

June 24, 2004

***COTTON PEST MANAGEMENT NEWSLETTER #4***

**COTTON SITUATION:** The Georgia Weekly Weather and Crops Report for the week ending June 20<sup>th</sup> listed the crop as 51 percent squaring and 4 percent setting bolls. Scattered showers and thunderstorms have continued and cotton continues to develop rapidly.

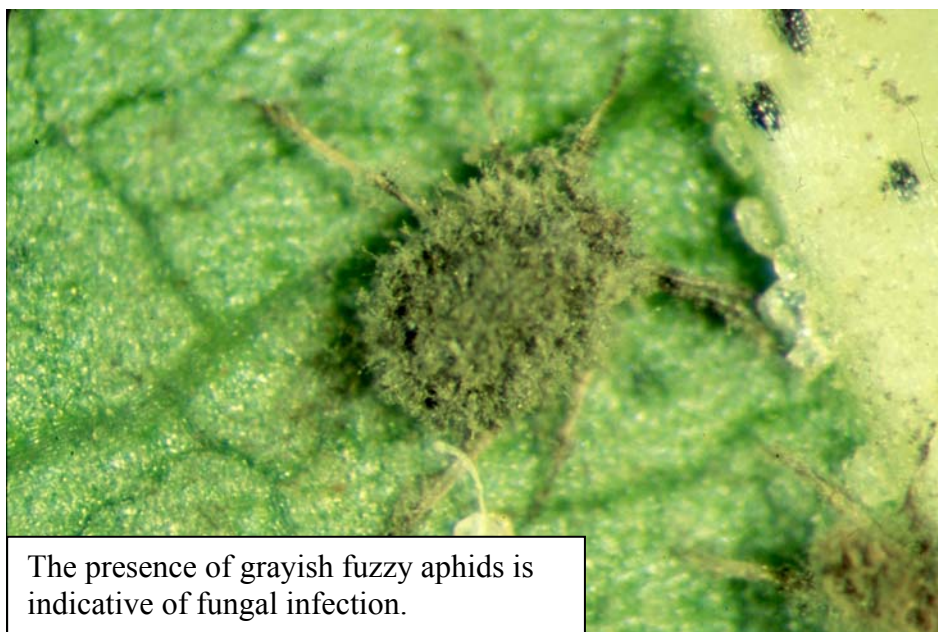
**INSECT SITUATION:** Aphid populations are building in many areas, which is typical for late June. Plant bugs have become more common in some areas. We anticipate the next generation of tobacco budworm to infest cotton in the next week to ten days in southernmost counties. Beneficial insects such as big-eyed bugs are building in squaring cotton.

**Aphids:** Aphid populations are building in various fields across the state. Cotton aphids are very prolific. A new generation may occur every five days. In the early stage of an infestation, winged aphids infest plants and give birth to living young that develop into wingless females. Wingless females will continue to give birth to wingless forms until the host plant becomes crowded, at which time females will give birth to living young that will develop wings so that they may fly and infest other plants. These soft bodied insects range in color from light yellow to dark green or almost black and infest the underside of leaves and tender terminal growth. Damage to the plant occurs as aphids feed on plant juices with their sucking mouthparts. This feeding is an additional stress factor on the plant. Heavy feeding will cause discoloration or yellowing of the terminal. Aphids secrete a sugar-like substance called honeydew, which makes the leaves sticky and slick in appearance. A sooty mold will develop on accumulated honeydew.

Aphid trials conducted in recent years have typically shown no yield benefit to treating aphids. However, each year there are some heavily infested fields in parts of Georgia, which may justify treatment. The decision to treat aphids is a difficult one and is basically a judgement call, which must be made on a field by field basis. In making the decision to treat aphids, we suggest you consider the following symptoms: heavy honeydew present and some leaves showing sooty mold, yellowing in the terminal or lower leaves, retention problems on stressed cotton, or limited growth on late planted cotton. Additionally, treatment should only be considered if no reports of the fungus which causes aphid populations to crash have been received. Ideally, we would like to wait on the naturally occurring fungus to control aphids. Historically, the first reports of the fungus which causes aphids to crash have been:

Year	Date fungal epizootic observed:
1999	July 1
2000	July 5
2001	June 25
2002	June 25
2003	June 26

Exactly when the fungal epizootic will occur this year can not be predicted, but **scouts should be observant for grayish fuzzy aphids which is indicative of the fungal epizootic.** Once the fungus is present in the field, populations will generally crash in about a week.



The presence of grayish fuzzy aphids is indicative of fungal infection.

The neonicotinoid class of insecticide has demonstrated good activity on aphids and includes Assail, Centric, and Trimax. These insecticides are good options if consideration is being given to treating aphids.

Several county agents and consultants are participating in a Cotton Aphid Fungus Sampling Service being coordinated by Dr. Don Steinkraus of the University of Arkansas in cooperation with Cotton Incorporated. Results of samples sent from Georgia and other states and additional information on the fungus will be posted on a web site by the University of Arkansas (<http://www.uark.edu/misc/aphid>). There is also information on how to participate in the sampling program.

**Plant Bugs:** Reports of plant bugs have been more numerous during the past week. Be sure squaring cotton is being monitored for plant bugs and square loss. Treatment for plant bugs is recommended when pinhead square retention drops below 75 percent and numerous plant bugs are observed. We recommend scouts monitor a single position per plant to obtain square retention measures. Ideally, counts should be made on the fruiting position which is recently damaged (usually a small square in the top of the plant, blasted squares present, yellowish or brown in color). However, scouts and consultants should also spot check retention on the entire plant. To avoid yield loss, at least 75 percent

of first position squares should be present at first bloom. In areas where plant bugs are currently infesting cotton, it is likely we will see some indication of reproduction (immature or nymph plant bugs) in the coming weeks.

**Stink Bugs:** We have recently conducted scout schools in Tift, Jeff Davis, and Burke counties. As part of the training we visit a local cotton field to demonstrate scouting techniques and collect insects for identification. A common observance in sweep net samples was stink bugs, both brown and southern green. In other fields we have visited during the past week, we have also observed stink bugs. The point is that stink bugs are here and when cotton begins setting bolls, we must be scouting for stink bugs and be prepared to treat if economic damage is observed.

**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