



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



Georgia Cotton

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CROP SITUATION. (Brown) USDA's September estimate of cotton production in Georgia predicted a harvest of 1.7 million bales from 1.33 million acres, for an average of 614 lb/A. These numbers seem high. The numbers will be closer to 1.5 million bales or less with an average of 550 lb/A or less. The Boll Weevil Program certified 1,379,745 acres as of August 10. There is no tally on acres that have been destroyed or abandoned, but that number could limit harvest to 1.2 million acres.

Harvest has begun in earnest in some southerly portions of the state. Earliest yield reports were disappointing, but there have been a few positive indications from irrigated fields over the past week. Some of the large, traditional cotton counties in central Georgia which usually plant and harvest early have thus far defoliated little.

There are large sections of the state in which the crop was severely punished by summer drought; some of that has been resurrected by rains over the past weeks. It is common to see green, lush foliage obscuring a few open, hardlock bolls in the bottom and supporting a significant but immature fruit load (bolls, blooms, squares) in the upper two thirds of the plant. If it was early August, yield potential would be excellent, but since it is mid-September, it will be a race to frost. Though there have been few if any recent studies or formal observations, the accepted last effective bloom dates in south Georgia range from September 5 to 10. The reported average first frost date in Tifton is November 5. Over the past 20 years, it seems the tendency has been for later rather than earlier killing frosts, but middle Georgia did experience a terminating frost October 13 in the early 1990s. No one can predict the outcome of carrying these fields to frost but for many, there is no alternative – an economically viable yield is not present. The hope is for a late, comeback crop. Management-wise, the single most important input may be stink bug control. Stink bugs have been light throughout much of the year throughout much of the state but late fields should be carefully scouted for damage.

Defoliation has been extremely challenging thus far. Even premier treatments have provided unsatisfactory results. The abundance of juvenile growth and strong pressure for regrowth increase the importance of thidiazuron (Dropp, etc.) in mixtures. Two step defoliation programs – preconditioning with follow up treatments about a week later – have been the most consistent. Successful, one-application treatments will require high rates of thidiazuron in combination with other materials such as ethephon. Ginstar at 5 to 6 oz/A with ethephon is another option. There is no apparent “silver bullet,” and growers may need to proceed with harvest with less than perfect defoliation.

FIBER QUALITY PREMIUMS AND DISCOUNTS. (Shurley, Jost, and Brown) The Georgia cotton crop has been of very good quality the past 2 seasons (2004 and 2005). In particular, Staple and Strength have been much improved; however, uniformity continues to be a challenge. Because of drought conditions this season yield will obviously be reduced, it is also likely that fiber quality will be compromised as well. Together, these factors will compound the financial impact on the grower. Typically during drought-stressed seasons, the most common fiber quality problems tend to be short Staple, reduced fiber length Uniformity, and high Micronaire. Color Grade may not be impacted if harvest weather is cooperative and defoliation/harvest is not delayed.

Obviously, very little of this year’s crop has been harvested and graded at this early point in the season. Thus far, however, Staple is averaging about 33 and Uniformity around 80 (USDA-AMS, September 14, 2006). Color grade has been good (mostly 31) and Micronaire has averaged about 4.7 to 4.8. Thus far, Strength looks to be down a little from last year.

Below are fiber quality premiums and discounts offered on the cash (spot) market as of September 14th. As we proceed through harvest, producers with uncommitted cotton (cotton not contracted for delivery) may wish to compare the “Loan Differences” with what the cash market is offering. Alternatives for uncommitted cotton would include LDP/POP and cash sale, LDP and hold (store or “on-call”), or place (store) in Loan and redeem or except a merchant equity later. If the Loan is offering more premiums or less discount, this may be an advantageous way to go.

Cash Market Premiums and Discounts, Southeast, September 15, 2006

Premiums (Cents/Lb)		Discounts (Cents/Lb)	
Color 31-Leaf 3	1.00	Color 32-Leaf 3	-.50
Staple 35	.00 ^a / 1.50 ^b	Color 42-Leaf 3	-1.00
Strength (29.5-30.4)	.25	Staple 33	-1.75 ^a / -2.25 ^b
Uniformity (82.5-83.4)	.20	Micronaire (5.0-5.2)	-2.00
		Uniformity (79.5-80.4)	-.25
		Trash and Bark (Level 1)	-3.75

SOURCE: USDA-AMS, Cotton Program, Memphis.

^{a/} If Color 41-Leaf 3

^{b/} If Color 31-Leaf 3

Unfortunately, discounts for short Staple, low Uniformity, and high Micronaire may be unavoidable for some growers due to the drought conditions experienced this season. These problems become compounded further if Color and Strength is also reduced and if trash and bark are a problem. Timely defoliation and harvest can help reduce the chances of additional discounts.

With market prices and yield already low, fiber quality discounts only add to the pain. There often is a balance between high yield (maximizing harvestable bolls) and fiber quality. Income per acre is dependent on both, not one or the other. Striking that balance is the key.

MSMA/DSMA NO LONGER AVAILABLE FOR COTTON GROWERS? (*Culpepper and Murphy*)

On August 10, 2006, EPA issued a notification that "all uses for MSMA, DSMA, CAMA and cacodylic acid (organic arsenical herbicides) are ineligible for re-registration." EPA's primary concern is the potential for applied organic arsenical products to transform to a more toxic inorganic form of arsenic in soil with subsequent transport to drinking water. The Re-registration Eligibility Decision (RED) document that discusses this decision may be accessed at:

http://www.epa.gov/oppsrrd1/REDS/organic_arsenicals_red.pdf

If this decision stands, these herbicides will no longer be available for use in cotton and turfgrasses. When EPA announces decisions of this type, it solicits comments from the public for a 60 day time period. We encourage you, your farmers and turfgrass managers to send their comments on this decision to EPA no later than October 10, 2006. Comments can be mailed to EPA or submitted at the following website:

<http://www.epa.gov/fedrgstr/EPA-PEST/2006/August/Day-09/p12905.htm>

Directions are given at this website on how to submit either mailed or electronic comments.

MSMA and DSMA have been, and are still, very important herbicides for weed management in cotton and turfgrasses in Georgia. A brief description of their current use in cotton is as follows:

Prior to the release of Roundup Ready technology, MSMA or DSMA mixtures were applied in most Georgia cotton fields. Although MSMA and DSMA have been largely replaced by glyphosate over the past 7 to 9 years, the use and importance of MSMA/DSMA has increased significantly since 2005. The recent increase in value of MSMA/DSMA for cotton weed control is primarily due to glyphosate-resistant Palmer amaranth and tropical spiderwort spreading throughout Georgia. Our research has shown that MSMA mixtures are usually more effective than glyphosate mixtures when managing these weeds at layby. Additionally and of equal importance, MSMA mixtures are effective alternatives to glyphosate for weed resistance management strategies in cotton.

The potential loss of MSMA/DSMA is as untimely as possible for Georgia cotton growers. It appears that we are on the brink of a very serious infestation of both glyphosate-resistant Palmer amaranth and tropical spiderwort throughout our state. Currently in many fields, growers are not managing these weeds economically. The loss of MSMA will further exacerbate our inability to manage these weeds in future years. Additionally, the loss of MSMA will force growers to rely

even more heavily on glyphosate for lay-by cotton weed control which will likely lead to more glyphosate-resistant weeds infesting Georgia cotton thereby further stressing a fragile farming economy.

WET WEATHER BLIGHT (*Kemerait*) Recent rains in Southwest Georgia have lead to a substantial outbreak of Wet Weather Blight (*Asochyta* blight). This disease causes spots to form on petioles, bracts, stems, leaves, and bolls. Currently there is no control measure recommended for this disease. We will be evaluating fungicides for the control of Wet Weather Blight to determine their effectiveness and the overall effects of the disease on yield.

COFFEE COUNTY FIELD DAY (*McGriff and Jost*) On October 26 beginning at 10 am there will be a Cotton Field Day in Coffee County. During this field day a discussion of a large-plot “systems” trial will be held. Plans include a discussion of inputs to the 20 varieties from the 10 different technology packages currently available to producers. Yield, fiber quality, and net returns from these 20 varieties will be available. Another stop will be made at a large-plot nematicide trial.

Editorial-CONCERNS ABOUT MONSANTO ACQUISITION OF D&PL -- AN OPINION. (*Brown*) “Did you hear anything in the news conference that concerned you?” The question was posed following the Web cast on August 15 in which Monsanto announced the planned acquisition of Delta and Pine Land Company (D&PL). While thoughts about the concentration of germplasm immediately came to mind, the real concern is what was NOT made clear in the announcement, particularly in regard to biotechnology traits.

From the introduction of transgenic cotton in the mid-1990s, D&PL has been a dominant player of genetically modified cultivars in the U.S., especially in the Southeast. Monsanto has been even more dominant. Monsanto traits have been used around the world in Bollgard, Ingard, and Roundup Ready cotton. With the next generation products Bollgard II and Roundup Ready Flex, they are poised to dominate the future. Other technology providers Dow AgroSciences and Bayer have thus far made minimal market penetration with Widestrike and Liberty Link cotton, respectively, in much of the Cotton Belt. In 2005, 83 percent of the U.S. cotton crop involved transgenic varieties; of that 83 percent, 81 percent was technology licensed from Monsanto. And as a seed company, D&PL has exclusively employed traits from Monsanto in their commercial transgenic cultivars from 1996 through the present.

Compelled by reasons which probably include the failed purchase of D&PL by Monsanto in the late 1990s, D&PL has systematically been positioning itself to develop transgenic varieties with traits from providers OTHER THAN Monsanto. D&PL has made significant progress in this quest. Not long ago it appeared that in five years, D&PL might be completely divorced from Monsanto by having technologies from DuPont and/or Syngenta.

D&PL has agreements with DuPont which include a joint venture with Verdia, a biotechnology research company devoted to molecular genetic applications in plant related businesses. Their efforts have yielded a glyphosate herbicide tolerant gene called GAT (different than Monsanto

RR) and an ALS-herbicide tolerant gene. Do they also have insect control genes in their portfolio?

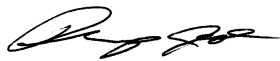
Whether or not the D&PL / DuPont collection includes insect-related genes is irrelevant. D&PL has acquired rights from Syngenta to develop and market VIP Cotton, a Bt cotton system substantially different from Monsanto's Bollgard and Bollgard II and Dow's Widestrike.

These are KNOWN advances of biotechnology into D&PL germplasm. No doubt there are other successes in D&PL greenhouses that are not yet public.

D&PL's efforts to move to the future with technology other than Monsanto traits makes the collective company, Monsanto plus D&PL, even more formidable if in fact the D&PL-acquired traits go with them into the merged company. The recent announcements provided no clarity to these outstanding issues. Surely, antitrust questions go beyond germplasm; they should also focus on the matter of the concentration of technology. Monsanto already has us ... let's just politely say in an "awkward position." The collective technology pool of the merged company would conceivably include not only Monsanto's Bollgard, Bollgard II, Roundup Ready, and Roundup Ready Flex traits but also the Verdia GAT gene, the DuPont ALS-tolerant gene, and Syngenta's VIP system. These latter technologies could be developed ... or shelved. The fact that they are not in another company's laboratory or greenhouse prevents the introduction of products that could effectively compete with Monsanto's current portfolio. Shelving such technology – or even physically eliminating existing transgenic lines in which these new genes have successfully been introduced – establishes serious, lengthy hurdles for other would-be competitors.

Growers in Georgia are already frustrated with the inordinate control exercised by one company. Unless issues of traits are adequately addressed in the proposed merger, things could get worse. The real answer to the overwhelming control of varieties and technology by a single provider is legitimate competition.

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