

## The University of Georgia

## **Cooperative Extension Service**

**College of Agricultural and Environmental Sciences** 



## **Georgia Cotton**

August 1, 2007

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Crop Progress. (*Brown*) The acreage report from the Boll Weevil Eradication Program is expected by mid-August. It will be interesting to see how it compares to the USDA estimate of 1.05 million acres of cotton in 2007. As of July 29, Georgia Ag Statistics rated the crop 6 percent very poor, 13 percent poor, 36 percent fair, 37 percent good, and 8 percent excellent. It is estimated that only 55 percent of the crop is setting bolls compared to the 5 year average of 83 percent. Much of the irrigated crop and the non-irrigated acreage which emerged at a "normal" date is moving rapidly toward cutout and maturation, while a large portion of the dryland crop is significantly later than normal.

The first category of "normal" cotton is on course to make a QUICK crop because of (1) high fruit retention, (2) high temperatures, and (3) marginal moisture. The only way to possibly alter this course is to be aggressive with irrigation and conservative with pgr (mepiquat) treatments, but for many of these fields, the crop is almost finished.

Considerable cotton was planted late and/or it emerged late, concurrent with rains in early to mid-June. As it moves to bloom, moisture becomes even more critical, and the abundance or absence of rain will make or break our yield prospects. For favorable yields, the late crop will require ample, consistent moisture while some will also require an extended summer (or late cool weather). And what about harvest season weather?

Rain has been varied across Georgia. Dry weather and high temperatures could put a fast end to a lot of acres. Over the last 7 days, rainfall totals have ranged from over 3.8 inches in Vidalia to 0.02 inches in Byron.

Can we make 1.5 million bales from a million acres? That remains a reasonable target ... and if favorable rain occurs, we might do better. We should not expect the unbelievable comeback crop we saw in 2006. One reason is the presence of stink bugs. They were almost absent last year but are with us (and increasing?) in 2007.

**Insect Management in Late Cotton.** (*Roberts*) A significant portion (30-plus percent) of Georgia cotton has yet to bloom and we have received several questions regarding insect management in this late cotton.

- 1) Should we lower thresholds (i.e. be more aggressive with insect sprays)? No, thresholds have been established to maximize profits and are based on potential crop losses from an insect infestation versus actual insecticide and application costs. Spray decisions should be similar in early or late maturing cotton. However, we need to avoid bad decisions and mistakes in a late maturing crop there is not time to recover and compensate from mistakes (insects, weather, etc.) compared with an earlier maturing one. Aphids could potentially delay maturity of late emerging cotton and thus would be an exception to the above statements. Aphids are stress inducing pests, and there are effective insecticides capable of eliminating aphids (and removing the associated stress) if it is occurring. In most years aphid numbers crash by this time due to the naturally occurring fungus, but this has not been the case this season. Aphids continue to be observed in some areas.
- 2) Can we expect higher stink bug infestations on a late crop? Possibly. To date, stink bugs and other boll feeding bugs (tarnished and clouded plant bugs, leaf-footed bugs, etc.) have been low to moderate. However, stink bug populations increase over time and often concentrate on late maturing cotton in areas where other fields are cutting out and are being defoliated. Lush, green plants producing seeds are preferred feeding sites. Some fields will need to be scouted and spray decisions made until the end of September. Stink bugs are capable of damaging bolls until they are about 25 days of age. Similar comments in terms of concentration of pests could be made for other insect pests such as corn earworm and whiteflies.
- 3) What about silverleaf whiteflies? Silverleaf whitefly (SLWF) can be a serious pest of cotton and can cause significant yield losses. Economic infestations of SLWF are most often associated with drought years and late planted cotton in vegetable growing areas. Thus far, SLWF infestations have been reported in Tift, Colquitt, Cook, and Berrien Counties. In some fields reproduction (immatures present) has been observed. Populations of SLWF will probably continue to increase unless there are several days of heavy rainfall soon. Heavy rain normally reduces adult populations. Early planted cotton will likely avoid serious problems with SLWF in many areas, but late emerging cotton could be challenging. Be especially aware of SLWF in hairy leaf cottons. Some of our early-mid maturing varieties are hairy and are preferred by SLWF. Every effort should be made to conserve beneficial insects in fields infested with SLWF; in other words, spray other pests on an as needed basis only.
- 4) Can corn earworm be controlled with pyrethroids? To date, control of corn earworm with high rates of pyrethroids has been good. Addition of an ovicide or a non-pyrethroid larvicide with a high rate of a pyrethroid should be considered in high pressure situations. We are

continuing to monitor pyrethroid susceptibility using Adult Vial Tests. Tolerance to a pesticide increases when populations are repeatedly exposed to a class of pesticides; repeat use "selects" for tolerant individuals. Will corn earworm tolerance to pyrethroids increase as the season progresses? Stay informed.

**Dr. Glen Ritchie, Crop Physiologist, Joins UGA Faculty, August 5.** Dr. Glen Ritchie, having just completed his Ph.D. program begun under the direction of Dr. Craig Bednarz, will join the UGA Crop & Soil Sciences Department faculty as Assistant Professor on August 5. Glen has been working at UGA since 2003 with cotton projects involving remote sensing, irrigation management, water use efficiency, fiber quality, plant growth regulators, and harvest aids. Much of his work has been funded from grants from the Georgia Cotton Commission, and he has carried a significant role in activities at the Stripling Irrigation Research Park in Camilla. We officially welcome Glen and look forward to his continued contributions in cotton physiology, management, and technology.

## **UPCOMING SPECIAL EVENTS**

Cotton Research Tour
Gibbs and Lang Farms, RDC Pivot, and NESPAL Building
August 21, 2007
8:30 am to 1:30 pm

Contact Information: Sara Cates, Crop & Soil Sciences, Tifton 229/386-3006

Midville Field Day – Cotton, Corn, Peanuts, Soybeans August 29, 2007 (Wednesday) 9:30 am to 1:30 pm UGA – Southeast Research and Education Center Contact Info: Burke County Extension Office (705) 554-2119

2008 Georgia Cotton Conference January 29-30, 2008 UGA Campus Conference Center, Tifton,

Your local County Extension Agent is a source of more information on these subjects.

Edited by: Steve M. Brown, Extension Agronomist-Cotton

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