



The University of Georgia
Cooperative Extension
 College of Agricultural and Environmental Sciences

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COTTON PEST MANAGEMENT NEWSLETTER #8

COTTON SITUATION: The Georgia Weekly Crop Progress and Condition Report for the week ending August 15th listed the crop as 20 percent bolls opening which is significantly higher than the 5 year average of 4 percent. Crop conditions are rated as 32% fair, 35% good, and 9% excellent. The crop continues to develop rapidly. Growers have terminated insect controls for some pests on early planted cotton, but the majority of the crop should continue to be closely scouted and managed for insect pests.

INSECT SITUATION: Insect pest pressure continues to vary by field and location (this is why all fields should be scouted). Stink bug damage is common but intensity is varied. Corn earworm numbers are increasing in some locations. Fall armyworm, beet armyworm, and soybean loopers have been reported at low numbers. Low populations of spider mites and whiteflies can be observed in some fields.

Boll Feeding Bugs: Brown and southern green stink bugs are the most common boll feeding bugs infesting cotton at this time. However, we have also received reports of clouded plant bugs and leaf-footed bugs infesting cotton which may also damage developing bolls. Continue to monitor boll damage and treat on an as needed basis. Insecticides used for stink bug control should provide control of clouded plant bugs. Treat leaf-footed bugs as you would brown stink bugs.



Clouded plant bug nymph.

Clouded plant bug adult.

Leaf-footed bug adult.

Photos by Ron Smith, ipmimages.org

Corn Earworm: Corn earworm infestations have been near normal in most areas. In general the heaviest pressure has been observed in east Georgia. Very high populations of CEW have been reported in South Carolina for several weeks. Late planted cotton is still attractive to moths as egg-laying sites. Be sure to scout Bt cottons for both small and large (> ¼ inch) larvae. The threshold for Bt cottons is 8 larvae (¼ inch in length or larger) per 100 plants. We do not recommend treating small larvae on the 2-gene Bt cottons Bollgard II and WideStrike. However,

if high numbers of small CEW are observed and you need to treat for stink bugs, consider using or adding a pyrethroid to the spray. OP insecticides used for stink bug control have little to no activity on CEW and will remove most beneficial insects which increases the likelihood of CEW survival. When targeting CEW with pyrethroids, the high rate is suggested.

Fall Armyworm: FAW infestations have been very high in pasture and turf but relatively low in cotton. There are two strains of FAW: the grass strain and the corn strain. The corn strain is typically the strain which infest cotton and appears to be much more difficult to control with insecticides than the grass strain. The threshold for FAW is 2X that used for CEW.

Beet Armyworm: This week we received a couple of calls concerning BAW feeding on pigweed. In one situation large BAW larvae were moving to cotton after defoliating the pigweed. When large BAW larvae move to Bt cotton (regardless of which technology) they typically feed and survive. Larvae will typically feed on foliage, but may also feed on squares and blooms. In these situations, treatment is suggested when 10% of squares are damaged or 10% of blooms are infested. In the absence of pigweed infestations, treatment is recommended when 10 active “hits” are observed per 300 row feet.

Soybean Looper: SBL larvae have been reported at low numbers from a few areas. Loopers initially feed low in the plant canopy and tend to feed up the plant. A large percentage of foliage which a SBL larva consumes occurs in the last few days of the larval stage. Point here is that a high population of large SBL larvae can consume a significant amount of foliage in a relatively short time period. We would anticipate the 2-gene Bt cottons to provide good control of SBL, however single gene Bt cotton (Bollgard) provides little control. Treatment is necessary when SBLs threaten to defoliate cotton with immature bolls. Populations of 8 per foot of row will often cause economic damage.



Soybean looper larva and pupal case.
Photo by Ron Smith, ipmimages.org



Soybean looper moth.
Photo by Russ Ottens, ipmimages.org

Terminating Insecticide Applications: The decision to terminate insect controls can be challenging in some fields but a few basic considerations will assist in that decision. When evaluating a field a grower must first identify the last boll population which will significantly contribute to yield (bolls which you plan to harvest). In some situations the last population of bolls which you will harvest is easy to see (i.e. cotton which is loaded and cutout). In others,

such as late planted cotton, the last population of bolls you will harvest will be determined by weather factors (the last bloom you expect to open and harvest based on heat unit accumulation). Once the last boll population is determined the boll development or approximate boll age should be estimated. Depending on the insect pest, bolls are relatively safe from attack at varying stages of boll development.

The table below list approximate boll age in days which bolls should be protected for selected insect pests. Cooler temperatures will slow plant development and subsequent boll age values may increase in such environments. It is assumed that the field is relatively insect pest free when the decision to terminate insecticide applications for a pest is made.

Insect Pest(s)	Approx. Boll Age (days)
Corn Earworm Tobacco Budworm	18-20 bolls fully sized
Stink Bugs	25
Fall Armyworm	bolls near maturity
Foliage Feeders soybean looper beet armyworm southern armyworm	bolls mature
Sucking Insects whiteflies aphids	harvest (honeydew accumulation on lint)

INSECT UPDATES: Check the **Cotton Insect Hotline (1-800-851-2847)** for updates on current insect conditions. The Cotton Pest Management Newsletter and additional cotton production information is also posted on the UGA Cotton Homepage at: <http://www.ugacotton.com>

Sincerely,

Phillip Roberts
Extension Entomologist

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