



## Cotton/Soybean Insect Newsletter

Volume 18, Issue #9 Edisto Research & Education Center in Blackville, SC

29 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 **@BugDoctIn** on Twitter.



### News from Around the State

**Jay Crouch**, county agent covering Newberry, Saluda, Edgefield, York, and Chester Counties, reported that he “looked at a good bit of cotton yesterday, nothing of concern on insect front. Finally getting some weather for cotton to start growing – soybeans holding their own right now.” **Hannah Mikell**, county agent covering Clarendon and Williamsburg Counties, reported “no [insect] news here but that’s usually good! I’ve seen stink bugs in corn (not at threshold). Number one concern across my area has been heavy deer pressure, with hog damage in certain areas. Hands down deer pressure has been tough!” **Jonathan Croft**, county agent covering Orangeburg, Dorchester, and Berkeley Counties, reported he has “not looked at any cotton this



week. I did some shakes in some group 4 beans (R3-R4) this week. Found some green cloverworms and some three-cornered alfalfa hoppers. Also a random yellow-striped armyworm (pictures attached). Didn’t see any stink bugs in these beans. I saw some brown stink bugs today in some corn in Orangeburg County.” **Drake Perrow**, a producer and consultant in Cameron, SC, reported that “cotton is finally starting to move. A few PGRs going out as internode length is stretching out. Aphids popping their nasty heads up in most fields.”



## **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, and two of the trainings will feature afternoon sessions covering peanuts and weeds. See below and the attached flyers for details. We have the following dates and locations planned:

- Pee Dee Region of the state – 18 July at the SC Cotton Museum in Bishopville, SC (insect scouting workshop only in the AM, ending with lunch)
- Barnwell County area – 19 July at the Edisto REC near Blackville, SC (insect scouting in the AM and weed identification and herbicide injury in the PM).
- Calhoun or Orangeburg County area – 20 July at Lone Star Plantation in St. Matthews, SC (PM session covering peanuts)

## **Cotton Situation**

As of 25 June 2023, the USDA NASS South Carolina Statistical Office estimated that about 18% of the crop is squaring, compared with 11% the previous week, 27% at this time last year, and 31% for the 5-year average. The conditions of the crop were reported as 3% excellent, 54% good, 41% fair, 2% poor, and 0% very poor. These are reported statewide averages.

## **Cotton Insects**

**Bollworm** – Populations of corn earworm in corn are completing development on ear tips. We observed a pretty good infestation this week in some non-Bt corn I have at Edisto REC. This generation will pupate in the soil under corn soon and emerge in a couple of weeks as moths looking for mates and new flowering hosts on cotton (as bollworm) and on soybeans (as podworm). Get ready to start scouting early planted cotton for bollworm.



**Aphids** – Populations of aphids continue to build in some fields. Natural enemies are also increasing their numbers, feeding on the abundant aphids. Again, I do not get concerned about aphids, unless the infestation occurs on young cotton (early squaring before bloom) or when there is just too much stress on the plant (e.g. drought, insects, heat, etc.), and we might be able to alleviate the aphid stressor to help the situation. Do know that we have seen very few data (if any) that support spraying for cotton aphids in cotton. Furthermore, despite widespread incidence of the Cotton Leafroll Dwarf Virus (CLRDV) transmitted by cotton aphid in recent years, we still do not see broad economic benefit to treating aphids in cotton.



**Plant Bugs** – We swept some early squaring cotton this week for tarnished plant bug (TPB), *Lygus lineolaris*, and found populations exceeding threshold in many sets of 100 sweeps. Numbers ranged from 5 to 17 adults of TPB per 100 sweeps. The treatment threshold is 8 per 100 sweeps. We assessed square retention between 70 and 97%, so we had some treatments



# COOPERATIVE EXTENSION

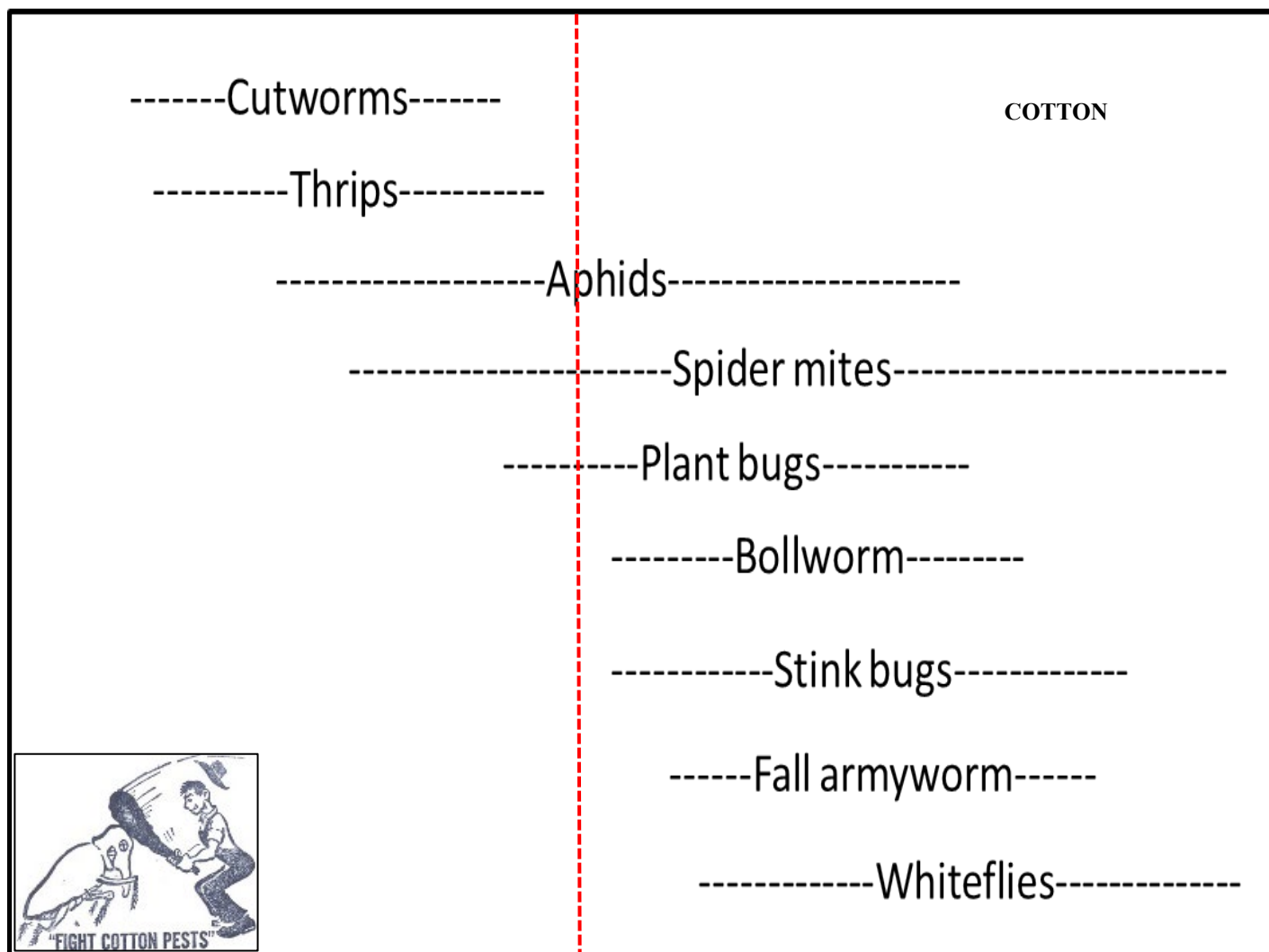
College of Agriculture, Forestry and Life Sciences



to make for TPB. If you haven't already, start sweeping squaring cotton for TPB adults, and monitor square retention. In pre-blooming cotton, use a treatment threshold of 8 TPB per 100 sweeps. Also 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 hot and dry weather this week, after all the clouds and rain in the last couple of weeks, will probably lead to increased square shed. Check for both square retention and counts of TPB. Don't use retention counts alone.



April                      May                      June                      July                      August                      September



The Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer. Clemson University Cooperating with U.S. Department of Agriculture, South Carolina Counties, Extension Service, Clemson, South Carolina.

The mention of any commercial product in this publication does not imply its endorsement by Clemson University over other products not named, nor does the omission imply that they are not satisfactory.



**Soybean Situation**

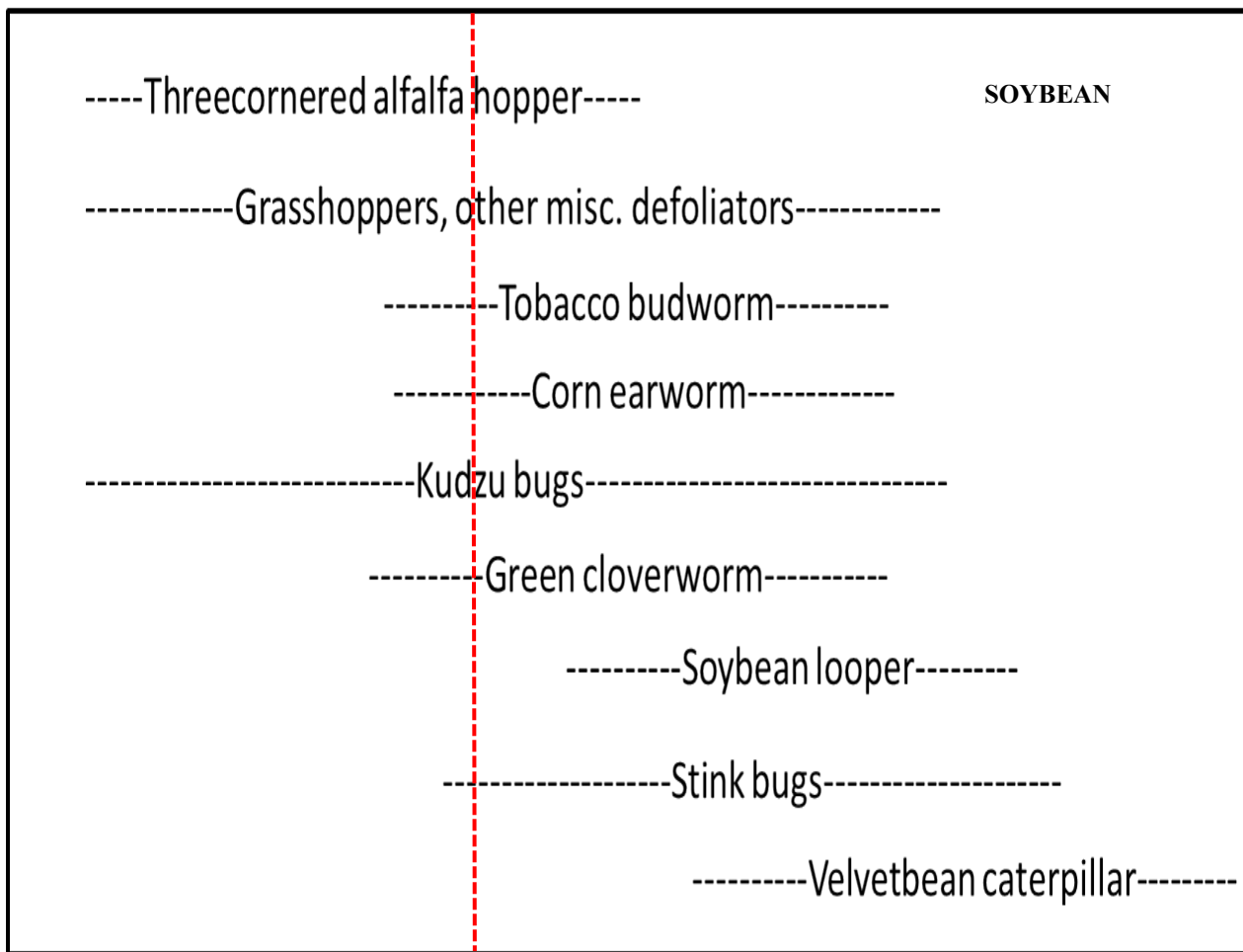
As of 25 June 2023, the USDA NASS South Carolina Statistical Office estimated that about 87% of the crop has been planted, compared with 82% the previous week, 96% at this time last year, and 90% for the 5-year average. About 74% of the crop has emerged, compared with 65% the previous week, 87% at this time last year, and 80% for the 5-year average. The conditions of the crop were reported as 3% excellent, 80% good, 17% fair, 0% poor, and 0% very poor. These are reported statewide averages.

**Soybean Insects**

Again this week, problems with insects in soybeans have not been reported, although pests are slowly building in the crop. Continue to watch out for problems with grasshoppers, kudzu bugs, and threecornered alfalfa hopper. The green cloverworm has already been noticed, along with a few other migratory, defoliating species. Podworm numbers will increase in soybeans soon, particularly early plantings. As mentioned in the cotton section, corn earworm is cycling through corn right now.



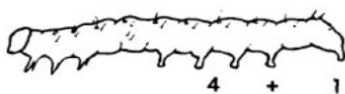
April      May      June      July      August      September      October



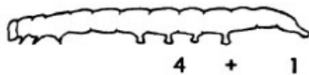


As moth activity increases, deposited eggs will yield caterpillar pests on soybeans. It is good skill to be able to identify adult moths flying around in fields. Use this chart to study moth and caterpillar identification.

**FIELD KEY TO COMMON SOYBEAN CATERpillARS**



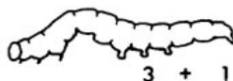
**CORN EARWORM**  
4 + 1 pair prolegs  
Curls up in hand  
Black "warts" on body



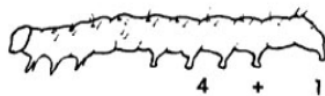
**VELVETBEAN CATERPILLAR**  
4 + 1 pair prolegs  
Very active when handled



**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



*The Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer. Clemson University Cooperating with U.S. Department of Agriculture, South Carolina Counties, Extension Service, Clemson, South Carolina.*

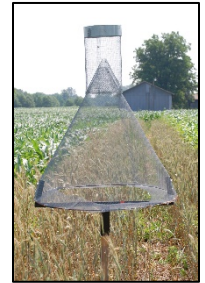


**Bollworm & Tobacco Budworm**

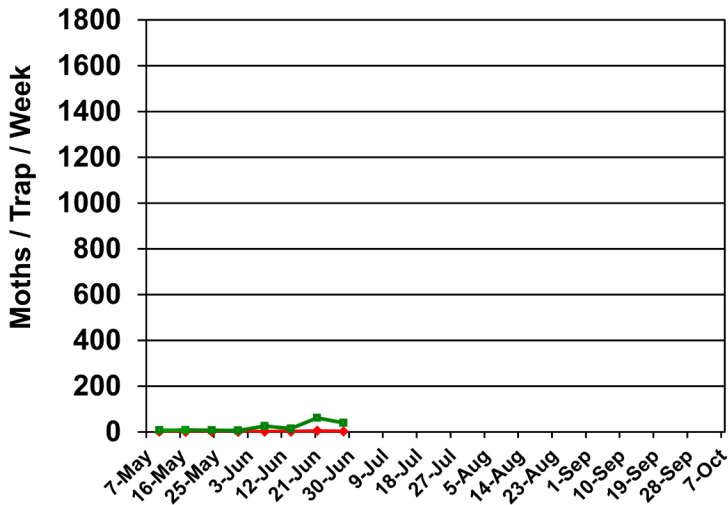


Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2007-2022 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these

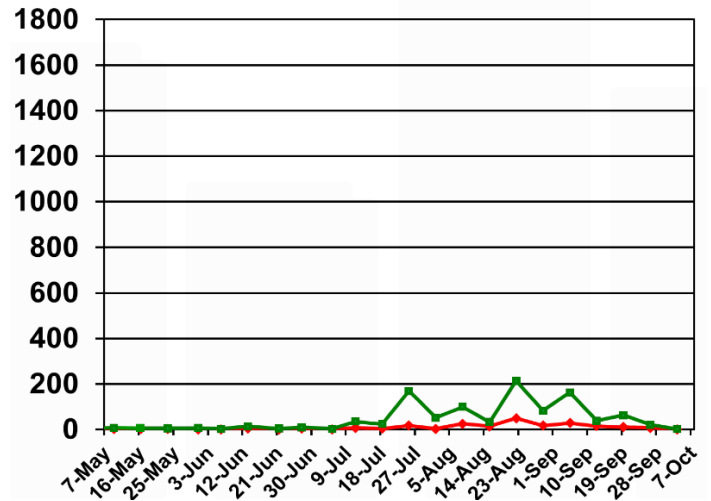
data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state but are useful for general trends.



**Pheromone Trap Capture SC - 2023**

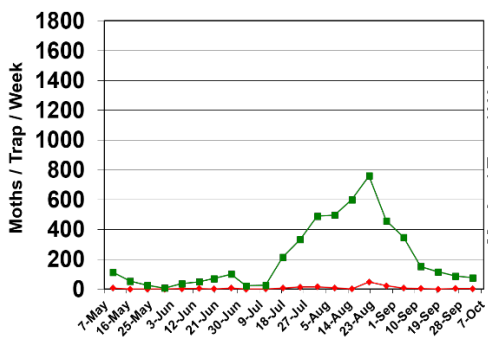


**Pheromone Trap Capture SC - 2022**

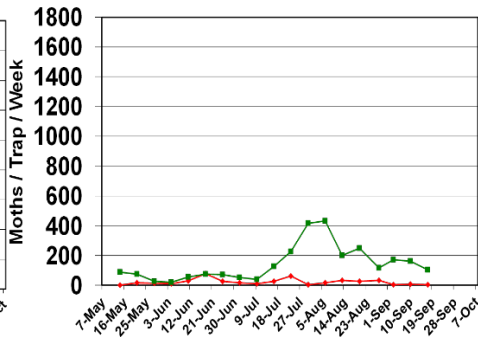


Trap data from 2007-2021 are shown below for reference to other years of trapping data from EREC:

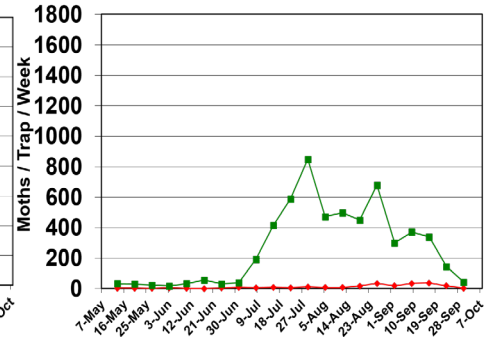
**Pheromone Trap Capture SC - 2007**



**Pheromone Trap Capture SC - 2008**



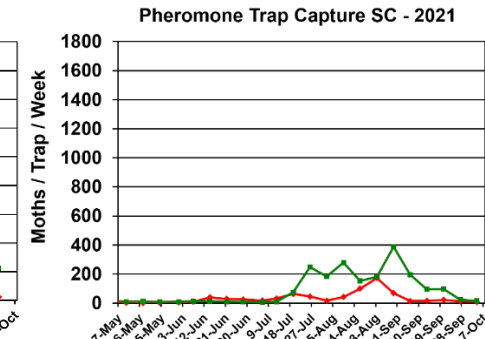
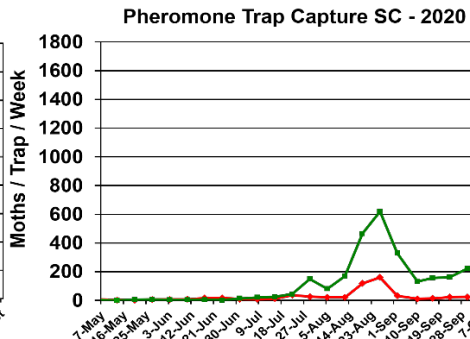
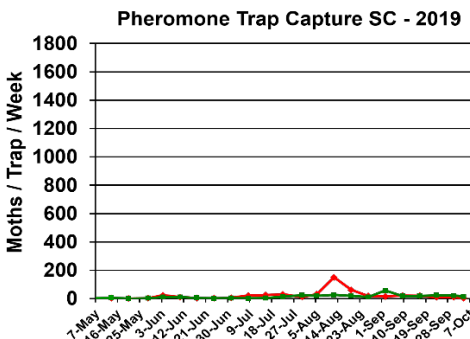
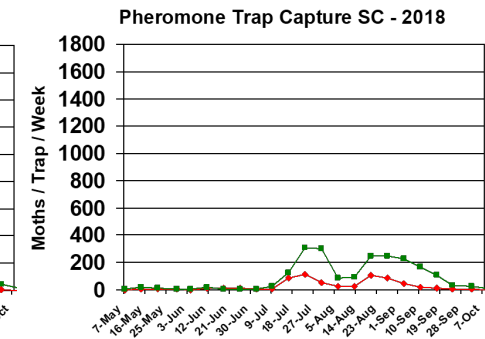
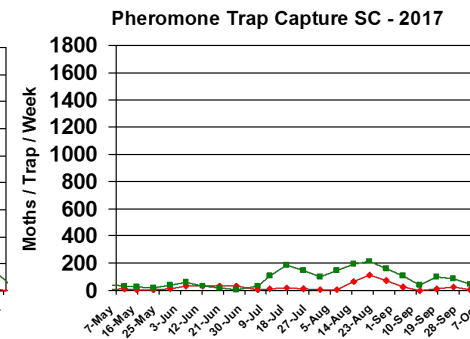
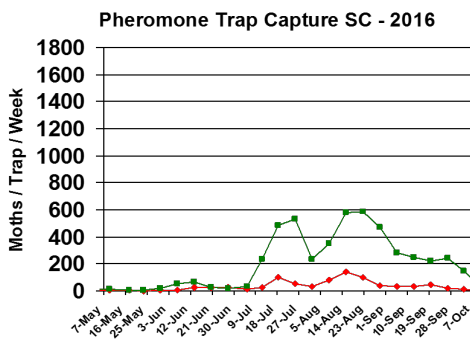
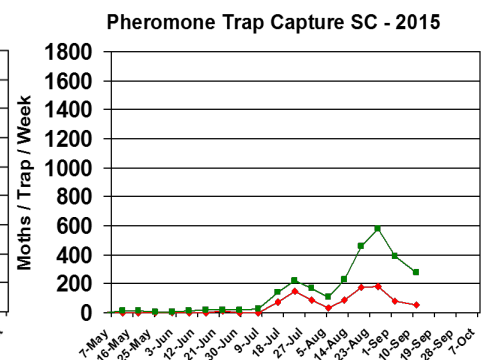
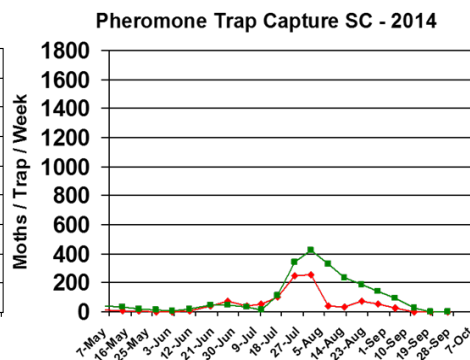
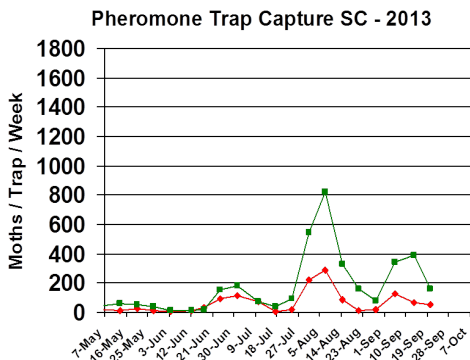
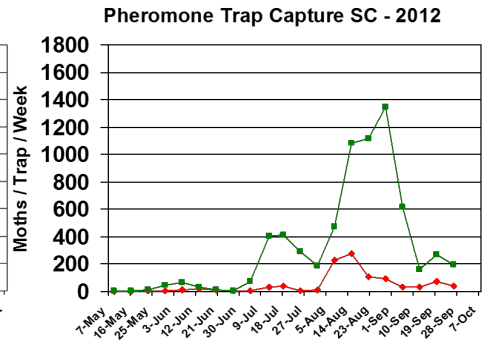
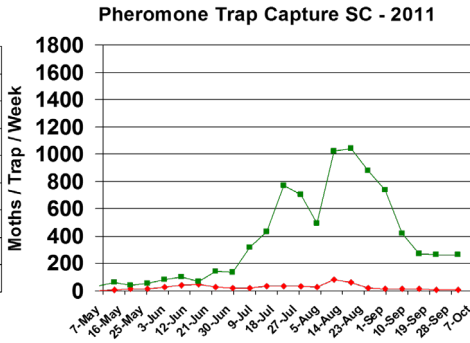
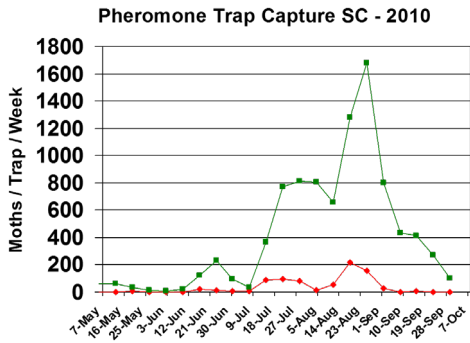
**Pheromone Trap Capture SC - 2009**





# COOPERATIVE EXTENSION

College of Agriculture, Forestry and Life Sciences



The Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer. Clemson University Cooperating with U.S. Department of Agriculture, South Carolina Counties, Extension Service, Clemson, South Carolina.

The mention of any commercial product in this publication does not imply its endorsement by Clemson University over other products not named, nor does the omission imply that they are not satisfactory.



### **Pest Management Handbook – 2023**

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

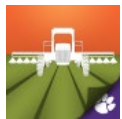
<https://www.clemson.edu/extension/agronomy/files/pest-management-handbook-clemson-extension.pdf>

### **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>