



Cotton/Soybean Insect Newsletter

Volume 7, Issue #11

Edisto Research & Education Center in Blackville, SC

9 August 2012

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. Text alerts are also available. The hotline is sponsored by Syngenta.

Kudzu Bug Seminar/Field Day

We are offering a field day program to cover the kudzu bug with an in-field tour of plots infested with the species and an indoor session for data delivery and additional questions/answers. The meeting will be held at the **Edisto REC, 64 Research Road, Blackville, SC 29817 on 11 September 2012** (a Tuesday). The program will begin at 8:30AM with registration and conclude early in the afternoon after a provided lunch. Scientists with Clemson, UGA, NCSU, USDA, and industry will be on the program. All folks (except presenters) that want to attend should RSVP by emailing me (green4@clemson.edu) and letting me know. We need this information to plan lunch and breaks. The agenda will include topics such as:

- Discovery and distribution of kudzu bug/bean plataspid in USA
- How did the insect get here, and from where did it come?
- Biology of the kudzu bug
- Tour of soybean field plots and field discussions
- Effect of maturity group, planting dates, etc.
- Insecticide efficacy
- Yield component analyses/field cages
- Host plant resistance
- Recommendations for control in soybeans
- Bio-control potential
- Multi-state panel question/answer session
- And more!

News from Above the Lakes

David DeWitt, county agent covering Lee, Kershaw, and Sumter Counties, reported that he is “seeing many corn earworms in beans as well as some loopers [and kudzu bugs] starting to show up. Spoke with a farmer this morning, who also scouts cotton for others, who has found some corn earworms in his WideStrike cotton. He said that he had to look hard for them and that they were at the lower part of plant on the bottom side of the early bolls. He was going to look hard at other cotton to see if any more show up. He had looked at other fields a couple miles down road and did not find them. He also did not find any in his new Fibermax cotton next to the WideStrike field.”

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Public Service Activities

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.



News from Below the Lakes

Charles Davis, county agent covering Calhoun and Orangeburg Counties, and Drake Perrow, a producer in the Cameron area, reported that numbers of corn earworms and tobacco budworms have exploded. Moths are everywhere in the field, and Charles reported many CEW moths on blooms of Florida pusley. Pressure is high.

Jonathan Croft, county agent covering Dorchester and Berkeley Counties, reported that “in cotton that I have checked this week, I have not found enough boll damage or stink bugs to warrant sprays. In the later planted soybeans I checked this week, I found a mix of worms but not above threshold, numbers were very low. The mix included soybean looper, green cloverworm, corn earworm, and velvetbean caterpillar. Foliage damage was still below threshold has well. In my area, rains have saturated fields and have slowed corn harvest and crop spraying where needed.”

News from the Piedmont/Upstate

Jay Crouch, county agent in Newberry, reported last week that “cotton insects were quiet. Still finding egg masses and adult kudzu bugs, but the immature explosion I'm anticipating has not happened..... yet. Saw moderate levels of immature three cornered alfalfa hopper in a couple fields in Edgefield.”

Bollworm & Tobacco Budworm



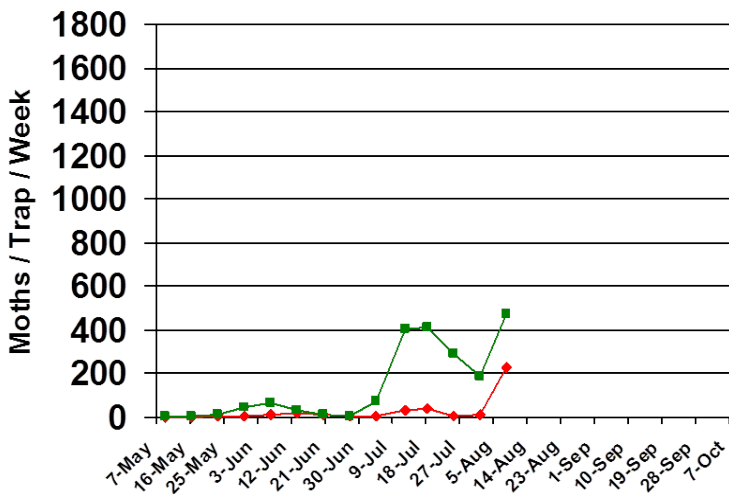
Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2011 for reference.

Tobacco budworm numbers are up tremendously. That species continues to be important for our soybean acres and for a very limited number of non-Bt-cotton acres. These data provide a measure of moth activity

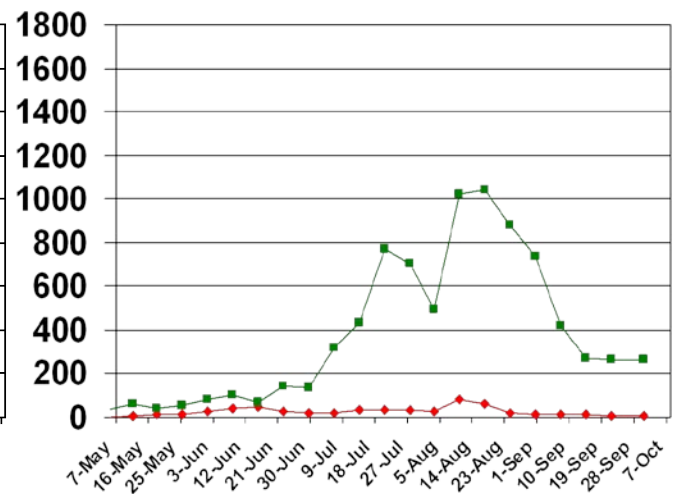
in our local area near my research plots, indicating the likelihood of caterpillar pressure developing in the field. The numbers are not necessarily representative of the species throughout the state.



Pheromone Trap Capture SC - 2012



Pheromone Trap Capture SC - 2011



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Cotton Situation

As of 6 August 2012, the USDA NASS South Carolina Statistical Office had the cotton crop at about 96% squared, compared with where we were last year at 92% and the 5-yr average of 96%. The crop has set bolls on about 62% of our acres, compared with 65% last year and 58% for the 5-yr average. Conditions of the cotton crop were described as 6% excellent, 56% good, 34% fair, 3% poor, and 1% very poor. Soil moisture levels in the state were described for the past week as 7% very short, 32% short, and 61% adequate, with no surplus. These are observed/perceived state-wide averages.

Important in Cotton Right Now

Stink bugs, spider mites, and bollworm appear to be the main culprits in cotton currently. Check for injured bolls using our stink bug boll-injury threshold (see Volume 7 Issue 9 for a good summary of scouting procedures for stink bugs), look for building populations of spider mites (pictures below I took the other day), and check for bollworms where you are not spraying pyrethroids for stink bugs. Follow guidelines for control found in our handbook: <http://www.clemson.edu/extension/rowcrops/pest/index.html>



Soybean Situation

As of 6 August 2012, the USDA NASS South Carolina Statistical Office had our progress at 55% of soybeans as bloomed, compared with last year at 69% and the 5-yr average of 63%. Pods have been set on about 22% of acres, compared with 17% for last year and 26% for the 5-yr average. Conditions of the soybean crop are described as 3% excellent, 48% good, 38% fair, 10% poor, and 1% very poor. These are observed/perceived state-wide averages.

Caterpillars in Soybeans

Pyrethroid sprays for kudzu bugs and stink bugs will not provide good control of soybean loopers (SBL) and tobacco budworm (TBW), so don't forget the field for too long after spraying a pyrethroid. Make sure that the

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large moth flights we are getting into are not translating into important populations of defoliating or fruit-feeding caterpillars. Choice of insecticide will depend upon what species of caterpillars are present, along with other species in the field that are also economic problems. **PROPER IDENTIFICATION IS CRITICAL.** See Volume 7 (this year) Issue 9 for a helpful picture key on caterpillar identification.

Kudzu Bug/Bean Plataspid

The first generation of kudzu bugs continues to molt from the last immature stage into adults and will continue to move into soybeans. Research efforts related to determining when to treat soybeans with insecticides for kudzu bugs are ongoing and represent critical and needed information for managing this invasive species in the crop. Current recommendations are to interrupt development of each generation in soybeans with insecticide applications targeting the immature stage of the insect. **We have one more generation to go!** Treatment thresholds and sampling plans for kudzu bugs are being developed and refined; however, tentative recommendations (Table 1) are to initiate application of insecticide when immatures are detected in sweep-net samples at approximately 1 nymph/sweep. Sweep-net samples should be taken from all areas of the field (edges and middles) to represent the entire field, taking care not to bias sampling along border rows where populations build up initially. However, one potential treatment tactic would be to use a border-row application of insecticide to mitigate populations that develop around field perimeters initially. This could be a cost-saving approach to controlling kudzu bugs, at least for the initial spray application. As an alternative to sweep-net sampling, visual inspections of insect density down in the canopy may suffice. If immature kudzu bugs are easily and repeatedly found on petioles and main stems using this method of canopy observations, treatment is likely warranted. This type of observational/visual sampling for kudzu bugs could also help define and exploit differential colonization of border and interior areas of fields by the pest.

Table 1. Tentative sampling methods and treatment thresholds for kudzu bugs in soybeans.

Sampling Method	Minimum Observations	Threshold
Sweep net (15-inch diameter)	At least ten 10-sweep samples representing entire field*	1 nymph/sweep
Canopy observation (visual)	At least ten observation spots representing entire field*	Nymphs easily found on petioles, main stems, or leaves

*Samples should be taken from multiple stops across the field and not just field borders

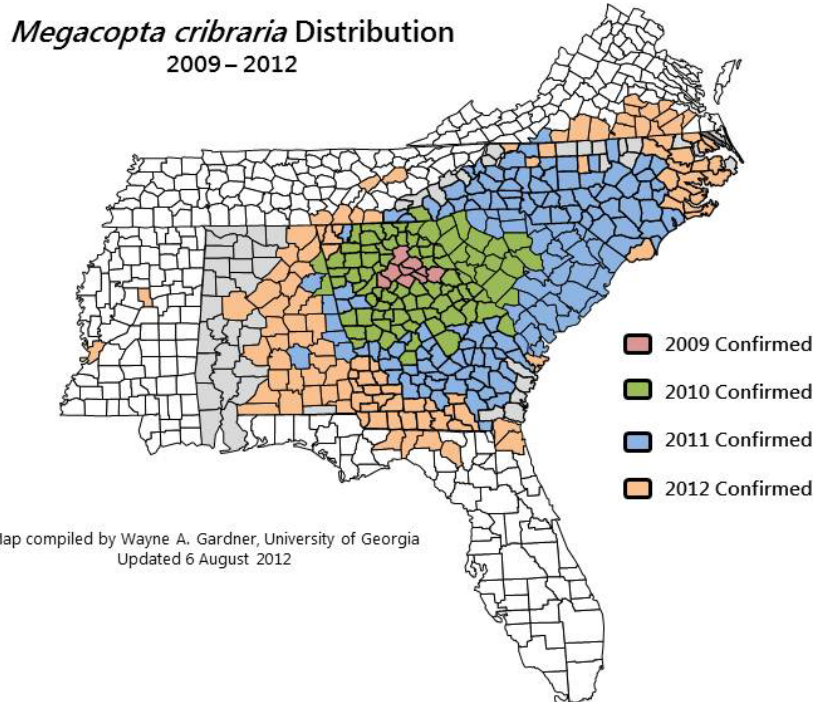
A 12-minute presentation on the kudzu bug is open access until 31 October at the link below. A shorter presentation is open access permanently courtesy of the United Soybean Board. View these at: <http://www.plantmanagementnetwork.org/edcenter/seminars/soybean/kudzu>.

Visit our kudzu bug webpage for the latest information on this invasive pest: <http://www.clemson.edu/extension/kudzubugs/index.html>

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Here is the latest map of the distribution of the kudzu bug, *Megacopta cribraria*, in the Southeast. Many thanks to Dr. Wayne Gardner (UGA) for updating and supplying this map regularly. There are 8 **states** now reporting this invasive species. In order of appearance of the pest: Georgia, South Carolina, North Carolina, Alabama, Virginia, Florida, Tennessee, and Mississippi. South Carolina remains the only state to be completely infested with this species.



Pest Management Handbook - 2012

Insect control recommendations are available online in the 2012 South Carolina Pest Management Handbook at:
<http://www.clemson.edu/extension/rowcrops/pest/index.html>

Need More Information?

For more 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 – Entomologist