August 20, 2003

COTTON PEST MANAGEMENT NEWSLETTER #11

COTTON SITUATION: The Georgia Weekly Weather and Crops Report for the week ending August 17th listed the crop as 97 percent setting bolls and 5 percent bolls opening. Crop conditions remain mostly unchanged from previous reports.

INSECT SITUATION: The insect situation has remained similar for several weeks. Corn earworm and tobacco budworm infestations vary by location from relatively light to heavy. Low levels of fall, beet, and southern armyworms are being observed. Soybean loopers can be found in many fields but few have required treatment to date. Stink bugs, especially the brown species, continue to re-infest cotton in many areas.

When Can We Terminate Insecticide Applications? The answer to this question depends on identifying the last harvestable boll which will significantly contribute to yield. Once identified, these bolls need to be protected from insects until they are relatively "safe" from damage by insects. The duration or length of time bolls need to be protected varies by insect species. The table below list selected insect pests and accumulated DD60s past white bloom (and approximate boll age in days) which developing bolls need to be protected.

Insect Pest(s)	DD60s (degree hours)	Boll Age (days)
Plant Bugs	250	12
Corn Earworm Tobacco Budworm	350	18-20 bolls fully sized
Stink Bugs	450	25
Fall Armyworm	bolls mature	bolls mature
Foliage Feeders soybean looper beet armyworm southern armyworm	bolls mature	bolls mature
Sucking Insects whiteflies aphids	bolls mature	bolls mature

Stink Bugs: Stink bug infestations in cotton have been higher than normal, probably the highest ever observed in Georgia during recent history. This is especially true for the brown species which has required us to use organophosphates to achieve good control. Pyrethroids are not a "zero" on brown stink bugs, but will provide around 50 percent control (sometimes better and sometimes not quite this good) in most situations. One exception to this observation is the pyrethroid Capture. Although not as active as the organophosphates, Capture does provide better control of brown stink bug compared with other pyrethroids. Pyrethroids provide good control of southern green and green species. In some fields, three applications have been needed for control of stink bugs. During recent weeks, we have seen heavy migration into cotton from other crops and host plants. Historically, stink bug sprays have reduced populations and damage below economic levels for about two weeks, but if heavy migration is occurring treatment intervals may need to be shortened. These infestations remain somewhat sporadic so keep scouts in the field and continue treating on an as needed basis.

Corn Earworm and Tobacco Budworm: CEW and TBW infestations vary by location. Infestations range from light to heavy. In areas where TBW has historically infested cotton, mixed populations are being observed. When needed, insecticide applications for control of TBW and CEW on non-Bt cotton should be a priority. Timely applications and correct insecticide selection must be made to minimize both cost and damage.

Fall Armyworm: FAW have been reported in the southernmost counties of Georgia. Infestations are spotty, but some treatable infestations have been reported. If detected early, pyrethroids will provide good suppression of small FAW.

Foliage Feeders: Soybean loopers have been observed in most fields which I have visited during the past week. In many cases, populations are low and some feeding in the lower canopy will be beneficial. However, these infestations need to be watched closely as we must protect foliage which is feeding developing bolls. Beet armyworms have also been reported in a few isolated areas.

Last Insect Newsletter: This is the last scheduled newsletter for the 2003 growing season. Thanks to everyone who has offered observations and suggestions for information to include. We will continue to update the insect hotline as situations change.

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/
Have a safe harvest season.

Sincerely,

Phillip Roberts Extension Entomologist