

**UNIFORM STACKED-GENE COTTON VARIETY TRIALS
COASTAL BEND, UPPER GULF COAST, BRAZOS RIVER VALLEY,
AND SOUTHERN BLACKLANDS REGIONS OF TEXAS, 2008**



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Variety selection is the most important decision made during the year. Unlike herbicide or insecticide decisions that can be changed during the season to address specific conditions and pests, variety selection is made only once and that selection will dictate the management of that field for the entire season. Variety decisions should be based on genetics first, and transgenic technology second. Attention should be focused on agronomic characteristics such as yield, maturity and fiber quality when selecting varieties. Figure 1 outlines the Best Management Practices for variety selection.

Texas producers planted 4.9 million acres in 2008 which was similar acreage to 2007. In the east/south Texas regions (Coastal Bend, Upper Gulf Coast, Brazos River Valley and Blacklands) 714,000 acres were planted in 2008.

Transgenic varieties accounted for 90% of the state acreage in 2008 (87% in 2007). According to the USDA-Agricultural Marketing Service “Cotton Varieties Planted 2008 Crop” survey for the Corpus Christi Classing Office, about 21% of acres were Bollgard/Roundup Ready, 34% Bollgard II/Roundup Ready Flex, 28% Liberty Link and Liberty Link Bollgard II, and 17% Conventional cotton varieties. The most popular varieties for the region were: Fiber Max 840 B2RF – 15%, Fiber Max 832 – 14%, Fiber Max 835 LLB2 – 10%, Delta Pine 555 BGRR – 8%, Fiber Max 832 LL – 7%, Fiber Max 955 LLB2 - 7%, Fiber Max 958 LL – 4%, Deltapine 143 B2RF - 4%, Deltapine 444 BGRR – 3%, Deltapine 164 B2RF – 3%.

To assist Texas cotton producers in remaining competitive in the Coastal Bend, Upper Gulf Coast, Brazos River Valley, and the Southern Blacklands regions the Extension Cotton Agronomy program has been conducting uniform, large plot, on-farm, replicated variety trials for the past six years (Figure 2). This approach provides a good foundation of information that can be utilized to begin the decision making process.

Ten locations were planted in 2008. Counties included in the project were San Patricio, Victoria, Calhoun, Jackson, Matagorda, Wharton, Colorado, Fort Bend, Brazos and Williamson. The 2008 season was characterized as very dry through boll fill, followed by late season rainfall which was fairly common across the areas. Crop loss in the Coastal Bend due to poor stand establishment was about a 100,000 acres. Additionally, Hurricane Dolly affected the Rio Grande Valley and the Coastal Bend crop. Hurricane Dolly made landfall in the Rio Grande Valley on July 23 and devastated the Valley crop. The majority of the 91,000 acres in the Valley was lost and the northern fringe of Dolly damaged the lower Coastal Bend crop, but the crop remained harvestable. Some yield and quality loss was experienced.

Hurricane Ike made landfall near Galveston on September 13 and moved northward along the Interstate 45 corridor. Although Ike delivered serious damage to southeast Texas, the cotton crop in central Texas sustained minimal damage from rain and wind.

Commercial seed companies represented in the trials included Fibermax (FM), Stoneville (ST), Deltapine (DPL), Phytogen (PHY), Dyna-Gro (DG), and Croplan Genetics (CG). All varieties were treated with either Aeris or Avicta Complete Pak seed treatment.

Table 1 provides a list of planting and harvest dates, row spacing and plot area for each location. Subsequent tables provide a summary for each location and summaries for core varieties for the Upper Gulf Coast (Jackson, Matagorda, Wharton, Colorado, and Fort Bend Counties). Also included are results from the "Meaney Monster Cotton Variety Trial" conducted at the Corpus Christi AgriLife Research and Extension Center.

Data featured in these tables include, statistical analysis of yield, turnout, fiber quality parameters, loan and lint value results. Plot samples were ginned with a 10-saw table-top gin with no lint cleaner. This method consistently produces higher lint turnout percentages than would be common in a commercial gin. Consequently, higher turnouts equate to lint yields which are generally higher than area-wide commercial yields. Additionally, all data were standardized to a color grade and leaf of 41 - 4. Table 2 shows numerical rankings based upon lint yield for all varieties across all locations. Only varieties that were planted in at least five locations are included.

The statistical analysis presents a general overview of the uniformity of the test conditions (soil type, cultural practices, insect damage, etc.). Trial locations with large least significant differences (LSD's) in the range of 150 to 200 lbs of lint/acre generally offer little useful information due to non-uniform conditions (higher degree of variability). The smaller the LSD, the more precise are the test results. Non-significance is represented as "NS."

Varieties that are statistically different from one another will not have the same letter next to the corresponding number value in a column. For example, in the first table (San Patricio County) lint yields for the first three varieties are statistically similar (each variety followed by a common letter “a” designation). However, the first variety (PHY 375 WRF) is significantly higher when compared to the remaining varieties (none of which are followed by an “a” designation).

Each year review as many public and private tests within your region as possible before making decisions. Due to the annual introduction of several new varieties/technology it has become increasingly more difficult to find multi-year data. Consequently, these uniform, large plot, replicated, on-farm variety trials provide an excellent source of information.



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Figure 1.



First 40 Days - Fruiting to Finish

The Most Critical Period in Cotton Production
Expert Recommendations of Best Management Practices for an
Efficient, Cost Effective Cotton Production System

Variety Selection

Cultivar selection is the most important decision made in the production enterprise. This decision has a lasting effect on the crop's early-season vigor and on overall plant health and uniformity during the *First 40 Days*. The crop's ultimate yield and fiber quality potential at harvest begin with variety selection and seed quality.

❖ *Consider planting disease tolerant varieties, or those that have at least some resistance, where disease is a problem*

Choose Varieties with Genetic Potential for Higher Yield and Excellent Fiber Quality

Yield remains the ultimate measure of the crop, although the ever-increasing demand for higher fiber quality makes this factor a close second in priority. With more than 70% of the U.S. crop exported, fiber quality will become the single most important factor for U.S. cotton in the foreseeable future. International mill standards and specifications are higher than domestic mills.

- ❖ *Long staple length - 35 to 36 (1.08 – 1.13 inches)*
- ❖ *High strength - 28 to 29 g/tex*
- ❖ *Premium micronaire - 3.8 to 4.6*
- ❖ *High uniformity index - 82*
- ❖ *Smooth leaf with plant conformation suitable for efficient harvest - 21/31 Grades 2-3 leaf*

Plant Several Varieties: Consider Specific Traits and Crop Maturity after Yield and Quality

Consider planting 3 to 4 varieties to determine which cultivars and trait combinations perform best on your farms. Multiple varieties also minimizes the risk of planting the entire farm to a potentially poor performing variety or using traits that do not add value to the individual cropping system.

❖ *Always evaluate more than one year of variety data prior to planting large acreage to a new cultivar*

Select the Highest Quality Seed for Planting

High quality seed is critical to early success and the crop's ultimate performance. Rapid germination and emergence is best, because it narrows the window for seedling disease and minimizes pest impact. In addition to the standard warm germination test, a cool germination test is recommended. Cool/Warm Vigor Index of 160 is best (e.g. 90 warm germ + 70 cool germ = 160)

- ❖ *Early planting into cool soils requires the best vigor index available in the variety you are planting*
- ❖ *CWVI > 160 = Excellent*
- ❖ *CWVI 140 – 159 = Good*
- ❖ *CWVI 120 – 139 = Fair*
- ❖ *CWVI < 120 = Poor*

Table 1. Planting date, harvest date, row spacing, plot dimensions and area harvested.

County	Planting Date	Harvest Date	Row Spacing (inches)	Plot Dimensions	Area harvested/plot
San Patricio	Mar 14	Aug 7	38	6 rows x 1077 ft	0.47 acres
Victoria	Mar 24	July 30	38	6 rows x 2797 ft	1.22 acres
Calhoun	Mar 26	Aug 7	32	5 rows x 2800 ft	0.86 acres
Jackson	Mar 21	July 31	38	8 rows x 2025 ft	1.18 acres
Matagorda	Apr 1	Aug 8	40	8 rows x 490 ft	0.30 acres
Wharton	Apr 8	Sept 3	40	8 rows x 1343 ft	0.80 acres
Fort Bend	Apr 4	Sept 5	36	6 rows x 941 ft	0.39 acres
Colorado	Mar 31	Aug 23	36	8 rows x 900 ft	0.50 acres
Brazos	Mar 31	Sept 29	40	8 rows x 600 ft	0.31 acres
Williamson	Apr 17	Sept 1	30	6 rows x 900 ft	0.31 acres

Table 2. Variety ranking based on lint yield across all locations, 2008.

Variety	County Location										Mean
	San Patricio	Victoria	Calhoun	Jackson	Matagorda	Wharton	Fort Bend	Colorado	Brazos	Williamson	
PHY 375 WRF	1	1	1	1	1	4	2	2	1	7	2.1
DPL 141 B2RF	3	5	2	8	2	2	3	3	2	4	3.4
ST 5327 B2RF	6	6	4	2	4	3	5	5	7	1	4.3
DPL 161 B2RF	---	3	5	6	3	1	1	9	4	8	4.4
CG 3220 B2RF	---	4	3	3	8	6	6	6	3	3	4.7
FM 1740 B2RF	2	2	7	4	7	5	7	4	6	9	5.3
PHY 485 WRF	5	8	6	5	6	8	4	7	5	5	5.9
ST 4498 B2RF	4	7	8	7	5	7	8	8	9	6	6.9
FM 840 B2RF	7	9	10	9	9	9	9	1	8	2	7.3

Table 3. Uniform Stacked-Gene Cotton Variety Trials, 2008
San Patricio County
Cooperator: Robert Rieder
Duane Campion, County Extension Agent – Agriculture and Natural Resources

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/acre)	
PHY 375 WRF	878	a	45.4	a	5.20	a	1.11	a	29.53	a	82.83	a	50.48	a	443	a
FM 1740 B2RF	849	ab	45.5	a	5.23	a	1.10	a	28.97	a	83.22	a	50.95	a	433	ab
DPL 164 B2RF	830	ab	43.0	cd	5.23	a	1.11	a	29.70	a	83.30	a	51.08	a	424	abc
DPL 141 B2RF	813	bc	42.3	de	5.23	a	1.08	a	28.50	a	82.53	a	49.72	a	405	bcd
ST 4498 B2RF	769	cd	45.3	ab	5.20	a	1.11	a	29.63	a	82.47	a	51.40	a	395	cde
Alltex Apex B2RF	759	cde	43.5	cd	5.33	a	1.09	a	27.47	a	82.00	a	49.75	a	378	def
PHY 485 WRF	748	de	43.7	bcd	5.10	a	1.12	a	30.63	a	83.27	a	51.02	a	382	def
ST 5327 B2RF	717	def	44.3	abc	5.17	a	1.08	a	29.30	a	83.27	a	50.93	a	365	ef
FM 9063 B2RF	706	ef	42.6	de	5.17	a	1.10	a	30.43	a	82.63	a	51.20	a	362	ef
FM 840 B2RF	670	f	41.3	e	5.17	a	1.12	a	28.40	a	82.37	a	51.48	a	345	f
Mean	774		43.7		5.20		1.10		29.26		82.79		50.80		393	
P>F	0.0001		0.0019		0.9601		0.9465		0.7869		0.8390		0.9177		0.0024	
LSD (P=.10)	59		1.57		NS		NS		NS		NS		NS		37	
STD DEV	41.69		1.11		0.191		0.048		2.16		1.097		1.71		25.9	
CV%	5.38		2.55		3.67		4.35		7.38		1.33		3.37		6.59	

Table 4. Uniform Stacked-Gene Cotton Variety Trials, 2008
Victoria County
Cooperator: Bill Buzek
Joe Janak, County Extension Agent – Agriculture and Natural Resources

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/acre)	
PHY 375 WRF	946	a	43.7	a	5.53	bcd	1.07	d	28.77	d	83.47	a	49.18	c	466	a
FM 1740 B2RF	901	ab	42.2	ab	5.60	abc	1.10	cd	31.37	abc	83.47	a	50.03	bc	451	ab
DPL 161 B2RF	876	bc	41.8	bcd	5.67	ab	1.14	ab	30.93	abc	83.67	a	50.70	ab	444	ab
CG 3220 B2RF	868	bc	42.4	ab	5.70	a	1.14	ab	30.77	bcd	84.23	a	50.60	ab	439	abc
DPL 141 B2RF	860	bc	40.2	cd	5.17	f	1.11	bcd	29.53	cd	82.90	a	50.10	bc	431	bcd
ST 5327 B2RF	830	cd	42.4	ab	5.40	de	1.07	d	30.77	bcd	82.60	a	49.20	c	408	cde
ST 4498 B2RF	808	cde	41.8	bc	5.50	cd	1.08	d	32.20	ab	83.87	a	49.53	bc	400	de
PHY 485 WRF	807	cde	41.1	bcd	5.53	bcd	1.09	cd	30.47	bcd	84.27	a	50.08	bc	404	de
FM 840 B2RF	768	de	40.1	d	5.33	e	1.16	a	32.83	a	84.87	a	51.78	a	398	de
ST 4357 B2RF	753	e	41.8	bc	5.47	cde	1.12	abc	28.73	d	83.43	a	50.12	bc	377	e
Mean	842		41.8		5.49		1.11		30.64		83.68		50.13		421	
P>F	0.0040		0.0597		0.0001		0.0001		0.0400		0.2580		0.0636		0.0061	
LSD (P=.10)	70		1.73		0.14		0.04		2.042		NS		1.254		34.7	
STD DEV	49.44		1.22		0.1		0.03		1.442		0.977		0.886		24.5	
CV%	5.87		2.93		1.74		2.35		4.71		1.17		1.77		5.81	

Table 5. Uniform Stacked-Gene Cotton Variety Trials, 2008
Calhoun County
Cooperator: David Hahn
Phoenix Rogers, County Extension Agent – Agriculture and Natural Resources

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/acre)	
PHY 375 WRF	862	a	43.9	a	5.20	bc	1.05	de	29.00	c	82.87	c	48.27	ef	415	b
DPL 141 B2RF	857	a	41.9	de	4.97	ef	1.10	bc	29.17	c	81.77	d	52.15	ab	447	a
CG 3220 B2RF	830	ab	42.5	cd	5.30	ab	1.09	bc	29.40	c	84.47	a	50.50	bcd	419	ab
ST 5327 B2RF	808	abc	43.2	abc	5.03	de	1.05	de	28.63	c	83.37	bc	49.98	cde	404	bc
DPL 161 B2RF	802	a-d	42.7	bcd	5.37	a	1.11	ab	31.40	ab	84.17	ab	50.70	bcd	407	bc
PHY 485 WRF	802	a-d	42.3	d	5.30	ab	1.03	e	30.77	b	82.60	cd	47.95	f	384	cd
FM 1740 B2RF	774	bcd	43.4	ab	4.90	f	1.06	de	28.77	c	82.83	c	51.58	abc	399	bc
ST 4498 B2RF	749	cd	41.0	f	5.10	cd	1.04	e	31.93	a	83.50	abc	49.27	def	369	de
DG 3520 B2RF	736	d	41.2	ef	5.03	de	1.07	cd	26.90	d	83.07	c	51.30	abc	377	cd
FM 840 B2RF	642	e	40.0	g	5.03	de	1.13	a	31.30	ab	84.47	a	52.80	a	339	e
Mean	786		42.2		5.12		1.07		29.73		83.31		50.45		396	
P>F	0.0011		0.0001		0.0001		0.0001		0.0001		0.0040		0.0077		0.0007	
LSD (P=.10)	68		0.83		0.12		0.03		1.01		1.03		2.0		30	
STD DEV	48.4		0.59		0.09		0.02		0.716		0.728		1.424		21.3	
CV%	6.16		1.39		1.65		1.88		2.41		0.87		2.82		5.39	

Table 6. Uniform Stacked-Gene Cotton Variety Trials, 2008
Jackson County
Cooperator: Dale Allen
Michael Hiller, County Extension Agent – Agriculture and Natural Resources

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/acre)	
PHY 375 WRF	735	a	45.2	a	4.70	ab	1.04	de	27.27	de	82.73	a	50.53	bc	371	a
ST 5327 B2RF	720	a	44.3	b	4.90	a	1.05	cd	29.47	b	83.37	a	50.75	bc	364	a
CG 3220 B2RF	702	a	43.4	c	4.90	a	1.06	bc	27.97	cd	83.03	a	51.87	ab	364	a
FM 1740 B2RF	656	b	44.3	b	4.40	cd	1.04	cde	26.5	e	82.33	a	50.72	bc	334	b
PHY 485 WRF	647	bc	42.6	cd	4.90	a	1.03	de	29.4	b	83.07	a	49.45	c	320	bc
DPL 161 B2RF	641	bc	42.3	de	4.80	a	1.06	bc	29.83	b	82.23	a	51.80	b	333	b
ST 4498 B2RF	636	bc	43.2	c	4.77	ab	1.04	cde	31.33	a	83.67	a	51.77	b	329	b
DPL 141 B2RF	628	bc	42.4	d	4.47	cd	1.08	b	28.80	bc	81.37	a	52.27	ab	329	b
DG 2490 B2RF	615	c	41.5	f	4.27	d	1.02	e	26.80	de	82.00	a	49.37	c	304	c
FM 840 B2RF	608	c	41.5	ef	4.57	bc	1.13	a	31.60	a	83.33	a	53.72	a	327	bc
Mean	659		43.0		4.67		1.06		28.9		82.71		51.22		337	
P>F	0.0001		0.0001		0.0001		0.0001		0.0001		0.167		0.0222		0.0024	
LSD (P=.10)	39		0.826		0.21		0.03		1.377		NS		1.877		24.6	
STD DEV	27.54		0.584		0.15		0.02		0.972		0.959		1.326		17.4	
CV%	4.18		1.36		3.1		1.69		3.36		1.16		2.59		5.15	

Table 7. Uniform Stacked-Gene Cotton Variety Trials, 2008
Matagorda County
Cooperator: Hansen Farms
Brent Batchelor, County Extension Agent - Agriculture and Natural Resources

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/acre)	
PHY 375 WRF	1040	a	42.5	a	5.17	bc	1.09	ef	29.6	e	83.43	de	51.25	c	533	a
DPL 141 B2RF	1010	a	41.7	ab	4.97	cd	1.14	bc	30.2	de	83.57	cde	53.05	ab	536	a
Seed Tec CT212	971	a	38.4	e	5.20	abc	1.09	ef	31.5	bcd	83.33	e	51.07	c	496	ab
DPL 161 B2RF	962	ab	40.3	d	5.43	a	1.16	ab	31.2	bcd	84.57	ab	50.82	c	489	abc
ST 5327 B2RF	875	bc	41.6	abc	5.23	ab	1.10	de	30.7	cde	85.00	a	51.35	c	450	bcd
ST 4498 B2RF	873	bc	40.6	cd	4.97	cd	1.09	ef	32.9	a	84.90	a	52.93	ab	462	bcd
DPL 393	867	c	41.3	bc	5.07	bcd	1.13	c	30.6	cde	83.80	b-e	52.70	b	457	bcd
PHY 485 WRF	859	c	39.6	d	5.07	bcd	1.08	f	31.7	abc	84.33	abc	51.23	c	440	cd
FM 1740 B2RF	835	c	41.7	ab	4.60	ef	1.09	ef	30.1	de	83.43	de	53.10	ab	444	cd
PHY 440W	822	c	40.3	d	4.83	de	1.09	ef	30.7	cde	84.37	abc	52.97	ab	435	de
CG 3220 B2RF	816	c	40.6	cd	5.10	bc	1.13	cd	29.6	e	84.53	ab	51.87	bc	423	de
FM 840 B2RF	720	d	38.5	e	4.43	f	1.17	a	32.2	ab	84.23	a-d	54.08	a	389	e
Mean	888		40.6		5.01		1.11		30.94		84.12		52.20		462	
P>F	0.0001		0.0001		0.0001		0.0001		0.009		0.0210		0.0034		0.0014	
LSD (P=.10)	89.58		1.01		0.25		0.03		1.4		0.866		1.309		50.3	
STD DEV	63.9		0.72		0.18		0.02		0.999		0.617		0.934		35.9	
CV%	7.2		1.78		3.55		1.61		3.23		0.73		1.79		7.75	

Table 8. Uniform Stacked-Gene Cotton Variety Trials, 2008
Wharton County
Cooperator: Keith Kresta
Peter McGuill, County Extension Agent – Agriculture and Natural Resources

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/acre)	
DPL 161 B2RF	1126	a	43.9	a	5.10	a	1.07	a	26.27	a	81.73	a	49.15	a	554	a
DPL 141 B2RF	1073	ab	41.5	a	4.50	d	1.07	a	26.50	a	81.33	a	50.85	a	546	a
ST 5327 B2RF	1065	bc	44.0	a	4.93	ab	1.06	a	27.53	a	82.50	a	51.52	a	549	a
DG 2490 B2RF	1061	bc	43.5	a	4.87	abc	1.05	a	25.83	a	82.57	a	49.43	a	525	a
PHY 375 WRF	1048	bc	44.4	a	4.83	bc	1.08	a	27.70	a	82.40	a	52.15	a	547	a
FM 1740 B2RF	1013	cd	43.6	a	4.70	bcd	1.06	a	27.23	a	81.37	a	51.05	a	517	a
CG 3220 B2RF	989	de	42.1	a	4.63	cd	1.07	a	25.90	a	82.50	a	51.65	a	511	a
ST 4498 B2RF	984	de	43.7	a	4.70	bcd	1.08	a	26.53	a	83.03	a	52.70	a	519	a
PHY 485 WRF	968	de	43.9	a	4.67	cd	1.04	a	28.20	a	82.57	a	50.53	a	489	a
FM 840 B2RF	947	e	43.0	a	4.70	bcd	1.10	a	27.07	a	81.57	a	52.13	a	493	a
Mean	1028		43.4		4.76		1.07		26.88		82.16		51.12		525	
P>F	0.000 7		0.109 0		0.040 0		0.840 0		0.430 0		0.675 0		0.490 4		0.194 6	
LSD (P=.10)	56.8		NS		0.26		NS		NS		NS		NS		NS	
STD DEV	40.12		1.13		0.18		0.04		1.334		1.211		2.038		32.2	
CV%	3.9		2.6		3.85		4		4.96		1.47		3.99		6.12	

Table 9. Uniform Stacked-Gene Cotton Variety Trials, 2008
Fort Bend County
Cooperator: Stasney Farms
Joe Mask, County Extension Agent – Agriculture and Natural Resources

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/acre)	
DPL 555 BR	1279	a	46.0	a	5.00	bc	1.06	d	26.40	c	80.70	c	49.45	a	540	a
DPL 161 B2RF	1035	b	43.4	cd	5.20	ab	1.16	a	28.80	b	83.80	a	51.70	a	458	b
PHY 375 WRF	983	bc	46.2	a	4.87	cd	1.08	cd	27.07	c	82.27	b	51.23	a	431	bc
DPL 141 B2RF	929	bcd	42.7	d	4.57	ef	1.13	b	26.60	c	79.67	c	52.57	a	419	bc
PHY 485 WRF	916	cd	44.5	bc	5.30	a	1.07	cd	27.00	c	83.60	a	50.15	a	393	cd
ST 5327 B2RF	900	cd	45.0	ab	4.63	def	1.07	cd	26.67	c	82.37	b	52.17	a	402	c
CG 3220 B2RF	897	cd	44.1	bc	4.77	cde	1.09	c	27.17	c	82.17	b	52.05	a	399	c
FM 1740 B2RF	851	de	45.2	ab	4.80	cde	1.07	cd	27.30	c	82.13	b	52.13	a	380	cde
ST 4498 B2RF	765	ef	42.8	d	4.43	f	1.08	cd	30.03	ab	82.83	ab	52.73	a	346	de
FM 840 B2RF	731	f	41.3	e	4.67	def	1.15	a	30.43	a	82.23	b	53.68	a	336	e
Mean	929		44.1		4.82		1.10		27.75		82.18		51.786		410.4	
P>F	0.0001		0.0001		0.0001		0.0001		0.0001		0.0001		0.1440		0.0002	
LSD (P=.10)	109		1.27		0.29		0.03		1.486		1.21		NS		53	
STD DEV	77.63		0.9		0.2		0.02		1.05		0.854		1.616		37.4	
CV%	8.36		2.04		4.18		1.71		3.78		1.04		3.12		9.12	

Table 10. Uniform Stacked-Gene Cotton Variety Trials, 2008
Colorado County
Cooperator: Mahalitic Farms
Dale Rankin, County Extension Agent - Agriculture and Natural Resources

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/acre)	
FM 840 B2RF	1106	a	42.6	a	4.57	a	1.12	a	28.4	a	83.73	a	52.58	a	581	a
PHY 375 WRF	1037	a	41.8	a	4.50	a	1.13	a	28.4	a	82.87	a	53.22	a	552	a
DPL 141 B2RF	1039	a	43.2	a	4.47	a	1.09	a	29.3	a	82.93	a	52.93	a	550	a
FM 1740 B2RF	1028	a	41.9	a	4.43	a	1.13	a	29.0	a	83.33	a	52.93	a	543	a
ST 5327 B2RF	986	a	40.5	a	4.23	a	1.12	a	27.9	a	82.67	a	53.47	a	528	a
CG 3220 B2RF	975	a	41.7	a	4.53	a	1.13	a	29.6	a	83.87	a	53.63	a	523	a
PHY 485 WRF	983	a	42.4	a	4.37	a	1.13	a	27.1	a	83.27	a	52.9	a	521	a
ST 4498 B2RF	961	a	41.5	a	4.37	a	1.15	a	29.3	a	83.67	a	53.78	a	517	a
DPL 161 B2RF	935	a	41.3	a	4.27	a	1.15	a	28.4	a	83.40	a	53.57	a	501	a
DG 2570 B2RF	927	a	41.9	a	3.97	a	1.11	a	27.8	a	82.13	a	53.05	a	492	a
Mean	998		41.8		4.37		1.13		28.6		83.2		53.20		530	
P>F	0.8677		0.3924		0.6700		0.6100		0.5310		0.3540		0.5526		0.9108	
LSD (P=.10)	NS		NS		NS		NS		NS		NS		NS		NS	
STD DEV	136.82		1.2		0.36		0.04		1.42		0.85		0.714		71	
CV%	13.71		2.87		8.23		3.16		4.97		1.02		1.34		13.38	

Table 11. Uniform Stacked-Gene Cotton Variety Trials, 2008
Brazos/Burleson County
Cooperator: Johnny Osborne - Higginbottom Farms
Eric Zimmerman, County Extension Agent – Agriculture and Natural Resources Brazos County
Cullen “Dusty” Tittle, County Extension Agent – Agriculture and Natural Resources Burleson County

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/acre)	
PHY 375 WRF	1164	a	44.32	a	4.53	de	1.11	e	26.80	e	82.33	a	53.13	a	619	a
DPL 141 B2RF	1162	a	45.47	a	4.67	cd	1.16	bc	29.63	a	81.70	a	53.47	a	621	a
CG 3220 B2RF	1160	a	42.56	a	4.90	a	1.20	a	29.17	abc	83.70	a	53.57	a	622	a
DPL 161 B2RF	1153	a	42.94	a	4.97	a	1.19	ab	27.83	cde	82.57	a	52.70	a	609	a
PHY 485 WRF	1112	a	41.48	a	4.73	bc	1.15	cd	29.20	abc	84.63	a	53.70	a	597	a
FM 1740 B2RF	1100	a	43.36	a	4.87	ab	1.14	cde	27.57	de	82.77	a	53.37	a	587	a
DG 2570 B2RF	1094	a	41.91	a	4.97	a	1.13	de	28.13	b-e	83.67	a	53.45	a	585	a
ST 5327 B2RF	1094	a	43.16	a	4.67	cd	1.11	e	28.53	a-d	82.70	a	53.25	a	583	a
FM 840 B2RF	1086	a	39.79	a	4.50	e	1.21	a	29.73	a	83.13	a	53.68	a	583	a
ST 4498 B2RF	1082	a	42.55	a	4.70	c	1.12	e	29.37	ab	83.07	a	53.45	a	578	a
Mean	1121		42.75		4.75		1.15		28.60		83.03		53.38		598.4	
P>F	0.8719		0.1946		0.0001		0.0001		0.0383		0.9510		0.2519		0.9029	
LSD (P=.10)	NS		NS		0.14		0.03		1.48		NS		NS		NS	
STD DEV	86.94		2.134		0.099		0.022		1.051		1.16		0.431		46.573	
CV%	7.76		4.99		2.09		1.94		3.68		1.4		0.81		7.78	

Table 12. Uniform Stacked-Gene Cotton Variety Trials, 2008
Williamson County
Cooperator: Greg Shirocky
Bob Whitney, County Extension Agent – Agriculture and Natural Resources

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/acre)	
DG 2490 B2RF	616	a	39.7	a	4.35	a	1.03	a	23.4	a	80.58	a	48.47	a	300	a
ST 5327 B2RF	609	ab	42.7	a	4.50	a	1.01	a	21.9	a	79.93	a	46.23	a	282	ab
FM 840 B2RF	593	abc	39.6	a	4.25	a	0.99	a	23.1	a	79.66	a	46.43	a	276	ab
CG 3220 B2RF	562	a-d	40.3	a	4.50	a	1.00	a	22.5	a	79.73	a	46.64	a	263	bc
DPL 141 B2RF	557	a-e	39.7	a	4.40	a	1.04	a	23.3	a	80.70	a	48.77	a	271	ab
PHY 485 WRF	551	b-e	40.1	a	4.20	a	0.96	a	23.9	a	80.07	a	46.66	a	258	bc
ST 4498 B2RF	541	cde	39.7	a	4.20	a	1.03	a	23.4	a	80.20	a	48.45	a	263	bc
PHY 375 WRF	536	cde	40.0	a	4.33	a	1.01	a	23.8	a	80.27	a	47.22	a	253	bc
DPL 161 B2RF	510	de	39.8	a	4.43	a	0.99	a	21.8	a	80.07	a	46.03	a	235	c
FM 1740 B2RF	502	e	39.2	a	4.53	a	1.01	a	22.7	a	80.23	a	47.13	a	237	c
Mean	558		40.1		4.37		1.01		23.0		80.14		47.203		263	
P>F	0.0490		0.5900		0.2800		0.1200		0.2600		0.9800		0.2800		0.0690	
LSD (P=.10)	59		NS		NS		NS		NS		NS		NS		31.6	
STD DEV	41.1		1.82		0.18		0.03		1.085		1.241		1.487		22	
CV%	7.36		4.55		4.18		2.72		4.72		1.55		3.15		8.34	

**Table 13. Uniform Stacked-Gene Cotton Variety Trials, 2008
Jackson, Matagorda, Wharton, Colorado and Fort Bend Counties Combined Analysis**

Variety	Yield (lbs/acre)		Turnout %		Micronaire		Length (inches)		Strength (g/tex)		Uniformity		Loan Value (¢/lbs)		Lint Value (\$/acre)	
PHY 375 WRF	969	a	44.00	a	4.81	abc	1.08	cde	28.02	b	82.74	bc	51.68	cde	487	a
DPL 161 B2RF	940	ab	42.20	cd	4.96	a	1.12	ab	28.92	ab	83.15	ab	51.41	de	467	ab
DPL 141 B2RF	936	ab	42.30	bcd	4.60	cd	1.10	bc	28.28	b	81.77	d	52.33	bc	476	a
ST 5327 B2RF	910	abc	43.10	abc	4.78	a-d	1.08	cde	28.47	b	83.18	ab	51.85	cd	459	abc
FM 1740 B2RF	877	bcd	43.30	ab	4.59	d	1.08	de	28.03	b	82.52	c	51.99	bcd	444	bcd
CG 3220 B2RF	876	bcd	42.40	bcd	4.79	a-d	1.10	cd	28.05	b	83.22	ab	52.21	bcd	444	bcd
PHY 485 WRF	875	bcd	42.60	bc	4.86	ab	1.07	e	28.69	b	83.37	a	50.85	e	433	cd
ST 4498 B2RF	844	cd	42.40	bcd	4.65	bcd	1.09	cde	30.05	a	83.62	a	52.78	ab	435	cd
FM 840 B2RF	823	d	41.40	d	4.59	d	1.13	a	29.95	a	83.02	abc	53.24	a	425	d
Mean	894		42.63		4.74		1.09		28.72		82.95		52.04		452	
P>F	0.0163		0.0135		0.0505		0.0006		0.0204		0.0009		0.0020		0.0180	
LSD (P=.10)	67		1.05		0.22		0.02		1.14		0.62		0.85		30.4	
STD DEV	63.24		0.98		0.204		0.021		1.069		0.576		0.792		28.3	
CV%	7.07		2.3		4.3		1.95		3.72		0.69		1.52		6.26	

Table 14. 2008 Meaney Monster Cotton Variety Trial
 Dr. Dan D. Fromme, Assistant Professor & Extension Agronomist
 Rudy Alaniz and Clinton Livingston, Technician
 Texas AgriLife Research and Extension Center
 Corpus Christi, Texas

Variety	Yield (lbs/acre)	Turnout %	Micronaire	Length (inches)	Strength (g/tex)	Uniformity %	Loan Value (¢ /lb) ¹	Lint Value (\$/acre)
Tamcot 22	573 a	40.43 fgh	4.08 nop	1.05 g-j	26.78 pq	81.28 m-p	50.88 h-o	291.82 ab
FM 955 LLB2	567 a	37.70 qr	4.53 b-f	1.09 abc	28.93 g-n	82.58 a-i	52.54 a-f	291.82 ab
FM 9058 F	530 ab	41.05 def	4.20 i-o	1.09 abc	29.03 f-m	80.65 op	52.88 abc	280.03 abc
DPL 515 BGRR	488 bc	40.75 efg	4.50 c-g	1.02 k-n	28.83 g-o	81.83 e-n	49.43 o-r	241.47 c-f
FM 9180 B2F	483 bcd	38.63 l-p	4.08 nop	1.08 b-f	30.58 b-f	83.43 a	52.61 a-e	254.11 bcd
DPL 455 BG/RR	480 b-e	42.23 c	4.40 e-i	1.02 k-n	28.30 j-p	80.63 op	49.53 m-r	238.89 c-g
ATX 7A18	479 b-e	40.13 ghi	4.30 g-m	1.05 g-j	29.70 c-k	81.55 j-o	51.56 c-k	247.13 cde
FM 9063 B2F	473 b-f	38.23 opq	4.25 h-n	1.11 a	32.13 ab	81.85 d-n	53.33 ab	252.04 b-e
PHY 375 WRF	470 b-f	41.48 cde	4.43 d-h	1.01 mn	28.35 i-p	81.83 e-n	49.19 pqr	231.57 d-g
PHY 370 WR	467 b-f	40.50 fgh	4.63 a-d	0.993 no	29.20 e-l	82.18 b-m	48.80 qr	227.71 d-h
DPL 161 B2RF	464 b-f	40.55 fgh	4.68 abc	1.06 eh	29.75 c-k	82.73 a-f	51.25 d-l	237.70 d-g
PHY 440 W	462 b-f	38.18 opq	4.25 h-n	1.06 e-h	30.95 a-d	82.90 abc	51.70 c-j	238.55 d-g
FM 1740 B2F	460 b-f	41.80 cd	4.35 f-k	1.03 h-m	27.95 l-q	82.40 b-k	50.06 k-q	230.08 d-g

ATX 6W102	455 b-f	40.30 fgh	4.63 a-d	1.04 h-m	28.18 k-q	82.33 b-l	50.34 j-p	229.20 d-g
FM 1735 LLB2	452 b-g	36.85 r	4.25 h-n	1.05 f-j	28.63 h-o	82.70 a-f	50.95 g-n	229.97 d-g
ATX 7AZ1	442 c-g	43.20 b	4.50 c-j	1.07 c-g	29.38 d-l	82.73 a-f	52.46 a-g	231.78 d-g
DPL 445 BGRR	441 c-g	41.13 def	4.53 b-f	1.03 h-m	30.70 a-e	82.53 a-j	50.43 i-p	222.46 d-j
FM 832	440 c-g	38.18 opq	4.13 l-p	1.10 abc	32.23 a	82.68 a-g	53.33 ab	234.65 d-g
DPL 164 B2RF	439 c-h	41.05 def	4.73 ab	1.04 h-m	28.00 l-q	81.60 i-o	50.24 j-q	220.62 d-j
DPL 141 B2RF	432 c-i	39.43 i-l	4.33 f-l	1.05 f-i	29.68 c-k	80.88 nop	51.13 e-l	221.38 d-j
ATX 7B35	432 c-i	38.20 opq	4.10 m-p	1.08 b-f	28.05 l-q	81.78 f-n	51.86 b-i	224.42 d-h
DCG 1374	430 c-i	38.85 l-o	4.38 f-j	1.07 b-g	29.30 e-l	81.68 h-n	52.14 a-h	224.80 d-h
DCG 1256	429 c-i	39.75 h-k	3.93 p	1.09 abc	28.78 g-o	81.30 m-p	52.69 a-d	226.28 d-h
DPL 174 RF	429 c-i	44.43 a	4.78 a	1.02 j-n	27.38 n-q	81.95 c-m	49.50 n-r	212.23 e-k
DPL 143 B2RF	424 c-j	39.18 j-n	4.18 j-o	1.09 abc	27.38 n-q	80.50 p	52.81 abc	223.68 d-i
ATX Apex B2RF	423 c-j	39.38 i-m	4.60 a-e	1.06 d-h	27.25 opq	82.20 b-m	51.03 f-m	216.03 d-j
STV 5327 B2RF	421 c-j	41.05 def	4.35 f-k	1.04 h-l	29.90 c-j	81.50 k-o	50.45 i-p	212.12 e-k
FM 840 B2F	417 c-j	37.85 pq	4.15 k-o	1.10 ab	30.38 c-g	83.03 ab	53.53 a	223.04 d-i
DPL 555 BGRR	412 c-j	43.73 ab	4.65 abc	0.975 o	27.53 m-q	79.00 q	48.14 r	198.02 g-m
FM 1880 B2F	407 d-k	38.70 l-p	4.00 op	1.09 a-d	29.35 d-l	81.38 l-p	52.94 abc	215.34 d-j

FM 835 LLB2	406 d-k	38.80 l-o	4.33 f-l	1.08 a-e	30.58 b-f	82.78 a-e	52.86 abc	214.73 d-j
DCG 1469	403 e-k	39.33 i-m	4.50 c-g	1.04 h-k	29.40 d-l	82.75 a-f	50.48 i-p	203.12 f-l
PHY 315 RF	397 f-l	41.45 cde	4.23 h-n	1.02 j-n	27.33 n-q	81.70 g-n	49.81 l-q	197.87 g-m
PHY 485 WRF	377 g-m	38.93 k-o	4.53 b-f	1.02 j-n	30.00 c-h	82.83 a-d	49.58 m-r	187.26 h-n
STV 4498 B2RF	362 h-n	39.98 g-j	4.33 f-l	1.03 h-m	30.33 c-g	82.63 a-h	50.36 i-p	182.53 i-o
ATX 7824	355 i-n	40.78 efg	4.70 abc	1.05 f-i	30.70 a-e	82.33 b-l	51.11 e-l	181.47 j-o
DPL 117 B2RF	347 j-n	38.23 opq	4.20 i-o	1.03 i-m	31.03 abc	82.05 b-m	49.80 l-q	172.84 k-o
STV 4427 B2RF	332 k-n	39.30 i-n	4.23 h-n	1.04 h-m	26.58 q	81.58 j-o	50.55 i-p	167.90 l-o
DPL 121 RF	320 lmn	40.80 efg	4.70 abc	1.02 i-m	28.25 k-p	82.15 b-m	49.34 pqr	157.63 mno
PHY 425 RF	305 mn	38.45 n-q	4.53 b-f	1.03 i-m	29.95 c-i	82.23 b-m	49.79 l-q	151.77 no
STV 4554 B2RF	297 n	39.95 g-j	4.75 a	1.01 lmn	29.90 c-j	82.40 b-k	49.33 pqr	146.59 no
DCG 1254	291 n	38.53 m-q	4.75 a	1.03 h-m	27.55 m-q	81.55 j-o	49.53 m-r	144.22 o
Mean	426.5	39.94	4.40	1.05	29.15	81.97	50.96	217.54
P>F	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
LSD (P=0.05)	77.9	0.862	0.212	0.0289	1.601	0.987	1.52	41.42
STD DEV	55.663	0.616	0.151	0.0206	1.144	0.705	1.0843	29.5862
CV%	13.05	1.54	3.44	1.97	3.92	0.86	2.13	13.59

Means in a column followed by the same letter are not significantly different by ANOVA.

¹Loan based on \$0.5170/lb +/- premiums/discounts according to the 2008 USDA Loan Chart.