

Grower / Cooperator: A Tumbling T Ranches, Goodyear, AZ
Planting Date: 30 May 2010
Harvest Date: 22 November 2010

Final Irrigation: 30 September 2010
Soil Type: Gilman loam

Table. Lint yield and fiber quality results from the Variety Trial, Goodyear, AZ, 2010.

Seed Company	Variety	Lint Yield lbs/acre	Means Separation *	Lint Turnout Percent	HVI Color	Staple 32nds	Strength g/tex	Length Inches	Uniformity Percent	Micronaire	Leaf Grade	Premium cent/lb	Value \$/acre
Monsanto	DP1044B2RF	2088.8	a	32.4	31	38	31.4	1.18	83.1	4.2	3	4.5	\$1,180.62
Monsanto	DP1032B2RF	1903.8	a b	34.9	31	38	30.2	1.18	81.7	4.2	2	4.6	\$1,077.82
Bayer CropScience	FM9170B2F	1891.8	b	32.8	31	39	32.1	1.20	82.4	3.9	3	3.4	\$1,048.09
Phytogen	PHY375WRF	1824.4	b c	32.9	31	37	29.2	1.17	81.9	4.3	3	4.2	\$1,025.33
Monsanto	DP0912B2RF	1774.1	b c d	31.8	31	37	30.7	1.13	82.1	4.8	3	4.1	\$995.32
Phytogen	PHY367WRF	1748.0	b c d	31.8	31	38	31.9	1.17	82.5	4.3	3	4.6	\$989.84
Bayer CropScience	ST4288B2F	1669.2	c d	29.1	31	37	30.1	1.17	81.5	4.4	3	3.0	\$918.97
Monsanto	DP1034B2RF	1617.8	d	33.6	21	39	29.5	1.22	83.0	4.1	3	4.7	\$917.36
Monsanto	DP1028B2RF	1617.7	d	34.0	21	37	29.2	1.16	81.9	4.4	2	4.8	\$918.46
Monsanto	DP161B2RF	1615.8	d	29.0	31	39	32.0	1.21	82.3	4.1	3	4.5	\$912.89
Phytogen	PHY565WRF	1614.9	d	31.5	31	39	32.3	1.21	82.9	3.9	3	4.6	\$914.03
Bayer CropScience	ST4498B2F	1607.3	d	30.5	31	38	32.9	1.16	83.2	4.3	4	4.0	\$899.91
LSD§		192.1		1.7	-	1	1.8	0.04	NS	0.3	0.8	NS	\$119.65
OSL†		0.0025		0.0002	-	0.0167	0.0067	0.0104	0.2472	0.0015	0.0385	0.2883	0.0058
CV‡		5.0		2.4	-	1.5	2.7	1.5	0.8	2.9	13.4	15.5	5.5

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Grower / Cooperator: H-4 Farms, Buckeye, AZ
Planting Date: 14 April 2010
Harvest Date: 2 December 2010

Final Irrigation: 25 September 2010
Soil Type: Rillito Sandy Loam

Table. Lint yield and fiber quality results from the Upland cotton variety trial, Buckeye, AZ, 2010.

Seed Company	Variety	Lint Yield lbs/acre	Means Separation *	Lint Turnout Percent	HVI Color	Staple 32nds	Strength g/tex	Length Inches	Uniformity Percent	Micronaire	Leaf Grade	Premium cent/lb	Value \$/acre
Monsanto	DP1032B2RF	2113.6	a	36.6	31	37	31.2	1.17	82.5	4.5	2	4.7	\$1,198.40
Monsanto	DP1044B2RF	1983.1	b	33.1	31	37	30.3	1.16	82.4	4.8	2	4.6	\$1,122.43
Monsanto	DP0949B2RF	1940.3	b c	34.0	31	38	32.5	1.17	83.0	4.7	2	5.0	\$1,106.05
Phytogen	PHY367WRF	1874.3	c d	33.5	31	37	32.3	1.17	82.3	4.2	2	4.8	\$1,065.05
Monsanto	DP0935B2RF	1847.2	c d e	35.4	31	37	30.9	1.14	81.9	4.9	2	4.0	\$1,035.79
Bayer CropScience	ST4498B2F	1800.2	d e f	33.2	31	37	33.0	1.14	83.3	4.6	2	4.9	\$1,023.90
Bayer CropScience	ST5458B2F	1783.8	d e f	33.9	31	37	30.7	1.14	81.6	5.0	2	2.9	\$978.22
Phytogen	PHY375WRF	1765.1	e f	34.8	21	37	29.9	1.15	82.2	4.6	2	4.6	\$999.72
Phytogen	PHY565WRF	1737.9	f	31.5	31	38	33.0	1.17	82.6	4.4	2	4.1	\$974.25
Bayer CropScience	FM9170B2F	1483.6	g	32.6	31	38	32.5	1.20	82.6	4.4	2	4.2	\$829.78
Bayer CropScience	ST4288B2F	1471.3	g	28.1	31	37	30.3	1.15	81.2	4.4	3	3.8	\$821.12
LSD§		90.4		1.1		1	1.6	0.02	0.9	2.0	NS	1.0	\$57.43
OSL†		0.0001		0.0001	-	0.0108	0.0004	0.0005	0.0012	0.0001	0.0836	0.0072	0.0001
CV‡		3.5		2.2	-	1.5	3.4	1.4	0.7	2.8	19.3	16.4	3.8

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Grower / Cooperator: Tierra Verde Farms, Stanfield, AZ
Planting Date: 15 April 2010
Harvest Date: 15 December 2010

Final Irrigation: 28 October 2010
Soil Type: Dateland Fine Sandy Loam

Table. Lint yield and fiber quality results from the Upland cotton variety trial, Stanfield, AZ, 2010.

Seed Company	Variety	Lint Yield lbs/acre	Means Separation *			Lint Turnout Percent	HVI Color	Staple 32nds	Strength g/tex	Length Inches	Uniformity Percent	Micronaire	Leaf Grade	Premium cent/lb	Value \$/acre
Monsanto	DP1044B2RF	1934.6	a			36.9	21	36	30.1	1.12	82.3	4.9	3	3.6	\$1,076.20
Bayer CropScience	ST4498B2F	1807.3	a	b		36.2	21	35	30.9	1.10	81.9	4.9	2	2.3	\$982.60
Phytogen	PHY565WRF	1785.1	a	b		37.5	21	36	30.3	1.12	81.3	4.7	2	4.5	\$1,007.81
Phytogen	PHY367WRF	1774.7	a	b	c	36.2	21	37	30.6	1.14	81.5	4.7	3	3.5	\$986.58
Monsanto	DP0935B2RF	1670.7		b	c	d	38.2	21	36	31.6	1.12	81.8	2	4.4	\$942.29
Monsanto	DP1032B2RF	1621.7		b	c	d	38.0	21	37	30.5	1.14	81.6	2	4.0	\$909.85
Phytogen	PHY375WRF	1609.3		b	c	d	37.2	21	35	29.0	1.09	81.2	2	2.3	\$870.59
Bayer CropScience	ST4288B2F	1540.1			c	d	34.0	21	36	30.1	1.13	80.7	2	4.2	\$865.25
Bayer CropScience	FM9170B2F	1454.9				d	35.8	21	36	31.1	1.14	81.7	3	4.3	\$819.28
LSD§		243.3				NS	---	NS	NS	NS	NS	NS	NS	NS	\$121.66
OSL†		0.0178				0.0572	---	0.1707	0.6119	0.1526	0.4448	0.5491	0.4363	0.1809	0.0086
CV‡		8.3				3.9	---	2.1	1.4	1.8	0.9	3.5	19.9	31.2	7.5

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Grower / Cooperator: Pacheco Farms, Marana, AZ
Planting Date: 6 May 2010
Harvest Date: 1 November 2010

Final Irrigation: 17 August 2010
Soil Type: Vinton Anthony Sandy Loam

Table. Lint yield and fiber quality results from the Variety Trial, Pima County, AZ, 2010.

Seed Company	Variety	Lint Yield lbs/acre	Means Separation *	Lint Turnout Percent	HVI Color	Staple 32nds	Strength g/tex	Length Inches	Uniformity Percent	Micronaire	Leaf Grade	Premium cent/lb	Value \$/acre
Monsanto	DP1044B2RF	1487.7	a	36.7	21	38	29.6	1.18	82.4	4.4	2	4.9	\$845.98
Bayer CropScience	FM9170B2F	1432.8	a b	35.3	21	36	28.9	1.13	81.4	4.1	2	5.2	\$819.95
Phytogen	PHY565WRF	1406.0	a b	32.8	21	37	28.9	1.16	82.4	4.5	2	4.6	\$795.75
Bayer CropScience	ST4288B2F	1405.5	a b	36.9	21	38	30.4	1.19	81.3	4.0	2	5.2	\$803.04
Monsanto	DP1032B2RF	1399.7	a b	35.0	21	37	30.3	1.16	81.7	4.4	2	4.8	\$794.49
Phytogen	PHY375WRF	1353.2	a b	34.8	21	37	28.4	1.15	81.0	4.2	2	4.9	\$769.50
Phytogen	PHY367WRF	1306.0	a b	33.9	21	37	30.9	1.16	81.8	4.2	3	4.9	\$743.56
Bayer CropScience	ST4498B2F	1251.8	b	32.2	21	38	31.8	1.19	81.5	4.2	3	4.2	\$704.34
Monsanto	DP0935B2RF	1210.1	b	31.7	21	37	29.6	1.15	80.8	4.0	3	4.9	\$688.23
LSD§		NS		NS	---	NS	NS	NS	NS	NS	NS	NS	NS
OSL†		0.2377		0.5453	---	0.3343	0.5406	0.3695	0.5355	0.8805	0.7570	0.5613	0.2304
CV‡		7.2		8.0	---	2.2	5.4	2.2	1.0	8.0	39.5	9.5	7.3

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Grower / Cooperator: Ed Curry Farms, Pearce, AZ
Planting Date: 27 April 2010
Harvest Date: 17 November 2010

Final Irrigation: 10 September 2010
Soil Type: Cogswell Clay Loam

Table. Lint yield and fiber quality results from the Variety Trial, Cochise County, AZ, 2010.

Seed Company	Variety	Lint Yield lbs/acre	Means Separation *	Lint Percent	HVI Color	Staple 32nds	Strength g/tex	Length Inches	Uniformity Percent	Micronaire	Leaf Grade	Premium cent/lb	Value \$/acre
Phytogen	PHY375WRF	1054.5	a	35.0	21	36	27.2	1.13	79.8	3.0	3	-0.6	\$542.05
Phytogen	PHY745WRF	1019.0	a b	33.1	31	38	31.6	1.19	81.9	2.9	4	-1.7	\$514.04
Bayer CropScience	ST4288B2F	999.2	a b	31.1	21	37	29.7	1.16	80.4	3.1	3	1.0	\$529.78
Phytogen	PHY367WRF	987.0	a b	33.5	21	37	29.6	1.17	80.4	2.7	3	-2.0	\$493.99
Monsanto	DP0935B2RF	917.9	a b	35.4	21	36	28.9	1.13	79.9	3.0	2	1.0	\$486.41
Bayer CropScience	FM9170B2F	910.2	a b	34.0	21	38	28.4	1.18	80.4	2.7	3	-3.3	\$442.84
Bayer CropScience	ST4498B2F	906.9	a b	32.9	31	37	30.2	1.16	80.7	2.9	4	-3.2	\$442.87
Monsanto	DP1044B2RF	823.6	b	30.7	21	37	29.4	1.15	80.6	3.1	3	1.1	\$437.84
LSD§		NS		1.3	-	NS	1.5	NS	NS	0.2	0.7	1.8	NS
OSL†		0.3058		0.0001	-	0.4437	0.0009	0.0789	0.1637	0.0017	0.0022	0.0002	0.3231
CV‡		11.9		2.2	-	2.4	2.8	2.1	1.0	3.8	13.0	111.2	13.0

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Grower / Cooperator: Layton Farms and Ranches, Thatcher, AZ

Planting Date: 20 April 2010

Harvest Date: 28 October 2010

Final Irrigation: 10 September 2010

Soil Type: Grabe Clay Loam

Table. Lint yield and fiber quality results from the Variety Trial, Graham County, AZ, 2010.

Seed Company	Variety	Lint Yield lbs/acre	Means Separation *			Lint Turnout Percent	HVI Color 32nds	Staple Strength g/tex	Length Inches	Uniformity Percent	Micronaire	Leaf Grade	Premium cent/lb	Value \$/acre	
			a	b	c										
Phytogen	PHY367WRF	1846.2	a			34.6	21	37	29.9	1.15	81.3	3.5	2	4.0	\$1,034.61
Monsanto	DP1133B2RF	1837.4	a	b		36.8	21	37	30.0	1.17	82.1	3.8	2	4.6	\$1,041.71
Monsanto	DP0935B2RF	1759.7	a	b	c	35.8	21	36	28.6	1.12	80.3	3.7	2	4.7	\$997.34
Bayer CropScience	ST4498B2F	1751.7	a	b	c	33.5	21	36	29.7	1.13	80.9	3.7	2	5.1	\$999.45
Bayer CropScience	FM9170B2F	1708.7	a	b	c	33.5	21	38	30.0	1.17	80.3	3.5	2	3.2	\$942.68
Phytogen	PHY565WRF	1704.5	a	b	c	34.3	21	37	30.0	1.16	80.7	3.6	2	5.2	\$974.41
Monsanto	DP1044B2RF	1704.1	a	b	c	33.3	21	37	28.3	1.15	81.2	3.7	2	4.9	\$969.63
Monsanto	DP164B2RF	1666.1	a	b	c	33.6	21	38	29.3	1.19	80.8	3.8	2	5.1	\$951.62
Phytogen	PHY755WRF	1621.2		b	c	32.4	21	39	31.3	1.23	82.1	3.7	2	5.4	\$930.72
Bayer CropScience	ST4288B2F	1572.3			c	31.2	21	37	29.3	1.15	80.7	3.9	2	5.1	\$897.68
LSD§		NS				2.6	-	1	1.2	0.03	NS	NS	-	NS	NS
OSL†		0.3086				0.0002	-	0.0007	0.0030	0.0003	0.0728	0.6179	-	0.3032	0.4516
CV‡		8.3				4.5	-	1.9	2.3	1.7	1.0	7.5	-	20.4	8.9

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Grower / Cooperator: David Stambaugh Farms. Eloy, AZ
Planting Date: 18 April 2010
Harvest Date: 13 October 2010

Final Irrigation: 25 August 2010
Soil Type: Marana Silty Clay Loam

Table. Lint yield and fiber quality results from the Bayer CropScience Cotton Agronomic Performance (CAP) Trial, Eloy, AZ, 2010.

Seed Company	Variety	Lint Yield lbs/acre	Means Separation *	Lint Turnout Percent	HVI Color	Staple 32nds	Strength g/tex	Length Inches	Uniformity Percent	Micronaire	Leaf Grade	Premium cent/lb	Value \$/acre
Bayer Crop Science	BCSX1030B2F	2401.4	a	35.0	21	37	27.6	1.17	82.4	4.0	2	5.1	\$1,370.53
Bayer Crop Science	ST4288B2F	2223.0	a b	31.6	21	38	29.5	1.18	81.4	4.2	2	5.0	\$1,266.55
Bayer Crop Science	FM1740B2F	2205.2	a b	35.2	21	37	29.2	1.16	82.1	4.4	2	4.9	\$1,255.63
Bayer Crop Science	ST4498B2F	2203.0	a b	34.0	21	37	32.1	1.17	82.9	4.1	2	5.7	\$1,270.02
Bayer Crop Science	BCSX1010B2F	2151.6	a b c	33.7	21	38	29.4	1.19	81.2	4.1	2	5.1	\$1,228.81
Bayer Crop Science	BCSX1040B2F	2002.4	b c	30.0	21	40	29.2	1.24	82.5	4.2	2	5.1	\$1,144.04
Monsanto	DP1034B2RF	1949.2	b c	35.3	21	38	28.1	1.20	81.8	4.1	2	5.0	\$1,111.32
Bayer Crop Science	FM9170B2F	1874.5	c d	33.7	21	38	29.4	1.19	81.6	3.8	2	5.1	\$1,069.57
Bayer Crop Science	FM9160B2F	1649.1	d e	32.2	21	37	28.0	1.17	81.0	3.9	2	5.0	\$939.88
Bayer Crop Science	BCSX1160B2F	1477.1	e	31.2	21	37	28.2	1.15	79.8	3.4	2	2.9	\$813.94
LSD§		296.3		1.2	---	2	1.6	0.05	1.2	0.4	---	0.8	\$174.31
OSL†		0.0001		0.0001	---	0.0259	0.0007	0.0701	0.0019	0.0014	---	0.0002	0.0001
CV‡		8.6		2.0	---	2.4	3.1	2.5	0.8	5.3	---	9.6	8.9

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Grower / Cooperator: Dennis Bagnall Farms, Coolidge, AZ
Planting Date: 14 April 2010
Harvest Date: 12 October 2010

Final Irrigation: 20 August 2010
Soil Type: Denure Sandy Loam, Mohall Loam

Table. Lint yield and fiber quality results from the Bayer CropScience Cotton Agronomic Performance (CAP) Trial, Coolidge, AZ, 2010.

Seed Company	Variety	Lint Yield lbs/acre	Means Separation *	Lint Turnout Percent	HVI Color	Staple 32nds	Strength g/tex	Length Inches	Uniformity Percent	Micronaire	Leaf Grade	Premium cent/lb	Value \$/acre
Bayer CropScience	BCSX1030B2F	1610.2	a	36.1	21	37	27.6	1.14	81.6	4.4	2	4.9	\$915.41
Bayer CropScience	ST4498B2F	1604.6	a	34.9	21	37	30.3	1.15	83.3	4.6	2	5.5	\$922.10
Bayer CropScience	FM9170B2F	1552.9	a b	35.7	21	38	29.3	1.19	82.2	4.3	2	5.1	\$885.87
Bayer CropScience	ST5458B2F	1540.1	a b	34.8	21	37	30.1	1.15	81.2	4.5	2	5.0	\$877.74
Bayer CropScience	FM1740B2F	1525.0	a b	34.4	21	38	29.3	1.21	82.5	4.4	2	5.0	\$869.52
Bayer CropScience	BCSX1010B2F	1519.6	a b	32.8	21	38	29.0	1.19	81.5	4.3	2	5.0	\$866.05
Monsanto	DP1050B2RF	1466.3	a b c	38.1	21	38	28.4	1.18	82.5	4.5	2	5.1	\$836.54
Bayer CropScience	BCSX1040B2F	1419.0	a b c	32.9	21	39	29.6	1.20	83.4	4.5	2	5.2	\$812.02
Bayer CropScience	ST4288B2F	1369.0	b c	32.3	21	37	28.3	1.15	81.0	4.6	2	4.9	\$778.26
Bayer CropScience	FM9160B2F	1290.3	c	34.2	21	38	29.2	1.19	82.4	4.0	2	5.2	\$737.68
LSD§		NS		2.6	-	NS	1.2	0.04	1.3	0.2	0.0	0.2	NS
OSL†		0.0883		0.0055	-	0.0748	0.0041	0.0127	0.0113	0.0001	0.0000	0.0008	0.0823
CV‡		8.3		4.3	-	2.0	2.4	1.9	0.9	2.5	0.0	2.6	8.3

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Grower / Cooperator: Steve Daley Farms, Thatcher, AZ
Planting Date: 28 April 2010
Harvest Date: 11 November 2010

Final Irrigation: 10 September 2010
Soil Type: Pima Clay Loam

Table. Lint yield and fiber quality results from the Bayer CropScience Cotton Agronomic Performance (CAP) Trial, Thatcher, AZ, 2010.

Seed Company	Variety	Lint Yield lbs/acre	Means Separation *	Lint Turnout Percent	HVI Color	Staple 32nds	Strength g/tex	Length Inches	Uniformity Percent	Micronaire	Leaf Grade	Premium cent/lb	Value \$/acre
Bayer CropScience	BCSX1030B2F	1630.6	a	35.9	21	35	25.6	1.09	80.5	4.5	2	2.7	\$651.98
Bayer CropScience	FM9170B2F	1624.8	a	34.5	21	38	30.0	1.19	81.7	3.9	2	5.2	\$676.37
Monsanto	DP0935B2RF	1593.1	a	35.3	21	37	28.6	1.15	81.7	4.2	2	4.9	\$682.30
Bayer CropScience	FM9160B2F	1588.9	a	34.5	21	37	29.1	1.17	80.9	3.9	2	5.1	\$660.17
Bayer CropScience	ST4498B2F	1582.2	a	34.7	21	37	30.1	1.15	82.3	4.2	2	5.3	\$659.45
Bayer CropScience	FM1740B2F	1576.9	a	35.1	21	37	28.5	1.14	81.0	4.2	2	5.0	\$653.82
Bayer CropScience	ST5458B2F	1531.4	a	34.5	21	37	28.9	1.14	80.7	4.5	2	4.8	\$633.25
Bayer CropScience	BCSX1010B2F	1525.9	a	32.3	21	37	28.3	1.16	81.4	4.1	2	5.0	\$633.02
Bayer CropScience	ST4288B2F	1400.5	b	32.8	21	37	27.7	1.14	80.7	4.5	2	4.9	\$579.59
Bayer CropScience	BCSX1040B2F	1232.0	c	30.2	21	40	30.1	1.23	82.5	4.5	2	5.2	\$512.58
LSD§		120.9		1.4	-	1	1.4	0.04	2.9	0.4	0.0	1.5	\$55.78
OSL†		0.0001		0.0001	-	0.0001	0.0001	0.0001	0.0068	0.0029	0.0000	0.0528	0.0002
CV‡		4.6		2.3	-	1.8	2.8	1.7	0.7	4.8	0.0	17.2	5.0

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Grower / Cooperator: Tierra Verde Farms, Coolidge, AZ

Planting Date: 26 April 2010

Harvest Date: 24 November 2010

Final Irrigation: 26 September 2010

Soil Type: Mohall Sandy Loam

Table. Lint yield and fiber quality results from the Monsanto FACT Trial, Coolidge, AZ, 2010.

Seed Company	Variety	Lint Yield lbs/acre	Lint Turnout Percent	HVI Color	Staple 32nds	Strength g/tex	Length Inches	Uniformity Percent	Micronaire	Leaf Grade	Premium cent/lb	Value \$/acre
Monsanto	DP0949B2RF	1732.1	35.7	31	37	31.1	1.16	82.6	4.6	3	4.5	\$977.79
Monsanto	DP1044B2RF	1660.1	33.9	31	37	30.2	1.16	82.7	4.3	3	4.3	\$933.82
Monsanto	10R020B2R2	1570.8	34.1	31	36	28.6	1.12	82.3	4.6	2	4.1	\$881.23
Monsanto	DP1133B2RF	1568.8	36.2	41	38	32.2	1.18	84.5	4.5	3	2.6	\$856.55
Monsanto	DP0912B2RF	1560.7	33.2	41	37	30.4	1.15	80.4	4.6	3	2.0	\$842.76
Phytogen	PHY375WRF	1541.8	34.6	31	36	28.8	1.13	81.5	4.5	2	4.1	\$864.94
Bayer CropScience	ST4498B2F	1510.6	34.4	31	37	29.9	1.17	83.1	4.0	4	3.3	\$835.36
Monsanto	10R040B2R2	1477.5	35.2	31	38	30.0	1.18	81.7	4.3	2	4.5	\$834.05
Bayer CropScience	ST4288B2F	1474.5	30.2	31	38	29.7	1.18	80.9	4.1	3	4.2	\$828.65
Monsanto	DP1032B2RF	1453.4	35.3	31	37	30.3	1.17	82.3	4.2	2	4.6	\$822.63
Monsanto	10R052B2R2	1452.8	36.7	31	37	28.9	1.17	82.6	4.6	2	4.4	\$819.36
Monsanto	10R015B2R2	1446.2	35.7	31	36	27.9	1.12	82.4	4.5	2	4.1	\$811.32
Bayer CropScience	ST5458B2F	1434.2	32.4	31	38	31.8	1.18	80.8	4.2	4	3.3	\$793.09
Monsanto	10R047B2R2	1416.6	35.4	21	38	28.7	1.19	83.5	4.4	2	5.2	\$809.60
Monsanto	DP1137B2RF	1409.0	36.5	31	36	28.9	1.11	79.0	4.5	2	3.4	\$779.90
Monsanto	10R051B2R2	1372.5	37.0	31	38	28.2	1.20	82.8	4.1	2	4.6	\$776.12
Monsanto	10R013B2R2	1339.4	33.1	41	39	31.1	1.22	82.7	4.0	3	2.6	\$730.62
Monsanto	10R030B2R2	1230.6	33.5	31	38	28.9	1.20	81.6	3.9	2	4.4	\$693.42
Monsanto	10R050B2R2	1230.2	27.1	31	38	33.3	1.20	81.7	3.8	2	4.8	\$698.73
Monsanto	10R026B2R2	1123.2	33.6	31	38	30.7	1.19	82.9	4.1	2	5.0	\$640.23

2010 Upland Cotton Advanced Strain Evaluation, Yuma, AZ

Grower / Cooperator: Harrison Farms, Yuma, AZ

Planting Date: 17 March 2010

Harvest Date: 3 September 2010

Final Irrigation: 27 August 2010

Soil Type: Lagunita Loamy Sand, Ripley Silt Loam

2010 Upland Cotton Advanced Strain Evaluation, Maricopa, AZ

Grower / Cooperator: UA Maricopa Ag Center, Maricopa, AZ

Planting Date: 13 April 2010

Harvest Date: 4 November 2010

Final Irrigation: 18 September 2010

Soil Type: Casa Grande Clay Loam

2010 Upland Cotton Advanced Strain Evaluation, Safford, AZ

Grower / Cooperator: UA Safford Ag Center, Safford, AZ

Planting Date: 29 April 2010

Harvest Date: 27 October 2010

Final Irrigation: 5 September 2010

Soil Type: Grabe Clay Loam, Anthony Clay Loam

Table. Lint yield and fiber quality results from the 2010 Advanced Strain Evaluation Trial, Yuma, AZ

Seed Company	Variety	Lint Yield lbs/acre	Means Separation *	Lint Turnout	HVI Color	Staple 32nds	Strength g/tex	Length Inches	Uniformity Percent	Micronaire	Leaf Grade	Premium cent/lb	Value \$/acre
Monsanto	10R013B2R2	2103.8	a	36.9	21	36	29.9	1.13	81.4	4.6	2	4.9	\$961.27
Phytogen	PHY499WRF	2005.1	a b	38.1	21	35	31.1	1.11	82.3	4.5	2	4.6	\$1,064.36
Monsanto	10R050B2R2	1999.4	a b c	37.7	21	35	29.9	1.10	80.3	4.4	2	3.0	\$1,032.68
ACGA	ACGA039	1997.9	a b c	37.5	21	37	30.9	1.15	81.3	4.4	2	5.2	\$1,143.08
Phytogen	PHY367WRF	1920.2	a b c d	36.4	21	35	27.2	1.08	80.1	4.5	2	2.7	\$1,101.74
Monsanto	DP1032B2RF	1917.9	a b c d	39.2	21	35	27.6	1.10	80.2	4.4	2	3.6	\$957.56
Bayer CropScience	ST5458B2F	1908.8	a b c d	35.9	21	36	29.3	1.11	81.1	4.7	2	4.4	\$1,077.68
Monsanto	10R015B2R2	1850.8	a b c d e	39.4	21	35	27.8	1.10	82.5	4.8	2	3.7	\$962.71
Phytogen	PHY375WRF	1842.1	a b c d e	37.3	21	36	28.1	1.10	80.7	4.2	2	3.6	\$973.47
ACGA	ACGA082	1829.9	a b c d e f	34.4	21	39	32.7	1.20	82.8	4.5	2	5.3	\$1,050.87
ACGA	ACGA225	1821.4	b c d e f	34.8	21	36	29.4	1.12	81.7	4.8	2	4.8	\$949.98
ACGA	ACGA246	1813.6	b c d e f	33.2	21	36	31.0	1.11	81.5	4.4	2	4.6	\$985.10
Monsanto	10R020B2R2	1798.6	b c d e f g	37.0	21	35	25.6	1.07	81.5	4.5	2	2.0	\$942.45
ACGA	ACGA250	1774.6	b c d e f g	35.0	21	36	32.6	1.13	81.0	4.4	2	5.1	\$1,034.64
Bayer CropScience	FM1740B2F	1766.0	b c d e f g	37.8	21	34	27.1	1.06	80.3	4.8	2	1.1	\$874.17
Phytogen	PHY565WRF	1740.1	b c d e f g	35.3	21	36	31.2	1.13	81.2	4.2	2	5.3	\$1,134.63
Monsanto	DP1133B2RF	1736.9	b c d e f g	41.2	21	35	29.1	1.10	82.3	4.9	2	3.4	\$935.72
Bayer CropScience	ST5288B2F	1736.5	b c d e f g	36.0	21	35	27.0	1.09	80.9	4.6	2	2.9	\$933.01
Monsanto	DP0949B2RF	1726.6	b c d e f g	37.6	21	35	28.9	1.09	81.6	4.6	2	4.3	\$971.80
Monsanto	DP1137B2RF	1723.6	c d e f g	40.5	21	34	27.8	1.07	82.3	4.7	2	2.7	\$853.73
ACGA	ACGA189	1715.2	d e f g	34.2	21	37	31.5	1.17	82.2	4.3	2	5.4	\$996.47
Bayer CropScience	FM9170B2F	1708.0	d e f g	36.4	21	37	29.4	1.14	80.6	3.8	2	4.2	\$888.25
ACGA	ACGA229	1698.1	d e f g	36.0	21	37	31.2	1.15	81.8	4.5	2	5.2	\$1,049.19
Monsanto	10R026B2R2	1698.1	d e f g	39.2	21	36	28.1	1.10	81.4	4.4	2	4.4	\$1,196.67
ACGA	ACGA264	1673.6	d e f g	32.6	21	39	32.8	1.21	82.1	4.8	2	4.5	\$971.58
Bayer CropScience	ST4288B2F	1653.6	d e f g	33.0	21	36	28.2	1.11	81.1	4.4	2	4.4	\$692.50
Phytogen	PHY519WRF	1628.3	e f g	35.6	21	34	27.6	1.08	80.3	4.3	2	3.6	\$1,025.67
Bayer CropScience	BCSX1030B2F	1615.4	e f g	36.9	21	34	26.0	1.05	80.2	3.9	2	0.8	\$944.18
ACGA	ACGA265	1581.5	e f g	33.2	21	37	31.4	1.15	82.2	4.6	2	5.3	\$1,024.16
Bayer CropScience	BCSX1040B2F	1554.9	f g	31.4	21	38	29.5	1.20	82.3	4.5	2	5.1	\$906.59
Bayer CropScience	FM9160B2F	1522.5	g h	34.3	21	36	26.8	1.12	81.3	3.7	2	4.0	\$850.26
ACGA	ACGA276	1520.6	g h	34.2	21	38	32.8	1.17	83.1	4.7	2	5.5	\$1,013.47
Phytogen	PHY569WRF	1274.1	h	34.6	21	35	29.9	1.07	81.0	4.3	2	2.4	\$905.29
LSD§		279.6		0.0	-	1	1.6	0.04	1.2	0.3	2.0	2.3	\$165.60
OSL†		0.0001		0.0001	-	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0012	0.0001
CV‡		11.2		4.8	-	2.5	3.8	2.4	1.0	5.3	5.1	40.2	11.8

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Table. Lint yield and fiber quality results from the 2010 Advanced Strain Evaluation Trial, Maricopa, AZ

Seed Company	Variety	Lint Yield lbs/acre	Means Separation *	Lint Turnout	HVI Color	Staple 32nds	Strength g/tex	Length Inches	Uniformity Percent	Micronaire	Leaf Grade	Premium cent/lb	Value \$/acre
Monsanto	10R050B2R2	2006.7	a	34.8	31	38	34.1	1.18	82.4	4.5	2	4.0	\$1,122.72
Phytogen	PHY499WRF	1867.9	a b	35.6	31	36	31.5	1.13	82.7	4.4	3	4.4	\$1,053.09
Monsanto	DP1044B2RF	1813.5	b c	33.4	31	36	30.7	1.14	81.9	4.8	2	3.6	\$1,007.14
Phytogen	PHY375WRF	1742.5	b c d	34.3	41	37	31.3	1.16	82.8	4.5	2	1.9	\$938.47
Monsanto	DP1133B2RF	1644.6	c d e	35.8	31	38	33.0	1.20	83.5	4.4	3	4.0	\$920.86
Phytogen	PHY367WRF	1643.6	c d e	32.8	31	37	31.7	1.15	82.4	4.5	3	4.7	\$932.17
Bayer CropScience	BCSX1030B2F	1600.0	d e f	33.7	31	36	29.6	1.13	81.6	4.3	2	2.7	\$875.24
Monsanto	10R047B2R2	1583.2	d e f g	35.1	31	38	29.6	1.17	82.5	4.7	2	4.6	\$895.51
Monsanto	10R020B2R2	1554.6	e f g h	33.2	41	36	29.4	1.12	82.3	4.3	2	3.3	\$859.20
Phytogen	PHY519WRF	1522.4	e f g h i	33.6	31	37	31.5	1.14	82.5	4.6	3	4.4	\$857.87
ACGA	0143-2036-303-601	1517.7	e f g h i j	32.9	31	38	32.3	1.18	82.8	4.6	2	3.0	\$835.19
Monsanto	10R026B2R2	1508.1	e f g h i j k	33.9	41	37	30.1	1.16	82.0	4.5	2	4.9	\$858.81
Bayer CropScience	ST5458B2RF	1491.8	e f g h i j k	32.9	41	37	30.9	1.14	81.6	4.7	3	2.8	\$818.82
Phytogen	PHY565WRF	1476.8	e f g h i j k l	31.8	31	37	32.9	1.17	82.7	4.1	3	3.6	\$820.65
Monsanto	10R051B2R2	1470.0	f g h i j k l	35.5	31	36	29.4	1.14	82.4	4.7	2	4.2	\$825.10
Monsanto	10R040B2R2	1465.0	f g h i j k l	34.8	31	38	30.8	1.18	82.6	4.3	2	4.0	\$820.13
Bayer CropScience	ST5288B2F	1436.0	f g h i j k l m	33.6	41	36	29.2	1.12	81.6	4.8	4	1.4	\$767.22
ACGA	39-501-601-701-801	1432.1	f g h i j k l m	34.3	41	37	32.2	1.18	82.9	4.5	2	3.9	\$800.61
ACGA	0109-2027-302-601-701	1425.3	g h i j k l m	30.2	31	38	32.3	1.18	82.1	4.6	2	3.0	\$784.13
ACGA	0136-2026-303-601	1418.7	g h i j k l m	31.0	41	37	31.0	1.16	82.7	4.5	2	4.7	\$803.71
ACGA	0122-2033-303-701	1410.7	h i j k l m n	34.3	31	37	32.5	1.15	82.9	4.5	2	4.9	\$801.99
ACGA	0144-2086-3B-701	1403.9	h i j k l m n	32.1	41	37	31.9	1.17	82.4	4.4	2	2.2	\$760.50
Bayer CropScience	BCSX1040B2F	1380.4	i j k l m n	28.7	21	38	31.5	1.20	82.3	4.5	3	2.1	\$746.12
Bayer CropScience	ST4288B2F	1370.5	i j k l m n	28.7	41	37	30.6	1.16	81.6	4.3	3	2.8	\$750.34
Bayer CropScience	FM1845LLB2	1368.4	i j k l m n	30.8	31	38	32.4	1.19	82.5	4.5	3	3.7	\$761.95
Bayer CropScience	FM9170B2F	1359.8	i j k l m n	32.1	31	38	32.3	1.19	82.5	4.2	3	2.7	\$743.77
Monsanto	DP1137B2RF	1354.5	i j k l m n	35.2	41	38	30.8	1.19	83.3	4.4	2	3.2	\$747.30
ACGA	0119-2016-303-601-701	1353.2	i j k l m n	31.6	31	38	32.6	1.19	82.0	4.7	2	4.6	\$765.65
ACGA	0120-2029-301-501-601-701-801	1349.9	j k l m n	30.6	41	39	34.5	1.24	83.4	4.8	3	3.9	\$755.25
Phytogen	PHY569WRF	1348.2	j k l m n	32.2	31	38	32.9	1.18	83.5	4.0	2	4.9	\$767.57
ACGA	0105-2005-303-601	1343.7	k l m n	31.0	31	38	32.2	1.20	82.8	4.4	3	3.9	\$750.40
ACGA	0109-2026-310-601-701	1338.9	k l m n	29.0	31	39	34.0	1.23	82.9	4.8	2	3.9	\$749.03
Bayer CropScience	FM1740B2F	1316.6	l m n	33.4	31	37	31.7	1.14	82.7	4.5	2	3.1	\$726.01
Monsanto	10R052B2R2	1280.0	m n o	35.6	31	38	30.8	1.18	82.8	4.3	2	3.9	\$713.44
Bayer CropScience	FM1773LLB2	1241.8	n o	30.5	31	39	33.7	1.22	82.7	4.6	2	4.0	\$696.55
Bayer CropScience	FM9160B2F	1115.7	o	31.6	31	36	29.6	1.13	81.3	4.2	2	3.8	\$622.57
LSD§		170.8		0.7	-	1	2.0	0.04	NS	0.3	0.8	NS	\$101.92
OSL†		0.0001		0.0001	-	0.0001	0.0001	0.0001	0.4337	0.0001	0.0050	0.0589	0.0001
CV‡		7.1		1.4	-	2.1	3.9	2.1	1.1	3.9	20.6	34.5	7.7

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Table. Lint yield and fiber quality results from the 2010 Advanced Strain Evaluation Trial, Safford, AZ

Seed Company	Variety	Lint Yield lbs/acre	Means Separation *	Lint Turnout	HVI Color	Staple 32nds	Strength g/tex	Length Inches	Uniformity Percent	Micronaire	Leaf Grade	Premium cent/lb	Value \$/acre
Phytogen	PHY519WRF	1730.4	a	38.3	31	37	29.1	1.14	80.9	4.1	2	4.4	\$975.24
Monsanto	DP1133B2RF	1631.7	a b	41.4	31	37	29.4	1.14	82.3	4.6	2	4.4	\$920.71
Bayer CropScience	FM9170B2F	1610.7	a b c	38.4	31	37	28.7	1.16	81.3	4.1	2	4.2	\$904.23
Bayer CropScience	FM9160B2F	1576.1	b c d	36.9	31	37	29.0	1.17	81.6	4.1	2	4.4	\$889.00
ACGA	0117-2006-306-601	1540.5	b c d e	37.5	21	37	30.3	1.16	82.0	4.5	2	4.8	\$875.09
Monsanto	10R050B2R2	1533.7	b c d e	38.9	31	38	30.5	1.17	80.5	4.2	2	4.6	\$868.30
Monsanto	DP1032B2RF	1526.2	b c d e f	40.6	31	37	28.3	1.14	80.6	4.4	2	4.2	\$857.32
Monsanto	DP1044B2RF	1520.1	b c d e f	36.6	31	37	28.9	1.14	81.7	4.2	2	4.2	\$854.15
ACGA	0106-2004-3B-701	1518.3	b c d e f	37.8	31	37	30.7	1.17	81.4	4.4	2	4.7	\$860.13
Phytogen	PHY755WRF	1509.4	b c d e f	36.5	31	38	31.1	1.20	81.1	4.2	2	4.7	\$854.86
Bayer CropScience	FM1740B2F	1504.5	b c d e f	37.8	31	36	28.4	1.12	80.4	4.4	2	3.4	\$832.05
Bayer CropScience	BCSX1030B2F	1493.6	b c d e f g	38.5	31	36	27.7	1.10	80.4	4.3	2	3.8	\$833.25
ACGA	0116-2B-326-701	1492.4	b c d e f g	38.0	31	36	29.8	1.11	81.5	4.4	2	4.0	\$835.59
ACGA	0116-2015-309-501-601-701-801	1489.7	b c d e f g	35.1	31	39	32.7	1.21	82.9	4.6	2	4.7	\$844.20
Monsanto	DP0935B2RF	1486.7	b c d e f g	38.7	31	36	28.9	1.13	80.7	4.3	2	3.9	\$830.26
Monsanto	10R020B2R2	1483.5	c d e f g	38.5	31	35	27.8	1.10	81.7	4.4	2	2.9	\$814.50
ACGA	0120-2029-301-501-601-701	1478.7	c d e f g	35.4	31	39	32.3	1.20	82.5	4.6	2	4.9	\$841.66
Bayer CropScience	ST5458B2F	1453.9	d e f g h	36.1	31	36	28.7	1.12	80.2	4.2	2	3.9	\$812.93
Phytogen	PHY565WRF	1443.4	d e f g h i	36.4	31	37	29.6	1.15	81.8	4.0	2	4.5	\$815.40
Monsanto	10R026B2R2	1442.2	d e f g h i j	39.6	31	37	28.5	1.13	81.2	4.4	2	4.3	\$812.00
Phytogen	PHY499WRF	1439.2	d e f g h i j k	37.5	31	36	29.2	1.12	81.3	4.4	2	4.2	\$809.37
Monsanto	10R051B2R2	1426.5	e f g h i j k	41.5	31	37	27.0	1.14	82.1	4.4	2	4.2	\$802.21
Monsanto	DP1137B2RF	1383.3	f g h i j k l	40.8	31	35	27.2	1.11	81.0	4.6	2	3.3	\$764.85
Phytogen	PHY569WRF	1355.5	g h i j k l m	38.2	31	36	29.3	1.12	82.3	4.2	2	4.2	\$762.17
Bayer CropScience	BCSX1010B2F	1350.6	g h i j k l m n	36.0	31	36	27.5	1.13	80.3	4.3	2	4.0	\$756.74
Phytogen	PHY367WRF	1315.4	h i j k l m n o	36.9	31	36	29.1	1.12	80.4	3.9	2	3.6	\$730.96
Bayer CropScience	ST5288B2F	1297.9	i j k l m n o	37.1	31	36	28.1	1.13	80.6	4.2	2	3.4	\$717.52
Monsanto	10R052B2R2	1294.9	j k l m n o	42.2	31	36	28.0	1.14	81.7	4.3	2	4.2	\$727.28
Bayer CropScience	FM1845LLB2	1292.7	k l m n o	35.9	31	38	30.0	1.19	81.9	4.4	2	4.6	\$731.51
ACGA	0119-2006-307-601-701	1255.0	l m n o	36.8	31	36	28.1	1.11	81.1	4.7	2	3.4	\$695.28
ACGA	0105-2005-303-601	1252.1	l m n o	36.0	31	37	30.3	1.16	81.6	4.3	3	4.5	\$707.18
Monsanto	10R040B2R2	1216.9	m n o p	40.3	31	36	27.4	1.13	80.8	4.2	2	3.8	\$679.46
Bayer CropScience	ST4288B2F	1207.8	m n o p q	35.5	31	35	27.3	1.10	80.4	4.6	2	3.1	\$666.61
ACGA	39-501-601-701-801	1204.2	n o p q	37.3	31	37	29.6	1.14	81.1	4.3	3	4.0	\$673.78
ACGA	0143-2036-303-601	1202.4	o p q	37.4	31	37	30.8	1.15	80.7	4.3	3	4.3	\$676.55
Bayer CropScience	FM1773LLB2	1100.0	p q r	35.4	31	37	29.2	1.15	79.5	4.3	2	3.9	\$615.09
Bayer CropScience	BCSX1040B2F	1066.3	q r	32.7	31	39	29.9	1.21	82.1	4.3	2	4.6	\$603.90
ACGA	0122-2033-307-701	957.8	r	35.4	21	37	30.6	1.14	80.9	4.0	2	4.8	\$544.06
LSD§		147.7		0.0	-	1	1.6	0.04	1.2	0.3	0.3	1.1	\$84.12
OSL†		0.0001		0.0001	-	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0454	0.0001
CV‡		7.5		2.7	-	2.4	4.0	2.4	1.0	4.8	10.2	19.7	7.7

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation