

June 17, 2003

COTTON PEST MANAGEMENT NEWSLETTER #4

COTTON SITUATION: The Georgia Weekly Weather and Crops Report for the week ending June 15th listed the crop as 97 percent planted and 35 percent squaring. Cotton conditions are generally listed good to excellent with only three percent rated poor and 19 percent fair.

INSECT SITUATION: Tobacco budworm eggs and larvae continue to be reported in the central part of the state. In southernmost Georgia, TBW egg and larval counts have declined. A few plant bug problem fields have been reported. Aphids are spotty and populations are generally lower than normal for this time of year. Bigeyed bugs and other predators have been observed in squaring cotton.

Tobacco Budworm: Tobacco budworm infestations have declined in southernmost Georgia but continue to be reported on early planted squaring cotton in the central part of the state. Only a small percentage of the non-Bt acreage was treated for TBW. Bt cotton provides excellent control of TBW. We would expect TBW infestations to increase approximately 4 weeks following the initial TBW egg lay in your area.

Tarnished Plant Bugs and Cotton Fleahoppers: We have received a few reports of plant bugs infesting fields and reducing square set. Be sure scouts are monitoring retention in squaring fields and are observant for plant bugs. Treatment of plant bugs or fleahoppers is recommended when square retention falls below 75 percent. Although scouts will generally only check one small square per plant, periodically whole plants should be observed to monitor retention of squares lower in the plant canopy. Our goal should be to retain at least 75 percent of first positions at first bloom.

Insecticide Update: In the pest control handbook, Intruder 70WP (active ingredient acetamiprid) insecticide is listed for control of aphids, whiteflies, and plant bugs. Intruder will not be labeled in Georgia during 2003, a similar product Assail 70 WP (same active ingredient as Intruder) will be marketed. In addition to cotton, Assail is also labeled on some vegetable crops. Mustang Max 0.8EC is a new pyrethroid insecticide being marketed by FMC. Another pyrethroid, Up-Cycle 2.5EC is an additional pyrethroid which will be marketed by United Phosphorus Inc.

Aphids: Aphid populations remain spotty but are slowly building in some fields. In most situations there are small areas of fields (early infested plants) with high infestations. Cotton

aphids are very prolific. A new generation may occur every five days. In the early part 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 to 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/or 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. 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. The first reports of the fungus which causes aphids to crash were July 1 during 1999, July 5 during 2000 and June 25 during 2001 and 2002. 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 includes Centric, Assail, 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 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.

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 Internet at: <http://www.griffin.peachnet.edu/caes/cotton/>

Sincerely,

Phillip Roberts
Extension Entomologist

