

## The University of Georgia Cooperative Extension College of Agricultural and Environmental Sciences

August 15, 2012

## **COTTON PEST MANAGEMENT NEWSLETTER #6**

**COTTON SITUATION:** The Georgia Crop Progress & Condition Report for the week ending August 12<sup>th</sup> listed the crop as 97 percent setting bolls and 6 percent bolls opening which are slightly ahead of the 5-year averages of 88 and 5 percent. Crop conditions were rated 33 percent fair, 47 percent good, and 13 percent excellent. The August Crop Production report released on August 10, 2012 by NASS-USDA projected Georgia cotton production at 925 lbs. per acre on 1.245 million harvested acres. If realized, 925 lbs. per acre would be a new record state yield.

**INSECT SITUATION:** Stink bugs are the most common insect pest being treated in cotton at this time. A few reports of corn earworm have been received but as a whole numbers continue to be low. Spider mites continue to linger, but have yet to build to damaging populations in most fields. Silverleaf whitefly populations continue to increase in infested areas; whiteflies are also being observed in additional locations.

**Stink Bugs:** Reports of stink bugs and internal boll injury are all over the board; some fields have yet to reach threshold levels whereas others have been treated multiple times. This is why we recommend you scout all fields! Agents and scouts have reported high numbers of immature stink bugs in peanuts for several weeks. As these immatures complete development, they may move to another host plant such as cotton. Last week a consultant in SW Georgia reported very high numbers of stink bugs in the first few rows of cotton planted adjacent to peanuts. Most likely these bugs originated in the peanuts and are migrating into the adjacent cotton. Historically we see much higher populations of stink bugs on field edges, so be sure to collect a representative sample of bolls from the entire field when monitoring boll damage. Be observant for stink bugs when walking fields and keep a tally of browns verse greens which will aid in insecticide selection. OP insecticides such as Bidrin and methyl parathion provide good control of both southern green and brown species; whereas pyrethroids provide good control of southern green but only fair control of browns.

**Corn Earworm, Fall Armyworm, and Tobacco Budworm:** Isolated reports of corn earworm have been received, but as a whole corn earworm pressure has been low. However, we need to stay vigilant with scouting procedures for corn earworm and fall armyworms. Tobacco budworm moth activity has been high in southwest Georgia, Bt cottons should provide good control of tobacco budworm.

**Clouded Plant Bugs:** Clouded plant bugs have been reported from some counties. This bug is most often associated with boll feeding. We would expect internal damage from clouded plant bugs to be very similar to internal boll damage from stink bugs. Treatment decisions should be

made on levels of boll damage and field observation will give us an indication of what species is causing the damage. Insecticides used to control stink bugs should provide good control of clouded plant bugs.



Clouded plant bug nymph (left) and adult (right). Photos by Ron Smith, ipmimages.org

Whiteflies: Silverleaf whiteflies (SLWF) have primarily been reported in Tift and Colquitt counties; however we have recently received reports of whiteflies in adjoining counties as well. Recent rainfall events will have a suppressive effect on SLWF adults, but it is unlikely it will eliminate this threat. The use of IGRs such as Knack and Courier provide the most consistent control of SLWF. These IGRs must be used on a timely basis before SLWF populations are high. When scouting SLWF, examine the 5<sup>th</sup> expanded leaf below the terminal. The number of adults per leaf can be counted by gently turning the leaf so as not to disturb the adults. The underside of the leaf should then be examined for the presence of immatures. If immatures are present on greater than 50 percent of sampled leaves, treatment is suggested. Also observe leaves within the canopy for "browning" spots or general leaf decline associated with whitefly feeding. We need to keep foliage green and healthy until all harvestable bolls are mature. Whiteflies also excrete honeydew which may potentially collect on open lint which is problematic. Watch this pest closely and only treat other pest when absolutely necessary. Avoid applying OP insecticides alone in whitefly infested fields. Conservation of beneficial insects is a tremendous benefit in a SLWF management program.



Silverleaf whitefly adults and empty pupal cases (left), SLWF immatures on underside of a leaf (right). *Photos by Scott Bauer (left) and Stormy Sparks, ipmimages.org.* 

**Spider Mites:** Spider mites and/or damage can be found at low levels in most fields I have visited. Only a small percentage of fields have been treated, but the potential for mites to "blow up" is there in many fields, especially if we make a bad decision in terms of insecticide selection.

**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 <u>significantly</u> 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)

**PEST PATROL HOTLINE:** Check the Pest Patrol Hotline (**1-877-285-8525**) for updates on current insect conditions. Select #1 for updates from the Southern Region, then #3 for the Southeast, and then #4 to hear the Georgia update. More information, including sign up for text message alerts when new updates are posted, can be found at <u>www.SyngentaPestPatrol.com</u>. 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

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