

June 23, 2005

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

**COTTON SITUATION:** The Georgia Weekly Weather and Crops Report for the week ending June 19<sup>th</sup> listed the crop as 32 percent squaring and 2 percent setting bolls which are slightly behind the five year averages of 45 and 7 percent. Producers are busy making herbicide applications and side-dressing cotton. Cotton growth is variable from field to field.

**INSECT SITUATION:** Scouts should be monitoring square retention in all squaring fields. We received a few reports of plant bugs. Tobacco budworm egg counts are light to moderate with a few larvae becoming established in non-Bt fields. Aphids are building in some areas. Spider mites are present in some fields and their spread should be monitored closely.

**Plant Bugs:** Reports of square retention are typically running in the 85-95 percent range, with some fields dropping to 60 percent. Normally plants will shed few squares prior to bloom unless insects are involved. However, we have experienced excessive rainfall in some areas, and excessive temperatures last week. Perhaps these weather extremes have caused some physiological shed, but we must not discount plant bug induced shed. In addition to making square retention counts in the top of the plant, scouts should periodically pull plants when walking fields to monitor retention on whole plants. Scouts should also be observant for plant bugs when walking fields. In fields where retention problems are occurring and no plant bugs are observed, we would suggest checking that field again, preferably not in the heat of the day, for the presence of plant bugs. Treatment of plant bugs is recommended when plants are retaining less than 80 percent of small squares and plant bugs are observed. Our goal in terms of square retention is to **retain 80 percent of all first position squares at first bloom**. In a field we visited this week, most of the square loss had occurred three to four nodes below the terminal. None of the damage was recent (no recently damaged squares, yellowish in color, were present) and square loss most likely occurred 7-10 days ago. When we check this field again we will make sure no new square loss has occurred.

Periodically pull plants when walking fields to monitor retention of all fruiting sites.





Tarnished Plant Bug adult,  
photo by Ron Smith ([www.ipmimages.org](http://www.ipmimages.org))



Missing square, note elliptical square,  
photo by Steve M. Brown



Small square damaged by tarnished plant bug, photo by Ron Smith  
([www.ipmimages.org](http://www.ipmimages.org))

**Aphids:** Aphid populations are building in various fields across the state. Cotton aphids are very prolific, a new generation may occur every five days. 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 would 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 would 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:

<b>Year</b>	<b>Date fungal epizootic first observed:</b>
<b>1999</b>	<b>July 1</b>
<b>2000</b>	<b>July 5</b>
<b>2001</b>	<b>June 25</b>
<b>2002</b>	<b>June 25</b>
<b>2003</b>	<b>June 26</b>
<b>2004</b>	<b>June 28</b>



Aphid Fungus, once observed in the field aphid populations will crash in about a week.

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 neonicotinoid class of insecticide has demonstrated good activity on aphids and include Assail , Centric, and Trimax. These insecticides would be 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.

**Tobacco Budworm:** Tobacco budworm infestations are variable from field to field. Egg and small worm counts are light to moderate. Most of the heavier egg lay is occurring on older cotton. Bt cotton will provide excellent control of tobacco budworm. If economic infestations infest non-Bt cotton, a non-pyrethroid insecticide such as Tracer, Steward, or Denim should be used.

**Scout Schools:** Dates, location, and contacts for additional information for upcoming cotton scout schools are listed below.

June 28, 2005            SE GA Res.& Ed. Center, Midville-*Roosevelt McWilliams* (706/554-2119)

**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,

Phillip Roberts  
Extension Entomologist