

July 17, 2003

COTTON PEST MANAGEMENT NEWSLETTER #7

COTTON SITUATION: The Georgia Weekly Weather and Crops Report for the week ending July 13th listed the crop as 87 percent squaring and 42 percent setting bolls. Crop conditions changed very little with 1 percent rated very poor, 4 percent poor, 19 percent fair, 56 percent good, and 20 percent excellent.

INSECT SITUATION: Tobacco budworm and corn earworm numbers have increased during the past week and sprays have been initiated in some areas. However economic infestations remain spotty. Various bugs are still being reported, we have observed more southern green stink bugs than brown stink bugs this week. A few reports of armyworms and spider mites have been received. Beneficial insect numbers are high in fields which have not been treated with a broad spectrum insecticide.

Tobacco Budworm and Corn Earworm (Bt Cotton): As mentioned above CEW egg and larval counts have increased during the past week in many areas of the state. Mid-July is typically when we expect CEW to move from corn and other alternate hosts to cotton. Bt cotton has provided very good control of TBW, however supplemental insecticides may be needed for control of CEW on some fields. A few Bt fields have been treated for CEW during the past week. Treatment of CEW on Bt cotton is recommended when 8 larvae (1/4 inch or greater in length) are found per 100 plants. Scouts need to monitor the middle canopy of the plant for eggs and larvae. We recommend that at least one bloom, one bloom tagged boll (be sure to look under the bloom tag), and an additional boll in addition to the top foot of the plant be searched for eggs and larvae. When and if CEW escapes occur in Bt cotton, the problem is often found near or a few nodes below the uppermost first position white bloom. Pyrethroids are the treatment of choice for control of CEW in Bt cotton. In addition to controlling CEW, pyrethroids will also provide control of various bugs.

Corn earworm egg on dried bloom tag (left) and larvae found in bloom tag and damaged boll (right).
Image Source: www.ipmimages.org (Photo by Ron Smith)



Tobacco Budworm and Corn Earworm (Non-Bt Cotton): Corn earworm activity increased during the past week and some sprays have been initiated on non-Bt cotton. In central and southwest Georgia, a mix of both tobacco budworm (TBW) and corn earworm (CEW) have been observed. Be observant for moths in the field. Moth flushing will give us an idea of which species are infesting the field. When mixed populations are observed, the infestation should be treated as a TBW infestation, especially if numbers are high. Pyrethroids will provide very good control of CEW, but should not be used for TBW control due to the threat of pyrethroid resistance.

Fall Armyworm: We have only received a few reports of fall armyworm (FAW) to date. Scouts should be observant for FAW as this is typically the time of year when infestations appear. FAW lay masses of eggs on the undersides of leaves. Upon hatching small larvae will disperse to fruiting forms, most often blooms and bolls which will be in the mid to lower canopy. Early detection of FAW is key to achieving control. Pyrethroids will provide good control of small larvae (less than 1/8 inch in length) but these infestations can be difficult to detect. When checking fruiting forms be observant for etching or feeding on the inner surface of boll bracts. Small FAW larvae will often feed on the inner surface of a boll bract prior to penetrating the basal area of the boll.

Fall armyworm moth, etching on inner surface of boll bract, larvae in bloom, and larvae feeding in basal area of a boll.



Stink Bugs: Although somewhat sporadic, stink bugs populations have been higher than during recent years. The brown stink bug was most common during recent weeks, but southern green stink bugs have been more numerous than browns in fields we visited this week. We would expect movement of stink bugs from corn and other host plants as corn begins to dry down. In addition to pulling bolls and monitoring for internal boll damage, scouts should continue to be observant for stink bugs and identify which is the predominant species as this will impact insecticide selection. Organophosphates provide better control of the brown species, but various insecticides will provide good control of southern green. A pyrethroid is a good treatment when southern green stink bugs are the predominant species and CEW is also present. Following a stink bug spray, scouts should wait 7 days before evaluating performance when using the internal boll damage technique.

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,

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