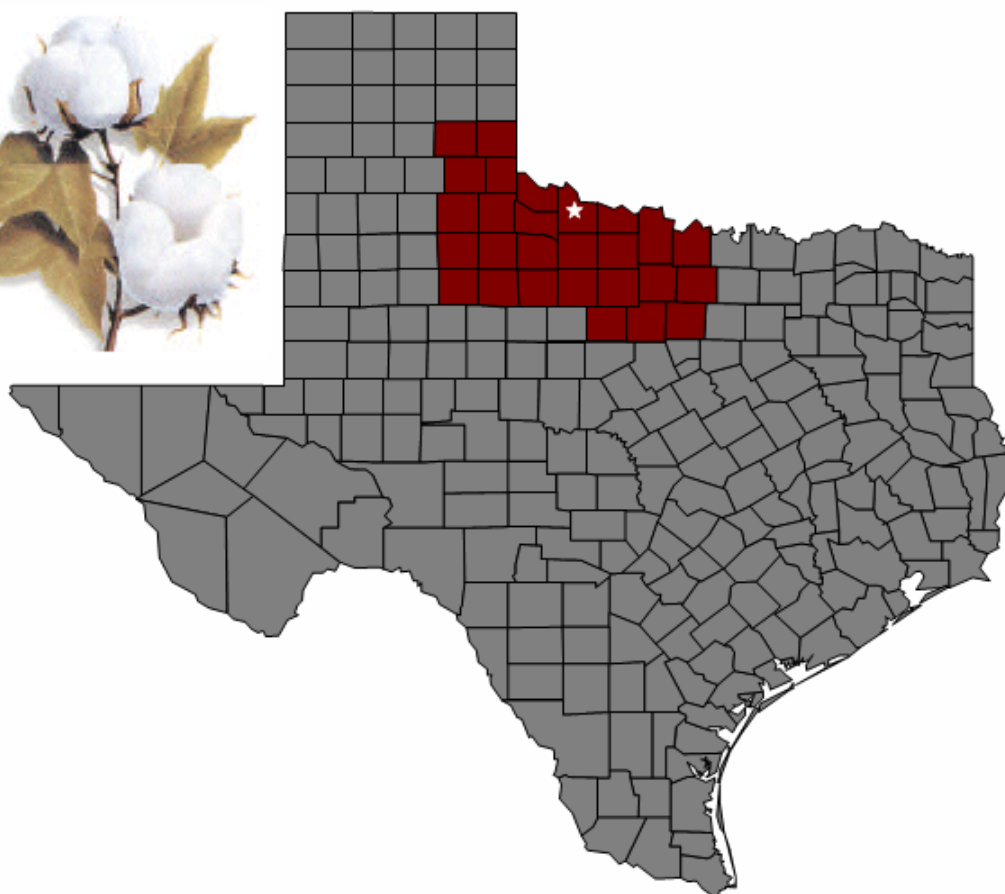


ROLLING PLAINS

2000 - 2004



COTTON VARIETY TRIALS

Vernon Center Technical Report #2005-01

FOREWORD

This report summarizes the 2000 - 2004 cotton variety trials that were conducted at the Texas Agricultural Experiment Station near Chillicothe and Munday, Texas. The information given herein is for educational purposes only, and may not be reproduced without permission. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas Agricultural Extension Service or Experiment Station is implied.

Research methods are outlined for each of the trials that were conducted. All varieties within a trial were treated with the same herbicide and insecticide program. Appropriate statistical analysis was used for each trial. The cotton variety trial at Munday is conducted under subsurface drip irrigation. The cotton variety trial at Chillicothe was developed as a dryland variety trial, but was supplementally irrigated in 2000 and 2001. Means within a column which differ by more than the LSD are considered statistically different at the 10% level.

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Todd A. Baughman - Extension/Research Agronomist
David Bordovsky - Research Scientist

Texas A&M Research & Extension Center - Vernon
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The Texas A&M University System

Rolling Plains Uniform Cotton Variety Trial - 2004

Location: Texas Agricultural Experiment Station at Munday

Cultural Practices:

Planting Date: 5/20/2004
 Seeding Rate: 3.5 seed/ft
 Row Spacing: 40 inches
 Plot Size: 2 rows by 150 ft
 Replications: 4
 Harvest Date: 12/16/2004
 Soil Type: Abilene Clay Loam
 Fertilizer: 40 lbs N/acre + 20 lbs P2O5/acre - Sidedressed
 Irrigation: Subsurface Drip Irrigated Daily - Total = 10.7 inches
 Previous Crop: Cotton
 Insecticide: Karate - .04 lb ai/A, 8/4
 Herbicide: Treflan - 2.0 pt/A - Preplant Incorporated
 Staple - 1.7 oz/A, 6/16
 Staple - 0.7 oz/A, 7/9
 Harvest Aid: Freeze

Weather:

Month	Rainfall (inches)	Minimum	Average	Maximum	Average
		Temperature	Minimum	Temperature	Maximum
		----- (F) -----			
May	0.61	42	61	101	89
June	5.30	62	67	104	89
July	7.60	63	70	104	93
August	3.21	61	68	98	89
September	2.97	49	63	97	88
October	3.16	43	56	92	77

Table 1. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Munday, in 2004.

Variety	Plant Pop	Plant Height	Open bolls	Leaf	Color Grade	Micron	Fiber Length	Strength	Unif Index	Lint T-out	Loan Value	Lint Yield	Lint Value
	(#/row ft)	(in)	(%)			(units)	(in)	(g/Tex)	(%)	(%)	(¢/lb)	(lbs/A)	(\$/A)
ST 5242BR	3.5	46	78	2	51	4.0	1.08	24.6	82.4	32.0	48.59	1637	795.82
DP 455 BG/RR	3.5	48	87	3	51	3.3	1.12	26.0	80.3	28.9	47.21	1542	729.40
FM 960BR	3.4	47	78	3	51	3.6	1.15	28.1	81.9	27.5	49.11	1483	728.69
DP 445 BG/RR	3.6	53	76	3	51	3.6	1.12	25.9	81.8	28.3	49.19	1444	709.81
FM 960 B2R	3.4	50	84	3	51	3.7	1.15	27.3	81.1	28.0	49.24	1403	690.53
ST 5599BR	2.6	57	75	3	61	3.7	1.12	27.3	81.7	27.6	48.28	1420	685.07
FM 966	2.8	52	81	2	51	3.7	1.15	29.5	83.1	27.7	50.17	1312	657.92
FM 989BR	3.3	56	64	3	51	3.2	1.13	26.5	80.8	25.3	46.63	1398	651.89
ST 4892BR	2.4	52	83	3	51	3.5	1.09	25.5	81.4	26.5	47.80	1343	644.31
FM 958LL	3.4	48	66	3	51	3.8	1.13	28.1	82.3	24.1	49.22	1250	616.61
DP 444 BG/RR	3.2	48	78	2	51	3.3	1.11	25.2	81.8	26.6	45.51	1348	614.81
AFD 2485	3.0	50	80	3	51	3.5	1.13	27.3	82.0	25.6	48.85	1244	608.65
NG 2448R	3.0	49	80	3	51	3.5	1.12	26.6	82.5	24.4	49.30	1233	606.92
AFD 2070	3.2	48	72	4	51	3.7	1.10	26.7	81.5	25.5	49.54	1218	603.73
PM 2280 BG/RR	3.6	55	82	3	51	3.7	1.12	27.1	81.6	25.2	49.35	1214	599.13
DP 555 BG/RR	3.1	56	67	3	51	3.5	1.12	26.4	80.9	30.6	47.78	1247	597.67
ST 3664R	2.5	61	68	3	51	3.7	1.04	24.2	81.5	26.5	47.11	1259	593.96
PHY 410 R	3.3	52	73	4	61	3.8	1.12	25.7	82.6	25.9	47.38	1247	591.79
DX 24317	3.9	51	75	3	51	3.5	1.10	26.8	82.2	25.9	49.25	1197	589.75
BCG 50 R	3.5	55	74	2	51	3.8	1.12	26.3	81.8	23.5	49.05	1192	584.79
DPLX 02T57R	3.5	57	67	3	51	3.5	1.08	25.2	81.5	25.5	48.21	1206	580.66
DP 432 RR	3.2	55	68	3	61	3.6	1.11	24.5	82.1	23.9	47.19	1223	579.25
FM 989R	3.2	49	81	3	51	3.3	1.12	27.0	81.0	25.4	47.22	1205	571.35
ST 4646B2R	3.1	45	83	3	51	3.3	1.10	24.5	80.3	24.5	45.03	1267	570.86
FM 960R	3.2	50	67	3	51	3.3	1.13	26.5	80.8	24.5	47.05	1212	570.17
ST 4575BR	2.9	48	86	3	52	3.3	1.08	24.2	80.8	26.4	44.84	1256	564.47
STX 3636B2R	3.4	49	86	3	51	3.5	1.11	24.6	80.3	26.3	47.33	1181	559.17
DP 488 BG/RR	3.3	54	69	3	51	3.3	1.14	27.2	81.8	26.6	47.76	1167	558.63
DP 434 RR	2.9	51	63	3	51	3.3	1.13	24.9	80.4	27.9	46.27	1172	544.28
DP 449 BG/RR	3.5	48	78	3	61	3.7	1.13	26.2	81.9	25.4	47.06	1153	542.45

Table 1. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Munday, in 2004.

Variety	Plant Pop.	Plant Height	Open bolls	Leaf	Color Grade	Fiber Micron	Fiber Length	Fiber Strength	Unif Index	Lint T-out	Loan Value	Lint Yield	Lint Value
	(#/row ft)	(in)	(%)			(units)	(in)	(g/Tex)	(%)	(%)	(¢/lb)	(lbs/A)	(\$/A)
NG 1553R	3.5	49	82	2	51	3.3	1.15	26.6	81.7	24.0	47.35	1088	515.32
DP 543 BGII/RR	2.9	48	64	3	51	3.5	1.12	26.5	80.1	25.9	48.57	1056	513.09
AFD 2428	2.9	54	73	2	51	3.5	1.11	25.1	81.1	25.0	47.06	1086	511.48
DP 424 BGII/RR	3.5	49	76	3	51	3.2	1.09	24.6	80.9	23.6	45.29	1124	510.46
DP 494 RR	2.8	59	66	2	51	3.7	1.13	27.0	81.8	25.5	49.33	1030	508.56
DX 24119	3.7	46	78	3	52	3.6	1.16	26.2	81.1	24.9	48.26	1038	502.37
SG 215 BG/RR	3.0	47	75	2	51	3.3	1.05	23.0	80.9	24.5	44.41	1118	496.67
DX 0204C	3.5	50	73	2	51	3.0	1.19	25.7	79.2	23.8	44.36	1110	492.21
ST 6636BR	3.1	52	67	3	51	3.5	1.13	28.0	81.6	25.9	48.74	998	487.10
PHY 510 R	3.5	52	78	2	51	3.3	1.13	27.1	80.6	22.9	47.30	986	466.82
STX 5454B2R	3.1	52	71	2	51	3.4	1.09	24.8	80.7	22.5	45.01	1029	462.67
Trial Average	3.2	51	75	3	52	3.5	1.12	26.1	81.4	25.9	47.61	1228	585.59
LSD (P=.10)	0.4	3	11	NS	.	0.2	0.03	1.2	1.0	2.5	1.84	156	85.30
SD	0.4	3	9	1	.	0.2	0.02	1.1	0.9	2.1	1.57	133	72.76
CV	10.9	6	13	25	.	6	2	4	1	8	3	11	12

LSD = least significant difference; SD = standard deviation; CV = coefficient of variation; NS = not significant.

Means within a column which differ by more than the LSD are statistically different at the 0.10 level of significance.

Rolling Plains Uniform Cotton Variety Trial - 2004

Location: Texas Agricultural Experiment Station at Chillicothe

Cultural Practices:

Planting Date: 5/17/2004
Seeding Rate: 4.9 seed/ft
Row Spacing: 40 inches
Plot Size: 2 rows by 50 ft
Replications: 4
Harvest Date: 12/4/2004
Soil Type: Miles Fine Sandy Loam
Fertilizer: 20 lbs N/acre + 10 lbs P2O5/acre - Sidedressed

Irrigation: None
Previous Crop: Cotton
Insecticide: None
Herbicide: Treflan - 1.5 pt/A, Preplant Incorporated
Harvest Aid: Freeze

Weather:

Month	Rainfall (inches)	Minimum	Average	Maximum	Average
		Temperature	Minimum	Temperature	Maximum
		----- (F) -----			
May	0.17	40	60	98	87
June	6.23	59	66	100	88
July	1.00	61	70	103	94
August	3.91	60	68	103	90
September	3.59	49	63	99	89
October	0.89	39	54	92	77

Table 2. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Chillicothe, in 2004.

Variety	Plant Pop	Plant Height	Open bolls	Leaf	Color Grade	Micron	Fiber Length	Fiber Strength	Unif Index	Lint T-out	Loan Value	Lint Yield	Lint Value
	(#/row ft)	(in)	(%)			(units)	(in)	(g/Tex)	(%)	(%)	(¢/lb)	(lbs/A)	(\$/A)
FM 960R	2.9	29	81	2	51	4.1	1.11	29.8	82.3	29.1	50.05	484	242.31
FM 960B2R	2.5	29	92	3	51	4.1	1.15	30.5	82.7	28.5	49.71	441	219.26
FM 960BR	2.1	27	95	3	51	4.3	1.09	31.3	82.3	28.3	49.96	434	217.02
NG 2448R	2.5	25	88	2	51	4.6	1.09	29.8	82.7	26.9	49.71	425	211.65
PM 2280 BG/RR	3.0	27	98	2	51	4.5	1.08	29.2	82.9	27.9	49.55	428	211.64
FM 989BR	2.5	24	88	3	51	4.1	1.09	29.4	82.0	27.4	50.13	406	203.56
AFD 2070	3.0	27	92	3	51	4.7	1.08	28.4	81.8	28.4	48.59	418	203.47
AFD 2428	2.8	24	88	2	51	4.4	1.09	28.8	82.2	28.7	48.81	410	200.30
DP 434 RR	2.7	27	90	2	51	4.3	1.13	27.0	82.6	29.3	48.80	389	189.54
AFD 3602R	2.7	24	94	3	51	4.5	1.07	29.4	82.5	27.3	48.29	391	188.64
ST 3664R	2.6	26	83	3	52	4.6	1.01	27.0	81.9	28.0	48.78	377	184.81
DPLX 02T57R	2.8	28	97	3	51	4.7	1.06	27.8	83.4	28.0	47.70	387	184.46
PHY 510 R	2.8	24	86	2	51	4.4	1.13	29.5	82.1	27.3	49.92	359	179.12
ST 6848R	2.6	26	92	3	61	4.5	1.10	29.4	83.3	26.8	49.44	358	177.14
ST 4686R	2.8	28	73	3	51	4.3	1.09	26.7	81.8	27.6	49.60	355	175.92
DP 488 BG/RR	2.8	27	72	3	51	4.1	1.11	28.3	81.5	29.0	49.74	350	173.98
DP 494 RR	2.3	27	68	3	51	4.4	1.13	30.5	82.9	28.6	49.68	346	172.01
DX 24119	3.0	27	87	2	52	4.2	1.12	27.6	82.2	27.5	49.75	344	171.26
FM 800R	2.7	26	70	3	51	4.3	1.14	30.5	83.0	27.1	49.50	342	169.52
SG 215 BG/RR	2.3	29	78	2	51	4.7	1.07	26.8	81.9	27.9	47.65	356	169.09
BCG 50 R	2.7	29	83	2	51	4.8	1.09	29.4	83.4	25.3	49.82	338	168.38
PHY 410 R	2.6	25	95	4	61	4.6	1.08	28.0	83.5	25.6	50.10	336	168.05
DX 0204C	2.8	26	86	2	51	4.0	1.17	28.7	82.5	26.7	49.71	338	167.56
NG 3969R	2.6	29	76	3	51	4.2	1.11	29.1	82.8	27.0	49.96	334	166.70
AFD 2485	2.9	24	87	3	51	4.4	1.13	30.4	83.0	28.3	48.84	335	163.72
DX 24317	3.2	29	80	2	51	4.4	1.08	29.4	82.8	24.5	47.17	322	151.72

Table 2. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Chillicothe, in 2004.

Variety	Plant Pop.	Plant Height	Open bolls	Leaf	Color Grade	Micron	Fiber Length	Strength	Unif Index	Lint T-out	Loan Value	Lint Yield	Lint Value
	(#/row ft)	(in)	(%)			(units)	(in)	(g/Tex)	(%)	(%)	(¢/lb)	(lbs/A)	(\$/A)
NG 1553R	2.4	27	96	3	51	4.3	1.14	30.5	83.7	25.3	49.11	308	151.56
FM 5044R	2.8	26	85	3	52	4.1	1.09	28.4	82.4	25.3	48.89	298	145.29
Trial Average	2.7	27	86	3	52	4.4	1.10	29.0	82.6	27.4	49.33	372	183.50
LSD (P=.10)	NS	3	6.6	1	.	0.2	0.03	1.7	1.0	1.8	1.47	84	42.07
SD	0.4	3	5.6	1	.	0.2	0.02	1.5	0.8	1.5	1.24	71	35.61
CV	16	10	6.56	23	.	4	2	5	1	5	3	19	19

LSD = least significant difference; SD = standard deviation; CV = coefficient of variation; NS = not significant.

Means within a column which differ by more than the LSD are statistically different at the 0.10 level of significance.

Rolling Plains Uniform Cotton Variety Trial - 2003

Location: Texas Agricultural Experiment Station at Munday

Cultural Practices:

Planting Date: 5/29/2003
 Seeding Rate: 4.9 seed/ft
 Row Spacing: 40 inches
 Plot Size: 2 rows by 150 ft
 Replications: 4
 Harvest Date: 12/8/2003
 Soil Type: Miles fine sandy loam
 Fertilizer: 40 lbs N/acre + 20 lbs P2O5/acre - Sidedressed, 7/29
 Irrigation: Subsurface Drip Irrigated Daily - Total = 14.6 inches
 Previous Crop: Cotton
 Insecticide: Baythroid + Steward - 2.6 + 11.3 oz/A, 8/5
 Herbicide: Treflan - 1.5 pt/A, 3/3
 Staple - 1.2 oz/A, 7/14
 Harvest Aid: Boll'd + LI 700 - 32 + 16 oz/A, 11/20

Weather:

Month	Rainfall (inches)	Minimum	Average	Maximum	Average
		Temperature	Minimum	Temperature	Maximum
		----- (F) -----			
May	1.94	51	60	104	88
June	6.21	57	66	99	90
July	0.00	68	73	107	100
August	1.35	61	71	109	98
September	1.05	52	62	97	85
October	0.67	38	53	96	81

Table 3. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Munday, in 2003.

Variety	Plant Pop (#/row ft)	Plant Height (in)	Open bolls (%)	Leaf	Color Grade	Micron (units)	Fiber Length (in)	Strength (g/Tex)	Unif Index (%)	Lint T-out (%)	Loan Value (¢/lb)	Lint Yield (lb/A)	Lint Value (\$/A)
AFD 2485	2.9	38	55	2	31	3.5	1.16	31.2	82.4	27.7	56.53	1760	994.40
FM 960BR	3.1	41	53	2	21	3.6	1.12	31.8	82.4	26.2	55.51	1783	991.30
ST 5242 BR	2.7	37	68	1	31	3.2	1.10	28.4	82.6	29.2	55.52	1537	853.29
ST 5599 BR	3.0	40	47	2	31	3.3	1.13	28.2	80.7	25.1	55.46	1511	837.96
DP 444 BG/RR	2.7	39	61	1	21	3.5	1.12	29.1	82.3	26.2	55.06	1476	814.44
AFD 3602R	3.1	44	52	2	21	4.2	1.13	29.6	81.9	24.5	56.24	1355	761.80
PHY 410 R	2.5	41	42	2	31	3.3	1.13	29.4	82.5	24.5	54.89	1382	758.67
DP 424 BGII/RR	3.2	37	58	1	21	3.1	1.11	28.4	81.3	23.7	55.19	1318	726.43
AFD 2070	2.6	44	37	2	21	3.4	1.11	29.9	82.2	24.1	55.30	1308	723.09
PM 2344 BG/RR	3.0	31	64	1	31	3.7	1.09	30.8	82.7	24.0	55.61	1291	718.16
ST 4646B2R	2.5	39	52	1	31	3.4	1.12	29.0	80.6	24.6	52.38	1358	715.37
PM HS26	3.0	38	50	1	31	3.7	1.10	29.9	81.7	22.7	54.34	1300	706.49
ST 5303 R	3.0	45	51	2	21	3.8	1.12	31.4	82.3	22.9	55.05	1273	701.87
ST 3990 BR	2.4	38	55	1	21	4.4	1.06	26.9	80.5	24.2	50.75	1354	694.84
AFD 3511R	2.6	39	57	1	31	4.1	1.10	30.5	81.9	24.1	55.31	1255	693.79
FM 819R	2.3	42	37	2	21	3.0	1.16	30.8	82.9	25.1	56.60	1213	686.52
TAMU WD22	2.0	44	29	1	21	3.7	1.12	27.2	80.5	25.2	52.35	1280	670.24
DPX03X176BR	1.9	42	30	1	21	3.3	1.13	29.3	80.0	24.2	54.35	1222	663.25
ST 4892 BR	2.3	40	49	1	31	3.5	1.12	29.1	81.7	22.6	53.34	1236	659.87
DP 449 BG/RR	2.3	41	45	2	21	3.6	1.10	29.6	80.6	26.0	51.25	1282	655.61
DP 468 BGII/RR	2.6	39	45	2	21	4.2	1.13	28.1	79.8	21.9	52.12	1187	618.70
FM 989R	2.7	45	37	1	21	3.9	1.09	29.5	81.0	23.5	49.49	1229	608.03
DP 555 BG/RR	2.0	49	17	1	21	3.2	1.12	28.4	80.3	25.8	53.44	1116	596.29
Trial Average	2.6	41	47	1		3.6	1.12	29.4	81.5	24.7	54.18	1349	732.63
LSD (P=.10)	NS	3	16	1		0.4	0.02	1.1	0.9	1.4	2.29	151	94.72
SD	0.6	3	13	1		0.3	0.02	1.0	0.8	1.2	1.94	128	80.17
CV	24.2	6	28	36		8.9	1.72	3.2	1.0	4.9	3.58	9	10.94

LSD = least significant difference; SD = standard deviation; CV = coefficient of variation; NS = not significant.
Means within a column which differ by more than the LSD are statistically different at the 0.10 level of significance.

Rolling Plains Uniform Cotton Variety Trial - 2003

Location: Texas Agricultural Experiment Station at Chillicothe

Cultural Practices:

Planting Date: 5/29/2003
 Seeding Rate: 3.7 seed/ft
 Row Spacing: 40 inches
 Plot Size: 2 rows by 75 ft
 Replications: 4
 Harvest Date: 11/20/2003
 Soil Type: Abilene clay loam
 Fertilizer: 20 lbs N/acre + 10 lbs P2O5/acre - Sidedressed, 7/10
 Irrigation: None
 Previous Crop: Cotton
 Insecticide: Vydate C-LV - 8 oz/A, 7/17
 Baythroid + Steward - 2.6 + 12.8 oz/A, 8/5
 Herbicide: Treflan - 1.5 pt/A, 3/31
 Staple - 1.2 oz/A, 7/21
 Harvest Aid: Ginstar + Prep - 8 + 16 oz/A, 10/22

Weather:

Month	Rainfall (inches)	Minimum	Average	Maximum	Average
		Temperature	Minimum	Temperature	Maximum
		----- (F) -----			
May	1.38	45	58	104	85
June	5.20	55	65	101	88
July	0.06	65	73	106	99
August	2.55	62	72	107	98
September	0.76	48	61	96	84
October	0.08	40	52	97	81

Table 4. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Chillicothe, in 2003.

Variety	Plant Pop	Plant Height	Open bolls	Leaf	Color Grade	Fiber Micron	Fiber Length	Strength	Unif Index	Lint T-out	Loan Value	Lint Yield	Lint Value
	(#/row ft)	(in)	(%)			(units)	(in)	(g/Tex)	(%)	(%)		(lbs/A)	(\$/A)
AFD 3602 R	1.7	20	47	1	31	5.2	1.01	27.6	79.6	29.2	46.36	309	143.12
AFD 2485	2.7	21	53	2	41	5.1	1.01	28.0	80.2	26.5	46.30	296	135.82
DP 555 BG/RR	2.3	21	37	1	31	5.0	1.02	27.8	79.1	29.3	48.80	270	131.04
FM 960BR	2.8	21	68	2	41	4.6	0.99	28.0	79.1	28.8	47.30	276	130.09
DP 494 RR	2.6	20	22	1	31	5.1	1.03	29.1	80.4	29.1	47.40	267	126.45
PM 2379 RR	2.9	20	75	1	31	5.1	0.98	29.3	80.2	26.7	46.33	265	122.80
DP 458 B/RR	2.6	19	49	1	41	5.3	1.00	27.3	79.9	27.7	44.59	270	120.27
AFD 2070	2.7	19	68	2	31	4.8	0.99	27.8	79.8	26.4	48.25	251	119.52
TAMU WD22	2.8	21	56	2	41	5.0	1.02	28.0	80.2	24.9	47.34	243	115.13
PHY 410 R	2.8	20	70	1	31	4.9	0.97	26.7	78.9	27.4	47.04	230	108.15
DP X03X176BR	2.4	20	29	2	41	5.0	1.03	29.3	80.2	25.6	46.91	229	107.83
FM 989R	2.9	20	45	1	31	5.0	0.99	30.5	80.2	24.5	48.19	220	105.29
AFD 3511R	2.7	18	84	2	31	4.6	0.96	28.6	78.9	24.8	47.40	209	99.21
FM 819R	2.3	23	48	2	41	4.9	1.02	29.8	80.3	26.4	49.32	197	97.09
PM HS26	2.4	20	81	2	31	4.9	0.95	28.5	78.7	24.5	46.79	206	96.01
Trial Average	2.6	20	55	2	35	5.0	1.00	28.4	79.7	26.8	47.22	249	117.19
LSD (P=.10)	0.3	2	11	NS		NS	NS	1.7	NS	3.14	NS	51	23.80
SD	0.2	1	9	1		0.3	0.04	1.4	1.1	2.63	2.56	43	19.99
CV	8.3	7	17	43		6.4	4.32	5.1	1.4	9.83	5.42	17	17.05

LSD = least significant difference; SD = standard deviation; CV = coefficient of variation; NS = not significant.

Means within a column which differ by more than the LSD are statistically different at the 0.10 level of significance.

Rolling Plains Uniform Cotton Variety Trial - 2002

Location Texas Agricultural Experiment Station at Munday

Cultural Practices:

Planting Date: 5/31/2002
 Seeding Rate: 4.5 seed/ft
 Row Spacing: 40 inches
 Plot Size: 2 rows by 75 ft
 Replications: 3
 Harvest Date: 12/18/2002
 Soil Type: Miles fine sandy loam
 Fertilizer: 50 lbs N/acre + 25 lbs P2O5/acre - Sidedressed, 7/12
 Irrigation: Drip Irrigated Daily 7/16 - 9/18
 Previous Crop: Cotton
 Insecticide: Steward - 10 oz/A, 8/23
 Herbicide: Dual Magnum - 1qt/A, 6/3
 Staple - 1 oz/A, 6/25 and 7/14
 Harvest Aid: Prep - 1 qt/A, 11-10

Weather:

Month	Rainfall (inches)	Minimum	Average	Maximum	Average
		Temperature	Minimum	Temperature	Maximum
		----- (F) -----			
May	0.60	43	59	97	84
June	7.46	61	68	97	91
July	4.80	66	71	102	92
August	1.65	64	71	102	95
September	1.17	50	63	100	90
October	4.71	37	51	92	68

Table 5. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Munday, in 2002.

Variety	Plant Pop (#/row ft)	Plant Height (in)	Open bolls (%)	Leaf	Color Grade	Micron (units)	Fiber Length (in)	Strength (g/Tex)	Unif Index (%)	Lint T-out (%)	Loan Value	Lint Yield (lbs/A)
PM 2344 BG/RR	3.4	38	43	4	41	4.0	1.11	31.4	82.1	24	51.07	1566
ST 3539BR	2.7	42	33	2	31	3.8	1.06	29.5	81.6	23	52.47	1455
PM 2280 BG/RR	2.7	44	41	3	41	3.3	1.15	30.3	80.6	23	50.90	1446
TAMU 53B-2-99	2.4	37	46	4	41	3.8	1.09	32.1	82.3	22	50.02	1241
TAMU 41A-1-99	2.4	41	40	4	41	3.5	1.11	30.6	82.5	21	50.23	1206
FM 989BR	2.8	48	21	2	31	2.9	1.15	27.8	80.1	20	47.23	1187
ST 2454R	2.5	48	23	3	41	3.2	1.11	28.7	80.9	22	51.00	1182
DP 444 BG/RR	2.5	52	32	3	41	2.7	1.13	26.5	81.2	22	44.42	1168
SG 215 BG/RR	2.8	49	26	4	41	3.0	1.11	28.2	81.2	19	48.00	1159
PHY PH 98M-2983	2.8	42	30	3	41	3.5	1.14	28.3	81.1	24	51.57	1150
ST 4892BR	2.5	48	19	5	42	2.7	1.12	27.7	79.7	19	38.75	1110
DP 449 BG/RR	2.6	50	30	2	31	3.1	1.16	29.6	81.2	22	50.55	1104
PM HS 26	2.3	47	35	4	41	3.6	1.11	31.2	81.5	21	50.10	1037
FM 966	2.7	51	25	3	41	3.2	1.17	31.4	81.4	22	48.42	1032
FM 5013	2.6	38	48	3	41	4.2	1.08	31.6	81.1	21	52.35	1003
ST 4793R	2.3	50	23	5	42	3.0	1.14	27.5	80.5	20	41.85	997
PM 1218 BG/RR	2.2	52	18	3	31	3.3	1.11	27.8	80.2	23	48.73	993
TAMU 96WD-81	2.2	39	22	3	41	3.7	1.10	29.4	80.3	22	52.90	990
DP 555 BG/RR	2.5	57	18	3	32	2.6	1.13	27.2	78.7	22	42.03	936
PHY GA 161	2.4	54	24	3	31	3.4	1.15	29.8	80.6	20	51.55	910
PHY 355	3.1	49	27	4	41	3.3	1.14	30.8	81.0	19	48.88	880
FM 958	2.5	46	20	3	41	3.6	1.15	31.5	81.4	20	52.43	832
ST 457	2.2	45	26	5	42	3.4	1.14	29.5	80.5	20	47.05	780
DP 458 B/RR	2.6	57	18	3	31	2.6	1.15	27.3	78.7	18	43.47	779
TAMU 96WD-69S	2.6	48	36	2	42	3.5	1.10	30.2	80.5	19	50.80	776
ST 580	2.9	46	16	2	32	2.8	1.16	29.1	79.5	18	42.73	765
ST BXN 49B	2.5	45	21	3	41	3.0	1.14	27.4	79.3	20	45.27	704
FM 819	2.6	49	21	5	51	3.2	1.18	30.3	81.1	18	45.88	703
TAMU 96WD-18	1.8	51	14	4	41	2.8	1.23	30.7	80.0	17	43.95	674
PHY HS-12	3.0	53	24	3	41	3.3	1.18	29.3	80.5	19	51.45	663
TAMU 96WD-22	1.9	48	18	4	41	2.9	1.14	26.1	79.4	19	43.70	636
LSD (10%)	0.6	6	12	1	.	0.5	0.03	1.9	1.1	3	4.76	341
CV	16	10	32	26	.	10	2	5	1	12	7	25

LSD = least significant difference; CV = coefficient of variation; NS = not significant.

Means within a column which differ by more than the LSD are statistically different at the 0.10 level of significance.

Rolling Plains Uniform Cotton Variety Trial - 2002

Location Texas Agricultural Experiment Station at Chillicothe

Cultural Practices:

Planting Date: 5/23/2002
 Seeding Rate: 3.3 seeds/ft
 Row Spacing: 40 inches
 Plot Size: 2 rows x 75 ft
 Replications: 4
 Harvest Date: 11/8/2002
 Soil Type: Abilene clay loam
 Fertilizer: 40 lbs N/acre + 20 lbs P2O5/acre - Sidedressed
 Irrigation: None
 Previous Crop: Cotton
 Insecticide: Karate - 3.8 oz/A, 7/23
 Vydate - 8 oz/A, 7/15
 Steward + Curacron - 11.5 + 8 oz/A, 8/5
 Herbicide: Trifluralin 1.5 pt/A, Preplant
 Harvest Aid: 8 oz Ginstar + 1 pt Ethephon on 10-14

Weather:

Month	Rainfall (inches)	Minimum	Average	Maximum	Average
		Temperature	Minimum	Temperature	Maximum
		----- (F) -----			
May	1.95	43	57	97	82
June	3.96	59	68	95	89
July	4.22	61	71	102	91
August	0.55	63	71	101	95
Septemb	1.01	47	62	101	89
October	5.15	37	51	91	67

Table 6. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Chillicothe, in 2002.

Variety	Plant Pop	Plant Height	Open bolls	Leaf	Color Grade	Micron (units)	Fiber Length	Strength	Unif Index	Lint T-out	Loan Value	Lint Yield
	(#/row ft)	(in)	(%)				(in)	(g/Tex)	(%)	(%)		(lbs/A)
TAMU 96WD-22	1.9	27	26	2	32	4.2	0.96	27.0	78.3	28	45.78	406
TAMU 96WD-81	2.4	27	51	2	32	4.4	0.97	27.6	76.9	26	46.31	394
TAMU 96WD-69S	2.0	29	48	2	32	4.2	0.98	30.2	78.7	24	46.63	393
PHY 355	2.1	28	62	3	42	4.4	0.99	29.5	80.6	24	46.41	390
TAMU 53B-2-99	2.7	27	76	3	41	4.2	0.94	30.8	79.7	25	45.94	382
PM 2266 RR	2.7	26	71	3	41	4.1	0.96	31.0	79.6	24	46.92	382
DP 444 BG/RR	2.5	28	58	2	31	3.7	0.96	27.0	78.9	26	46.74	374
SG 215 BG/RR	1.9	28	50	2	31	4.4	0.96	27.9	79.7	26	46.24	370
PM HS-26	2.3	26	54	3	41	4.3	0.95	32.3	80.2	24	47.21	360
PM 2344 BG/RR	2.3	24	84	3	41	4.1	0.96	31.9	80.4	23	47.35	356
DP 555 BG/RR	2.9	29	22	2	31	4.7	0.97	27.4	78.1	28	45.80	347
TAMU 96WD-18	1.9	28	43	4	41	4.1	1.05	31.5	80.7	24	50.54	345
PM 2326 RR	2.5	28	57	3	41	4.4	0.97	31.3	80.4	25	47.63	345
TAMU 41A-1-99	2.0	27	84	4	41	4.1	0.97	29.8	80.7	23	47.02	343
DP 449 BG/RR	1.9	26	45	2	31	4.2	0.94	27.8	78.3	26	45.99	343
PM 2280 BG/RR	2.3	27	71	3	31	3.5	0.98	30.2	79.0	24	47.01	342
PHY PH 98M-2983	2.5	28	55	2	31	4.4	0.94	27.5	78.8	27	45.70	341
DP 458 B/RR	5.1	23	21	1	31	4.7	0.95	29.3	78.9	25	46.55	327
PHY HS-12	1.6	28	31	2	31	4.5	1.00	29.2	78.6	23	47.41	306
PHY GA 161	1.9	28	26	2	31	4.2	1.00	32.8	79.7	24	49.17	304
DP 655 B/RR	1.9	28	40	2	31	4.0	0.95	29.8	78.7	25	46.59	294
LSD (10%)	0.8	2	12	1	.	0.3	0.02	1.6	0.9	2	1.36	55
CV	27	7	19	31	.	5	2	5	1	5	2	13

LSD = least significant difference; CV = coefficient of variation; NS = not significant.

Means within a column which differ by more than the LSD are statistically different at the 0.10 level of significance.

Rolling Plains Uniform Cotton Variety Trial - 2001

Location Texas Agricultural Experiment Station at Munday

Cultural Practices:

Planting Date: 5/22/2001
Seeding Rate: 5.5 seeds/ft
Row Spacing: 40 inches
Plot Size: 2 rows by 75 ft
Replications: 4
Harvest Date: 11/26/2001
Soil Type: Miles fine sandy loam
Fertilizer: 50 lb N/acre + 25 lb P₂O₅/acre - Sidedressed, 6/29
Irrigation: 5 seasonal applications
Previous Crop: Pearl Millet
Insecticide: Vydate - 0.5 pt/A, 8/7
7 applications of Malathion by TBWEF
Herbicide: Trilin - 1.5 pt/A, Preplant, 4/6
Harvest Aid: Finish - 2.6 pt/A, 11/2

Weather:

Month	Rainfall (inches)	Minimum Temperature ----- (F)	Average Minimum Temperature	Maximum Temperature	Average Maximum Temperature
May	2.84	46	61	101	86
June	0.53	58	69	102	95
July	0.14	67	75	107	102
August	1.72	64	71	104	95
Septemb	3.07	45	61	98	87
October	0.77	35	50	91	78

Table 7. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Munday, in 2001.

Variety	Plant Height	Open bolls	Leaf	Color Grade	Fiber Micron	Fiber Length	Strength	Unif Index	Lint T-out	Loan Value	Lint Yield
	(in)	(%)			(units)	(in)	(g/tex)	(%)	(%)	(¢/lb)	(lbs/A)
DP 491	35	32	2	42	4.1	1.18	30.6	82	25	49.84	1194
TAES MAR-283L-1-98	30	66	3	52	4.6	1.1	31.8	83	21	45.53	1094
PM 2344 BG/RR	29	58	3	52	5	1.07	30.9	83	22	43.35	1032
TAES MAR-54G-2-99	33	65	2	52	4.9	1.09	31.8	83	22	46.79	1029
DP 451 B/R	34	62	2	51	4.8	1.13	28.4	82	22	46.79	1013
ST 4793R	34	40	3	52	4.8	1.08	28.3	82	26	44.89	1013
DP 655 B/RR	37	41	2	42	4.5	1.14	31.3	83	25	51.04	1008
TAES MAR-280-K-1-98	33	64	2	52	5.3	1.08	30.2	83	21	42.54	1007
ST 3539BR	37	46	2	42	4.6	1.02	29.8	82	23	44.67	1005
TAES 96 WD-22	33	49	3	52	4.2	1.12	28.2	82	26	48.35	983
ST 5599BR	34	39	3	52	4.4	1.11	28.9	81	24	45.96	978
TAES 96 WD-81	31	54	2	51	4.6	1.11	30	81	24	48.6	962
TAES MAR-53B-2-99	29	65	3	52	4.8	1.05	31.4	82	22	45.24	952
DP 448 B	36	33	1	52	3.8	1.14	29.3	82	23	48.06	929
PM 1218 BG/RR	36	41	2	42	4.5	1.09	28.7	83	23	48.91	898
SG 215 BG/RR	34	50	2	42	5	1.06	26.2	82	25	47.33	897
Tamcot Sphinx	32	60	3	42	4.6	1.09	31.7	83	20	49.35	886
ST 4892BR	34	29	3	52	4.8	1.11	28.8	83	26	46.65	881
SG 501 BR	35	52	2	52	4.7	1.11	29.8	83	24	47.69	866
PM 2326 RR	37	62	2	52	4.8	1.09	30.5	83	22	46.58	857
PM 2326 BG/RR	38	52	3	52	4.6	1.05	29.5	83	21	45.31	850
DP 458 B/RR	36	42	3	52	4.6	1.13	31.3	82	22	46.84	849
PM 2280 BG/RR	33	58	3	51	4.6	1.1	31.3	82	24	50.11	821
PHY GA 161	39	43	2	52	4.4	1.13	31.7	82	22	48.91	819
PM 2266 RR	33	59	3	52	4.5	1.08	31.1	83	20	47.01	817
TAES MAR-52J-1-99	34	64	3	52	4.7	1.07	30.1	82	21	46.58	810
ST 2454R	36	45	2	52	4.5	1.06	28.9	83	24	47.05	809
Tamcot Pyramid	32	65	3	52	4.8	1.05	29.8	82	24	46.5	805
Tamcot Sphinx-V	32	54	3	52	4.4	1.11	32.6	83	21	48.5	802
PHY HS-12	34	52	1	51	4.6	1.14	31.1	81	25	49.64	787
PM 2200 RR	37	44	2	42	4.4	1.11	30.5	83	22	48.65	779
PHY 355	36	55	3	52	4.8	1.1	29.9	83	24	44.04	755
PM HS 26	36	56	2	52	4.6	1.1	31.1	83	24	46.81	714
TAES 94-L25	27	64	3	52	4.9	1.16	31	82	24	44.49	711
LSD (10%)	4	11	1		0.3	0.03	1.0	1	2	3.07	184
CV	9	18	32		6	2	3	1	7	6	17

LSD = least significant difference; C.V. = coefficient of variation; NS = not significant.

Means within a column which differ by more than the LSD are statistically different at the 0.10 level of significance.

Rolling Plains Uniform Cotton Variety Trial -2001

Location Texas Agricultural Experiment Station at Chillicothe

Cultural Practices:

Planting Date: 5/24/2001
 Seeding Rate: 4.2 seeds/ft
 Row Spacing: 40 inches
 Plot Size: 2 rows by 75 ft
 Replications: 4
 Harvest Date: 10/26/2001
 Soil Type: Abilene clay loam
 Fertilizer: 40 lb N/acre + 20 lb P₂O₅/acre - Sidedressed, 6/12
 Irrigation: 1 application (7/24)
 Previous Crop: Cotton
 Insecticide: Vydate - 8.7 oz/A, 7/7
 No applications of Malathion by TBWEF
 Herbicide: Trilin - 1.5 pt/A, Preplant, 4/5
 Harvest Aid: Ginstar - 8 oz/A, 10/20
 Prep - 1 lb/A
 Induce - 1 % v/v

Weather:

Month	Rainfall (inches)	Minimum	Average	Maximum	Average
		Temperature	Minimum	Temperature	Maximum
		----- (F) -----			
May	3.73	45	60	99	84
June	0.28	56	68	102	95
July	0.21	67	75	109	102
August	1.40	66	71	103	96
September	1.57	41	61	102	87
October	0.02	32	48	92	79

Table 8. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Chillicothe, in 2001.

Variety	Plant Height	Open bolls	Leaf	Color Grade	Micron	Fiber Length	Strength	Unif Index	Lint T-out	Loan Value	Lint Yield
	(in)	(%)			(units)	(in)	(g/tex)	(%)	(%)	(¢/lb)	(lbs/A)
SG 215 BG/RR	28	83	1	31	5.0	1.04	26.8	82	30	46.49	915
TAES 96 WD-22	28	71	1	31	4.5	1.11	28.5	81	28	54.05	814
Tamcot Pyramid	26	78	1	31	4.9	1.05	28.8	81	26	49.43	775
PHY HS-12	31	53	1	31	5.1	1.13	32.2	82	28	50.61	735
Tamcot Sphinx-V	26	55	1	31	5.0	1.09	33.0	83	25	52.46	732
TAES MAR-280-K-1-98	28	74	1	31	5.3	1.08	31.2	83	23	47.91	726
PHY 355	29	60	2	31	5.2	1.10	31.1	84	27	49.74	698
ST 3539BR	28	70	1	21	5.2	1.02	29.8	82	27	42.74	697
TAES MAR-53B-2-99	24	71	2	41	4.9	1.05	32.0	83	24	48.78	694
PHY GA 161	31	53	1	31	4.8	1.15	32.8	83	25	55.53	683
DP 458 B/RR	28	58	1	31	5.1	1.11	31.0	81	25	50.80	682
TAES MAR-52J-1-99	24	84	2	41	4.5	1.09	30.8	82	24	53.79	679
TAES 96 WD-81	26	68	1	31	4.8	1.10	30.0	81	25	53.15	667
TAES MAR-54G-2-99	27	66	1	31	5.1	1.11	33.0	84	23	52.01	664
PM 2280 BG/RR	24	77	1	31	4.2	1.09	32.3	82	24	53.63	662
PM 1218 BG/RR	32	56	1	21	5.3	1.08	28.3	83	28	47.60	660
Tamcot Sphinx	25	71	1	31	5.0	1.09	31.9	83	24	51.30	657
TAES MAR-283L-1-98	24	76	2	41	4.6	1.12	32.1	83	21	54.08	655
PM 2200 RR	30	65	1	21	4.9	1.08	30.3	82	25	52.81	638
PM 2326 RR	30	65	1	31	5.1	1.07	31.3	82	24	49.54	637
PM 2344 BG/RR	24	76	2	41	5.0	1.09	32.1	83	22	49.01	628
ST 2454R	32	63	1	21	5.2	1.05	29.2	82	27	44.78	619
PM 2379 RR	29	66	1	31	5.2	1.07	30.7	82	26	47.46	617
All-Tex Atlas RR	30	69	1	31	4.9	1.04	30.6	82	24	46.99	606
PM 2266 RR	26	65	2	31	4.6	1.08	31.2	83	23	53.75	602
TAES 94 L-25	21	77	1	31	4.6	1.20	32.3	83	23	55.21	599
PM 2326 BG/RR	27	74	1	31	5.0	1.03	30.9	81	23	46.44	578
PM HS-26	28	62	1	31	5.0	1.06	31.3	83	23	48.01	571
All-Tex Xpress RR	26	81	1	31	4.2	1.11	32.3	83	21	55.23	514
LSD (10%)	3	10	0	.	0.2	0.02	0.8	1	2	2.14	81
CV (%)	10	12	22	.	3	1	2	1	6	4	10

LSD = least significant difference; C.V. = coefficient of variation; NS = not significant.

Means within a column which differ by more than the LSD are statistically different at the 0.10 level of significance.

Rolling Plains Uniform Cotton Variety Trial - 2000

Location Texas Agricultural Experiment Station at Munday

Cultural Practices:

Planting Date: 5/23/2000
 Seeding Rate: 5.5 seeds/ft
 Row Spacing: 40 inches
 Plot Size: 2 rows by 75 ft
 Replications: 4
 Harvest Date: 11/21-22/00
 Soil Type: Miles fine sandy loam
 Fertilizer: 46 lb N/acre + 23 lb P₂O₅/acre - Sidedressed, 7/6
 Irrigation: 6 seasonal applications
 Previous Crop: Wheat
 Insecticide: Karate + Lorsban - 7/26
 Lorsban - 8/11
 Lorsban - 8/26
 Karate + Lorsban - 9/2
 2 applications of Fyfanon by TBWEF
 Herbicide: Trilin - 1.5 pt/A, Preplant, 3/9
 Harvest Aid: Def + Cyclone - 10/18

Weather:

Month	Rainfall (inches)	Minimum	Average	Maximum	Average
		Temperature	Minimum	Temperature	Maximum
		(F)			
May	1.28	51	65	113	93
June	2.84	59	69	101	88
July	0.30	67	74	108	99
August	0.00	68	74	108	102
Septemb	0.00	40	64	111	95
October	5.87	33	57	105	77

Table 9. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Munday, in 2000.

Variety	Plant	Open	Leaf	Color	Micron	Fiber	Strength	Unif	Lint	Loan	Lint
	Height	bolts		Grade		Length		Index	Turnout	Value	Yield
	(in)	(%)			(units)	(in)	(g/tex)	(%)	(%)	(¢/lb)	(lbs/A)
SG 215 BG/RR	37	97	2	51	4.6	1.05	24	82	29	44.59	1905
TAMU 94L-25	28	96	3	61	4.4	1.18	30	82	25	44.14	1578
TAMCOT Pyramid	34	98	3	51	4.6	1.06	26	82	27	45.21	1557
DP 655 B/RR	41	98	3	51	3.6	1.11	31	80	27	46.30	1554
AFD 2050	36	93	2	61	4.4	1.08	27	81	27	44.91	1519
TAMU 93WB-59	34	93	3	61	4.1	1.08	28	80	27	44.78	1499
SG 125 B/R	37	97	2	61	4.2	1.07	25	81	26	43.34	1496
FM 958	34	95	3	61	4.6	1.14	30	82	28	46.43	1494
TAMCOT Sphinx	34	98	3	61	4.5	1.08	28	82	27	45.80	1494
TAMU 283L-1-98	31	97	4	61	4.1	1.15	30	83	23	44.08	1487
DP PMX9C23 B/R	39	96	2	61	4.4	1.06	28	81	25	45.14	1486
TAMU CIQPIHGP6H-1-97	35	94	4	61	4.2	1.12	28	82	26	43.90	1485
PM 2280 BG/RR	35	98	3	51	4.2	1.09	29	81	25	46.35	1483
PM 2326 BG/RR	38	97	3	51	4.5	1.04	27	81	26	45.13	1466
PM 1218 BG/RR	37	98	2	51	4.9	1.07	25	82	27	43.73	1461
SG 501BR	39	97	2	61	4.2	1.07	27	82	26	45.35	1453
DP 451 B/RR	33	96	3	61	4.7	1.10	26	81	26	42.85	1436
AFD Rocket	36	97	3	61	4.5	1.08	28	82	25	45.76	1428
ST 4892BR	41	97	2	61	4.0	1.10	27	82	27	45.59	1414
ST 2454R	37	95	2	61	4.5	1.07	26	82	27	43.98	1405
PHY 355	36	94	3	61	4.5	1.10	27	82	25	44.01	1390
TAMU GARNTHGPIH-1-96	33	94	4	61	4.5	1.11	29	83	24	44.21	1387
DP 458 B/RR	39	95	2	61	3.9	1.09	29	80	26	46.14	1353
FM 5017	40	94	3	51	4.6	1.06	29	82	24	45.25	1351
DP PMX 00V06 B/R	34	97	3	61	4.2	1.06	28	82	22	44.51	1347
TAMCOT Luxor	34	97	3	61	4.5	1.05	27	81	25	43.81	1340
TAMU HQCULHQPIH-1-95	32	99	2	61	4.2	1.10	28	82	26	45.15	1326
PM 1560 BG/RR	38	97	2	51	4.0	1.08	28	81	28	46.41	1324
G&P GPX 3-00	33	98	3	61	4.1	1.11	27	81	24	44.98	1310
FM 989	37	93	3	61	4.3	1.13	31	82	26	46.75	1306
TAMU SPNXCUCUPIH-1-96	33	95	3	51	4.5	1.13	29	83	23	47.54	1297

Table 7. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Munday, in 2000.

Variety	Plant	Open	Leaf	Color	Fiber		Uniformity	Lint	Loan	Lint	
	Height	bolts		Grade	Micronaire	Length	Strength	Index	Turnout	Value	Yield
	(in)	(%)			(units)	(in)	(g/tex)	(%)	(%)	(¢/lb)	(lbs/A)
PM HS 26	35	94	3	61	4.7	1.06	28	82	24	43.40	1292
AFD Explorer	35	94	3	61	4.4	1.05	28	81	23	43.48	1287
TAMU 279C-1-98	30	97	4	61	4.0	1.18	31	83	23	44.50	1263
G&P GPX 4-00	34	95	3	61	4.4	1.12	28	81	25	46.16	1262
FM 819	39	95	3	61	4.4	1.14	30	82	26	44.09	1234
TAMU 94J-3	35	98	3	61	4.2	1.15	29	82	23	44.33	1202
Bronco 717	35	97	2	51	4.0	1.07	27	80	24	46.12	1197
FM 5013	36	94	3	51	4.5	1.06	28	82	23	45.14	1196
PHY GA 161	41	94	3	51	4.2	1.14	30	82	25	46.46	1173
FM 832	48	93	2	51	4.0	1.16	31	83	25	49.28	1160
AFD 2051	38	94	2	61	4.4	1.12	28	81	22	46.26	1153
FM 5015	40	90	2	51	4.7	1.06	29	82	24	44.26	1125
AFD C2525	36	91	3	61	4.5	1.06	29	82	23	44.43	987
LSD (P=.10)	4	3	1		0.3	0.02	1	1	2	2.15	152
CV	9	2	27		5.3	1.67	4	1	5	4.07	9

LSD = least significant difference; C.V. = coefficient of variation; NS = not significant.

Means within a column which differ by more than the LSD are statistically different at the 0.10 level of significance.

Rolling Plains Uniform Cotton Variety Trial -2000

Location Texas Agricultural Experiment Station at Chillicothe

Cultural Practices:

Planting Date: 5/22/2000
 Seeding Rate: 4.2 seeds/ft
 Row Spacing: 40 inches
 Plot Size: 2 rows by 75 ft
 Replications: 4
 Harvest Date: 10/18/2000
 Soil Type: Abilene clay loam
 Fertilizer: 40 lb N/acre + 20 lb P₂O₅/acre - Sidedressed, 7/7
 Irrigation: 2 applications (7/21 & 8/15)
 Previous Crop: Cotton
 Insecticide: Karate - 7/24
 Steward + Bidrin - 8/1
 Lorsban + Karate - 8/11
 Tracer + Curacron - 8/16
 10 applications of Fyfanon by TBWEF
 Herbicide: Trilin - 1.5 pt/A, Preplant, 3/14
 Trilin - 0.75 pt/A, Hooded Sprayer, 7/19
 Harvest Aid: None

Weather:

Month	Rainfall (inches)	Minimum	Average	Maximum	Average
		Temperature	Minimum	Temperature	Maximum
		----- (F) -----			
May	1.34	45	62	112	91
June	7.73	58	67	100	87
July	1.09	62	71	106	98
August	0.00	66	74	106	102
September	0.11	37	62	109	93
October	5.76	27	56	105	76

Table 10. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Chillicothe, in 2000.

Variety	Plant Height	Open bolls	Leaf	Color Grade	Fiber Micron	Fiber Length	Fiber Strength	Unif Index	Lint T-out	Loan Value	Lint Yield
	(in)	(%)			(units)	(in)	(g/tex)	(%)	(%)	(¢/lb)	(lbs/A)
PHY 355	33	99	3	41	4.9	1.09	29	82	22	51.19	782
PM 1218 BG/RR	32	99	1	21	5.1	1.03	26	81	25	45.15	758
PM 2280 BG/RR	30	95	2	31	4.2	1.06	31	81	22	51.79	706
TAMU GARNTHGPIH-1-96	29	99	2	41	4.5	1.07	29	81	21	49.63	690
TAMU 94J-3	32	97	2	31	4.4	1.15	31	83	23	55.16	689
FM 958	29	98	1	31	4.4	1.09	31	80	23	52.81	679
TAMCOT Pyramid	30	99	1	31	4.3	1.03	28	80	24	48.09	674
AFD 2050	33	100	1	31	4.1	1.05	31	81	23	50.03	664
G&P GPX 4-00	32	98	2	31	4.3	1.08	30	81	21	53.76	663
DP 655 B/R	34	100	1	21	4.0	1.07	32	81	23	52.01	659
TAMU 93WB-59	29	98	1	31	4.0	1.08	29	80	23	52.39	657
TAMU 283L-1-98	31	97	2	41	4.1	1.10	31	82	20	53.30	656
TAMU HQCULHQPIH-1-95	29	98	1	31	4.5	1.03	27	79	23	47.64	655
PM 2379 RR	32	98	1	31	4.8	1.05	29	81	23	47.64	654
FM 832	35	99	2	31	4.2	1.14	34	81	21	54.80	653
TAMU CIQPIHGP6H-1-97	29	99	2	41	3.9	1.07	30	80	21	51.33	645
Bronco 141	31	99	2	31	4.0	1.07	30	81	21	51.78	640
DP 458 B/RR	32	100	2	21	4.0	1.06	30	81	24	51.01	636
Bronco 73	30	99	1	31	4.0	1.05	30	80	22	49.96	618
FM 989	33	99	1	31	4.3	1.10	33	82	21	53.74	612
PM HS26	31	99	2	31	4.2	1.05	31	82	20	50.44	608
PHY GA161	33	100	1	31	3.9	1.14	35	82	21	55.29	603
AFD Rocket	29	115	2	31	4.6	1.07	29	82	23	52.25	602
DP PMX9C23 B/R	32	98	1	31	4.5	1.04	29	81	22	48.14	597
FM 5013	31	96	2	31	4.3	1.06	31	82	20	50.41	592
TAMU 94L-25	25	97	2	31	4.0	1.13	31	80	20	54.33	589
TAMU SPNXCUCUPIH-1-96	28	99	2	31	4.3	1.10	31	83	20	53.91	585
AFD 2051	32	98	2	31	4.3	1.09	29	81	22	52.58	567

Table 8. Results from the cotton variety trial at the Texas Agricultural Experiment Station, Chillicothe, in 2000.

Variety	Plant Height	Open bolls	Leaf	Color Grade	Fiber Micronaire	Fiber Length	Fiber Strength	Uniformity Index	Lint Turnout	Loan Value	Lint Yield
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	(in)	(%)			(units)	(in)	(g/tex)	(%)	(%)	(¢/lb)	(lbs/A)
AFD Explorer	34	98	2	31	4.3	1.07	31	82	20	53.63	567
FM 5017	33	95	1	31	4.6	1.03	31	81	20	47.81	562
FM 819	31	99	1	31	4.5	1.10	32	82	21	54.16	552
TAMU 279C-1-98	29	98	3	41	4.1	1.12	30	82	19	52.95	550
TAMCOT Luxor	29	99	2	41	4.9	1.03	26	82	20	46.13	548
G&P GPX 3-00	31	100	1	31	4.0	1.11	30	82	20	53.95	538
PM 2326 BG/RR	30	97	2	31	4.4	1.02	30	80	21	46.76	530
FM 5015	35	97	2	31	4.5	1.07	32	83	21	52.26	490
TAMCOT Sphinx	30	99	1	31	4.4	1.07	31	83	22	50.88	481
AFD C2525	30	97	2	41	4.4	1.04	30	81	19	48.30	451
LSD (10%)	2	NS	1		0.3	0.03	2	1	1	2.84	91
CV (%)	6	5	34		6	2	5	1	6	5	13

LSD = least significant difference; C.V. = coefficient of variation; NS = not significant.

Means within a column which differ by more than the LSD are statistically different at the 0.10 level of significance.

Table 11. Lint yield results for the past five years from the cotton variety trial at the Texas Agricultural Experiment Station, Munday, in 2000, 2001, 2002, 2003, and 2004

Variety	2000 Lint Yield	2001 Lint Yield	2002 Lint Yield	2003 Lint Yield	2004 Lint Yield	Avg of 2280* (%)	Trials (#)
ST 4892BR	1414	881	1110	1236	1343	97	5
SG 215 BG/RR	1905	897	1159		1118	102	4
PM 2280 BG/RR	1483	821	1446		1214	100	4
PM HS26	1292	714	1037	1300		86	4
ST 5599BR		978		1511	1420	117	3
PM 2344 BG/RR		1032	1566	1291		111	3
DP 444 BG/RR			1168	1476	1348	102	3
PM 1218 BG/RR	1461	898	993			92	3
ST 2454R	1405	809	1182			92	3
DP 555 BG/RR			936	1116	1247	84	3
DP 458 B/RR	1353	849	779			83	3
PHY 355	1390	755	880			82	3
PHY GA 161	1173	819	910			81	3
FM 960BR				1783	1483	130	2
ST 5242 BR				1537	1637	127	2
AFD 2485				1760	1244	119	2
DP 655 B/RR	1554	1008				114	2
ST 3539BR		1005	1455			112	2
DP 451 B/RR	1436	1013				110	2
PHY 410 R				1382	1247	105	2
ST 4646B2R				1358	1267	104	2
TAMCOT Sphinx	1494	886				104	2
SG 501BR	1453	866				102	2
TAMCOT Pyramid	1557	805				102	2
PM 2326 BG/RR	1466	850				101	2
AFD 2070				1308	1218	100	2
FM 989BR			1187		1398	99	2
DP 424 BGII/RR				1318	1124	97	2
FM 989R				1229	1205	97	2
ST 4793R		1013	997			96	2
TAES 96WD-81		962	990			93	2
FM 966			1032		1312	90	2
DP 449 BG/RR			1104	1282		87	2
TAES 96WD-22		983	636			82	2
FM 958	1494		832			79	2
FM 5013	1196		1003			75	2
PHY HS-12		787	663			71	2
FM 819	1234		703			66	2
DP 491		1194				145	1

Table 11. Lint yield results for the past five years from the cotton variety trial at the Texas Agricultural Experiment Station, Munday, in 2000, 2001, 2002, 2003, and 2004

Variety	2000 Lint Yield	2001 Lint Yield	2002 Lint Yield	2003 Lint Yield	2004 Lint Yield	Avg of 2280*	Trials
						(%)	(#)
TAES MAR-283L-1-98		1094				133	1
DP 455 BG/RR					1542	127	1
TAES MAR-54G-2-99		1029				125	1
TAES MAR-280-K-1-98		1007				123	1
DP 445 BG/RR					1444	119	1
TAES MAR-53B-2-99		952				116	1
FM 960B2R					1403	116	1
DP 448 B		929				113	1
TAMU 94L-25	1578					106	1
AFD 3602 R				1355		104	1
ST 3990 BR				1354		104	1
ST 3664R					1259	104	1
ST 4575BR					1256	103	1
FM 958LL					1250	103	1
AFD 2050	1519					102	1
NG 2448R					1233	102	1
TAMU 93WB-59	1499					101	1
SG 125 BR	1496					101	1
DP 432 RR					1223	101	1
TAMU 283L-1-98	1487					100	1
DP PMX9C23 B/R	1486					100	1
TAMU CIQPIHGP6H-1-97	1485					100	1
FM 960R					1212	100	1
PM 2266 RR		817				100	1
DPLX 02T57R					1206	99	1
TAES MAR-52J-1-99		810				99	1
DX 24317					1197	99	1
TAMU WD22				1280		98	1
BCG 50 R					1192	98	1
ST 5303 R				1273		98	1
Tamcot Sphinx-V		802				98	1
STX 3636B2R					1181	97	1
DP 434 RR					1172	97	1
AFD 3511 R				1255		97	1
AFD Rocket	1428					96	1
DP 488 BG/RR					1167	96	1
DP 449 BG/RR					1153	95	1
PM 2200 RR		779				95	1
DPX03X176BR				1222		94	1

Table 11. Lint yield results for the past five years from the cotton variety trial at the Texas Agricultural Experiment Station, Munday, in 2000, 2001, 2002, 2003, and 2004

Variety	2000 Lint Yield	2001 Lint Yield	2002 Lint Yield	2003 Lint Yield	2004 Lint Yield	Avg of 2280* (%)	Trials (#)
TAMU GARNTHGPIH-1-96	1387					94	1
FM 819R				1213		93	1
DX 0204C					1110	91	1
DP 468 BGII/RR				1187		91	1
FM 5017	1351					91	1
DP PMX 00V06 B/R	1347					91	1
TAMCOT Luxor	1340					90	1
NG 1553R					1088	90	1
AFD 2428					1086	89	1
TAMU HQCULHQPIH-1-95	1326					89	1
PM 1560 BG/RR	1324					89	1
G&P GPX 3-00	1310					88	1
FM 989	1306					88	1
TAMU SPNXCUCUPIH-1-96	1297					87	1
DP 543 BGII/RR					1056	87	1
AFD Explorer	1287					87	1
TAES 94-L25		711				87	1
TAMU 53B-2-99			1241			86	1
DX 24119					1038	86	1
TAMU 279C-1-98	1263					85	1
G&P GPX 4-00	1262					85	1
DP 494 RR					1030	85	1
STX 5454B2R					1029	85	1
TAMU 41A-1-99			1206			83	1
ST 6636BR					998	82	1
PHY 510 R					986	81	1
TAMU 94J-3	1202					81	1
Bronco 717	1197					81	1
PH 98M-2983			1150			80	1
FM 832	1160					78	1
AFD 2051	1153					78	1
FM 5015	1125					76	1
AFD C2525	987					67	1
PM 2326 RR			857			59	1
ST 457			780			54	1
TAMU 96WD-69S			776			54	1
ST 580			765			53	1
ST BXN 49B			704			49	1
TAMU 96WD-18			674			47	1

PM 2280 BG/RR used for average except in 2003 (PM HS 26 used)

Table 12. Lint yield results for the past five years from the cotton variety trial at the Texas Agricultural Experiment Station, Chillicothe, in 2000, 2001, 2002, 2003, and 2004

Variety	2000 Lint Yield	2001 Lint Yield	2002 Lint Yield	2003 Lint Yield	2004 Lint Yield	Avg of 2280* (%)	Trials (#)
DP 458 B/RR	636	682	327	270		105	4
PM 2280BG/RR	706	662	342		428	100	4
PM HS26	608	571	360	206		94	4
SG 215 BG/RR		915	370		356	110	3
PM 2379 RR	654	617		265		105	3
AFD 3602 R				309	391	121	2
FM 960BR				276	434	118	2
DP 555 BG/RR			347	270		116	2
AFD 2485				296	335	111	2
AFD 2070				251	418	110	2
PSC 355	782	698				108	2
TAMCOT Pyramid	674	775				106	2
DP 494 RR				267	346	105	2
PM 1218 BG/RR	758	660				104	2
PM 2266 RR		602	382			101	2
PSC HS-12		735	306			100	2
PM 2344 BG/RR		628	356			99	2
PM 2326 RR		637	345			99	2
PSC 410 R				230	336	95	2
PSC GA161	603	683				94	2
DP 655 B/RR	659		294			90	2
TAMCOT Sphinx	481	657				84	2
PM 2326 BG/RR	530	578				81	2
TAMU 96WD-22			406			119	1
TAMU WD22				243		118	1
TAMU 96WD-81			394			115	1
TAMU 96WD-69S			393			115	1
PSC 355			390			114	1
FM 960R					484	113	1
TAMU 53B-2-99			382			112	1
DP X03X176BR				229		111	1
Tamcot Sphinx-V		732				111	1
DP 444 BG/RR			374			109	1
FM 989R				220		107	1
ST 3539BR		697				105	1
FM 960B2R					441	103	1
AFD 3511 R				209		101	1
TAMU 96WD-18			345			101	1
DP 449 BG/RR			343			100	1
TAMU 41A-1-99			343			100	1
PSC PH 98M-2983			341			100	1
NG 2448R					425	99	1

Table 12. Lint yield results for the past five years from the cotton variety trial at the Texas Agricultural Experiment Station, Chillicothe, in 2000, 2001, 2002, 2003, and 2004

Variety	2000 Lint Yield	2001 Lint Yield	2002 Lint Yield	2003 Lint Yield	2004 Lint Yield	Avg of 2280*	Trials
						(%)	(#)
PM 2200 RR		638				96	1
FM 958	679					96	1
AFD 2428					410	96	1
FM 819R				197		96	1
FM 989BR					406	95	1
AFD 2050	664					94	1
ST 2454 R		619				94	1
FM 832	653					92	1
All-Tex Atlas RR		606				92	1
DP 434 RR					389	91	1
Bronco 141	640					91	1
DPLX 02T57R					387	90	1
PSC GA 161			304			89	1
ST 3664R					377	88	1
Bronco 73	618					88	1
FM 989	612					87	1
AFD Rocket	602					85	1
PSC 510R					359	84	1
FM 5013	592					84	1
ST 6848R					358	84	1
ST 4686R					355	83	1
DP 488 BG/RR					350	82	1
DX 24119					344	80	1
AFD 2051	567					80	1
AFD Explorer	567					80	1
FM 800R					342	80	1
FM 5017	562					80	1
BCG 50 R					338	79	1
DX 0204C					338	79	1
FM 819	552					78	1
NG 3969R					334	78	1
TAMCOT Luxor	548					78	1
All-Tex Xpress RR		514				78	1
DX 24317					322	75	1
NG 1553R					308	72	1
FM 5044R					298	70	1
FM 5015	490					69	1
AFD 2525	451					64	1

*PM 2280 BG/RR used for average except in 2003 (PM HS 26 used)