



July 24, 2008

COTTON PEST MANAGEMENT NEWSLETTER #8

COTTON SITUATION: The Georgia Weekly Crop Progress and Condition Report for the week ending July 20th listed the crop as 87 percent squaring and 52 percent setting bolls which is similar to the 5 year averages of 90 and 57 percent respectively.

INSECT SITUATION: Corn earworms continue to be reported; numbers have been high in some areas as some fields are receiving a second insecticide application for corn earworm. Fall armyworms have been reported at treatable levels in some fields in SW Georgia. Continue to scout for boll feeding bugs and treat on an as needed basis.

Fall Armyworm: Fall armyworm (FAW) is a fruit feeding pest of cotton, typically observed feeding on bolls or in blooms in the mid to lower canopy. Due to their propensity to inhabit the mid and lower canopy, early detection of FAW by scouts can be difficult. Correct identification of small FAW is also difficult. FAW lay egg masses which appear very similar to that of beet armyworm (I cannot tell the difference). However, upon hatching small FAW larvae immediately disperse to fruiting forms such as blooms and bolls where as beet armyworm will feed gregariously on the underside of a leaf for several days.



FAW larvae disperse to fruiting forms upon hatching.



Small FAW larva, notice etching on inner surface of boll bract.

When FAW larvae are small (less than 1/4 inch in length) they appear very similar to corn earworm (CEW) larvae. There are no absolute rules or keys to correctly differentiate small FAW and CEW larvae. As FAW develop, distinguishing characteristics become more apparent. Suggestions for identifying small FAW larvae include:

Look for etching on the inner surface of boll bracts. Small FAW larvae will often feed on the inner surface of boll bracts, leaving the outer surface intact, which creates a window pane effect.



Be observant for window panning on boll bracts (etching on the inner surface of boll bracts) which is often associated with small FAW larvae. If etching is observed, examine the basal area of the developing boll for larvae. FAW larvae often penetrate the lower part of the boll (below).



Three light parallel stripes on the back of the first segment behind the head and a prominent inverted "Y" on the front of the head capsule become visible as larvae grow.

A black spot on the side of the first abdominal segment (just behind the last pair of true legs) is often visible.

The threshold for FAW is about 2X that of CEW. A FAW larva typically damages fewer bolls when compared with a CEW larva. High rates of pyrethroids will provide good suppression of very small FAW larvae (< 1/8 inch in length). However it is difficult to initially detect small FAW; larvae are typically much larger when first detected. Often when we see this suppression of FAW with pyrethroids is when an application was made that targeted another pest such as CEW. Since FAW often infest bolls and blooms in the middle and lower areas of plants, coverage and penetration of the plant canopy with insecticides is critical to achieve acceptable control.

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

Putting knowledge to work

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