



Cotton Comments

OSU Southwest Oklahoma Research and Extension Center
Altus, OK



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2012 Oklahoma Crop Yield and Quality

The 2012 crop is definitely winding down. It has been another tough year in the Oklahoma cotton patch. Two years of back-to-back droughts have wreaked havoc in Oklahoma. Interesting graphics courtesy of USDA-RMA concerning crop insurance indemnities paid out by county across the US in 2011 and 2012 are available.

[For 2011 click here.](#)

[For 2012 click here.](#)

Considerable dryland acreage has once again failed. Irrigated yields are essentially a function of how much irrigation capacity was available to the crop, and application efficiency. Some high capacity center pivots and some drip irrigated fields have produced up to 3.5 bales/acre; whereas limited furrow irrigated fields have been closer to one bale/acre.

We are ending 2012 with over 90% of the state in the extreme/exceptional drought categories. Although weather prognosticators in the southern Great Plains are often wrong, they are indicating a continued run of dry conditions. Based on comments from state climatologists, 2012 may end up being the one of the warmest overall years on record. Cotton heat unit accumulation at Altus was 61, 14, 13, 8, and 14 percent above normal for the months of May, June, July, August and September. An early freeze/frost event on October 8 in western Oklahoma was a spoiler and likely terminated cotton fiber development in some later maturing fields. However, based on excellent September maturing weather, yield and quality were not devastated as would have occurred during a more normal year. On October 27, we had a killing freeze over much of the area. Producers were able to get winter wheat and cover crops established on the failed cotton acreage thanks to the late September rainfall (2.3 inches). The bad news is that October (0.3) and November (0.4) rainfall at Altus produced a rather scant total of 0.7 inches. Normal rainfall for Altus for October (2.7), November (1.5) totals about 4.2 inches. Thus far, December has been pretty much a zero in terms of precipitation. January and February typically deliver about 2 inches. This has huge implications for our winter crops. We are looking forward to getting out of the drought, however, with the fizzling of the El Nino in the Pacific, everyone is looking to the skies hoping and praying for badly needed rainfall.

The USDA Crop Production Report released on December 11 indicated that for the US, all cotton production is forecast at 17.3 million 480-pound bales, down 1 percent from last month but up 11 percent from last year. Yield is expected to average 793 pounds per acre, up 3 pounds from last year. Upland cotton production is forecast at 16.6 million 480-pound bales, up 13 percent from 2011. For Oklahoma in 2012, our planted acreage was about 300,000. USDA-NASS left unchanged from the November Crop Report our harvested acres (175,000), yield per acre (411 lb) and production (150,000 bales). Based on an informal survey of the 17 gins across the state, the total production I found was about 100,000 bales. I think the harvested acreage numbers are high, the yield per acre should be higher, and the total production should be lower. With respect to these types of statistics, I have been wrong before and will be wrong again.

The fiber quality resilience of the new cotton varieties is amazing. As of December 7, the Abilene, TX, USDA-AMS Classing Office had classed about 81,000 bales from Oklahoma. Color grades are still hanging in there with about 73% classing as an 11, 21 or 31 color (51% 11 or 21, about 22% 31). The early freeze affected some fields, and we currently have about 21% classed as a 12, 22, or 32 color. Leaf grades have been fairly good for this crop, with about 86% classing as a leaf grade 1, 2, or 3. Bark contamination has been about 21%, which is not bad considering the late September rainfall, the early October freeze and stripper harvesting of most acres. A total of 61% of the bales had a 35/32nds or longer staple, with about 36.5% classed with 36 or longer. Uniformity is averaging 79.9%, but considering the year, and again, stripper harvesting of most acres, it's not too bad. Just over 9% has been classed as low micronaire (less than 3.5), with another 5% in the high micronaire category (greater than 4.9). These low micronaire bales likely reflect the early frost/freeze hit on maturity in some later planted fields. The overwhelming majority of the bales (about 86%) are in the 3.5 to 4.9 range. Strength values are holding up very well, with the average running about 30.2 g/tex, with over 64% above 30 g/tex. Incidentally, the Oklahoma bales classed at Abilene thus far have the highest average staple and strength values, which is great. The Abilene classing office serves east Texas, a portion of west Texas, Oklahoma, and Kansas.

Extension Variety Trials Summarized

Extension irrigated variety trials conducted in producer-cooperator fields in the far southwest corner of the state and along the I-40 corridor indicated that several of the newer entries performed very well under the considerable heat and dry conditions encountered in 2012.

Two types of trials were planted. The Replicated Agronomic Cotton Evaluation (RACE) trials were planted and harvested working directly with producer-cooperators in their fields using their commercial equipment. Usually, 7-8 entries per site (typically one entry per brand name), with 3 replicates are planted at these sites. It should be noted that Americot 1511 B2RF had a designation change that occurred on June 8th. Therefore, this germplasm was entered as Americot 1511 B2RF, but due to the name change it is reported as NexGen 1511 B2RF. Plot weights were captured using a Lee

weigh wagon with integral digital scales. A total of 9 sites (5 irrigated, 4 dryland) were planted in 2012. Good to excellent stands were obtained at all sites planted. All dryland sites failed. These locations included Union City (due to hailout), Tipton, Hollis, and Canute (due to drought). The one irrigated site located in the Lugert-Altus Irrigation District failed due to lack of irrigation capability and thus drought. The remaining 4 irrigated sites included Hollis, and locations near the I-40 corridor including Erick, Hydro, and Carnegie.

An additional 5 County Replicated Small Plot (CRSP) sites closer to Altus were planted. A total of 4 replicates of about 12 total entries were planted in each trial. Good to excellent stands were obtained at these locations. These included 3 irrigated (Altus, Granite, and Tipton) and 2 dryland sites (Altus and Granite). Both dryland sites failed, and the irrigated site located within the LAID and the one near Granite failed due to lack of irrigation. The surviving CRSP trial near Tipton was challenged by limited furrow irrigation. This crop was severely moisture stressed by the end of the season. The seeding rate was 52,000 seed/acre and was planted and harvested by our Extension crew using our Extension project small plot planter. It was harvested with a John Deere 482 plot stripper (without a field cleaner).

Grab samples were taken from each individual plot from both RACE and CRSP trials and ginned on plot-type ginning equipment. Lint samples were submitted to the Texas Tech University Fiber and Biopolymer Research Institute (FBRI) for high volume instrument (HVI) analysis. CCC Loan value was determined based on the 2012 loan chart using an Excel spreadsheet provided by Cotton Incorporated. It should be noted that color and leaf grades were standardized to 21 and 2, respectively at all sites due to the nature of our plot ginning equipment.

Surviving irrigated test yields were generally a function of available water and delivery efficiency in these fields. Test average yields ranged from a low of 800 lb/acre in a furrow irrigated trial to over 1500 lb/acre in subsurface drip and in center pivot trials. Fiber properties at most sites were remarkably good. Based on 2012 irrigated trials, we can say that we have some excellent cotton genetics available, and these can do well in a tough year. Results from producer-cooperator fields indicated that variety selection is very important. When yield, fiber CCC loan value, ginning costs, and seed and technology fees are considered, the statistically significant difference in top and bottom variety performers with respect to net value per acre averaged over \$200 across sites. In our region, storm resistance is also important (the higher the better), and all tests were visually scored for this characteristic.

For various trial results and background information click on the links below:

[Location Summary for All Surviving 2012 Sites](#)

[Beckham County – Erick Center Pivot Irrigated RACE results](#)

[Beckham County – Erick Mesonet Weather Data Files \(May-October 2012\)](#)

[Caddo County – Carnegie Center Pivot Irrigated RACE results](#)
[Caddo County – Fort Cobb Mesonet Weather Data Files \(May-October 2012\)](#)

[Custer County – Hydro Center Pivot Irrigated RACE results](#)
[Custer County – Weatherford Mesonet Weather Data Files \(May-October 2012\)](#)

[Harmon County – Hollis Subsurface Drip Irrigated RACE results](#)
[Harmon County – Hollis Mesonet Weather Data Files \(May-October 2012\)](#)

[Tillman County – Tipton Furrow Irrigated CRSP results](#)
[Tillman County – Tipton Mesonet Weather Data Files \(May-October 2012\)](#)

[Multi-Site RACE Trial averages for yield, storm resistance, plant height, Loan value, net value, micronaire, staple, strength, and uniformity](#)

[2012 Failed Sites and Stand Counts](#)

USDA-Risk Management Agency Updates Cotton Transitional Yields (T-Yields)

Due to the devastating drought for the last two years, crop insurance is extremely important. The USDA-Risk Management Agency (RMA) has recently updated cotton Transitional Yields (T-Yields) for Oklahoma. T-yields are calculated as a 5-year yield per PLANTED acre.

The T-yields are used to establish crop insurance coverage levels for growers who have no production history within a county or farm. Also, 60% of the T-yield is substituted in the 10-year Actual Production History (APH) calculation for years when producers suffer devastating losses such as we have experienced over the last two seasons. This substitution is done by practice (non-irrigated and irrigated). This substitute for an extremely low insurance adjustment yield is known as the “yield plug.”

The good news is that in 2013 for the 37 Oklahoma counties that can insure **non-irrigated (dryland)** cotton, T-yields have remained unchanged in 5 counties, and have gone up in 20 of those. Most counties which represent the traditional “Oklahoma cotton patch” (Districts 2 West Central and 3 Southwest) T-yields have all increased. The bad news is that 12 counties, mostly in Districts 6 (South Central), 5 (Central), 7 (Northeast), and 8 (East Central) have seen T-yields reduced. Southwest District 3 counties will see about a 20% increase in T-yields. For example, in 2012, Tillman County’s non-irrigated T-yield was 235 lbs/acre. For 2013, this will be 282, or a 20% increase.

Irrigated T-yields have also increased in most counties which can insure that practice. It appears to me that in the Southwest District 3, irrigated T-yields have been increased about 20% in 2013 compared to 2012 levels. For instance, Jackson County’s irrigated

T-yield in 2012 was 834 lbs/acre. In 2013, this will be 1001, roughly a 20% increase. Tillman, Harmon, Greer, and Caddo counties have similar increases.

The highest non-irrigated T-yield in the state is in Kay County at 436 lbs/acre. The highest irrigated T-yield in the state is in Jackson County. Higher T-yields are good news for producers who have seen their APH values reduced by two years of severe drought.

[For a table that presents changes in Oklahoma T-yield levels for 2013, click here](#)

USDA-RMA Announces Crop Insurance Premium Rate Adjustment

USDA-RMA recently announced that an overhaul of crop insurance was coming based on an analysis by a team of economists and actuaries. It appears that adjustments in premium prices will be phased in over the next several years.

According to the RMA news release, “A key recommendation from the review was that RMA should ‘evaluate alternative loss cost experience weighting methods’, especially with a view toward placing more weight on loss experience from recent years that may be more representative of today’s agricultural risks. A follow-up study addressing this recommendation was initiated in August 2010 with a final draft produced in July 2011.”

Key revisions include:

- 1) Use of a moving 20-year period to establish county base premium rates
- 2) Adjustment of pre-1995 loss data down to reflect program/agronomic differences (mainly due to increases in agricultural technology such as transgenic traits, precision agriculture, etc.).
- 3) Use of weather data to adjust premium rates. This would include the use of long-term data to reduce the impact of the weight of infrequent weather events.

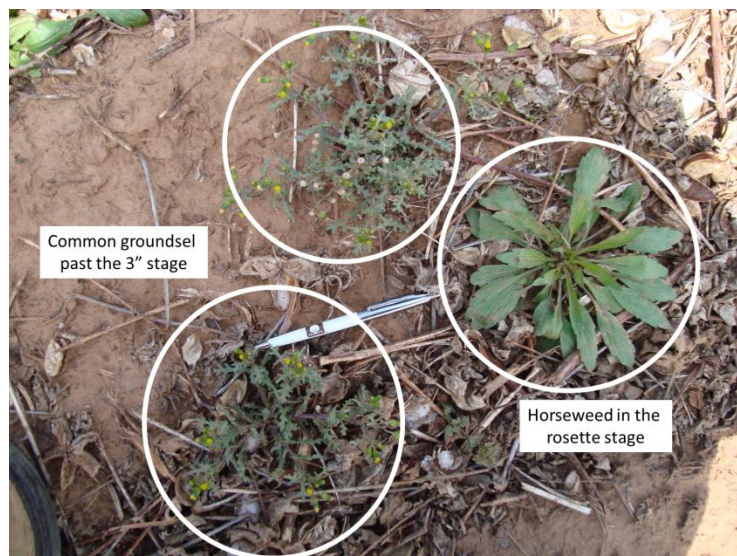
With respect to implementation, RMA noted that they will “phase in new rates limiting year-to-year premium changes to limit potential increases due to significant 2012 losses as a result of drought. This approach will help keep premiums stable and provide farmers predictable rates. For 2013 RMA will fully implement targets that result in 15 percent or less change (increase or decrease) in yield protection premium on average.” When glancing at the US map for estimated premium impact for cotton in 2013, Oklahoma faces an 8% increase; Texas, 5% increase; Kansas, 1% increase; New Mexico, 11% increase; and California, 10% increase. All states east of Oklahoma and Texas will see cotton insurance premium prices decrease.

[For a copy of the USDA-RMA news release, click here.](#)

Glyphosate Resistant Weeds/Winter – Spring weed Control Reminders

Although it's only December it's not too early to be thinking about spring and summer weed control. It's time to start the broken record! Preventing or fighting resistance in your field starts now. Here are some things to refresh your memory.

- Scout fields now for horseweed and for common groundsel .
- Remember to include either 1.0 lb ai/acre 2,4-D or 0.25 lb ai/acre dicamba with your glyphosate for winter or spring applications for horseweed and/or common groundsel.
- Don't spray according to the calendar.
- Spray according to weed size.
- Spray horseweed in the rosette stage (before vertical growth) and common groundsel prior to 3 inches of growth.
- Remember plant back intervals (30 days after 2,4-D, 21 days after 1 inch of rain behind dicamba).
- Plan ahead to prevent pigweed escapes in your fields this summer-use residual herbicides.
- Plan on incorporating at least two residual herbicides into your weed control system.
- Tank-mix residuals with glyphosate whenever possible.
- Remember, the best way to fight resistant weed problems is to never get them!
- Review "Herbicide Program Suggestions for Fighting Glyphosate Resistant Pigweed in Oklahoma Cotton" ([click here for copy](#)) and settle your weed control plans early.



Last Dance for Production Conference During the National Cotton Council's 2013 Beltwide Cotton Conferences

The National Cotton Council (NCC) will be changing the format of future Beltwide Cotton Conferences by eliminating the Production Conference. Future Beltwide Cotton Conferences will be somewhat shorter by doing this, and other conferences (Consultant's, technical conferences by discipline, etc.) will continue in the same manner. Below is information provided by Dr. Bill Robertson with the NCC concerning the upcoming 2013 Beltwide Cotton Conferences in San Antonio, TX.

Monday, December 17, is the last day discounted room rates will be offered by the Marriott Rivercenter/Riverwalk hotels in San Antonio, Texas. Those are the headquarter hotels for the 2013 Beltwide Cotton Conferences, set for January 7-10.

The NCC urges cotton industry members, university and USDA researchers, Extension personnel, consultants, equipment and service providers – anyone with a stake in a healthy U.S. cotton production sector – to make your housing reservations now for this world-class information forum. Housing and Conferences registration instructions, along with a schedule of events and general information are available at:

www.cotton.org/beltwide

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