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

July 26, 2007

COTTON PEST MANAGEMENT NEWSLETTER #7

COTTON SITUATION: The Georgia Weekly Crop Progress and Condition Report for the week ending July 22nd listed the crop as 79 percent squaring and 39 percent setting bolls which is significantly below the five year averages of 95 percent squaring and 70 percent setting bolls. Scattered rainfall events have occurred in some areas, whereas other locations remain dry.

INSECT SITUATION: Corn earworm and tobacco budworm egg and larval counts vary by location from low to high; this is why we scout all fields. The percent of bug damaged bolls continue to increase on cotton which is setting bolls. Aphids have crashed in some areas, but are building in others.

Corn Earworm: Corn earworms (CEW) are being reported in blooms and bloom tagged bolls in Bt cotton in some areas. Pyrethroids have generally provided good control of CEW in Bt cotton when used at high rates. Survival of CEW moths in pyrethroid treated vials was 19 percent (range of 11-33) this week which is less concerning compared with previous weeks. However, we know that difficult to control populations exists in the farmscape. We want to stress the importance of avoiding low rates of pyrethroids when targeting CEW. If CEW pressure is high an ovicide or another non-pyrethroid larvacide should be tank mixed with the medium to high rate of a pyrethroid.

Tobacco Budworm: Bt cotton provides excellent control of tobacco budworm (TBW). However, TBW can be a major pest on non-Bt cotton. Tobacco budworm is resistant to the pyrethroid insecticides and should not be used for control of TBW. Non-pyrethroid insecticides such as Tracer, Steward, or Denim should be used for control of tobacco budworm.

Boll Feeding Bugs: Internal boll damage from bugs is increasing in cotton which is setting bolls. Bugs observed in fields capable of causing internal boll damage include the brown and southern green stink bugs, leaf-footed bugs, tarnished plant bugs, and clouded plant bugs. Scouts should be observant for which species are present to aid in insecticide selection.

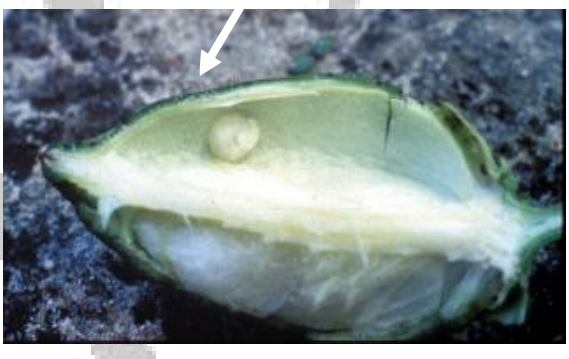
Aphids: The aphid situation is perplexing. In some areas aphid populations have crashed due to the naturally occurring fungus. In others aphids are building rapidly with no indication of fungal activity. While in others low populations of aphids are scattered across fields. On late emerging cotton (mid-June), small cotton, consider treating aphids if high populations exists and there is no indication of the fungus, grey fuzzy aphid cadavers are present. Stress from aphids could delay maturity of late cotton which could be problematic.

Stink Bug Management in Georgia Cotton



Stink Bug Biology: The southern green stink bug (left) and the brown stink bug (right) are the most common stink bugs infesting Georgia cotton. Adults and large nymphs are capable of damaging developing bolls. Stink bugs will damage bolls up to 25 days of age, bolls of this age are fully sized. Stink bugs feed with their piercing sucking mouthparts on developing seed. Physical damage to the seed will impact lint development. Additionally the introduction of boll rot pathogens during feeding or through feeding sites may also cause individual locks or entire bolls to fail to fluff or rot (center). Excessive stink bug damage has a detrimental effect on fiber

Warts form within 48 hrs of



Scouting (Internal Boll Damage): Randomly select medium sized bolls approximately the diameter of a quarter. Bolls of this size can be easily burst between your forefinger and thumb. Bolls are considered damaged if callous growths or warts are observed on the inner surface of the boll wall and/or stained lint is observed. Treatment is suggested when 20 percent of medium sized bolls exhibit internal damage. During early bloom when bolls the diameter of a quarter are not present, the largest bolls available should be sampled. Be observant for stink bugs in the field to determine which specie(s) is causing the damage. When a drop cloth is used to sample stink bugs treatment is suggested when 1 stink bug per 6 row feet is observed.

Control:

- **>** Pyrethroids provide very good control of southern green stink bugs but only fair control of the brown stink bug species (higher rates of pyretrhoids improve efficacy on brown species).
- **>** Organophosphates provide excellent control of both green and brown species.
- **>** Pyrethroids provide excellent control of corn earworm.
- **>** Organophosphates provide poor control of corn earworm.
- **>** Tank-mix of a pyrethroid and an organophosphate is a good choice when brown stink bugs and corn earworms are both infesting fields.

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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