

July 13, 2006

***COTTON PEST MANAGEMENT NEWSLETTER #5***

**COTTON SITUATION:** The Georgia Weekly Crop Progress and Condition Report for the week ending July 9<sup>th</sup> listed the crop as 87 percent squaring and 44 percent setting bolls. Crop conditions continued to decline due to lack of rainfall. Some dryland fields have little yield potential whereas others need rainfall very soon.

**INSECT SITUATION:** Although aphids have crashed in southwest Georgia, populations can be found in high numbers in east and central Georgia (if no indication of the fungus is present in your area and high numbers are present—consider treating heavily infested fields). Mixed populations of corn earworms and tobacco budworms have been reported in many areas. Fall armyworms were also reported in southwest Georgia. Bug-damaged bolls have exceeded threshold levels on some early-planted cotton. Spider mites continue to linger and/or build in some areas.

**Aphids:** The naturally occurring fungus that causes populations to crash is slow to spread this season. This is likely due to the dry conditions we have experienced to date. The fungus requires a high relative humidity for sporulation and spread. Limited county agents and consultants are cooperating with the University of Arkansas in an aphid fungus detection program. The following website (<http://www.uark.edu/misc/aphid/index.htm>) provides current information on fungal infection of samples submitted from Georgia and other cotton producing states and additional information on the life cycle of the fungus. To date we have only observed aphid populations crash south and west of Tifton.

**Should I Treat Aphids?** In most years only a small percentage of cotton is treated for aphids in Georgia. Research trials conducted in Georgia cannot consistently demonstrate a yield response to aphid control. Historically, aphid populations have crashed in most areas of the state by now. However, in many areas aphids remain at high numbers and there is no indication of the fungal epizootic. For this reason, we believe there are fields that should be treated for aphids at this time. Aphids feed on plant juices and serve as an additional stress factor on the plant. This is a stress factor we can control. The neonic insecticides Centric and Trimax have provided good control of aphids. If stink bugs are also a target for an application, Bidrin is a good choice.

Aphid treatments should only be applied in fields where there is no indication of the naturally occurring fungus (grayish, fuzzy aphid cadavers). If there is no indication of the fungus, we can expect aphids to continue to infest those fields for at least another 7 days. Decision to treat dryland fields will be difficult and will be a judgment call based on yield potential. On irrigated fields, consider treatment

of fields where high populations are present and plant growth has been delayed. Many irrigation systems cannot fully apply all the water needed by a cotton plant. Thus it may be beneficial to remove the stress associated with aphids.

Grayish, fuzzy aphids are indicative of the naturally occurring fungus that causes aphid populations to crash.



**Spider Mites:** Spider mites have required treatment in some SW Georgia fields. Growers should be aware if spider mites are infesting fields (even if not at treatable levels). In fields that are infested by moderate populations of mites, consider using insecticides for other target pests that have activity on spider mites.

**Boll Feeding Bugs:** Scouts should be monitoring medium sized bolls for internal symptoms of feeding by bugs. The threshold for treating stink bugs and other boll feeding bugs is 20 percent internal damage (warts or callous growths and/or stained lint found on the inner surface of the boll wall).



**Corn Earworm and Fall Armyworm:** Small larvae have been reported in blooms of Bt cotton during the past week in southernmost counties. When larvae are small and only a few days of age, correct identification is difficult. Pyrethroids at high rates will provide good control of fall armyworm if small larvae are targeted.



Small fall armyworm and/or corn earworm larvae feeding in blooms. Photo by Ron Smith, ipmimages.org



Small fall armyworm will etch the inner surface of bracts prior to penetrating the base of developing bolls. Photos by Ron Smith (top left), Blake Layton (top right), and David Jones (below), ipmimages.org.



**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.ugacotton.com>**

Sincerely,

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