

July 8, 2004

**COTTON PEST MANAGEMENT NEWSLETTER #6**

**COTTON SITUATION:** The Georgia Weekly Weather and Crops Report for the week ending July 4<sup>th</sup> listed the crop as 83 percent squaring and 26 percent setting bolls which are similar to the 5-year averages of 75 and 29 percent. Twenty percent of the crop is rated fair and 78 percent is rated good to excellent. The USDA released planted acreage estimates on June 30<sup>th</sup> and indicated Georgia growers had planted 1.33 million acres of cotton.

**INSECT SITUATION:** Aphid infestations have crashed or are crashing in most areas due to a naturally occurring fungus. Tobacco budworm numbers are light to moderate. Corn earworm pheromone trap captures increased today in Tifton. Expect to see increased corn earworm activity this week. Some early planted fields have been treated for stink bugs.

**Boll Feeding Bugs (Stink Bugs and others):** A complex of bugs can feed on developing bolls and includes stink bugs, plant bugs, leaf-footed bugs and others. Stink bugs are historically the most common boll feeding bug we observe in Georgia. Three primary species of stink bugs typically infest cotton; southern green, green, and brown. However, we sometimes also observe additional species such as *Euschistus quadrator*.

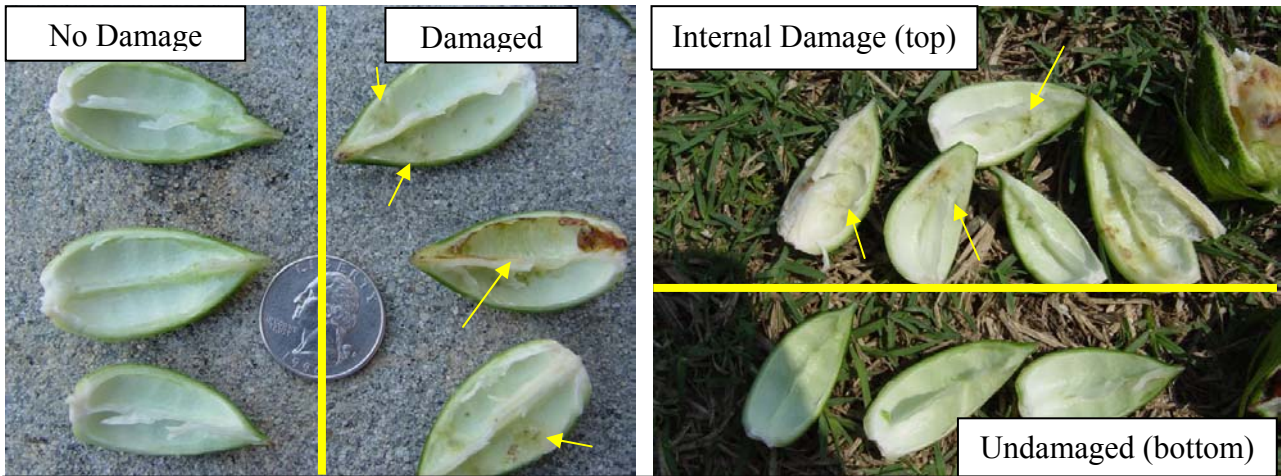
Once cotton begins blooming, scouts should begin monitoring bolls for internal damage from boll feeding bugs. Damage is recognized as warts or callous growths on the inner surface of the boll wall or stained lint. Bolls approximately the diameter of a quarter should be sampled. However, if bolls of this size are not present (first 10-14 days of bloom) sample the largest bolls available. Bolls which are the diameter of a quarter appear to be the preferred size on which stink bugs feed. Bolls of this size can be easily squashed between your forefinger and thumb. Scouts should also be observant for bugs in the field which gives an indication of what species is causing the damage. Be sure to differentiate brown and southern green stink bugs. Organophosphate insecticides should be used when brown stink bug is the primary stink bug species present. Pyrethroids will provide very good control of southern green and green, but only suppression (maybe 50 percent) of brown stink bug when used at medium rates. Pyrethroids are a good choice when corn earworms are also infesting fields.



Brown (top left), southern green (right), and *E. quadrator* (bottom left) stink bugs.



Sample bolls approximately the diameter of a quarter when monitoring for internal boll damage from stink bugs.



Internal boll damage (stink bug damage) is defined as wart or callous growths on the inner surface of the boll wall and/or stained lint. Boll walls which are not damaged are smooth.

**Tarnished Plant Bug Nymphs and Dirty Blooms:** In parts of Georgia, we encountered higher than normal tarnished plant bug infestations during recent weeks. It is likely we will observe nymphs or immature plant bugs in these same areas. Nymphs are easily recognized by the presence of 5 black dots on the back. Nymphs also run around quickly when disturbed. Scouts will often observe nymphs feeding on squares when making terminal checks and sometimes in blooms. Larger squares which are fed upon by plant bugs will often remain on the plant. When these damaged squares bloom, the petals and anthers will be deformed and have brownish markings. These damaged blooms are often referred to as dirty blooms. If numerous dirty blooms are observed, 10-15 percent, treatment may be justified.



“Dirty” blooms (top) are a result of plant bugs feeding on large squares which are not shed by the plant. Tarnished plant bug nymph feeding in bloom (bottom left). Tarnished plant bug nymphs and an adult (bottom right). Images obtained from [www.ipmimages.org](http://www.ipmimages.org).

**Tobacco Budworm:** Tobacco budworm (TBW) numbers are light to moderate depending on location. We would anticipate observing mixed populations of TBW and corn earworm in the coming days. When treating mixed populations of TBW and corn earworm, treat the infestation as a TBW infestation.

**Corn Earworm:** Corn earworm (CEW) pheromone trap captures increased today in Tifton. This would suggest we are on the front end of the CEW flight which generally occurs around mid-July. Pyrethroids provide very good control of CEW. In some situations, Bt cotton will require supplemental treatment for CEW. Be sure scouts are monitoring at least one bloom, one bloom tagged boll (look under and in bloom tag), and a boll lower in the canopy in addition to the top 12 inches of the plant. When CEW escapes occur in Bt cotton, they are often associated with developing bolls and stuck blooms in the middle of the plant canopy.

**Aphids:** Aphid populations have crashed in many areas of the state due to a fungal epizootic. If you still have active aphid infestations, be sure to look for gray fuzzy aphid cadavers which are indicative of the fungus.

**INSECT UPDATES:** Check the **Cotton Insect Hotline (1-800-851-2847)** for updates on current insect conditions. The Cotton Pest Management Newsletter is also posted on the UGA Cotton Homepage at: <http://www.griffin.peachnet.edu/caes/cotton/>

Sincerely,

Phillip Roberts  
Extension Entomologist