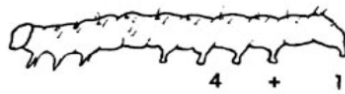
April      May      June      July      August      September      October



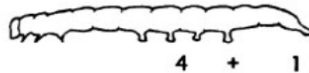


As moth activity increases, deposited eggs will yield caterpillar pests on soybeans. It is good skill to be able to identify adult moths flying around in fields. Use this chart to study moth and caterpillar identification.

**FIELD KEY TO COMMON SOYBEAN CATERpillARS**



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



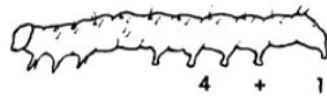
**VELVETBEAN CATERPILLAR**  
4 + 1 pair prolegs  
Very active when handled



**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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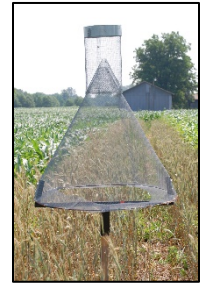


**Bollworm & Tobacco Budworm**

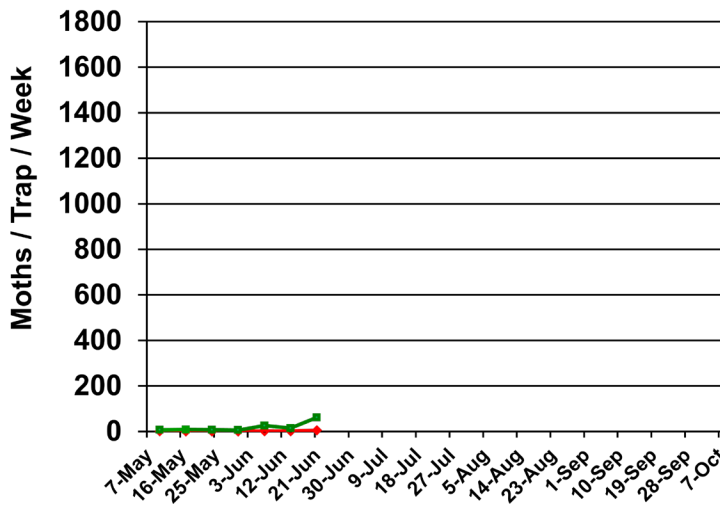


Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2007-2022 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these

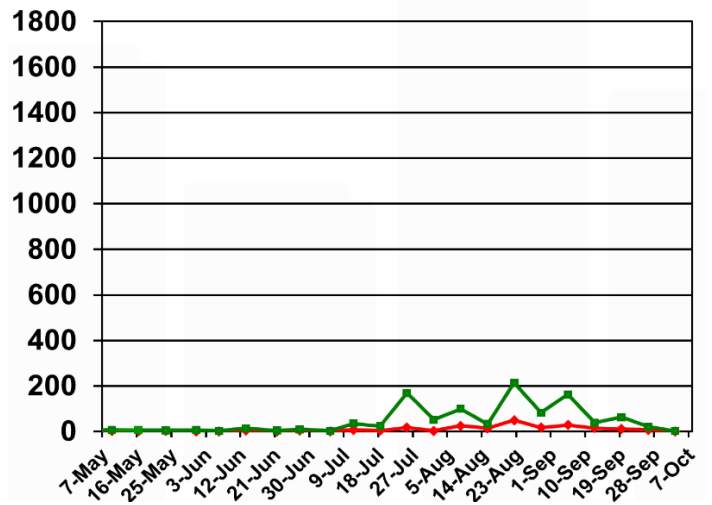
data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state but are useful for general trends.



**Pheromone Trap Capture SC - 2023**

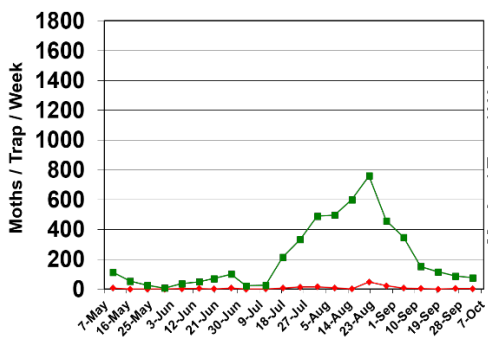


**Pheromone Trap Capture SC - 2022**

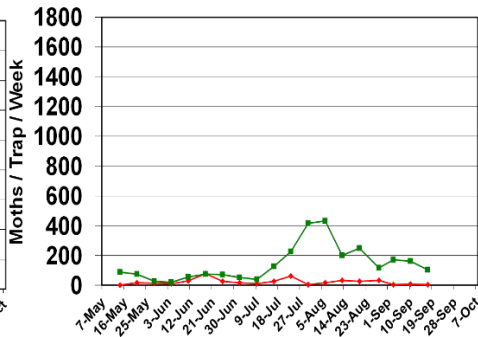


Trap data from 2007-2021 are shown below for reference to other years of trapping data from EREC:

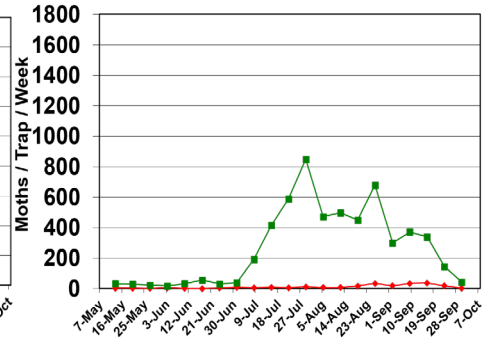
**Pheromone Trap Capture SC - 2007**



**Pheromone Trap Capture SC - 2008**



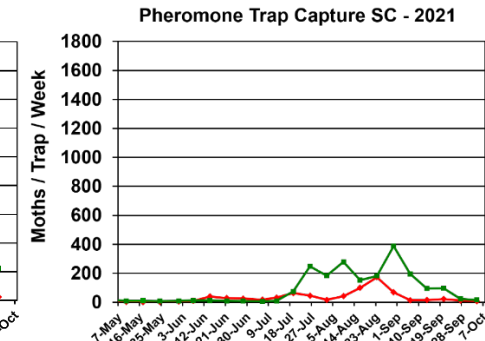
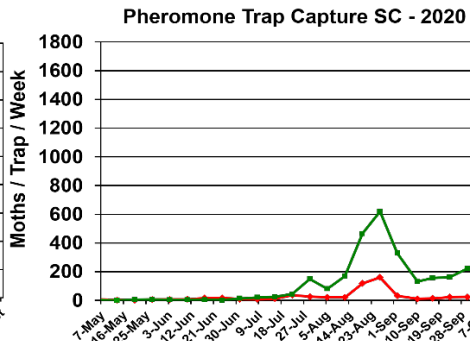
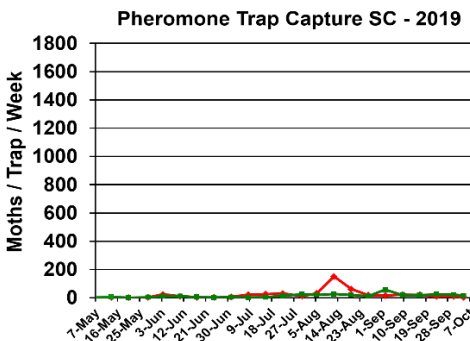
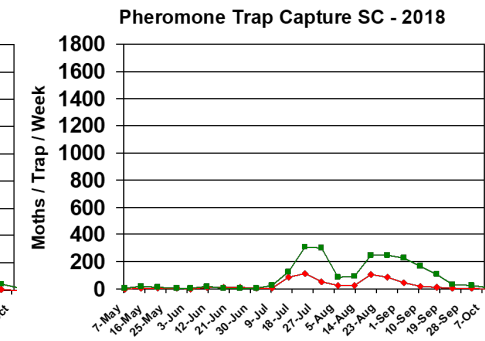
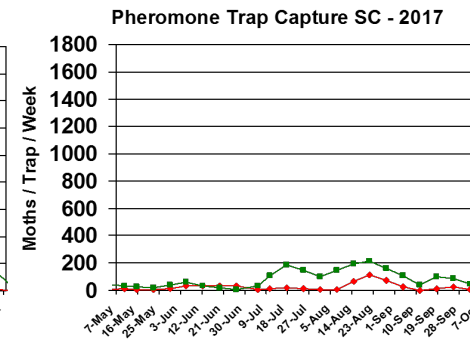
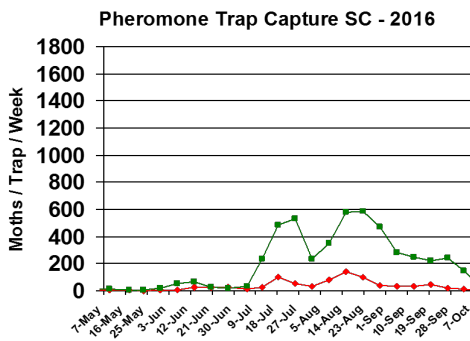
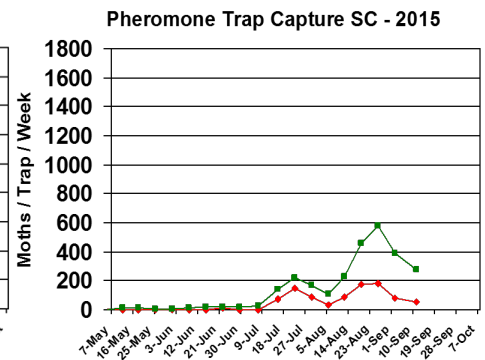
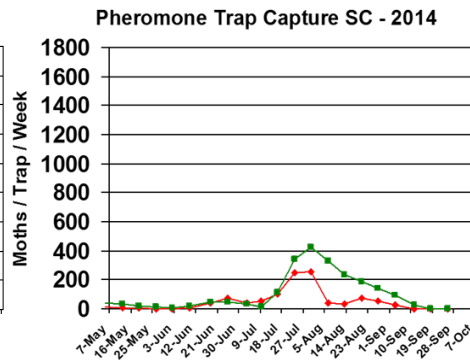
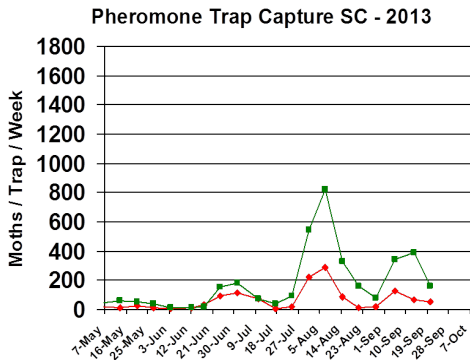
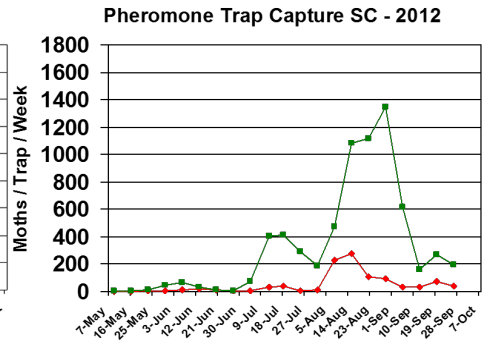
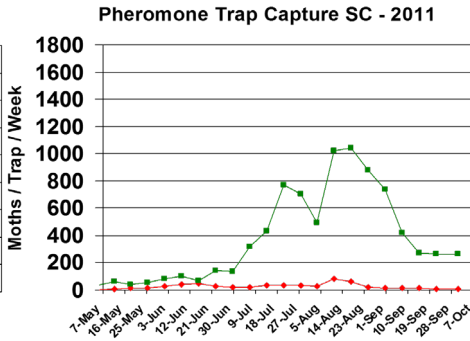
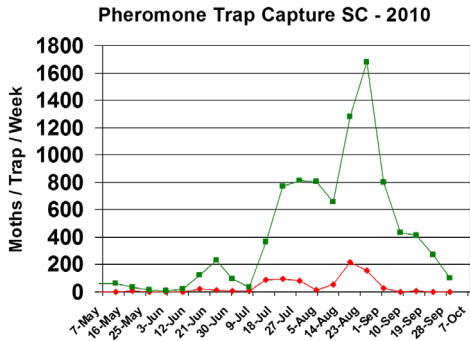
**Pheromone Trap Capture SC - 2009**





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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



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