



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

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COTTON PEST MANAGEMENT NEWSLETTER #9

COTTON SITUATION: The Georgia Weekly Crop Progress and Condition Report for the week ending July 27th listed the crop as 93 percent squaring and 66 percent setting bolls which is slightly behind the 5 year averages of 95 and 73 percent respectively. Crop conditions vary based on available moisture and were rated 4 percent very poor, 10 percent poor, 36 percent fair, 41 percent good, and 9 percent excellent.

INSECT SITUATION: Corn earworm numbers range from low to moderately high depending on location. Fall armyworm are sporadic but have been observed at treatable levels in some fields. Stink bugs continue to be reported, some fields exceeding threshold and some not. Spider mites have been reported at low numbers in a few fields.

Stink Bugs and other Boll Feeding Bugs: Southern green and brown stink bugs are the most common boll feeding bugs infesting cotton in Georgia during most years. However, tarnished plant bugs (tends to feed on small bolls) and leaf-footed bugs may also feed on developing bolls. Internal symptoms of feeding injury, callous growths or warts on the inner surface of the boll wall, by the above mentioned bugs appear similar. Thus it is important for scouts to be observant for bugs when walking fields to aid in determining the primary pest causing boll injury. Treatments for boll feeding bugs are recommended when 20 percent of bolls approximately the diameter of a quarter display internal symptoms of feeding (i.e. warts or callous growths on the inner surface of the boll wall and/or stained lint).



Tarnished Plant Bug adult.
Photo by Russ Ottens, ipmimages.org



Clouded Plant Bug adult.
Photo by Ron Smith, ipmimages.org

Dirty Blooms: Tarnished plant bugs are typically considered a pest which feeds on small squares. Small squares which are damaged by plant bugs typically shed. However, tarnished plant bugs may feed on large squares and even small bolls. Larger squares fed on by tarnished plant bug may not abort and will bloom and potentially set a normal boll. “Dirty blooms” (below right) are indicative of blooms from large squares which had been damaged by tarnished plant bug. Severe damage to the anthers could potentially lower pollination and thus result in misshapen bolls or fewer seeds set in bolls. Minor damage is probably cosmetic, but should be an indication that plant bugs may be infesting fields and thus scouting should be intensified for tarnished plant bug. When numerous dirty blooms are observed in fields, scouts should use a drop cloth to sample for tarnished plant bugs being especially observant for plant bug nymphs.

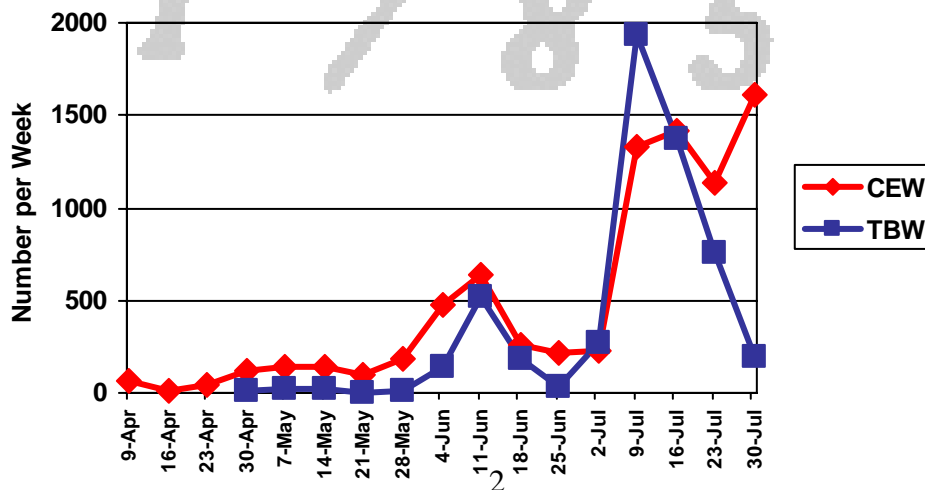


Tarnished plant bug nymph in a white bloom.
Photo by Ron Smith, ipmimages.org



Dirty Bloom, note misshapen areas on petals and localized discoloration on the anthers.
Photo by Barry Freeman, ipmimages.org

Corn Earworm and Tobacco Budworm (Non-Bt Cotton): The chart below illustrates corn earworm and tobacco budworm pheromone trap captures in Tifton during 2008. Population peaks of TBW have been very apparent to date and I anticipate TBW to increase in these trap captures next week. CEW numbers have remained similar for the past 3-4 weeks, perhaps due to movement from various nearby corn fields that range in maturity. During August predicting which is the predominant species infesting non-Bt cotton is difficult, often we see mixed populations of CEW and TBW. Observation of moths is perhaps the best indicator of species makeup. Pyrethroids would be a poor choice for control of TBW in non-Bt cotton. When in doubt of the species makeup, treat infestations as if they were TBW.



Corn Earworm (Bt Cotton): CEW have been observed at treatable levels in various areas. Most CEWs observed in Bt cotton have been in blooms, under stuck bloom tags, or in small bolls. Pyrethroids should be used at medium-high rates for control of CEW. Good coverage and penetration of the canopy will increase the likelihood of a successful treatment.

Southeast Research and Education Center 2008 Field Day: The annual Midville Field Day will be held on August 20, 2008. Registration will begin at 9:00 AM with field plot tours followed by a catered lunch.

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

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