July 22, 2004

## COTTON PEST MANAGEMENT NEWSLETTER #8

**COTTON SITUATION:** The Georgia Weekly Weather and Crops Report for the week ending July 18<sup>th</sup> listed the crop as 95 percent squaring and 59 percent setting bolls.

**INSECT SITUATION:** Mixed populations of tobacco budworm and corn earworm continue to be reported in various parts of the state. A few reports of fall armyworm from southwest and east Georgia have been received. Boll feeding bugs (stink bugs and plant bugs) are being treated in many areas.

**Corn Earworm and Tobacco Budworm (non-Bt cotton):** Mixed populations of corn earworm (CEW) and tobacco budworm (TBW) are being reported in many areas of the state. These infestations are patchy and sporadic and differ significantly by location. Infestation levels range from light to relatively high. TBW infestations have been reported in east Georgia during the past week. The presence of TBW was recognized when pyrethroids failed to provide good control of suspected CEW on non-Bt cotton. Near 100 percent of surviving larvae following treatment were TBW. During recent years, we have observed difficulty controlling TBW in other parts of the state due to pyrethroid resistant TBW. Scouts must be observant for moth activity when walking fields. Moth flushing counts (the number of TBW vs CEW moths) gives us an indication of what the species makeup is in the field. If TBW is the primary species, a non pyrethroid insecticide such as Tracer, Steward, or Denim should be used. It is important that we select the correct insecticide on the initial spray. Large TBW are difficult and expensive to attempt to control. If CEW is the predominant species, a pyrethroid should provide good control.



**Bt Cotton (Corn Earworm and Tobacco Budworm):** Bt cotton provides excellent control of TBW. However supplemental treatment of CEW may be needed in some fields. When CEW survive on Bt cotton they are often associated with blooms and small bolls near the uppermost white bloom. Escaped CEW larvae are often found feeding in the tips of bolls under dried bloom tags. If threshold levels of CEW are present in Bt cotton, a pyrethroid should be used.

**Fall Armyworm:** Sporadic infestations of fall armyworm (FAW) have been reported in southwest and east Georgia. FAW is a difficult insect to scout for due to their feeding habits. Eggs are laid in masses on the underside of leaves and appear identical to beet armyworm. Upon hatching, small FAW disperse to fruiting forms (bolls and blooms) in the mid to lower canopy. The key to successful control is early detection. Be observant for etching on the inner surface of boll bracts by small FAW. If detected early pyrethroids will provide fair to good control. However, as FAW larvae increase in size control becomes more difficult and expensive. Tank mixes of pyrethroids with non-pyrethroids recommended for FAW would be suggested for larger larvae. Good coverage and penetration of the canopy is a must since FAW often are found low in the plant canopy. The threshold for FAW is 2X that used for CEW.



**Boll Feeding Bugs (Stink Bugs and Plant Bugs):** Boll feeding bugs are being treated in many areas. A complex of bugs which includes stink bugs and plant bugs are causing internal damage. Plant bug damage on a developing boll appears identical (warts or callous growths) to that of stink bugs. However plant bugs may only damage bolls up to about ten days of age, whereas stink bugs can damage bolls up to about 25 days of age. Scouts should be observant for boll feeding bugs in the field so appropriate insecticides may be selected if needed. At this point in time, bugs do not appear to be as severe as last season. However, we should anticipate movement of stink bugs from other crops such as corn and peanuts in the near future.

**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