

2012

Cotton Variety Testing Results



COLLEGE OF AGRICULTURE
AND LIFE SCIENCES
COOPERATIVE EXTENSION

Cooperative Extension
Agricultural Experiment Station
The University of Arizona, Tucson
U.S. Department of Agriculture



Introduction

Variety selection is one of the most important decisions a grower will make contributing to the success of his/her cotton crop. It is critical, that a grower have as much information as possible in order to make an informed decision regarding variety selection.

In an effort to help supply reliable variety performance information the University of Arizona conducts a statewide Upland cotton variety testing program. This program consists of a few different types of trials. The first is a small plot evaluation of commercially available varieties along with experimental varieties, and is conducted in 3 locations across Arizona including; Yuma, Maricopa, and Safford. This testing program is called the University of Arizona Upland Cotton Advanced Strains Testing Program.

Another type of University sponsored trial is a large plot, replicated strip trial conducted on grower cooperator farms in a wide variety of locations across Arizona. These are large plot strip trials that consist of plots extending the full length of the irrigation run at each location. This program is titled the University of Arizona Upland Cotton Variety Testing Program.

Evaluations of Pima (extra long staple - ELS) cotton variety performance were also conducted at one location across Arizona in 2012. Results from this evaluation are also presented in this booklet.

The table found below contains planting date, final irrigation date, initial defoliation date, harvest date, soil type, and irrigation technique for each of the trials conducted across Arizona in 2012. The remainder of the tables in this publication contains yield and fiber quality data for each of the locations. Statistical analysis for all parameters is also presented at the bottom of each table. If you have any questions regarding these trials or this publication please direct them to Dr. Randy Norton, Regional Extension Specialist and Director of the Safford Ag Center at rnorton@cals.arizona.edu.

Randy Norton, editor

The work performed over the course of the 2012 cotton season to produce the results contained in this booklet was funded in part by Cotton Incorporated through the Arizona Cotton Growers Association and also by participating seed companies.

Location	Trial Type	Planting	Final Irrigation	Initial Defoliation	Harvest	Soil Type	Irrigation System	Page
Yuma	Upland Cotton Advanced Strains Trial	3/20/12	8/2/12	8/18/12	9/12/12	Lagunita Loamy sand	Furrow/Beds	1
Maricopa	Upland Cotton Advanced Strains Trial	4/23/12	9/21/12	11/9/12	12/4/12	Casa Grande Sandy clay loam	Furrow/Beds	2
Safford	Upland Cotton Advanced Strains Trial	4/19/12	9/8/12	10/13/12	11/15/12	Grabe Clay loam	Furrow/Beds	3
Yuma	Upland Cotton Variety Trial	4/2/12	8/15/12	10/1/12	11/2/12	Holtville Clay	Furrow/Beds	4
Parker	Upland Cotton Variety Trial	4/27/12	10/10/12	10/31/12	12/28/12	Gilman Fine sandy loam	Furrow/Beds	4
Blythe	Upland Cotton Variety Trial	3/13/12	10/2/12	11/13/12	12/11/12	Silt loam	Furrow/Beds	5
Aztec	Upland Cotton Variety Trial	4/30/12	10/3/12	11/8/12	1/9/13	Ligurta Gravelly clay loam	Furrow/Beds	5
Goodyear	Upland Cotton Variety Trial	5/31/12	9/20/12	10/19/12	11/26/12	Gilman loam	Flood/Flat	6
Stanfield	Upland Cotton Variety Trial	4/5/12	10/6/13	10/17/12	11/29/12	Denure Sandy loam	Subsurface Drip/Flat	6
San Tan Valley	Upland Cotton Variety Trial	4/16/12	8/29/12	9/19/12	10/24/12	Contine loam	Furrow/Beds	7
Agulla	Upland Cotton Variety Trial	4/9/12	9/25/12	10/14/12	10/25/12	Guest clay	Furrow/Beds	7
Eloy	Upland Cotton Variety Trial	4/27/12	9/5/12	10/18/12	12/6/12	Casa Gande Fine sandy loam	Furrow/Beds	8
Thatcher	Upland Cotton Variety Trial	5/3/12	9/10/12	10/1/12	10/24/12	Grabe Clay loam	Subsurface Drip/Beds	8
Safford	ELS Cotton Variety Trial	4/23/12	9/14/11	10/18/12	11/10/11	Grabe Clay loam	Furrow/Beds	9



Yield and fiber quality data for The University of Arizona Upland Cotton Advanced Strain Testing Program, Yuma, AZ, 2012.

Seed Company	Variety	Lint Yield (lbs/acre)	Yield Means Separation*	Percent Lint	Color Grade	Staple (32nds)	Micronaire	Strength (g/tex)	Length (in.)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value * (\$/acre)
Monsanto/DPL	DP1359B2RF	2,037.4	a	37.7	21	37	4.1	31.6	1.16	2	80.5	5.2	\$1,164.24
Monsanto/DPL	12R249B2R2	2,031.3	a	37.7	21	37	4.3	31.1	1.15	2	80.2	4.1	\$1,140.19
Monsanto/DPL	12R242B2R2	2,029.3	ab	39.0	31	37	4.5	28.0	1.15	3	82.2	4.0	\$1,135.35
Dow/Phytogen	PX3122-40WRF	1,934.1	abc	38.4	31	38	4.3	30.2	1.18	4	80.6	2.3	\$1,050.45
Dow/Phytogen	PHY499WRF	1,923.2	abcd	38.6	31	37	4.6	30.4	1.15	3	82.1	4.2	\$1,079.88
DynaGro	CT10612	1,906.8	abcd	39.7	21	38	4.5	29.7	1.18	2	82.1	5.2	\$1,091.21
Monsanto/DPL	12R244R2	1,874.2	abcde	38.4	21	37	4.1	31.0	1.15	3	81.6	5.0	\$1,068.75
DynaGro	CT11212	1,846.9	abcde	38.5	21	37	4.4	29.0	1.16	3	82.0	4.8	\$1,048.74
Monsanto/DPL	DP1321B2RF	1,834.7	abcdef	37.9	31	37	4.4	30.2	1.17	4	82.5	3.3	\$1,014.99
DynaGro	CT11622	1,826.9	abcdef	38.7	21	37	4.3	27.4	1.16	2	81.9	5.1	\$1,042.88
Monsanto/DPL	12R215B2R2	1,825.6	abcdef	34.5	41	37	4.3	28.4	1.15	6	81.8	-2.0	\$912.60
Bayer/FiberMax	FM2989GLB2	1,771.8	abcdef	35.6	31	37	4.2	30.9	1.16	3	80.9	4.1	\$994.22
Bayer/FiberMax	FM1944GLB2	1,752.3	abcdef	37.6	31	37	4.4	29.8	1.17	2	80.7	4.4	\$988.22
Monsanto/DPL	DP1044B2RF	1,740.7	abcdefg	34.9	21	37	4.0	30.7	1.15	3	82.0	4.6	\$984.56
Monsanto/DPL	12R251B2R2	1,727.9	bcdefg	36.8	31	38	4.0	32.5	1.19	4	81.1	3.8	\$963.75
Monsanto/DPL	11R154B2R2	1,686.0	cdefg	39.6	21	37	4.4	28.6	1.15	2	81.6	5.1	\$962.69
Dow/Phytogen	PX433906WRF	1,660.9	cdefg	37.1	31	37	4.0	30.1	1.17	3	81.5	4.0	\$929.92
Monsanto/DPL	11R136B2R2	1,640.2	cdefg	36.2	21	38	4.3	30.4	1.20	3	81.6	4.6	\$928.44
Bayer/FiberMax	FM9170B2F	1,639.1	cdefg	35.9	31	38	4.0	30.6	1.17	3	81.3	4.5	\$926.56
Dow/Phytogen	PX4339-CBWRF	1,636.9	cdefg	35.8	31	37	4.1	30.6	1.17	3	82.0	4.6	\$925.94
Dow/Phytogen	PX5322-11WRF	1,629.1	defg	35.8	21	37	4.2	30.3	1.16	3	81.8	4.9	\$926.96
Bayer/Stoneville	ST4498B2RF	1,624.7	defg	36.4	31	37	4.4	30.1	1.15	4	81.2	1.8	\$876.42
DynaGro	CT12214	1,585.0	efg	36.9	31	37	4.1	30.1	1.16	3	81.0	4.2	\$891.28
Dow/Phytogen	PX5263-11WRF	1,584.0	efg	36.9	31	37	4.1	29.7	1.17	3	81.5	4.0	\$887.01
Monsanto/DPL	DP1311B2RF	1,538.2	fg	38.8	31	37	4.3	29.5	1.14	3	81.7	3.8	\$857.15
Bayer/FiberMax	FM2484B2F	1,442.7	g	35.9	21	38	3.9	30.9	1.18	2	81.1	5.3	\$826.74
Average		1,758.8		37.3	---	37	4.2	30.1	1.16	3	81.5	4.0	\$985.35
LSD§		303.4		2.1	---	1	0.6	2.6	0.05	2	NS	2.19	\$178.61
OSL†		<0.0001		<0.0001	---	0.0371	<0.0001	<0.0001	0.0062	<0.0001	0.1350	<0.0001	<0.0001
CV‡		6.4		2.1	---	1.6	4.7	3.2	1.2	16.1	1.2	19.1	6.7

* Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation



Yield and fiber quality data for The University of Arizona Upland Cotton Advanced Strain Testing Program, Maricopa, AZ, 2012.

Seed Company	Variety	Lint Yield (lbs/acre)	Yield Means Separation*	Percent Lint	Color Grade	Staple (32nds)	Micronaire	Strength (g/tex)	Length (in.)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value ** (\$/acre)
Monsanto/DPL	DP1359B2RF	2,520.6	a	38.6	31	38	4.4	34.4	1.18	2	82.2	4.7	\$1,429.60
Monsanto/DPL	DP1044B2RF	2,219.7	ab	35.9	31	37	4.6	31.2	1.15	3	81.9	4.3	\$1,249.17
Monsanto/DPL	12R244R2	2,216.9	abc	37.6	21	36	4.7	31.1	1.12	3	82.0	4.7	\$1,256.35
Dow/Phytogen	PX4339-CBWRF	2,168.0	abcd	35.7	31	37	4.0	32.9	1.17	3	82.1	3.9	\$1,210.83
Monsanto/DPL	12R249B2R2	2,165.5	abcd	39.1	31	37	4.5	32.8	1.16	3	82.7	4.5	\$1,223.35
AZ Cotton Growers	ACGA 229	2,022.1	bcde	34.3	31	37	4.7	31.2	1.14	3	81.6	4.2	\$1,136.96
Dow/Phytogen	PX3122-40WRF	1,985.3	bcdef	35.5	41	38	4.0	30.9	1.18	6	82.1	-2.2	\$987.54
Bayer/FiberMax	FM1944GLB2	1,949.9	bcdefg	36.0	31	36	4.4	30.2	1.13	2	79.8	4.0	\$1,092.79
DynaGro	CT11212	1,939.0	bcdefgh	36.6	31	37	4.3	30.7	1.15	2	82.7	4.8	\$1,101.87
Dow/Phytogen	PX433906WRF	1,936.3	bcdefgh	36.3	31	37	3.9	31.5	1.15	4	82.0	3.0	\$1,065.31
DynaGro	CT10612	1,931.5	bcdefgh	37.8	21	39	4.3	31.8	1.21	3	83.7	5.1	\$1,101.16
Dow/Phytogen	PHY499WRF	1,912.2	bcdefghi	38.1	31	37	4.5	32.4	1.14	4	82.8	2.9	\$1,050.03
Bayer/Stoneville	ST4946GLB2	1,905.4	bcdefghi	35.6	31	36	4.6	31.2	1.12	4	82.4	3.0	\$1,047.83
Monsanto/DPL	12R251B2R2	1,878.1	bcdefghij	36.7	31	37	4.3	33.5	1.17	3	82.5	3.6	\$1,043.68
Bayer/FiberMax	FM9170B2F	1,877.8	bcdefghij	34.9	31	38	4.2	32.4	1.18	3	82.1	4.4	\$1,059.02
Bayer/Stoneville	ST4498B2RF	1,867.0	bcdefghijk	35.3	31	36	4.6	32.4	1.13	4	82.5	3.3	\$1,032.55
Monsanto/DPL	11R136B2R2	1,862.7	cdefghijkl	34.9	31	38	4.4	31.1	1.21	3	83.2	4.4	\$1,051.07
Dow/Phytogen	PX5322-11WRF	1,853.5	defghijklm	35.3	31	38	4.4	30.2	1.17	3	82.1	4.3	\$1,043.18
Bayer/FiberMax	FM2989GLB2	1,788.0	efghijklmn	34.6	31	37	4.3	31.8	1.15	3	81.6	3.6	\$993.57
Bayer/Stoneville	ST6448GLB2	1,780.0	efghijklmn	34.9	31	38	4.1	31.0	1.20	3	81.8	4.1	\$998.42
Bayer/Stoneville	ST5445LLB2	1,773.0	efghijklmn	34.2	41	37	4.8	31.7	1.16	5	82.0	-0.1	\$920.76
Keithly-Williams	0727-806-W904	1,761.4	efghijklmn	32.7	31	38	4.4	31.5	1.18	3	82.6	4.1	\$987.29
DynaGro	CT11622	1,751.3	efghijklmn	37.1	31	38	4.4	30.8	1.18	3	82.4	4.5	\$988.90
AZ Cotton Growers	ACGA 279	1,740.8	efghijklmn	33.5	31	36	4.7	30.3	1.11	3	81.6	4.0	\$974.57
Bayer/FiberMax	FM2484B2F	1,730.1	efghijklmn	36.0	31	38	4.3	32.5	1.19	2	82.1	5.0	\$985.49
Monsanto/DPL	11R154B2R2	1,718.3	efghijklmn	37.6	31	37	4.5	30.8	1.16	3	82.9	4.6	\$972.34
AZ Cotton Growers	ACGA 288	1,715.8	efghijklmn	33.4	31	38	4.3	31.2	1.18	3	81.1	4.4	\$967.93
AZ Cotton Growers	ACGA 291	1,705.8	efghijklmn	31.2	31	38	4.9	35.2	1.19	3	83.0	3.5	\$946.03
Dow/Phytogen	PX5263-11WRF	1,693.4	efghijklmn	37.7	31	37	4.2	33.1	1.17	3	82.7	4.2	\$951.66
Monsanto/DPL	12R242B2R2	1,680.3	efghijklmn	37.5	41	37	4.6	30.6	1.15	4	82.8	2.3	\$914.03
Bayer	BX1347GLB2	1,637.9	fghijklmn	33.7	41	37	4.3	28.6	1.16	5	81.1	0.2	\$854.12
DynaGro	CT12214	1,627.8	ghijklmn	34.7	31	36	4.3	29.3	1.12	4	82.3	1.8	\$874.76
Keithly-Williams	0708-802-W903	1,603.2	ghijklmn	34.3	31	38	4.1	32.4	1.18	3	81.9	4.5	\$905.22
Bayer/Stoneville	ST4145LLB2	1,583.3	hijklmn	32.3	41	37	4.3	31.2	1.15	7	82.1	-12.5	\$595.49
Keithly-Williams	0713-807-W904	1,563.4	ijklmn	29.9	31	39	4.4	31.9	1.23	3	82.4	4.4	\$880.96
AZ Cotton Growers	ACGA 287	1,544.4	jklmn	34.0	31	37	4.6	33.6	1.17	3	82.3	4.4	\$870.82
Monsanto/DPL	12R215B2R2	1,516.9	klmn	31.9	41	36	4.5	30.0	1.13	6	82.8	-3.3	\$736.72
DynaGro	CT12222	1,507.0	lmn	32.9	31	36	3.9	31.4	1.14	3	81.7	4.5	\$851.18
Monsanto/DPL	DP1321B2RF	1,506.4	mn	34.5	41	36	4.7	31.6	1.13	5	82.8	0.6	\$792.21
Monsanto/DPL	DP1311B2RF	1,482.8	no	38.2	31	37	4.3	30.5	1.15	4	82.5	2.5	\$808.48
Keithly-Williams	0702-806-W903	1,437.0	no	30.2	31	37	4.6	33.9	1.15	3	83.3	3.4	\$795.96
Keithly-Williams	0717-803-W904	1,146.2	o	26.8	31	37	4.6	31.1	1.15	3	81.7	3.9	\$640.80
Average		1,790.6		34.9	---	37	4.4	31.6	1.16	3	82.2	3.0	\$985.48
LSD§		355.7		1.9	---	2	0.4	2.5	0.04	1	1.4	8.2	221.93
OSL†		<0.0001		<0.0001	---	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
CV‡		7.0		1.9	---	1.2	2.6	2.7	1.1	14.1	0.6	96.8	7.9

* Lint yield means followed by the same letter are not significantly different

** Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation



Yield and fiber quality data for The University of Arizona Upland Cotton Advanced Strain Testing Program, Safford, AZ, 2012.

Seed Company	Variety	Lint Yield		Percent Lint	Color Grade	Staple (32nds)	Micronaire	Strength (g/tex)	Length (in.)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value * (\$/acre)
		(lbs/acre)	Means Separation*										
Monsanto/DPL	12R249B2R2	1,993.3	a	40.6	21	36	4.6	30.1	1.12	2	79.9	4.4	\$1,124.63
Bayer/FiberMax	FM2484B2F	1,739.2	ab	38.3	31	37	4.3	29.6	1.16	2	80.7	4.6	\$985.03
Bayer/FiberMax	FM2989GLB2	1,703.1	abc	36.4	31	36	4.4	29.4	1.12	2	80.8	4.4	\$960.97
Monsanto/DPL	DP1359B2RF	1,687.9	abcd	39.0	31	36	4.2	30.4	1.12	2	79.5	4.1	\$947.10
Monsanto/DPL	12R251B2R2	1,667.1	abcde	38.1	31	36	4.4	30.8	1.13	3	79.3	3.3	\$921.15
Keithly-Williams	0708-802-W903	1,609.1	bcdef	37.2	31	37	4.8	30.5	1.14	2	81.7	4.5	\$908.77
AZ Cotton Grower	ACGA 279	1,563.2	bcdefg	36.3	31	35	4.8	28.7	1.10	2	80.3	3.0	\$858.53
Monsanto/DPL	12R244R2	1,552.7	bcdefgh	38.5	31	36	4.5	30.7	1.12	2	82.2	4.7	\$880.55
Bayer/FiberMax	FM1845LLB2	1,545.7	bcdefgh	36.6	31	35	4.5	30.8	1.11	3	82.5	3.3	\$852.81
Keithly-Williams	0727-806-W904	1,544.4	bcdefgh	36.1	31	37	4.4	29.8	1.14	2	81.3	4.5	\$871.72
Keithly-Williams	0713-807-W904	1,522.2	bcdefghi	34.0	31	37	4.9	30.9	1.18	2	80.5	4.0	\$851.13
Bayer/Stoneville	ST4946GLB2	1,520.5	bcdefghi	36.6	31	35	4.4	30.5	1.09	3	81.1	3.1	\$837.14
Monsanto/DPL	12R215B2R2	1,506.4	bcdefghi	33.9	31	36	4.5	28.2	1.11	4	82.0	1.5	\$804.99
Dow/Phytogen	PX5322-11WRF	1,504.5	bcdefghi	37.1	31	36	4.2	28.8	1.14	2	80.9	4.4	\$847.97
Monsanto/DPL	DP1044B2RF	1,479.7	bcdefghi	36.2	21	36	4.6	30.0	1.12	2	81.6	4.3	\$832.31
Bayer/Stoneville	ST6448GLB2	1,479.0	bcdefghi	35.2	31	37	4.4	29.5	1.16	2	80.6	4.4	\$833.57
Bayer	BX1347GLB2	1,476.7	bcdefghi	35.1	31	37	4.2	28.0	1.16	3	80.1	3.4	\$817.10
AZ Cotton Grower	ACGA 291	1,469.1	bcdefghi	33.6	31	35	5.0	30.9	1.10	1	80.3	2.4	\$799.08
Dow/Phytogen	PX5263-11WRF	1,461.8	bcdefghi	37.9	31	36	4.3	30.1	1.13	3	81.1	4.2	\$821.45
Dow/Phytogen	PHY499WRF	1,459.8	bcdefghi	37.9	31	35	4.4	30.1	1.08	2	81.2	2.8	\$798.32
AZ Cotton Grower	ACGA 287	1,435.8	bcdefghij	35.6	21	36	4.8	31.7	1.12	2	80.5	4.7	\$813.84
DynaGro	CT10612	1,425.7	bcdefghij	40.2	21	36	4.6	29.4	1.12	2	81.5	4.7	\$807.81
Monsanto/DPL	11R154B2R2	1,420.2	bcdefghij	41.5	21	36	4.4	28.8	1.11	2	81.5	4.3	\$799.61
Bayer/Stoneville	ST4145LLB2	1,411.3	bcdefghij	34.9	31	35	4.4	27.3	1.09	4	79.7	0.8	\$744.66
DynaGro	CT11622	1,410.0	bcdefghij	40.4	21	36	4.5	28.2	1.13	2	81.9	4.8	\$800.81
AZ Cotton Grower	ACGA 288	1,405.8	bcdefghij	35.4	31	36	4.3	29.1	1.13	2	79.7	4.0	\$787.24
Bayer/FiberMax	FM1944GLB2	1,405.8	bcdefghij	35.8	31	37	4.3	29.0	1.14	2	80.2	4.1	\$788.54
DynaGro	CT12214	1,362.8	cdefghij	37.0	31	35	4.1	29.0	1.10	3	80.3	3.4	\$754.27
Dow/Phytogen	PX3122-40WRF	1,349.3	cdefghij	36.5	31	37	4.1	29.0	1.14	3	81.5	3.7	\$751.40
Bayer/FiberMax	FM9170B2F	1,347.3	cdefghij	36.9	31	37	4.2	30.5	1.16	2	81.2	4.8	\$764.26
Dow/Phytogen	PX4339-CBWRF	1,333.8	defghijk	36.4	31	37	4.2	29.9	1.14	2	81.1	4.4	\$751.64
Monsanto/DPL	DP1321B2RF	1,330.6	defghijk	37.0	31	36	4.6	30.3	1.12	3	82.1	3.7	\$740.76
Keithly-Williams	0702-806-W903	1,327.9	defghijk	34.0	31	35	4.8	31.6	1.10	2	82.4	3.6	\$737.64
Dow/Phytogen	PX433906WRF	1,311.9	efghijk	36.6	31	36	4.0	30.0	1.14	3	81.2	4.2	\$736.94
Monsanto/DPL	DP1311B2RF	1,282.0	fghijk	40.5	31	35	4.6	28.1	1.09	3	80.8	3.2	\$707.80
Monsanto/DPL	11R136B2R2	1,261.6	fghijk	37.4	31	37	4.2	31.3	1.16	2	80.9	4.7	\$715.15
AZ Cotton Grower	ACGA 229	1,233.3	ghijk	36.1	31	36	4.5	29.7	1.13	2	81.1	4.3	\$694.11
Bayer/Stoneville	ST5445LLB2	1,208.7	ghijk	36.5	31	36	4.7	29.4	1.12	3	81.2	3.5	\$670.62
Monsanto/DPL	12R242B2R2	1,198.0	hijk	38.1	31	35	4.7	27.3	1.10	2	81.3	3.7	\$667.93
DynaGro	CT12222	1,165.2	ijk	35.5	21	35	4.4	29.9	1.09	1	80.5	4.0	\$652.51
DynaGro	CT11212	1,090.5	jk	37.9	31	35	4.8	27.5	1.10	2	81.9	3.8	\$608.61
Keithly-Williams	0717-803-W904	985.1	k	30.0	31	36	4.4	28.6	1.13	3	81.4	3.7	\$549.08
Average		1,433.0		36.8	---	36	4.5	29.6	1.12	2	81.0	3.8	\$799.99
LSD§		36.2		1.7	---	2	0.3	2.0	0.05	1	2.0	2.3	\$204.48
OSL†		<0.0001		<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
CV‡		8.9		1.6	---	1.6	2.5	2.4	1.5	20.2	0.9	21.4	8.9

* Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

2012

Cotton Variety Testing Results



Yield and fiber quality data for The University of Arizona Upland Cotton Variety Testing Program, Yuma, AZ, 2012.

Seed Company	Variety	Lint Yield (lbs/acre)	Yield Means Separation*	Percent Lint	Color Grade	Staple (32nds)	Micronaire	Strength (g/tex)	Length (in.)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value ** (\$/acre)
Bayer/Stoneville	ST5288B2F	2,481.1	a	39.6	31	36	4.5	27.0	1.11	3	80.7	3.5	\$1,375.06
DynaGro	DG2570B2RF	2,287.6	a	38.6	31	36	4.4	28.7	1.13	3	82.6	4.0	\$1,280.85
DynaGro	DG2450B2RF	2,268.1	a	36.9	31	38	4.1	28.8	1.19	3	82.5	4.1	\$1,272.64
DynaGro	DG2595B2RF	2,111.9	a	39.0	31	38	4.7	30.5	1.18	3	81.7	4.2	\$1,185.09
Dow/Phytogen	PHY499WRF	1,980.5	a	41.1	31	36	4.5	30.6	1.12	3	82.6	4.0	\$1,112.48
Monsanto/DPL	DP1044B2RF	1,948.4	a	36.4	31	37	4.4	28.7	1.13	3	81.8	3.9	\$1,088.59
Monsanto/DPL	DP1219B2RF	1,942.8	a	36.4	31	37	4.5	32.4	1.16	3	82.0	4.3	\$1,094.21
Bayer/Stoneville	ST4498B2F	1,874.6	a	38.2	31	38	4.1	31.3	1.16	3	83.0	4.6	\$1,059.95
Dow/Phytogen	PHY367WRF	1,865.5	a	39.1	31	37	4.2	30.2	1.14	3	82.7	4.3	\$1,051.04
Bayer/FiberMax	FM1944B2F	1,864.1	a	39.1	31	38	4.5	29.8	1.17	3	81.9	4.2	\$1,049.89
Dow/Phytogen	PHY375WRF	1,837.9	a	37.2	31	36	3.9	29.1	1.12	3	81.8	4.0	\$1,028.57
Monsanto/DPL	DP1212B2RF	1,817.2	a	36.7	31	38	4.4	30.9	1.19	3	82.3	4.3	\$1,022.43
Average		2,023.3		38.2	---	37	4.3	29.8	1.15	---	82.1	4.1	\$1,135.07
LSD§		NS		3.6	---	2	0.5	3.4	NS	---	NS	NS	NS
OSL†		0.1527		0.0057	---	0.0082	0.0001	0.0006	0.0622	---	0.1305	0.1632	0.1975
CV‡		11.8		3.0	---	2.1	3.5	3.6	1.9	---	1.1	9.6	12.1

* Lint yield means followed by the same letter are not significantly different

** Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount (each variety evaluated at base color 31 and leaf grade 3)

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

2012

Cotton Variety Testing Results



Yield and fiber quality data for The University of Arizona Upland Cotton Variety Testing Program, Parker, AZ, 2012.

Seed Company	Variety	Lint Yield (lbs/acre)	Percent Lint	Color Grade	Staple (32nds)	Micronaire	Strength (g/tex)	Length (in.)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value ** (\$/acre)
DynaGro	DG2570B2RF	2,883.3	42.6	21	37	4.1	30.2	1.16	3	81.9	4.0	\$1,615.08
Dow/Phytogen	PHY375WRF	2,699.2	40.8	31	37	3.8	29.9	1.17	4	81.5	3.0	\$1,484.73
DynaGro	DG2450B2RF	2,605.2	40.4	31	38	3.8	28.8	1.18	3	81.3	3.6	\$1,449.66
Bayer/Stoneville	ST5288B2F	2,553.6	40.3	41	38	3.9	29.7	1.17	5	80.5	-0.4	\$1,318.07
Dow/Phytogen	PHY499WRF	2,510.5	41.4	31	37	4.1	31.0	1.16	4	82.0	2.1	\$1,358.78
Monsanto/DPL	DP1044B2RF	2,497.7	37.6	31	37	3.6	29.7	1.17	4	81.3	1.9	\$1,346.27
Monsanto/DPL	DP1032B2RF	2,492.9	39.7	41	37	3.8	30.6	1.16	4	80.1	1.3	\$1,330.46
Monsanto/DPL	DP1359B2RF	2,402.1	42.1	31	38	3.6	32.7	1.19	3	81.4	3.1	\$1,322.77
DynaGro	DG2595B2RF	2,310.2	39.8	31	37	3.9	29.5	1.16	3	81.1	3.7	\$1,286.89
Bayer/Stoneville	ST4498B2F	2,195.4	37.5	31	37	3.8	30.7	1.16	4	81.6	3.1	\$1,208.54
Bayer/FiberMax	FM1944GLB2	2,154.6	38.4	31	38	3.9	31.4	1.20	4	81.7	3.6	\$1,198.55
Dow/Phytogen	PHY565WRF	1,653.1	38.9	41	37	3.5	31.0	1.18	5	81.7	0.0	\$859.32
Average		2,413.1	40.0	---	37	3.8	30.4	1.17	4	81.3	2.4	\$1,314.93
LSD§		---	5.0	---	NS	0.5	1.8	NS	2	NS	4.1	---
OSL†		---	0.0100	---	0.5897	0.0013	<0.0001	0.4180	0.0178	0.3850	0.0064	---
CV‡		---	4.0	---	2.0	4.0	2.0	1.9	16.9	1.1	56.8	---

** Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

2012

Cotton Variety Testing Results



Yield and fiber quality data for the Upland cotton variety test conducted in Blythe, CA, 2012.

Seed Company	Variety	Lint Yield (lbs/acre)	Percent Lint	Color Grade	Staple (32nds)	Micronaire	Strength (g/tex)	Length (in.)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value ** (\$/acre)
Monsanto/DPL	DP1359B2RF	3,201.4	38.1	31	34	4.5	29.4	1.07	3	80.3	1.6	\$1,715.94
Monsanto/DPL	DP1032B2RF	3,111.2	35.6	31	36	4.4	28.9	1.13	3	81.5	3.8	\$1,734.47
Dow/Phytogen	PHY375WRF	3,001.8	34.8	31	37	4.4	29.5	1.16	3	81.8	4.0	\$1,679.51
Dow/Phytogen	PHY499WRF	2,868.9	35.0	41	37	4.5	30.9	1.14	5	82.7	-0.3	\$1,483.22
Bayer/FiberMax	FM1944GLB2	2,712.3	34.9	31	38	4.2	30.7	1.19	3	82.2	4.4	\$1,529.72
Monsanto/DPL	DP1044B2RF	2,710.7	31.1	41	37	4.3	28.6	1.15	4	82.5	1.4	\$1,446.14
Bayer/Stoneville	ST5288B2F	2,652.7	35.0	41	35	4.6	28.2	1.10	5	80.0	-1.3	\$1,346.27
Dow/Phytogen	PHY565WRF	2,603.5	33.4	51	36	4.6	28.0	1.13	6	81.3	-4.8	\$1,230.16
Bayer/FiberMax	FM2484B2RF	2,519.8	32.3	31	38	4.0	31.2	1.20	3	81.9	4.4	\$1,421.17
Monsanto/DPL	DP10R152B2RF	2,331.8	34.4	31	37	4.1	28.9	1.14	3	82.1	4.1	\$1,308.16

2012

Cotton Variety Testing Results



Yield and fiber quality data for The University of Arizona Upland Cotton Variety Testing Program, Aztec, AZ, 2012.

Seed Company	Variety	Lint Yield (lbs/acre)	Yield Means Separation*	Percent Lint	Color Grade	Staple (32nds)	Micronaire	Strength (g/tex)	Length (in.)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value ** (\$/acre)
Americot	AM1511B2RF	1,787.6	a	42.0	41	36	4.1	31.0	1.13	4	81.9	1.1	\$952.23
Monsanto/DPL	DP1359B2RF	1,663.5	ab	41.3	21	37	3.6	31.8	1.15	3	80.2	4.4	\$938.28
Dow/Phytogen	PHY565WRF	1,650.3	ab	37.3	31	38	3.4	30.5	1.16	5	81.0	0.7	\$872.79
DynaGro	DG2570B2RF	1,601.6	abc	39.4	21	37	3.7	29.8	1.14	3	80.7	4.3	\$901.43
DynaGro	DG2450B2RF	1,487.1	abc	38.4	31	37	3.6	29.1	1.13	4	79.9	0.6	\$787.60
Monsanto/DPL	DP1044B2RF	1,467.9	abc	40.1	31	37	4.1	30.2	1.13	3	81.2	4.2	\$824.08
Dow/Phytogen	PHY499WRF	1,418.3	abc	41.2	31	37	3.9	31.0	1.14	5	81.4	0.7	\$745.14
Monsanto/DPL	DP1032B2RF	1,384.6	abc	40.2	31	37	3.6	30.9	1.17	3	81.2	3.4	\$768.04
Dow/Phytogen	PHY375WRF	1,368.6	abc	39.5	31	37	3.9	30.8	1.13	3	82.1	4.4	\$771.19
Bayer/Stoneville	ST5458B2F	1,351.8	abc	38.9	31	36	3.9	30.0	1.13	4	79.8	2.7	\$738.61
Bayer/Stoneville	ST4498B2F	1,256.1	abc	38.2	31	37	3.5	33.1	1.15	5	82.0	1.6	\$673.65
Bayer/FiberMax	FM1944GLB2	1,160.1	abc	37.7	31	38	3.8	32.2	1.17	3	81.0	4.5	\$654.96
DynaGro	DG2595B2RF	1,050.9	bc	37.8	31	36	3.9	31.0	1.12	5	81.2	2.3	\$571.90
Nexgen	NG4010B2F	940.3	c	35.2	31	38	3.4	32.7	1.19	5	82.3	-1.7	\$473.17
Average		1,399.2		39.1	---	37	3.7	31.0	1.14	4	81.1	2.4	\$762.36
LSD§		709.1		NS	---	NS	NS	2.9	NS	NS	2.5	NS	\$465.10
OSL†		0.0080		0.3113	---	0.1534	0.1005	0.0022	0.1021	0.2165	0.0188	0.2427	0.0236
CV‡		10.1		5.7	---	1.8	7.2	2.2	1.7	22.5	0.7	94.0	14.3

* Lint yield means followed by the same letter are not significantly different

** Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

2012
Cotton Variety Testing Results



Yield and fiber quality data for The University of Arizona Upland Cotton Variety Testing Program, Goodyear, AZ, 2012.

Seed Company	Variety	Lint Yield (lbs/acre)	Yield Means Separation*	Percent Lint	Color Grade	Staple (32nds)	Micronaire	Strength (g/tex)	Length (in.)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value ** (\$/acre)
Monsanto/DPL	DP1359B2RF	2,105.0	a	36.7	31	38	4.1	33.3	1.18	2	80.5	4.6	\$1,190.42
Monsanto/DPL	DP1219B2RF	2,068.0	a	35.2	31	37	4.2	34.0	1.17	2	81.1	4.8	\$1,175.06
Monsanto/DPL	DP1044B2RF	1,883.7	ab	34.4	31	36	4.4	30.0	1.13	2	81.5	4.1	\$1,056.70
DynaGro	DG2570B2RF	1,694.3	ab	35.3	31	37	4.7	30.3	1.15	3	82.7	4.5	\$956.77
Dow/Phytogen	PHY499WRF	1,649.4	b	36.6	41	37	4.7	32.7	1.15	3	82.5	3.3	\$912.23
DynaGro	DG2595B2RF	1,633.3	b	33.1	31	37	4.8	30.7	1.16	3	82.0	3.3	\$901.60
DynaGro	DG2450B2RF	1,607.5	b	34.6	31	37	4.3	29.3	1.16	2	81.9	4.5	\$907.87
Bayer/FiberMax	FM1944GLB2	1,547.7	b	34.5	31	38	4.6	31.5	1.20	2	82.2	4.8	\$878.29
Dow/Phytogen	PHY375WRF	1,544.6	b	35.0	31	36	4.7	29.9	1.11	2	81.4	3.0	\$847.32
Dow/Phytogen	PHY565WRF	1,533.9	b	32.0	41	38	4.1	33.3	1.18	3	81.9	3.5	\$851.28
Bayer/Stoneville	ST5458B2F	1,527.7	b	31.5	41	38	4.2	32.8	1.20	4	81.6	1.8	\$821.73
Bayer/Stoneville	ST4498B2F	1,522.8	b	33.0	41	37	4.3	32.0	1.17	4	82.9	3.1	\$838.14
Average		1,693.2		34.3	---	37	4.4	31.6	1.16	3	81.8	3.8	\$944.78
LSD§		418.6		4.0	---	NS	0.7	3.9	NS	2	NS	NS	\$202.42
OSL†		0.0008		0.0110	---	0.0947	0.0089	0.0037	0.0622	0.0004	0.3499	0.4497	<0.0001
CV‡		6.1		3.2	---	1.7	3.7	2.9	1.9	12.6	1.0	33.3	5.2

* Lint yield means followed by the same letter are not significantly different
 ** Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount
 § Least Significant Difference
 † Observed Significance Level
 ‡ Coefficient of Variation

2012
Cotton Variety Testing Results



Yield and fiber quality data for The University of Arizona Upland Cotton Variety Testing Program, Stanfield, AZ, 2012.

Seed Company	Variety	Lint Yield (lbs/acre)	Yield Means Separation*	Percent Lint	Color Grade	Staple (32nds)	Micronaire	Strength (g/tex)	Length (in.)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value ** (\$/acre)
Monsanto/DPL	DP1359B2RF	1,988.5	a	37.6	31	37	4.9	33.0	1.17	2	81.3	4.6	\$1,126.10
Monsanto/DPL	DP1044B2RF	1,905.2	ab	36.8	29	36	4.9	29.4	1.11	2	81.1	2.6	\$1,039.66
Monsanto/DPL	DP1219B2RF	1,904.7	ab	34.4	31	37	4.6	32.9	1.17	2	81.3	4.1	\$1,068.13
Bayer/Stoneville	ST5458B2F	1,854.7	ab	33.3	31	36	4.8	30.5	1.12	3	80.4	3.9	\$1,036.81
Dow/Phytogen	PHY499WRF	1,847.9	ab	34.0	31	36	4.7	31.0	1.11	3	81.4	4.1	\$1,036.69
DynaGro	DG2570B2RF	1,745.5	ab	36.8	31	36	4.8	29.7	1.11	2	82.1	4.3	\$981.96
Bayer/Stoneville	ST4498B2F	1,693.3	bc	35.4	31	36	4.6	31.1	1.13	3	82.0	3.9	\$946.00
Bayer/FiberMax	FM1944GLB2	1,652.3	bc	33.5	31	36	4.7	30.4	1.14	3	80.0	2.7	\$906.07
Dow/Phytogen	PHY565WRF	1,644.9	bc	35.2	31	37	4.6	31.6	1.16	2	82.4	4.7	\$931.86
DynaGro	DG2595B2RF	1,537.9	c	33.9	31	37	5.0	30.4	1.15	3	81.7	3.2	\$849.38
Dow/Phytogen	PHY375WRF	1,532.1	c	35.0	31	35	4.5	28.5	1.10	3	81.0	3.0	\$843.10
DynaGro	DG2450B2RF	1,513.2	c	35.3	29	37	4.6	29.1	1.14	3	81.0	4.2	\$850.27
Average		1,735.0		35.1	---	36	4.7	30.6	1.13	2	81.3	3.8	\$968.00
LSD§		295.3		2.1	---	NS	0.4	1.9	0.08	1	2.0	NS	\$162.10
OSL†		<0.0001		<0.0001	---	0.0898	0.0043	<0.0001	0.0125	0.0006	0.0089	0.3589	<0.0001
CV‡		6.3		2.2	---	2.7	3.2	2.5	2.6	22.0	1.0	35.8	6.4

* Lint yield means followed by the same letter are not significantly different
 ** Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount
 § Least Significant Difference
 † Observed Significance Level
 ‡ Coefficient of Variation



Yield and fiber quality data for The University of Arizona ELS Cotton Variety Testing Program, Safford, AZ, 2012.

Seed Company	Variety	Lint Yield (lbs/acre)	Yield Means Separation*	Percent Lint	Color Grade	Staple (32nds)	Micronaire	Strength (g/tex)	Length (in.)	Leaf Grade	Uniformity Index (%)	Premium (cents/lb)	Value ** (\$/acre)
Monsanto/DPL	DP357	2,085.9	a	39.7	2	48	4.3	41.9	1.38	2	87.1	81.4	\$1,698.07
Dow/Phytogen	PHY800	2,044.8	ab	39.2	2	49	4.2	43.0	1.43	2	88.5	80.6	\$1,649.06
Dow/Phytogen	PHY805RF	2,019.7	ab	39.4	2	50	4.3	44.5	1.42	3	87.4	78.4	\$1,584.21
Dow/Phytogen	PHY8262RF	1,942.6	ab	37.2	3	50	4.3	43.3	1.44	3	87.8	78.0	\$1,515.26
Monsanto/DPL	DP360	1,916.1	ab	37.5	2	50	4.3	44.0	1.44	3	87.8	78.0	\$1,494.64
Dow/Phytogen	PHY802RF	1,789.7	b	38.9	2	51	4.1	45.1	1.47	3	88.0	78.4	\$1,402.23
Average		1,966.5		38.7	---	49	4.2	43.6	1.43	3	87.7	79.1	\$1,557.24
LSD§		296.1		2.2	---	NS	NS	NS	0.09	NS	1.4	NS	\$246.80
OSL†		0.0288		0.0071	---	0.0741	0.7240	0.1278	0.0233	0.0735	0.0139	0.0960	0.0067
CV‡		6.0		2.5	---	2.6	3.6	3.7	2.1	27.2	0.6	2.5	6.3

* Lint yield means followed by the same letter are not significantly different

** Value calculated from CCC loan schedule base price of \$0.52/lb + premium/discount

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Team members:

Randy Norton, editor

Regional Extension Specialist

Shawna Loper

Assistant Area Agent, Agriculture, Pinal County

Linda Masters (retired)

La Paz County Extension Director

Ayman Mostafa

Assistant Area Agent, Agriculture, Maricopa County

Kurt Nolte

Yuma County Extension Director



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AZ 1593
P-165

February 2013

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