



The University of Georgia

## Cooperative Extension

College of Agricultural and Environmental Sciences

September 3, 2009

### *COTTON PEST MANAGEMENT NEWSLETTER #11*

**COTTON SITUATION:** The Georgia Weekly Crop Progress and Condition Report for the week ending August 30<sup>th</sup> listed the crop as 10 percent bolls opening which is significantly lower than the 5 year average of 25 percent bolls opening. Crop conditions were rated as 12% excellent, 46% good, 32% fair, 8% poor, and 2% very poor. Rainy and cloudy conditions have been conducive for boll rots and hard locking of cotton which is opening. Conversely, rainfall has been beneficial for later planted fields. It was good to see sunshine and some blue sky today which will benefit all cotton.

**INSECT SITUATION:** Fall armyworm infestations continue to be high in some areas. Unfortunately, some producers have had to address FAW for the last 6 weeks. Corn earworm numbers have dropped significantly and are low in most areas. Stink bugs continue to be reported from many areas. Insect growth regulator applications have begun in localized areas for silverleaf whiteflies. Spider mites can be observed in some fields but populations have been slow to build. With each day that passes more fields will be reaching the stage at which some insects like stink bugs and corn earworms are no longer a significant threat. However, there are many late maturing fields which will require insect pest management (scouting and treating on an as needed basis) for several more weeks. Some pests will likely begin to concentrate on later maturing fields which remain green and lush.

**Cotton and Peanut Field Day, UGA Tifton Campus**

**September 9, 2009**

**(a schedule and directions can be found at the end of this newsletter)**

**Fall Armyworm:** Unfortunately, many of us will remember 2009 as the year of the fall armyworm. Infestations have been as heavy and sustained as I have ever seen in some areas. Treatable infestations of FAW have been reported from southwest Georgia since late July; with some fields in this area being treated 3-4 times just for FAW. During the past week, we have received increased reports of high FAW infestations in east Georgia. The threshold for FAW is about 2 times that of corn earworm. Control of FAW is difficult, and we should consider 70 percent control a successful treatment in cotton (in fields with high numbers this may not reduce populations below threshold levels). Diamond at 9+ ozs/acre and high rates of Steward or Belt have performed fair to good on established infestations. However, control with all treatments has been erratic, and we do not fully understand why treatments are successful in one field and not in the other. One thing we do know is that coverage and penetration of the canopy is extremely important when targeting FAW with insecticides. We must deliver the insecticide to the target or area of the plant where FAWs are present. Timing is also important as small larvae are much easier to control. When FAW are very small, high rates of pyrethroids have provided

good suppression (in most situations we were fortuitous to suppress FAW when targeting another pest such as stink bugs or corn earworm with a pyrethroid). Bolls are susceptible to feeding damage by FAW larvae until near maturity. Typically FAW larvae will chew into the base or lower portion of bolls.

**Stink Bugs:** Bolls are susceptible to stink bugs until about 25 days of age. There are many fields in Georgia which are still actively blooming and we hope to make bolls which bloom this week. In later maturing fields we will need to scout and treat stink bugs all of September. These later maturing fields are also green and lush and may concentrate stink bugs and some other pests as nearby fields and host plants become less suitable hosts.

**Terminating Insecticide Applications:** The decision to terminate insect controls can be challenging in some fields but a few basic considerations will assist in that decision. When evaluating a field a grower must first identify the last boll population which will significantly contribute to yield (bolls which you plan to harvest). In some situations the last population of bolls which you will harvest is easy to see (i.e. cotton which is loaded and cutout). In others, such as late planted cotton, the last population of bolls you will harvest will be determined by weather factors (the last bloom you expect to open and harvest based on heat unit accumulation). Once the last boll population is determined the boll development or approximate boll age should be estimated. Depending on the insect pest, bolls are relatively safe from attack at varying stages of boll development.

The table below list approximate boll age in days which bolls should be protected for selected insect pests. Cooler temperatures will slow plant development and subsequent boll age values may increase in such environments. It is assumed that the field is relatively insect pest free when the decision to terminate insecticide applications for a pest is made.

Insect Pest(s)	Approx. Boll Age (days)
Corn Earworm Tobacco Budworm	18-20 bolls fully sized
Stink Bugs	25
Fall Armyworm	bolls near maturity
Foliage Feeders soybean looper beet armyworm southern armyworm	bolls mature
Sucking Insects whiteflies aphids	harvest (honeydew accumulation on lint)

**Whiteflies:** Treatments for whiteflies have been initiated in localized areas based on the presence of immature whiteflies. IGRs such as Knack and Courier have historically been our

most effective management program for whiteflies. These IGRs must be applied in a timely manner for maximum benefit. Treatment should be initiated when immatures are observed on the majority (>50%) of the leaves sampled. We recommend sampling the 5<sup>th</sup> expanded leaf below the terminal for the presence of whitefly immatures. Be observant for immatures on leaves above the 5<sup>th</sup> leaf and adjust sampling sites if needed, our objective is to time the IGR application before populations begin to cycle or reproduce in a field which results in a rapid population increase. In fields which are infested with whiteflies, only treat other insect pests when thresholds are exceeded and select insecticides which are least likely to flare whiteflies.

**Last Newsletter for 2009:** This is the final issue of the Cotton Pest Management Newsletter for 2009. Thanks to each of you who offer suggestions, provide information, and critique information included in the newsletter. Please let me know if you have suggestions on how we could improve our programs and the newsletter. We will have much to discuss this winter in terms of Cotton Pest Management.

**INSECT UPDATES:** Check the **Cotton Insect Hotline (1-800-851-2847)** for updates on current insect conditions. The Cotton Pest Management Newsletter and additional cotton production information is also posted on the UGA Cotton Homepage at: <http://www.ugacotton.com>

Sincerely,

Phillip Roberts  
Extension Entomologist

Putting knowledge to work

COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES, COLLEGE OF FAMILY AND CONSUMER SCIENCES, WARNELL SCHOOL OF FOREST RESOURCES, COLLEGE OF VETERINARY SCIENCES  
The University of Georgia and Fort Valley State University, the U. S. Department of Agriculture and counties of the state cooperating, The Cooperative Extension Service offers educational programs, assistance and materials to all people without regard to race, color, national origin, age, sex or disability. An equal opportunity/affirmative action organization committed to a diverse work force.

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**Cotton and Peanut Research Field Day  
September 9, 2009  
UGA Tifton Campus**

8.30	Welcome, <b>UGA Lang/Rigdon Farm Shop</b>	
8:45 Stop 1	Long Term Crop Rotation Trial Cotton Weed Management Peanut Weed Management	Scott Tubbs Stanley Culpepper Eric Prostko
9:15 Stop 2	Peanut Calcium Nutrition Peanut Agronomic Research	Glen Harris John Beasley
9:45 Stop 3	Stink Bug Movement and Distribution in Cotton Engineering Research – Cotton BioControl and Bt Cottons	Mike Toews & John Herbert Changying Li John Ruberson & Phillip Roberts
10:15 Stop 4	Growth Habits and Drought Tolerance of Cotton Cotton Variety Selection UGA Cotton Breeding Program	Glen Ritchie Jared Whitaker Peng Chee & Ed Lubbers
10:45 Stop 5	Peanut Seedling and Soil-borne Diseases UGA Peanut Breeding Program	Tim Brenneman Bill Branch
11:15 Stop 6	Nutrient Cycling in Cotton and Peanuts Thrips Management in Cotton (tillage impact) Potassium and Leaf Spot Management in Cotton	Scott Tubbs Mike Toews Glen Harris & Bob Kemerait
11:45 Stop 7	Peanut Diseases USDA Peanut Breeding Peanut Economics	Albert Culbreath Corley Holbrook Nathan Smith & Amanda Smith
12:15	Lunch at <b>Blackshank Farm</b> , sponsored by the Georgia Cotton Commission and the Georgia Peanut Commission.	
1:30	Cotton and Peanut Official Variety Trials (Gibbs Farm) participants interested in viewing OVTs will caravan to the Gibbs Farm following lunch.	Don Day, Larry Thompson, Anton Coy
<b>Have a Safe Trip Home</b>		

University of Georgia College of Agricultural and Environmental Sciences  
Georgia Cotton Commission  
Georgia Peanut Commission

**Directions to UGA Lang/Rigdon Farm**

**From the UGA Tifton Campus Conference Center (exit #64 on I-75)**

- 1. Hwy 41 north approx. 0.8 miles**
- 2. Turn left on Zion Hope Road and travel approx. 1.4 miles to 4-way Stop**
- 3. Turn right on Carpenter Road and travel approx. 1.6 miles**
- 4. Turn left on Rigdon Aultman Rd, Lang/Rigdon Farm entrance is on the right.**

**Contact Debbie Rutland 229 386-3424 if you have questions.**

Cotton and Peanut Research Field Day  
September 9, 2009  
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Tentative Stop Locations

