

August 12, 2004

***COTTON PEST MANAGEMENT NEWSLETTER #11***

**COTTON SITUATION:** The Georgia Weekly Weather and Crops Report for the week ending August 8<sup>th</sup> listed the crop as 98 percent setting bolls and 1 percent bolls opening. Three percent of the crop is rated very poor, 12 percent poor, 32 percent fair, 41 percent good, and 12 percent excellent. USDA estimates for yield, acres harvested, and production (as of August 1) were 738 lbs lint/acre on 1.3 million harvested acres for a total of 2 million bales.

**INSECT SITUATION:** We continue to receive reports of mixed populations of tobacco budworm and corn earworm. Infestations have been very high in some areas, especially on later planted cotton. However, in other areas both egg and worm counts are relatively low. Boll feeding bug infestations are much lower than during 2003, but sprays are still needed in many areas. We have seen aphids building in a few fields. When aphid populations build to relatively high numbers, we have observed them crashing due to the naturally occurring fungus.

**When is a Boll “Safe” from Insect Attack?:** Although cotton is never immune from insect attack, the following chart provides guidelines for terminating insect control for various pests. To use these guidelines, one must first determine the latest population of bolls that will significantly contribute to yield (the population of bolls you plan to mature prior to defoliation). These guidelines assume the field is relatively insect-free at the time of insecticide termination. For some pests (tobacco budworm and corn earworm), the insects will make this decision for us as the field becomes less attractive as a suitable host site.

<b>Insect Pest(s)</b>	<b>Boll Age (Approx. Days from White Bloom)</b>
Tobacco Budworm / Corn Earworm	20
Stink Bug (leaf-footed bug)	25
Tarnished Plant Bug	12
Foliage Feeding Caterpillars: (soybean looper, beet and southern armyworm)	Bolls Mature
Whiteflies (leaf deterioration, honeydew accumulation)	Bolls Mature
Aphids (honeydew accumulation)	Bolls Mature
Fall Armyworm	Bolls Mature (penetrates the softer base of bolls)

**Tobacco Budworm and Corn Earworm:** In general we continue to receive reports of mixed populations of tobacco budworm (TBW) and corn earworm (CEW). Species makeup will vary by location. On non-Bt cotton, non-pyrethroid insecticides such as Tracer, Steward, or Denim should be used for control of TBW. Bt cotton should provide good control of TBW, but supplemental treatment of CEW with a pyrethroid may be needed. Late cotton appears to be more attractive to TBW and CEW as high egg and larval counts have been observed on later planted cotton in some areas.

**Southern Armyworm:** Southern armyworm may be found on both non-Bt and Bt cotton and most often are observed in fields that have not been treated with an insecticide that has activity on caterpillar pests. Typically, southern armyworm will only feed on foliage but will occasionally feed on squares, flowers, and bolls. Larvae can vary in color from tan to nearly black. Several large black spots are present on the top and sides of the first abdominal segment (just behind the third pair of true legs). On small larvae, these black spots give the appearance of a band around the body. The head capsule of larvae is often a tan-orange color. Southern armyworm moths lay egg masses similar in appearance to beet or fall armyworm, but they are much larger, about the size of a nickel. Upon hatching the larvae feed in a group on the underside of leaves for several days similar to beet armyworms. As larvae mature they will disperse to adjacent plants. Do not confuse southern armyworm with beet armyworm. Unlike beet armyworm, southern armyworm can be controlled with pyrethroids.



Small southern armyworm feeding gregariously. Initial feeding symptoms appear similar to a beet armyworm hit.



Large southern armyworm, notice orangish head capsule and spots on the first abdominal segment.



Beet armyworm larvae are easily identified by the presence of a black dot directly above the second pair of true legs.

**Fall Armyworm:** Sporadic infestations of fall armyworm continue to be reported in southwest and east Georgia. The key to successful control is early detection. The threshold for FAW is 2X that used for tobacco budworm and corn earworm. Fall armyworm can damage (penetrate the base of bolls) much larger bolls as compared to tobacco budworm and corn earworm.

**Boll Weevil Eradication Update:** As producers prep field margins for harvest, we need to be reminded of the importance of boll weevil traps. They need to be standing and functional. If a trap is accidentally knocked down, please stand it back up. Additionally, if traps are accidentally destroyed, boll weevil eradication personnel should be contacted so that a new trap can be installed. It is especially important that traps are standing and functional at this time of year. If you remember back to the boll weevil days, when fields cutout, weevils dispersed in search of new food sources and traps would fill up in a day. Most reinfestations have been detected during August as cotton cuts out. Early detection and control of reinfestations is only possible with vigilant trapping on all fields and is vitally important to maintaining our weevil free status.

**Boll Feeding Bugs:** Boll feeding bug (stink bugs and plant bugs) infestations remain patchy. Some fields are exceeding the threshold of 20 percent internal boll damage and others are not. Scout all fields and treat on an as-needed basis.

**Silverleaf Whitefly:** Immature silverleaf whiteflies were observed in Tift County. Monitor these infestations closely, especially on late-planted cotton. Early planted cotton will likely avoid damaging infestations.

**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,

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