



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



Georgia Cotton

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www.ugacotton.com

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PREPARE PLANTING EQUIPMENT. (*Brown*) Farmers don't have to be reminded seed is incredibly expensive. Modern genetics, built-in pest management technology, and even coated-on seed treatments make a bag seed a significant investment. The fact that planting commits so much of the cost of production in a single pass compels growers to carefully scrutinize planting equipment before going to the field. These last weeks prior to planting should be used to make sure everything is in proper working order, including bearings, chains, shafts, cogs, opening/closing and depth control devices, monitors, etc. Now is also a good time to work on seed drop rates and calibrate in-furrow insecticide/ fungicide equipment. Again, make sure everything is in "tip-top shape" and ready to go.

FACING A DRY SPRING? BE TIMELY WITH BURN DOWN TREATMENTS. (*Brown*) Climatologists, based on ocean currents and jet stream, are predicting relatively dry weather for Spring 2006. If they are correct, growers face greater than normal challenges with stand establishment, especially in conservation tillage.

In the absence of frequent rains, cover crops or aggressive winter weeds can rapidly deplete soil moisture. Water consumption typically increases with plant maturity. Advancing reproductive stages (flower, grain/seed fill) correspond with increased water demand. Such demand increases the importance of eliminating cover vegetation well before planting, curtailing water use and allowing regeneration of the soil profile when it does rain. Thus, moisture conservation can be added to the list of benefits of early cover termination. The standard practice of applying burn down treatments 3 to 4 weeks prior to planting is even more critical in a dry year.

www.GeorgiaWeather.net : WEB RESOURCE FOR COTTON GROWERS (*Paz and Hoogenboom*) Planting season is only a few weeks away and undoubtedly there will be some restless growers trying to figure out what's weather going to be during the season. The Georgia Automated Environmental Monitoring Network (AEMN) web site (www.georgiaweather.net) provides current weather information and weather-based tools that you will find useful in managing your operations (Figure 1). We suggest you bookmark this web site.

Do you want to know what happened during the last 24-hours? Select the weather station closest to your farm, and click the link 'Graph Current Conditions'. This web page will show the 24-hour chart of several weather variables including temperature, cumulative rainfall and soil moisture. Click on 'Yesterday's Conditions' to view daily summaries.

Do you want to know what happened during the past several days? Click on '7-day Summary Calculators'.

One popular section of the web site is the web page showing the degree-days at different locations in South Georgia. To view the degree-days, go to the AEMN web site then click on 'Cotton' → in the left panel and then click on 'Degree-Days'. The table will show cumulative degree-days for the current growing season and the past two growing seasons.

If you need to calculate the cumulative degree-days for a particular time period, you can use the degree-day calculator. Just select the station closest to your farm and select 'Degree-Day Calculator'.

These are just few of the things that you will find on the AEMN web site. We hope that information we provide on this web site will help you in your day-to-day operations. As always, we welcome your comments and suggestions on how we can improve our service.



Figure 1. Links to weather information and tools on the AEMN web site.

GEORGIA QUALITY COTTON AWARD RESULTS (Jost) The results of the first ever Georgia Quality Cotton Award are in. The awards program was held in Atlanta March 6-8 at the Omni Hotel. Presentation of awards was on March 7 at the Georgia Dome following a tour of Mt. Vernon Mills in Trion, GA that morning.

At the onset the goals of this award were two fold. One goal was to publicize the fact that high quality cotton can be grown in the state of Georgia and to recognize the growers and ginners doing so. The second goal was to identify production practices involved in the production of high quality cotton. Both objectives were met. The following table outlines the winners, where they were located, cotton acres farmed, loan value and premium received, and ginner.

2005 Georgia Quality Cotton Award Winners.

Area (see map)	Cat. ¹	Grower	Location	Acres	Loan Value	Premium	Ginner
					cents/lb		
1	1	Gerald Fowler	Sycamore	43.5	55.499	2.649	Tim Floyd: Sconyers Gin
	2	David Carlson	Dawson	682	55.498	2.648	Ron Lee: McClesky Cotton
	3	Larron Copeland	Bronwood	3000	54.609	1.750	Ron Lee: McClesky Cotton
2	1	Bobby Eavenson	Dewey Rose	478	55.329	2.329	Clint Smith: Farmers Gin and Storage
	2	Gary and Glenn Brinson	Tarrytown	905	54.052	1.052	Chip Roche: Roche Farm and Garden
	3	Charles Smith Jr.	Wadley	1446	55.974	2.617	Clint Smith: Farmers Gin and Storage
3	1	Keith Lewis	Nashville	176	57.635	4.935	Jaclyn Ford and Rhonda Dixon: Dixon Gin
	2	Edwin Pope	Barwick	678	56.530	3.830	Van Murphy: BCT Gin
	3	Herbert Price	Dixie	1075	56.294	3.569	Van Murphy: BCT Gin
4	1	Stephen Houston Jr.	Donalsonville	95	57.792	5.090	Keith Pendergrass: Clover Leaf Gin
	2	Billy Grant	Donalsonville	500	56.891	4.191	Keith Pendergrass: Clover Leaf Gin
	3	Glenn Heard	Brinson	1300	56.808	4.108	Keith Pendergrass: Clover Leaf Gin



¹ Category 1 = less than 500 Acres
 Category 2 = 500 to 1000 Acres
 Category 3 = over 1000 Acres

While the numbers themselves are informative, they basically are only quantifiable way to illustrate what these growers and ginners were able to do. What is more instructive is to know how these growers did it. In the following text I want to bring out some of the key inputs and practices employed by the winners.

Common Themes

- While the vast majority of the growers who won this award grew primarily DP 555 BGRR they did utilize a mix of varieties.
- None of the growers who won this award cut fertilizer rates.
- Where nematodes were a problem, they were addressed.
- All growers who won this award aggressively managed stink bugs.
- Timely harvest was key!
 - Winners in category 1 finished harvesting their crop in an average of 18 days.
 - Winners in category 2 began harvesting an average of 17 days after defoliation.
 - Winners in category 3 began harvesting an average of 10 days after defoliation.

Specific Comments and Achievements

Area 1

Gerald Fowler (43.5 Acres) Gerald's cotton had the highest overall uniformity in this area of the state with an 81.28. Also his cotton had the longest average staple of all the winners of 36.74. All of this cotton was non-irrigated. Gerald used 5lbs Temik, and grew primarily variety DP 488 BR.

David Carlson (682 Acres) David's cotton didn't have the best number for any particular fiber quality measurement *but* it was consistently second for most of them. The majority of David's cotton was non-irrigated, and he managed stink bugs with three insecticide applications. His crop consisted of 66% DP 555 BR, 33% FM 991B2R.

Larron Copeland (3000 Acres) Biggest acreage grower for any of the winners and yields averaged well over 1000 lbs/A. Larron *started* picking 8 days after defoliation. He grew both irrigated and dryland cotton. He primarily grew DP 555 BR and used 4lbs Temik.

Area 2

Bobby Eavenson (478 Acres) Bobby averaged over 1000 lbs/A with 4 different varieties, and had the highest uniformity in that area of the state with an 81.2. This cotton was produced on both irrigated and dryland acres. He primarily grew ST 5599BR, DP 555 BR, and DP 488 BR, and used 5 lbs Temik.

Gary and Glenn Brinson (905 Acres) Gary and Glenn's cotton had the second highest uniformity at 80.3 and second highest staple at 35.35 for their acreage category statewide. Glenn is the grower credited with the statement "Growing quality cotton is like a contest with stink bugs... They want it and I won't let 'em have it. They primarily grew DP 555 BR and used 5 lbs Temik.

Charles Smith Jr (1446 Acres) Charles began harvesting 10 to 12 days after defoliation. He was committed to 555 with the majority of his acreage being planted to this variety. Charles was

able to produce the highest staple for this size grower with an average of 35.13 on mostly irrigated acres. Charles grew 70% DP 555 BR and 30% FM 991 RR.

Area 3

Keith Lewis (176 Acres) Keith is mostly a dryland cotton producer. He had the highest uniformity in the state with 81.31, the lowest micronaire in the state with 3.94, and highest strength with 32.17. He primarily grew FiberMax varieties, but also was complete with harvest 20 days after his first defoliant application. Keith used cruiser treated seed and 5#lb Temik.

Edwin Pope (678 Acres) Edwin's cotton had the highest uniformity in the state for this acreage category with an 80.44, and also the longest staple for this acreage category with 35.4. He began harvesting 14 days after defoliation and treated for stink bugs 3 times. He primarily grew DP 555 BR and used 5 lbs Temik.

Herbert Price (1075 Acres) 99.2% of the cotton produced by Herbert Price had a color grade of 41 or better. He also had the second lowest micronaire in this category with a 4.44, and he averaged over 1000 lbs/A. Herbert also used high rates of Temik and aggressively managed stink bugs. He primarily grew DP 555 BR.

Area 4

Stephen Houston Jr. (95 Acres) Stephen had the highest average premium in the state on his 95 acres, 5.09 c/lb. He also had the highest uniformity in the area with 80.86. He finished harvesting 21 days after defoliation. He primarily grew DP 555 BR and used 6 lbs Temik.

Billy Grant (500 Acres) Billy had the highest premium for his acreage category, and also had an average yield of 1300 lbs/A. He was finished picking his cotton 23 days after defoliation. He also addressed stink bugs and managed nematodes with Telone. He primarily grew DP 555 BR.

Glenn Heard (1300 Acres) Glenn had the highest uniformity for this acreage category, and 100% of his cotton classed a 41 color grade or better. He primarily grew DP 555 BR and used Telone to address nematodes.

We hope to continue and improve upon this awards program in 2006. A special thanks goes to Bayer CropScience and FiberMax for sponsoring this award.

EARLY SEASON WEED MANAGEMENT THOUGHTS (*Culpepper and Grey*)

1. Burndown in Conservation Tillage Cotton. Hopefully by now, growers have applied their 2,4-D removing primrose, wild radish, and horseweed from their fields. For those growers, they can now use Roundup or Gramoxone to effectively control the remaining weeds prior to cotton planting.

For those growers who did not spray 2,4-D, options are still available but management is now more difficult and expensive. After primrose and radish are past bloom (weed seed are being added to the seed bank), research has shown that Gramoxone plus Direx or Roundup plus Valor

will offer good control of these two weeds as well as most other common weeds: with horseweed being possible exception. The Gramoxone plus Direx mixture should be applied 15 days or more in advance of planting. For Roundup plus Valor, no more than 1 oz per acre of Valor can be applied 14 days ahead of planting, or 2 oz per acre of Valor when applying 21 days ahead of planting (Valor plant back restrictions assume a strip till production system). Ignite is also available for cotton burndown and provides excellent control of primrose as well as being effective on horseweed. Ignite will not control an immature radish but will “finish off” one that is maturing.

Some often ask about diuron plus Roundup mixtures for burndown. Although very effective in controlling weeds, diuron can significantly reduce grass activity (especially cover crops) by Roundup. This has been observed in grower fields on at least six occasions over the past two years. Thus, we would not recommend this mixture for use where grasses such as a cover crops are present as re-treatment of the field may be needed.

2. Length of Weed Control Offered by the Yellow Herbicide. The typical half-life (time period which is required for degradation or breakdown of half the amount of product sprayed) of yellow herbicides ranges from 42 to 45 days. This can be slightly increased if the product is incorporated into the soil. Degradation from sunlight is relatively minor; however, losses through volatilization and anaerobic conditions can be much more severe. Volatilization can be managed in many situations by incorporation through mechanical practices or by irrigation. However, breakdown of these herbicides from anaerobic conditions are more complicated and less manageable. Anaerobic conditions essentially occur when the herbicide sits under standing water and some suggest that these products can break down as quick as 7 days when faced with conditions where standing water is present.

3. Using a Yellow Herbicide in Conservation Tillage. Recent studies were conducted to evaluate weed control for Prowl (pendimethalin) applied as a traditional spray application verses impregnated on fertilizer in conservation tillage cotton. Studies compared different timings of application (4 weeks prior to planting or preemergence), method of application (spray verses fertilizer impregnation), herbicide rate (1.0 verses 1.5 lbs/ac), and fertilizer rate (250 verses 500 lb/ac). An additional treatment included a split application of 0.75 lb/ac impregnated on fertilizer 4 weeks prior to planting followed by 0.75 lb/ac sprayed after planting (1.5 lb/ac total).

Florida pusley control was poor (less than 50%) when pendimethalin was applied 4 weeks prior to planting as a spray or when impregnated on fertilizer. In contrast, when applied as a preemergence at planting treatment, pendimethalin spray or impregnated fertilizer controlled Florida pusley 75 to 88%. This indicated that Florida pusley control may be reduced when pendimethalin is applied 4 week prior to planting. The reduced Florida pusley control was assumed to be caused by the interception of herbicide spray or fertilizer coverage due to size of the cover crop. The cover crop biomass prevented the herbicide from reaching the ground uniformly in both scenarios at 4 weeks prior to planting. The split application of pendimethalin (0.75 lb/ac 4 week + 0.75 lb/ac preemergence) gave control equal to the 1.5 lb/ac preemergence treatment. This split application could protect growers from early emerging pusley as well as extend control into the crop.

Prowl H2O SC and Prowl 3.3 EC control was similar for all applications. Greater control was usually noted when applying pendimethalin at 1.5 lbs/ac when compared to 1.0 lbs/ac. Similarly, greater control was noted when impregnated fertilizer was applied on 500 lb as compared to 250 lbs/ac.

4. Staple 85 SP vs. Staple LX. DuPont is switching formulations of Staple from an 85 SP to a new liquid formulation containing 3.2 lb active ingredient per gallon. Unfortunately, University of Georgia Weed Scientists have not had the opportunity to evaluate the new formulation of Staple. Also to our knowledge, no other University has evaluated this product in the Southeast. Our greatest concern is not weed response but rather crop response when mixing the new Staple formulation with the more than 20 different glyphosate products being used. Because we have no data or experience, we can not recommend growers use the new LX formulation of Staple. We do still support and recommend the Staple 85 SP use patterns that we have generated for many years now. As soon as we have the opportunity to compare Staple LX to Staple SP we will provide our results quickly. If using the new formulation of Staple LX, be sure to adjust your use rate according to the label.

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

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