

June 30, 2005

COTTON PEST MANAGEMENT NEWSLETTER #5

COTTON SITUATION: The Georgia Weekly Weather and Crops Report for the week ending June 16th listed the crop as 48 percent squaring and 6 percent setting bolls. This is slightly behind the five-year averages of 62 and 16 percent. Cotton is growing rapidly at this time.

INSECT SITUATION: We have received reports of the naturally occurring fungus attacking aphids in south Georgia. Plant bugs have been reported at treatable levels in isolated areas. Tobacco budworm infestations are light to moderate on non-Bt cotton. Spider mites are present in some areas.

Aphids: Cotton aphid populations have crashed due to the naturally occurring fungus in some south Georgia fields (Colquitt, Mitchell, Tift, and Early counties). Gray fuzzy aphid cadavers are indicative of the aphid fungus. Once the fungus is observed in a field, the aphid population will usually crash in a week or less. Typically, fungus attacks are initially observed in fields with high aphid infestations. High humidity, which we have had this week, is conducive for fungal spread.



Grayish fuzzy aphids are indicative of the naturally occurring fungus that causes aphid populations to crash. (photo by Danielle Bracewell)

Tobacco Budworm: Tobacco budworm (TBW) activity has been light to moderate to date. Most infestations that we have observed have been on early-planted cotton. However, we anticipate increased TBW pressure in the coming days. Bt cotton will provide excellent control of TBW. On non-Bt cotton, non-pyrethroid insecticides such as Tracer, Steward, or Denim should be used. During 2004, pyrethroid-resistant TBW populations were observed in many areas. Pyrethroids will not consistently control TBW in Georgia, especially when populations are moderate to high. Scouts should be observant for TBW and corn earworm (CEW) moths when walking fields. Moth activity is a good indicator of which species is active in that field. Eggs and larvae of TBW and CEW appear identical without the use of magnification. We anticipate a mix of both TBW and CEW as we get into July. Pyrethroids continue to provide very good control of CEW. On non-Bt cotton, insecticide selection and timing of sprays (target larvae less than ¼ inch in length) are critical for achieving good control.



Corn earworm moth, photo by Steve L. Brown, www.ipmimages.org



Tobacco budworm moth, photo by J. Michael Moore, www.ipmimages.org



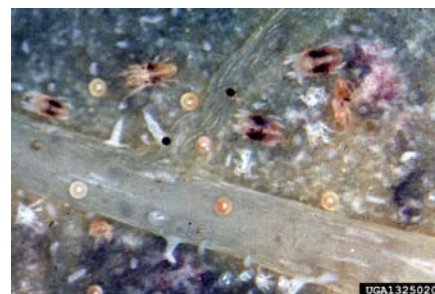
Small tobacco budworm or corn earworm larva, photo by Russ Ottens, www.ipmimages.org

Plant Bugs: In parts of Georgia, plant bug numbers and damage have been greater than in recent years. Be sure scouts are monitoring square retention and fruit set closely and are being observant for plant bug activity in fields.

Spider Mites: Spider mites have been reported from isolated areas. Often spider mite infestations occur initially on field margins or near non-planted weedy areas within fields. In time spider mites may infest the entire field. Spider mites spread in two ways: 1) migration of females from infested plants to new hosts and 2) natural or mechanical transportation (by wind, mammals and man, or on machinery). Spider mites are extremely small but can be seen with the aid of a 10X hand lens. Mites infest and feed on the undersides of leaves by piercing the epidermis and extracting plant sap. Spider mite damage includes pale blotches or spots which are yellowish bronze to red, initially these symptoms appear along the main leaf veins and folds in leaves. Severe damage may cause premature leaf drop. Yield reduction from mites is greater when infestations develop in early-mid growth stages (squaring) compared with later plant development stages. If spider mite damage is observed, examine the undersides of affected leaves with a hand lens to confirm the presence of mites. Spot treatment of infested areas (field margins) is a potential management strategy. Mites are typically associated with hot dry weather. Spider mites may complete a generation in as few as 5 days.



Cotton infested with spider mites, notice bronzing of leaves, photo by Danielle Bracewell.



Spider mites magnified, photo Whitney Crenshaw, www.ipmimages.org



Spider mite damaged leaf, photo by Clemson – USDA Coop. Ext. Slide Series,

www.ipmimages.org

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.ugacotton.com>

Sincerely,

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