

July 1, 2003

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

**COTTON SITUATION:** The Georgia Weekly Weather and Crops Report for the week ending June 29<sup>th</sup> listed the crop as 67 percent squaring and 15 percent setting bolls. Four percent of the cotton is rated poor, 19 percent fair, 56 percent good, and 21 percent excellent.

**INSECT SITUATION:** Tobacco budworm egg and small larvae counts increased during recent days in southernmost Georgia. Aphid populations continue to build but some early indications of the naturally occurring fungus which causes populations to crash have been reported. Plant bugs and reduced square retention continue to be reported in some fields. Stink bugs, especially brown stink bug, are numerous in some fields.

**Tobacco Budworm and Corn Earworm:** Scouts have reported increased numbers of eggs and small larvae in southernmost Georgia. We would expect tobacco budworm (TBW) to be the predominant species until mid July. Corn earworm (CEW) will typically begin infesting cotton in higher numbers during mid-July. Bt cotton should continue to provide excellent control of TBW. Treatment of TBW on non-Bt cotton is recommended when 8 or more small larvae are found per 100 plants and beneficials are present. If the natural controls (predators and parasites) are at low levels, treat when 5 larvae are found per 100 plants. When treating TBW, a non-pyrethroid insecticide such as Tracer or Steward should be used, especially if infestations are high. Timing is very important when treating TBW, sprays should target larvae less than 1/4 inch in length. It takes about 3 days for a TBW larva to attain a length of 1/4 inch. Several years ago, 1997, pyrethroid resistant TBW was first documented in Georgia. Since that time, poor control of TBW with pyrethroids has been experienced in various locations in Georgia. These failures have not occurred in every field, but the potential for TBW control problems with pyrethroids in any field exists due to pyrethroid resistance. Pyrethroids continue to provide very good control of corn earworm, but should be avoided when TBW is the primary target.

David Jones, Extension Entomologist, recently cooperated with Tim Varnedore in Jeff Davis County and Tony Otts in Ware County on two on farm TBW insecticide efficacy trials on tobacco. Treatments were applied on June 13<sup>th</sup> and June 14<sup>th</sup> respectively and evaluated three days later. Percent control of TBW in tobacco was 30 and 29 percent with a pyrethroid and 88 and 98 percent with Tracer. Is this pyrethroid resistance? We do not know for sure but we suspect it to be. Does this mean we will see the same percent control of TBW in cotton? Again

we do not know, however these results should be considered when making TBW treatment decisions in cotton.

**Tarnished Plant Bugs and Cotton Fleahoppers:** It appears slightly more fields have been treated for plant bugs this year compared with years past. Scouts should continue monitoring retention until bolls are forming.

**Aphids:** Aphid infestations have continued to increase in many parts of the state. Heavy infestations have generally been observed in isolated fields but uniform infestations are becoming common. We have received reports of the naturally occurring fungus which will cause aphid populations to crash. Be sure scouts are observant for grayish fuzzy aphids which are indicative of the fungal epizootic or crash. Once fuzzy aphids are detected in a field, aphids should crash in about a week.

**Stink Bugs:** Stink bugs are numerous in some fields and can be observed at low populations in most if you are observant. Most of what we have observed to date have been the brown species. Based on observation and limited research it does not appear that stink bugs cause economic damage in pre-bloom cotton. However, square set should be monitored closely. In fields which are blooming and setting bolls, scouts should be monitoring boll injury and be observant for stink bugs in the field.

**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