



Cotton/Soybean Insect Newsletter

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Pest Patrol Hotline

The information contained herein each week is available via a toll-free hotline. I will update the short message weekly for at least as long as the newsletter runs. Call the free number (877) 285-8525 and select the messages you would like to hear. Select #1 for updates from the Southern Region. Select #3 for the Southeast, and then select #1 to hear my message. After a new message is on the hotline, a text message alert can be sent alerting 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. The hotline is 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.

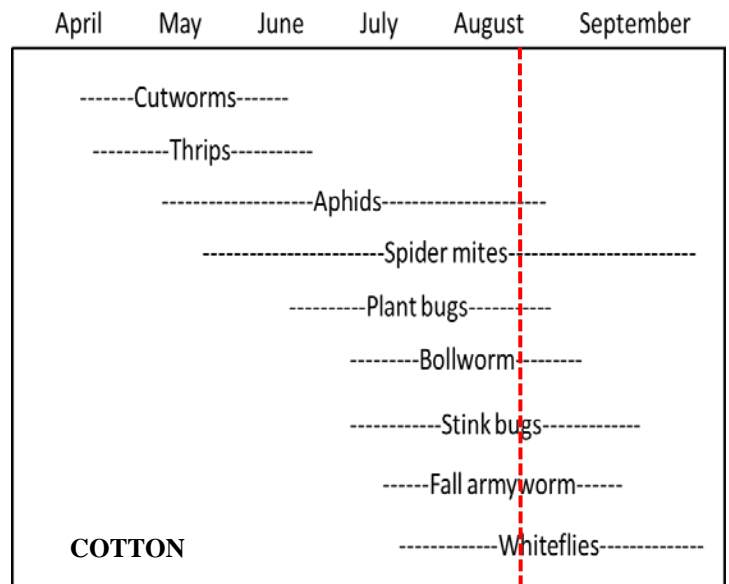


News from Around the State

Drake Perrow, consultant in Calhoun County, reported that he "saw increasing moth activity over the week with many eggs hatching, especially in soybeans, peanuts, and late, lush cotton. Aphids starting to reappear in some cotton. Stink bug pressure is still pretty low as a whole. Need rain again. Some cotton fields 25-50% open." Collins Gardner, consultant in the Pee Dee Region, reported that he is "wrapping up cotton with the last stink bug spray and spraying soybeans at R3 with fungicide and insecticide and soybean looper material where it's needed."

Cotton Situation

As of 14 August 2016, the USDA NASS South Carolina Statistical Office estimated that about 87% of the crop has set bolls, compared with 96% at this time last year and 82% for the 5-year average. About 1% of bolls have opened, compared with 0% at this time last year and 2% for the 5-year average. The crop was described as 5% excellent, 39% good, 55% fair, 1% poor, and 0% very poor. These are observed/perceived state-wide averages.



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Cotton Insects

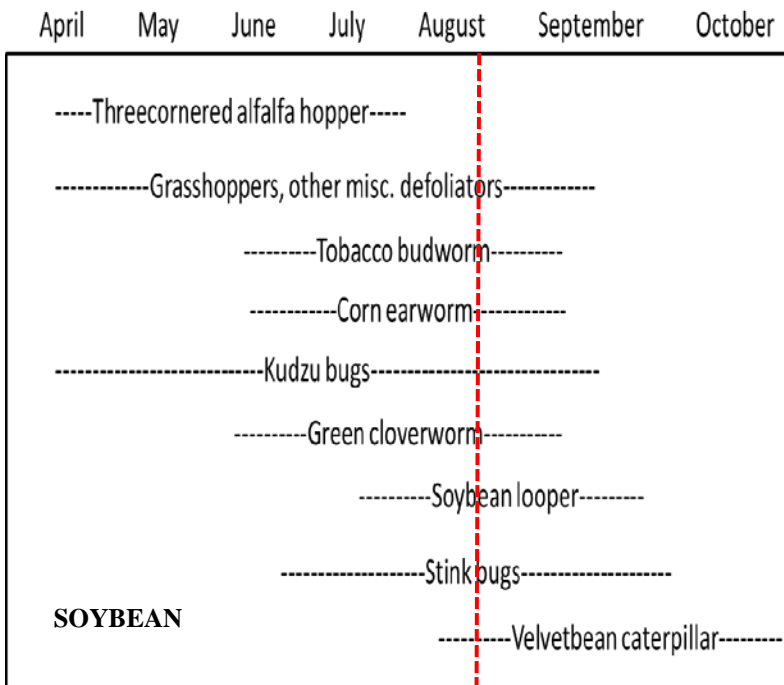
Although pressure from stink bugs has been lower than normal this year (in general), don't let your guard down. Most of the crop still has at least a couple of weeks left during which you should check for stink bugs and boll injury. Remember, August is stink-bug month – all month. Finish off those fields. Also, because bollworm pressure continues, check for larvae that survive the Bt proteins. Transgenic Bt cotton is great technology, but it does not provide 100% protection from bollworm. Historically, PHY varieties with WideStrike technology show a little more injury from bollworm than Bollgard 2 varieties, but the PHY varieties have been good and have tended to compensate for that extra injury when the picker goes through the field. That being said, all Bt cotton is susceptible right now, particularly if it was planted a little late and is irrigated or has caught good rainfall so far (i.e. lush growth with blooming ongoing and a few weeks left to set bolls). Notice all the moths flying around and check terminals, squares, blooms, and bolls for bollworms and injury. Report any cases where a pyrethroid didn't work.

Soybean Situation

As of 14 August 2016, the USDA NASS South Carolina Statistical Office estimated that about 67% of our soybean crop is blooming, compared with 66% at this time last year and 74% for the 5-year average. About 28% of the crop is setting pods, compared with 21% at this time last year and 26% for the 5-year average. The crop was described as 22% excellent, 60% good, 14% fair, 4% poor, and 0% very poor. These are observed/perceived state-wide averages.

Soybean Insects

Soybean looper is the key pest right now in most fields, but podworm (same species as bollworm, corn earworm, etc.) is also important. Our pheromone traps for the heliothines show that numbers are going up. It is very common right now to flush numerous moths as you walk fields. Podworm moths are everywhere, and I saw a tobacco budworm moth this morning. Again, use a sweep net or drop cloth to assess numbers of podworm. Don't let them eat the blooms and small pods. Consult our recommendations in the 2016 Pest Management Handbook for insecticides active on caterpillars. Don't forget about some of the pre-mixed products like Beseige and Intrepid Edge for soybean loopers and podworm. Those are listed in the last section "Multiple Pests – Pre-mixed Products" in the soybean insect section. I am hearing reports that some materials are on order and not immediately available right now, so be aware of all options.



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Below is information on sampling and thresholds for major pests of soybeans in SC. This information and more can be found in the Pest Management Handbook under Soybean Insect Control. The first table covers threshold numbers for major species if using a drop cloth (shake sheet, beat cloth, etc.). The second table covers threshold numbers for major species if using a sweep net to sample soybeans. If you do not have a sweep net or drop cloth, I would encourage you to get a drop cloth and sweep net to use as routine sampling tools in the crop. I do not sample research plots or enter a grower's field to diagnose a problem without these tools for estimating the insect numbers. They are a must.

BEAT CLOTH THRESHOLDS

Treatment thresholds (per 3 row ft) for soybean insects sampled with beat cloth.					
Pest	Row width (inches)				
	38	30	21	14	7
stink bug	3	2.4	1.6	1.1	0.5
corn earworm*	6	4.7	3.3	2.2	1.1
velvetbean caterpillar	12-18	12	8.3	5.5	2.7
soybean looper	18-24	16	11.6	7.7	3.8

*this is the pod-feeding threshold for corn earworm

SWEEP NET THRESHOLDS

Use percent defoliation estimates as an additional treatment guideline for foliage feeders. Prior to bloom, up to 30% defoliation is acceptable without economic yield loss, but once blooming begins, the guideline drops to 15% defoliation.

Treatment guidelines for soybean insects sampled with a sweep net.		
Pest	Number per 10 sweeps	Comments
stink bug	1-2	
corn earworm	3	or 15% foliage loss
velvetbean caterpillar	10	or 15% foliage loss
soybean looper	15	or 15% foliage loss
kudzu bug	10 (nymphs)	1 nymph per sweep

For other foliage feeders use a threshold of 30% defoliation before first bloom, 15% after first bloom.

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Tobacco budworm moth at right. Caterpillar looks identical to corn earworm below.



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



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



VELVETBEAN CATERPILLAR
 4 + 1 pair prolegs
 Very active when handled



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



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Bollworm & Tobacco Budworm

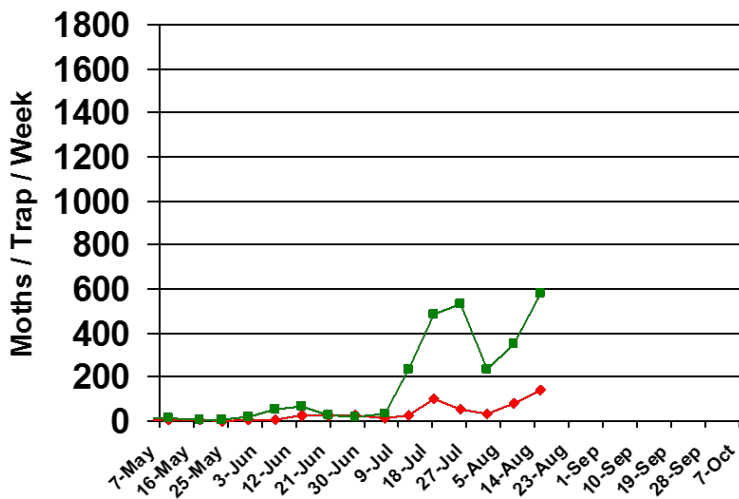


Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2015 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these

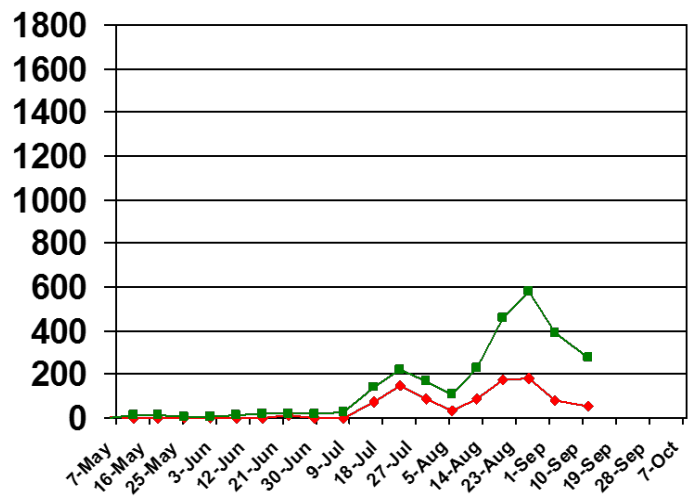
data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.



Pheromone Trap Capture SC - 2016

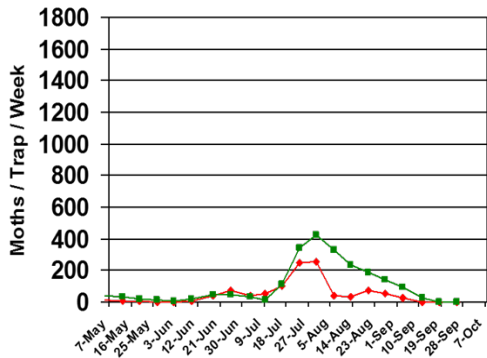


Pheromone Trap Capture SC - 2015

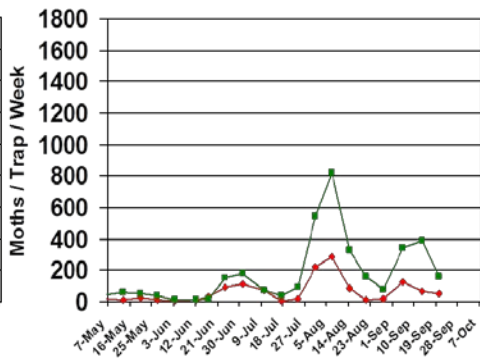


Trap data from 2012-2014 are shown below for reference to other recent years of trapping data from EREC:

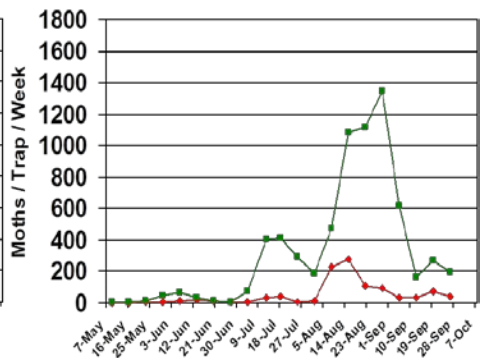
Pheromone Trap Capture SC - 2014



Pheromone Trap Capture SC - 2013



Pheromone Trap Capture SC - 2012



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Pest Management Handbook - 2016

Insect control recommendations are available online in the 2016 South Carolina Pest Management Handbook at: <http://www.clemson.edu/extension/rowcrops/pest/>

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/rowcrops/cotton/pest_management/newsletters/index.html

Sincerely,

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



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

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