

June 9, 2005

COTTON PEST MANAGEMENT NEWSLETTER #3

COTTON SITUATION: The Georgia Weekly Weather and Crops Report for the week ending June 9th listed the crop as 92 percent planted and 4 percent squaring. Planted acres are similar to the 5 year average, however percent squaring is behind the five year average of 15 percent.

INSECT SITUATION: Thrips remain a potential pest in cotton which has not reached the five leaf stage. A few isolated reports of cutworms and grasshoppers have been received. Aphids are beginning to infest localized areas of fields and will spread in the coming weeks. Tobacco budworm infestations are light to date. Scouts should be observant for plant bugs and be monitoring square retention in squaring fields.

Thrips: A significant percentage of cotton remains susceptible to thrips damage. Once plants reach the 5 true leaf stage and are growing vigorously, it is unlikely that thrips will need to be treated. Most of the cotton which is still susceptible to thrips injury is growing rapidly at this time and we would expect plant injury to be much less than was observed on slow growing seedlings during May. Continue to monitor fields at least once per week and make foliar applications only if necessary.

Plant Bugs: Tarnished plant bug is not a common pest of cotton in Georgia, however a small percentage of fields require treatment each year. For this reason it is important that all fields are monitored for plant bugs and associated square loss. Plant bug adults are elusive insects, often flying ahead of you as you walk fields. Sweep nets can be an effective sampling tool and are used to sample adults in some states, but we recommend that treatment decisions be based on square retention. Square retention can be calculated by examining a single fruiting position on multiple plants in the field. Monitor the fruiting position where damage is occurring, normally this is a small first position square in the top of the plant. To locate the small square, grasp the two uppermost true leaves in the terminal and gently pull them away from each other. Follow the petiole of either leaf to the point where it joins the main stem. There should be a small square on a short stem attached at this point. The square should be healthy, green, and firmly attached to the plant (ie retained). However if the square has been damaged, the plant will shed it. Squares which have been damaged by plant bugs will be yellowish or brown to black, or missing and loosely attached to the plant. When the square has already shed, an elliptical scar will be seen on the branch where it had been attached. Treatment for plant bugs is recommended when plants are retaining less than 80 percent of small squares and plant bugs are observed. In addition to making square retention counts at a single fruiting position, scouts should also periodically examine all fruiting sites on plants. I commonly pull individual plants from the ground when walking fields. In some fields, square loss may be occurring lower in the plant. If noticeable

square loss is observed other than the top of the plant, another retention count should be made where damage is occurring. Our goal relative to square retention is to retain 80 percent of all first position squares at first bloom.



Tarnished Plant Bug adult, photo by Ron Smith (www.ipmimages.org)



Small square damaged by tarnished plant bug, photo by Ron Smith (www.ipmimages.org)



Missing fruiting position (elliptical square), photo by Steve M. Brown

Aphids: Low numbers of cotton aphids can be observed in most April and early May planted fields at this time. In most situations individual plants or small localized areas are randomly infested in various parts of the field. In the coming weeks, these localized infestations will spread and aphids will colonize entire fields. Historically only a small percentage of aphid insecticides are used in Georgia as most growers wait for the naturally occurring fungus to eliminate aphid infestations. We normally first observe the fungus in late June or early July.

Tobacco Budworm: We have been monitoring tobacco budworm (TBW) pheromone traps since early April in several counties. To date moth captures have been low, as well as reports from scouts, agents, and others. Historically we observe a June generation of TBW on non-Bt cotton during early to mid-June. These early infestations are generally observed on squaring cotton. In many situations, beneficial insects suppress numbers below economic levels. If control is needed a non-pyrethroid selective insecticide should be used.



Tobacco Budworm adult (left) and eggs laid on newly expanded terminal leaf.

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

June 18, 2005	Terrell Co. Ext. Office, Dawson- <i>Will Duffie</i> (229/995-2165)
June 21, 2005	Jeff Davis Co., Hazelhurst- <i>Tim Varnedore</i> (912/375-6648)
June 28, 2005	SE GA Res.& Ed. Center, Midville- <i>Roosevelt McWilliams</i> (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
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