2004 Annual Report

Extension Cotton Research and Demonstrations In Oklahoma

Southwest Research & Extension Center

In cooperation with

OSU

Integrated Pest Management Program

Oklahoma State University

2004 State Extension Cotton Research Report

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An effective cotton integrated pest management program encompasses all aspects of production. This report contains summarized data from experiments and demonstrations intended to address key production issues in the areas of fertility, plant population, tillage, variety selection, weed control and defoliation. 2004 was another interesting year for Oklahoma cotton producers. April rains combined with warm soil temperatures experienced early in the month of May created ideal planting conditions this year. Roughly two weeks into May temperatures soared to the century mark removing our planting moisture. Unfortunately we received no rainfall in May, thus acreage not planted by the 20th was either dry planted or postponed. June delivered moderate temperatures (below 95 degrees) and approximately 2-3 inches of rain per week (totaling over 9 inches for the month). Cotton planted in early May soaked up the rains and kicked it into high gear while the remaining dryland acreage was planted with ample moisture. Although early planted cotton was blooming by the 4th of July, several fields were damaged by a hail storm on the 7th. Three and a half inches of rain fell over the course of the month and we quickly began to observe the effects of too much cloudy weather. Cool cloudy weather continued into August with another 2.3 inches of rain. Surprisingly, warm dry weather in September matured a great deal of cotton we are not accustomed to making. Rains continued in October and November (nearly 9 inches) making for a challenging harvest. Overall, we produced another record dryland crop in addition to an exceptional irrigated crop.

It should be emphasized that data from only one year should not be used for major production decisions, and at least 2-3 year's results should be utilized before production practices should be modified. This report includes data generated from "off-label" applications or practices. Although this data is presented, OSU does not recommend the implementation of any "off-label" use of any product.

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OSU Integrated Pest Management
BASF
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Syngenta Crop Protection
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Stoneville Pedigreed Seed Company
John Deere

We appreciate the interest, cooperation and support of all those involved in the cotton industry in Oklahoma and encourage your comments and suggestions for the improvement of our programs. This report can be accessed on the web at http://www.osu.altus.ok.us

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Murray, Eddie, and Rann Williams-Altus
Brad McKinley-Frederick
Jeannie Hileman-Carnegie Cooperative
Ken Mach, Yukon
Wayne Winsett-Altus
Darrel Gambrel and Gayle Thompson-Erick

Variety Performance

Weed Control

Production & Agronomics

Harvest Aids

Irrigation and Weather Records

OSU Southwest Research & Extension Center (OSUREC)-Altus

4 inches furrow irrigation-7/22, 8/2, 8/11, 8/23

Western Oklahoma State College (WOSC)-Altus

2.5 inches furrow irrig.-7/17; 1.5 inches-7/21, 8/2, 2.2 inches-8/10; 1.5 inches-8/18

Month	Apr.04			May.04			Jun.04		
Date	Air Temp.(F)			Air Temp. (F)			Air Temp. (F)		
	Max.	Min.	Precip.	Max.	Min.	Precip	Max.	Min.	Precip.
1	79	41	0	66	46	0	98	58	0
2	78	50	0	81	40	0	99	62	0
3	70	52	0	80	43	0	81	62	1.04
4	67	46	0	89	47	0	88	63	0
5	68	52	0	90	53	0	86	65	0.58
6	65	52	0.37	88	56	0	86	66	0
7	69	53	0.13	85	57	0	94	69	0
8	73	48	0.12	87	61	0	82	69	0
9	78	52	0.34	88	61	0	82	69	0.04
10	54	44	0.02	89	64	0	89	68	2.52
11	56	38	0	86	67	0	94	72	0
12	62	40	0	97	65	0	93	71	0
13	63	33	0.12	81	68	0	92	67	0
14	78	35	0	72	47	0	96	71	0
15	93	40	0	77	44	0	91	71	0
16	94	49	0	84	47	0	94	68	0
17	86	52	0	90	56	0	94	67	0.3
18	79	56	0	96	66	0	88	67	0
19	75	62	0	98	67	0	81	71	0.13
20	89	60	0	94	67	0	89	68	0
21	89	51	0	90	69	0	88	68	0
22	76	54	0	96	66	0	79	63	1.54
23	64	58	0	99	70	0	84	58	0
24	74	51	0.05	101	69	0	90	60	0
25	79	45	0	87	67	0	83	67	0
26	75	49	0.75	98	70	0	88	67	0.04
27	86	49	0	90	73	0.01	86	62	0.15
28	76	54	0	94	55	0.02	83	66	0.8
29	84	51	0	98	57	0	81	67	2.55
30	64	48	0.5	90	63	0	87	69	0.03
31				91	54	0			
Totals	75	49	2.4	88.8	59.2	0.03	88	66	9.72

Weather Records (cont.)

Month	Jul.04			Aug.04			Sep.04		
Date	Air Temp.(F)			Air Temp. (F)			Air Temp. (F)		
	Max.	Min.	Precip.	Max.	Min.	Precip	Max.	Min.	Precip.
1	89	65	0	96	69	0	88	62	0
2	97	66	0	101	72	0	89	61	0
3	94	68	0.48	102	72	0	86	63	0
4	95	71	0	102	74	0	89	64	0
5	95	74	0	94	74	0	88	66	0
6	93	68	0	88	68	0	88	60	0
7	92	60	2.46	84	69	0	85	54	0
8	97	69	0	84	66	0.23	85	51	0
9	93	74	0	91	67	0.42	86	48	0
10	93	71	0	95	69	0.09	89	51	0
11	95	70	0	83	66	0	94	54	0
12	96	71	0	90	61	0	96	59	0
13	96	70	0	86	65	0.01	98	63	0
14	99	69	0	82	64	0	96	68	0
15	102	68	0	81	66	0.03	95	71	0
16	105	68	0	91	65	0	96	72	0
17	95	71	0	95	61	0	101	70	0
18	94	71	0	94	62	0	96	69	0
19	99	68	0	75	66	0.05	94	70	0
20	102	68	0	77	63	0.3	91	69	0
21	98	66	0	83	59	0	92	70	0.1
22	98	66	0	88	63	0.13	89	69	0
23	98	73	0	92	68	0	79	60	0.58
24	85	70	0.18	99	70	0	84	61	0.01
25	70	63	0	101	72	0	85	61	0
26	86	59	0.12	100	72	0	82	62	0
27	80	61	0	94	70	0	87	61	0
28	80	68	0.05	83	67	1.27	84	58	0
29	82	67	0.44	85	65	0	84	55	0
30	90	62	0	78	66	0	79	56	0
31	94	66	0	84	60	0			
Totals	92.9	67.8	3.73	89.6	66.8	2.53	89.2	61.9	0.69

Variety Performance

Variety selection continues to be an important decision for cotton producers in Oklahoma. Although most newly released varieties have been tested prior to their commercial release, most cotton producers have had little experience with those varieties on their farms. Therefore, twelve variety demonstrations were established throughout Oklahoma comparing newly released varieties to Oklahoma standards. Unfortunately, two of the sites were lost to bad weather. Six of the remaining ten were dryland production while the remaining four were irrigated production.

Dryland Production:

Three of the six dryland locations were replicated trials while the other three were non-replicated demonstrations. All of the dryland locations (Washita, Canadian, Tillman, Jackson, Caddo, and Custer Counties) compared the following eleven varieties: PM 2280 B/R, PM 2344 B/R, PM 2167 RR, DP 555 B/R, DP 444 B/R, ST 4892 B/R, ST 5599 B/R, NG 1553 R, NG 2448 R, FM 960 B2R, and FM 800B2R. Results varied across location as a result of scattered rainfall patterns within the growing season and varying soil types. Overall, Paymaster 2280 B/R consistently produced more lint/acre compared to the other ten varieties across all locations. Tables 1-12 show detailed information for each location mentioned above.

Table 1. Dryland Demonstration in Tillman County (Sandy Loam)

	Planted:	May 21st	**Harvested:**	December 1st
Yield Rank	**Variety**	**Seed Cotton**	**Gin%**	**Lint/Acre**
1	PM 2280 B/R	3012	29.6	892
2	DP 444 B/R	2498	33.8	844
3	PM 2344 B/R	2322	30.1	699
4	DP 555 B/R	1843	35.7	658
5	ST 5599 B/R	1926	32.5	626
6	NG 2448 R	1877	28	526
7	ST 4892 B/R	1640	29.5	484
8	FM 800 B2R	1564	30.9	483
9	PM 2167 R	1401	29.6	415
10	NG 1553 R	1594	26	414
11	FM 960 B2R	1227	31.2	383

Table 2. Dryland Demonstration in Tillman County

		Fiber Data			
Yield Rank	**Variety**	**Mic**	**Length**	**Uniformity**	**Strength**
1	PM 2280 B/R	3.9	1.05	81.6	29.5
2	DP 444 B/R	3.6	1.05	81.4	28
3	PM 2344 B/R	4.8	1.02	83.1	28.1
4	DP 555 B/R	4.4	1.06	81.9	27.9
5	ST 5599 B/R	3.8	1.02	80.1	25.5
6	NG 2448 R	3.1	1.01	81.1	26.3
7	ST 4892 B/R	3.1	1	80.2	25.4
8	FM 800 B2R	4	1.08	82.7	28.1
9	PM 2167 R	3.6	0.96	78.6	23.7
10	NG 1553 R	2.7	1.05	80.2	23.6
11	FM 960 B2R	3.9	1.01	78.6	24.4

Table 3. Dryland Demonstration in Custer County (Sandy Loam)

Planted: May 24th **Harvested:** November 8th

Yield Rank	**Variety**	**Seed Cotton**	**Gin%**	**Lint/Acre**
1	ST 5599 B/R	4787	32.2	1541
2	DP 444 B/R	4428	32.1	1421
3	PM 2280 B/R	4656	28.3	1318
4	PM 2167 RR	4256	29.9	1273
5	DP 555 B/R	3958	32.1	1271
6	PM 2344 B/R	4476	28.1	1258
7	FM 960 B2R	3605	31.7	1143
8	ST 4892 B/R	3658	30.5	1116
9	NG 2448 R	3329	28.1	935
10	FM 800 B2R	2977	29.9	890
11	NG 1553 R	2774	22.6	627

Table 4. Dryland Demonstration in Custer County

		Fiber Data			
Yield Rank	**Variety**	**Mic**	**Length**	**Uniformity**	**Strength**
1	ST 5599 B/R	3.8	1.06	83.4	26.5
2	DP 444 B/R	3.6	1.08	84.5	28
3	PM 2280 B/R	3.6	1.07	83	30.4
4	PM 2167 RR	4.9	0.99	82.2	30.1
5	DP 555 B/R	3.4	1.1	81.7	28.7
6	PM 2344 B/R	4.1	1.12	85	31.2
7	FM 960 B2R	3.4	1.1	81.6	27.5
8	ST 4892 B/R	4	1.05	83.3	29
9	NG 2448 R	3.6	1.06	84.3	30.2
10	FM 800 B2R	2.9	1.14	84.9	29.2
11	NG 1553 R	3	1.07	81.8	28.6

Table 5. Dryland Demonstration in Washita County (Sandy Loam)

	Planted:	June 7th	**Harvested:**	December 14th
Yield Rank	**Variety**	**Seed Cotton**	**Gin%**	**Lint/Acre**
1	FM 960 B2R	4636	31	1432
2	DP 555 B/R	3696	34	1257
3	ST 4892 B/R	4112	29	1176
4	PM 2280 B/R	3919	29	1140
5	ST 5599 B/R	4021	28	1106
6	PM 2344 B/R	3605	29	1056
7	PM 2167 RR	3648	29	1051
8	DP 444 B/R	3555	27	949
9	NG 1553 R	3356	27	920
10	FM 800 B2R	2653	33	878
11	NG 2448 R	2776	25	702

Table 6. Dryland Demonstration in Washita County

		Fiber Data			
Yield Rank	**Variety**	**Mic**	**Length**	**Uniformity**	**Strength**
1	FM 960 B2R	3.9	1.15	85.2	29.3
2	DP 555 B/R	3.7	1.12	83.2	28.4
3	ST 4892 B/R	4.5	1.05	82.9	27.3
4	PM 2280 B/R	3.7	1.12	83.7	28.2
5	ST 5599 B/R	3.9	1.12	84.4	28
6	PM 2344 B/R	4.2	1.08	84.9	29.8
7	PM 2167 RR	3.9	1.05	83.7	28.4
8	DP 444 B/R	3.3	1.11	85.4	25.6
9	NG 1553 R	3.1	1.11	82.3	25.8
10	FM 800 B2R	3.2	1.18	84.4	30.3
11	NG 2448 R	3.7	1.06	82.2	29

Table 7. Dryland Variety Trial in Canadian County (Silt Clay Loam)

Planted: June 2nd **Harvested:** December 16th

Entry No.	Entry Name	SeedCotton Lbs/Acre		Gin Percent		Lint Lbs/Acre	
1	PM 2280 B/R	4240	ab	27	ab	1143	a
2	PM 2344 B/R	4344	a	25	bcd	1085	ab
3	ST 1553 R	4131	ab	26	abc	1070	ab
4	DP 444 B/R	3771	ab	28	a	1032	abc
5	ST 2448 R	3864	ab	27	ab	1024	abc
6	DP 555 B/R	3989	ab	23	de	920	a-d
7	ST 4892 B/R	3564	ab	26	abc	916	a-d
8	PM 2167 RR	3390	b	26	abc	879	bcd
9	FM 800 B2R	3346	b	24	cde	796	cd
10	FM 960 B2R	3570	ab	22	e	787	cd
11	ST 5599 B/R	3379	b	23	de	766	d
LSD (P=.05)		931.4		2.5		252	
CV		17.06		6.87		18.43	

Means followed by same letter do not significantly differ (P=.05, LSD)

Table 8. Dryland Variety Trial in Canadian County

Yield Rank	Entry Name	Fiber Data			
		Mic	Length	Uniformity	Strength
1	PM 2280 B/R	3.5	1.05	81.2	28.8
2	PM 2344 B/R	3	1.01	79.5	23.4
3	ST 1553 R	2.9	1.1	81.3	25.4
4	DP 444 B/R	2.8	1.06	83.3	24.9
5	ST 2448 R	3.2	1.06	82.8	24
6	DP 555 B/R	2.5	1.06	79.9	23.7
7	ST 4892 B/R	2.7	1.02	80.8	20.6
8	PM 2167 RR	4.1	0.98	82.5	26.7
9	FM 800 B2R	3.3	1.11	82	26.3
10	FM 960 B2R	2.6	1.17	81.3	26.4
11	ST 5599 B/R	2.8	1.05	80	27

Table 9. Dryland Variety Trial in Caddo County (Sandy Loam)

Planted: June 2nd **Harvested:** December 16th

Entry No.	Entry Name	SeedCotton Lbs/Acre		Gin Percent		Lint Lbs/Acre	
1	ST 4892 B/R	4932	a	33	a	1644	a
2	FM 960 B2R	4861	ab	32	ab	1551	ab
3	PM 2280 B/R	4807	ab	30	bcd	1446	bc
4	ST 5599 B/R	4622	abc	31	bc	1435	bc
5	FM 800 B2R	4687	abc	30	cd	1405	bcd
6	DP 444 B/R	4158	cd	33	a	1376	cde
7	ST 1553 R	4578	abc	29	d	1313	c-f
8	DP 555 B/R	3831	d	33	a	1272	c-f
9	ST 2448 R	4229	cd	30	cd	1257	def
10	PM 2344 B/R	4322	bcd	28	d	1225	ef
11	PM 2167 RR	4175	cd	28	d	1184	f
LSD (P=.05)		554		1.9		174.5	
CV		8.58		4.26		8.8	

Means followed by same letter do not significantly differ (P=.05, LSD)

Table 10. Dryland Variety Trial in Caddo County

Yield Rank	Entry Name	Fiber Data			
		Mic	Length	Uniformity	Strength
1	ST 4892 B/R	4.1	1.08	84.7	27.8
2	FM 960 B2R	3.7	1.17	84	27.9
3	PM 2280 B/R	4	1.1	82.6	28.6
4	ST 5599 B/R	4.4	1.06	82.3	27
5	FM 800 B2R	3.6	1.12	83.6	28.5
6	DP 444 B/R	4.1	1.06	82.2	23.9
7	NG 1553 R	3.6	1.12	82.3	25.9
8	DP 555 B/R	4.2	1.07	82.6	25.9
9	NG 2448 R	4.2	1.13	85.8	26.9
10	PM 2344 B/R	4.6	1.09	84	27.4
11	PM 2167 RR	3.9	1.05	82.2	26.4

Table 11. Dryland Variety Trial in Jackson County (Clay Loam)

Planted: May 7th **Harvested:** Nov. 11th

Entry No.	Entry Name	SeedCotton Lbs/Acre		Gin Percent		Lint Lbs/Acre	
1	FM 960 B2R	1146	a	31	a	350	a
2	ST 4892 B/R	1122	ab	30	a	338	ab
3	FM 800 B2R	1059	abc	28	a	300	abc
4	DP 444 B/R	941	a-d	30	a	277	abc
5	ST 1553 R	938	a-d	29	a	276	abc
6	ST 2448 R	891	a-d	30	a	269	abc
7	DP 555 B/R	869	a-d	31	a	264	abc
8	ST 5599 B/R	851	bcd	31	a	260	bc
9	PM 2167 RR	824	cd	31	a	253	bc
10	PM 2344 B/R	797	cd	30	a	242	c
11	PM 2280 B/R	740	d	30	a	221	c
LSD (P=.05)		290.3		2.5		89.4	
CV		21.73		5.8		22.32	

Means followed by same letter do not significantly differ (P=.05, LSD)

Table 12. Dryland Variety Trial in Jackson County

Yield Rank	Entry Name	Fiber Data			
		Mic	Length	Uniformity	Strength
1	FM 960 B2R	4.8	1.1	81.6	31.1
2	ST 4892 B/R	5.4	1.01	83.3	26.5
3	FM 800 B2R	4.8	1.12	84.2	32.7
4	DP 444 B/R	4.9	0.96	80.2	23.7
5	NG 1553 R	4.2	1.01	80.9	26
6	NG 2448 R	4.6	0.97	81.5	28.5
7	DP 555 B/R	4.9	1.03	81	26.3
8	ST 5599 B/R	5.3	0.97	81.4	25.9
9	PM 2167 RR	5.1	0.92	78.4	23.6
10	PM 2344 B/R	4.6	1.01	83.3	28.2
11	PM 2280 B/R	4.5	0.97	80.6	26.8

Irrigated Production:

Four irrigated projects compared some or all of the following 20 varieties: DP 444 B/R, DP 458 B/R, DP 488 B/R, DP 655 B/R, DP 555 B/R, DP 468 B2R, DP 35 B, ST 4646 B2R, ST 5599 B/R, ST 4892 B/R, ST 5242 B/R, NG 1553 R, NG 2448 R, FM 989 B2R, FM 800 B2R, FM 960 B2R, PM 2280 B/R, SG 215 B/R, PM 2344 B/R, FM 958 LL, and FM 966 LL.

Stoneville's 4892 B/R and Fibermax's 989 B2R performed the best across all locations. Both varieties averaged 3.5 bales per acre across all four locations. In addition, ST 5599 averaged 3.2 bales per acre across all locations. FM 960 B2R, ST 5242 B/R, and DP 444 B/R consistently ranked in the top 5 across all four locations. . Tables 13-22 show detailed yield information for each location.

Table 13. Irrigated Variety Demonstration-Jackson-WOSC (Clay Loam)

	Planted:	May 11th	**Harvested:**	December 4th
Yield Rank	**Variety**	**Seed Cotton**	**Gin%**	**Lint/Acre**
1	ST 4892 B/R	5304	34	1782
2	ST 5599 B/R	5160	34	1744
3	FM 989 B2R	5150	32	1658
4	FM 960 B2R	5173	32	1655
5	DP 555 B/R	4675	35	1613
6	ST 4646 B2R	5150	31	1571
7	ST 5242 B/R	4686	33	1551
8	NG 1553 R	4365	35	1537
9	DP 444 B/R	4643	33	1532
10	FM 958 LL	4872	31	1530
11	DP 468 B2R	5216	29	1523
12	FM 966 LL	4872	31	1515
13	DP 35 B	5036	30	1491
14	FM 800 B2R	4503	33	1472
15	DP 655 B/R	4486	31	1451
16	NG 2448 R	4931	29	1445
17	DP 458 B/R	4905	28	1386
18	DP 488 B/R	3662	32	1292

Table 14. Irrigated Variety Demonstration-Jackson-WOSC

			Fiber Data		
Yield Rank	Variety	Mic	Length	Uniformity	Strength
1	ST 4892 B/R	4.8	1.11	83.6	26.6
2	ST 5599 B/R	4.5	1.14	82.8	29.3
3	FM 989 B2R	4.1	1.17	83.4	30.4
4	FM 960 B2R	4.1	1.19	83.8	28.4
5	DP 555 B/R	4	1.16	82.2	27.5
6	ST 4646 B2R	4.3	1.15	82.4	26.3
7	ST 5242 B/R	4.5	1.11	84.2	26.8
8	NG 1553 R	3.9	1.18	85.2	27.6
9	DP 444 B/R	4.4	1.15	84.5	25.6
10	FM 958 LL	4	1.25	85.8	29.2
11	DP 468 B2R	3.9	1.19	82.8	26.7
12	FM 966 LL	4.1	1.16	85.5	31
13	DP 35 B	4	1.18	82.7	30.4
14	FM 800 B2R	3.9	1.17	81.4	28.2
15	DP 655 B/R	3.8	1.17	83.6	29.3
16	NG 2448 R	4.5	1.1	84.3	29.5
17	DP458 B/R	4.1	1.16	83	28.4
18	DP488 B/R	3.8	1.17	82	27.8

Table 15. Irrigated Variety Demonstration-Jackson-OSUREC (Clay Loam)

Planted: May 10th **Harvested:** November 12th

Yield Rank	Variety	Seed Cotton	Gin%	Lint/Acre
1	FM 989 B2R	5863	30	1765
2	FM 960 B2R	5703	29	1642
3	FM 958 LL	5624	29	1631
4	ST 4892 B/R	5772	28	1610
5	ST 5599 B/R	5330	30	1588
6	DP 458 B/R	5539	28	1562
7	DP 555 B/R	5163	30	1539
8	DP 468 B2R	5618	27	1522
9	NG 2448 R	5739	27	1521
10	DP 488 B/R	5186	29	1520
11	FM 800 B2R	5049	29	1449
12	DP 35 B	5242	27	1426
13	ST 5242 B/R	5157	27	1392
14	NG 1553 R	5641	25	1382
15	DP 655 B/R	5265	26	1379
16	FM 966 LL	5275	26	1366
17	DP 444 B/R	4977	27	1359
18	ST 4646 B2R	5307	25	1337

Table 16. Irrigated Variety Demonstration-Jackson-OSUREC

Yield Rank	Variety	Mic	Fiber Data Length	Uniformity	Strength
1	FM 989 B2R	4.8	1.18	83.6	31.5
2	FM 960 B2R	4.6	1.22	83.5	33.9
3	FM 958 LL	4.6	1.18	83.6	33.2
4	ST 4892 B/R	5	1.13	84.3	28.7
5	ST 5599 B/R	4.8	1.15	82.9	28.9
6	DP 458 B/R	4.9	1.16	83.7	29.6
7	DP 555 B/R	4.3	1.13	83.3	29.2
8	DP 468 B2R	4.8	1.19	84.1	29.1
9	NG 2448 R	4.6	1.11	82.9	28.7
10	DP 488 B/R	4.6	1.16	84.3	28.9
11	FM 800 B2R	3.9	1.21	84.6	31.9
12	DP 35 B	4.6	1.19	84.5	31.5
13	ST 5242 B/R	4.6	1.09	83.5	26.6
14	NG 1553 R	4.3	1.17	81.6	32
15	DP 655 B/R	4.4	1.19	84.1	32.3
16	FM 966 LL	4.6	1.17	84	33.5
17	DP 444 B/R	4.5	1.14	83	29
18	ST 4646 B2R	4.9	1.15	84.2	29.6

Table 17. Irrigated Variety Demonstration-Jackson-Williams (Clay Loam)

Planted: May 10th **Harvested:** November 4th

Yield Rank	Variety	Seed Cotton	Gin%	Lint/Acre
1	DP 444 B/R	3835	40.88	1567
2	FM 989 B2R	3892	37.49	1459
3	ST 4892 B/R	3609	38.2	1378
4	ST 5242 B/R	3573	38.5	1375
5	ST 5599 B/R	3517	37.9	1333
6	ST 4646 B2R	3614	34.8	1259
7	FM 960 B2R	3532	35.1	1238
8	FM 800 B2R	3368	35.6	1198
9	DP 458 B/R	3362	35.5	1193
10	DP 555 B/R	2920	40.5	1183
11	DP 655 B/R	3167	35.9	1135
12	DP 468 B2R	3352	33.8	1134
13	DP488 B/R	3100	35.9	1112

Table 18. Irrigated Variety Demonstration-Jackson-Williams

			Fiber Data			Loan
Yield Rank	Variety	Mic	Length	Uniformity	Strength	Value
1	DP 444 B/R	4.2	37	82	28.6	0.5553
2	FM 989 B2R	4.3	37	82	32.7	0.5480
3	ST 4892 B/R	4.5	35	82	27.2	0.5420
4	ST 5242 B/R	4.8	35	82	28.3	0.5357
5	ST 5599 B/R	4.5	36	81	28.8	0.5441
6	ST 4646 B2R	4.2	38	82	32.4	0.5593
7	FM 960 B2R	4.4	36	81	28.3	0.5356
8	FM 800 B2R	4.3	37	81	29.6	0.5618
9	DP 458 B/R	3.8	38	82	31.7	0.5503
10	DP 555 B/R	4.1	36	80	27.4	0.5539
11	DP 655 B/R	4.3	37	81	29.3	0.5624
12	DP 468 B2R	4.2	36	81	30.1	0.5584
13	DP488 B/R	4.2	37	81	28.5	0.5596

Table 19. Irrigated Variety Trial in Caddo County (Sandy Loam)

Planted: June 2nd **Harvested:** Decmeber 16th

Entry No.	Entry Name	SeedCotton Lbs/Acre		Gin Percent		Lint Lbs/Acre	
1	ST 4892 B/R	6082	abc	32	a	1965	a
2	DP 444 B/R	6289	ab	30	a-e	1888	a
3	ST 5242 B/R	5728	a-f	32	ab	1810	ab
4	FM 989 B/R	5886	a-e	30	a-d	1787	abc
5	PM 2280 B/R	6393	a	28	d-g	1781	abc
6	ST 2448 RR	5728	a-f	29	c-f	1662	bcd
7	FM 960 B2R	5505	c-g	29	b-f	1631	bcd
8	ST 5599 B/R	5913	a-d	28	efg	1627	bcd
9	DP 555 B/R	5112	fg	32	abc	1607	b-e
10	ST 1553 RR	5706	b-f	28	d-g	1592	b-e
11	PM 2344 B/R	6055	a-d	26	g	1578	cde
12	DP 488 B/R	5423	c-g	28	d-g	1541	de
13	SG 215 B/R	5663	b-f	27	fg	1515	de
14	DP 655 B/R	5406	d-g	28	d-g	1513	de
15	FM 800 B2R	5232	efg	28	d-g	1450	de
16	DP 458 B/R	4861	g	29	d-g	1384	e
LSD (P=.05)		673.6		2.7		223.5	
CV		8.29		6.58		9.5	

Means followed by same letter do not significantly differ (P=.05, LSD)

Table 20. Irrigated Variety Trial in Caddo County

Yield Rank	Entry Name	Fiber Data			
		Mic	Length	Uniformity	Strength
1	ST 4892 B/R	3.9	1.1	84.2	26.6
2	DP 444 B/R	3.4	1.11	82.4	26.3
3	ST 5242 B/R	4.3	1.05	83.9	25.8
4	FM 989 B/R	3.5	1.12	81.8	30.2
5	PM 2280 B/R	3.6	1.09	83.8	28.5
6	NG 2448 RR	4.5	1.09	82.9	30.1
7	FM 960 B2R	3.6	1.18	82.8	28.5
8	ST 5599 B/R	4.4	1.08	82.1	29.1
9	DP 555 B/R	3.4	1.13	83.3	26.1
10	NG 1553 RR	3.4	1.11	82.3	26.9
11	PM 2344 B/R	4.2	1.07	82.7	26
12	DP 488 B/R	3.2	1.12	85.2	27.9
13	SG 215 B/R	3.6	1.06	83.1	23.4
14	DP 655 B/R	3.1	1.11	82.2	27.8
15	FM 800 B2R	3.5	1.17	84.2	30.3
16	DP 458 B/R	3.2	1.1	82.3	26.7

Table 21. Dryland Yield Ranking Across All Six Locations

Variety Name	Yield Ranking By Location						Average Ranking	Average Lint/Acre
	Tillman	Custer	Washita	Canadian	Caddo	Jackson		
PM 2280 B/R	1	3	4	1	3	11	3.8	1027
DP 444 B/R	2	2	8	4	6	4	4.3	983
ST 4892 B/R	8	8	3	7	1	2	4.8	946
FM 960 B2R	11	7	1	10	2	1	5.3	941
DP 555 B/R	5	5	2	6	8	7	5.5	940
ST 5599 B/R	6	1	5	11	4	8	5.8	956
PM 2344 B/R	4	6	6	2	10	10	6.3	928
FM 800 B2R	8	10	10	9	5	3	7.5	792
NG 1553 R	11	11	9	3	7	5	7.7	770
NG 2448 R	7	9	11	5	9	6	7.8	786
PM 2167 RR	10	4	7	8	11	9	8.2	843

Table 22. Irrigated Yield Ranking Across All Four Locations

Variety Name	Yield Ranking By Location				Average Ranking	Average Lint/Acre
	WOSC	OSU	Williams	Caddo		
ST 4892 B/R	1	4	3	1	2.25	1684
FM 989 B2R	3	1	2	4	2.5	1667
ST 5599 B/R	2	5	5	8	5	1573
FM 960 B2R	4	2	7	7	5	1542
ST 5242 B/R	7	13	4	3	6.75	1532
DP 444 B/R	9	17	1	2	7.25	1587
DP 555 B/R	5	7	10	9	7.75	1486
ST 4646 B2R	6	18	6	*	10	1389
DP 468 B2R	11	8	12	*	10.33	1393
NG 2448 R	16	9	*	6	10.33	1543
NG 1553 R	8	14	*	10	10.67	1504
DP 458 B/R	17	6	9	16	12	1381
FM 800 B2R	14	11	8	15	12	1392
DP 35 B	13	12	*	*	12.5	1459
DP 488 B/R	18	10	13	12	13.25	1366
DP 655 B/R	15	15	11	14	13.75	1370
FM 958 LL	10	3	*	*	6.5	1581
FM 966 LL	12	16	*	*	14	1441
PM 2344 B/R	*	*	*	11	*	*
PM 2280 B/R	*	*	*	5	*	*
SG 215 B/R	*	*	*	13	*	*

*Variety not present at this location

Weed Control

Weed control decisions continue to be an important part of cotton production in Oklahoma. The introduction of new herbicides and new seed technologies are increasing producer's options and maximizing efficiency of their operations. Our purpose is to identify the best options available to Oklahoma producers and help adapt those programs to their operation. We accomplish this through the generation of research-based information. As new options emerge producers often don't have the capability to experiment with them. The following trials attempt to address current or potential weed control issues important to Oklahoma cotton producers.

Staple Programs in the Liberty Link Cotton System

The objective of this study was to utilize the residual activity of Staple herbicide in the Liberty Link system. Staple was applied preemergence alone or tank-mixed with Cinch or Direx and then followed by either one or two applications of Ignite with or without Staple. Including Staple in the mid-postemergence applications increased mid to late-season morningglory control compared to Ignite only systems.

Trial ID: DUPWC0401
Planting Date: May 18
Row Spacing: 40 inches
Replications: 3
Location: OSUREC
Rate: 12 lbs/A
Plot Size: 4 r x 50'
Soil Type: Clay Loam

Treatment Information						% Pitted Morningglory Control							
No.	Name	Rate	Unit	Stg	Code	6/4/2004		6/17/2004		6/24/2004		7/15/2004	
1	IGNITE	6.7	oz ai/a	EP 2-3LF	B	0	a	83	b	94	a	73	c
	INDUCE	0.25	% v/v	EP 2-3LF	B								
	IGNITE	6.7	oz ai/a	MP 5-8LF	C								
	INDUCE	0.25	% v/v	MP 5-8LF	C								
2	IGNITE	6.7	oz ai/a	EP 2-3LF	B	0	a	88	a	95	a	88	ab
	STAPLE	0.5	oz ai/a	EP 2-3LF	B								
	INDUCE	0.25	% v/v	EP 2-3LF	B								
	IGNITE	6.7	oz ai/a	MP 5-8LF	C								
	STAPLE	0.5	oz ai/a	MP 5-8LF	C								
	INDUCE	0.25	% v/v	MP 5-8LF	C								
3	STAPLE	0.5	oz ai/a	PRE	A	0	a	0	c	94	a	91	a
	IGNITE	6.7	oz ai/a	MP 5-8LF	C								
	STAPLE	0.5	oz ai/a	MP 5-8LF	C								
	INDUCE	0.25	% v/v	MP 5-8LF	C								

Staple Programs in the Liberty Link Cotton System (cont.)

Treatment Information						% Pitted Morningglory Control							
No.	Name	Rate	Unit	Stg	Code	6/4/2004		6/17/2004		6/24/2004		7/15/2004	
4	CINCH	11.5	oz ai/a	PRE	A	0	a	0	c	91	a	92	a
	STAPLE	0.5	oz ai/a	PRE	A								
	IGNITE	6.7	oz ai/a	MP 5-8LF	C								
	STAPLE	0.5	oz ai/a	MP 5-8LF	C								
	INDUCE	0.25	% v/v	MP 5-8LF	C								
5	DIREX	1	qt/a	PRE	A	0	a	0	c	93	a	94	a
	STAPLE	0.5	oz ai/a	PRE	A								
	IGNITE	6.7	oz ai/a	MP 5-8LF	C								
	STAPLE	0.5	oz ai/a	MP 5-8LF	C								
	INDUCE	0.25	% v/v	MP 5-8LF	C								
6	CINCH	11.5	oz ai/a	PRE	A	0	a	0	c	91	a	90	a
	COTORAN	1	qt/a	PRE	A								
	IGNITE	6.7	oz ai/a	MP 5-8LF	C								
	STAPLE	0.5	oz ai/a	MP 5-8LF	C								
	INDUCE	0.25	% v/v	MP 5-8LF	C								
7	STAPLE	0.77	oz ai/a	PRE	A	0	a	80	b	96	a	88	ab
	IGNITE	6.7	oz ai/a	EP 2-3LF	B								
	INDUCE	0.25	% v/v	EP 2-3LF	B								
	IGNITE	6.7	oz ai/a	MP 5-8LF	C								
	INDUCE	0.25	% v/v	MP 5-8LF	C								
8	CAPAROL	3.2	pt/a	PRE	A	0	a	92	a	95	a	79	bc
	IGNITE	6.7	oz ai/a	ASNEEDED	BCD								
9	UNTREATED					0	a	0	c	0	b	0	d
LSD (P=.05)						0		4.9		6.6		10.1	
CV						0		7.35		4.6		7.53	

Means followed by same letter do not significantly differ (P=.05, LSD)

Staple Programs in the Liberty Link Cotton System (cont.)

APPLICATION DESCRIPTION			
	A	**B**	**C**
Application Date:	5/18/2004	6/4/2004	6/17/2004
Time of Day:	6:15 AM	2:00 PM	1:30 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PREEMERGE	EP-2-3 LF	MP 5-6 LF
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	69 F	89 F	95 F
% Relative Humidity:	80	40	45
Wind Velocity, Unit:	6 MPH	6 MPH	7 MPH
Soil Temp., Unit:	72 F	84 F	89 F
Soil Moisture:	ADEQUATE	GOOD	GOOD
% Cloud Cover:	60	40	70
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER
Operating Pressure:	25 PSI	25 PSI	25 PSI
Nozzle Type:	TJFLATFAN	TJFLATFAN	TJFLATFAN
Nozzle Size:	8002 VS	8002 VS	8002 VS
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Nozzles/Row:	2	2	2
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA
Propellant:	COMP. AIR	COMP. AIR	COMP. AIR

Staple Programs in Simulated Roundup Ready Flex Cotton

The primary objective of this trial was to evaluate the effectiveness of Staple herbicide in a simulated Roundup Ready Flex weed control program. Both preemergence and postemergence applications including Staple herbicide were compared to Roundup Weathermax alone, and applications of Touchdown and Envoke herbicides. Including Staple with Roundup Weathermax applications increased morningglory control 4 weeks after treatment.

Trial ID: DUPWC0402 **Location:** OSUREC
Planting Date: May 18 **Rate:** 12 lbs/A
Row Spacing: 40 inches **Plot Size:** 4 r x 50'
Replications: 3 **Soil Type:** Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Pitted Morningglory Control 6/4/2004		6/17/2004		6/24/2004		7/15/2004	
1	STAPLE	0.34	oz ai/a	EP 2-3LF	B	0	a	83	ab	87	a	88	a
	ROUNDUP WEATHERMAX	15	oz ai/a	EP 2-3LF	B								
	STAPLE	0.34	oz ai/a	MP 5-8LF	C								
	ROUNDUP WEATHERMAX	15	oz ai/a	MP 5-8LF	C								
2	STAPLE	0.5	oz ai/a	EP 2-3LF	B	0	a	90	a	87	a	87	ab
	ROUNDUP WEATHERMAX	15	oz ai/a	EP 2-3LF	B								
	STAPLE	0.5	oz ai/a	MP 5-8LF	C								
	ROUNDUP WEATHERMAX	15	oz ai/a	MP 5-8LF	C								
3	STAPLE	0.5	oz ai/a	PRE	A	0	a	0	e	72	c	78	bcd
	CINCH	11.5	oz ai/a	PRE	A								
	STAPLE	0.5	oz ai/a	MP 5-8LF	C								
	ROUNDUP WEATHERMAX	15	oz ai/a	MP 5-8LF	C								
4	ROUNDUP WEATHERMAX	15	oz ai/a	EP 2-3LF	B	0	a	70	cd	75	bc	63	e
	ROUNDUP WEATHERMAX	15	oz ai/a	MP 5-8LF	C								
5	DUAL MAGNUM	15.2	oz ai/a	EP 2-3LF	B	0	a	63	d	86	a	75	cd
	TOUCHDOWN TOTAL	12.5	oz ai/a	EP 2-3LF	B								
	ENVOKE	0.075	oz ai/a	MP 5-8LF	C								
	INDUCE	0.25	% v/v	MP 5-8LF	C								
6	DUAL MAGNUM	15.2	oz ai/a	EP 2-3LF	B	0	a	72	cd	87	a	70	de
	TOUCHDOWN TOTAL	12.5	oz ai/a	EP 2-3LF	B								
	ENVOKE	0.114	oz ai/a	MP 5-8LF	C								
	INDUCE	0.25	% v/v	MP 5-8LF	C								
7	TOUCHDOWN TOTAL	12.5	oz ai/a	EP 2-3LF	B	0	a	68	cd	87	a	76	cd
	ENVOKE	0.075	oz ai/a	MP 5-8LF	C								
	INDUCE	0.25	% v/v	MP 5-8LF	C								

Staple Programs in Simulated Roundup Ready Flex Cotton

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Pitted Morningglory Control 6/4/2004		6/17/2004		6/24/2004		7/15/2004	
8	TOUCHDOWN TOTAL	12.5	oz ai/a	EP 2-3LF	B	0	a	67	cd	85	a	75	cd
	ENVOKE	0.114	oz ai/a	MP 5-8LF	C								
	INDUCE	0.25	% v/v	MP 5-8LF	C								
9	COTORAN	16	oz ai/a	PRE	A	0	a	0	e	70	c	79	a-d
	CINCH	11.5	oz ai/a	PRE	A								
	STAPLE	0.5	oz ai/a	MP 5-8LF	C								
	ROUNDUP WEATHERMAX	15	oz ai/a	MP 5-8LF	C								
10	STAPLE	0.5	oz ai/a	PRE	A	0	a	7	e	82	ab	84	abc
	DIREX	1	qt/a	PRE	A								
	STAPLE	0.5	oz ai/a	MP 5-8LF	C								
	ROUNDUP WEATHERMAX	15	oz ai/a	MP 5-8LF	C								
11	ROUNDUP WEATHERMAX	15	oz ai/a	EP-AN	B	0	a	75	bc	85	a	80	a-d
	ROUNDUP WEATHERMAX	15	oz ai/a	MP-AN	C								
	ROUNDUP WEATHERMAX	15	oz ai/a	LP-AN	D								
	ROUNDUP WEATHERMAX	15	oz ai/a	PD-AN	E								
12	UNTREATED CHECK					0	a	0	e	0	d	0	f
LSD (P=.05)						0		9.1		8.1		10.6	
CV						0		10.88		6.33		8.74	

Means followed by same letter do not significantly differ (P=.05, LSD)

APPLICATION DESCRIPTION

	A	B	C
Application Date:	5/18/2004	6/4/2004	6/17/2004
Time of Day:	6:15 AM	2:00 PM	1:30 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PREEMERGE	EP-2-3 LF	MP 5-6 LF
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	69 F	89 F	95 F
% Relative Humidity:	80	40	45
Wind Velocity, Unit:	6 MPH	6 MPH	7 MPH
Soil Temp., Unit:	72 F	84 F	89 F
Soil Moisture:	ADEQUATE	GOOD	GOOD
% Cloud Cover:	60	40	70
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER
Operating Pressure:	25 PSI	25 PSI	25 PSI
Nozzle Type:	TJFLATFAN	TJFLATFAN	TJFLATFAN
Nozzle Size:	8002 VS	8002 VS	8002 VS
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Nozzles/Row:	2	2	2
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA

Liberty Link Weed Control Systems

The Liberty Link Weed Control system was available to cotton producers in the Fibermax seed line in 2004. It's tolerance to over-the-top applications of Ignite herbicide allow broad-spectrum control of many weed species present in Oklahoma cotton. Ignite applied alone effectively controlled early season morningglory. The addition of Staple to the mid-post application significantly increased late season control.

Trial ID:	BAYWC0402	**Location:**	OSUREC
Planting Date:	May 18	**Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 50'
Replications:	3	**Soil Type:**	Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Pitted Morningglory Control 6/15/2004		6/24/2004		7/15/2004		8/5/2004	
1	UNTREATED					0	b	0	c	0	d	0	e
2	IGNITE	32	oz/a	EP	B	95	a	95	a	87	ab	78	bc
	IGNITE	32	oz/a	MP	C								
3	IGNITE	32	oz/a	EP	B	95	a	95	a	91	a	80	bc
	IGNITE	32	oz/a	MP	C								
	STAPLE	0.6	oz/a	MP	C								
4	CAPAROL	3.2	pt/a	PRE	A	95	a	95	a	86	ab	80	bc
	IGNITE	32	oz/a	EP	B								
	IGNITE	32	oz/a	MP	C								
5	IGNITE	32	oz/a	EP	B	95	a	93	b	82	bc	84	ab
	IGNITE	32	oz/a	MP	C								
	IGNITE	16	oz/a	PD	D								
6	IGNITE	32	oz/a	EP	B	95	a	95	a	91	ab	92	a
	IGNITE	32	oz/a	MP	C								
	STAPLE	0.8	oz/a	MP	C								
7	IGNITE	32	oz/a	EP	B	95	a	95	a	82	bc	73	c
	ACCUQEST	2	qt/100 gal	EP	B								
	IGNITE	32	oz/a	MP	C								
	ACCUQUEST	2	qt/100 gal	MP	C								
8	CAPAROL	3.2	pt/a	PRE	A	95	a	95	a	84	ab	88	a
	IGNITE	32	oz/a	ASNEED	BCD								

Liberty Link Weed Control Systems (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Pitted Morningglory Control 6/15/2004	6/24/2004	7/15/2004	8/5/2004
9	AE F039866 00 SL25 T3	22.9	oz/a	EP	B	95 a	95 a	73 c	60 d
	AE F039866 00 SL25 T3	22.9	oz/a	MP	C				
LSD (P=.05)						0	1.7	9.2	8
CV						0	1.14	7.05	6.52

Means followed by same letter do not significantly differ (P=.05, LSD)

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	5/19/2004	6/4/2004	6/17/2004	7/13/2004
Time of Day:	6:15 AM	9:00 AM	11:00 AM	3:30 PM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PREEMERGE	EP 4LEAF	MP 6-7LF	MIDBLOOM
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	70 F	79 F	82 F	98 F
% Relative Humidity:	70	70	62	25
Wind Velocity, Unit:	8 MPH	4 MPH	6.6 MPH	7 MPH
Soil Temp., Unit:	76 F	80 F	82 F	99 F
Soil Moisture:	MARGINAL	GOOD	GOOD	FAIR
% Cloud Cover:	0	20	10	5
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER	REDBALL
Operating Pressure:	30 PSI	30 PSI	30 PSI	25 PSI
Nozzle Type:	FLATFAN	FLATFAN	FLATFAN	FLATFAN
Nozzle Size:	8002	8002	8002	8001/003
Nozzles/Row:	2	2	2	3
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA
Propellant:	COMP.AIR	COMP.AIR	COMP.AIR	COMP.AIR

Ignite Post-directed for Morningglory

Ignite is a non-selective broad-spectrum herbicide registered for over-the-top applications to Liberty Link cotton. The objective of this trial was to evaluate the effectiveness of Ignite applied post-emergence and directed beneath the crop canopy minimizing contact with non-Liberty Link cotton foliage. No injury to the cotton was observed after application other than basal stem reddening and insignificant necrosis about 3 inches above the ground. Effective weed control was achieved with all treatments, however, as seen in other trials, the addition of a residual herbicide increased late-season control.

Trial ID: BAYWC0401 **Location:** OSUREC
Planting Date: May 18 **Rate:** 12 lbs/A
Row Spacing: 40 inches **Plot Size:** 4 r x 50'
Replications: 3 **Soil Type:** Clay Loam

Trt	Treatment		Rate	Grow	Appl	% Pitted Morningglory Control			
No.	Name	Rate	Unit	Stg	Code	7/21/2004	7/28/2004	8/5/2004	8/12/2004
1	UNTREATED CHECK					0 d	0 c	0 c	0 c
2	IGNITE	32	oz/a	PD	A	100 a	100 a	95 a	92 a
	ACCUQUEST	2	qt/100 gal	PD	A				
	STAPLE	1	oz/a	PD	A				
3	ROUNDUP WEATHERMAX	22	oz/a	PD	A	83 b	100 a	95 a	92 a
	ACCUQUEST	2	qt/100 gal	PD	A				
	STAPLE	1	oz/a	PD	A				
4	IGNITE	16	oz/a	PD	A	85 b	92 b	77 b	63 b
	ROUNDUP WEATHERMAX	11	oz/a	PD	A				
	ACCUQUEST	2	qt/100 gal	PD	A				
5	IGNITE	32	oz/a	PD	A	100 a	100 a	80 b	67 b
	ACCUQUEST	2	qt/100 gal	PD	A				
6	ROUNDUP WEATHERMAX	22	oz/a	PD	A	80 c	93 b	78 b	73 b
	ACCUQUEST	2	qt/100 gal	PD	A				
7	IGNITE	40	oz/a	PD	A	100 a	100 a	80 b	73 b
	ACCUQUEST	2	qt/100 gal	PD	A				
LSD (P=.05)						1.9	4	12.6	17.3
CV						1.39	2.72	9.78	14.8

Means followed by same letter do not significantly differ (P=.05, LSD)

Ignite Post-directed for Morningglory (cont.)

APPLICATION DESCRIPTION

	A
Application Date:	7/13/2004
Time of Day:	5:00 PM
Application Method:	SPRAY
Application Timing:	LAYBY/PD
Applic. Placement:	DIRECTED
Air Temp., Unit:	98 F
% Relative Humidity:	24
Wind Velocity, Unit:	4 MPH
Soil Temp., Unit:	101 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	5
Appl. Equipment:	REDBALL
Operating Pressure:	25 PSI
Nozzle Type:	FLATFANS
Nozzle Size:	8001/003
Nozzles/Row:	3
Ground Speed, Unit:	4 MPH
Carrier:	WATER
Spray Volume, Unit:	15 GPA
Propellant:	CO2

Morningglory Control in Roundup Ready Flex Cotton

The Roundup Ready Flex cotton system is anticipated to be commercially available on a widespread basis in 2006. This system, unlike the current Roundup Ready system (restricted past 4lf stage) will allow over-the-top or broadcast applications of Roundup Weathermax much later in the season. The objective of this study was to compare a program of Roundup Weathermax only to Roundup Weathermax programs including alternative herbicides such as Staple, Caparol, Aim and Direx. The Roundup Weathermax alone treatments were equally as effective as any other treatment observed. No differences in yield were observed between treatments.

Trial ID: MONWC0401 **Location:** OSUREC
Planting Date: May 18 **Rate:** 12 lbs/A
Row Spacing: 40 inches **Plot Size:** 4 r x 50'
Replications: 3 **Soil Type:** Clay Loam

Trt	Treatment		Rate	Grow	Appl	% Pitted Morningglory Control			
No.	Name	Rate	Unit	Stg	Code	6/4/2004	6/17/2004	6/24/2004	7/15/2004
1	UNTREATED CHECK					0 a	0 d	0 b	0 c
2	ROUNDUP WEATHERMAX	22	oz/a	1LF	B	0 a	81 bc	90 a	74 ab
	ACCUQUEST MAX	2	qt/100 gal	1LF	B				
	ROUNDUP WEATHERMAX	33	oz/a	5LF	C				
	ACCUQUEST MAX	2	qt/100 gal	5LF	C				
	ROUNDUP WEATHERMAX	33	oz/a	PD-14LF	D				
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D				
3	ROUNDUP WEATHERMAX	22	oz/a	1LF	B	0 a	80 c	88 a	75 ab
	ACCUQUEST MAX	2	qt/100 gal	1LF	B				
	ROUNDUP WEATHERMAX	33	oz/a	5LF	C				
	ACCUQUEST MAX	2	qt/100 gal	5LF	C				
	ROUNDUP WEATHERMAX	22	oz/a	PD-14LF	D				
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D				
	STAPLE	0.6	oz/a	PD-14LF	D				
4	CAPAROL	3.2	pt/a	PRE	A	0 a	80 c	91 a	79 ab
	ROUNDUP WEATHERMAX	22	oz/a	1LF	B				
	ACCUQUEST MAX	2	qt/100 gal	1LF	B				
	ROUNDUP WEATHERMAX	22	oz/a	5LF	C				
	ACCUQUEST MAX	2	qt/100 gal	5LF	C				
	ROUNDUP WEATHERMAX	22	oz/a	PD-14LF	D				
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D				

Morningglory Control in Roundup Ready Flex Cotton (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Pitted Morningglory Control 6/4/2004	6/17/2004	6/24/2004	7/15/2004
5	ROUNDUP WEATHERMAX	22	oz/a	1LF	B	0 a	85 ab	90 a	83 a
	ACCUQUEST MAX	2	qt/100 gal	1LF	B				
	STAPLE	1.5	oz/a	5LF	C				
	CROP OIL CONCENTRATE	1.25	% v/v	5LF	C				
	AIM	1	oz/a	PD-14LF	D				
	DIREX	1	qt/a	PD-14LF	D				
	CROP OIL CONCENTRATE	1.25	% v/v	PD-14LF	D				
6	CAPAROL	3.2	pt/a	PRE	A	0 a	88 a	88 a	71 b
	STAPLE	1.5	oz/a	1LF	B				
	CROP OIL CONCENTRATE	1.25	% v/v	1LF	B				
	ROUNDUP WEATHERMAX	22	oz/a	PD-14LF	D				
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D				
7	STAPLE	0.8	oz/a	PRE	A	0 a	80 c	89 a	70 b
	DIREX	3	pt/a	PRE	A				
	ROUNDUP WEATHERMAX	22	oz/a	1LF	B				
	ACCUQUEST MAX	2	qt/100 gal	1LF	B				
	ROUNDUP WEATHERMAX	22	oz/a	5LF	C				
	ACCUQUEST MAX	2	qt/100 gal	5LF	C				
	ROUNDUP WEATHERMAX	22	oz/a	PD-14LF	D				
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D				
LSD (P=.05)						0	4.6	4.1	10.3
CV						0	4.39	3.62	10.7

Means followed by same letter do not significantly differ (P=.05, LSD)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	%Control 8/5/2004	SC lbs/A 1/25/2005	Gin% 1/25/2005	Lint lbs/A 1/25/2005
1	UNTREATED CHECK					0 c	0 c	0 b	0 b
2	ROUNDUP WEATHERMAX	22	oz/a	1LF	B	90 ab	3820 ab	29 a	1087 a
	ACCUQUEST MAX	2	qt/100 gal	1LF	B				
	ROUNDUP WEATHERMAX	33	oz/a	5LF	C				
	ACCUQUEST MAX	2	qt/100 gal	5LF	C				
	ROUNDUP WEATHERMAX	33	oz/a	PD-14LF	D				
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D				
3	ROUNDUP WEATHERMAX	22	oz/a	1LF	B	91 a	3673 ab	27 a	1005 a
	ACCUQUEST MAX	2	qt/100 gal	1LF	B				
	ROUNDUP WEATHERMAX	33	oz/a	5LF	C				
	ACCUQUEST MAX	2	qt/100 gal	5LF	C				
	ROUNDUP WEATHERMAX	22	oz/a	PD-14LF	D				
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D				
	STAPLE	0.6	oz/a	PD-14LF	D				

Morningglory Control in Roundup Ready Flex Cotton (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	%Control 8/5/2004		SC lbs/A 1/25/2005		Gin% 1/25/2005		Lint lbs/A 1/25/2005	
4	CAPAROL	3.2	pt/a	PRE	A	91	ab	3979	a	28	a	1118	a
	ROUNDUP WEATHERMAX	22	oz/a	1LF	B								
	ACCUQUEST MAX	2	qt/100 gal	1LF	B								
	ROUNDUP WEATHERMAX	22	oz/a	5LF	C								
	ACCUQUEST MAX	2	qt/100 gal	5LF	C								
	ROUNDUP WEATHERMAX	22	oz/a	PD-14LF	D								
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D								
5	ROUNDUP WEATHERMAX	22	oz/a	1LF	B	82	b	3450	ab	27	a	947	a
	ACCUQUEST MAX	2	qt/100 gal	1LF	B								
	STAPLE	1.5	oz/a	5LF	C								
	CROP OIL CONCENTRATE	1.25	% v/v	5LF	C								
	AIM	1	oz/a	PD-14LF	D								
	DIREX	1	qt/a	PD-14LF	D								
	CROP OIL CONCENTRATE	1.25	% v/v	PD-14LF	D								
6	CAPAROL	3.2	pt/a	PRE	A	82	b	3662	ab	29	a	1056	a
	STAPLE	1.5	oz/a	1LF	B								
	CROP OIL CONCENTRATE	1.25	% v/v	1LF	B								
	ROUNDUP WEATHERMAX	22	oz/a	PD-14LF	D								
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D								
7	STAPLE	0.8	oz/a	PRE	A	84	ab	3243	b	28	a	916	a
	DIREX	3	pt/a	PRE	A								
	ROUNDUP WEATHERMAX	22	oz/a	1LF	B								
	ACCUQUEST MAX	2	qt/100 gal	1LF	B								
	ROUNDUP WEATHERMAX	22	oz/a	5LF	C								
	ACCUQUEST MAX	2	qt/100 gal	5LF	C								
	ROUNDUP WEATHERMAX	22	oz/a	PD-14LF	D								
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D								
LSD (P=.05)						9		680.1		1.8		223.5	
CV						8.22		14.68		5.06		17.18	

Means followed by same letter do not significantly differ (P=.05, LSD)

Morningglory Control in Roundup Ready Flex Cotton (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Fiber Data Mic	Length	Uniformity	Strength
1	UNTREATED CHECK					.	.	.	.
2	ROUNDUP WEATHERMAX	22	oz/a	1LF	B	3.4	1.11	80.5	23.8
	ACCUQUEST MAX	2	qt/100 gal	1LF	B				
	ROUNDUP WEATHERMAX	33	oz/a	5LF	C				
	ACCUQUEST MAX	2	qt/100 gal	5LF	C				
	ROUNDUP WEATHERMAX	33	oz/a	PD-14LF	D				
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D				
3	ROUNDUP WEATHERMAX	22	oz/a	1LF	B	3.3	1.13	80.7	24.1
	ACCUQUEST MAX	2	qt/100 gal	1LF	B				
	ROUNDUP WEATHERMAX	33	oz/a	5LF	C				
	ACCUQUEST MAX	2	qt/100 gal	5LF	C				
	ROUNDUP WEATHERMAX	22	oz/a	PD-14LF	D				
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D				
	STAPLE	0.6	oz/a	PD-14LF	D				
4	CAPAROL	3.2	pt/a	PRE	A	3.2	1.15	80.7	24.4
	ROUNDUP WEATHERMAX	22	oz/a	1LF	B				
	ACCUQUEST MAX	2	qt/100 gal	1LF	B				
	ROUNDUP WEATHERMAX	22	oz/a	5LF	C				
	ACCUQUEST MAX	2	qt/100 gal	5LF	C				
	ROUNDUP WEATHERMAX	22	oz/a	PD-14LF	D				
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D				
5	ROUNDUP WEATHERMAX	22	oz/a	1LF	B	3	1.12	80	24
	ACCUQUEST MAX	2	qt/100 gal	1LF	B				
	STAPLE	1.5	oz/a	5LF	C				
	CROP OIL CONCENTRATE	1.25	% v/v	5LF	C				
	AIM	1	oz/a	PD-14LF	D				
	DIREX	1	qt/a	PD-14LF	D				
	CROP OIL CONCENTRATE	1.25	% v/v	PD-14LF	D				
6	CAPAROL	3.2	pt/a	PRE	A	3	1.15	80	24.3
	STAPLE	1.5	oz/a	1LF	B				
	CROP OIL CONCENTRATE	1.25	% v/v	1LF	B				
	ROUNDUP WEATHERMAX	22	oz/a	PD-14LF	D				
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D				
7	STAPLE	0.8	oz/a	PRE	A	3.1	1.16	81.3	25.5
	DIREX	3	pt/a	PRE	A				
	ROUNDUP WEATHERMAX	22	oz/a	1LF	B				
	ACCUQUEST MAX	2	qt/100 gal	1LF	B				
	ROUNDUP WEATHERMAX	22	oz/a	5LF	C				
	ACCUQUEST MAX	2	qt/100 gal	5LF	C				
	ROUNDUP WEATHERMAX	22	oz/a	PD-14LF	D				
	ACCUQUEST MAX	2	qt/100 gal	PD-14LF	D				

Morningglory Control in Roundup Ready Flex Cotton (cont.)

	APPLICATION DESCRIPTION			
	A	**B**	**C**	**D**
Application Date:	5/18/2004	6/4/2004	6/16/2004	7/14/2004
Time of Day:	10:00 AM	3:00 PM	3:30 PM	11:00 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PREEMERGE	EP-1LF	MP-5LF	12-14LF
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	DIRECTED
Air Temp., Unit:	77 F	87 F	98 F	86 F
% Relative Humidity:	60	56	20	45
Wind Velocity, Unit:	7 MPH	6 MPH	10 MPH	5 MPH
Soil Temp., Unit:	72 F	75 F	98 F	84 F
Soil Moisture:	MARGINAL	GOOD	GOOD	GOOD
% Cloud Cover:	0	0	10	0
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER	REDBALL
Operating Pressure:	24 PSI	24 PSI	24 PSI	26 PSI
Nozzle Type:	FLATFAN	FLATFAN	FLATFAN	FLATFAN
Nozzle Size:	8002 VS	8002 VS	8002 VS	8001/003
Nozzles/Row:	2	2	2	3
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA	15 GPA
Propellant:	COMP. AIR	COMP. AIR	COMP. AIR	COMP.AIR

Layby Comparisons for Morningglory Control

Certain restrictions on current Roundup Ready applications create a challenge for late-season weed control. Applications of Roundup Weathermax past the 4 leaf stage must be directed under the crop canopy minimizing contact with cotton foliage, which is similar to traditional post-emergence directed treatments. The objective of this study was to evaluate the effectiveness of several different late-season post-emergence directed applications for morningglory control. Applications were made with a Redball 420 Layby Hood. This site had a severe population of morningglory at the time of application. Most treatments effectively controlled morningglory 2 weeks after application.

Trial ID:	DUPWC0403	**Location:**	OSUREC
Planting Date:	May 18	**Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 50’
Replications:	3	**Soil Type:**	Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Pitted Morningglory Control 7/20/2004		7/29/2004		8/11/2004	
1	LAYBY PRO	32	oz/a	15-20"HT	A	78	ef	88	a	73	cd
2	LAYBY PRO	32	oz/a	15-20"HT	A	86	cd	86	ab	73	cd
	INDUCE	0.25	% v/v	15-20"HT	A						
3	LAYBY PRO	32	oz/a	15-20"HT	A	83	de	81	abc	73	cd
	CROP OIL	1	% v/v	15-20"HT	A						
4	LAYBY PRO	32	oz/a	15-20"HT	A	83	de	89	a	86	ab
	ROUNDUP WEATHERMAX	15	oz/a	15-20"HT	A						
	ACCUQUEST MAX	2	qt/100 gal	15-20"HT	A						
5	DIREX	32	oz/a	15-20"HT	A	75	f	81	abc	83	abc
	ROUNDUP WEATHERMAX	15	oz/a	15-20"HT	A						
	ACCUQUEST MAX	2	qt/100 gal	15-20"HT	A						
6	COTORAN	32	oz/a	15-20"HT	A	63	g	65	d	70	d
	ROUNDUP WEATHERMAX	15	oz/a	15-20"HT	A						
	ACCUQUEST MAX	2	qt/100 gal	15-20"HT	A						
7	SUPREND	1.5	lb/a	15-20"HT	A	75	f	81	abc	82	abc
	INDUCE	0.25	% v/v	15-20"HT	A						
8	LAYBY PRO	32	oz/a	15-20"HT	A	91	bc	74	bcd	82	abc
	VALOR	1	oz/a	15-20"HT	A						
	INDUCE	0.25	% v/v	15-20"HT	A						

Layby Comparisons for Morningglory Control (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Pitted Morningglory Control 7/20/2004		7/29/2004		8/11/2004	
9	VALOR	1	oz/a	15-20"HT	A	89	bc	90	a	90	a
	INDUCE	0.25	% v/v	15-20"HT	A						
	ROUNDUP WEATHERMAX	15	oz/a	15-20"HT	A						
	ACCUQUEST MAX	2	qt/100 gal	15-20"HT	A						
10	ENVOKE	0.19	oz/a	15-20"HT	A	73	f	85	abc	88	ab
	CAPAROL	24	oz/a	15-20"HT	A						
	INDUCE	0.25	% v/v	15-20"HT	A						
11	ROUNDUP WEATHERMAX	22	oz/a	15-20"HT	A	60	g	73	cd	75	cd
	ACCUQUEST MAX	2	qt/100 gal	15-20"HT	A						
12	AIM	1	oz/a	15-20"HT	A	93	ab	86	ab	78	bcd
	DIREX	1	qt/a	15-20"HT	A						
	CROP OIL CONCENTRATE	1.25	% v/v	15-20"HT	A						
13	AIM	0.6	oz/a	15-20"HT	A	89	bc	86	ab	80	a-d
	VALOR	2	oz/a	15-20"HT	A						
	INDUCE	0.25	% v/v	15-20"HT	A						
14	IGNITE	16	oz/a	15-20"HT	A	90	bc	91	a	82	abc
	DIREX	1	qt/a	15-20"HT	A						
	CROP OIL CONCENTRATE	1.25	% v/v	15-20"HT	A						
15	ET	2	oz/a	15-20"HT	A	97	a	90	a	87	ab
	DIREX	1	qt/a	15-20"HT	A						
	CROP OIL CONCENTRATE	1.25	% v/v	15-20"HT	A						
16	UNTREATED					0	h	0	e	0	e
LSD (P=.05)						5.1		11.8		10.8	
CV						4		9.05		8.58	

Means followed by same letter do not significantly differ (P=.05, LSD)

Layby Comparisons for Morningglory Control (cont.)

APPLICATION DESCRIPTION

	A
Application Date:	7/13/2004
Time of Day:	3:00 PM
Application Method:	SPRAY
Application Timing:	PD/LAYBY
Applic. Placement:	DIRECTED
Air Temp., Unit:	98 F
% Relative Humidity:	25
Wind Velocity, Unit:	7 MPH
Soil Temp., Unit:	99 F
Soil Moisture:	GOOD
% Cloud Cover:	5
Appl. Equipment:	REDBALL
Operating Pressure:	24 PSI
Nozzle Type:	FLATFAN
Nozzle Size:	TJ8001/03
Nozzles/Row:	3
Ground Speed, Unit:	4 MPH
Carrier:	WATER
Spray Volume, Unit:	15 GPA
Propellant:	COMP.AIR

ET Post-directed for Morningglory Control

ET is a newly registered herbicide/defoliant available for broad-leaf weed control in cotton. Current cotton labeling restricts its use to closed hood applications only. The objective of this trial was to evaluate the safety and effectiveness of post-emergence directed applications under the crop canopy for the control of morningglory. No significant crop injury was observed after application. All tank-mixes including ET effectively controlled morningglory 4 weeks after treatment.

Trial ID: NICWC0401 **Location:** OSUREC
Planting Date: May 18 **Rate:** 12 lbs/A
Row Spacing: 40 inches **Plot Size:** 4 r x 50'
Replications: 3 **Soil Type:** Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	% Pitted Morningglory Control 7/20/2004		7/29/2004		8/11/2004	
1	Untreated Control			0	e	0	d	0	c
2	Roundup WeatherMax	21	fl oz/a	65	d	89	c	73	b
3	Roundup WeatherMax	21	fl oz/a	76	c	96	ab	85	a
	ET	0.5	fl oz/a						
4	Roundup WeatherMax	21	fl oz/a	82	bc	98	a	91	a
	ET	1	fl oz/a						
5	Direx	32	fl oz/a	87	b	94	b	90	a
	ET	0.5	fl oz/a						
	COC	1	% v/v						
6	Direx	32	fl oz/a	95	a	98	a	92	a
	ET	0.75	fl oz/a						
	COC	1	% v/v						
7	Direx	32	fl oz/a	99	a	98	a	91	a
	ET	1	fl oz/a						
	COC	1	% v/v						
8	Direx	32	fl oz/a	99	a	98	a	91	a
	Aim	1	fl oz/a						
	COC	1	% v/v						
LSD (P=.05)				6.8		3.9		9.2	
CV				6.11		3.17		8.19	

Means followed by same letter do not significantly differ (P=.05, LSD)

ET Post-directed for Morningglory Control (cont.)

Application Description

	A
Application Date:	7/13/2004
Time of Day:	6:00 PM
Application Method:	SPRAY
Application Timing:	18"COTTON
Application Placement:	DIRECTED
Applied By:	REDBALL 420
Air Temperature, Unit:	96 F
% Relative Humidity:	23
Wind Velocity, Unit:	7 MPH
Soil Temperature, Unit:	98 F
Soil Moisture:	GOOD
% Cloud Cover:	0
Appl. Equipment:	RB420HOOD
Operating Pressure:	25
Pressure Unit:	PSI
Nozzle Type:	FLATFAN
Nozzle Size:	8001/03
Nozzles/Row:	3
Ground Speed, Unit:	4 MPH
Carrier:	WATER
Spray Volume:	20
Volume Unit:	GPA
Propellant:	CO2

Syngenta Weed Control Programs

The objective of this study was to evaluate the effectiveness of Touchdown, Sequence, Envoke and Suprend (currently not labeled in this region) for the control of morningglory. All treatments evaluated controlled morningglory greater than 75% in August.

Trial ID: SYNWC0401 **Location:** OSUREC
Planting Date: May 18 **Rate:** 12 lbs/A
Row Spacing: 40 inches **Plot Size:** 4 r x 50'
Replications: 3 **Soil Type:** Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Pitted Morningglory Control 6/17/2004		6/24/2004		7/15/2004		8/5/2004	
1	UNTREATED CHECK					0	c	0	b	0	b	0	b
2	TOUCHDOWN TOTAL	1.5	pt/a	EP1LF	A	80	a	91	a	70	a	76	a
	ACCUQUEST MAX	2	qt/100 gal	EP1LF	A								
	SEQUENCE	1.25	qt/a	EP5LF	B								
	SUPREND	1.5	lb/a	PD13LF	C								
	INDUCE	0.25	% v/v	PD13LF	C								
3	ROUNDUP WEATHERMAX	22	oz/a	EP-1LF	A	81	a	90	a	71	a	86	a
	ACCUQUEST MAX	2	qt/100 gal	EP-1LF	A								
	ROUNDUP WEATHERMAX	22	oz/a	EP5LF	B								
	ACCUQUEST MAX	2	qt/100 gal	EP5LF	B								
	DUAL MAGNUM	1	pt/a	EP5LF	B								
	ROUNDUP WEATHERMAX	22	oz/a	PD13LF	C								
	ACCUQUEST MAX	2	qt/100 gal	PD13LF	C								
	DIREX	1	qt/a	PD13LF	C								
4	ROUNDUP WEATHERMAX	22	oz/a	EP1LF	A	80	a	90	a	73	a	80	a
	ACCUQUEST MAX	2	qt/100 gal	EP1LF	A								
	ENVOKE	0.15	oz/a	MP5-8LF	B								
	INDUCE	0.25	% v/v	MP5-8LF	B								
	SUPREND	1.5	lb/a	PD13LF	C								
	INDUCE	0.25	% v/v	PD13LF	C								
5	TOUCHDOWN TOTAL	1.5	pt/a	EP1LF	A	70	b	80	a	76	a	79	a
	ACCUQUEST MAX	2	qt/100 gal	EP1LF	A								
	ENVOKE	0.15	oz/a	MP5-8LF	B								
	INDUCE	0.25	% v/v	MP5-8LF	B								
	SUPREND	1.5	lb/a	PD13LF	C								
	INDUCE	0.25	% v/v	PD13LF	C								
LSD (P=.05)						7.4		13.7		8.6		14.2	
CV						7.69		12.7		9.5		14.38	

Means followed by same letter do not significantly differ (P=.05, LSD)

Syngenta Weed Control Programs (cont.)

APPLICATION DESCRIPTION

	A	B	C
Application Date:	6/4/2004	6/16/2004	7/14/2004
Time of Day:	3:00 PM	3:30 PM	11:00 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	EP-1LF	MP-5LF	12-14LF
Applic. Placement:	BROADCAST	BROADCAST	DIRECTED
Air Temp., Unit:	87 F	98 F	86 F
% Relative Humidity:	56	20	45
Wind Velocity, Unit:	6 MPH	10 MPH	5 MPH
Soil Temp., Unit:	75 F	98 F	84 F
Soil Moisture:	GOOD	GOOD	GOOD
% Cloud Cover:	0	10	0
Appl. Equipment:	LEESPIDER	LEESPIDER	REDBALL
Operating Pressure:	24 PSI	24 PSI	26 PSI
Nozzle Type:	FLATFAN	FLATFAN	FLATFAN
Nozzle Size:	8002 VS	8002 VS	8001/003
Nozzles/Row:	2	2	3
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	15 GPA
Propellant:	COMP. AIR	COMP. AIR	COMP.AIR

Cotton Tolerance of Prowl H20 Over-the-top

Prowl 3.3 EC herbicide has recently been re-formulated and labeled as Prowl H20. The new formulation is micro-encapsulated which lends itself to greater shelf life after application and an increased capacity to be incorporated (by rain or sprinkler irrigation) into the soil profile through existing residue. The objective of this trial was to evaluate crop safety when Prowl H20 is tank-mixed with Roundup Weathermax for over-the-top applications to Roundup Ready cotton (which is currently not labeled). No injury symptoms were observed after application and there were no treatment effects on yield or quality.

Trial ID: BASAG0401
Planting Date: May 6
Row Spacing: 40 inches
Replications: 3
Location: WOSC
Rate: 12 lbs/A
Plot Size: 4 r x 50'
Soil Type: Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Cotton Injury 6/3	6/15	6/24	7/15	Seedcot lbs/A 1/20/2005	Gin % 1/20/2005	Lint lbs/A 1/20/2005
1	UNTREATED CHECK					0 a	0 a	0 a	0 a	4692 a	32 a	1508 a
2	PROWL H2O	0.75	lb ai/a	1-LEAF	A	0 a	0 a	0 a	0 a	4556 a	33 a	1507 a
	ROUNDUP WEATHERMAX	22	oz/a	1-LEAF	A							
	ACCUQUEST	2	qt/100 gal	1-LEAF	A							
3	PROWL H2O	1.5	lb ai/a	1-LEAF	A	0 a	0 a	0 a	0 a	4682 a	32 a	1521 a
	ROUNDUP WEATHERMAX	22	oz/a	1-LEAF	A							
	ACCUQUEST	2	qt/100 gal	1-LEAF	A							
4	ROUNDUP WEATHERMAX	22	oz/a	1-LEAF	A	0 a	0 a	0 a	0 a	4714 a	32 a	1506 a
	ACCUQUEST	2	qt/100 gal	1-LEAF	A							
5	PROWL H2O	0.75	lb ai/a	4-LEAF	B	0 a	0 a	0 a	0 a	4894 a	32 a	1565 a
	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B							
	ACCUQUEST	2	qt/100 gal	4-LEAF	B							
6	PROWL 3.3 EC	0.75	lb ai/a	4-LEAF	B	0 a	0 a	0 a	0 a	4649 a	32 a	1488 a
	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B							
	ACCUQUEST	2	qt/100 gal	4-LEAF	B							
7	PROWL H2O	1.5	lb ai/a	4-LEAF	B	0 a	0 a	0 a	0 a	4660 a	33 a	1541 a
	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B							
	ACCUQUEST	2	qt/100 gal	4-LEAF	B							

Cotton Tolerance of Prowl H20 Over-the-top (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Cotton Injury 6/3	6/15	6/24	7/15	Seedcot lbs/A 1/20/2005	Gin % 1/20/2005	Lint lbs/A 1/20/2005
8	PROWL 3.3 EC	1.5	lb ai/a	4-LEAF	B	0 a	0 a	0 a	0 a	4774 a	33 a	1555 a
	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B							
	ACCUQUEST	2	qt/100 gal	4-LEAF	B							
9	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B	0 a	0 a	0 a	0 a	4567 a	33 a	1496 a
	ACCUQUEST	2	qt/100 gal	4-LEAF	B							
10	DUAL MAGNUM	1.33	pt/a	4-LEAF	B	0 a	0 a	0 a	0 a	4851 a	32 a	1566 a
	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B							
11	OUTLOOK	16	oz/a	4-LEAF	B	0 a	0 a	0 a	0 a	4752 a	32 a	1531 a
	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B							
LSD (P=.05)						0	0	0	0	496.8	1.8	203.7
CV						0	0	0	0	7.31	3.83	9.24

Means followed by same letter do not significantly differ (P=.05, LSD)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Fiber Data Mic	Length	Uniformity	Strength
1	UNTREATED CHECK					4.5 a	1.21 a	83.98 a	30.95 a
2	PROWL H2O	0.75	lb ai/a	1-LEAF	A	4.68 a	1.21 a	83.65 a	31.93 a
	ROUNDUP WEATHERMAX	22	oz/a	1-LEAF	A				
	ACCUQUEST	2	qt/100 gal	1-LEAF	A				
3	PROWL H2O	1.5	lb ai/a	1-LEAF	A	4.5 a	1.21 a	83.98 a	30.53 a
	ROUNDUP WEATHERMAX	22	oz/a	1-LEAF	A				
	ACCUQUEST	2	qt/100 gal	1-LEAF	A				
4	ROUNDUP WEATHERMAX	22	oz/a	1-LEAF	A	4.33 a	1.2 a	82 a	31.7 a
	ACCUQUEST	2	qt/100 gal	1-LEAF	A				
5	PROWL H2O	0.75	lb ai/a	4-LEAF	B	4.63 a	1.19 a	83.18 a	31.3 a
	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B				
	ACCUQUEST	2	qt/100 gal	4-LEAF	B				
6	PROWL 3.3 EC	0.75	lb ai/a	4-LEAF	B	4.65 a	1.19 a	83.45 a	30.75 a
	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B				
	ACCUQUEST	2	qt/100 gal	4-LEAF	B				
7	PROWL H2O	1.5	lb ai/a	4-LEAF	B	4.5 a	1.21 a	83.98 a	30.35 a
	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B				
	ACCUQUEST	2	qt/100 gal	4-LEAF	B				

Cotton Tolerance of Prowl H20 Over-the-top (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Fiber Data Mic		Length		Uniformity		Strength	
8	PROWL 3.3 EC	1.5	lb ai/a	4-LEAF	B	4.4	a	1.19	a	82.33	a	30.93	a
	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B								
	ACCUQUEST	2	qt/100 gal	4-LEAF	B								
9	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B	4.33	a	1.21	a	83.78	a	30.3	a
	ACCUQUEST	2	qt/100 gal	4-LEAF	B								
10	DUAL MAGNUM	1.33	pt/a	4-LEAF	B	4.5	a	1.19	a	83.55	a	31.15	a
	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B								
11	OUTLOOK	16	oz/a	4-LEAF	B	4.5	a	1.2	a	84.05	a	31.9	a
	ROUNDUP WEATHERMAX	22	oz/a	4-LEAF	B								
LSD (P=.05)						0.285		0.034		1.507		1.509	
CV						4.38		1.94		1.25		3.36	

Means followed by same letter do not significantly differ (P=.05, LSD)

APPLICATION DESCRIPTION

	A	B
Application Date:	5/27/2004	6/7/2004
Time of Day:	9:00 AM	9:00 AM
Application Method:	SPRAY	SPRAY
Application Timing:	1-2 LEAF	4-5 LEAF
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	84 F	75 F
% Relative Humidity:	55	72
Wind Velocity, Unit:	5 MPH	7 MPH
Soil Temp., Unit:	80 F	77 F
Soil Moisture:	MARGINAL	GOOD
% Cloud Cover:	100	90
Appl. Equipment:	LEESPIDER	LEESPIDER
Operating Pressure:	26 PSI	26 PSI
Nozzle Type:	FLATFAN	FLATFAN
Nozzle Size:	8002	8002
Nozzle Spacing, Unit:	20 IN	20 IN
Nozzles/Row:	2	2
Ground Speed, Unit:	4 MPH	4 MPH
Spray Volume, Unit:	10 GPA	10 GPA
Propellant:	COMP.AIR	COMP.AIR

Effect of Pentia Application Timing on Cotton Yield

The objective of this study was to compare the yield of cotton receiving Pentia growth regulator applications to the standard generic growth regulator Mepiquat Chloride. No significant difference in yield was observed between any of the treatments.

Trial ID: BASAG0402 **Location:** OSUREC
Planting Date: May 4 **Rate:** 12 lbs/A
Row Spacing: 40 inches **Plot Size:** 4 r x 50'
Replications: 3 **Soil Type:** Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Avg # sq/plant 7/15/2004	Plant Ht-inches 7/15/2004	Seedcot lbs/A 1/1/2005	Gin % 1/1/2005	Lint lbs/A 1/1/2005
1	UNTREATED CHECK					13 a	24 a	4692 a	36 a	1663 a
2	PENTIA	8	oz/a	PINHEAD	A	13 a	21 b	4545 a	36 a	1622 a
	PENTIA	8	oz/a	EARLYBLM	B					
	PENTIA	8	oz/a	ASNEEDED	C					
3	PENTIA	8	oz/a	EARLYBLM	B	12 a	24 a	4894 a	35 a	1704 a
	PENTIA	8	oz/a	ASNEEDED	C					
4	MEPIQUAT(GENERIC)	8	oz/a	PINHEAD	A	12 a	22 b	4812 a	36 a	1741 a
	MEPIQUAT(GENERIC)	8	oz/a	EARLYBLM	B					
LSD (P=.05)						2.1	1.7	664.8	2.5	226
CV						10.75	4.58	8.78	4.47	8.4

Means followed by same letter do not significantly differ (P=.05, LSD)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Fiber Data Mic	Length	Uniformity	Strength
1	UNTREATED CHECK					4.3	1.13	81.6	26.8
2	PENTIA	8	oz/a	PINHEAD	A	4.5	1.14	81.5	28.4
	PENTIA	8	oz/a	EARLYBLM	B				
	PENTIA	8	oz/a	ASNEEDED	C				
3	PENTIA	8	oz/a	EARLYBLM	B	4.3	1.16	83.3	28
	PENTIA	8	oz/a	ASNEEDED	C				
4	MEPIQUAT(GENERIC)	8	oz/a	PINHEAD	A	4.1	1.14	82.2	28.2
	MEPIQUAT(GENERIC)	8	oz/a	EARLYBLM	B				

Effect of Pentia Application Timing on Cotton Yield

APPLICATION DESCRIPTION			
	A	**B**	**C**
Application Date:	6/15/2004	7/6/2004	7/19/2004
Time of Day:	3:00 PM	10:00 AM	8:30 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PINHEAD	1STBLOOM	MIDBLOOM
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	87 F	77 F	83 F
% Relative Humidity:	48	60	54
Wind Velocity, Unit:	6 MPH	5 MPH	2 MPH
Soil Temp., Unit:	84 F	81 F	86 F
Soil Moisture:	GOOD	GOOD	GOOD
% Cloud Cover:	20	30	10
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER
Operating Pressure:	24 PSI	24 PSI	24 PSI
Nozzle Type:	FF	FF	FF
Nozzle Size:	TJ8002VS	TJ8002VS	TJ8002VS
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Nozzles/Row:	2	2	2
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA
Propellant:	COMP.AIR	COMP.AIR	COMP.AIR

Effect of Trimax Applications on Cotton Yield

The purpose of this study was to identify any potential growth or developmental benefits from applications of Trimax insecticide. All treatments received standard insect control practices which consisted of 6.4 oz/A of Vydate C-LV applied at pinhead square for fleahopper control. Subsequently treatments 2 and 3 received three applications of Trimax starting at pinhead square and continuing at approximately 10 day intervals. Treatment 4 was to receive any other necessary insect treatments on an as needed basis. As it turned out no other insecticide treatment was needed. Therefore, treatments 1 and 4 were essentially the same. No statistical yield benefit was observed from any treatment compared to the untreated.

Trial ID:	BAYAG0402	**Location:**	OSUREC
Planting Date:	May 4	**Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 50’
Replications:	3	**Soil Type:**	Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Seedcot lbs/A 12/2/2004	Gin % 1/26/2005	Lint lbs/A 1/26/2005
1	VYDATE C-LV - then UNTREATED	6.4	Oz/a	PINHEAD	A	4532 a	31 a	1408 a
2	TRIMAX	1	oz/a	PINHEAD	A	4215 a	33 a	1391 a
	TRIMAX	1	oz/a	10DAIT	B			
	TRIMAX	1	oz/a	20DAIT	C			
3	TRIMAX	1.5	oz/a	PINHEAD	A	4642 a	32 a	1482 a
	TRIMAX	1.5	oz/a	10DAIT	B			
	TRIMAX	1.5	oz/a	20DAIT	C			
4	LOCAL STD INSECT CONTROL			ASNEEDED		4487 a	33 a	1472 a
	VYDATE C-LV	6.4	Oz/a	PINHEAD	A			
LSD (P=.05)						654.3	2.4	260.8
CV						8.05	4.03	9.98

Means followed by same letter do not significantly differ (P=.05, LSD)

Effect of Trimax Applications on Cotton Yield (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Fiber Data Mic	Length	Uniform	Strength
1	VYDATE C-LV	6.4	Oz/a	PINHEAD	A	4.9	1.18	81.6	27.2
	UNTREATED								
2	TRIMAX	1	oz/a	PINHEAD	A	4.7	1.18	84.8	28.5
	TRIMAX	1	oz/a	10DAIT	B				
	TRIMAX	1	oz/a	20DAIT	C				
3	TRIMAX	1.5	oz/a	PINHEAD	A	4.6	1.18	81.7	27.1
	TRIMAX	1.5	oz/a	10DAIT	B				
	TRIMAX	1.5	oz/a	20DAIT	C				
4	Vydate C-LV	6.4	oz/a	PINHEAD	A	4.6	1.14	83.7	29.6

APPLICATION DESCRIPTION

	A	B	C
Application Date:	6/15/2004	6/24/2004	7/2/2004
Time of Day:	7:00 PM	9:30 AM	9:00 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PINHEAD	10DAIT	20DAIT
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	88 F	84 F	80 F
% Relative Humidity:	44	39	70
Wind Velocity, Unit:	7 MPH	3 MPH	1 MPH
Soil Temp., Unit:	85 F	80 F	79 F
Soil Moisture:	GOOD	GOOD	GOOD
% Cloud Cover:	15	15	5
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER
Operating Pressure:	26 PSI	26 PSI	26 PSI
Nozzle Type:	FLATFAN	FLATFAN	FLATFAN
Nozzle Size:	8002	8002	8002
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Nozzles/Row:	2	2	2
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA
Propellant:	COMP.AIR	COMP.AIR	COMP.AIR

Evaluation of an Experimental Growth Regulator-TADS 15338

The purpose of this trial was to compare TADS 15338 to applications of Mepiquat Chloride. A slight height reduction was observed with the TADS compound compared to Mepiquat Chloride. No differences in yield were observed between treatments.

Trial ID: BAYAG0403 **Location:** OSUREC
Planting Date: May 4 **Rate:** 12 lbs/A
Row Spacing: 40 inches **Plot Size:** 4 r x 50'
Replications: 4 **Soil Type:** Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Plant Ht. Inches 7/20/2004		Seedcot lbs/A 11/12/2004		Gin % 1/13/2005		Lint lbs/A 1/13/2005	
1	UNTREATED					25.7	a	5030	a	37	a	1839	a
2	MEPIQUAT CHLORIDE	4	oz/a	MATCHSQ	A	24.3	ab	4976	a	35	a	1764	a
	MEPIQUAT CHLORIDE	4	oz/a	14DAIT	B								
	MEPIQUAT CHLORIDE	4	oz/a	28DAIT	C								
3	TADS15338	2	oz/a	MATCHSQ	A	25.2	ab	4916	a	35	a	1741	a
	TADS15338	2	oz/a	14DAIT	B								
	TADS15338	2	oz/a	28DAIT	C								
4	TADS15338	2.5	oz/a	MATCHSQ	A	24.2	b	4889	a	35	a	1685	a
	TADS15338	2.5	oz/a	14DAIT	B								
	TADS15338	2.5	oz/a	28DAIT	C								
LSD (P=.05)						1.36		441.1		2.5		184.6	
CV						3.43		5.57		4.36		6.57	

Means followed by same letter do not significantly differ (P=.05, LSD)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Fiber Data Mic	Length	Uniformity	Strength
1	UNTREATED					4.3	1.13	81.6	28.2
2	MEPIQUAT CHLORIDE	4	oz/a	MATCHSQ	A	4.6	1.15	82.9	29.2
	MEPIQUAT CHLORIDE	4	oz/a	14DAIT	B				
	MEPIQUAT CHLORIDE	4	oz/a	28DAIT	C				
3	TADS15338	2	oz/a	MATCHSQ	A	4.4	1.21	82.6	30
	TADS15338	2	oz/a	14DAIT	B				
	TADS15338	2	oz/a	28DAIT	C				
4	TADS15338	2.5	oz/a	MATCHSQ	A	4.6	1.15	83.1	29.3
	TADS15338	2.5	oz/a	14DAIT	B				
	TADS15338	2.5	oz/a	28DAIT	C				

Evaluation of an Experimental Growth Regulator-TADS 15338

APPLICATION DESCRIPTION

	A	B	C
Application Date:	7/2/2003	7/15/2004	8/3/2004
Time of Day:	12:00 PM	9:00 AM	6:00 PM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	MATCHHEAD	14DAIT	28DAIT
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	88 F	80 F	102 F
% Relative Humidity:	51	60	24
Wind Velocity, Unit:	3.3 MPH	4 MPH	9 MPH
Soil Temp., Unit:	90 F	85 F	94 F
Soil Moisture:	GOOD	FAIR	GOOD
% Cloud Cover:	0	0	30
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER
Operating Pressure:	26 PSI	26 PSI	26 PSI
Nozzle Type:	FLATFAN	FLATFAN	FLATFAN
Nozzle Size:	8002	8002	8002
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Nozzles/Row:	2	2	2
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA
Propellant:	COMP.AIR	COMP.AIR	COMP.AIR

Substituting Pre-plant Nitrogen Applications with In-season Applications of Coron

The purpose of this study was to compare standard nitrogen application programs (according to OSU soil test recommendations) with alternative programs that substitute some portion of pre-plant nitrogen applications with in-season foliar applications of Coron liquid fertilizer. Cotton yields from the alternative nitrogen programs were equal to those produced by traditional programs.

Trial ID:	HELAG0401	**Location:**	OSUREC
Planting Date:	May 5	**Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 50’
Replications:	4	**Soil Type:**	Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Seedcot lbs/A 12/3/2004		Gin % 1/3/2005		Lint lbs/A 1/3/2005	
1	FULL "N" ACC. SOIL TEST			PPI	A	4156	a	31	abc	1299	ab
	HM 9826 A	1	qt/a	PINHEAD	B						
	HM 9870	2	qt/a	50% BLM	D						
2	FULL "N" ACC. SOIL TEST			PPI	A	3856	a	31	bc	1175	b
	HM 9754	1	gal/a	PPI	A						
	HM 9826 A	1	qt/a	PINHEAD	B						
	HM 9870	2	qt/a	50% BLM	D						
3	FULL "N" ACC.SOIL TEST			PPI	A	4081	a	32	ab	1284	ab
	HM 9826 A	1	qt/a	PINHEAD	B						
	HM 9827 A	1	gal/a	1STBLM	C						
	HM 9870	2	qt/a	50% BLM	D						
	HM 9827 A	1	gal/a	ASNEEDED	EF						
4	FULL "N" ACC.SOIL TEST			PPI	A	4060	a	30	c	1230	ab
	HM 9754	1	gal/a	PPI	A						
	HM 9826 A	1	qt/a	PINHEAD	B						
	HM 9827 A	1	gal/a	1STBLM	C						
	HM 9870	2	qt/a	50% BLM	D						
	HM 9827 A	1	gal/a	ASNEEDED	EF						
5	2/3 "N" ACC SOIL TEST			PPI	A	3842	a	31	abc	1202	ab
	HM 9826 A	1	qt/a	PINHEAD	B						
	HM 9870	2	qt/a	50% BLM	D						
6	2/3 "N" ACC SOIL TEST			PPI	A	3972	a	32	a	1260	ab
	HM 9754	1	gal/a	PPI	A						
	HM 9826 A	1	qt/a	PINHEAD	B						
	HM 9870	2	qt/a	50% BLM	D						

Substituting Pre-plant Nitrogen Applications with In-season Applications of Coron (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Seedcot lbs/A 12/3/2004		Gin % 1/3/2005		Lint lbs/A 1/3/2005	
7	2/3 "N" ACC SOIL TEST			PPI	A	4203	a	31	abc	1313	ab
	HM 9826 A	1	qt/a	PINHEAD	B						
	HM 9827 A	1	gal/a	1STBLM	C						
	HM 9870	2	qt/a	50% BLM	D						
	HM 9827 A	1	gal/a	ASNEEDED	EF						
8	2/3 "N" ACC SOIL TEST			PPI	A	4156	a	32	a	1342	a
	HM 9754	1	gal/a	PPI	A						
	HM 9826 A	1	qt/a	PINHEAD	B						
	HM 9827 A	1	gal/a	1STBLM	C						
	HM 9870	2	qt/a	50% BLM	D						
	HM 9827 A	1	gal/a	ASNEEDED	EF						
9	1/2 "N" ACC. SOIL TEST			PPI	A	4067	a	32	a	1290	ab
	HM 9826 A	1	qt/a	PINHEAD	B						
	HM 9870	2	qt/a	50% BLM	D						
10	NO NITROGEN APPLIC. (UNTREATED CHECK)					2998	b	32	a	966	c
LSD (P=.05)						506.8		1.2		164.7	
CV						8.87		2.7		9.18	

Means followed by same letter do not significantly differ (P=.05, LSD)

Substituting Pre-plant Nitrogen Applications with In-season Coron

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Fiber Data Mic	Length	Uniformity	Strength
1	FULL "N" ACC. SOIL TEST			PPI	A	4.7	1.05	81.2	25.4
	HM 9826 A	1	qt/a	PINHEAD	B				
	HM 9870	2	qt/a	50% BLM	D				
2	FULL "N" ACC. SOIL TEST			PPI	A	4.5	1.08	82.4	27.6
	HM 9754	1	gal/a	PPI	A				
	HM 9826 A	1	qt/a	PINHEAD	B				
	HM 9870	2	qt/a	50% BLM	D				
3	FULL "N" ACC.SOIL TEST			PPI	A	4.6	1.13	82.7	27.3
	HM 9826 A	1	qt/a	PINHEAD	B				
	HM 9827 A	1	gal/a	1STBLM	C				
	HM 9870	2	qt/a	50% BLM	D				
	HM 9827 A	1	gal/a	ASNEEDED	EF				
4	FULL "N" ACC.SOIL TEST			PPI	A	4.3	1.1	83.3	26.1
	HM 9754	1	gal/a	PPI	A				
	HM 9826 A	1	qt/a	PINHEAD	B				
	HM 9827 A	1	gal/a	1STBLM	C				
	HM 9870	2	qt/a	50% BLM	D				
	HM 9827 A	1	gal/a	ASNEEDED	EF				
5	2/3 "N" ACC SOIL TEST			PPI	A	4.3	1.11	81.5	25.9
	HM 9826 A	1	qt/a	PINHEAD	B				
	HM 9870	2	qt/a	50% BLM	D				
6	2/3 "N" ACC SOIL TEST			PPI	A	4.9	1.07	80.7	26.1
	HM 9754	1	gal/a	PPI	A				
	HM 9826 A	1	qt/a	PINHEAD	B				
	HM 9870	2	qt/a	50% BLM	D				
7	2/3 "N" ACC SOIL TEST			PPI	A	4.6	1.08	81.8	24.7
	HM 9826 A	1	qt/a	PINHEAD	B				
	HM 9827 A	1	gal/a	1STBLM	C				
	HM 9870	2	qt/a	50% BLM	D				
	HM 9827 A	1	gal/a	ASNEEDED	EF				
8	2/3 "N" ACC SOIL TEST			PPI	A	4.6	1.17	82.5	28.3
	HM 9754	1	gal/a	PPI	A				
	HM 9826 A	1	qt/a	PINHEAD	B				
	HM 9827 A	1	gal/a	1STBLM	C				
	HM 9870	2	qt/a	50% BLM	D				
	HM 9827 A	1	gal/a	ASNEEDED	EF				

Substituting Pre-plant Nitrogen Applications with In-season Coron

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Fiber Data Mic	Length	Uniformity	Strength
8	2/3 "N" ACC SOIL TEST			PPI	A	4.6	1.17	82.5	28.3
	HM 9754	1	gal/a	PPI	A				
	HM 9826 A	1	qt/a	PINHEAD	B				
	HM 9827 A	1	gal/a	1STBLM	C				
	HM 9870	2	qt/a	50% BLM	D				
	HM 9827 A	1	gal/a	ASNEEDED	EF				
9	1/2 "N" ACC. SOIL TEST			PPI	A	4.8	1.07	80	26.9
	HM 9826 A	1	qt/a	PINHEAD	B				
	HM 9870	2	qt/a	50% BLM	D				
10	NO NITROGEN APPLICATIONS (UNTREATED CHECK)					4.6	1.09	82.5	27.6

APPLICATION DESCRIPTION

	A	B	C	D	E	F
Application Date:	4/11/2004	6/15/2004	7/2/2004	8/3/2004	8/12/2004	8/24/2004
Time of Day:	10:00 AM	5:00 PM	8:45 AM	6:OO PM	10:00 AM	2:00 PM
Application Method:	SPRA/DROP	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PREPLANT	PINHEAD	1STBLOOM	MIDBLOOM	LATEBLOOM	LATEBLOOM
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	74 F	88 F	80 F	98 F	77 F	95 F
% Relative Humidity:	40	60	70	40	50	39
Wind Velocity, Unit:	5 MPH	5 MPH	3 MPH	6 MPH	5 MPH	5 MPH
Soil Temp., Unit:	58 F	84 F	80 F	88 F	84 F	100 F
Soil Moisture:	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
% Cloud Cover:	10	50	10	20	20	20

All applications made at 10 GPA, 4 MPH, 25 PSI with Lee Spider Highboy

Evaluation of PGR IV Seed Treatment and Foliar Application

The purpose of this study was to compare yields from plots receiving PGR IV seed treatments and PGR IV foliar applications to untreated plots. No significant differences were observed between any treatment.

Trial ID:	MICAG0401	**Location:**	OSUREC
Planting Date:	May 4	**Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 50’
Replications:	4	**Soil Type:**	Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	App Code	Vigor Index Scale of 1-10 5/11		5/13		5/18		Stand #/Meter 5/21	
1	UNTREATED (SEED)					7	a	10	a	10	a	14	a
2	PGR IV PLUS SEED TRT	2	oz/a	SEED	A	7	a	10	a	10	a	16	a
3	PGR IV PLUS SEED TRT	1	oz/a	SEED	A	8	a	10	a	10	a	12	a
	PGR IV-FOLIAR(LIQUID)	4	oz/a	PINHEAD	B								
4	PGR IV PLUS SEED TRT	1	oz/a	SEED	A	8	a	10	a	10	a	14	a
	PGR IV-FOLIAR(LIQUID)	4	oz/a	PINHEAD	B								
	PGR IV-PLUS-FOLIAR	1	oz/a	EARLYBLM	C								
5	PGR IV-PLUS-FOLIAR	1	oz/a	EARLYBLM	C	8	a	10	a	10	a	15	a
6	PGR IV-PLUS-FOLIAR	1	oz/a	EARLYBLM	C	8	a	10	a	10	a	14	a
	PGR IV-PLUS-FOLIAR	1	oz/a	14DAEBLM	D								
LSD (P=.05)						0.7		0		0		3.3	
CV						6.14		0		0		15.54	

Means followed by same letter do not significantly differ (P=.05, LSD)

Evaluation of PGR IV Seed Treatment and Foliar Application (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	App Code	Total # Sq/plant 7/15		Seedcot lbs/A 11/12		Gin % 11/18		Lint lbs/A 11/18	
1	UNTREATED (SEED)					13	a	4916	a	36	a	1749	a
2	PGR IV PLUS SEED TRT	2	oz/a	SEED	A	12	a	4600	a	35	a	1627	a
3	PGR IV PLUS SEED TRT	1	oz/a	SEED	A	13	a	5014	a	36	a	1800	a
	PGR IV-FOLIAR(LIQUID)	4	oz/a	PINHEAD	B								
4	PGR IV PLUS SEED TRT	1	oz/a	SEED	A	12	a	5009	a	35	a	1760	a
	PGR IV-FOLIAR(LIQUID)	4	oz/a	PINHEAD	B								
	PGR IV-PLUS-FOLIAR	1	oz/a	EARLYBLM	C								
5	PGR IV-PLUS-FOLIAR	1	oz/a	EARLYBLM	C	12	a	4916	a	35	a	1739	a
6	PGR IV-PLUS-FOLIAR	1	oz/a	EARLYBLM	C	12	a	4905	a	36	a	1748	a
	PGR IV-PLUS-FOLIAR	1	oz/a	14DAEBLM	D								
LSD (P=.05)						2.3		674.2		1.7		286.5	
CV						12.2		9.14		3.27		10.95	

Means followed by same letter do not significantly differ (P=.05, LSD)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Fiber Data Mic	Length	Uniformity	Strength
1	UNTREATED (SEED)					4.6	1.13	82.9	29
2	PGR IV PLUS SEED TRT	2	oz/a	SEED	A	4.4	1.14	82.8	27.8
3	PGR IV PLUS SEED TRT	1	oz/a	SEED	A	4.6	1.15	81.7	29.1
	PGR IV-FOLIAR(LIQUID)	4	oz/a	PINHEAD	B				
4	PGR IV PLUS SEED TRT	1	oz/a	SEED	A	4.3	1.13	83.4	29.2
	PGR IV-FOLIAR(LIQUID)	4	oz/a	PINHEAD	B				
	PGR IV-PLUS-FOLIAR(DRY)	1	oz/a	EARLYBLM	C				
5	PGR IV-PLUS-FOLIAR(DRY)	1	oz/a	EARLYBLM	C	4.4	1.12	81.8	29.2
6	PGR IV-PLUS-FOLIAR(DRY)	1	oz/a	EARLYBLM	C	4.4	1.14	82.7	28.2
	PGR IV-PLUS-FOLIAR(DRY)	1	oz/a	14DAEBLM	D				

Evaluation of PGR IV Seed Treatment and Foliar Application (cont.)

APPLICATION DESCRIPTION

	A	B	C
Application Date:	6/15/2004	7/6/2004	7/19/2004
Time of Day:	4:00 PM	10:00 AM	8:45 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PINHEAD	EARLBLOOM	MIDBLOOM
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	90 F	80 F	83 F
% Relative Humidity:	45	65	54
Wind Velocity, Unit:	6 MPH	5 MPH	2 MPH
Soil Temp., Unit:	84 F	81 F	86 F
Soil Moisture:	GOOD	GOOD	GOOD
% Cloud Cover:	20	30	10
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER
Operating Pressure:	26 PSI	26 PSI	26 PSI
Nozzle Type:	FLATFAN	FLATFAN	FLATFAN
Nozzle Size:	8002	8002	8002
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Nozzles/Row:	2	2	2
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA
Propellant:	COMP.AIR	COMP.AIR	COMP.AIR

Comparison of Fibermax 960 B2R to 960 B/R and 958 RR

The original purpose of this trial was to compare the same variety with three different gene packages (RR, B/R, and B2R). Treatment 1 was to receive no lepidopteran treatment, treatments 2 and 3 were to receive lepidopteran treatment on an as-needed basis, treatment 4 was to receive lepidopteran treatment according to Bollgard II threshold, and treatment 5 received a mandatory pyrethroid application at late-bloom. No lepidopteran species were identified at any level during the season. Therefore the only treatment applied was the mandatory pyrethroid application (treatment 5). No differences in yield were observed between treatments.

Trial ID:	MONAG0401	**Location:**	WOSC
Planting Date:	May 6	**Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 50’
Replications:	4	**Soil Type:**	Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Seedcot lbs/A 1/25/2005		Gin % 1/25/2005		Lint lbs/A 1/25/2005	
1	FM 958 RR UNTREATED					4952	a	32	a	1601	a
2	FM 958 RR UNTREATED					4833	a	32	a	1560	a
3	FM 960 BR UNTREATED					5019	a	32	a	1596	a
4	FM 960 B2R UNTREATED					5001	a	33	a	1630	a
5	FM 960 B2R MUSTANG EC	0.05	lb ai/a	LATEBLM	C	4784	a	32	a	1531	a
LSD (P=.05)						394.6		1.8		182.7	
CV						4.26		2.95		6.13	

Means followed by same letter do not significantly differ (P=.05, LSD)

Comparison of Fibermax 960 B2R to 960 B/R and 958 RR (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Fiber Data Mic		Length		Uniformity		Strength	
1	FM 960 RR UNTREATED					4.1	b	1.17	c	83.5	a	30	a
2	FM 960 RR UNTREATED					4.1	b	1.18	bc	84.47	a	30.53	a
3	FM 960 BR UNTREATED					4.4	a	1.15	c	83.47	a	32	a
4	FM 960 B2R UNTREATED					4.4	a	1.21	a	83.43	a	30.7	a
5	FM 960 B2R MUSTANG EC	0.045	lb ai/a	LATEBLM	C	4.6	a	1.21	ab	83.3	a	30.37	a
LSD (P=.05)						0.296		0.032		1.73		1.766	
CV						3.64		1.45		1.1		3.05	

Means followed by same letter do not significantly differ (P=.05, LSD)

APPLICATION DESCRIPTION

	C
Application Date:	8/24/2004
Time of Day:	10:30 AM
Application Method:	SPRAY
Application Timing:	LATEBLOOM
Applic. Placement:	BROADCAST
Air Temp., Unit:	88 F
% Relative Humidity:	39
Wind Velocity, Unit:	7 MPH
Soil Temp., Unit:	94 F
Soil Moisture:	GOOD
% Cloud Cover:	20
Appl. Equipment:	LEESPIDER
Operating Pressure:	26 PSI
Nozzle Type:	FLATFAN
Nozzle Size:	TJ8002 VS
Nozzle Spacing, Unit:	20 IN
Nozzles/Row:	2
Ground Speed, Unit:	4 MPH
Spray Volume, Unit:	10 GPA
Propellant:	COMP.AIR

The Effects of Hydrahume In-Furrow on Two Cotton Variety (DP 555 B/R & PM 2344 B/R) Yields Following Cadre Applied in Peanuts the Previous Year

The objective of this study was to evaluate yield differences between untreated plots and plots receiving in-furrow treatments of 9-18-9 or Hydrahume or a combination of both. No statistical difference was observed in the Paymaster 2344 B/R trial. However, in the DP 555 B/R trial, treatments 2 and 5 increased yield over the untreated check.

Trial ID: OSUAG0401 **Location:** Beckham County
Planting Date: May 6 **Rate:** 12 lbs/A
Row Spacing: 40 inches **Plot Size:** 4 r x 50'
Replications: 4 **Soil Type:** Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Stand Ct #/Meter 6/3/2004		Seedcot lbs/A		Gin % 1/13/2005		Lint lbs/A	
1	PM 2344 B/R-UNTREATED					8	a	4937	a	26	a	1255	a
2	PM 2344 B/R-9-18-9	2	gal/a	ATPLANT	A	7	a	5244	a	26	a	1354	a
3	PM 2344 B/R-9-18-9	2	gal/a	ATPLANT	A	6	a	5020	a	24	b	1216	a
	PM 2344 B/R-HYDRAHUME	0.5	gal/a	ATPLANT	A								
4	PM 2344 B/R-HYDRAHUME	0.5	gal/a	ATPLANT	A	5	a	4796	a	26	a	1243	a
5	PM 2344 B/R-HYDRAHUME	1	gal/a	ATPLANT	A	7	a	5389	a	27	a	1428	a
6	PM 2344 B/R-HYDRAHUME	1.5	gal/a	ATPLANT	A	6	a	4904	a	26	a	1267	a
LSD (P=.05)						3.4		1189.4		1.1		303.8	
CV						29.58		12.76		2.23		12.71	

Means followed by same letter do not significantly differ (P=.05, LSD)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Fiber Data Mic	Length	Uniformity	Strength
1	PM 2344 B/R-UNTREATED					3.8	1.04	82.2	27.3
2	PM 2344 B/R-9-18-9	2	gal/a	ATPLANT	A	4.1	1.02	82.2	27.5
3	PM 2344 B/R-9-18-9	2	gal/a	ATPLANT	A	4.2	1.04	82.4	27.5
	PM 2344 B/R-HYDRAHUME	0.5	gal/a	ATPLANT	A				
4	PM 2344 B/R-HYDRAHUME	0.5	gal/a	ATPLANT	A	3.6	1.05	83	27.7
5	PM 2344 B/R-HYDRAHUME	1	gal/a	ATPLANT	A	3.7	1.06	84.2	29.1
6	PM 2344 B/R-HYDRAHUME	1.5	gal/a	ATPLANT	A	4.2	1.04	83.7	26.7

The Effects of Hydrahume In-Furrow on Two Cotton Variety (DP 555 B/R & PM 2344 B/R) Yields Following Cadre Applied in Peanuts the Previous Year (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Stand Ct #/Meter 6/3/2004		Seedcot lbs/A		Gin % 1/13/2005		Lint lbs/A	
1	DP 555 B/R-UNTREATED					8	a	3863	b	27	abc	1033	c
2	DP 555 B/R-9-18-9	2	gal/a	ATPLANT	A	9	a	4846	a	29	a	1402	a
3	DP 555 B/R-9-18-9	2	gal/a	ATPLANT	A	4	b	4937	a	25	c	1243	abc
	DP 555 B/R-HYDRAHUME	0.5	gal/a	ATPLANT	A								
4	DP 555 B/R-HYDRAHUME	0.5	gal/a	ATPLANT	A	7	a	4101	ab	28	ab	1142	abc
5	DP 555 B/R-HYDRAHUME	1	gal/a	ATPLANT	A	7	a	4774	a	28	ab	1336	ab
6	DP 555 B/R-HYDRAHUME	1.5	gal/a	ATPLANT	A	6	ab	4137	ab	26	bc	1081	c
LSD (P=.05)						3.5		901.4		2.1		252.9	
CV						28.03		11.15		4.19		11.52	

Means followed by same letter do not significantly differ (P=.05, LSD)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Fiber Data Mic	Length	Uniformity	Strength
1	DP 555 B/R-UNTREATED					3.3	1.08	80.3	27.7
2	DP 555 B/R-9-18-9	2	gal/a	ATPLANT	A	3.4	1.11	80.7	27.9
3	DP 555 B/R-9-18-9	2	gal/a	ATPLANT	A	3.2	1.12	81.9	27.4
3	DP 555 B/R-HYDRAHUME	0.5	gal/a	ATPLANT	A				
4	DP 555 B/R-HYDRAHUME	0.5	gal/a	ATPLANT	A	3.2	1.11	81.9	27
5	DP 555 B/R-HYDRAHUME	1	gal/a	ATPLANT	A	2.9	1.11	81	26.1
6	DP 555 B/R-HYDRAHUME	1.5	gal/a	ATPLANT	A	3.1	1.11	81.6	26.9

Chaperone Applied at First Bloom for Enhanced Cotton Yields

The purpose of this study was to compare cotton yields of the untreated check to applications of Chaperone. No Chaperone rate increased cotton yield over the untreated check.

Trial ID:	OSUAG0402	**Location:**	OSUREC
Planting Date:	May 5	**Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 50’
Replications:	4	**Soil Type:**	Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Total # sq/plant 7/15/2004	Seedcot lbs/A	Gin % 1/26/2005	Lint lbs/A
1	UNTREATED CHECK					14 a	4356 a	33 a	1432 a
2	CHAPERONE	5	oz/a	1STBLM	A	11 a	4494 a	32 a	1417 a
3	CHAPERONE	10	oz/a	1STBLM	A	12 a	4443 a	33 a	1445 a
4	CHAPERONE	20	oz/a	1STBLM	A	13 a	4429 a	33 a	1480 a
LSD (P=.05)						3.8	403.3	2.3	176.5
CV						19.26	5.01	3.95	6.73

Means followed by same letter do not significantly differ (P=.05, LSD)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	Fiber Data Mic	Length	Uniformity	Strength
1	UNTREATED CHECK					4.6	1.15	84.9	27.1
2	CHAPERONE	5	oz/a	1STBLM	A	4.5	1.13	83.1	27.8
3	CHAPERONE	10	oz/a	1STBLM	A	4.5	1.14	82.8	28.3
4	CHAPERONE	20	oz/a	1STBLM	A	4.3	1.16	85	26.9

Chaperone Applied at First Bloom for Enhanced Cotton Yields

APPLICATION DESCRIPTION

	A
Application Date:	7/2/2004
Time of Day:	12:00 PM
Application Method:	SPRAY
Application Timing:	1STBLOOM
Applic. Placement:	BROADCAST
Air Temp., Unit:	88 F
% Relative Humidity:	51
Wind Velocity, Unit:	3.5 MPH
Soil Temp., Unit:	90 F
Soil Moisture:	GOOD
% Cloud Cover:	0
Appl. Equipment:	LEESPIDER
Operating Pressure:	25 PSI
Nozzle Type:	FLATFAN
Nozzle Size:	8002
Nozzle Spacing, Unit:	20 IN
Nozzles/Row:	2
Ground Speed, Unit:	4 MPH
Carrier:	WATER
Spray Volume, Unit:	10 GPA
Propellant:	COMP.AIR

Conservation Tillage and Plant Population

At the Washita County location, plant populations of 22, 32, 42, and 52,000 plants per acre of Stoneville's 5599 B/R were planted on June 7th into terminated rye on a sandy loam soil. A John Deere 1710 vacuum planter equipped with John Deere down pressure springs and Yetter no-till attachments (25 wave coulter and residue managers) was used to plant this demonstration. Typically, moisture is a limiting factor in this region and lower plant populations tend to perform under these conditions. However, this year moisture was abundant and the results of this demonstration did not echo historical data. Plots were harvested December 14th and results indicated that decreasing the seeding rate decreased yield, thus the 42K and 52K populations produced the most lint per acre at 1061-1099 lbs. In addition to the seeding rate study, a demonstration was also established comparing row-tillage to no-tillage. Two separate 16 row plots measuring 1120' in length were planted comparing the two tillage regimes. The no-till plot yielded 1106 lbs/A while the row-tilled plot yielded 992 lbs/A.

Treatment Population/ Tillage	Seed Cotton Lbs/Acre	Gin Percent	Lint lbs/acre
ST 5599 B/R 22 K	2730	30	813
ST 5599 B/R 32 K	2946	26	778
ST 5599 B/R 42 K	4147	27	1099
ST 5599 B/R 52 K	3721	29	1061
ST 5599 B/R ROW TILL	3201	31	992
ST 5599 B/R NO TILL	4021	28	1106

Population/Treatment	Fiber Data			
	Mic	Length	Uniformity	Strength
ST 5599 B/R 22 K	3.6	1.09	85.3	26.6
ST 5599 B/R 32 K	3.6	1.09	82.9	26.3
ST 5599 B/R 42 K	3.4	1.1	81.8	26.7
ST 5599 B/R 52 K	3.5	1.09	82.5	27.8
ST 5599 B/R ROW TILL	3.8	1.09	82.7	26.9
ST 5599 B/R NO TILL	3.9	1.12	84.4	28.0

Finish Programs for Irrigated Cotton

Trial ID: BAYHA0401
Planting Date: May 5
Row Spacing: 40 inches
Replications: 4
Location: OSUREC
Rate: 12 lbs/A
Plot Size: 4 r x 50'
Soil Type: Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Open 9/30/2004		% Defol. 9/30/2004		% Desicc. 9/30/2004		% Open 10/8/2004	
1	UNTREATED					71	c	0	f	0	d	77	e
2	FINISH	32	oz/a	50-60%OP	A	86	ab	73	cd	7	bc	93	ab
	GINSTAR	6	oz/a	50-60%OP	A								
	INDUCE	0.25	% v/v	50-60%OP	A								
3	FINISH	24	oz/a	50-60%OP	A	84	ab	75	cd	7	bc	85	cde
	GINSTAR	6	oz/a	50-60%OP	A								
	INDUCE	0.25	% v/v	50-60%OP	A								
4	PREP	24	oz/a	50-60%OP	A	77	bc	72	d	5	c	84	de
	GINSTAR	6	oz/a	50-60%OP	A								
	INDUCE	0.25	% v/v	50-60%OP	A								
5	FINISH	42	oz/a	50-60%OP	A	88	ab	80	abc	10	a	99	a
	INDUCE	0.25	% v/v	50-60%OP	A								
6	PREP	24	oz/a	50-60%OP	A	90	a	77	bcd	8	ab	93	ab
	DEF	16	oz/a	50-60%OP	A								
	INDUCE	0.25	% v/v	50-60%OP	A								
7	GINSTAR	8	oz/a	50-60%OP	A	69	c	38	e	0	d	86	bcd
	INDUCE	0.25	% v/v	50-60%OP	A								
8	FINISH	21	oz/a	50-60%OP	A	89	ab	83	ab	8	ab	94	a
	DEF	16	oz/a	50-60%OP	A								
	INDUCE	0.25	% v/v	50-60%OP	A								

Finish Programs for Irrigated Cotton (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Open 9/30/2004	% Defol. 9/30/2004	% Desicc. 9/30/2004	% Open 10/8/2004
9	PREP	21	oz/a	50-60%OP	A	85 ab	72 d	5 c	92 abc
	DEF	8	oz/a	50-60%OP	A				
	INDUCE	0.25	% v/v	50-60%OP	A				
10	FINISH	24	oz/a	50-60%OP	A	85 ab	85 a	7 bc	93 ab
	GINSTAR	5	oz/a	50-60%OP	A				
	DEF	8	oz/a	50-60%OP	A				
	INDUCE	0.25	% v/v	50-60%OP	A				
LSD (P=.05)						12.6	7.1	2.9	7.9
CV						8.9	6.28	29.9	5.15

Means followed by same letter do not significantly differ (P=.05, LSD)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Defol. 10/8/2004	% Desicc. 10/8/2004	% TermRegr* 10/22/2004	% BasRegr* 10/22/2004
1	UNTREATED					0 d	0 a	0 c	0 e
2	FINISH	32	oz/a	50-60%OP	A	97 a	2 a	3 bc	27 b
	GINSTAR	6	oz/a	50-60%OP	A				
	INDUCE	0.25	% v/v	50-60%OP	A				
3	FINISH	24	oz/a	50-60%OP	A	96 ab	1 a	3 bc	12 cd
	GINSTAR	6	oz/a	50-60%OP	A				
	INDUCE	0.25	% v/v	50-60%OP	A				
4	PREP	24	oz/a	50-60%OP	A	96 ab	1 a	0 c	10 d
	GINSTAR	6	oz/a	50-60%OP	A				
	INDUCE	0.25	% v/v	50-60%OP	A				
5	FINISH	42	oz/a	50-60%OP	A	95 ab	0 a	10 b	43 a
	INDUCE	0.25	% v/v	50-60%OP	A				
6	PREP	24	oz/a	50-60%OP	A	93 abc	1 a	8 bc	40 a
	DEF	16	oz/a	50-60%OP	A				
	INDUCE	0.25	% v/v	50-60%OP	A				
7	GINSTAR	8	oz/a	50-60%OP	A	92 bc	0 a	0 c	5 de
	INDUCE	0.25	% v/v	50-60%OP	A				
8	FINISH	21	oz/a	50-60%OP	A	93 abc	0 a	22 a	20 bc
	DEF	16	oz/a	50-60%OP	A				
	INDUCE	0.25	% v/v	50-60%OP	A				

* % Terminal and Basal Regrowth

Finish Programs for Irrigated Cotton (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Defol. 10/8/2004	% Desicc. 10/8/2004	% TermRegr 10/22/2004	% BasRegr 10/22/2004
9	PREP	21	oz/a	50-60%OP	A	89 c	0 a	7 bc	27 b
	DEF	8	oz/a	50-60%OP	A				
	INDUCE	0.25	% v/v	50-60%OP	A				
10	FINISH	24	oz/a	50-60%OP	A	97 a	0 a	0 c	10 d
	GINSTAR	5	oz/a	50-60%OP	A				
	DEF	8	oz/a	50-60%OP	A				
	INDUCE	0.25	% v/v	50-60%OP	A				
LSD (P=.05)						4.5	1.8	8.4	9.6
CV						3.06	243.66	92.35	28.98

Means followed by same letter do not significantly differ (P=.05, LSD)

APPLICATION DESCRIPTION

	A
Application Date:	9/24/2004
Time of Day:	1:00 PM
Application Method:	SPRAY
Application Timing:	60%OPEN
Applic. Placement:	BROADCAST
Air Temp., Unit:	79 G
% Relative Humidity:	40
Wind Velocity, Unit:	6 MPH
Soil Temp., Unit:	75 F
Soil Moisture:	GOOD
% Cloud Cover:	30
Appl. Equipment:	LEESPIDER
Operating Pressure:	58 PSI
Nozzle Type:	TJFLATFAN
Nozzle Size:	8002
Nozzle Spacing, Unit:	20 IN
Nozzles/Row:	2
Ground Speed, Unit:	4 MPH
Carrier:	WATER
Spray Volume, Unit:	15 GPA
Propellant:	COMP.AIR

Finish Programs in Dryland Cotton

Trial ID: BAYHA0402
Planting Date: May 6
Row Spacing: 40 inches
Replications: 4
Location: WOSC
Rate: 12 lbs/A
Plot Size: 4 r x 50'
Soil Type: Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	%Open 9/22/2004		%Defol. 9/22/2004		%Desicc. 9/22/2004		%Open 9/28/2004		%Defol. 9/28/2004		%Desicc. 9/28/2004	
1	UNTREATED					57	c	0	f	0	a	79	c	0	f	0	b
2	FINISH	21	oz/a	50-60%OP	A	74	ab	93	a	0	a	96	ab	96	ab	0	b
	GINSTAR	5	oz/a	50-60%OP	A												
	INDUCE	0.25	% v/v	50-60%OP	A												
3	PREP	24	oz/a	50-60%OP	A	71	ab	87	bc	0	a	94	ab	94	abc	0	b
	GINSTAR	5	oz/a	50-60%OP	A												
	INDUCE	0.25	% v/v	50-60%OP	A												
4	FINISH	21	oz/a	50-60%OP	A	67	bc	80	d	0	a	94	ab	67	e	0	b
	DEF	8	oz/a	50-60%OP	A												
	INDUCE	0.25	% v/v	50-60%OP	A												
5	PREP	24	oz/a	50-60%OP	A	74	ab	68	e	0	a	98	a	73	de	0	b
	DEF	12	oz/a	50-60%OP	A												
	INDUCE	0.25	% v/v	50-60%OP	A												
6	FINISH	16	oz/a	50-60%OP	A	75	ab	88	abc	0	a	92	ab	87	a-d	0	b
	DEF	8	oz/a	50-60%OP	A												
	INDUCE	0.25	% v/v	50-60%OP	A												
7	FINISH	16	oz/a	50-60%OP	A	81	a	87	bc	0	a	96	ab	83	bcd	3	a
	DEF	8	oz/a	50-60%OP	A												
	GRAMOXONE MAX	2	oz/a	50-60%OP	A												
	INDUCE	0.25	% v/v	50-60%OP	A												
8	FINISH	12	oz/a	50-60%OP	A	72	ab	84	cd	0	a	97	ab	82	cd	0	b
	DEF	6	oz/a	50-60%OP	A												
	INDUCE	0.25	% v/v	50-60%OP	A												
9	GINSTAR	6	oz/a	50-60%OP	A	59	c	67	e	0	a	89	b	87	a-d	0	b
	INDUCE	0.25	% v/v	50-60%OP	A												
10	GINSTAR	8	oz/a	50-60%OP	A	64	bc	92	ab	0	a	89	b	99	a	0	b
	INDUCE	0.25	% v/v	50-60%OP	A												
LSD (P=.05)						11.1		6.1		0		8.9		14.1		1.6	
CV						9.35		4.72		0		5.6		10.71		273.86	

Means followed by same letter do not significantly differ (P=.05, LSD)

Finish Programs in Dryland Cotton (cont.)

APPLICATION DESCRIPTION	A
Application Date:	9/16/2004
Time of Day:	3:00 PM
Application Method:	SPRAY
Application Timing:	50%OPEN
Applic. Placement:	BROADCAST
Air Temp., Unit:	96 F
% Relative Humidity:	33
Wind Velocity, Unit:	3 MPH
Soil Temp., Unit:	110 F
Soil Moisture:	DRY
% Cloud Cover:	40
Appl. Equipment:	LEESPIDER
Operating Pressure:	55 PSI
Nozzle Type:	TJFLATFAN
Nozzle Size:	8002
Nozzle Spacing, Unit:	20 IN
Nozzles/Row:	2
Ground Speed, Unit:	4 MPH
Carrier:	WATER
Spray Volume, Unit:	15 GPA
Propellant:	COMP.AIR

Finish Harvest Aid Demonstration-Jackson County

Trial ID:	BAYHA0403	**Location:**	Jackson Cty
Planting Date:	May 7	**Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 50’
Replications:	None	**Soil Type:**	Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Open 10/11/2004	% Defol 10/11/2004	% Desicc. 10/11/2004
1	FINISH 6 PRO	42	oz/a	60-70%OP	A	100	95	0
	INDUCE	0.5	% v/v	60-70%OP	A			
2	FINISH 6 PRO	32	oz/a	60-70%OP	A	92	95	0
	INDUCE	0.5	% v/v	60-70%OP	A			
3	FINISH 6 PRO	21	oz/a	60-70%OP	A	85	85	0
	DEF	8	oz/a	60-70%OP	A			
	INDUCE	0.5	% v/v	60-70%OP	A			
4	FINISH 6 PRO	21	oz/a	60-70%OP	A	92	95	0
	GINSTAR	6	oz/a	60-70%OP	A			
	INDUCE	0.5	% v/v	60-70%OP	A			
5	PREP	24	oz/a	60-70%OP	A	88	95	0
	GINSTAR	6	oz/a	60-70%OP	A			
	INDUCE	0.5	% v/v	60-70%OP	A			

APPLICATION DESCRIPTION

	A
Application Date:	9/28/2004
Time of Day:	11:00 AM
Application Method:	SPRAY
Application Timing:	60%OPEN
Applic. Placement:	BROADCAST
Air Temp., Unit:	75 F
% Relative Humidity:	45
Wind Velocity, Unit:	5 MPH
Soil Temp., Unit:	73 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	20
Appl. Equipment:	LEESPIDER
Operating Pressure:	55 PSI
Nozzle Type:	TEEJET
Nozzle Size:	FLATFAN
Nozzle Spacing, Unit:	20 IN
Nozzles/Row:	2
Ground Speed, Unit:	4 MPH
Spray Volume, Unit:	15 GPA
Propellant:	COMP.AIR

Finish Harvest Aid Demonstration-Tillman County

Trial ID:	BAYHA0404	**Location:**	Tillman Cty
Planting Date:	May 6	**Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 50’
Replications:	None	**Soil Type:**	Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Open 10/14/2004	% Defol 10/14/2004	% Desicc. 10/14/2004
1	FINISH 6 PRO	42	oz/a	60-70%OP	A	97	85	0
	INDUCE	0.5	% v/v	60-70%OP	A			
2	FINISH 6 PRO	32	oz/a	60-70%OP	A	97	80	0
	INDUCE	0.5	% v/v	60-70%OP	A			
3	FINISH 6 PRO	21	oz/a	60-70%OP	A	87	90	0
	DEF	8	oz/a	60-70%OP	A			
	INDUCE	0.5	% v/v	60-70%OP	A			
4	FINISH 6 PRO	21	oz/a	60-70%OP	A	85	80	0
	GINSTAR	6	oz/a	60-70%OP	A			
	INDUCE	0.5	% v/v	60-70%OP	A			
5	PREP	24	oz/a	60-70%OP	A	86	75	0
	GINSTAR	6	oz/a	60-70%OP	A			
	INDUCE	0.5	% v/v	60-70%OP	A			

APPLICATION DESCRIPTION

	A
Application Date:	9/30/2004
Time of Day:	11:00 AM
Application Method:	SPRAY
Application Timing:	70%OPEN
Applic. Placement:	BROADCAST
Air Temp., Unit:	79 F
% Relative Humidity:	40
Wind Velocity, Unit:	5 MPH
Soil Temp., Unit:	75 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	25
Appl. Equipment:	LEESPIDER
Operating Pressure:	55 PSI
Nozzle Type:	TEEJET
Nozzle Size:	FLATFAN
Nozzle Spacing, Unit:	20 IN
Nozzles/Row:	2
Ground Speed, Unit:	4 MPH
Spray Volume, Unit:	15 GPA
Propellant:	COMP.AIR

Finish Harvest Aid Demonstration-Caddo County

Trial ID: BAYHA0405
Planting Date: May 6
Row Spacing: 38 inches
Replications: None
Location: Caddo Cty
Rate: 12 lbs/A
Plot Size: 4 r x 50'
Soil Type: Sandy Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Open 10/25/2004	% Defol. 10/25/2004	% Desicc. 10/25/2004
1	FINISH 6 PRO	42	oz/a	60-70%OP	A	98	50	30
	INDUCE	0.5	% v/v	60-70%OP	A			
2	FINISH 6 PRO	32	oz/a	60-70%OP	A	95	70	10
	INDUCE	0.5	% v/v	60-70%OP	A			
3	FINISH 6 PRO	21	oz/a	60-70%OP	A	90	60	20
	DEF	8	oz/a	60-70%OP	A			
	INDUCE	0.5	% v/v	60-70%OP	A			
4	FINISH 6 PRO	21	oz/a	60-70%OP	A	90	75	0
	GINSTAR	6	oz/a	60-70%OP	A			
	INDUCE	0.5	% v/v	60-70%OP	A			
5	PREP	24	oz/a	60-70%OP	A	90	70	10
	GINSTAR	6	oz/a	60-70%OP	A			
	INDUCE	0.5	% v/v	60-70%OP	A			
6	PREP	21	oz/a	60-70%OP	A	90	75	10
	DEF	16	oz/a	60-70%OP	A			
	INDUCE	0.25	% v/v	60-70%OP	A			
7	GINSTAR	8	oz/a	60-70%OP	A	80	50	0
	INDUCE	0.25	% v/v	60-70%OP	A			

Finish Harvest Aid Demonstration-Caddo County (cont.)

APPLICATION DESCRIPTION

	A
Application Date:	10/14/2004
Time of Day:	11:30 AM
Application Method:	SPRAY
Application Timing:	70%OPEN
Applic. Placement:	BROADCAST
Air Temp., Unit:	59 F
% Relative Humidity:	65
Wind Velocity, Unit:	4 MPH
Soil Temp., Unit:	64 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	20
Appl. Equipment:	LEESPIDER
Operating Pressure:	55 PSI
Nozzle Type:	TEEJET
Nozzle Size:	FLATFAN
Nozzle Spacing, Unit:	20 IN
Nozzles/Row:	2
Ground Speed, Unit:	4 MPH
Carrier:	WATER
Spray Volume, Unit:	15 GPA
Propellant:	COMP.AIR

Beltwide Uniform Harvest Aid Evaluation

Trial ID: BWHHA0401 **Location:** OSUREC
Planting Date: May 6 **Rate:** 12 lbs/A
Row Spacing: 40 inches **Plot Size:** 4 r x 50'
Replications: 4 **Soil Type:** Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Open 9/30/2004		% Defol 9/30/2004		%Desicc. 9/30/2004		% Open 10/8/2004	
1	UNTREATED					64	b	0	d	0	c	79	c
	GRAMOXONE MAX	21	oz/a	7DAIT	B								
	INDUCE	0.25	% v/v	7DAIT	B								
2	TRIBUFOS	0.56	lb ai/a	55%OP	A	77	a	45	c	18	a	94	a
	ETHEPHON	1	lb ai/a	55%OP	A								
	THIDIAZURON	0.05	lb ai/a	55%OP	A								
	GRAMOXONE MAX	21	oz/a	7DAIT	B								
	INDUCE	0.25	% v/v	7DAIT	B								
3	DIMETHIPIN	0.31	lb ai/a	55%OP	A	80	a	71	a	8	bc	93	a
	TRIBUFOS	0.56	lb ai/a	55%OP	A								
	ETHEPHON	1	lb ai/a	55%OP	A								
	AGRIDEX	1	pt/a	55%OP	A								
	GRAMOXONE MAX	21	oz/a	7DAIT	B								
	INDUCE	0.25	% v/v	7DAIT	B								
4	THIDIAZURON	0.05	lb ai/a	55%OP	A	71	ab	48	c	3	c	95	a
	ETHEPHON	1	lb ai/a	55%OP	A								
	GRAMOXONE MAX	21	oz/a	7DAIT	B								
	INDUCE	0.25	% v/v	7DAIT	B								
5	TRIBUFOS	0.56	lb ai/a	55%OP	A	77	a	73	a	8	bc	94	a
	ETHEPHON	1	lb ai/a	55%OP	A								
	GRAMOXONE MAX	21	oz/a	7DAIT	B								
	INDUCE	0.25	% v/v	7DAIT	B								
6	AIM	0.5	oz/a	55%OP	A	80	a	49	bc	11	ab	87	b
	ETHEPHON	0.75	lb ai/a	55%OP	A								
	THIDIAZURON	0.05	lb ai/a	55%OP	A								
	INDUCE	0.25	% v/v	55%OP	A								
	AIM	1	oz/a	7DAIT	B								
	AGRIDEX	1	% v/v	7DAIT	B								
7	RESOURCE	8	oz/a	55%OP	A	77	a	57	b	13	ab	83	bc
	PREP	1.3	pt/a	55%OP	A								
	AGRIDEX	1	% v/v	55%OP	A								
	RESOURCE	6	oz/a	7DAIT	B								
	AGRIDEX	1	% v/v	7DAIT	B								
LSD (P=.05)							9.7		8.7		8.1		5.9
CV							8.65		12		64.13		4.46

Means followed by same letter do not significantly differ (P=.05, LSD)

Beltwide Uniform Harvest Aid Evaluation (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Defol. 10/8/2004		% Desicc. 10/8/2004		% TermReg 10/22/2004		% BasReg 10/22/2004	
1	UNTREATED					20	c	80	a	0	a	0	d
	GRAMOXONE MAX	21	oz/a	7DAIT	B								
	INDUCE	0.25	% v/v	7DAIT	B								
2	TRIBUFOS	0.56	lb ai/a	55%OP	A	94	b	6	b	0	a	10	bc
	ETHEPHON	1	lb ai/a	55%OP	A								
	THIDIAZURON	0.05	lb ai/a	55%OP	A								
	GRAMOXONE MAX	21	oz/a	7DAIT	B								
	INDUCE	0.25	% v/v	7DAIT	B								
3	DIMETHIPIN	0.31	lb ai/a	55%OP	A	95	ab	5	bc	0	a	18	ab
	TRIBUFOS	0.56	lb ai/a	55%OP	A								
	ETHEPHON	1	lb ai/a	55%OP	A								
	AGRIDEX	1	pt/a	55%OP	A								
	GRAMOXONE MAX	21	oz/a	7DAIT	B								
	INDUCE	0.25	% v/v	7DAIT	B								
4	THIDIAZURON	0.05	lb ai/a	55%OP	A	95	ab	5	bc	0	a	8	cd
	ETHEPHON	1	lb ai/a	55%OP	A								
	GRAMOXONE MAX	21	oz/a	7DAIT	B								
	INDUCE	0.25	% v/v	7DAIT	B								
5	TRIBUFOS	0.56	lb ai/a	55%OP	A	97	a	3	c	0	a	25	a
	ETHEPHON	1	lb ai/a	55%OP	A								
	GRAMOXONE MAX	21	oz/a	7DAIT	B								
	INDUCE	0.25	% v/v	7DAIT	B								
6	AIM	0.5	oz/a	55%OP	A	94	b	3	c	0	a	6	cd
	ETHEPHON	0.75	lb ai/a	55%OP	A								
	THIDIAZURON	0.05	lb ai/a	55%OP	A								
	INDUCE	0.25	% v/v	55%OP	A								
	AIM	1	oz/a	7DAIT	B								
	AGRIDEX	1	% v/v	7DAIT	B								
7	RESOURCE	8	oz/a	55%OP	A	94	b	3	c	0	a	25	a
	PREP	1.3	pt/a	55%OP	A								
	AGRIDEX	1	% v/v	55%OP	A								
	RESOURCE	6	oz/a	7DAIT	B								
	AGRIDEX	1	% v/v	7DAIT	B								
LSD (P=.05)						2.5		2.3		0		7.7	
CV						2		10.11		0		39.63	

Means followed by same letter do not significantly differ (P=.05, LSD)

Beltwide Uniform Harvest Aid Evaluation (cont.)

APPLICATION DESCRIPTION

	A	B
Application Date:	9/24/2004	9/30/2004
Time of Day:	2:00 PM	11:00 AM
Application Method:	SPRAY	SPRAY
Application Timing:	55%OPEN	7DAIT
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	80 F	75 F
% Relative Humidity:	42	47
Wind Velocity, Unit:	6 MPH	8 MPH
Soil Temp., Unit:	75 F	70 F
Soil Moisture:	GOOD	GOOD
% Cloud Cover:	20	30
Appl. Equipment:	LEESPIDER	LEESPIDER
Operating Pressure:	58 PSI	58 PSI
Nozzle Type:	TJFLATFAN	TJFLATFAN
Nozzle Size:	8002	8002
Nozzle Spacing, Unit:	20 IN	20 IN
Nozzles/Row:	2	2
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA
Propellant:	COMP.AIR	COMP.AIR

Cotton Quik Harvest Aid Programs

Trial ID:	DUPHA0401	**Location:**	OSUREC
Planting Date:	May 6	**Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 50’
Replications:	4	**Soil Type:**	Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	Appl Code	% Open 9/30/2004		% Defol 9/30/2004		% Desicc. 9/30/2004		% Open 10/7/2004	
1	UNTREATED					57	a	0	d	0	c	63	d
2	COTTON QUIK	3	pt/a	65%OP	A	63	a	70	ab	5	ab	67	cd
	DEF	12	oz/a	65%OP	A								
3	FINISH	1	pt/a	65%OP	A	66	a	75	a	7	a	74	bc
	DEF	12	oz/a	65%OP	A								
4	DPX J3775	3	pt/a	65%OP	A	65	a	33	c	5	ab	76	abc
	GINSTAR	3	oz/a	65%OP	A								
5	COTTON QUIK	3	pt/a	65%OP	A	64	a	37	c	5	ab	81	ab
	GINSTAR	3	oz/a	65%OP	A								
6	COTTON QUIK	42	oz/a	65%OP	A	67	a	35	c	3	b	85	a
	GINSTAR	3	oz/a	65%OP	A								
7	COTTON QUIK	3	pt/a	65%OP	A	65	a	37	c	5	ab	85	a
	GINSTAR	3	oz/a	65%OP	A								
	CYCLONE MAX	1	pt/a	7DAIT	B								
8	FINISH	1	pt/a	65%OP	A	62	a	65	b	0	c	77	ab
	GINSTAR	6	oz/a	65%OP	A								
LSD (P=.05)						18.2		6.2		2.4		10.5	
CV						16.31		7.99		37.09		7.88	

Means followed by same letter do not significantly differ (P=.05, LSD)

Cotton Quik Harvest Aid Programs (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	Appl Code	% Defol. 10/7/2004		% Desicc. 10/7/2004		% TermReg 10/22/2004		% BasRegr 10/22/2004	
1	UNTREATED					0	d	0	b	0	a	0	d
2	COTTON QUIK	3	pt/a	65%OP	A	88	bc	0	b	0	a	18	a
	DEF	12	oz/a	65%OP	A								
3	FINISH	1	pt/a	65%OP	A	87	c	0	b	0	a	15	ab
	DEF	12	oz/a	65%OP	A								
4	DPX J3775	3	pt/a	65%OP	A	90	abc	0	b	0	a	9	c
	GINSTAR	3	oz/a	65%OP	A								
5	COTTON QUIK	3	pt/a	65%OP	A	94	a	0	b	0	a	13	abc
	GINSTAR	3	oz/a	65%OP	A								
6	COTTON QUIK	42	oz/a	65%OP	A	94	a	1	b	0	a	10	bc
	GINSTAR	3	oz/a	65%OP	A								
7	COTTON QUIK	3	pt/a	65%OP	A	95	a	5	a	0	a	10	bc
	GINSTAR	3	oz/a	65%OP	A								
	CYCLONE MAX	1	pt/a	7DAIT	B								
8	FINISH	1	pt/a	65%OP	A	93	ab	0	b	0	a	10	bc
	GINSTAR	6	oz/a	65%OP	A								
LSD (P=.05)						5.1		0.7		0		5.4	
CV						3.65		57.64		0		28.76	

Means followed by same letter do not significantly differ (P=.05, LSD)

Cotton Quik Harvest Aid Programs (cont.)

Application Description

	A	B
Application Date:	9/24/2004	9/30/2004
Time of Day:	3:00 PM	10:30 AM
Application Method:	SPRAY	SPRAY
Application Timing:	60%OPEN	7DAIT
Application Placement:	BROADCAST	BROADCAST
Applied By:	GROUND	GROUND
Air Temperature, Unit:	83 F	75 F
% Relative Humidity:	39	47
Wind Velocity, Unit:	6 MPH	8 MPH
Soil Temperature, Unit:	75 F	70 F
Soil Moisture:	GOOD	GOOD
% Cloud Cover:	20	30
Appl. Equipment:	LEESPIDER	LEESPIDER
Operating Pressure:	58	58
Pressure Unit:	PSI	PSI
Nozzle Type:	TJFLATFAN	TJFLATFAN
Nozzle Size:	8002	8002
Nozzle Spacing, Unit:	20 IN	20 IN
Nozzles/Row:	2	2
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume:	15	15
Volume Unit:	GPA	GPA
Propellant:	COMP. AIR	COMP.AIR

ET Harvest Aid Programs

Trial ID: NICHA0401
Planting Date: May 6
Row Spacing: 40 inches
Replications: 4
Location: OSUREC
Rate: 12 lbs/A
Plot Size: 4 r x 50'
Soil Type: Clay Loam

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Open 10/5/2004		% Defol 10/5/2004		% Desicc 10/5/2004		% Open 10/12/2004	
1	UNTREATED CHECK					63	c	0	d	0	d	69	B
2	ET	2	oz/a	60%OPEN	A	68	bc	35	b	33	b	85	A
	ETHEPHON	1.3	pt/a	60%OPEN	A								
	CROP OIL CONCENTRATE	1	% v/v	60%OPEN	A								
3	ET	2	oz/a	60%OPEN	A	81	ab	20	c	53	a	77	Ab
	GINSTAR	3	oz/a	60%OPEN	A								
	C ROP OIL CONCENTRATE	1	% v/v	60%OPEN	A								
4	ET	1.5	oz/a	60%OPEN	A	77	ab	55	a	15	c	80	Ab
	COTTON QUIK	3	pt/a	60%OPEN	A								
5	ET	2	oz/a	60%OPEN	A	68	bc	20	c	50	a	81	A
	CROP OIL CONCENTRATE	1	% v/v	60%OPEN	A								
	ET	2	oz/a	7DAIT	B								
	CROP OIL CONCENTRATE	1	% v/v	7DAIT	B								
6	ET	1.5	oz/a	60%OPEN	A	72	abc	20	c	47	a	82	A
	CROP OIL CONCENTRATE	1	% v/v	60%OPEN	A								
	ET	1	oz/a	7DAIT	B								
	GRAMOXONE MAX	5	oz/a	7DAIT	B								
	CROP OIL CONCENTRATE	1	% v/v	7DAIT	B								
7	ET	1.25	oz/a	60%OPEN	A	84	a	45	ab	23	bc	87	A
	ETHEPHON	1	pt/a	60%OPEN	A								
	CROP OIL CONCENTRATE	1	% v/v	60%OPEN	A								
	ET	1.5	oz/a	7DAIT	B								
	CROP OIL CONCENTRATE	1	% v/v	7DAIT	B								
LSD (P=.05)						12.9		12.1		10.8		11.4	
CV						9.93		24.46		19.18		7.99	

Means followed by same letter do not significantly differ (P=.05, LSD)

ET Harvest Aid Programs (cont.)

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Appl Code	% Defol 10/12/2004	% Desicc 10/12/2004	% TermReg 10/22/2004	% BasReg 10/22/2004
1	UNTREATED CHECK					0 e	0 d	0 a	0 a
2	ET	2	oz/a	60%OPEN	A	89 c	5 b	0 a	5 a
	ETHEPHON	1.3	pt/a	60%OPEN	A				
	CROP OIL CONCENTRATE	1	% v/v	60%OPEN	A				
3	ET	2	oz/a	60%OPEN	A	82 d	10 a	0 a	3 a
	GINSTAR	3	oz/a	60%OPEN	A				
	C ROP OIL CONCENTRATE	1	% v/v	60%OPEN	A				
4	ET	1.5	oz/a	60%OPEN	A	83 d	5 b	0 a	8 a
	COTTON QUIK	3	pt/a	60%OPEN	A				
5	ET	2	oz/a	60%OPEN	A	91 bc	5 b	0 a	3 a
	CROP OIL CONCENTRATE	1	% v/v	60%OPEN	A				
	ET	2	oz/a	7DAIT	B				
	CROP OIL CONCENTRATE	1	% v/v	7DAIT	B				
6	ET	1.5	oz/a	60%OPEN	A	95 ab	3 c	0 a	5 a
	CROP OIL CONCENTRATE	1	% v/v	60%OPEN	A				
	ET	1	oz/a	7DAIT	B				
	GRAMOXONE MAX	5	oz/a	7DAIT	B				
	CROP OIL CONCENTRATE	1	% v/v	7DAIT	B				
7	ET	1.25	oz/a	60%OPEN	A	96 a	3 c	0 a	5 a
	ETHEPHON	1	pt/a	60%OPEN	A				
	CROP OIL CONCENTRATE	1	% v/v	60%OPEN	A				
	ET	1.5	oz/a	7DAIT	B				
	CROP OIL CONCENTRATE	1	% v/v	7DAIT	B				
LSD (P=.05)						4.5	1.7	0	4.9
CV						3.28	21.76	0	64.91

Means followed by same letter do not significantly differ (P=.05, LSD)

ET Harvest Aid Programs (cont.)

APPLICATION DESCRIPTION

	A	B
Application Date:	9/27/2004	10/5/2004
Time of Day:	5 PM	10:30 AM
Application Method:	SPRAY	SPRAY
Application Timing:	60%OPEN	8DAIT
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	86 F	68 F
% Relative Humidity:	30	56
Wind Velocity, Unit:	5 MPH	5.5 MPH
Soil Temp., Unit:	76 F	76 F
Soil Moisture:	GOOD	GOOD
% Cloud Cover:	0	70
Appl. Equipment:	LEESPIDER	LEESPIDER
Operating Pressure:	58 PSI	58 PSI
Nozzle Type:	TJFLATFAN	TJFLATFAN
Nozzle Size:	8002	8002
Nozzle Spacing, Unit:	20 IN	20 IN
Nozzles/Row:	2	2
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA
Propellant:	COMP.AIR	COMP.AIR