

July 1, 2004

COTTON PEST MANAGEMENT NEWSLETTER #5

COTTON SITUATION: The Georgia Weekly Weather and Crops Report for the week ending June 27th listed the crop as 68 percent squaring and 13 percent setting bolls. Cotton continues to grow and develop at a rapid pace.

INSECT SITUATION: Aphid populations are “crashing” in the southern part of Georgia due to the naturally occurring fungus *Neozygites fresenii*. Tobacco budworm activity, small larvae and eggs, has also increased in the southern parts of Georgia. Plant bugs continue to be spotty with some fields requiring treatment. Stink bugs can be observed in most fields if you look close. As fields begin setting bolls, scouts should begin monitoring for internal boll damage and be observant for boll feeding bugs.

Aphids: The Fungus is Among Us! Aphid populations have declined rapidly in the southernmost counties due to the naturally occurring fungal epizootic. We have observed aphid crashes in Colquitt and Mitchell Counties. Historically, the fungus is first observed in the southwest corner of Georgia and in the coming days it spreads north and west. Fields which are heavily infested with aphids will typically be the first to crash in a given area. Be sure to be observant for gray fuzzy aphid cadavers which is indicative of the naturally occurring fungus. Once fuzzy aphids are observed in a field, the aphid population will crash in about a week.

Gray fuzzy aphids are indicative of the naturally occurring fungus which causes aphid populations to crash.



Tobacco Budworm: We have received reports of increased tobacco budworm (TBW) activity in southern Georgia. We should anticipate increased TBW activity in more northern counties this week. TBW infestations will be most likely to occur on fruiting cotton. Bt cotton should provide excellent control of TBW. However on non-Bt cotton, treatment may be needed. Egg and small larvae in fields

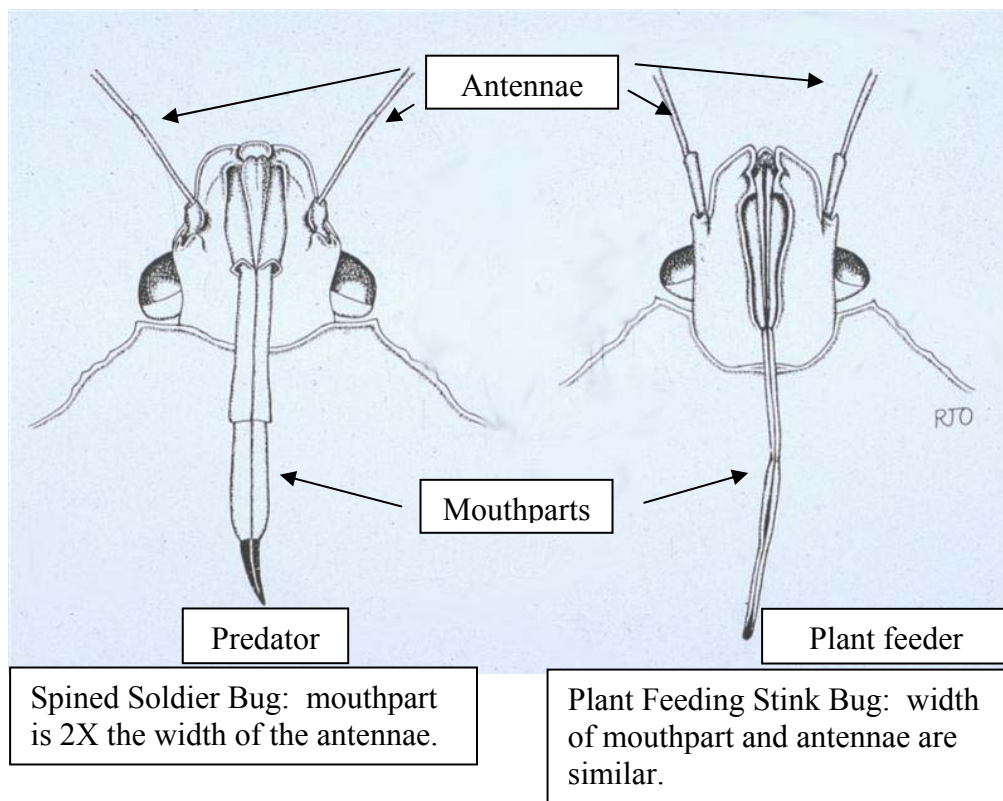
at this time are most likely TBW, especially in areas where TBW annually infests cotton. Usually corn earworms (CEW) will begin infesting cotton in about 10 days. Pyrethroids will provide excellent control of CEW, but are erratic on TBW due to pyrethroid resistance. Scouts should be observant for moth activity in fields which will provide an indication of which (TBW or CEW) is the predominant species. If TBW is the primary species, a non-pyrethroid insecticide such as Denim, Steward, or Tracer would be recommended. Applications must be made on a timely basis (target small larvae less than 1/4 inch in length) to achieve good control of TBW.



Plant Bugs: Continue to monitor square retention on squaring cotton and be observant for plant bugs. I would expect us to begin observing nymph plant bugs in cotton which was infested by adults earlier. Nymphs are often observed feeding on larger squares when examining them for TBW and CEW larvae.

Stink Bugs: A small percentage of cotton is blooming and setting bolls and stink bug scouting should begin on these fields. We recommend sampling bolls which are about the diameter of a quarter and examining for internal boll damage. Internal boll damage includes warts or callous growths on the inner surface of the boll wall or stained lint. Treatment is suggested if 20 percent internal damage is observed. In fields which do not have bolls the diameter of a quarter, sample the largest bolls available. During 2003, we observed a few fields which sustained significant damage during the first two weeks of bloom. Scouts should also be observant for stink bugs and other bugs which can feed on developing bolls. Tarnished plant bugs can feed on small bolls (less than 10 days of age). Other boll feeding bugs would include leaf-footed bugs and clouded plant bugs.

Spined Soldier Bug: Scouts need not confuse spined soldier bugs, which are predators, with brown stink bugs. Spined soldier bugs are brown in color but generally have sharper spines on the shoulders when compared to the brown stink bug. However, there are some species of plant feeding brown stink bugs (*Euschistus tristigmus* and *E. quadrator*) which also have spined shoulders. The best method to distinguish the predatory spined soldier bug from plant feeding stink bugs is to examine the mouthparts. The mouthpart of a spined soldier bug is about 2X the width of the antennae, whereas the mouthpart of a plant feeding stink bug is about the same width of the antennae. Significant populations of spined soldier bugs are sometimes observed in aphid infested fields. Lady beetle larvae (often found at high numbers when aphids are present) are a common prey insect of spined soldier bugs.



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 UGA Cotton Homepage at: <http://www.griffin.peachnet.edu/caes/cotton/>

Sincerely,

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