

University of Arizona Cooperative Extension

2002 Upland Cotton Variety Trial Results

Somerton, AZ

Planting Date 5 April
Total Number of Irrigations 8

Final Irrigation Date 16 August
Total N Applied 153 lbs N/acre

Harvest Date 7 September
General Soil Texture Sandy loam

Cooperator:			Fiber Quality							
Company	Variety	Lint Yield (lbs/Acre)	Percent Lint	Micronaire	Fiber Length (100ths)	Staple Length (32nds)	Fiber Strength (g/tex)	Uniformity Index	Premium/Discount ⁵ (points)	Value ⁶ (\$/acre)
Stoneville	ST4892BR	1495.2 a ¹	35.3 bcd	5.4 a	1.12 cde	36.3 cde	29.8 de	83.0 ab	-171	752
Deltapine	DP555BR	1305.0 ab	39.2 a	5.0 bcd	1.13 cde	36.5 cde	30.1 de	81.3 d	144	698
Deltapine	SG215BR	1266.3 abc	35.7 bc	5.2 abc	1.07 f	34.0 f	26.1 g	83.0 ab	-263	626
Stoneville	ST4793R	1212.7 bcd	33.6 bcdef	5.2 abc	1.11 ef	35.5 e	28.8 ef	82.0 bcd	-119	615
Buttonwillow	BR303	1207.3 bcd	32.8 cdef	4.8 e	1.23 a	39.5 a	32.7 bc	83.0 ab	230	604
Deltapine	DP388	1182.6 bcd	34.9 bcd	4.9 cde	1.11 de	35.8 de	30.0 de	82.5 abc	273	647
Fiber Max	FM658	1176.2 bcd	36.0 b	4.8 de	1.15 bcd	36.8 cd	32.4 bc	82.3 bcd	420	661
Fiber Max	FM989BR	1117.3 bcd	34.3 bcde	5.1 bc	1.12 cde	36.0 cde	31.0 cd	81.7 cd	67	592
Buttonwillow	BR9801	1094.6 bcd	32.9 bcdef	5.2 ab	1.19 ab	38.0 b	33.0 b	83.7 a	-50	569
Deltapine	DP451BR	1062.1 bcd	32.4 def	5.2 abc	1.13 cde	36.5 cde	29.4 de	81.8 cd	-68	545
Deltapine	DP20B	1044.3 cd	31.7 ef	4.8 de	1.11 de	35.7 de	27.1 fg	81.3 cd	137	560
ACGA	AG3601	982.0 d	31.2 f	5.1 bc	1.16 bc	37.0 bc	35.0 a	82.3 bcd	59	516
LSD _{0.05} ²		247	3.1	0.3	0.04	1.2	1.9	1.2	--	--
OSL ³		0.0126	0.0007	0.0008	0.0001	0.0001	0.0001	0.0115	--	--
CV (%) ⁴		13.5	5.9	3.2	2.3	2.1	3.9	1.0	--	--

¹Means followed by the same letter are not significantly different according to a Fisher's LSD means separation test.

²LSD: Least Significant Difference.

³OSL: Observed Significance Level.

⁴CV: Coefficient of Variation.

⁵Average premium or discount applied to the lint based on CCC loan schedule.

⁶Value of lint per acre based on CCC loan schedule of discounts and premiums and assuming a base value of 52.00 cents per pound.

University of Arizona Cooperative Extension

2002 Upland Cotton Variety Trial Results

Wellton, AZ

Planting Date 5 April
Total Number of Irrigations 7

Final Irrigation Date 3 August
Total N Applied 0 lbs N/acre

Harvest Date 13 September
General Soil Texture Silt loam

Cooperator:			Fiber Quality							
Company	Variety	Lint Yield (lbs/Acre)	Percent Lint	Micronaire	Fiber Length (100ths)	Staple Length (32nds)	Fiber Strength (g/tex)	Uniformity Index	Premium/Discount ⁵ (points)	Value ⁶ (\$/acre)
Stoneville	ST4892BR	1616.8 a ¹	34.7 ab	4.9 a	1.11 de	35.5 de	29.1 cd	81.3 bc	181	868
Deltapine	DP451BR	1554.6 a	32.1 cd	4.4 de	1.13 cd	36.5 c	27.8 d	80.8 cd	358	864
Buttonwillow	BR303	1528.2 a	30.8 de	4.4 cde	1.22 a	39.0 a	31.8 ab	81.8 abc	405	856
Deltapine	DP555BR	1523.3 a	35.6 a	4.2 e	1.12 cde	36.0 cd	29.7 c	79.7 e	370	808
Stoneville	ST4793R	1523.0 a	34.1 abc	5.0 a	1.10 ef	35.3 de	28.3 cd	82.3 ab	-44	787
Deltapine	SG215BR	1492.5 ab	34.7 ab	4.7 ab	1.08 f	34.7 e	25.3 e	81.3 bc	80	806
Deltapine	DP388	1366.3 bc	33.1 bc	4.2 e	1.12 cde	36.0 cd	29.5 c	80.8 cd	274	748
Buttonwillow	BR9801	1333.6 c	32.0 cd	4.7 abc	1.17 b	37.8 b	31.7 ab	82.5 a	409	747
Fiber Max	FM958	1306.3 c	34.2 abc	4.4 de	1.12 de	36.0 cd	29.8 c	80.0 d	363	726
Fiber Max	FM989BR	1083.2 d	32.4 cd	4.3 e	1.12 cde	36.0 cd	31.3 b	81.5 abc	393	605
ACGA	AG3601	1064.2 d	28.8 e	4.6 bcd	1.14 c	36.7 c	33.1 a	81.0 cd	415	597
LSD _{0.05} ²		337	2.2	0.3	0.03	1.0	1.5	1.0	--	--
OSL ³		0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	--	--
CV (%) ⁴		6.7	4.6	4.0	1.5	1.8	3.4	0.8	--	--

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2002 Upland Cotton Variety Trial Results

Buckeye, AZ

Planting Date 1 April

Final Irrigation Date 17 September
10 tons

Harvest Date 7 December

Total Number of Irrigations 20

Total N Applied manure/acre

General Soil Texture Silt loam

Cooperator: H4 Farms				Fiber Quality						
Company	Variety	Lint Yield (lbs/Acre)	Percent Lint	Micronaire	Fiber Length (100ths)	Staple Length (32nds)	Fiber Strength (g/tex)	Uniformity Index	Premium/ Discount ⁵ (points)	Value ⁶ (\$/acre)
Deltapine	DP555BR	2282.2 a ¹	37.1 a	4.6	1.08 d	34.7 c	30.9 bcd	80.7 b	227	1239
Deltapine	DP565	2242.2 a	34.4 bcd	4.8	1.14 a	36.7 a	32.3 bc	81.3 b	160	1203
Deltapine	DP449BR	2211.7 ab	36.3 ab	4.9	1.09 cd	35.0 bc	31.4 bcd	81.7 ab	173	1184
Stoneville	BXN49B	2083.7 bc	35.2 abcd	4.7	1.11 bcd	35.3 bc	29.7 d	81.7 ab	68	1097
ACGA	AG3601	2026.8 c	31.9 e	4.8	1.14 ab	36.7 a	37.2 a	81.7 ab	147	1083
Stoneville	ST4892BR	2021.9 c	35.5 abc	5.1	1.10 cd	35.3 bc	32.6 b	82.7 a	-543	941
Deltapine	DP33B	2001.0 cd	33.6 cde	4.8	1.10 cd	35.3 bc	31.3 bcd	81.0 b	125	1066
Deltapine	DP448B	1862.9 de	32.9 de	4.7	1.12 abc	36.0 ab	30.6 cd	81.7 ab	190	1005
Fiber Max	FM989BR	1766.7 e	34.7 bcd	4.8	1.09 cd	34.7 c	32.6 b	81.0 b	305	973
Fiber Max	FM966	1603.0 f	34.6 bcd	4.6	1.12 abc	36.0 ab	38.1 a	82.7 a	402	898
LSD _{0.05} ²		147.4	2.3	NS	0.03	1.2	1.9	1.2	--	--
OSL ³		0.0001	0.0065	0.0656	0.0072	0.0127	0.0001	0.0339	--	--
CV (%) ⁴		4.3	3.9	3.5	1.7	1.9	3.4	0.9	--	--

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2002 Upland Cotton Variety Trial Results

Stanfield, AZ

Planting Date 10 April
Total Number of Irrigations 10

Final Irrigation Date 1 September
Total N Applied 180 lbs N/acre

Harvest Date 21 October
General Soil Texture Sandy loam

Cooperator: Paul Ollerton			Fiber Quality							
Company	Variety	Lint Yield (lbs/Acre)	Percent Lint	Micronaire	Fiber Length (100ths)	Staple Length (32nds)	Fiber Strength (g/tex)	Uniformity Index	Premium/Discount ⁵ (points)	Value ⁶ (\$/acre)
Deltapine	DP449BR	1870.0 a ¹	33.6 b	4.7 b	1.12 b	36.0 b	29.8	80.5 cd	231	1015
Stoneville	ST4892BR	1793.6 a	33.0 d	5.1 a	1.11 b	35.5 b	28.9	81.8 a	-398	808
Deltapine	DP565	1694.6 ab	32.1 g	4.5 bc	1.19 a	38.3 a	30.5	81.0 bc	333	938
Deltapine	DP555BR	1601.5 abc	34.6 a	4.3 c	1.13 b	36.0 b	30.1	79.5 d	271	876
ACGA	AG3601	1466.0 bcd	29.4 l	5.1 a	1.14 b	36.5 b	32.0	80.8 bc	-70	754
Deltapine	DP448B	1419.7 bcd	31.2 h	4.5 bc	1.12 b	36.3 b	29.3	80.0 cd	285	780
Stoneville	BXN49B	1333.6 cde	33.4 c	4.7 bc	1.13 b	36.3 b	28.5	80.0 cd	201	721
Fiber Max	FM989BR	1273.1 de	32.7 e	4.7 b	1.11 b	35.8 b	30.2	81.0 bc	314	702
Fiber Max	FM966	1137.8 e	32.6 f	4.8 ab	1.13 b	36.3 b	32.4	82.3 a	244	621
LSD _{0.05} ²		282	0.1	2.1	0.04	1.2	NS	1.1	--	--
OSL ³		0.0002	0.0001	0.0013	0.0044	0.0075	0.0636	0.0005	--	--
CV (%) ⁴		12.8	0.2	4.9	2.2	2.3	5.8	0.9	--	--

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2002 Upland Cotton Variety Trial Results

Maricopa, AZ

Planting Date 1 April
Total Number of Irrigations 9

Final Irrigation Date 23 August
Total N Applied 180 lbs. N/acre

Harvest Date 25 October
General Soil Texture Sandy loam

Cooperator: Maricopa Ag. Center				Fiber Quality						
Company	Variety	Lint Yield (lbs/Acre)	Percent Lint	Micronaire	Fiber Length (100ths)	Staple Length (32nds)	Fiber Strength (g/tex)	Uniformity Index	Premium/ Discount ⁵ (points)	Value ⁶ (\$/acre)
Deltapine	DP565	1670.1 a ¹	33.0	4.7 bc	1.15 a	36.8 a	31.5 b	81.8 ab	381	932
Deltapine	DP448B	1666.4 a	32.4	4.7 bc	1.13 b	36.3 ab	29.8 cd	81.5 abc	345	924
Deltapine	DP449BR	1512.6 b	34.1	4.9 b	1.10 c	35.5 bcd	30.5 bc	80.5 cd	345	839
Deltapine	DP555BR	1477.5 b	35.9	4.7 bc	1.09 cd	35.3 cd	30.2 bc	80.0 d	331	817
Stoneville	BXN49B	1313.9 c	32.9	4.6 c	1.11 bc	35.5 bcd	28.7 d	81.3 bc	35	688
ACGA	AG3601	1265.1 c	31.2	4.9 b	1.13 b	36.3 ab	34.1 a	81.5 abc	274	692
Stoneville	ST4892BR	1173.1 d	33.6	5.1 a	1.09 cd	35.0 d	29.8 cd	82.5 a	-485	553
Fiber Max	FM966	1146.0 d	32.4	4.7 bc	1.12 b	36.0 abc	35.4 a	82.5 a	401	642
Fiber Max	FM989BR	941.2 e	31.5	4.8 b	1.08 d	34.8 d	30.4 bc	80.5 cd	195	507
LSD _{0.05} ²		72.7	--	0.2	0.02	0.8	1.3	1.2	--	--
OSL ³		0.0001	--	0.0026	0.0001	0.0002	0.0001	0.0020	--	--
CV (%) ⁴		3.7	--	2.7	1.1	1.5	2.8	1.0	--	--

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2002 Upland Cotton Variety Trial Results

Coolidge, AZ

Planting Date 10 April
Total Number of Irrigations 11

Final Irrigation Date 1 September
Total N Applied 280 lbs N/acre

Harvest Date 9 October
General Soil Texture Clay loam

Cooperator: Lee Smith				Fiber Quality						
Company	Variety	Lint Yield (lbs/Acre)	Percent Lint	Micronaire	Fiber Length (100ths)	Staple Length (32nds)	Fiber Strength (g/tex)	Uniformity Index	Premium/ Discount ⁵ (points)	Value ⁶ (\$/acre)
Fiber Max	FM966	1649.5 a ¹	34.5	4.2 ab	1.15	37.0	34.0 a	83.3 a	461	934
Deltapine	DP449BR	1565.7 ab	35.2	3.7 cd	1.17	37.0	31.9 bc	82.0 ab	418	880
Deltapine	DP448B	1547.4 ab	32.9	3.6 d	1.16	37.0	28.7 efg	80.8 bc	318	854
Stoneville	ST4892BR	1486.1 bc	35.4	3.9 c	1.13	36.3	27.1 g	80.0 c	341	823
FiberMax	FM989BR	1483.9 bc	34.0	4.2 b	1.16	37.0	30.8 bcd	82.0 ab	420	834
Stoneville	BXN49B	1475.0 bc	34.2	4.4 a	1.13	36.3	27.9 fg	81.8 ab	326	815
Deltapine	DP565	1397.0 cd	33.4	3.5 d	1.16	37.3	30.4 cde	82.0 ab	335	773
Deltapine	DP555BR	1330.0 d	36.9	3.3 e	1.14	36.5	29.6 def	81.0 bc	128	709
ACGA	AG3601	932.2 e	30.7	3.8 c	1.17	37.3	32.6 ab	80.8 bc	421	524
LSD _{0.05} ²		138.9	--	0.2	NS	NS	2.0	1.6	--	--
OSL ³		0.0001	--	0.0001	0.0909	0.2500	0.0001	0.0176	--	--
CV (%) ⁴		6.6	--	3.6	1.9	1.8	4.5	1.4	--	--

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2002 Upland Cotton Variety Trial Results

Marana, AZ

Planting Date 12 April
Total Number of Irrigations 7

Final Irrigation Date 22 August
Total N Applied 87 lbs. N/acre

Harvest Date 16 October
General Soil Texture Clay loam

Cooperator: Marana Ag. Center				Fiber Quality						
Company	Variety	Lint Yield (lbs/Acre)	Percent Lint	Micronaire	Fiber Length (100ths)	Staple Length (32nds)	Fiber Strength (g/tex)	Uniformity Index	Premium/ Discount ⁵ (points)	Value ⁶ (\$/acre)
Stoneville	ST4892BR	1549.0 a ¹	37.8	4.9 a	1.09 d	35.0 d	26.6 e	82.0 ab	64	814
Stoneville	ST4793R	1474.2 ab	37.4	4.9 a	1.09 d	35.0 d	26.5 e	82.5 a	253	804
Deltapine	DP449BR	1461.8 ab	36.3	4.6 bc	1.13 bc	36.5 bc	29.4 c	82.3 ab	361	813
Deltapine	DP555BR	1460.3 ab	40.0	4.4 c	1.12 cd	36.0 c	27.6 de	79.5 d	305	804
Deltapine	DP565	1459.5 ab	36.5	4.5 bc	1.18 a	37.8 a	28.7 cd	82.0 ab	345	809
Deltapine	DP448B	1395.3 b	35.4	4.4 c	1.13 c	36.5 bc	27.2 e	81.3 bc	331	772
Fiber Max	FM958	1249.1 c	37.5	4.6 b	1.15 bc	37.0 ab	30.0 b	80.8 c	365	695
Fiber Max	FM966	1218.7 c	36.9	4.5 bc	1.15 bc	36.8 bc	33.4 a	82.3 ab	376	679
ACGA	AG3601	1213.5 c	34.1	4.4 bc	1.16 ab	37.0 ab	31.3 b	81.5 abc	374	676
LSD _{0.05} ²		106.7	--	0.2	0.03	1.0	1.4	1.0	--	--
OSL ³		0.0001	--	0.0001	0.0001	0.0001	0.0001	0.0001	--	--
CV (%) ⁴		5.3	--	2.7	1.7	1.9	3.3	0.9	--	--

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2002 Upland Cotton Variety Trial Results

Thatcher, AZ

Planting Date 15 April
Total Number of Irrigations 6

Final Irrigation Date 10 September
Total N Applied 77 lbs N/acre

Harvest Date 22 October
General Soil Texture Grabe Clay Loam

Cooperator: Layton Farms			Fiber Quality							
Company	Variety	Lint Yield (lbs/Acre)	Percent Lint	Micronaire	Fiber Length (100ths)	Staple Length (32nds)	Fiber Strength (g/tex)	Uniformity Index	Premium/Discount ⁵ (points)	Value ⁶ (\$/acre)
Deltapine	DP555BR	1628.6 a ¹	38.3 a	4.2 bc	1.09 d	34.8 d	29.3 d	79.8 d	270	891
Deltapine	DP655BR	1585.6 ab	35.0 c	4.2 bc	1.13 bc	36.3 bc	31.1 c	81.8 bc	373	884
Fiber Max	FM991R	1532.9 b	35.6 bc	4.4 b	1.12 bc	36.0 bc	31.3 bc	81.8 bc	411	860
Fiber Max	FM989BR	1531.2 b	34.8 c	4.2 bc	1.10 cd	35.5 cd	31.4 bc	81.0 bcd	364	852
Stoneville	ST4793R	1459.8 c	36.2 b	4.7 a	1.08 d	34.8 d	28.2 d	82.0 b	-194	731
Stoneville	ST4892BR	1426.0 cd	36.1 b	4.4 b	1.10 cd	35.3 cd	29.5 d	81.8 bc	-95	728
Deltapine	SG215BR	1383.1 d	34.9 c	4.2 bc	1.04 e	33.7 e	25.9 e	80.7 cd	1.7	719
ACGA	AG3601	1318.4 e	32.7 d	4.3 b	1.14 b	36.8 b	32.6 ab	81.5 bc	361	733
NMSU	1517-99	1289.4 e	32.4 d	4.0 c	1.20 a	38.3 a	33.5 a	83.5 a	-209	644
LSD _{0.05} ²		59.2	0.76	0.3	0.03	1.1	1.4	1.2631	--	--
OSL ³		2.8	1.5	4.7	2.0	2.0	3.1	1.0	--	--
CV (%) ⁴		0.0001	0.0001	0.0066	0.0001	0.0001	0.0001	0.0006	--	--

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University of Arizona Cooperative Extension

2002 Upland Cotton Variety Trial Results

Kansas Settlement, AZ

Planting Date <u>6 May</u>	Final Irrigation Date <u>9 September</u>	Harvest Date <u>6 November</u>
Total Number of Irrigations <u>5</u>	Total N Applied <u>53 lbs N/acre</u>	General Soil Texture <u>Sandy loam</u>

Cooperator: Glen Schmitt				Fiber Quality						
Company	Variety	Lint Yield (lbs/Acre)	Percent Lint	Micronaire	Fiber Length (100ths)	Staple Length (32nds)	Fiber Strength (g/tex)	Uniformity Index	Premium/ Discount ⁵ (points)	Value ⁶ (\$/acre)
NMSU	1517-99	789.0 a ¹	34.9 cd	4.4	1.17	37.0	34.0	84.0	465	447
CPCSD	Nova	679.4 b	35.6 bcd	4.5	1.11	36.0	31.7	84.0	440	383
NMSU	1517-95	675.0 b	33.4 def	5.0	1.09	35.0	30.0	84.0	365	376
Stoneville	ST4892BR	663.4 b	37.3 ab	4.9	1.04	33.0	26.3	84.0	-110	338
Deltapine	DP436BR	649.0 b	32.0 f	4.9	1.11	36.0	26.6	85.0	390	363
Deltapine	DP451BR	638.4 bc	32.2 f	4.5	1.07	34.0	23.9	82.0	45	335
Fiber Max	FM989R	625.1 bc	34.8 cd	4.1	1.08	35.0	28.5	80.0	310	344
Deltapine	SG215BR	608.3 bcd	35.9 abc	4.6	1.07	34.0	25.9	85.0	210	329
Stoneville	ST4793R	575.7 cd	35.7 abc	4.9	1.08	35.0	29.5	83.0	350	320
ACGA	AG3601	548.9 d	32.5 ef	4.4	1.08	35.0	28.4	83.0	320	303
CPCSD	Riata	547.2 d	37.9 a	4.3	1.11	36.0	30.0	83.0	405	307
Fiber Max	FM991R	543.5 d	34.7 cde	4.1	1.17	37.0	32.2	84.0	405	308
LSD _{0.05} ²		71.3	2.8	--	--	--	--	--	--	--
OSL ³		0.0004	0.0012	--	--	--	--	--	--	--
CV (%) ⁴		5.2	2.9	--	--	--	--	--	--	--

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