



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

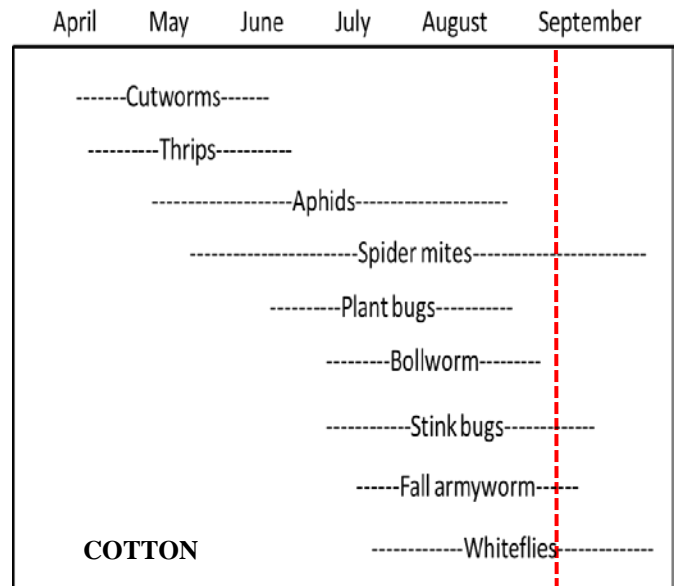
This is the final newsletter for 2016. Thanks to everyone for making contributions to the information presented in the newsletter. As long as there is sufficient interest in the newsletter, I will continue to provide it. Each year numerous folks request to be added to the distribution list, so I am reading that as growing interest. If you find the newsletter useful and want to see it continue, please let me and those with the Extension Service know. Have a great harvest season...see you in 2017 with Volume 12!

Cotton Situation

As of 4 September 2016, the USDA NASS South Carolina Statistical Office estimated that about 22% of the crop had bolls opening, compared with 47% at this time last year and 31% for the 5-year average. The crop was described as 5% excellent, 37% good, 57% fair, 1% poor, and 0% very poor. These are observed/perceived state-wide averages.

Cotton Insects

Well, it is all but over for arthropod pests in cotton. All that should remain as potentially important are stink



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bugs, spider mites, and whiteflies. Stink bugs, particularly the immatures that have no choice but to continue to feed and develop, will concentrate on the young bolls up and out on the plant, and it becomes more of a judgement call on any additional applications of insecticides. For the bulk of the crop, we are finished checking and spraying for stink bugs. Any late-planted fields will likely need another look. Soybeans are loaded with stink bugs right now, so there is potential to have large populations in late cotton also. Spider mites are everywhere, but most fields are ready for some defoliation anyway, so we can let most of those go as well. Whiteflies would be the final insects to observe, as late infestations can create enough honeydew (just like aphids) to alter the lint quality with formation of mold.

Soybean Situation

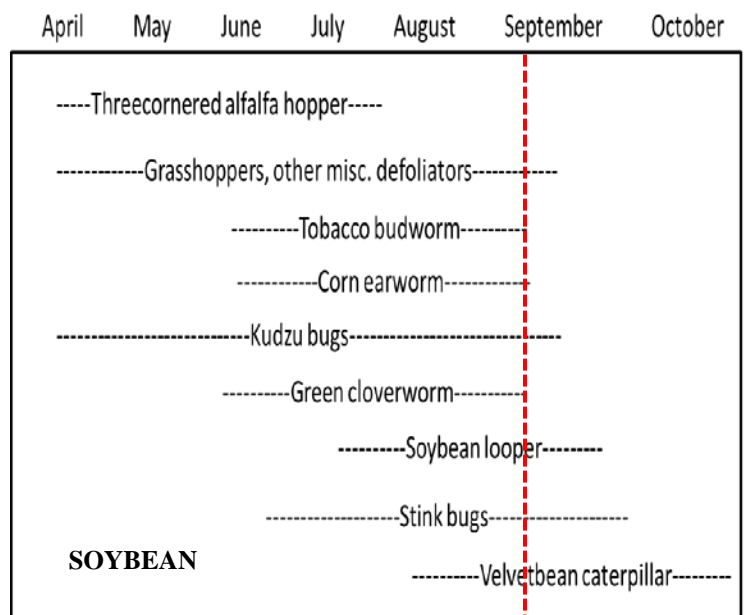
As of 4 September 2016, the USDA NASS South Carolina Statistical Office estimated that about 96% of our soybean crop is blooming, compared with 94% at this time last year and 93% for the 5-year average. About 70% of the crop is setting pods, compared with 78% at this time last year and 68% for the 5-year average. About 5% of the crop is dropping leaves, compared with 0% at this time last year and 0% for the 5-year average. The crop was described as 15% excellent, 56% good, 20% fair, 6% poor, and 3% very poor. These are observed/perceived state-wide averages.

Soybean Insects

Stink bugs and a few lingering populations of defoliators (caterpillars, beetles, grasshoppers, and others) remain concerns. Those insect pests include southern green stink bug, green stink bug, brown stink bug, redbanded stink bug (and a few other stink bug species), velvetbean caterpillar, green cloverworm, soybean looper, leaf beetles, and grasshoppers. Populations of stink bugs have increased dramatically, so



check your soybeans for stink bugs. Remember, soybeans are the last big acreage crop for stink bugs to concentrate in, so check fields with a drop cloth or sweep net. Thresholds are included one last time below for final checks of soybeans. Early instars of stink bugs can go unnoticed, so make sure you can recognize them (southern green SB nymphs left; green SB nymphs, right)!



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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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Bollworm & Tobacco Budworm

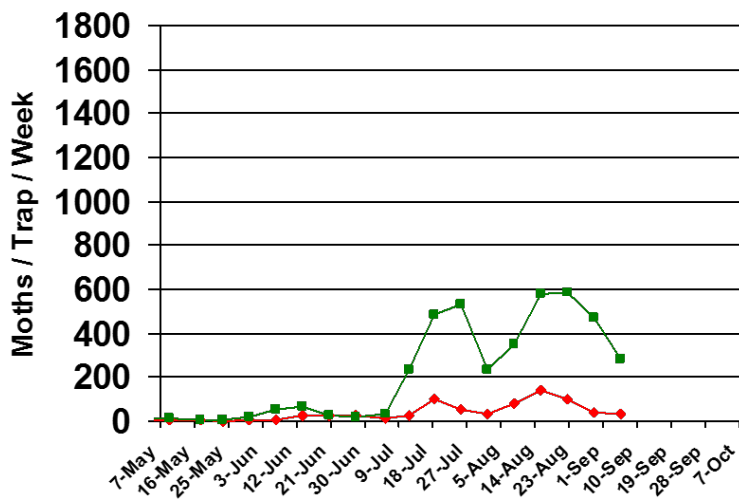


Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2015 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these

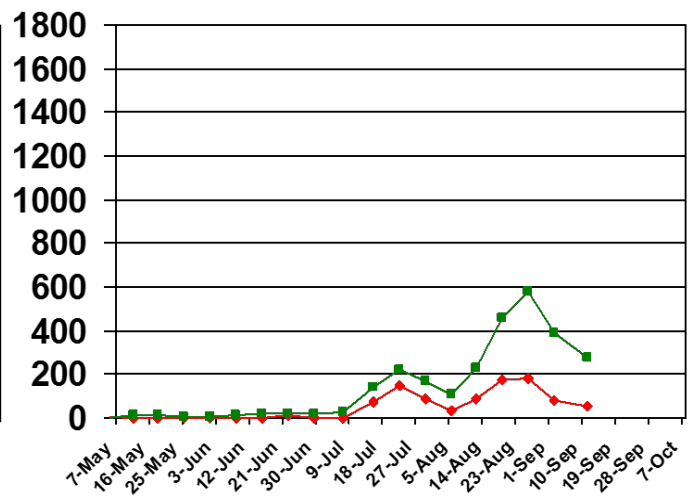
data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.



Pheromone Trap Capture SC - 2016

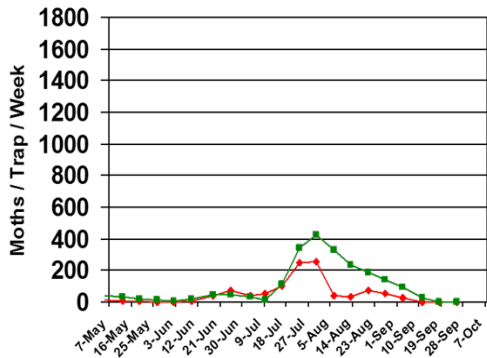


Pheromone Trap Capture SC - 2015

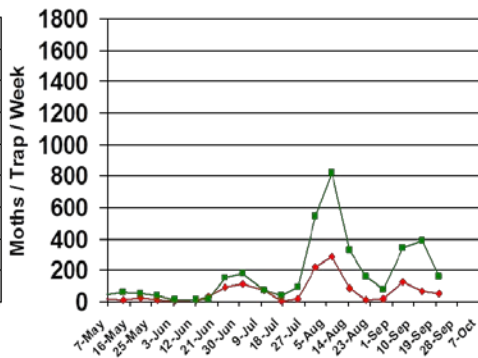


Trap data from 2012-2014 are shown below for reference to other recent years of trapping data from EREC:

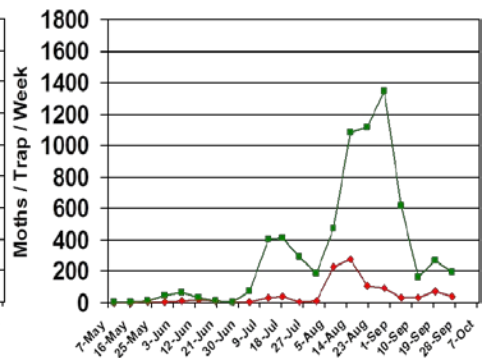
Pheromone Trap Capture SC - 2014



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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