2003 Annual Report

Extension Cotton Research and Demonstrations In Oklahoma



Southwest Research
and
Extension Center
Altus

In cooperation with
OSU Integrated Pest Management Program

Oklahoma State University

2003 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. 2003 was another interesting year for Oklahoma cotton producers. Once again, limited winter rainfall made for challenging planting conditions. Late April and early May plantings struggled due to marginal moisture, while later planted acreage stalled due to cool wet conditions. Most fields, developmentally speaking, were 1-3 weeks behind. Eventually warm temperatures and an abundance of timely June rainfall (approximately 7 inches) spurred good vigorous growth into the middle of July. As soil moisture dissipated, irrigation cycles began and dryland acres suffered. The typical hot dry period set in for the remainder of July and most of August, which fortunately expedited the maturity of irrigated acres and unfortunately depleted hopes for a dryland crop. The two week period stretching from the last of August through the first week of September brought cooler temperatures and much needed rainfall (4-5 inches). Essentially, irrigation runs came to an end and expectations were to see an early maturing crop due high temperatures. However, the excessive rainfall and cooler temperatures resulted in exactly the opposite. Irrigated acres continued to grow vigorously, producing and retaining an unusual amount of fruit on the upper portion of plants. Dryland acres planted to less determinate varieties were also able to take advantage of these conditions. Relatively suitable weather in September and October slowly matured the top crop in irrigated fields and the only crop in dryland fields. Outstanding yields and uncharacteristically favorable market conditions resulted in a profitable year for most Oklahoma cotton producers.

It should be emphasized that the 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.

We are very appreciative of the contributions made by Pat Bolin and the OSU Integrated Pest Management Program. Without their support, much of this work would not be possible. We also appreciate the support from producers, County Extension Educators, OSU Agricultural Experiment Station and ginners. Cotton Incorporated, through the Oklahoma State Support Committee, has provided assistance through partial funding of several projects. The Oklahoma Cotton Cooperative Foundation and the Oklahoma Center for the Advancement of Science and Technology (OCAST) have made tremendous contributions to our educational programs and we are grateful for their continued support. A special thanks goes also to the following organizations, whose contributions make it possible to maintain and expand our research and demonstration programs and distribute results.

BASF
Bayer CropScience
Cotton Growers Cooperative
Cotton Incorporated State Support Committee
Delta and Pine Land Company
Dupont
FMC Corporation
Griffin Chemical Company
Helena Chemical
John Deere
Monsanto Company
Nichino America
Oklahoma Cooperative Foundation
OSU Integrated Pest Management Program
Stoneville Pedigreed Seed Company
Syngenta Crop Protection
Uniroyal
Valent
Worrell Farms

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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Western Oklahoma State College
Humphreys Cooperative
Keeff Felty & Natalie Wheeler-Altus
Keith Graumman-Granite
Mike Johnson-Dill City
Charles Shephard-Butler
Cotton Growers Cooperative
Murray, Eddie, and Rann Williams-Altus
Brad McKinley-Frederick
Jeannie Hileman-Carnegie Cooperative
Ken Mach, Yukon
Wayne Winsett-Altus

Variety Performance

Weed Control

Production & Agronomics

Harvest Aids

OSU Southwest Research & Extension Center (OSUREC)-Altus

4 inches furrow irrigation – 7/17, 7/29, 8/9, 8/19, 8/24

Western Oklahoma State College (WOSC)-Altus

3 inches furrow irrigation– 7/22; 1.5 inches – 7/29, 8/5, 8/12, 8/19; 3 inches – 8/27

Month:	Apr.03			May.03			Jun.03		
	Air Temp.			Air Temp.			Air Temp.		
Date	Max.	Min.	Precip.	Max.	Min.	Precip.	Max.	Min.	Precip.
1	89	43	0	78	56	0	94	64	0
2	88	48	0	74	56	0	85	66	1.62
3	83	57	0	85	56	0	84	63	0.21
4	73	52	0.02	93	59	0	80	61	0.13
5	67	41	0	93	50	0	82	62	0.01
6	79	45	0.04	84	47	0	82	59	1.36
7	63	37	0	86	52	0	85	57	0
8	60	29	0	99	55	0.02	79	57	0.14
9	70	24	0	96	51	0	92	60	0
10	81	28	0	93	58	0	92	56	0
11	78	36	0	79	47	0	97	63	0
12	81	38	0	85	51	0	85	64	T
13	90	43	0	95	57	0	84	63	0.61
14	91	47	0	82	68	0	81	64	0
15	74	40	0	87	65	0	89	63	0.42
16	81	53	0.35	82	61	0.03	87	67	0
17	68	44	0	85	55	0	87	64	0
18	90	48	0	93	58	0	89	65	0
19	78	50	1.91	94	62	0	89	65	0
20	71	44	0	67	54	0.04	90	67	0.04
21	74	49	0	71	52	0.4	89	64	0.9
22	64	48	0	74	53	0.02	97	66	0
23	72	53	0.23	86	62	0	96	75	0
24	81	46	0.02	90	62	0.12	95	76	0
25	77	46	0	74	61	0.03	93	78	0
26	81	47	0	76	56	0.13	75	59	0.48
27	93	51	0	81	60	0	83	58	0.47
28	85	56	0	94	56	0	92	63	0
29	88	55	0	100	63	0	83	65	1.03
30	91	59	0	108	65	0	89	67	0
31				88	65	0			
Totals	**79**	**45**	**2.57**	**86**	**57**	**0.79**	**87.5**	**64.0**	**7.42**

Weather Information (Continued)

Month:	Jul.03			Aug.03			Sep.03		
	Air Temp.			Air Temp.			Air Temp.		
Date	Max.	Min.	Precip.	Max.	Min.	Precip.	Max.	Min.	Precip.
1	93	69	0	106	70	0	72	65	0
2	98	68	0	98	73	0	78	62	0
3	97	68	0	99	74	0	85	63	0
4	95	69	0	106	73	0	86	64	0
5	92	70	0	105	76	0	86	62	0
6	93	71	0	109	71	0	88	63	0
7	94	73	0	110	72	0	84	64	0
8	92	70	0	104	77	0	88	64	0
9	98	72	0	89	71	0	93	66	0
10	100	74	0	96	70	0.17	96	67	0
11	103	70	0	98	69	0	74	67	0.4
12	106	74	0	90	68	0	82	55	0
13	106	78	0	89	65	0	81	56	0
14	106	74	0	86	64	0	78	56	0.06
15	104	75	0	92	68	0	81	51	0
16	98	69	0	94	69	0	91	53	0
17	99	70	0	97	71	0	90	63	0
18	103	72	0	103	73	0	75	58	0
19	104	72	0	102	69	0	75	47	0
20	104	74	0	102	76	0	84	48	0
21	103	78	0	103	71	0	84	53	0
22	98	73	0	100	74	0	91	58	0.01
23	93	66	0	97	71	0	92	64	0
24	99	65	0	96	71	0	91	64	0
25	100	73	0	96	71	0	83	64	0
26	98	75	0	99	69	0	89	61	0
27	97	71	0	98	71	0	83	57	0
28	101	71	0	101	69	0.42	81	54	0
29	104	72	0	85	70	0.7	78	55	0
30	90	73	0.02	86	69	1.48	82	56	0.07
31	100	66	0.08	75	68	1.8			
Totals	**98.9**	**71**	**0.1**	**97.13**	**70.7**	**4.57**	**84.0**	**59.3**	**0.54**

Irrigated Variety Demonstration 1 – Jackson County

Twenty cotton varieties were planted into plots measuring four rows by 1000' at a rate of 12 lbs/A on the 29th of May. The combination of a late May planting rate and the following cool wet period made for a late maturing crop. In addition, over 4 inches of rain was received in early September which helped set a significant amount of late fruit. Plots were harvested with a John Deere 482 stripper and weighed with a commercial size boll buggy equipped with scales. Seed cotton samples were ginned in order to obtain lint turnout and fiber properties. Results of this demonstration are presented in the tables below.

Trial ID:	OSUVP0301	**Location:**	WOSC
Planting Date:	May 29	**Seeding Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 1000'
Replications:	1	**Soil Type:**	Clay Loam
Harvest Date:	December 17		

YIELD Rank	VARIETY NAME	STAND PLANTS/FT	GIN %	LINT LBS/A
1	ST 4892 B/R	3.5	33	1882
2	NuCotn 35 B	4.3	31	1821
3	FM 960 B/R	3.9	32	1810
4	ST 5599 B/R	3.7	32	1799
5	DP 444 B/R	3	33	1762
6	FM 958 B	4	31	1749
7	FM 989 B/R	3.7	30	1721
8	SG 215 B/R	4.4	30	1715
9	CT 210	4.2	31	1713
10	DP 458 B/R	4	30	1685
11	DP 449 B/R	3.5	30	1685
12	DP 458 B/R	3.5	29	1684
13	SG 501 B/R	4	30	1679
14	FM 832 B	4	28	1672
15	DP 424 BGII/R	4.3	29	1635
16	DP 655 B/R	3.5	30	1580
17	ST BXN 49B	2.7	31	1575
18	DP 448 B	3.7	28	1571
19	DP 555 B/R	4.2	32	1565
20	DP 468 BGII/R	4.1	27	1533

Irrigated Variety Demonstration 1 – Jackson County

Trial ID:	OSUVP0301	**Location:**	WOSC
Planting Date:	May 29	**Seeding Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 1000’
Replications:	1	**Soil Type:**	Clay Loam
Harvest Date:	December 17		

YIELD RANK	VARIETY NAME	FIBER MIC	FIBER LENGTH	FIBER STRENGTH
1	ST 4892 B/R	4.3	1.11	27.3
2	NuCotn 35 B	4.4	1.14	30.8
3	FM 960 B/R	3.9	1.15	33.4
4	ST 5599 B/R	4.1	1.16	27.9
5	DP 444 B/R	4.3	1.15	28.1
6	FM 958 B	4.6	1.15	35.1
7	FM 989 B/R	4.2	1.16	28.3
8	SG 215 B/R	4.6	1.08	26.0
9	CT 210	4.4	1.11	30.7
10	DP 458 B/R	3.9	1.22	30.8
11	DP 449 B/R	3.6	1.14	30.2
12	DP 458 B/R	4.0	1.14	29.1
13	SG 501 B/R	4.8	1.11	27.5
14	FM 832 B	3.7	1.25	31.0
15	DP 424 BGII/R	4.4	1.15	27.0
16	DP 655 B/R	4.3	1.18	31.0
17	ST BXN 49B	4.9	1.11	27.6
18	DP 448 B	4.3	1.13	27.6
19	DP 555 B/R	3.8	1.12	27.8
20	DP 468 BGII/R	4.3	1.21	30.7

Irrigated Variety Demonstration 2 – Jackson County

Twenty cotton varieties were planted into four row by 1000' plots on the 24th of May. Plots were seeded at a rate of 12 lbs/A and managed for optimum yield. The combination of a late May planting rate and the following cool wet period made for a late maturing crop. In addition, over 3 inches of rain was received in early September which helped set a significant amount of late fruit. Plots were harvested with a John Deere 482 stripper and weighed with a commercial size boll buggy equipped with scales. Seed cotton samples were ginned in order to obtain lint turnout and fiber properties. Results of this demonstration are presented in the tables below.

Trial ID:	OSUVP0302	**Location:**	OSUREC
Planting Date:	May 24	**Seeding Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 1000'
Replications:	1	**Soil Type:**	Clay Loam
Harvest Date:	December 12		

YIELD RANK	VARIETY NAME	STAND PLANTS/FT	GIN %	LINT LBS/A
1	FM 960 B/R	3.4	32	1769
2	FM 989 B/R	3.9	31	1764
3	ST 5599 B/R	2.9	33	1723
4	FM 832 B	3.4	29	1701
5	CT 210	4.1	33	1657
6	ST 4892 B/R	3.8	31	1655
7	FM 958 B	4.1	31	1646
8	DP 458 B/R	4.2	30	1587
9	DP 444 B/R	4.2	33	1559
10	NuCotn 35 B	3	30	1542
11	DP 424 BGII/R	3.1	29	1486
12	SG 215 B/R	3.1	31	1473
13	DP 555 B/R	3	30	1447
14	DP 468 BGII/R	2.8	29	1442
15	DP 655 B/R	3.8	32	1426
16	DP 449 B/R	3.9	31	1417
17	ST BXN 49B	3.1	28	1401
18	SG 501 B/R	3.9	29	1392
19	DP 448 B	2.7	30	1361
20	ST 3539 B/R	3	30	1262

Irrigated Variety Demonstration 2 – Jackson County

Trial ID:	OSUVP0302	**Location:**	OSUREC
Planting Date:	May 24	**Seeding Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 1000’
Replications:	1	**Soil Type:**	Clay Loam
Harvest Date:	December 12		

YIELD RANK	VARIETY NAME	FIBER MIC	FIBER LENGTH	FIBER STRENGTH
1	FM 960 B/R	4.3	1.11	32.6
2	FM 989 B/R	4.4	1.17	31.2
3	ST 5599 B/R	4.2	1.11	29.8
4	FM 832 B	3.6	1.18	32.2
5	CT 210	4.7	1.10	30.2
6	ST 4892 B/R	4.6	1.11	28.3
7	FM 958 B	4.6	1.19	35.4
8	DP 458 B/R	4.6	1.06	28.6
9	DP 444 B/R	4.4	1.17	28.6
10	NuCotn 35 B	4.5	1.13	31.5
11	DP 424 BGII/R	4.8	1.05	27.0
12	SG 215 B/R	4.6	1.09	26.2
13	DP 555 B/R	3.4	1.12	27.6
14	DP 468 BGII/R	3.9	1.16	29.9
15	DP 655 B/R	4.3	1.13	31.5
16	DP 449 B/R	4.5	1.13	30.0
17	ST BXN 49B	3.9	1.16	28.7
18	SG 501 B/R	4.7	1.16	29.2
19	DP 448 B	4.3	1.16	30.3
20	ST 3539 B/R	5.3	1.01	29.9

Irrigated Variety Demonstration 3 – Jackson County

Twenty varieties were planted into twenty-four row by 2230' plots on the 7th of May at a rate of 11 lbs/A. The combination of a late May planting rate and the following cool wet period made for a late maturing crop. In addition, over 3 inches of rain was received in early September which helped set a significant amount of late fruit. Plots were harvested with a John Deere 9970 picker. Individual modules were produced from each plot, tagged and ginned separately to obtain lint turnout, fiber properties and loan price. Results of this demonstration are presented in the tables below.

Trial ID:	OSUVP0303	**Location:**	Williams
Planting Date:	May 7	**Seeding Rate:**	11 lbs/A
Row Spacing:	38 inches	**Plot Size:**	24 r x 2230'
Replications:	1	**Soil Type:**	Clay Loam
Harvest Date:	October 30		

YIELD RANK	VARIETY NAME	AVG.STAND PLANTS/FT	GIN %	LINT LBS/A
1	DP 448 B	3.7	40	1439
2	FM 832 B	4	35	1276
3	DP 555 B/R	4.2	38	1331
4	DP 35 B	4.3	37	1360
5	ST BXN 49 B	2.7	39	1259
6	ST 5599 B/R	3.7	39	1285
7	CT 210	4.2	39	1275
8	FM 958 B	4	40	1210
9	DP 468 BGII/R	4.1	37	1190
10	DP 655 B/R	3.5	36	1181
11	FM 989 B/R	3.7	38	1112
12	DP 458 B/R	3.5	40	1083
13	FM 960 B/R	3.9	38	1089
14	ST 4892 B/R	3.5	37	1083
15	DP 444 B/R	3.3	39	965
16	SG 215 B/R	4.4	38	1118
17	DP 449 B/R	4	36	999
18	DP 424 BGII/R	4.3	35	1019
19	SG 501 B/R	4	39	1006
20	ST 3539 B/R	3.5	39	868

Irrigated Variety Demonstration 3 – Jackson County

Trial ID:	OSUVP0303	**Location:**	Williams
Planting Date:	May 7	**Seeding Rate:**	11 lbs/A
Row Spacing:	38 inches	**Plot Size:**	24 r x 2230’
Replications:	1	**Soil Type:**	Clay Loam
Harvest Date:	October 30		

YIELD RANK	VARIETY NAME	FIBER STREN.	FIBER LENG.	FIBER UNIF.	FIBER MIC.	LOAN PRICE	RETURN $/ACRE
1	DP 448 B	28.1	111.1	81.3	5	0.5389	775
2	FM 832 B	32.6	117.4	83	4.6	0.5685	725
3	DP 555 B/R	27.9	108.5	81.1	5	0.5348	712
4	DP 35 B	30	109.6	81.3	5.1	0.516	702
5	ST BXN 49 B	27.2	109.1	81.6	5.3	0.508	640
6	ST 5599 B/R	29.7	108	81.2	5.4	0.4974	639
7	CT 210	30.4	107.2	81.7	5.5	0.4952	631
8	FM 958 B	33.3	110	81.9	5.3	0.5166	625
9	DP 468 BGII/R	29	111.8	81.2	5.2	0.5222	621
10	DP 655 B/R	30.2	107.8	81.3	5.2	0.5128	606
11	FM 989 B/R	30.6	108.1	81.6	5.3	0.5028	559
12	DP 458 B/R	29.4	109	81.3	5.4	0.5058	548
13	FM 960 B/R	32.1	107.7	81.7	5.3	0.5026	547
14	ST 4892 B/R	28.7	107.2	82.2	5.6	0.4962	537
15	DP 444 B/R	28.2	107.4	82.1	4.9	0.539	520
16	SG 215 B/R	25.3	102.1	81.3	5.5	0.4472	500
17	DP 449 B/R	29.7	107.4	81	5.4	0.4987	498
18	DP 424 BGII/R	27.2	106.3	81.1	5.3	0.4869	496
19	SG 501 B/R	28	104.9	81.8	5.5	0.4757	479
20	ST 3539 B/R	27.8	99.7	81	5.5	0.4489	390

Irrigated Variety Trial – Texas County

Six cotton varieties were planted both on the 10th and again on the 30th of May. Two row by 25' plots were seeded at a rate of 14 lbs/A and managed for optimum yield. Plots received 5 inches of overhead irrigation from a pivoting sprinkler system. Interest in cotton continues to grow in the northern parts of Oklahoma, Texas and Southern Kansas. As indicated by the results below, planting date and variety selection can be important factors to consider for these areas.

Trial ID:	OSUVP0304	**Location:**	Panhandle St.
Planting Date:	May 10 & 30	**Seeding Rate:**	14 lbs/A
Row Spacing:	40 inches	**Plot Size:**	2 r x 25'
Replications:	3	**Soil Type:**	Sandy Clay Loam
Harvest Date:	December 15		

Trt No.	Treatment Name	Grow Stg	Appl Code	GIN PERCENT		LINT LBS/ACRE	
1	DP 555 B/R	EARLPLAN	A	31	a	664	fg
2	PM 2280 B/R	EARLPLAN	A	25	d	746	efg
3	PM 2266 RR	EARLPLAN	A	28	bc	1029	ab
4	ST 2454 R	EARLPLAN	A	28	bc	859	cde
5	PM 2145 RR	EARLPLAN	A	30	abc	1087	a
6	PM 2167 RR	EARLPLAN	A	30	ab	1033	ab
7	DP 555 B/R	LATPLANT	B	28	abc	613	g
8	PM 2280 B/R	LATPLANT	B	27	cd	747	efg
9	PM 2266 RR	LATPLANT	B	27	bcd	885	cde
10	ST 2454 R	LATPLANT	B	28	abc	795	def
11	PM 2145 RR	LATPLANT	B	29	abc	923	bcd
12	PM 2167 RR	LATPLANT	B	30	abc	998	abc
LSD (P=.05)				2.9		140	
Standard Deviation				2		96.9	
CV				6.99		11.21	

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

Irrigated Variety Trial – Texas County

Trial ID: OSUVP0304
Planting Date: May 10 & 30
Row Spacing: 40 inches
Replications: 3
Harvest Date: December 15

Location: Panhandle St.
Seeding Rate: 14 lbs/A
Plot Size: 2 r x 25'
Soil Type: Sandy Clay Loam

Trt No.	Treatment Name	Grow Stg	Appl Code	FIBER MIC		FIBER LENGTH		FIBER STRENGTH	
1	DP 555 B/R	EARLPLAN	A	2.45	g	1.132	a	25	e
2	PM 2280 B/R	EARLPLAN	A	2.83	f	1.13	a	27.7	abc
3	PM 2266 RR	EARLPLAN	A	3.2	cde	1.102	b	27.33	abc
4	ST 2454 R	EARLPLAN	A	2.95	ef	1.08	cd	26.7	bcd
5	PM 2145 RR	EARLPLAN	A	3.75	a	1.053	e	28.2	a
6	PM 2167 RR	EARLPLAN	A	3.6	ab	1.025	f	26.85	abc
7	DP 555 B/R	LATPLANT	B	2.53	g	1.135	a	25.35	de
8	PM 2280 B/R	LATPLANT	B	3.08	def	1.093	bc	28.1	ab
9	PM 2266 RR	LATPLANT	B	3.2	cde	1.097	bc	27.25	abc
10	ST 2454 R	LATPLANT	B	3.05	def	1.067	de	26.3	cde
11	PM 2145 RR	LATPLANT	B	3.32	bcd	1.02	f	27.1	abc
12	PM 2167 RR	LATPLANT	B	3.43	bc	1.027	f	26.25	cde
LSD (P=.05)				0.298		0.0216		1.497	
Standard Deviation				0.207		0.015		1.037	
CV				6.63		1.39		3.86	

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

Dryland Variety Demonstration – Washita County

Twelve cotton varieties were planted with a John Deere 1710 vacuum planter equipped with down pressure springs and Yetter no-till attachments (25 wave coulters and residue managers) on the 15th of May into terminated rye. Four row by 1120' plots were seeded at a rate of 11 lbs/A, and managed for optimum yield. Interest in limited and/or no-till cotton continues to grow in Oklahoma. As indicated by the results below, variety selection can be an important factor to consider for this area. The tables below display the results of this demonstration.

Trial ID:	OSUVP0305	**Location:**	Johnson Farm
Planting Date:	May 15	**Seeding Rate:**	11 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 1120'
Replications:	1	**Soil Type:**	Sandy Clay Loam
Harvest Date:	December 13		

YIELD RANK	VARIETY NAME	STAND PLANTS/FT	GIN %	LINT LBS/A
1	ST 5599 B/R	4	28	1433
2	FM 960 B/R	4	24	1150
3	ST 5303 R	3.3	25	1118
4	ST 4793 R	3.3	26	992
5	ST 4892 B/R	3.3	26	958
6	FM 989 B/R	3.3	22	890
7	ST 2454 R	3	24	882
8	DP 555 B/R	3.7	26	796
9	PM 2167 RR	4	22	626
10	DP 458 B/R	4.3	23	611
11	PM 2344 B/R	4.3	20	545
12	PM 2266 RR	3.7	21	543

Dryland Variety Demonstration – Washita County

Trial ID:	OSUVP0305	**Location:**	Johnson Farm
Planting Date:	May 15	**Seeding Rate:**	11 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 1120’
Replications:	1	**Soil Type:**	Sandy Clay Loam
Harvest Date:	December 13		

YIELD RANK	VARIETY NAME	FIBER MIC	FIBER LENGTH	FIBER STRENGTH
1	ST 5599 B/R	4.1	1.11	29.8
2	FM 960 B/R	3.8	1.11	33.1
3	ST 5303 R	4.3	1.08	31.5
4	ST 4793 R	4.9	1.06	31.3
5	ST 4892 B/R	4.7	1.09	28.9
6	FM 989 B/R	4.0	1.16	31.7
7	ST 2454 R	4.0	1.04	31.0
8	DP 555 B/R	3.9	1.10	29.9
9	PM 2167 RR	4.7	1.04	31.5
10	DP 458 B/R	3.4	1.14	33.8
11	PM 2344 B/R	4.7	1.12	32.4
12	PM 2266 RR	4.5	1.08	33.0

Plant Population Demonstration & Cruiser vs. Temik

Variety: PM 2280 B/R	STAND #/FT	GIN %	YIELD LBS/A	FIBER MIC	FIBER LENGTH	FIBER STREN
5 lbs/A	2	23	592	4.4	1.05	32
7 lbs/A	2.7	24	704	4.6	1.01	30.3
9 lbs/A	3.3	24	781	4.6	1.06	30.4
11 lbs/A	4	22	865	4	1.09	34.3
Cruiser Alone	3.7	23	754	3.8	1.06	31.5
Cruiser + Temik @ 2.0 lbs/A	4	22	865	4	1.09	34.3
Temik alone @ 2.0 lbs/A	Plot destroyed by grasshoppers					

Dryland Variety Demonstration – Caddo County

Thirteen cotton varieties were planted on the 23rd of May and managed for optimum yield. As indicated by the results below, variety selection can be an important factor to consider for this area. Stoneville 5599 B/R produced the most lint/acre (488 lbs.). The tables below display the results of this demonstration.

Trial ID:	OSUVP0306	**Location:**	Mace Farm
Planting Date:	May 23	**Seeding Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	8 r x 1320’
Replications:	1	**Harvest Date:**	December 26

YIELD RANK	VARIETY NAME	STAND PLANTS/FT	GIN %	LINT LBS/A
1	ST 5599 B/R	3.3	26	488
2	ST 4892 B/R	3.1	25	402
3	FM 989 B/R	3.2	24	388
4	FM 960 B/R	3.2	24	356
5	PM 2344 B/R	3.4	24	342
6	PM 2266 R	3	22	300
7	ST 2454 R	3.3	23	268
8	PM 2167 R	3.5	20	262
9	PM 2280 B/R	3.5	22	255
10	ST 4793 R	2.7	24	252
11	DP 555 B/R	3.3	27	243
12	DP 458 B/R	3.4	23	176
13	ST 5303 R	3.4	25	150

Dryland Variety Demonstration – Caddo County

Trial ID:	OSUVP0306	**Location:**	Mace Farm
Planting Date:	May 23	**Seeding Rate:**	12 lbs/A
Row Spacing:	40 inches	**Plot Size:**	8 r x 1320’
Replications:	1	**Harvest Date:**	December 26

YIELD RANK	VARIETY NAME	FIBER MIC	FIBER LENGTH	FIBER STRENGTH
1	ST 5599 B/R	5.3	1.03	31.4
2	ST 4892 B/R	5.4	1.03	29.3
3	FM 989 B/R	5.6	1.07	30.4
4	FM 960 B/R	5.3	1.09	32.9
5	PM 2344 B/R	5.6	1.01	31.3
6	PM 2266 R	5.0	1.05	30.4
7	ST 2454 R	5.4	1.11	26.0
8	PM 2167 R	5.4	1.00	29.1
9	PM 2280 B/R	4.7	1.11	31.1
10	ST 4793 R	4.7	1.03	31.6
11	DP 555 B/R	4.7	1.14	30.5
12	DP 458 B/R	5.1	1.12	31.1
13	ST 5303 R	5.5	1.04	29.1

Dryland Variety Demonstration – Canadian County

Fourteen cotton varieties were planted on the 27th of May and managed for optimum yield. As indicated by the results below, variety selection can be an important factor to consider for this area. Stoneville 4793 R produced the most lint/acre (547 lbs). The tables below display the results of this demonstration.

Trial ID:	OSUVP0307	**Location:**	Mach Farm
Planting Date:	May 27	**Seeding Rate:**	10 lbs/A
Row Spacing:	40 inches	**Plot Size:**	8 r x 600’
Replications:	1	**Soil Type:**	Sandy Clay Loam
Harvest Date:	December 14		

YIELD RANK	VARIETY NAME	STAND PLANTS/FT	GIN %	LINT LBS/A
1	ST 4793 R	3.2	26	547
2	DP 555 B/R	4.4	28	513
3	ST 5303 R	4.7	23	510
4	PM 2266 R	3.2	22	458
5	PM 2167 R	4.5	24	454
6	ST 4892 B/R	4.5	26	431
7	PM 2280 B/R	4	22	415
8	FM 960 B/R	3.3	26	402
9	FM 989 B/R	3.2	22	367
10	PM 2344 B/R	3.5	22	327
11	ST 2454 R	3.5	23	324
12	ST 3539 B/R	3.5	22	303
13	ST 5599 B/R	4.3	25	291
14	DP 458 B/R	4.3	21	265

Dryland Variety Demonstration – Canadian County

Trial ID: OSUVP0307
Location: Mach Farm
Planting Date: May 27
Seeding Rate: 10 lbs/A
Row Spacing: 40 inches
Plot Size: 8 r x 600'
Replications: 1
Soil Type: Sandy Clay Loam
Harvest Date: December 14

YIELD RANK	VARIETY NAME	FIBER MIC	FIBER LENGTH	FIBER STRENGTH
1	ST 4793 R	5.3	1.01	27.6
2	DP 555 B/R	5.0	1.02	26.6
3	ST 5303 R	5.3	1.03	30.6
4	PM 2266 R	4.5	1.07	32.6
5	PM 2167 R	5.2	1.01	30.2
6	ST 4892 B/R	5.4	1.05	30.7
7	PM 2280 B/R	4.0	1.01	29.2
8	FM 960 B/R	5.0	1.01	29.5
9	FM 989 B/R	4.6	1.06	31.3
10	PM 2344 B/R	4.9	1.01	30.7
11	ST 2454 R	4.9	1.04	30.2
12	ST 3539 B/R	5.1	1.10	30.8
13	ST 5599 B/R	4.9	0.99	27.6
14	DP 458 B/R	5.1	1.05	29.5

Dryland Variety Demonstration – Custer County

Fifteen cotton varieties were planted on the 15th of May and managed for optimum yield. As indicated by the results below, variety selection can be an important factor to consider for this area. Deltapine 555 B/R and Stoneville 5599 B/R produced the most lint/acre (713 lbs and 674 lbs/A, respectively). The tables below display the results of this demonstration.

Trial ID:	OSUVP0308	**Location:**	Sheppard Farm
Planting Date:	May 15	**Seeding Rate:**	10 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 2640’
Replications:	1	**Soil Type:**	Sandy Clay Loam
Harvest Date:	December 16		

YIELD RANK	VARIETY NAME	STAND PLANTS/FT	GIN %	LINT LBS/A
1	DP 555 B/R	4.4	28	713
2	ST 5599 B/R	3.9	28	674
3	ST 4892 B/R	3.8	27	619
4	DP 458 B/R	5.4	26	592
5	ST 5303 R	3.9	26	550
6	PM 2156 R	3.4	25	543
7	PM 2200 R	3.3	24	540
8	FM 960 B/R	4.3	26	532
9	PM 2266 R	4.1	24	491
10	PM 2167 R	3.4	26	490
11	ST 2454 R	3.8	27	442
12	FM 819 RR	3.4	24	431
13	PM 2344 B/R	3.8	23	304
14	PM 2326 B/R	4.1	22	261
15	PM 2280 B/R	3.3	22	255

Dryland Variety Demonstration – Custer County

Trial ID:	OSUVP0308	**Location:**	Sheppard Farm
Planting Date:	May 15	**Seeding Rate:**	10 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 2640’
Replications:	1	**Soil Type:**	Sandy Clay Loam
Harvest Date:	December 16		

YIELD RANK	VARIETY NAME	FIBER MIC	FIBER LENGTH	FIBER STRENGTH
1	DP 555 B/R	4.6	1.05	29.9
2	ST 5599 B/R	5.4	1.00	27.5
3	ST 4892 B/R	5.5	1.04	30.3
4	DP 458 B/R	5.2	1.05	30.3
5	ST 5303 R	5.6	1.01	31.7
6	PM 2156 R	5.2	0.96	27.4
7	PM 2200 R	4.7	0.99	27.3
8	FM 960 B/R	5.3	1.02	32.4
9	PM 2266 R	4.9	1.04	30.6
10	PM 2167 R	5.4	0.92	28.8
11	ST 2454 R	5.2	0.97	28.5
12	FM 819 RR	4.7	1.11	33.1
13	PM 2344 B/R	4.5	0.97	26.9
14	PM 2326 B/R	4.7	0.97	30.4
15	PM 2280 B/R	4.6	1.00	31.9

Dryland Variety Demonstration – Greer County

Nine cotton varieties were planted on the 22nd of May and managed for optimum yield. As indicated by the results below, variety selection can be an important factor to consider for this area. Fibermax 960 B/R and DP 458 B/R produced the most lint/acre (414 lbs and 386 lbs/A, respectively). The tables below display the results of this demonstration.

Trial ID:	OSUVP0309	**Location:**	Graumann Farm
Planting Date:	May 22	**Seeding Rate:**	10 lbs/A
Row Spacing:	40 inches	**Plot Size:**	4 r x 1320'
Replications:	1	**Soil Type:**	Sandy Clay Loam
Harvest Date:	December 11		

YIELD RANK	VARIETY NAME	STAND PLANTS/FT	GIN %	LINT LBS/A
1	FM 960 B/R	3.4	25	414
2	DP 458 B/R	3.1	23	386
3	DP 555 B/R	4.1	27	363
4	PM 2344 B/R	3.1	20	350
5	ST 4892 B/R	2.7	25	307
6	FM 989 B/R	3.5	23	300
7	PM 2280 B/R	3.3	20	295
8	ST 3539 B/R	2.8	23	290
9	ST 5599 B/R	2.4	25	289

YIELD RANK	VARIETY NAME	FIBER MIC	FIBER LENGTH	FIBER STRENGTH
1	FM 960 B/R	4.5	1.00	30.4
2	DP 458 B/R	4.8	1.02	28.3
3	DP 555 B/R	4.6	1.00	25.5
4	PM 2344 B/R	4.2	0.98	29.8
5	ST 4892 B/R	5.2	0.98	26.8
6	FM 989 B/R	4.4	0.97	26.4
7	PM 2280 B/R	3.8	0.99	26.9
8	ST 3539 B/R	4.7	0.90	26.8
9	ST 5599 B/R	4.6	0.94	26.7

Dryland Variety Demonstration – Tillman County

Twelve cotton varieties were planted on the 22th of May and managed for optimum yield. As indicated by the results below, variety selection can be an important factor to consider for this area. Stoneville 5599 B/R produced the most lint/acre (641 lbs). The tables below display the results of this demonstration.

Trial ID:	OSUVP0310	**Location:**	McKinley Farm
Planting Date:	May 22	**Seeding Rate:**	6 lbs/A
Row Spacing:	40 inches	**Plot Size:**	24 r x 1320’
Replications:	1	**Soil Type:**	Sandy Loam
Harvest Date:	December 10		

YIELD RANK	VARIETY NAME	STAND PLANTS/FT	GIN %	LINT LBS/A
1	ST 5599 B/R	3	26	641
2	ST 4793 R	2.7	25	506
3	ST 5303 R	2.1	23	475
4	ST 4892 B/R	2.4	25	468
5	PM 2167 R	2.5	24	467
6	PM 2266 R	2.8	22	442
7	ST 2454 R	2.7	24	435
8	FM 989 B/R	2.7	23	410
9	DP 555 B/R	2.9	28	333
10	DP 458 B/R	2.5	22	289
11	PM 2280 B/R	2.7	21	281
12	PM 2344 B/R	2.4	22	259

YIELD RANK	VARIETY NAME	FIBER MIC	FIBER LENGTH	FIBER STRENGTH
1	ST 5599 B/R	5.0	1.14	32.3
2	ST 4793 R	5.5	1.05	28.8
3	ST 5303 R	5.1	1.11	33.9
4	ST 4892 B/R	5.5	1.06	28.2
5	PM 2167 R	5.2	1.03	30.3
6	PM 2266 R	4.8	1.10	30.1
7	ST 2454 R	4.1	1.13	29.3
8	FM 989 B/R	5.2	1.05	30.6
9	DP 555 B/R	4.9	1.10	29.0
10	DP 458 B/R	4.9	1.06	29.6
11	PM 2280 B/R	4.6	1.03	30.3
12	PM 2344 B/R	5.3	0.96	29.2

Layby Morningglory Control with Ignite Herbicide

Ignite herbicide has recently been registered for use in Liberty Link cotton by Bayer Crop Science. Although not labeled, this trial evaluated the effectiveness of ignite when applied post-directed mid-season, and at the layby stage to non-Liberty Link cotton through a Redball 420 layby hood. Early season weed pressure was controlled with applications of Glyphosate as needed (application codes A and B). Evaluations suggest that reducing the rate of Ignite herbicide or delaying an application can result in reduced weed control as well.

Trial ID: BAYWC0301 **Location:** OSUREC-W
Planting Date: May 28 **Seeding Rate:** 10 lbs/A
Row Spacing: 40 inches **Plot Size:** 4 r x 50'
Replications: 3 **Soil Type:** Clay Loam

	TREATMENT INFORMATION					% PITTED MG CONTROL		
No.	Name	Rate	Unit	Stage	Code	8/12/2003	8/29/2003	9/12/2003
1	UNTREATED					0 b	0 d	0 d
2	LIBERTY	32	OZ/A	LAYBY	D		89.3 b	90 a
2	ACCUQUEST	2	QT/100 GAL	LAYBY	D			
2	DIREX	1	QT/A	LAYBY	D			
3	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	D		95.3 a	90 a
3	ACCUQUEST	2	QT/A	LAYBY	D			
3	DIREX	1	QT/A	LAYBY	D			
4	LIBERTY	16	OZ/A	LAYBY	D		87.7 bc	80 b
4	ROUNDUP WEATHERMAX	11	OZ/A	LAYBY	D			
4	ACCUQUEST	2	QT/A	LAYBY	D			
5	LIBERTY	32	OZ/A	LAYBY	D		89.7 ab	79.3 b
5	ACCUQUEST	2	QT/100 GAL	LAYBY	D			
6	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	D		91 ab	80 b
6	ACCUQUEST	2	QT/100 GAL	LAYBY	D			
7	LIBERTY	32	OZ/A	POST-DIR	C	89.3 a	83.3 c	67.7 c
7	ACCUQUEST	2	QT/100 GAL	POST-DIR	C			
LSD (P=.05)						12.75	5.72	1.95
CV						8.12	4.2	1.58

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

Layby Morningglory Control with Ignite Herbicide

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	6/11/2003	7/2/2003	7/21/2003	8/12/2003
Time of Day:	9:00 AM	10:00 AM	3:30 PM	2:30 PM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	EP 2LF	EP 6-8LF	MP12-14LF	LP-LAYBY
Applic. Placement:	BROADCAST	DIRECTED	DIRECTED	DIRECTED
Air Temp., Unit:	77 F	84 F	89 F	100 F
% Relative Humidity:	75	43	60	29
Wind Velocity, Unit:	5 MPH	8 MPH	3 MPH	7 MPH
Soil Temp., Unit:	83 F	88 F	90 F	98 F
Soil Moisture:	ADEQUATE	ADEQUATE	MARGINAL	ADEQUATE
% Cloud Cover:	30	20	30	40
Appl. Equipment:	LEESPIDER	RBALL 420	RBALL 420	RBALL 420
Operating Pressure:	24 PSI	24 PSI	24 PSI	24 PSI
Nozzle Type:	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN
Nozzle Size:	8002	8001/003	8001/003	8001/003
Nozzle Spacing, Unit:	20 IN	13 IN	13 IN	13 IN
Nozzles/Row:	2	3	3	3
Ground Speed, Unit:	4 MPH	4.5 MPH	4.5 MPH	4.5 MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	15 GPA	15 GPA	15 GPA
Propellant:	COMP.AIR	COMP.AIR	COMP.AIR	COMP.AIR

Treatment Application Comment
APPLICATIONS "A" & "B" WERE GLYPHOSATE + AMM.SULFATE FOR EARLY WEEDS

Liberty Link Cotton Weed Control Systems

Ignite herbicide has recently been registered for use in Liberty Link cotton by Bayer Crop Science. The objective of this trial was to evaluate the effectiveness of the Liberty Link/Ignite herbicide system on pitted morningglory. Effective control of pitted morningglory was observed throughout the season. However, by late in the season, tank-mixing with Staple did improve long-term control.

Trial ID: BAYWC0302
Planting Date: May 28
Row Spacing: 40 inches
Replications: 3
Location: OSUREC-W
Rate: 10 lbs/A
Plot Size: 4 r x 50'
Soil Type: Clay Loam

TREATMENT INFORMATION						% PITTED MORNINGGLORY CONTROL							
No.	Name	Rate	Unit	Stg	Code	6/11/2003		6/18/2003		6/25/2003		7/2/2003	
1	UNTREATED					0	b	0	b	0	c	0	c
2	LIBERTY	32	OZ/A	EP 1-LF	B	0	b	93.3	a	90	a	83.3	ab
2	LIBERTY	32	OZ/A	MP 6-LF	C								
3	LIBERTY	32	OZ/A	EP 1-LF	B	0	b	93.3	a	91.7	a	80	b
3	LIBERTY	16	OZ/A	MP 8-LF	D								
3	STAPLE	1.2	OZ/A	MP 8-LF	D								
4	CAPAROL	3.2	PT/A	PRE	A	76.7	a	97	a	92.7	a	81.7	ab
4	LIBERTY	32	OZ/A	EP 1-LF	B								
4	LIBERTY	32	OZ/A	MP 6-LF	C								
5	LIBERTY	32	OZ/A	EP 1-LF	B	0	b	93.3	a	90	a	81.7	ab
5	LIBERTY	32	OZ/A	MP 6-LF	C								
5	LIBERTY	16	OZ/A	LAYBY	E								
6	LIBERTY	32	OZ/A	EP 1-LF	B	0	b	91.3	a	83.3	b	85	a
6	LIBERTY	32	OZ/A	MP 6-LF	C								
7	LIBERTY	32	OZ/A	EP 1-LF	B	0	b	91.7	a	90	a	80	b
7	ACCUQUEST	2	QT/100 GAL	EP 1-LF	B								
7	LIBERTY	32	OZ/A	MP 6-LF	C								
7	ACCUQUEST	2	QT/100 GAL	MP 6-LF	C								
LSD (P=.05)						1.94		5.69		5.72		3.54	
CV						9.96		4		4.19		2.84	

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

Liberty Link Cotton Weed Control Systems

TREATMENT INFORMATION						% PITTED MORNINGGLORY CONTROL					
No.	Name	Rate	Unit	Stg	Code	7/9/2003		7/16/2003		8/21/2003	
1	UNTREATED					0	c	0	e	0	d
2	LIBERTY	32	OZ/A	EP 1-LF	B	95	a	92.7	c	74.3	c
2	LIBERTY	32	OZ/A	MP 6-LF	C						
3	LIBERTY	32	OZ/A	EP 1-LF	B	66.7	b	81.7	d	96	a
3	LIBERTY	16	OZ/A	MP 8-LF	D						
3	STAPLE	1.2	OZ/A	MP 8-LF	D						
4	CAPAROL	3.2	PT/A	PRE	A	95	a	98	a	75	c
4	LIBERTY	32	OZ/A	EP 1-LF	B						
4	LIBERTY	32	OZ/A	MP 6-LF	C						
5	LIBERTY	32	OZ/A	EP 1-LF	B	95	a	98	a	82.7	b
5	LIBERTY	32	OZ/A	MP 6-LF	C						
5	LIBERTY	16	OZ/A	LAYBY	E						
6	LIBERTY	32	OZ/A	EP 1-LF	B	95	a	94	bc	73.3	c
6	LIBERTY	32	OZ/A	MP 6-LF	C						
7	LIBERTY	32	OZ/A	EP 1-LF	B	95	a	97	ab	73.3	c
7	ACCUQUEST	2	QT/100 GAL	EP 1-LF	B						
7	LIBERTY	32	OZ/A	MP 6-LF	C						
7	ACCUQUEST	2	QT/100 GAL	MP 6-LF	C						
LSD (P=.05)						3.88		3.11		4.46	
CV						2.82		2.18		3.7	

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

Liberty Link Cotton Weed Control Systems

APPLICATION DESCRIPTION

	A	B	C	D	E
Application Date:	5/29/2003	6/11/2003	7/2/2003	7/10/2003	8/6/2003
Time of Day:	10:00 AM	8:30 AM	3:00 PM	11:00 AM	10:OO AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PREEMERGE	EP C-1LF	MP 6LF	8-LF	LAYBY
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST	DIRECTED
Air Temp., Unit:	84 F	77 F	99 F	84 F	93 F
% Relative Humidity:	58	66	31	54	40
Wind Velocity, Unit:	7 MPH	5 MPH	7 MPH	5.5 MPH	2 MPH
Soil Temp., Unit:	88 F	75 F	101 F	84 F	90 F
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE	ADEQUATE	ADEQUATE
% Cloud Cover:	0	90	0	0	0
Weed Description:	PITTEDMG	PITTEDMG	PITTEDMG	PITTEDMG	PITTEDMG
Weed Stage:	N/A	1-5 INCH	1-4 INCH	1-8 INCH	1-8 INCH
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER	LEESPIDER	RBALL 420
Operating Pressure:	24 PSI	24 PSI	24 PSI	24 PSI	24 PSI
Nozzle Type:	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN
Nozzle Size:	8002	8002	8002	8002	8001/003
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN	20 IN	13 IN
Nozzles/Row:	2	2	2	2	3
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH	4 MPH	4.5 MPH
Carrier:	WATER	WATER	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA	10 GPA	15 GPA
Propellant:	COMP.AIR	COMP.AIR	COMP.AIR	COMP.AIR	COMP.AIR

Pigweed Control with Staple and Cinch in Simulated Roundup Ready Flex Cotton

The objective of this trial was to evaluate the effectiveness of Staple and Cinch herbicides used for the control of pigweed within (simulated) Roundup Ready Flex cotton. All treatments effectively controlled pigweeds season long.

Trial ID: DUPWC0301
Planting Date: May 28
Row Spacing: 40 inches
Replications: 3
Location: OSUREC-W
Rate: 10 lbs/A
Plot Size: 4 r x 50'
Soil Type: Clay Loam

	TREATMENT INFORMATION					% PIGWEED CONTROL					
No.	Name	Rate	Unit	Stg	Code	6/23/2003		7/1/2003		7/9/2003	
1	UNTREATED					0	d	0	e	0	d
2	CINCH	15.3	OZ A/A	PRE	A	98.3	a	100	a	100	a
2	STAPLE	0.5	OZ A/A	PRE	A						
2	STAPLE	0.34	OZ A/A	EP 2-3LF	B						
2	ROUNDUP WEATHERMAX	8	OZ A/A	EP 2-3LF	B						
2	STAPLE	0.34	OZ A/A	LP 12 LF	E						
2	ROUNDUP WEATHERMAX	8	OZ A/A	LP 12 LF	E						
3	CINCH	15.3	OZ A/A	PRE	A	56.7	c	100	a	100	a
3	STAPLE	0.34	OZ A/A	EP 2-3LF	B						
3	ROUNDUP WEATHERMAX	8	OZ A/A	EP 2-3LF	B						
3	STAPLE	0.34	OZ A/A	LP 12 LF	E						
3	ROUNDUP WEATHERMAX	8	OZ A/A	LP 12 LF	E						
4	CINCH	15.3	OZ A/A	PRE	A	98.7	a	100	a	99.3	a
4	STAPLE	0.68	OZ A/A	PRE	A						
4	STAPLE	0.5	OZ A/A	EP 2-3LF	B						
4	ROUNDUP WEATHERMAX	12	OZ A/A	EP 2-3LF	B						
4	STAPLE	0.5	OZ A/A	LP 12 LF	E						
4	ROUNDUP WEATHERMAX	12	OZ A/A	LP 12 LF	E						
5	CINCH	15.3	OZ A/A	PRE	A	63.3	b	100	a	99.3	a
5	STAPLE	0.5	OZ A/A	EP 2-3LF	B						
5	ROUNDUP WEATHERMAX	12	OZ A/A	EP 2-3LF	B						
5	STAPLE	0.5	OZ A/A	LP 12 LF	E						
5	ROUNDUP WEATHERMAX	12	OZ A/A	LP 12 LF	E						
6	CINCH	15.3	OZ A/A	PRE	A	98.3	a	80	c	70	c
6	STAPLE	0.5	OZ A/A	PRE	A						
6	STAPLE	0.5	OZ A/A	MP 8LF	D						
6	ROUNDUP WEATHERMAX	12	OZ A/A	MP 8LF	D						
7	CINCH	15.3	OZ A/A	PRE	A	63.3	b	0	e	99.3	a
7	STAPLE	0.5	OZ A/A	MP 6LF	C						
7	ROUNDUP WEATHERMAX	12	OZ A/A	MP 6LF	C						

Pigweed Control with Staple and Cinch in Simulated Roundup Ready Flex Cotton

	TREATMENT INFORMATION					% PIGWEED CONTROL					
No.	Name	Rate	Unit	Stg	Code	6/23/2003		7/1/2003		7/9/2003	
8	STAPLE	0.5	OZ A/A	EP 2-3LF	B	0	d	100	a	99.3	a
8	ROUNDUP WEATHERMAX	12	OZ A/A	EP 2-3LF	B						
8	STAPLE	0.5	OZ A/A	LP 12 LF	E						
8	ROUNDUP WEATHERMAX	12	OZ A/A	LP 12 LF	E						
9	ROUNDUP WEATHERMAX	15	OZ A/A	EP 2-3LF	B	0	d	100	a	90	ab
9	ROUNDUP WEATHERMAX	15	OZ A/A	LP 12 LF	E						
10	TOUCHDOWN	12	OZ A/A	EP 2-3LF	B	0	d	73.3	d	80	bc
10	ENVOKE (CGA-362-622)	0.114	OZ A/A	LP 12 LF	E						
10	INDUCE	0.25	% V/V	LP 12 LF	E						
11	DUAL MAGNUM	15.2	OZ A/A	EP2-3LF	B	0	d	95	ab	100	a
11	TOUCHDOWN	12	OZ A/A	EP2-3LF	B						
11	ENVOKE (CGA-362-622)	0.075	OZ A/A	LP 12 LF	E						
11	INDUCE	0.25	% V/V	LP 12 LF	E						
12	DUAL MAGNUM	15.2	OZ A/A	EP2-3LF	B	0	d	91.7	b	100	a
12	TOUCHDOWN	12	OZ A/A	EP2-3LF	B						
12	ENVOKE (CGA-362-622)	0.114	OZ A/A	LP 12 LF	E						
12	INDUCE	0.25	% V/V	LP 12 LF	E						
LSD (P=.05)						5.49		5.16		12.54	
CV						8.13		3.89		8.57	

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

Pigweed Control with Staple and Cinch in Simulated Roundup Ready Flex Cotton

TREATMENT INFORMATION						% PIGWEED CONTROL			
No.	Name	Rate	Unit	Stg	Code	8/4/2003		8/12/2003	
1	UNTREATED					0	d	0	f
2	CINCH	15.3	OZ A/A	PRE	A	96	a	100	a
2	STAPLE	0.5	OZ A/A	PRE	A				
2	STAPLE	0.34	OZ A/A	EP 2-3LF	B				
2	ROUNDUP WEATHERMAX	8	OZ A/A	EP 2-3LF	B				
2	STAPLE	0.34	OZ A/A	LP 12 LF	E				
2	ROUNDUP WEATHERMAX	8	OZ A/A	LP 12 LF	E				
3	CINCH	15.3	OZ A/A	PRE	A	100	a	100	a
3	STAPLE	0.34	OZ A/A	EP 2-3LF	B				
3	ROUNDUP WEATHERMAX	8	OZ A/A	EP 2-3LF	B				
3	STAPLE	0.34	OZ A/A	LP 12 LF	E				
3	ROUNDUP WEATHERMAX	8	OZ A/A	LP 12 LF	E				
4	CINCH	15.3	OZ A/A	PRE	A	100	a	100	a
4	STAPLE	0.68	OZ A/A	PRE	A				
4	STAPLE	0.5	OZ A/A	EP 2-3LF	B				
4	ROUNDUP WEATHERMAX	12	OZ A/A	EP 2-3LF	B				
4	STAPLE	0.5	OZ A/A	LP 12 LF	E				
4	ROUNDUP WEATHERMAX	12	OZ A/A	LP 12 LF	E				
5	CINCH	15.3	OZ A/A	PRE	A	100	a	100	a
5	STAPLE	0.5	OZ A/A	EP 2-3LF	B				
5	ROUNDUP WEATHERMAX	12	OZ A/A	EP 2-3LF	B				
5	STAPLE	0.5	OZ A/A	LP 12 LF	E				
5	ROUNDUP WEATHERMAX	12	OZ A/A	LP 12 LF	E				
6	CINCH	15.3	OZ A/A	PRE	A	88.3	b	98.7	b
6	STAPLE	0.5	OZ A/A	PRE	A				
6	STAPLE	0.5	OZ A/A	MP 8LF	D				
6	ROUNDUP WEATHERMAX	12	OZ A/A	MP 8LF	D				
7	CINCH	15.3	OZ A/A	PRE	A	100	a	100	a
7	STAPLE	0.5	OZ A/A	MP 6LF	C				
7	ROUNDUP WEATHERMAX	12	OZ A/A	MP 6LF	C				
8	STAPLE	0.5	OZ A/A	EP 2-3LF	B	100	a	100	a
8	ROUNDUP WEATHERMAX	12	OZ A/A	EP 2-3LF	B				
8	STAPLE	0.5	OZ A/A	LP 12 LF	E				
8	ROUNDUP WEATHERMAX	12	OZ A/A	LP 12 LF	E				
9	ROUNDUP WEATHERMAX	15	OZ A/A	EP 2-3LF	B	100	a	100	a
9	ROUNDUP WEATHERMAX	15	OZ A/A	LP 12 LF	E				

Pigweed Control with Staple and Cinch in Simulated Roundup Ready Flex Cotton

	TREATMENT INFORMATION					% PIGWEED CONTROL			
No.	Name	Rate	Unit	Stg	Code	8/4/2003		8/12/2003	
10	TOUCHDOWN	12	OZ A/A	EP 2-3LF	B	76.7	c	92.7	d
10	ENVOKE (CGA-362-622)	0.114	OZ A/A	LP 12 LF	E				
10	INDUCE	0.25	% V/V	LP 12 LF	E				
11	DUAL MAGNUM	15.2	OZ A/A	EP2-3LF	B	85	b	87.7	e
11	TOUCHDOWN	12	OZ A/A	EP2-3LF	B				
11	ENVOKE (CGA-362-622)	0.075	OZ A/A	LP 12 LF	E				
11	INDUCE	0.25	% V/V	LP 12 LF	E				
12	DUAL MAGNUM	15.2	OZ A/A	EP2-3LF	B	85.7	b	94.3	c
12	TOUCHDOWN	12	OZ A/A	EP2-3LF	B				
12	ENVOKE (CGA-362-622)	0.114	OZ A/A	LP 12 LF	E				
12	INDUCE	0.25	% V/V	LP 12 LF	E				
LSD (P=.05)						6.83		1.25	
CV						4.69		0.82	

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

APPLICATION DESCRIPTION

	A	B	C	D	E
Application Date:	5/28/2003	6/25/2003	7/2/2003	7/10/2003	7/22/2003
Time of Day:	7:30 PM	7:15 PM	10:30 AM	6:00 AM	8:30 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PREEMERGE	EP 4LF	EP 5-6LF	MP 7-8LF	LP 10-12L
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	76 F	83 F	86 F	78 F	83 F
% Relative Humidity:	57	59	53	57	45
Wind Velocity, Unit:	8 MPH	5 MPH	8 MPH	1 MPH	2 MPH
Soil Temp., Unit:	77 F	90 F	85 F	80 F	81 F
Soil Moisture:	MARGINAL	ADEQUATE	ADEQUATE	ADEQUATE	DRY
% Cloud Cover:	0	95	0	15	40
Weed Description	N/A	PIGWEED	PIGWEED	PIGWEED	PIGWEED
Weed Stage	N/A	3-8 INCH	1-5 INCH	2-6 INCH	2-8 INCH
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER	LEESPIDER	LEESPIDER
Operating Pressure:	23 PSI	23 PSI	23 PSI	23 PSI	23 PSI
Nozzle Type:	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN
Nozzle Size:	8002 VS	8002 VS	8002 VS	8002 VS	8002 VS
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN	20 IN	20 IN
Nozzles/Row:	2	2	2	2	2
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA	10 GPA	10 GPA
Propellant:	COMP. AIR	COMP. AIR	COMP. AIR	COMP. AIR	COMP. AIR

Staple Programs for Morningglory Control in Simulated Roundup Ready Flex Cotton

The objective of this trial was to evaluate the effectiveness of Staple herbicide used for the control of morningglory within (simulated) Roundup Ready Flex cotton. Repeated applications of either Staple, Roundup Weathermax, or a combination of both controlled pitted morningglory greater than any other treatment observed.

Trial ID: DUPWC0302
Planting Date: May 28
Row Spacing: 40 inches
Replications: 3
Location: OSUREC-W
Rate: 10 lbs/A
Plot Size: 4 r x 50'
Soil Type: Clay Loam

TREATMENT INFORMATION						% PITTED MORNINGGLORY CONTROL			
No.	Name	Rate	Unit	Stage	Code	6/11/2003	6/18/2003	6/25/2003	7/2/2003
1	UNTREATED					0 c	0 c	0 e	0 c
2	STAPLE	0.6	OZ/A	PRE	A	33.3 a	0 c	23.3 d	77.7 b
2	STAPLE	0.6	OZ/A	EP 4LF	D				
2	ROUNDUP WEATHERMAX	17.5	OZ/A	EP 4LF	D				
3	STAPLE	0.6	OZ/A	PRE	A	25 b	0 c	23.3 d	76.7 b
3	STAPLE	0.8	OZ/A	EP 4LF	D				
3	ROUNDUP WEATHERMAX	23.3	OZ/A	EP 4LF	D				
4	STAPLE	0.4	OZ/A	COTYL	B	0 c	60 b	93.3 ab	83.3 ab
4	ROUNDUP WEATHERMAX	11.6	OZ/A	COTYL	B				
4	STAPLE	0.4	OZ/A	EP 4LF	D				
4	ROUNDUP WEATHERMAX	11.6	OZ/A	EP 4LF	D				
5	STAPLE	0.6	OZ/A	COTYL	B	0 c	93.3 a	96 a	95 a
5	ROUNDUP WEATHERMAX	17.5	OZ/A	COTYL	B				
5	STAPLE	0.6	OZ/A	EP 4LF	D				
5	ROUNDUP WEATHERMAX	17.5	OZ/A	EP 4LF	D				
6	STAPLE	0.6	OZ/A	EP 2LF	C	0 c	0 c	78.3 c	82.7 ab
6	ROUNDUP WEATHERMAX	17.5	OZ/A	EP 2LF	C				
7	STAPLE	0.8	OZ/A	EP 2LF	C	0 c	0 c	87.7 b	86.7 ab
7	ROUNDUP WEATHERMAX	23.3	OZ/A	EP 2LF	C				
8	ROUNDUP WEATHERMAX	23.3	OZ/A	EP 2LF	C	0 c	0 c	87.7 b	84.7 ab
9	ROUNDUP WEATHERMAX	23.3	OZ/A	COTYL	B	0 c	93.3 a	91 ab	94 a
9	ROUNDUP WEATHERMAX	23.3	OZ/A	EP 4LF	D				
LSD (P=.05)						6.97	29.98	6.45	14.77
CV						62.11	63.18	5.77	11.28

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

Staple Programs for Morningglory Control in Simulated Roundup Ready Flex Cotton

TREATMENT INFORMATION						% PITTED MORNINGGLORY CONTROL			
No.	Name	Rate	Unit	Stage	Code	7/9/2003		8/4/2003	
1	UNTREATED					0	e	0	d
2	STAPLE	0.6	OZ/A	PRE	A	72.7	d	78.3	ab
2	STAPLE	0.6	OZ/A	EP 4LF	D				
2	ROUNDUP WEATHERMAX	17.5	OZ/A	EP 4LF	D				
3	STAPLE	0.6	OZ/A	PRE	A	75.3	cd	86.7	ab
3	STAPLE	0.8	OZ/A	EP 4LF	D				
3	ROUNDUP WEATHERMAX	23.3	OZ/A	EP 4LF	D				
4	STAPLE	0.4	OZ/A	COTYL	B	94	a	76	abc
4	ROUNDUP WEATHERMAX	11.6	OZ/A	COTYL	B				
4	STAPLE	0.4	OZ/A	EP 4LF	D				
4	ROUNDUP WEATHERMAX	11.6	OZ/A	EP 4LF	D				
5	STAPLE	0.6	OZ/A	COTYL	B	95	a	90.3	a
5	ROUNDUP WEATHERMAX	17.5	OZ/A	COTYL	B				
5	STAPLE	0.6	OZ/A	EP 4LF	D				
5	ROUNDUP WEATHERMAX	17.5	OZ/A	EP 4LF	D				
6	STAPLE	0.6	OZ/A	EP 2LF	C	78.7	bc	75	bc
6	ROUNDUP WEATHERMAX	17.5	OZ/A	EP 2LF	C				
7	STAPLE	0.8	OZ/A	EP 2LF	C	82.7	b	76.7	ab
7	ROUNDUP WEATHERMAX	23.3	OZ/A	EP 2LF	C				
8	ROUNDUP WEATHERMAX	23.3	OZ/A	EP 2LF	C	84	b	61.7	c
9	ROUNDUP WEATHERMAX	23.3	OZ/A	COTYL	B	93.3	a	85.7	ab
9	ROUNDUP WEATHERMAX	23.3	OZ/A	EP 4LF	D				
LSD (P=.05)							5.97		14.72
CV							4.59		12.15

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

Staple Programs for Morningglory Control in Simulated Roundup Ready Flex Cotton

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	5/28/2003	6/10/2003	6/18/2003	6/25/2003
Time of Day:	6:30 PM	10:00 AM	8:45 AM	6:35 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PREEMERGE	EP-COTYL	EP-2-3 LF	EP 4-5 LF
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	79 F	78 F	76 F	79 F
% Relative Humidity:	57	56	63	77
Wind Velocity, Unit:	6.5 MPH	7 MPH	2 MPH	6 MPH
Soil Temp., Unit:	78 F	75 F	74 F	75 F
Soil Moisture:	MARGINAL	GOOD	GOOD	GOOD
% Cloud Cover:	0	100	0	75
Weed Description:	NA	PITTEDMG	PITTEDMG	PITTEDMG
Weed Stage:	NA	COTYL-2IN	1-4 INCH	1-4 INCH
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER	LEESPIDER
Operating Pressure:	23 PSI	23 PSI	23 PSI	23 PSI
Nozzle Type:	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN
Nozzle Size:	8002 VS	8002 VS	8002 VS	8002 VS
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN	20 IN
Nozzles/Row:	2	2	2	2
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	10 GPA
Propellant:	COMP. AIR	COMP. AIR	COMP. AIR	COMP. AIR

Using Residual Herbicides in Simulated Roundup Ready Flex Cotton

The objective of this trial was to evaluate the effectiveness of residual herbicides used for the control of morningglory within (simulated) Roundup Ready Flex cotton. Results indicated that timely, repeated applications of Roundup Weathermax effectively controlled morningglory most of the season. However, delaying applications between early-post (1-4lf) and mid-post reduced control due to increased weed size at application. In addition, incorporating residual herbicides into the Roundup Ready system later in the season (6-12 lf and layby) rather than earlier (preemergence) resulted in more effective morningglory control.

Trial ID: MONWC0301 **Location:** OSUREC-W
Planting Date: May 28 **Rate:** 10 lbs/A
Row Spacing: 40 inches **Plot Size:** 4 r x 50'
Replications: 3 **Soil Type:** Clay Loam

TREATMENT INFORMATION						% PITTED MORNINGGLORY CONTROL					
No.	Name	Rate	Unit	Stg	Code	6/11/2003		6/18/2003		7/2/2002	
1	UNTREATED					0	c	0	d	0	c
2	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B	0	c	0	d	76.8	ab
2	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
2	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C						
2	ACCUQUEST	2	QT/100 GAL	4-LFC	C						
2	ROUNDUP WEATHERMAX	22	OZ/A	6-8LFC	D						
2	ACCUQUEST	2	QT/100 GAL	6-8LFC	D						
2	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G						
2	ACCUQUEST	2	QT/100 GAL	LAYBY	G						
3	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B	0	c	0	d	73	b
3	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
3	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C						
3	ACCUQUEST	2	QT/100 GAL	4-LFC	C						
3	ROUNDUP WEATHERMAX	22	OZ/A	6-8LFC	D						
3	ACCUQUEST	2	QT/100 GAL	6-8LFC	D						
3	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G						
3	ACCUQUEST	2	QT/100 GAL	LAYBY	G						
4	CAPAROL	3.2	PT/A	PRE	A	70	a	95	a	85	ab
4	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B						
4	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
4	ROUNDUP WEATHERMAX	22	OZ/A	8-10LFC	E						
4	ACCUQUEST	2	QT/100 GAL	8-10LFC	E						
4	ROUNDUP WEATHERMAX	22	OZ/A	10-12LFC	F						
4	ACCUQUEST	2	QT/100 GAL	10-12LFC	F						
4	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G						
4	ACCUQUEST	2	QT/100 GAL	LAYBY	G						

Using Residual Herbicides in Simulated Roundup Ready Flex Cotton

TREATMENT INFORMATION						% PITTED MORNINGGLORY CONTROL					
No.	Name	Rate	Unit	Stg	Code	6/11/2003		6/18/2003		7/2/2002	
5	STAPLE	1	OZ/A	PRE	A	55	b	92.5	ab	85.5	ab
5	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B						
5	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
5	ROUNDUP WEATHERMAX	22	OZ/A	10-12LFC	F						
5	ACCUQUEST	2	QT/100 GAL	10-12LFC	F						
5	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G						
5	ACCUQUEST	2	QT/100 GAL	LAYBY	G						
6	DIREX	1	QT/A	PRE	A	52.5	b	10	c	76.8	ab
6	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B						
6	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
6	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C						
6	ACCUQUEST	2	QT/100 GAL	4-LFC	C						
6	ROUNDUP WEATHERMAX	22	OZ/A	6-8LFC	D						
6	ACCUQUEST	2	QT/100 GAL	6-8LFC	D						
6	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G						
6	ACCUQUEST	2	QT/100 GAL	LAYBY	G						
7	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B	0	c	86.3	b	90	a
7	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
7	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C						
7	ACCUQUEST	2	QT/100 GAL	4-LFC	C						
7	ROUNDUP WEATHERMAX	22	OZ/A	10-12LFC	F						
7	ACCUQUEST	2	QT/100 GAL	10-12LFC	F						
7	DIREX	1.5	PT/A	10-12LFC	F						
8	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B	0	c	87	ab	85.8	ab
8	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
8	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C						
8	ACCUQUEST	2	QT/100 GAL	4-LFC	C						
8	ROUNDUP WEATHERMAX	22	OZ/A	10-12LFC	F						
8	ACCUQUEST	2	QT/100 GAL	10-12LFC	F						
8	DIREX	2	PT/A	10-12LFC	F						
9	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B	0	c	85.8	b	83.5	ab
9	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
9	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C						
9	ACCUQUEST	2	QT/100 GAL	4-LFC	C						
9	ROUNDUP WEATHERMAX	22	OZ/A	10-12LFC	F						
9	ACCUQUEST	2	QT/100 GAL	10-12LFC	F						
9	DIREX	3	PT/A	10-12LFC	F						

Using Residual Herbicides in Simulated Roundup Ready Flex Cotton

TREATMENT INFORMATION						% PITTED MORNINGGLORY CONTROL		
No.	Name	Rate	Unit	Stg	Code	6/11/2003	6/18/2003	7/2/2002
10	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B	0 c	87 ab	85.3 ab
10	ACCUQUEST	2	QT/100 GAL	1-LFC	B			
10	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C			
10	ACCUQUEST	2	QT/100 GAL	4-LFC	C			
10	STAPLE	1.5	OZ/A	MP-6-8LF	C			
10	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G			
10	ACCUQUEST	2	QT/100 GAL	LAYBY	G			
10	DIREX	2	PT/A	LAYBY	G			
LSD (P=.05)						5.05	8.26	13.51
CV						19.62	10.47	12.56

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

Using Residual Herbicides in Simulated Roundup Ready Flex Cotton

TREATMENT INFORMATION						% PITTED MORNINGGLORY CONTROL					
No.	Name	Rate	Unit	Stg	Code	7/9/2002		7/16/2003		8/4/2003	
1	UNTREATED					0	d	0	d	0	d
2	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B	83	abc	88.3	a	90.8	ab
2	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
2	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C						
2	ACCUQUEST	2	QT/100 GAL	4-LFC	C						
2	ROUNDUP WEATHERMAX	22	OZ/A	6-8LFC	D						
2	ACCUQUEST	2	QT/100 GAL	6-8LFC	D						
2	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G						
2	ACCUQUEST	2	QT/100 GAL	LAYBY	G						
3	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B	79.8	abc	86.3	ab	92.5	ab
3	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
3	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C						
3	ACCUQUEST	2	QT/100 GAL	4-LFC	C						
3	ROUNDUP WEATHERMAX	22	OZ/A	6-8LFC	D						
3	ACCUQUEST	2	QT/100 GAL	6-8LFC	D						
3	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G						
3	ACCUQUEST	2	QT/100 GAL	LAYBY	G						
4	CAPAROL	3.2	PT/A	PRE	A	79.3	abc	77.8	bc	92.5	ab
4	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B						
4	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
4	ROUNDUP WEATHERMAX	22	OZ/A	8-10LFC	E						
4	ACCUQUEST	2	QT/100 GAL	8-10LFC	E						
4	ROUNDUP WEATHERMAX	22	OZ/A	10-12LFC	F						
4	ACCUQUEST	2	QT/100 GAL	10-12LFC	F						
4	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G						
4	ACCUQUEST	2	QT/100 GAL	LAYBY	G						
5	STAPLE	1	OZ/A	PRE	A	76	bc	72.8	c	72	c
5	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B						
5	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
5	ROUNDUP WEATHERMAX	22	OZ/A	10-12LFC	F						
5	ACCUQUEST	2	QT/100 GAL	10-12LFC	F						
5	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G						
5	ACCUQUEST	2	QT/100 GAL	LAYBY	G						

Using Residual Herbicides in Simulated Roundup Ready Flex Cotton

TREATMENT INFORMATION						% PITTED MG CONTROL					
No.	Name	Rate	Unit	Stg	Code	7/9/2002		7/16/2003		8/4/2003	
6	DIREX	1	QT/A	PRE	A	86	ab	87.8	a	94.3	a
6	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B						
6	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
6	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C						
6	ACCUQUEST	2	QT/100 GAL	4-LFC	C						
6	ROUNDUP WEATHERMAX	22	OZ/A	6-8LFC	D						
6	ACCUQUEST	2	QT/100 GAL	6-8LFC	D						
6	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G						
6	ACCUQUEST	2	QT/100 GAL	LAYBY	G						
7	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B	83	abc	80.8	abc	91.5	ab
7	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
7	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C						
7	ACCUQUEST	2	QT/100 GAL	4-LFC	C						
7	ROUNDUP WEATHERMAX	22	OZ/A	10-12LFC	F						
7	ACCUQUEST	2	QT/100 GAL	10-12LFC	F						
7	DIREX	1.5	PT/A	10-12LFC	F						
8	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B	82.8	abc	73.5	c	84.5	b
8	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
8	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C						
8	ACCUQUEST	2	QT/100 GAL	4-LFC	C						
8	ROUNDUP WEATHERMAX	22	OZ/A	10-12LFC	F						
8	ACCUQUEST	2	QT/100 GAL	10-12LFC	F						
8	DIREX	2	PT/A	10-12LFC	F						
9	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B	72.3	c	74	c	87	ab
9	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
9	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C						
9	ACCUQUEST	2	QT/100 GAL	4-LFC	C						
9	ROUNDUP WEATHERMAX	22	OZ/A	10-12LFC	F						
9	ACCUQUEST	2	QT/100 GAL	10-12LFC	F						
9	DIREX	3	PT/A	10-12LFC	F						
10	ROUNDUP WEATHERMAX	22	OZ/A	1-LFC	B	88.5	a	89	a	93.3	ab
10	ACCUQUEST	2	QT/100 GAL	1-LFC	B						
10	ROUNDUP WEATHERMAX	22	OZ/A	4-LFC	C						
10	ACCUQUEST	2	QT/100 GAL	4-LFC	C						
10	STAPLE	1.5	OZ/A	MP-6-8LF	C						
10	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G						
10	ACCUQUEST	2	QT/100 GAL	LAYBY	G						
10	DIREX	2	PT/A	LAYBY	G						
LSD (P=.05)						11.36		9.73		8.81	
CV						10.71		9.19		7.6	

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

Using Residual Herbicides in Simulated Roundup Ready Flex Cotton

APPLICATION DESCRIPTION

	A	B	C	D	E	F	G
Application Date:	5/28/2003	6/10/2003	6/19/2003	7/2/2003	7/10/2003	7/17/2003	8/6/2003
Time of Day:	10:00 AM	9:15 AM	2:00 PM	2:30 PM	9:45 PM	2:30 PM	9:00 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PREEMERGE	1-3LFCOT	2-4LFCOT	6-8LFCOT	8-10LFCOT	10-12LFCO	LAYBY
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST	DIRECTED	DIRECTED
Air Temp., Unit:	76 F	81 F	88 F	101 F	84 F	98 F	81 F
% Relative Humidity:	57	58	45	18	54	29	45
Wind Velocity, Unit:	8 MPH	3 MPH	7 MPH	6 MPH	6 MPH	3 MPH	2 MPH
Soil Temp., Unit:	77 F	75 F	85 F	96 F	84 F	92 F	80 F
Soil Moisture:	MARGINAL	ADEQUATE	ADEQUATE	ADEQUATE	ADEQUATE	DRY	ADEQUATE
% Cloud Cover:	0	30	60	5	0	0	0
Crop Stage at App:	NA	1 LEAF	3-4 LEAF	6-8 LEAF	8-10 LEAF	12 LEAF	LAYBY
Weed Stage at App:	NA	2 INCH	2-3 INCH	3-6 INCH	2-6 INCH	3-8 INCH	4-8 INCH
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER	LEESPIDER	LEESPIDER	REDBALL	REDBALL
Operating Pressure:	23 PSI	23 PSI	23 PSI	23 PSI	23 PSI	23 PSI	23 PSI
Nozzle Type:	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN
Nozzle Size:	8002VS	8002VS	8002VS	8002VS	8002VS	8001/003	8001/003
Nozzle Spacing:	20 IN	20 IN	20 IN	20 IN	20 IN	20 IN	20 IN
Nozzles/Row:	2	2	2	2	2	2	2
Ground Speed, Unit:	4 MPH	4 MPH	4 MPH	4 MPH	4 MPH	4 MPH	4 MPH
Carrier:	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA	10 GPA	10 GPA	10 GPA	15 GPA	15 GPA
Propellant:	COMP. AIR	COMP. AIR	COMP. AIR	COMP. AIR	COMP. AIR	COMP. AIR	COMP. AIR

Effects of Roundup WeatherMax Application Timing and Rate on Yields in Roundup Ready Flex Cotton

Roundup Ready Flex Cotton is scheduled to be released commercially in 2006. This new technology will allow growers more flexibility of application timing due to an increased window of tolerance. It is speculated that, although this will be an advantage, growers will be inclined to delay timely applications due to the increased window of tolerance. The objective of this trial was to purposely delay applications of Roundup Weathermax to morningglory and measure the effects of these delayed applications on cotton yields.

Trial ID: MONWC0302
Planting Date: May 28
Row Spacing: 40 inches
Replications: 3
Location: OSUREC-W
Rate: 12 lbs/A
Plot Size: 4 r x 50'
Soil Type: Clay Loam

TREATMENT INFORMATION						% PITTED MG CONTROL							
No.	Name	Rate	Unit	Stg	Code	6/18/2003		6/25/2003		7/2/2003		7/9/2003	
1	UNTREATED					0	b	0	d	0	f	0	e
2	ROUNDUP WEATHERMAX	22	OZ/A	1-2LFC	A	90	a	95.8	a	94.8	a	91.3	a
2	ACCUQUEST	2	QT/100 GAL	1-2LFC	A								
2	ROUNDUP WEATHERMAX	22	OZ/A	2-3"W-AN	B								
2	ACCUQUEST	2	QT/100 GAL	2-3"W-AN	B								
2	ROUNDUP WEATHERMAX	22	OZ/A	2-3"W-AN	G								
2	ACCUQUEST	2	QT/100 GAL	2-3"W-AN	G								
3	ROUNDUP WEATHERMAX	22	OZ/A	3-4LFC	B	0	b	65	b	80.8	cd	72.8	bc
3	ACCUQUEST	2	QT/100 GAL	3-4LFC	B								
3	ROUNDUP WEATHERMAX	22	OZ/A	2-3"W-AN	E								
3	ACCUQUEST	2	QT/100 GAL	2-3"W-AN	E								
3	ROUNDUP WEATHERMAX	22	OZ AE/CWT	2-3"W-AN	G								
3	ACCUQUEST	2	QT/100 GAL	2-3"W-AN	G								
4	ROUNDUP WEATHERMAX	32	OZ/A	3-4LFC	B	0	b	62.5	bc	88	abc	81.3	ab
4	ACCUQUEST	2	QT/100 GAL	3-4LFC	B								
4	ROUNDUP WEATHERMAX	32	OZ/A	3-5"W-AN	F								
4	ACCUQUEST	2	QT/100 GAL	3-5"W-AN	F								
5	ROUNDUP WEATHERMAX	43	OZ/A	3-4LFC	B	0	b	53.8	c	89	abc	82.8	ab
5	ACCUQUEST	2	QT/100 GAL	3-4LFC	B								
5	ROUNDUP WEATHERMAX	43	OZ/A	3-5"W-AN	G								
5	ACCUQUEST	2	QT/100 GAL	3-5"W-AN	G								
6	ROUNDUP WEATHERMAX	32	OZ/A	5-8LFC	C	0	b	0	d	77	d	66.3	c
6	ACCUQUEST	2	QT/100 GAL	5-8LFC	C								
6	ROUNDUP WEATHERMAX	32	OZ/A	3-5"W-AN	E								
6	ACCUQUEST	2	QT/100 GAL	3-5"W-AN	E								
6	ROUNDUP WEATHERMAX	32	OZ/A	3-5"W-AN	F								
6	ACCUQUEST	2	QT/100 GAL	3-5"W-AN	F								

Effects of Roundup WeatherMax Application Timing and Rate on Yields in Roundup Ready Flex Cotton

	TREATMENT INFORMATION					% PITTED MG CONTROL							
No.	Name	Rate	Unit	Stg	Code	6/18/2003		6/25/2003		7/2/2003		7/9/2003	
7	ROUNDUP WEATHERMAX	43	OZ/A	5-8LFC	C	0	b	0	d	83.8	bcd	81.8	ab
7	ACCUQUEST	2	QT/100 GAL	5-8LFC	C								
7	ROUNDUP WEATHERMAX	43	OZ/A	3-5"W-AN	F								
7	ACCUQUEST	2	QT/100 GAL	3-5"W-AN	F								
8	ROUNDUP WEATHERMAX	22	OZ/A	1-2LFC	A	90	a	96.5	a	93.8	ab	89.3	a
8	ACCUQUEST	2	QT/100 GAL	1-2LFC	A								
8	ROUNDUP WEATHERMAX	22	OZ/A	3-4LFC	B								
8	ACCUQUEST	2	QT/100 GAL	3-4LFC	B								
8	ROUNDUP WEATHERMAX	22	OZ/A	5-8LFC	C								
8	ACCUQUEST	2	QT/100 GAL	5-8LFC	C								
8	ROUNDUP WEATHERMAX	22	OZ/A	8-10LFC	E								
8	ACCUQUEST	2	QT/100 GAL	8-10LFC	E								
8	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G								
8	ACCUQUEST	2	QT/100 GAL	LAYBY	G								
9	ROUNDUP WEATHERMAX	32	OZ/A	4-6"W-AN	C	0	b	0	d	87.5	a-d	85.3	ab
9	ACCUQUEST	2	QT/100 GAL	4-6"W-AN	C								
9	ROUNDUP WEATHERMAX	32	OZ/A	4-6"W-AN	G								
9	ACCUQUEST	2	QT/100 GAL	4-6"W-AN	G								
10	ROUNDUP WEATHERMAX	43	OZ/A	4-6"W-AN	C	0	b	0	d	83.3	bcd	80	abc
10	ACCUQUEST	2	QT/100 GAL	4-6"W-AN	C								
10	ROUNDUP WEATHERMAX	43	OZ/A	4-6"W-AN	G								
10	ACCUQUEST	2	QT/100 GAL	4-6"W-AN	G								
11	ROUNDUP WEATHERMAX	32	OZ/A	6-8"W-AN	D	0	b	0	d	37.5	e	28.8	d
11	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	D								
11	ROUNDUP WEATHERMAX	32	OZ/A	6-8"W-AN	E								
11	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	E								
11	ROUNDUP WEATHERMAX	32	OZ/A	6-8"W-AN	F								
11	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	F								
11	ROUNDUP WEATHERMAX	32	OZ/A	6-8"W-AN	G								
11	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	G								
12	ROUNDUP WEATHERMAX	43	OZ/A	6-8"W-AN	D	0	b	0	d	27.5	e	33.8	d
12	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	D								
12	ROUNDUP WEATHERMAX	43	OZ/A	6-8"W-AN	E								
12	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	E								
12	ROUNDUP WEATHERMAX	43	OZ/A	6-8"W-AN	F								
12	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	F								
LSD (P=.05)						0		9.85		10.82		14.23	
CV						0		21.91		10.67		14.91	

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

Effects of Roundup WeatherMax Application Timing and Rate on Yields in Roundup Ready Flex Cotton

TREATMENT INFORMATION						% MG CONTROL				LINT LBS/A*	
No.	Name	Rate	Unit	Stg	Code	7/16/2003		8/4/2003		12/17/2003	
1	UNTREATED					0	d	0	f	150	d
2	ROUNDUP WEATHERMAX	22	OZ/A	1-2LFC	A	85.8	ab	82.5	de	742	b
2	ACCUQUEST	2	QT/100 GAL	1-2LFC	A						
2	ROUNDUP WEATHERMAX	22	OZ/A	2-3"W-AN	B						
2	ACCUQUEST	2	QT/100 GAL	2-3"W-AN	B						
2	ROUNDUP WEATHERMAX	22	OZ/A	2-3"W-AN	G						
2	ACCUQUEST	2	QT/100 GAL	2-3"W-AN	G						
3	ROUNDUP WEATHERMAX	22	OZ/A	3-4LFC	B	80.8	ab	90.5	abc	859	a
3	ACCUQUEST	2	QT/100 GAL	3-4LFC	B						
3	ROUNDUP WEATHERMAX	22	OZ/A	2-3"W-AN	E						
3	ACCUQUEST	2	QT/100 GAL	2-3"W-AN	E						
3	ROUNDUP WEATHERMAX	22	OZ AE/CWT	2-3"W-AN	G						
3	ACCUQUEST	2	QT/100 GAL	2-3"W-AN	G						
4	ROUNDUP WEATHERMAX	32	OZ/A	3-4LFC	B	78.3	ab	94.5	a	846	a
4	ACCUQUEST	2	QT/100 GAL	3-4LFC	B						
4	ROUNDUP WEATHERMAX	32	OZ/A	3-5"W-AN	F						
4	ACCUQUEST	2	QT/100 GAL	3-5"W-AN	F						
5	ROUNDUP WEATHERMAX	43	OZ/A	3-4LFC	B	82.3	ab	80.3	e	782	ab
5	ACCUQUEST	2	QT/100 GAL	3-4LFC	B						
5	ROUNDUP WEATHERMAX	43	OZ/A	3-5"W-AN	G						
5	ACCUQUEST	2	QT/100 GAL	3-5"W-AN	G						
6	ROUNDUP WEATHERMAX	32	OZ/A	5-8LFC	C	75	b	92.5	ab	861	a
6	ACCUQUEST	2	QT/100 GAL	5-8LFC	C						
6	ROUNDUP WEATHERMAX	32	OZ/A	3-5"W-AN	E						
6	ACCUQUEST	2	QT/100 GAL	3-5"W-AN	E						
6	ROUNDUP WEATHERMAX	32	OZ/A	3-5"W-AN	F						
6	ACCUQUEST	2	QT/100 GAL	3-5"W-AN	F						
7	ROUNDUP WEATHERMAX	43	OZ/A	5-8LFC	C	78.3	ab	94.5	a	855	a
7	ACCUQUEST	2	QT/100 GAL	5-8LFC	C						
7	ROUNDUP WEATHERMAX	43	OZ/A	3-5"W-AN	F						
7	ACCUQUEST	2	QT/100 GAL	3-5"W-AN	F						

*The average gin turnout of the field was applied to seed cotton weights due to EPA restrictions

Effects of Roundup WeatherMax Application Timing and Rate on Yields in Roundup Ready Flex Cotton

	TREATMENT INFORMATION					% MG CONTROL				LINT LBS/A*	
No.	Name	Rate	Unit	Stg	Code	7/16/2003		8/4/2003		12/17/2003	
8	ROUNDUP WEATHERMAX	22	OZ/A	1-2LFC	A	91	a	87	cd	817	ab
8	ACCUQUEST	2	QT/100 GAL	1-2LFC	A						
8	ROUNDUP WEATHERMAX	22	OZ/A	3-4LFC	B						
8	ACCUQUEST	2	QT/100 GAL	3-4LFC	B						
8	ROUNDUP WEATHERMAX	22	OZ/A	5-8LFC	C						
8	ACCUQUEST	2	QT/100 GAL	5-8LFC	C						
8	ROUNDUP WEATHERMAX	22	OZ/A	8-10LFC	E						
8	ACCUQUEST	2	QT/100 GAL	8-10LFC	E						
8	ROUNDUP WEATHERMAX	22	OZ/A	LAYBY	G						
8	ACCUQUEST	2	QT/100 GAL	LAYBY	G						
9	ROUNDUP WEATHERMAX	32	OZ/A	4-6"W-AN	C	84	ab	88.5	bc	778	ab
9	ACCUQUEST	2	QT/100 GAL	4-6"W-AN	C						
9	ROUNDUP WEATHERMAX	32	OZ/A	4-6"W-AN	G						
9	ACCUQUEST	2	QT/100 GAL	4-6"W-AN	G						
10	ROUNDUP WEATHERMAX	43	OZ/A	4-6"W-AN	C	82.5	ab	86.5	cd	822	ab
10	ACCUQUEST	2	QT/100 GAL	4-6"W-AN	C						
10	ROUNDUP WEATHERMAX	43	OZ/A	4-6"W-AN	G						
10	ACCUQUEST	2	QT/100 GAL	4-6"W-AN	G						
11	ROUNDUP WEATHERMAX	32	OZ/A	6-8"W-AN	D	55	c	85.8	cd	772	ab
11	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	D						
11	ROUNDUP WEATHERMAX	32	OZ/A	6-8"W-AN	E						
11	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	E						
11	ROUNDUP WEATHERMAX	32	OZ/A	6-8"W-AN	F						
11	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	F						
11	ROUNDUP WEATHERMAX	32	OZ/A	6-8"W-AN	G						
11	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	G						
12	ROUNDUP WEATHERMAX	43	OZ/A	6-8"W-AN	D	76.3	b	94.8	a	609	c
12	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	D						
12	ROUNDUP WEATHERMAX	43	OZ/A	6-8"W-AN	E						
12	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	E						
12	ROUNDUP WEATHERMAX	43	OZ/A	6-8"W-AN	F						
12	ACCUQUEST	2	QT/100 GAL	6-8"W-AN	F						
LSD (P=.05)						13.59		5.39		95.2	
CV						12.99		4.59		8.9	

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

*The average gin turnout of the field was applied to seed cotton weights due to EPA restrictions

Effects of Roundup WeatherMax Application Timing and Rate on Yields in Roundup Ready Flex Cotton

APPLICATION DESCRIPTION

	A	B	C	D	E	F	G
Application Date:	6/10/2003	6/19/2003	6/23/2003	7/3/2003	7/10/2003	7/18/2003	8/6/2003
Time of Day:	9:15 AM	2:00 PM	9:00 AM	3:10 PM	10:00 AM	9:00 AM	8:00 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	1LFCOT	4LFCOT	5-6LFCOT	6-8LFCOT	10LFCOT	12LFCOT	LAYBY
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST	BROADCAST	DIRECTED
Air Temp.	81 F	88 F	87 F	101 F	84 F	89 F	85 F
% Relative Hum.:	58	45	57	18	54	45	45
Wind Velocity	3 MPH	7 MPH	10 MPH	6 MPH	6 MPH	6 MPH	2 MPH
Soil Temp.	75 F	85 F	83 F	96 F	84 F	94 F	80 F
Soil Moisture:	ADEQUATE	ADEQUATE	ADEQUATE	ADEQUATE	ADEQUATE	ADEQUATE	ADEQUATE
% Cloud Cover:	30	60	5	5		0	0
Crop Stage:	1 LEAF	4 LEAF	5-6 LEAF	6-8 LEAF	10 LEAF	12 LEAF	LAYBY
Weed Stage:	1-2 INCH	2-3 INCH	4-6 INCH	6-8 INCH	2-8 INCH	3-8 INCH	2-8 INCH
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER	LEESPIDER	LEESPIDER	LEESPIDER	REDBALL
Operating Pressure:	23 PSI	23 PSI	23 PSI	23 PSI	23 PSI	23 PSI	24 PSI
Nozzle Type:	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN	TJFLATFAN
Nozzle Size:	8002VS	8002VS	8002VS	8002VS	8002VS	8002VS	8001/003
Nozzle Spacing	20 IN	20 IN	20 IN	20 IN	20 IN	20 IN	13 IN
Nozzles/Row:	2	2	2	2	2	2	3
Ground Speed:	4 MPH	4 MPH	4 MPH	4 MPH	4 MPH	4 MPH	4.5 MPH
Carrier:	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Spray Volume	10 GPA	10 GPA	10 GPA	10 GPA	10 GPA	10 GPA	15 GPA
Propellant:	COMP. AIR	COMP. AIR	COMP. AIR	COMP. AIR	COMP. AIR	COMP. AIR	CO2

App. Code	Treatment Application Comment
A	APPLIED TREATMENTS 2 & 8
B	APPLIED TREATMENTS 2-5 & 8
C	APPLIED TREATMENTS 6-10
D	APPLIED TREATMENTS 11&12
E	APPLIED TREATMENTS 3,6,11,& 12
F	APPLIED TREATMENTS 4,6,7,11 & 12
G	APPLIED TREATMENTS 2,3,5,& 8-11

Preplant Burndown Weed Control for Limited Tillage Cotton

Limited tillage acreage continues to increase due to it's economical advantages. Preplant weed control options have increased with the recent registration of several products. The objective of this trial was to compare these new products to current standards.

Trial ID: OSUWC0301 **Location:** OSUREC-W
Planting Date: May 28 **Rate:** 12 lbs/A
Row Spacing: 40 inches **Plot Size:** 4 r x 50'
Replications: 3 **Soil Type:** Clay Loam

TREATMENT INFORMATION						PITTED MG CONTROL				D-CLAW	
No.	Name	Rate	Unit	Stg	Code	5/25/2003		5/30/2003		5/30/2003	
1	UNTREATED					0	f	0	g	100	a
2	LIBERTY	32	OZ/A	PREBURN	A	86.5	d	100	a	100	a
3	LIBERTY	32	OZ/A	PREBURN	A	88	cd	99.5	ab	100	a
3	ACCUQUEST	2	QT/100 GAL	PREBURN	A						
4	ROUNDUP WEATHERMAX	22	OZ/A	PREBURN	A	61.3	e	73.8	f	100	a
5	LIBERTY	32	OZ/A	PREBURN	A	86.5	d	100	a	100	a
5	ACCUQUEST	2	QT/100 GAL	PREBURN	A						
5	ROUNDUP WEATHERMAX	22	OZ/A	PREBURN	A						
6	AIM	1	OZ/A	PREBURN	A	96.8	ab	98.5	abc	100	a
6	CROP OIL CONCENTRATE	1.25	% V/V	PREBURN	A						
7	AIM	0.5	OZ/A	PREBURN	A	91.3	bcd	98.3	abc	100	a
7	MSMA	43	OZ/A	PREBURN	A						
7	CROP OIL CONCENTRATE	1.25	% V/V	PREBURN	A						
8	CYCLONE MAX	16	OZ/A	PREBURN	A	93.5	abc	90.8	de	100	a
8	INDUCE	0.25	% V/V	PREBURN	A						
9	CYCLONE MAX	21	OZ/A	PREBURN	A	98.3	a	94.8	bcd	100	a
9	INDUCE	0.25	% V/V	PREBURN	A						
10	ET-751	1	OZ/A	PREBURN	A	86.3	d	75	f	50	b
10	INDUCE	0.25	% V/V	PREBURN	A						
11	ET-751	0.5	OZ/A	PREBURN	A	60	e	86.3	e	100	a
11	ROUNDUP WEATHERMAX	11	OZ/A	PREBURN	A						
11	ACCUQUEST	2	QT/100 GAL	PREBURN	A						
12	ET-751	0.75	OZ/A	PREBURN	A	88.8	cd	93.8	cd	100	a
12	MSMA	43	OZ/A	PREBURN	A						
LSD (P=.05)							6.91		5.19		0
CV							6.13		4.27		0

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

Preplant Burndown Weed Control for Limited Tillage Cotton

TREATMENT INFORMATION						BUFFBUR		COCKLBUR	
No.	Name	Rate	Unit	Stg	Code	5/30/2003		5/30/2003	
1	UNTREATED					100	a	100	a
2	LIBERTY	32	OZ/A	PREBURN	A	100	a	100	a
3	LIBERTY	32	OZ/A	PREBURN	A	100	a	100	a
3	ACCUQUEST	2	QT/100 GAL	PREBURN	A				
4	ROUNDUP WEATHERMAX	22	OZ/A	PREBURN	A	100	a	100	a
5	LIBERTY	32	OZ/A	PREBURN	A	100	a	100	a
5	ACCUQUEST	2	QT/100 GAL	PREBURN	A				
5	ROUNDUP WEATHERMAX	22	OZ/A	PREBURN	A				
6	AIM	1	OZ/A	PREBURN	A	100	a	100	a
6	CROP OIL CONCENTRATE	1.25	% V/V	PREBURN	A				
7	AIM	0.5	OZ/A	PREBURN	A	100	a	100	a
7	MSMA	43	OZ/A	PREBURN	A				
7	CROP OIL CONCENTRATE	1.25	% V/V	PREBURN	A				
8	CYCLONE MAX	16	OZ/A	PREBURN	A	100	a	100	a
8	INDUCE	0.25	% V/V	PREBURN	A				
9	CYCLONE MAX	21	OZ/A	PREBURN	A	100	a	100	a
9	INDUCE	0.25	% V/V	PREBURN	A				
10	ET-751	1	OZ/A	PREBURN	A	36.3	b	56.3	b
10	INDUCE	0.25	% V/V	PREBURN	A				
11	ET-751	0.5	OZ/A	PREBURN	A	100	a	100	a
11	ROUNDUP WEATHERMAX	11	OZ/A	PREBURN	A				
11	ACCUQUEST	2	QT/100 GAL	PREBURN	A				
12	ET-751	0.75	OZ/A	PREBURN	A	100	a	100	a
12	MSMA	43	OZ/A	PREBURN	A				
LSD (P=.05)						2		2	
CV						1.46		1.43	

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

Preplant Burndown Weed Control for Limited Tillage Cotton

APPLICATION DESCRIPTION

	A
Application Date:	5/22/2003
Time of Day:	9:00 AM
Application Method:	SPRAY
Application Timing:	PREPLANT
Applic. Placement:	BROADCAST
Air Temp., Unit:	70 F
% Relative Humidity:	65
Wind Velocity, Unit:	2.5 MPH
Soil Temp., Unit:	68 F
Soil Moisture:	MARGINAL
% Cloud Cover:	100
Weed Description:	PITTED MG, DCLAW, BUFBUR, COCKLBUR
Weed Size:	1-6 INCH
Appl. Equipment:	LEESPIDER
Operating Pressure:	23 PSI
Nozzle Type:	TEEJET
Nozzle Size:	8002 VS
Nozzle Spacing, Unit:	20 IN
Nozzles/Row:	2
Ground Speed, Unit:	4 MPH
Carrier:	WATER
Spray Volume, Unit:	10 GPA
Propellant:	COMP. AIR

Post-directed Morningglory Control in Cotton

Morningglory continues to be Oklahoma cotton producer's most difficult to control weed. Although herbicide tolerant systems have improved the situation, effective late-season control can still be difficult to achieve. The objective of this trial was to evaluate various post-directed treatments for the control of pitted morningglory.

Trial ID: OSUWC0302
Planting Date: May 28
Row Spacing: 40 inches
Replications: 3
Location: OSUREC-W
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	8/6/2003		8/6/2003		8/14/2003	
1	UNTREATED					0	e	0	a	0	e
2	CAPAROL	1	QT/A	PD	A	82	bc	0	a	91	abc
2	BUENO 6	43	OZ/A	PD	A						
3	AIM	1	OZ/A	PD	A	94.5	a	0	a	93	ab
3	DIREX	1	QT/A	PD	A						
3	CROP OIL CONCENTRATE	1.25	% V/V	PD	A						
4	AIM	0.5	OZ/A	PD	A	81.3	c	0	a	94.8	a
4	DIREX	3	PT/A	PD	A						
4	CROP OIL CONCENTRATE	1.25	% V/V	PD	A						
5	AIM	0.5	OZ/A	PD	A	72.8	d	0	a	83.8	d
5	ACCUQUEST	2	QT/100 GAL	PD	A						
5	ROUNDUP WEATHERMAX	11	OZ/A	PD	A						
5	CROP OIL CONCENTRATE	1.25	% V/V	PD	A						
6	AIM	1	OZ/A	PD	A	85	bc	0	a	85.5	cd
6	CROP OIL CONCENTRATE	1.25	% V/V	PD	A						
7	AIM	0.5	OZ/A	PD	A	75	d	0	a	85.5	cd
7	MSMA	43	OZ/A	PD	A						
7	CROP OIL CONCENTRATE	1.25	% V/V	PD	A						
8	AIM	1.5	OZ/A	PD	A	92	a	0	a	86.3	cd
8	CROP OIL CONCENTRATE	1.25	% V/V	PD	A						
9	ROUNDUP WEATHERMAX	22	OZ/A	PD	A	73.3	d	0	a	83.8	d
9	ACCUQUEST	2	QT/100 GAL	PD	A						

Post-directed Morningglory Control in Cotton

	TREATMENT INFORMATION					PITTED MORNINGGLORY CONTROL					
No.	Name	Rate	Unit	Stg	Code	8/6/2003		8/6/2003		8/14/2003	
10	ET-751	1.5	OZ/A	PD	A	92.5	a	0	a	90.8	abc
10	INDUCE	0.25	% V/V	PD	A						
11	ET-751	0.5	OZ/A	PD	A	81.8	bc	0	a	87.3	bcd
11	ROUNDUP WEATHERMAX	22	OZ/A	PD	A						
11	ACCUQUEST	2	QT/100 GAL	PD	A						
12	ET-751	1	OZ/A	PD	A	86.5	b	0	a	88.3	a-d
12	ROUNDUP WEATHERMAX	22	OZ/A	PD	A						
12	ACCUQUEST	2	QT/100 GAL	PD	A						
LSD (P=.05)						5.22		0		6.54	
CV						4.73		0		5.6	

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

APPLICATION DESCRIPTION

	A
Application Date:	7/30/2003
Time of Day:	4:00 PM
Application Method:	SPRAY
Application Timing:	LATEPOST
Applic. Placement:	DIRECTED
Air Temp., Unit:	90 F
% Relative Humidity:	60
Wind Velocity, Unit:	5 MPH
Soil Temp., Unit:	91 F
% Cloud Cover:	30
Weed Description:	PITTEDMG
Weed Size:	1-6"
Appl. Equipment:	RBALL 420
Operating Pressure:	23 PSI
Nozzle Type:	TJFF
Nozzle Size:	8001/003
Nozzles/Row:	3
Ground Speed, Unit:	4.5 MPH
Carrier:	WATER
Spray Volume, Unit:	15 GPA
Propellant:	COMP. AIR

Touchdown/Dual Combinations for No-till Cotton

As limited tillage production systems become increasingly popular, effective weed control strategies for those systems gain more attention. The objective of this trial was to evaluate the effectiveness of Dual II Magnum for extended pigweed control in no-till cotton. Initially, all treatments controlled pigweed populations very effectively. Later in the season the residual activity from Dual II Magnum improved pigweed control over Roundup Weathermax alone.

Trial ID: SYNWC0301
Planting Date: May 28
Row Spacing: 40 inches
Replications: 3
Location: Washita County
Rate: 11 lbs/A
Plot Size: 8 r x 1100'
Soil Type: Sandy Clay Loam

TREATMENT INFORMATION						PIGWEED CONTROL			
No.	Name	Rate	Unit	Stg	Code	7/1/2003		7/15/2003	
1	ROUNDUP WEATHERMAX	22	OZ/A	EP	A	100	a	48.3	b
1	ACCUQUEST	2	QT/100 GAL	EP	A				
2	ROUNDUP WEATHERMAX	22	OZ/A	EP	A	100	a	73.3	a
2	ACCUQUEST	2	QT/100 GAL	EP	A				
2	DUAL II MAGNUM	1	PT/A	EP	A				
3	TOUCHDOWN IQ	1	QT/A	EP	A	100	a	73.3	a
3	ACCUQUEST	2	QT/100 GAL	EP	A				
3	DUAL II MAGNUM	1	PT/A	EP	A				
LSD (P=.05)							0		11.33
CV							0		7.69

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

Touchdown/Dual Combinations for No-till Cotton

APPLICATION DESCRIPTION

	A
Application Date:	6/13/2003
Time of Day:	10:30 AM
Application Method:	SPRAY
Application Timing:	EP: 4-5LF
Applic. Placement:	BROADCAST
Air Temp., Unit:	77 F
% Relative Humidity:	65
Wind Velocity, Unit:	6 MPH
Soil Temp., Unit:	75 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	25
Weed Description:	PIGWEED
Weed Size:	1-8"
Appl. Equipment:	HI-BOY
Operating Pressure:	28 PSI
Nozzle Type:	TJFLATFAN
Nozzle Size:	8003
Nozzle Spacing, Unit:	20 IN
Nozzles/Row:	2
Ground Speed, Unit:	5 MPH
Carrier:	WATER
Spray Volume, Unit:	10 GPA
Propellant:	CENT.PUMP

Valor Post-directed for Morningglory Control

Valor is currently registered only for pre-plant burn-down use in cotton. However, Valent continues to pursue a post-directed label as well. The objective of this study was to compare treatments including Valor to current standards.

Trial ID: VALWC0301
Planting Date: May 28
Row Spacing: 40 inches
Replications: 3
Location: OSUREC-W
Rate: 12 lbs/A
Plot Size: 4r x 50'
Soil Type: Sandy Clay Loam

	TREATMENT INFORMATION					PITTED MORNINGGLORY CONTROL					
No.	Name	Rate	Unit	Stg	Code	8/6/2003		8/14/2003		8/29/2003	
1	UNTREATED CHECK					0	c	0	c	0	g
2	ROUNDUP WEATHERMAX	1	LB A/A	PD	A	86.7	b	83.3	b	66.7	e
2	ACCUQUEST	2	QT/100 GAL	PD	A						
3	VALOR	0.063	LB A/A	PD	A	94	a	91	a	81.7	d
3	ROUNDUP WEATHERMAX	1	LB A/A	PD	A						
3	ACCUQUEST	2	QT/100 GAL	PD	A						
4	CAPAROL	1	QT/A	PD	A	95.3	a	90.7	a	85	c
4	BUENO 6	2.7	PT/A	LAYBY	B						
5	BUENO 6	2.7	PT/A	LAYBY	B	0	c	0	c	61.7	f
5	INDUCE	0.25	% V/V	LAYBY	B						
6	ROUNDUP WEATHERMAX	1	LB A/A	LAYBY	B	0	c	0	c	81.7	d
6	ACCUQUEST	2	QT/100 GAL	LAYBY	B						
7	VALOR	0.063	LB A/A	LAYBY	B	0	c	0	c	90	b
7	BUENO 6	2.7	PT/A	LAYBY	B						
7	INDUCE	0.25	% V/V	LAYBY	B						
8	VALOR	0.063	LB A/A	LAYBY	B	0	c	0	c	90	b
8	ROUNDUP WEATHERMAX	1	LB A/A	LAYBY	B						
8	ACCUQUEST	2	QT/100 GAL	LAYBY	B						
9	VALOR	0.047	LB A/A	LAYBY	B	0	c	0	c	80	d
9	ROUNDUP WEATHERMAX	1	LB A/A	LAYBY	B						
9	ACCUQUEST	2	QT/100 GAL	LAYBY	B						

Valor Post-directed for Morningglory Control

TREATMENT INFORMATION						PITTED MORNINGGLORY CONTROL		
No.	Name	Rate	Unit	Stg	Code	8/6/2003	8/14/2003	8/29/2003
10	VALOR	0.063	LB A/A	PD	A	94.3 a	90 a	100 a
10	ROUNDUP WEATHERMAX	1	LB A/A	PD	A			
10	ACCUQUEST	2	QT/100 GAL	PD	A			
10	VALOR	0.063	LB A/A	LAYBY	B			
10	ROUNDUP WEATHERMAX	1	LB A/A	LAYBY	B			
10	ACCUQUEST	2	QT/100 GAL	LAYBY	B			
11	CAPAROL	1	QT/A	LAYBY	B	0 c	0 c	90 b
11	BUENO 6	2.7	PT/A	LAYBY	B			
12	VALOR	0.063	LB A/A	LAYBY	B	0 c	0 c	82.3 cd
LSD (P=.05)						5.03	3.37	3.17
CV						9.62	6.73	2.47

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

APPLICATION DESCRIPTION

	A	B
Application Date:	7/30/2003	8/15/2003
Time of Day:	3:00 PM	1:30 PM
Application Method:	SPRAY	SPRAY
Application Timing:	MIDPOST	LAYBY
Applic. Placement:	DIRECTED	DIRECTED
Air Temp., Unit:	83 F	100 F
% Relative Humidity:	62	30
Wind Velocity, Unit:	3 MPH	7 MPH
Soil Temp., Unit:	87 F	98 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	30	40
Weed Description:	PITTED MG	PITTED MG
Weed Size:	1-2”	1-8”
Appl. Equipment:	RBALL 420	RBALL 420
Operating Pressure:	23 PSI	23 PSI
Nozzle Type:	TJFLATFAN	TJFLATFAN
Nozzle Size:	8001/003	8001/003
Nozzles/Row:	3	3
Carrier:	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA
Propellant:	COMP. AIR	COMP. AIR

Cotton Tolerance of Prowl H20 Over-the-top

Prowl H20 has recently been registered for preplant incorporated and preemergence use in cotton. BASF is also currently considering the effectiveness of tank-mixing Prowl H20 with glyphosate for over-the-top applications. Therefore, this study was designed to evaluate potential crop injury from over-the-top applications of Prowl formulations tank-mixed with Roundup WeatherMax.

Trial ID: BASAG0301
Planting Date: May 28
Variety: ST 5599 B/R
Replications: 4
Location: OSUREC-A
Rate: 12 lbs/A
Plot Size: 4r x 50'
Soil Type: Sandy Clay Loam

	TREATMENT INFORMATION					% CROP INJURY			GIN %
No.	Name	Rate	Unit	Stg	Code	6/20/2003	7/7/2003	7/22/2003	1/5/2004
1	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A	0 d	0 d	0 a	39.3 a
1	ACCUQUEST	2	QT/100 GAL	EP-1LF	A				
1	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B				
1	ACCUQUEST	2	QT/100 GAL	EP-4LF	B				
2	PROWL H20	33.8	OZ/A	EP-1LF	A	11.3 c	0 d	0 a	39.5 a
2	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A				
2	ACCUQUEST	2	QT/100 GAL	EP-1LF	A				
2	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B				
2	ACCUQUEST	2	QT/100 GAL	EP-4LF	B				
3	PROWL 3.3 EC	38	OZ/A	EP-1LF	A	22.5 b	2.5 cd	0 a	39.3 a
3	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A				
3	ACCUQUEST	2	QT/100 GAL	EP-1LF	A				
3	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B				
3	ACCUQUEST	2	QT/100 GAL	EP-4LF	B				
4	PROWL H20	67.6	OZ/A	EP-1LF	A	17.5 bc	7.5 bc	0 a	39.3 a
4	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A				
4	ACCUQUEST	2	QT/100 GAL	EP-1LF	A				
4	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B				
4	ACCUQUEST	2	QT/100 GAL	EP-4LF	B				
5	PROWL 3.3 EC	77.6	OZ/A	EP-1LF	A	42.5 a	15 a	0 a	39.3 a
5	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A				
5	ACCUQUEST	2	QT/100 GAL	EP-1LF	A				
5	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B				
5	ACCUQUEST	2	QT/100 GAL	EP-4LF	B				
6	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A	0 d	0 d	0 a	38.8 a
6	ACCUQUEST	2	QT/100 GAL	EP-1LF	A				
6	PROWL H20	33.8	OZ/A	EP-4LF	B				
6	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B				
6	ACCUQUEST	2	QT/100 GAL	EP-4LF	B				

Cotton Tolerance of Prowl H20 Over-the-top

TREATMENT INFORMATION						% CROP INJURY						GIN %	
No.	Name	Rate	Unit	Stg	Code	6/20/2003		7/7/2003		7/22/2003		1/5/2004	
7	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A	0	d	3.8	cd	0	a	39	a
7	ACCUQUEST	2	QT/100 GAL	EP-1LF	A								
7	PROWL 3.3 EC	38.3	OZ/A	EP-4LF	B								
7	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B								
7	ACCUQUEST	2	QT/100 GAL	EP-4LF	B								
8	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A	0	d	2.5	cd	0	a	39.5	a
8	ACCUQUEST	2	QT/100 GAL	EP-1LF	A								
8	PROWL H20	67.6	OZ/A	EP-4LF	B								
8	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B								
8	ACCUQUEST	2	QT/100 GAL	EP-4LF	B								
9	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A	0	d	11.3	ab	0	a	38.8	a
9	ACCUQUEST	2	QT/100 GAL	EP-1LF	A								
9	PROWL 3.3 EC	77.6	OZ/A	EP-4LF	B								
9	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B								
9	ACCUQUEST	2	QT/100 GAL	EP-4LF	B								
10	PROWL H20	33.8	OZ/A	EP-1LF	A	17.5	bc	2.5	cd	0	a	39.8	a
10	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A								
10	ACCUQUEST	2	QT/100 GAL	EP-1LF	A								
10	PROWL H20	33.8	OZ/A	EP-4LF	B								
10	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B								
10	ACCUQUEST	2	QT/100 GAL	EP-4LF	B								
LSD (P=.05)						6.88		7.37		0		1.08	
CV						42.62		112.95		0		1.9	

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

Cotton Tolerance of Prowl H20 Over-the-top

TREATMENT INFORMATION						LBS/ACRE		MIC		LENGTH		STRENGTH	
No.	Name	Rate	Unit	Stg	Code	1/5/2004		1/5/2004		1/5/2004		1/5/2004	
1	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A	1367	a	4.42	abc	1.117	a	29.13	ab
1	ACCUQUEST	2	QT/100 GAL	EP-1LF	A								
1	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B								
1	ACCUQUEST	2	QT/100 GAL	EP-4LF	B								
2	PROWL H20	33.8	OZ/A	EP-1LF	A	1323	a	4.57	ab	1.138	a	28.13	b
2	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A								
2	ACCUQUEST	2	QT/100 GAL	EP-1LF	A								
2	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B								
2	ACCUQUEST	2	QT/100 GAL	EP-4LF	B								
3	PROWL 3.3 EC	38	OZ/A	EP-1LF	A	1360	a	4.4	abc	1.12	a	29.48	a
3	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A								
3	ACCUQUEST	2	QT/100 GAL	EP-1LF	A								
3	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B								
3	ACCUQUEST	2	QT/100 GAL	EP-4LF	B								
4	PROWL H20	67.6	OZ/A	EP-1LF	A	1351	a	4.35	abc	1.13	a	28.83	ab
4	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A								
4	ACCUQUEST	2	QT/100 GAL	EP-1LF	A								
4	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B								
4	ACCUQUEST	2	QT/100 GAL	EP-4LF	B								
5	PROWL 3.3 EC	77.6	OZ/A	EP-1LF	A	1319	a	4.22	c	1.128	a	29.45	ab
5	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A								
5	ACCUQUEST	2	QT/100 GAL	EP-1LF	A								
5	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B								
5	ACCUQUEST	2	QT/100 GAL	EP-4LF	B								
6	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A	1321	a	4.32	bc	1.147	a	29.05	ab
6	ACCUQUEST	2	QT/100 GAL	EP-1LF	A								
6	PROWL H20	33.8	OZ/A	EP-4LF	B								
6	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B								
6	ACCUQUEST	2	QT/100 GAL	EP-4LF	B								
7	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A	1315	a	4.6	a	1.135	a	29.02	ab
7	ACCUQUEST	2	QT/100 GAL	EP-1LF	A								
7	PROWL 3.3 EC	38.3	OZ/A	EP-4LF	B								
7	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B								
7	ACCUQUEST	2	QT/100 GAL	EP-4LF	B								
8	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A	1343	a	4.28	c	1.125	a	28.63	ab
8	ACCUQUEST	2	QT/100 GAL	EP-1LF	A								
8	PROWL H20	67.6	OZ/A	EP-4LF	B								
8	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B								
8	ACCUQUEST	2	QT/100 GAL	EP-4LF	B								

Cotton Tolerance of Prowl H20 Over-the-top

TREATMENT INFORMATION						LBS/ACRE	MIC	LENGTH	STRENGTH
No.	Name	Rate	Unit	Stg	Code	1/5/2004	1/5/2004	1/5/2004	1/5/2004
9	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A	1265 a	4.28 c	1.137 a	29.57 a
9	ACCUQUEST	2	QT/100 GAL	EP-1LF	A				
9	PROWL 3.3 EC	77.6	OZ/A	EP-4LF	B				
9	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B				
9	ACCUQUEST	2	QT/100 GAL	EP-4LF	B				
10	PROWL H20	33.8	OZ/A	EP-1LF	A	1336 a	4.3 c	1.148 a	28.77 ab
10	ROUNDUP WEATHERMAX	22	OZ/A	EP-1LF	A				
10	ACCUQUEST	2	QT/100 GAL	EP-1LF	A				
10	PROWL H20	33.8	OZ/A	EP-4LF	B				
10	ROUNDUP WEATHERMAX	22	OZ/A	EP-4LF	B				
10	ACCUQUEST	2	QT/100 GAL	EP-4LF	B				
LSD (P=.05)						104.5	0.255	0.0303	1.337
CV						5.41	4.01	1.84	3.18

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

APPLICATION DESCRIPTION

	A	B
Application Date:	6/8/2003	6/20/2003
Time of Day:	9:00 AM	10:00 AM
Application Method:	SPRAY	SPRAY
Application Timing:	1 LEAF	4 LEAF
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	73 F	79 F
% Relative Humidity:	74	75
Wind Velocity, Unit:	8 MPH	8 MPH
Soil Temp., Unit:	73 F	75 F
Soil Moisture:	GOOD	GOOD
% Cloud Cover:	0	50
Appl. Equipment:	LEESPIDER	LEESPIDER
Operating Pressure:	22 PSI	22 PSI
Nozzle Type:	TJFLATFAN	TJFLATFAN
Nozzle Size:	8002	8002
Nozzles/Row:	2	2
Ground Speed, Unit:	4 MPH	4 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	10 GPA	10 GPA
Propellant:	COMP. AIR	COMP. AIR

Effects of Temik/Trimax/Cruiser on Lint Yields

Enhanced growth and maturity as well as good thrips control, has often been realized from the use of Temik in-furrow. The recent registration of Cruiser seed treatment has provided producers with another option for early season thrips control. The purpose of this study was to compare the effects of these treatments on cotton lint yields.

Trial ID: BAYAG0301
Planting Date: May 24
Variety: DP 424 BGII/R
Replications: 3
Location: OSUREC-D
Rate: 12 lbs/A
Plot Size: 4r x 50'
Soil Type: Sandy Clay Loam

TREATMENT INFORMATION						STAND #/M		HEIGHT "		HEIGHT "		GIN %	
No.	Name	Rate	Unit	Stg	Code	7/2/2003		6/17/2003		7/9/2003		1/5/2004	
1	DP 424 BGII/RR					10.43	b	2.93	ab	6.4	bc	29	a
1	UNTREATED												
2	DP 424 BGII/RR					10.8	ab	3.27	ab	7.27	a	28.7	a
2	TEMIK	4	LB/A	ATPLANT	A								
3	DP 424 BGII/RR					9.8	b	3	ab	6.47	b	29	a
3	TRIMAX	1.5	OZ/A	PSQUARE	B								
3	TRIMAX	1.5	OZ/A	10 DAPS	C								
3	TRIMAX	1.5	OZ/A	20 DAPS	D								
4	DP 424 BGII/RR					12.07	a	3.2	ab	6.67	b	27.3	a
4	TEMIK	4	LB/A	ATPLANT	A								
4	TRIMAX	1.5	OZ/A	PHSQ	B								
4	TRIMAX	1.5	OZ/A	10 DAPS	C								
4	TRIMAX	1.5	OZ/A	20 DAPS	D								
5	DP 424 BGII/RR-CRUISER					10.5	b	3.33	a	6	c	29	a
6	DP 424 BGII/RR-CRUISER					9.9	b	2.9	b	6.73	b	29	a
6	TEMIK	4	LB/A	ATPLANT	A								
LSD (P=.05)						1.342		0.43		0.434		2.76	
CV						6.97		7.61		3.62		5.29	

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

Effects of Temik/Trimax/Cruiser on Lint Yields

No.	TREATMENT INFORMATION Name	Rate	Unit	Stg	Code	LBS/ ACRE		MIC		FIBER LENGTH		STREN	
1	DP 424 BGII/RR					1073	ab	4.47	b	1.137	a	26.87	ab
1	UNTREATED												
2	DP 424 BGII/RR					1026	ab	4.83	a	1.107	bc	26.97	ab
2	TEMIK	4	LB/A	ATPLANT	A								
3	DP 424 BGII/RR					1150	a	4.6	ab	1.14	a	28	a
3	TRIMAX	1.5	OZ/A	PSQUARE	B								
3	TRIMAX	1.5	OZ/A	10 DAPS	C								
3	TRIMAX	1.5	OZ/A	20 DAPS	D								
4	DP 424 BGII/RR					990	b	4.6	ab	1.123	ab	26.7	ab
4	TEMIK	4	LB/A	ATPLANT	A								
4	TRIMAX	1.5	OZ/A	PHSQ	B								
4	TRIMAX	1.5	OZ/A	10 DAPS	C								
4	TRIMAX	1.5	OZ/A	20 DAPS	D								
5	DP 424 BGII/RR-CRUISER					1036	ab	4.53	b	1.143	a	27.57	ab
6	DP 424 BGII/RR-CRUISER					1059	ab	4.67	ab	1.097	c	26.23	b
6	TEMIK	4	LB/A	ATPLANT	A								
LSD (P=.05)						140.7		0.268		0.0263		1.54	
CV						7.33		3.19		1.29		3.13	

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	5/27/2003	7/11/2003	7/23/2003	8/4/2003
Time of Day:	11:00 AM	6:45 AM	10:15 AM	9:00 AM
Application Method:	IN-FURROW	SPRAY	SPRAY	SPRAY
Application Timing:	AT-PLANT	PINHEADSQ	10 DAIT	24 DAIT
Applic. Placement:	IN-FURROW	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	76 F	74 F	84 F	81 F
% Relative Humidity:	65	70	39	52
Wind Velocity, Unit:	7 MPH	6 MPH	2 MPH	5 MPH
Soil Temp., Unit:	72 F	79 F	88 F	87 F
Soil Moisture:	ADEQUATE	ADEQUATE	MARGINAL	ADEQUATE
% Cloud Cover:	35	10	0	0
Appl. Equipment:	JD1710VAC	LEESPIDER	LEESPIDER	LEESPIDER
Operating Pressure:		23 PSI	23 PSI	23 PSI
Nozzle Type:		TJFLATFAN	TJFLATFAN	TJFLATFAN
Nozzle Size:		8002	8002	8002
Nozzle Spacing, Unit:		20 IN	20 IN	20 IN
Nozzles/Row:		2	2	2
Ground Speed, Unit:	5 MPH	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

In-season Fertility and Yield Enhancement with Coron and Hydrahume

Increased fertilizer costs and emphasis upon potable water nitrate levels continue to fuel changes in nitrogen application strategies. The purpose of this trial was to compare the standard (according to soil test recommendations) rate and application timing of nitrogen to regimes receiving reduced (2/3 of soil test recommendations) pre-season nitrogen applications followed by in-season applications of Coron and Hydrahume.

Trial ID: HELAG0301
Planting Date: May 29
Variety: FM 960 B/R
Replications: 3
Location: WOSC
Rate: 12 lbs/A
Plot Size: 4r x 120'
Soil Type: Sandy Clay Loam

TREATMENT INFORMATION						AVG N PPM		AVG K PPM		AVG N PPM		AVG K PPM	
No.	Name	Rate	Unit	Stg	Code	7/7		7/7		7/14		7/14	
1	Soil Test Rec. (STR)			Preplant	A	2350	abc	5487.5	ab	2662.5	a	7813	b
1	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
1	HM 9870	2	Qt/A	Midbloom	D								
2	STR			Preplant	A	2475	a	5475	ab	2637.5	a	8200	ab
2	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
2	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
2	HM 9870	2	Qt/A	Midbloom	D								
3	STR			Preplant	A	2400	ab	6012.5	a	2562.5	ab	7888	ab
3	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
3	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
3	HM 9870	2	Qt/A	Midbloom	D								
4	STR			Preplant	A	2287.5	abc	5475	ab	2587.5	ab	7900	ab
4	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
4	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
4	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
4	HM 9870	2	Qt/A	Midbloom	D								
5	2/3 STR			Preplant	A	2262.5	abc	5787.5	ab	2450	ab	7925	ab
5	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
5	HM 9870	2	Qt/A	Midbloom	D								
6	2/3 STR			Preplant	A	2312.5	abc	5562.5	ab	2550	ab	8550	ab
6	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
6	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
6	HM 9870	2	Qt/A	Midbloom	D								

In-season Fertility and Yield Enhancement with Coron and Hydrahume

TREATMENT INFORMATION						AVG N PPM		AVG K PPM		AVG N PPM		AVG K PPM	
No.	Name	Rate	Unit	Stg	Code	7/7		7/7		7/14		7/14	
7	2/3 STR			Preplant	A	2175	c	5850	ab	2525	ab	7700	b
7	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
7	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
7	HM 9870	2	Qt/A	Midbloom	D								
8	2/3 STR			Preplant	A	2137.5	c	5125	b	2600	ab	8000	ab
8	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
8	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
8	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
8	HM 9870	2	Qt/A	Midbloom	D								
9	UNTREATED CHECK					2187.5	bc	5412.5	ab	2437.5	ab	8750	a
10	No STR Application					2312.5	abc	5675	ab	2387.5	b	8175	ab
10	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
10	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
10	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
10	HM 9870	2	Qt/A	Midbloom	D								
LSD (P=.05)						220.54		730.86		241.87		904.99	
CV						6.64		9.02		6.56		7.71	

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

	TREATMENT INFORM.					N PPM		K PPM		N PPM		K PPM	
No.	Name	Rate	Unit	Stg	Code	7/21		7/21		7/29		7/29	
1	Soil Test Rec. (STR)			Preplant	A	3237.5	abc	5387.5	abc	2162.5	a	5938	a
1	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
1	HM 9870	2	Qt/A	Midbloom	D								
2	STR			Preplant	A	2975	b-e	5625	abc	2050	abc	5875	a
2	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
2	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
2	HM 9870	2	Qt/A	Midbloom	D								
3	STR			Preplant	A	3187.5	a-d	5862.5	a	2125	abc	5575	a
3	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
3	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
3	HM 9870	2	Qt/A	Midbloom	D								
4	STR			Preplant	A	2900	cde	5450	abc	2087.5	abc	5663	a
4	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
4	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
4	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
4	HM 9870	2	Qt/A	Midbloom	D								
5	2/3 STR			Preplant	A	2850	de	5137.5	c	2037.5	abc	5400	a
5	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
5	HM 9870	2	Qt/A	Midbloom	D								
6	2/3 STR			Preplant	A	3200	abc	5550	abc	2125	abc	5700	a
6	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
6	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
6	HM 9870	2	Qt/A	Midbloom	D								
7	2/3 STR			Preplant	A	3275	ab	5237.5	bc	2137.5	ab	5800	a
7	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
7	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
7	HM 9870	2	Qt/A	Midbloom	D								
8	2/3 STR			Preplant	A	3512.5	a	5700	ab	2187.5	a	5950	a
8	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
8	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
8	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
8	HM 9870	2	Qt/A	Midbloom	D								
9	UNTREATED CHECK					2800	e	5712.5	ab	1937.5	bc	5700	a
10	No STR Application					2975	b-e	5737.5	ab	1912.5	c	5663	a
10	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
10	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
10	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
10	HM 9870	2	Qt/A	Midbloom	D								
LSD (P=.05)						340.45		554.44		222.6		598.09	
CV						7.59		6.9		7.39		7.2	

TREATMENT INFORMATION						N PPM		K PPM		N PPM		K PPM	
No.	Name	Rate	Unit	Stg	Code	8/4		8/4		8/12		8/12	
1	Soil Test Rec. (STR)			Preplant	A	2550	ab	4750	a	1662.5	a	5988	a
1	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
1	HM 9870	2	Qt/A	Midbloom	D								
2	STR			Preplant	A	2325	abc	5025	a	1650	a	5825	a
2	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
2	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
2	HM 9870	2	Qt/A	Midbloom	D								
3	STR			Preplant	A	2175	abc	5037.5	a	1775	a	5763	a
3	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
3	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
3	HM 9870	2	Qt/A	Midbloom	D								
4	STR			Preplant	A	2500	abc	4812.5	a	1675	a	6000	a
4	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
4	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
4	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
4	HM 9870	2	Qt/A	Midbloom	D								
5	2/3 STR			Preplant	A	2162.5	abc	4937.5	a	1550	a	5313	a
5	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
5	HM 9870	2	Qt/A	Midbloom	D								
6	2/3 STR			Preplant	A	2400	abc	5087.5	a	1462.5	a	5363	a
6	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
6	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
6	HM 9870	2	Qt/A	Midbloom	D								
7	2/3 STR			Preplant	A	2650	ab	5062.5	a	1525	a	5150	a
7	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
7	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
7	HM 9870	2	Qt/A	Midbloom	D								
8	2/3 STR			Preplant	A	2725	a	4900	a	1600	a	5338	a
8	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
8	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
8	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
8	HM 9870	2	Qt/A	Midbloom	D								
9	UNTREATED CHECK					1987.5	bc	5362.5	a	1128.8	b	5938	a
10	No STR Application					1812.5	c	5012.5	a	1007.5	b	5775	a
10	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
10	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
10	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
10	HM 9870	2	Qt/A	Midbloom	D								
LSD (P=.05)							714.3		765.7		333.04		955.14
CV							21.14		10.56		15.26		11.66

TREATMENT INFORMATION						N PPM		K PPM		LBS/PLOT		GIN %	
No.	Name	Rate	Unit	Stg	Code	8/18		8/18		12/11		1/5	
1	Soil Test Rec. (STR)			Preplant	A	1762.5	a	6787.5	ab	210.5	ab	29.8	ab
1	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
1	HM 9870	2	Qt/A	Midbloom	D								
2	STR			Preplant	A	1800	a	6387.5	ab	214.8	a	30.8	a
2	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
2	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
2	HM 9870	2	Qt/A	Midbloom	D								
3	STR			Preplant	A	1800	a	6750	ab	211.3	ab	30.5	a
3	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
3	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
3	HM 9870	2	Qt/A	Midbloom	D								
4	STR			Preplant	A	1950	a	6112.5	b	217	a	30.8	a
4	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
4	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
4	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
4	HM 9870	2	Qt/A	Midbloom	D								
5	2/3 STR			Preplant	A	1612.5	a	6150	b	214.5	a	30.3	ab
5	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
5	HM 9870	2	Qt/A	Midbloom	D								
6	2/3 STR			Preplant	A	1523.8	a	7150	a	215	a	30.5	a
6	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
6	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
6	HM 9870	2	Qt/A	Midbloom	D								
7	2/3 STR			Preplant	A	1600	a	6250	ab	217	a	29.5	ab
7	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
7	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
7	HM 9870	2	Qt/A	Midbloom	D								
8	2/3 STR			Preplant	A	1600	a	6487.5	ab	217	a	28.8	b
8	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
8	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
8	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
8	HM 9870	2	Qt/A	Midbloom	D								
9	UNTREATED CHECK					1443.8	a	6825	ab	207.3	ab	30.3	ab
10	No STR Application					1563.8	a	6887.5	ab	201	b	31	a
10	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
10	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
10	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
10	HM 9870	2	Qt/A	Midbloom	D								
LSD (P=.05)						623.43		961.47		12.57		1.61	
CV						25.8		10.07		4.08		3.68	

TREATMENT INFORMATION						YIELD		FIBER					
No.	Name	Rate	Unit	Stg	Code	LBS/ACRE		MIC		LENGTH		STRENGTH	
1	Soil Test Rec. (STR)			Preplant	A	1774	a	3.8	b	1.14	a	32.08	ab
1	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
1	HM 9870	2	Qt/A	Midbloom	D								
2	STR			Preplant	A	1876	a	4.1	ab	1.148	a	31.98	ab
2	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
2	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
2	HM 9870	2	Qt/A	Midbloom	D								
3	STR			Preplant	A	1829	a	3.93	ab	1.157	a	31.45	b
3	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
3	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
3	HM 9870	2	Qt/A	Midbloom	D								
4	STR			Preplant	A	1893	a	3.92	ab	1.16	a	32.22	ab
4	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
4	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
4	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
4	HM 9870	2	Qt/A	Midbloom	D								
5	2/3 STR			Preplant	A	1842	a	4.07	ab	1.135	a	32	ab
5	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
5	HM 9870	2	Qt/A	Midbloom	D								
6	2/3 STR			Preplant	A	1860	a	3.92	ab	1.147	a	31.7	ab
6	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
6	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
6	HM 9870	2	Qt/A	Midbloom	D								
7	2/3 STR			Preplant	A	1820	a	3.82	ab	1.155	a	31.35	b
7	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
7	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
7	HM 9870	2	Qt/A	Midbloom	D								
8	2/3 STR			Preplant	A	1771	a	3.83	ab	1.16	a	32.97	a
8	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
8	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
8	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
8	HM 9870	2	Qt/A	Midbloom	D								
9	UNTREATED CHECK					1780	a	4.13	a	1.16	a	32.55	ab
10	No STR Application					1766	a	4.07	ab	1.158	a	31.23	b
10	HM 9754 (Hydrahume)	1	Gal/A	Preplant	A								
10	HM 9826 A (12-0-0)	1	Qt/A	Pinhead	B								
10	HM 9827 A (Coron 10-0-10)	1	Gal/A	1st Blm	C								
10	HM 9870	2	Qt/A	Midbloom	D								
LSD (P=.05)						141.5		0.307		0.0279		1.436	
CV						5.35		5.34		1.67		3.1	

In-season Fertility and Yield Enhancement with Coron and Hydrahume

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	4/18/2003	7/2/2003	7/22/2003	8/12/2003
Time of Day:	9:00 AM	9:00 AM	8:00 AM	2:00 PM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PREPLANT	PINHEAD	1ST BLOOM	MIDBLOOM
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	61 F	81 F	81 F	100 F
% Relative Humidity:	71	60	46	23
Wind Velocity, Unit:	7 MPH	7.5 MPH	2 MPH	8 MPH
Soil Temp., Unit:	64 F	83 F	80 F	104 F
Soil Moisture:	MARGINAL	AVERAGE	ADEQUATE	ADEQUATE
% Cloud Cover:	10	80	40	10
Appl. Equipment:	LEESPIDER	LEESPIDER	LEESPIDER	LEESPIDER
Operating Pressure:	22 PSI	22 PSI	22 PSI	22 PSI
Nozzle Type:	TEEJET FF	TEEJET FF	TEEJET FF	TEEJET FF
Nozzle Size:	8002	8002	8002	8002
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN	20 IN
Nozzles/Row:	2	2	2	2
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	10 GPA
Propellant:	COMP. AIR	COMP. AIR	COMP. AIR	COMP. AIR

Enhanced Seedling Salt Tolerance with Hydrahume In-furrow ½ Gallon Rate

Salt can be a serious problem for emerging cotton seedlings, thus any advantage or boost to growing conditions at the time of emergence would be beneficial. This product was applied in-furrow as a liquid spray at ½ gallon per acre in ten gallons of water at a location known to have salt issues. Results are displayed in the tables below.

Trial ID: HELAG0303
Planting Date: May 23
Variety: ST 4892 B/R
Replications: 3
Location: White Farm
Rate: 12 lbs/A
Plot Size: 4r x 450'
Soil Type: Sandy Clay Loam

TREATMENT INFORMATION						POP. /AC	POP. /AC	%RETENT.	GIN	YIELD
No.	Name	Rate	Unit	Stg	Code	6/2/2003	6/9/2003	7/28/2003	PERCENT	LBS/ACRE
1	UNTREATED					35000 a	31333.3 a	93.3 a	42.3 a	1675 a
2	HYDRAHUME	0.5	GAL/A	ATPLANT	A	37333.3 a	31333.3 a	95.7 a	42.3 a	1704 a
LSD (P=.05)						18811.11	6572.94	3.79	0	492.2
CV						14.8	5.97	1.14	0	8.29

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

TREATMENT INFORMATION						FIBER		
No.	Name	Rate	Unit	Stg	Code	MIC	LENGTH	STRENGTH
1	UNTREATED					4.87 b	1.123 a	27.93 a
2	HYDRAHUME	0.5	GAL/A	ATPLANT	A	5.1 a	1.123 a	29.4 a
LSD (P=.05)						0.144	0.0248	4.13
CV						0.82	0.63	4.1

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

Enhanced Seedling Salt Tolerance with Hydrahume In-furrow ½ Gallon Rate

APPLICATION DESCRIPTION	A
Application Date:	5/23/2003
Time of Day:	9:00 AM
Application Method:	SPRAY
Application Timing:	ATPLANT
Applic. Placement:	IN-FURROW
Air Temp., Unit:	69 F
% Relative Humidity:	70
Wind Velocity, Unit:	8 MPH
Soil Temp., Unit:	68 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	30
Appl. Equipment:	JD7100MXE
Operating Pressure:	22 PSI
Nozzle Type:	TJFLATFAN
Nozzle Size:	8004
Nozzle Spacing, Unit:	40 IN
Nozzles/Row:	1
Ground Speed, Unit:	5.5 MPH
Incorporation Equip.:	PLANTER
Hours to Incorp.:	0
Incorp. Depth, Unit:	1.5 IN
Carrier:	WATER
Spray Volume, Unit:	10 GPA
Propellant:	COMP. AIR

Enhanced Seedling Salt Tolerance with Hydrahume In-furrow 1.0 Gallon Rate

Salt can be a serious problem for emerging cotton seedlings, thus any advantage or boost to growing conditions at the time of emergence would be beneficial. This product was applied in-furrow as a liquid spray at 1.0 gallon per acre in ten gallons of water at a location known to have salt issues. Results are displayed in the tables below.

Trial ID: HELAG0304
Planting Date: May 23
Variety: ST 4892 B/R
Replications: 3
Location: White Farm
Rate: 12 lbs/A
Plot Size: 4r x 450'
Soil Type: Sandy Clay Loam

TREATMENT INFORMATION						POP. /AC	POP. /AC	%RETENT.	GIN	YIELD
No.	Name	Rate	Unit	Stg	Code	6/2/2003	6/9/2003	7/28/2003	PERCENT	LBS/ACRE
1	UNTREATED					32667 a	34000 a	93.3 a	42.7 a	1988 a
2	HYDRAHUME	1.0	GAL/A	ATPLANT	A	37333 a	36000 a	94.3 a	42.7 a	1916 a
LSD (P=.05)						19296.98	7453.01	8.61	0	223.1
CV						15.69	6.06	2.61	0	3.25

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

TREATMENT INFORMATION						FIBER		
No.	Name	Rate	Unit	Stg	Code	MIC	LENGTH	STRENGTH
1	UNTREATED					5.00 a	1.12 a	28.77 a
2	HYDRAHUME	0.5	GAL/A	ATPLANT	A	5.07 a	1.11 a	29.07 a
LSD (P=.05)						0.717	0.0231	3.23
CV						4.06	1.32	3.18

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

Enhanced Seedling Salt Tolerance with Hydrahume In-furrow 1.0 Gallon Rate

APPLICATION DESCRIPTION	A
Application Date:	5/23/2003
Time of Day:	9:00 AM
Application Method:	SPRAY
Application Timing:	ATPLANT
Applic. Placement:	IN-FURROW
Air Temp., Unit:	69 F
% Relative Humidity:	70
Wind Velocity, Unit:	8 MPH
Soil Temp., Unit:	68 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	30
Appl. Equipment:	JD7100MXE
Operating Pressure:	22 PSI
Nozzle Type:	TJFLATFAN
Nozzle Size:	8004
Nozzle Spacing, Unit:	40 IN
Nozzles/Row:	1
Ground Speed, Unit:	5.5 MPH
Incorporation Equip.:	PLANTER
Hours to Incorp.:	0
Incorp. Depth, Unit:	1.5 IN
Carrier:	WATER
Spray Volume, Unit:	10 GPA
Propellant:	COMP. AIR

Bollgard II Demonstration

The Bollgard II gene became commercially available from Delta and Pine Land Company in two varieties for 2003 (424 BII/R and 468 BII/R). The intent of this demonstration was to compare the effectiveness of the original Bollgard system (within DP 458 B/R) to the conventional parent variety (DP 5415) and the newly released Bollgard II system (DP 468 BII/R). The treatments for comparison were to be as follows: Treatment 1 was DP 5415 with no treatment for lepidopteran pests, Treatment 2 was DP 5415 to be treated with Tracer as needed, Treatment 3 was DP 458 B/R to be treated with Tracer as needed, Treatment 4 was DP 468 BII/R to be treated with Tracer if thresholds were met, and treatment 5 was to be DP 468 BII/R automatically treated with a high rate of pyrethroid (Karate Z) at late bloom. Unfortunately (or fortunately) there was no significant worm pressure observed this season, therefore the only treatment applied was the late bloom application of Karate Z. The results are presented below.

Trial ID: MONAG0301 **Location:** WOSC
Planting Date: May 29 **Rate:** 12 lbs/A
Variety: DP 5415,458B/R,468BII/R **Plot Size:** 8r x 360'
Replications: 3 **Soil Type:** Sandy Clay Loam

	TREATMENT INFORMATION					#/METER		GIN %		LBS/ACRE	
No.	Name	Rate	Unit	Stg	Code	6/10/2003		1/6/2004		1/6/2004	
1	DP 5415 RR					6.17	b	29.3	a	1476	a
1	NO LEP TREATMENT										
2	DP 5415 RR					7.67	b	28	ab	1434	a
2	TRACER	2	OZ/A	ASNEED	-						
3	DP 458 B/R					9.77	a	28.3	ab	1426	a
3	TRACER	2	OZ/A	ASNEED	-						
4	DP 468 BGII/RR					10.1	a	26	b	1370	a
4	TRACER	2	OZ/A	THRESHH	-						
5	DP 468 BGII/RR					11.3	a	26.7	ab	1467	a
5	KARATE Z	0	LB A/A	LATEBLM	A						
LSD (P=.05)						2.093		2.85		201.8	
CV						12.35		5.46		7.47	

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

Bollgard II Demonstration

TREATMENT INFORMATION						FIBER					
No.	Name	Rate	Unit	Stg	Code	MIC		LENGTH		STRENGTH	
1	DP 5415 RR NO LEP					3.77	a	1.143	b	29.07	ab
1	TREATMENT										
2	DP 5415 RR					3.7	a	1.15	b	29.6	a
2	TRACER	2	OZ/A	ASNEED	-						
3	DP 458 B/R					3.7	a	1.15	b	28.63	ab
3	TRACER	2	OZ/A	ASNEED	-						
4	DP 468 BGII/RR					3.67	a	1.187	a	28.47	b
4	TRACER	2	OZ/A	THRESHH	-						
5	DP 468 BGII/RR					3.57	a	1.19	a	28.83	ab
5	KARATE Z	0	LB A/A	LATEBLM	A						
LSD (P=.05)						0.273		0.0265		1.098	
CV						3.94		1.21		2.02	

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

APPLICATION DESCRIPTION

	A
Application Date:	8/14/2003
Time of Day:	10:00 AM
Application Method:	SPRAY
Application Timing:	LATEBLOOM
Applic. Placement:	BROADCAST
Air Temp., Unit:	91 F
% Relative Humidity:	48
Wind Velocity, Unit:	6 MPH
Soil Temp., Unit:	94 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	0
Appl. Equipment:	LEESPIDER
Operating Pressure:	35 PSI
Nozzle Type:	8002
Nozzle Size:	TJ-FF
Nozzle Spacing, Unit:	20 IN
Nozzles/Row:	2
Ground Speed, Unit:	4 MPH
Carrier:	WATER
Spray Volume, Unit:	12 GPA
Propellant:	COMP. AIR

Finish Harvest Aid Demonstration in Irrigated Picker Cotton

Finish is primarily used to enhance boll opening. However, at higher rates considerable levels of defoliation often occur. This demonstration was established in order to demonstrate the difference between rates of Finish and combinations with both Def and Ginstar.

Trial ID: BAYHA0301
Planting Date: May 7
Variety: ST 4892 B/R
Replications: 3
Location: Winsett Farm
Rate: 12 lbs/A
Plot Size: 4r x 50'
Soil Type: Sandy Clay Loam

TREATMENT INFORMATION				%OPEN		%DEFOL		%DESICC		%OPEN		%DEFOL		%DESICC	
No.	Name	Rate	Unit	9/17/2003		9/17/2003		9/17/2003		9/23/2003		9/23/2003		9/23/2003	
1	FINISH	1	PT/A	90	c	90	a	5	b	100	a	98	a	2	b
	DEF	1	PT/A												
	INDUCE	0.5	% V/V												
2	FINISH	1.5	PT/A	91.7	bc	81.7	b	5	b	100	a	98	a	2	b
	DEF	0.5	PT/A												
	INDUCE	0.5	% V/V												
3	FINISH	1.5	PT/A	95	ab	83.3	ab	0	c	100	a	95	a	0	b
	INDUCE	0.5	% V/V												
4	FINISH	1	QT/A	98.3	a	89.3	a	0	c	100	a	95.3	a	0	b
	INDUCE	0.5	% V/V												
5	FINISH	1	PT/A	85	d	71.7	c	23.3	a	96.7	a	88.3	b	11.7	a
	GINSTAR	6	OZ/A												
	INDUCE	0.5	% V/V												
LSD (P=.05)				3.84		5.86		2.43		2.43		2.89		2.43	
CV				2.22		3.74		19.36		1.3		1.61		41.2	

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Finish Harvest Aid Demonstration in Irrigated Picker Cotton

APPLICATION DESCRIPTION

	A
Application Date:	9/10/2003
Time of Day:	12:00 PM
Application Method:	SPRAY
Application Timing:	80%OPEN
Applic. Placement:	BROADCAST
Air Temp., Unit:	80 F
% Relative Humidity:	40
Wind Velocity, Unit:	7 MPH
Soil Temp., Unit:	84 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	25
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

Bayer Harvest Aid Programs in Dryland Cotton

Due to the inherent economical differences between dryland and irrigated cotton production, different strategies are required for conditioning cotton prior to harvest. The purpose of this study was to compare various rates and combinations of Ginstar, Finish, Def, Prep, Aim and Cyclone Max.

Trial ID: BAYHA0302
Planting Date: May 29
Variety: FM 5024BXN
Replications: 3
Location: WOSC
Rate: 12 lbs/A
Plot Size: 4r x 50'
Soil Type: Sandy Clay Loam

	TREATMENT INFORMATION							%DEF		%DES		%DEF		%DES	
No.	Name	Conc	Type	Rate	Unit	Stg	Code	10/2/2003		10/2/2003		10/9/2003		10/9/2003	
1	UNTREATED							0	c	0	c	10	c	81.7	a
2	GINSTAR	1.5	EC	5	OZ/A	60%OP	A	50	a	0	c	68.3	a	20	c
	FINISH 6 PRO	6	EC	8	OZ/A	60%OP	A								
	INDUCE		L	0.25	% V/V	60%OP	A								
3	GINSTAR	1.5	EC	5	OZ/A	60%OP	A	20	bc	0	c	65	a	22.5	c
	INDUCE		L	0.25	% V/V	60%OP	A								
4	PREP	6	L	16	OZ/A	60%OP	A	20	bc	0	c	30	b	55	b
	DEF 6	6	EC	8	OZ/A	60%OP	A								
	INDUCE		L	0.25	% V/V	60%OP	A								
5	PREP	6	L	16	OZ/A	60%OP	A	16.7	bc	10	b	66.7	a	25	c
	GINSTAR	1.5	EC	7	OZ/A	60%OP	A								
	INDUCE		L	0.25	% V/V	60%OP	A								
6	AIM	2	EC	1	OZ/A	60%OP	A	26.7	b	16.7	a	33.3	b	51.7	b
	ETHEPHON	6	L	0.75	PT/A	60%OP	A								
	CROP OIL CON		L	0.5	% V/V	60%OP	A								
7	ET	0.2	EC	1.5	G A/A	60%OP	A	28.3	b	21.7	a	26.7	b	60	ab
	ETHEPHON	6	L	0.75	PT/A	60%OP	A								
	CROP OIL CON		L	0.5	% V/V	60%OP	A								
8	CYCLONE MAX	3	EC	4	OZ/A	60%OP	A	51.7	a	6.7	b	71.7	a	23.3	c
	ETHEPHON	6	L	1	PT/A	60%OP	A								
	INDUCE		L	0.25	% V/V	60%OP	A								
LSD (P=.05)								20.98		5.61		15.52		24.85	
CV								44.91		46.61		18.94		33.23	

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

Bayer Harvest Aid Programs in Dryland Cotton

	TREATMENT INFORMATION							%TERRG		%BASRG	
No.	Name	Conc	Type	Rate	Unit	Stg	Code	10/24/2003		10/24/2003	
1	UNTREATED							1.7	ab	3.3	d
2	GINSTAR	1.5	EC	5	OZ/A	60%OP	A	3.3	ab	18.3	abc
	FINISH 6 PRO	6	EC	8	OZ/A	60%OP	A				
	INDUCE		L	0.25	% V/V	60%OP	A				
3	GINSTAR	1.5	EC	5	OZ/A	60%OP	A	5	ab	11.7	cd
	INDUCE		L	0.25	% V/V	60%OP	A				
4	PREP	6	L	16	OZ/A	60%OP	A	3.3	ab	10	cd
	DEF 6	6	EC	8	OZ/A	60%OP	A				
	INDUCE		L	0.25	% V/V	60%OP	A				
5	PREP	6	L	16	OZ/A	60%OP	A	0	b	11.7	cd
	GINSTAR	1.5	EC	7	OZ/A	60%OP	A				
	INDUCE		L	0.25	% V/V	60%OP	A				
6	AIM	2	EC	1	OZ/A	60%OP	A	6.7	a	28.3	a
	ETHEPHON	6	L	0.75	PT/A	60%OP	A				
	CROP OIL CON		L	0.5	% V/V	60%OP	A				
7	ET	0.2	EC	1.5	G A/A	60%OP	A	1.7	ab	16.7	bc
	ETHEPHON	6	L	0.75	PT/A	60%OP	A				
	CROP OIL CON		L	0.5	% V/V	60%OP	A				
8	CYCLONE MAX	3	EC	4	OZ/A	60%OP	A	5	ab	23.3	ab
	ETHEPHON	6	L	1	PT/A	60%OP	A				
	INDUCE		L	0.25	% V/V	60%OP	A				
LSD (P=.05)								5.23		10.02	
CV								89.64		37.11	

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

Bayer Harvest Aid Programs in Dryland Cotton

APPLICATION DESCRIPTION

	A	B
Application Date:	9/25/2003	10/3/2003
Time of Day:	5:00 PM	10:30 AM
Application Method:	SPRAY	SPRAY
Application Timing:	85%OPEN	8 DAIT
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	82 F	77 F
% Relative Humidity:	51	61
Wind Velocity, Unit:	3 MPH	4 MPH
Soil Temp., Unit:	86 F	80 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	100	25
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

Treatment
Application Comment

APP. "B" = BLANKET CYCLONE MAX @ 21 OZ/A + INDUCE

Bayer Harvest Aid Programs in Irrigated Cotton

Due to the inherent economical differences between dryland and irrigated cotton production, different strategies are required for conditioning cotton prior to harvest. The purpose of this study was to compare various rates and combinations of Ginstar, Finish, Def, Prep, Resource and ET.

Trial ID: BAYHA0303
Planting Date: May 29
Variety: ST 5599 B/R
Replications: 3
Location: OSUREC-D
Rate: 12 lbs/A
Plot Size: 4r x 50'
Soil Type: Sandy Clay Loam

	TREATMENT INFORMATION					%OPEN		%DEFOL		%DESIC		%OPEN	
No.	Name	Rate	Unit	Stg	Code	10/21/2003		10/21/2003		10/21/2003		10/29/2003	
1	UNTREATED					72	c	0	c	0	c	86	d
2	FINISH 6 PRO	21	OZ/A	60%OP	A	81.3	abc	75	b	5	b	96.7	ab
2	INDUCE	0.25	% V/V	60%OP	A								
3	PREP	1	PT/A	60%OP	A	77.3	abc	78.3	b	6.7	b	94	abc
3	DEF 6	1	PT/A	60%OP	A								
3	INDUCE	0.25	% V/V	60%OP	A								
4	FINISH 6 PRO	16	OZ/A	60%OP	A	84	abc	83.3	ab	6.7	b	90.7	cd
4	DEF 6	8	OZ/A	60%OP	A								
4	INDUCE	0.25	% V/V	60%OP	A								
5	FINISH 6 PRO	21	OZ/A	60%OP	A	88.7	a	83.3	ab	8.3	b	98.7	a
5	DEF 6	16	OZ/A	60%OP	A								
5	INDUCE	0.25	% V/V	60%OP	A								
6	FINISH 6 PRO	16	OZ/A	60%OP	A	86	ab	90	a	5	b	98	a
6	DEF 6	16	OZ/A	60%OP	A								
6	INDUCE	0.25	% V/V	60%OP	A								
7	FINISH 6 PRO	12	OZ/A	60%OP	A	72	c	76.7	b	8.3	b	91.3	bcd
7	GINSTAR	5	OZ/A	60%OP	A								
7	DEF 6	8	OZ/A	60%OP	A								
7	INDUCE	0.25	% V/V	60%OP	A								
8	FINISH 6 PRO	1	PT/A	60%OP	A	76	bc	80	b	13.3	a	95.3	abc
8	ET	1.5	G A/A	60%OP	A								
8	CROP OIL CONC	0.5	% V/V	60%OP	A								
9	FINISH 6 PRO	1	PT/A	60%OP	A	79.3	abc	80	b	5	b	95.3	abc
9	RESOURCE	8	OZ/A	60%OP	A								
9	CROP OIL CONC	0.5	% V/V	60%OP	A								
LSD (P=.05)						12.29		9.27		4.96		5.59	
CV						8.91		7.46		44.23		3.44	

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

Bayer Harvest Aid Programs in Irrigated Cotton

TREATMENT INFORMATION						%DEFOL		%DESIC	
No.	Name	Rate	Unit	Stg	Code	10/27/2003		10/27/2003	
1	UNTREATED					36.7	c	0	b
2	FINISH 6 PRO	21	OZ/A	60%OP	A	90.7	ab	0	b
2	INDUCE	0.25	% V/V	60%OP	A				
3	PREP	1	PT/A	60%OP	A	88.7	b	0	b
3	DEF 6	1	PT/A	60%OP	A				
3	INDUCE	0.25	% V/V	60%OP	A				
4	FINISH 6 PRO	16	OZ/A	60%OP	A	91.7	ab	3.3	ab
4	DEF 6	8	OZ/A	60%OP	A				
4	INDUCE	0.25	% V/V	60%OP	A				
5	FINISH 6 PRO	21	OZ/A	60%OP	A	94.7	a	0	b
5	DEF 6	16	OZ/A	60%OP	A				
5	INDUCE	0.25	% V/V	60%OP	A				
6	FINISH 6 PRO	16	OZ/A	60%OP	A	94	ab	0	b
6	DEF 6	16	OZ/A	60%OP	A				
6	INDUCE	0.25	% V/V	60%OP	A				
7	FINISH 6 PRO	12	OZ/A	60%OP	A	91.7	ab	1	b
7	GINSTAR	5	OZ/A	60%OP	A				
7	DEF 6	8	OZ/A	60%OP	A				
7	INDUCE	0.25	% V/V	60%OP	A				
8	FINISH 6 PRO	1	PT/A	60%OP	A	93	ab	5	a
8	ET	1.5	G A/A	60%OP	A				
8	CROP OIL CONC	0.5	% V/V	60%OP	A				
9	FINISH 6 PRO	1	PT/A	60%OP	A	88.3	b	0	b
9	RESOURCE	8	OZ/A	60%OP	A				
9	CROP OIL CONC	0.5	% V/V	60%OP	A				
LSD (P=.05)						5.94		3.54	
CV						4.01		197.05	

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

Bayer Harvest Aid Programs in Irrigated Cotton

APPLICATION DESCRIPTION	A
Application Date:	10/13/2003
Time of Day:	8:30 AM
Application Method:	SPRAY
Application Timing:	60%OPEN
Applic. Placement:	BROADCAST
Air Temp., Unit:	69 F
% Relative Humidity:	80
Wind Velocity, Unit:	8 MPH
Soil Temp., Unit:	73 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	40
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

Early Finish Applications for Increased Boll Opening

Conditioning cotton prior to harvest is an important tool producers can use to facilitate a timely harvest. This demonstration was established to highlight the effectiveness of boll openers and the value of increasing rates.

Trial ID: BAYHA0305
Planting Date: May 7
Variety: DP 448 B
Replications: 1
Location: Williams Farm
Rate: 12 lbs/A
Plot Size: 4r x 50'
Soil Type: Tillman Hollister Clay Loam

TREATMENT INFORMATION						%OPEN	%DEF	%DES	%OPEN	%OPEN	%DEF	%DES
No.	Name	Rate	Unit	Stg	Code	10/7	10/7	10/7	10/10	10/14	10/14	10/14
1	FINISH 6 PRO	1	QT/A	6-7NACB	A	84	45	0	98	100	95	0
1	INDUCE	0.5	% V/V	6-7NACB	A							
2	PREP	1	QT/A	6-7NACB	A	76	5	0	89	96	80	0
2	INDUCE	0.5	% V/V	6-7NACB	A							
3	FINISH 6 PRO	1.5	PT/A	6-7NACB	A	80	25	0	95	96	90	0
3	INDUCE	0.5	% V/V	6-7NACB	A							
4	FINISH 6 PRO	1.5	PT/A	6-7NACB	A	80	60	5	94	99	92	6
4	DEF 6	8	OZ/A	6-7NACB	A							
4	INDUCE	0.5	% V/V	6-7NACB	A							
5	PREP	1.3	PT/A	6-7NACB	A	82	30	5	94	99	92	6
5	DEF 6	10	OZ/A	6-7NACB	A							
5	INDUCE	0.5	% V/V	6-7NACB	A							
6	FINISH 6 PRO	1.3	PT/A	6-7NACB	A	68	20	0	91	100	100	0
6	GINSTAR	6	OZ/A	6-7NACB	A							
6	INDUCE	0.5	% V/V	6-7NACB	A							

Early Finish Applications for Increased Boll Opening

APPLICATION DESCRIPTION	A
Application Date:	9/30/2003
Time of Day:	2:00 PM
Application Method:	SPRAY
Application Timing:	6-7NACB
Applic. Placement:	BROADCAST
Air Temp., Unit:	80 F
% Relative Humidity:	48
Wind Velocity, Unit:	7 MPH
Soil Temp., Unit:	84 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	10
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

Beltwide Uniform Harvest Aid Study

The Beltwide Uniform Harvest Aid Study is a regionally coordinated study that is initiated annually across the cotton belt. Oklahoma is one of 19 locations evaluating one set of treatments sponsored by various companies interested in the performance of their product in many environments. Treatments entered (sponsored) by private industry are compared to a set of five regional performance standards. Data is compiled from each location and summarized for each participant. Results from this years study are presented below.

Trial ID: BHA0301
Planting Date: May 24
Variety: PM 2344 B/R
Replications: 4
Location: OSUREC-D
Rate: 12 lbs/A
Plot Size: 4r x 50'
Soil Type: Tillman Hollister Clay Loam

TREATMENT INFORMATION						%OPEN		%DEF		%DES		%OPEN	
No.	Name	Rate	Unit	Stg	Code	10/2		10/2		10/2		10/8	
1	UNTREATED					69.5	b	0	e	0	a	68.5	b
1	CYCLONE MAX	21	OZ/A	7DAIT	B								
1	INDUCE	0.5	% V/V	7DAIT	B								
2	TRIBUFOS	0.56	LB A/A	50%OP	A	77	ab	76.3	bc	0	a	88.5	a
2	ETHEPHON	1	LB A/A	50%OP	A								
2	THIDIAZURON	0.05	LB A/A	50%OP	A								
2	CYCLONE MAX	21	OZ/A	7DAIT	B								
2	INDUCE	0.5	% V/V	7DAIT	B								
3	DIMETHIPIN	0.31	LB A/A	50%OP	A	73.5	ab	72.5	c	0	a	85	a
3	TRIBUFOS	0.56	LB A/A	50%OP	A								
3	ETHEPHON	1	LB A/A	50%OP	A								
3	CYCLONE MAX	21	OZ/A	7DAIT	B								
3	INDUCE	0.5	% V/V	7DAIT	B								
4	THIDIAZURON	0.05	LB A/A	50%OP	A	79	ab	73.3	c	0	a	87	a
4	ETHEPHON	1	LB A/A	50%OP	A								
4	CYCLONE MAX	21	OZ/A	7DAIT	B								
4	INDUCE	0.5	% V/V	7DAIT	B								
5	TRIBUFOS	0.56	LB A/A	50%OP	A	74	ab	71.5	c	0	a	86	a
5	ETHEPHON	1	LB A/A	50%OP	A								
5	CYCLONE MAX	21	OZ/A	7DAIT	B								
5	INDUCE	0.5	% V/V	7DAIT	B								
6	ET	1.5	G A/A	50%OP	A	74.5	ab	76.3	bc	0	a	83.5	a
6	ETHEPHON	1	LB A/A	50%OP	A								
6	CROP OIL CONC	0.5	% V/V	50%OP	A								
6	CYCLONE MAX	21	OZ/A	7DAIT	B								
6	INDUCE	0.5	% V/V	7DAIT	B								

Beltwide Uniform Harvest Aid Study

TREATMENT INFORMATION						%OPEN		%DEF		%DES		%OPEN	
No.	Name	Rate	Unit	Stg	Code	10/2		10/2		10/2		10/8	
7	ET	1.1	G A/A	50%OP	A	79.5	ab	71.3	c	0	a	81.5	a
7	ETHEPHON	1	LB A/A	50%OP	A								
7	CROP OIL CONC	0.5	% V/V	50%OP	A								
7	ET	1.1	G A/A	7DAIT	B								
7	CROP OIL CONC	0.5	% V/V	7DAIT	B								
8	AIM	0.016	LB A/A	50%OP	A	77	ab	63.8	d	0	a	87	a
8	ETHEPHON	0.75	LB A/A	50%OP	A								
8	CROP OIL CONC	1	% V/V	50%OP	A								
8	AIM	0.016	LB A/A	7DAIT	B								
8	CROP OIL CONC	1	% V/V	7DAIT	B								
9	RESOURCE	8	OZ/A	50%OPEN	A	73	ab	83.3	a	0	a	84	a
9	FINISH 6 PRO	1.3	PT/A	50%OPEN	A								
9	CROP OIL CONC	1	PT/A	50%OPEN	A								
9	RESOURCE	6	OZ/A	7DAIT	B								
9	CROP OIL CONC	1	PT/A	7DAIT	B								
10	RESOURCE	6	OZ/A	50%OPEN	A	83.5	a	79.8	ab	0	a	87.5	a
10	FINISH 6 PRO	1.3	PT/A	50%OPEN	A								
10	CROP OIL CONC	1	PT/A	50%OPEN	A								
10	CYCLONE MAX	21	OZ/A	7DAIT	B								
10	INDUCE	0.5	% V/V	7DAIT	B								
LSD (P=.05)						12.31		6.05		0		8.7	
CV						11.16		6.25		0		7.15	

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

Beltwide Uniform Harvest Aid Study

TREATMENT INFORMATION						%DEF		%DES		TERRG		BASRG	
No.	Name	Rate	Unit	Stg	Code	10/8		10/8		10/16		10/16	
1	UNTREATED					10	d	90	a	1.3	c	15	d
1	CYCLONE MAX	21	OZ/A	7DAIT	B								
1	INDUCE	0.5	% V/V	7DAIT	B								
2	TRIBUFOS	0.56	LB A/A	50%OP	A	85.8	bc	14.3	bc	1.3	c	28.8	bcd
2	ETHEPHON	1	LB A/A	50%OP	A								
2	THIDIAZURON	0.05	LB A/A	50%OP	A								
2	CYCLONE MAX	21	OZ/A	7DAIT	B								
2	INDUCE	0.5	% V/V	7DAIT	B								
3	DIMETHIPIN	0.31	LB A/A	50%OP	A	90	a	10	d	8.8	a	32.5	abc
3	TRIBUFOS	0.56	LB A/A	50%OP	A								
3	ETHEPHON	1	LB A/A	50%OP	A								
3	CYCLONE MAX	21	OZ/A	7DAIT	B								
3	INDUCE	0.5	% V/V	7DAIT	B								
4	THIDIAZURON	0.05	LB A/A	50%OP	A	90	a	10	d	2.5	bc	26.3	cd
4	ETHEPHON	1	LB A/A	50%OP	A								
4	CYCLONE MAX	21	OZ/A	7DAIT	B								
4	INDUCE	0.5	% V/V	7DAIT	B								
5	TRIBUFOS	0.56	LB A/A	50%OP	A	86.3	bc	13.8	bc	8.8	a	33.8	abc
5	ETHEPHON	1	LB A/A	50%OP	A								
5	CYCLONE MAX	21	OZ/A	7DAIT	B								
5	INDUCE	0.5	% V/V	7DAIT	B								
6	ET	1.5	G A/A	50%OP	A	88.8	ab	11.3	cd	8.8	a	43	ab
6	ETHEPHON	1	LB A/A	50%OP	A								
6	CROP OIL CONC	0.5	% V/V	50%OP	A								
6	CYCLONE MAX	21	OZ/A	7DAIT	B								
6	INDUCE	0.5	% V/V	7DAIT	B								
7	ET	1.1	G A/A	50%OP	A	86.3	bc	13.8	bc	5	abc	45	a
7	ETHEPHON	1	LB A/A	50%OP	A								
7	CROP OIL CONC	0.5	% V/V	50%OP	A								
7	ET	1.1	G A/A	7DAIT	B								
7	CROP OIL CONC	0.5	% V/V	7DAIT	B								
8	AIM	0.016	LB A/A	50%OP	A	83.3	c	16.8	b	6.3	ab	34.5	abc
8	ETHEPHON	0.75	LB A/A	50%OP	A								
8	CROP OIL CONC	1	% V/V	50%OP	A								
8	AIM	0.016	LB A/A	7DAIT	B								
8	CROP OIL CONC	1	% V/V	7DAIT	B								

Beltwide Uniform Harvest Aid Study

TREATMENT INFORMATION						%DEF		%DES		TERRG		BASRG	
No.	Name	Rate	Unit	Stg	Code	10/8		10/8		10/16		10/16	
9	RESOURCE	8	OZ/A	50%OPEN	A	91.3	a	8.8	d	1.3	c	36.3	abc
9	FINISH 6 PRO	1.3	PT/A	50%OPEN	A								
9	CROP OIL CONC	1	PT/A	50%OPEN	A								
9	RESOURCE	6	OZ/A	7DAIT	B								
9	CROP OIL CONC	1	PT/A	7DAIT	B								
10	RESOURCE	6	OZ/A	50%OPEN	A	90	a	10	d	2.5	bc	32.5	abc
10	FINISH 6 PRO	1.3	PT/A	50%OPEN	A								
10	CROP OIL CONC	1	PT/A	50%OPEN	A								
10	CYCLONE MAX	21	OZ/A	7DAIT	B								
10	INDUCE	0.5	% V/V	7DAIT	B								
LSD (P=.05)						3.04		3.04		4.83		15.24	
CV						2.61		10.56		72		32.07	

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

APPLICATION DESCRIPTION

	A	B
Application Date:	9/25/2003	10/2/2003
Time of Day:	2:30 PM	11:30 PM
Application Method:	SPRAY	SPRAY
Application Timing:	50%OPEN	7DAIT
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	79 F	64 F
% Relative Humidity:	48	52
Wind Velocity, Unit:	3.5 MPH	4 MPH
Soil Temp., Unit:	90 F	72 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	90	95
Crop Stage:	50%OPEN	7DAIT
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

Treatment Application Comment

ACCUMULATED HEAT UNITS FROM PLANTING TO HARVEST: 2496
ACCUMULATED HEAT UNITS FROM TREATMENT TO 7 DAYS AFTER: 72
ACCUMULATED HEAT UNITS FROM TREATMENT TO 14 DAYS AFTER: 119

Comparison of Three Formulations of ET Herbicide/Defoliant

Nichino America has recently obtained registration for the commercial release of ET herbicide/defoliant. The objective of this trial was to compare the effectiveness of three differing formulations of ET for defoliation and morningglory desiccation. Results are displayed below.

Trial ID: NICHA0301
Planting Date: May 24
Variety: PM 2344 B/R
Replications: 3
Location: OSUREC-D
Rate: 12 lbs/A
Plot Size: 4r x 50'
Soil Type: Tillman Hollister Clay Loam

	TREATMENT INFORMATION							%OPEN		%DEF		%DES		%MGDES	
No.	Name	Rate	Unit	Rate	Unit	Stg	Code	10/8		10/8		10/8		10/8	
1	ET-751 2.5%	1.03	G A/A	1.4	OZ/A	60-70%	A	70.7	a	33	a	48.3	b	85	b
1	AGRI-DEX	1	% V/V			60-70%	A								
1	ET-751 2.5%	1.03	G A/A	1.4	OZ/A	7DAIT	B								
1	AGRI-DEX	1	% V/V			7DAIT	B								
2	ET-751 2.5%	1.47	G A/A	2	OZ/A	60-70%	A	66	a	20	b	61.7	a	94.3	a
2	AGRI-DEX	1	% V/V			60-70%	A								
2	ET-751 2.5%	1.47	G A/A	2	OZ/A	7DAIT	B								
2	AGRI-DEX	1	% V/V			7DAIT	B								
3	ET-751 2.5%	2.03	G A/A	2.75	OZ/A	60-70%	A	65.3	a	17	b	65	a	95	a
3	AGRI-DEX	1	% V/V			60-70%	A								
3	ET-751 2.5%	2.03	G A/A	2.75	OZ/A	7DAIT	B								
3	AGRI-DEX	1	% V/V			7DAIT	B								
4	ET-751 10% OD	1.03	G A/A	0.35	OZ/A	60-70%	A	69.3	a	20	b	48.3	b	81.7	b
4	AGRI-DEX	1	% V/V			60-70%	A								
4	ET-751 10% OD	1.03	G A/A	0.35	OZ/A	7DAIT	B								
4	AGRI-DEX	1	% V/V			7DAIT	B								
5	ET-751 (ND) 2.5%	1.03	G A/A	1.4	OZ/A	60-70%	A	62	a	20	b	63.3	a	87.5	ab
5	AGRI-DEX	1	% V/V			60-70%	A								
5	ET-751 (ND) 2.5%	1.03	G A/A	1.4	OZ/A	7DAIT	B								
5	AGRI-DEX	1	% V/V			7DAIT	B								
6	ET-751 (ULN) 2.5%	1.03	G A/A	1.4	OZ/A	60-70%	A	68	a	25	ab	41.7	b	83.3	b
6	AGRI-DEX	1	% V/V			60-70%	A								
6	ET-751 (ULN) 2.5%	1.03	G A/A	1.4	OZ/A	7DAIT	B								
6	AGRI-DEX	1	% V/V			7DAIT	B								
7	AIM	1	OZ/A	1	OZ/A	60-70%	A	64	a	17	b	43.3	b	95	a
7	CROP OIL CONC	1	% V/V			60-70%	A								
7	AIM	1	OZ/A	1	OZ/A	7DAIT	B								
7	CROP OIL CONC	1	% V/V			7DAIT	B								
8	Control							60.7	a	0	c	0	c	0	c
LSD (P=.05)								16.13		8.89		9.63		8.17	

CV								14.01		26.76		11.83		5.78	

Comparison of Three Formulations of ET Herbicide/Defoliant

		TREATMENT INFORMATION						%OPEN		%DEF		%DES		%MGDES	
No.	Name	Rate	Unit	Rate	Unit	Stg	Code	10/16		10/16		10/16		10/16	
1	ET-751 2.5%	1.03	G A/A	1.4	OZ/A	60-70%	A	73.3	ab	85	b	10	a	100	a
1	AGRI-DEX	1	% V/V			60-70%	A								
1	ET-751 2.5%	1.03	G A/A	1.4	OZ/A	7DAIT	B								
1	AGRI-DEX	1	% V/V			7DAIT	B								
2	ET-751 2.5%	1.47	G A/A	2	OZ/A	60-70%	A	79.3	ab	90	a	5	b	100	a
2	AGRI-DEX	1	% V/V			60-70%	A								
2	ET-751 2.5%	1.47	G A/A	2	OZ/A	7DAIT	B								
2	AGRI-DEX	1	% V/V			7DAIT	B								
3	ET-751 2.5%	2.03	G A/A	2.75	OZ/A	60-70%	A	87.3	a	85	b	10	a	100	a
3	AGRI-DEX	1	% V/V			60-70%	A								
3	ET-751 2.5%	2.03	G A/A	2.75	OZ/A	7DAIT	B								
3	AGRI-DEX	1	% V/V			7DAIT	B								
4	ET-751 10% OD	1.03	G A/A	0.35	OZ/A	60-70%	A	68.7	b	75	d	10	a	90	b
4	AGRI-DEX	1	% V/V			60-70%	A								
4	ET-751 10% OD	1.03	G A/A	0.35	OZ/A	7DAIT	B								
4	AGRI-DEX	1	% V/V			7DAIT	B								
5	ET-751 (ND) 2.5%	1.03	G A/A	1.4	OZ/A	60-70%	A	86	a	80	c	10	a	100	a
5	AGRI-DEX	1	% V/V			60-70%	A								
5	ET-751 (ND) 2.5%	1.03	G A/A	1.4	OZ/A	7DAIT	B								
5	AGRI-DEX	1	% V/V			7DAIT	B								
6	ET-751 (ULN) 2.5%	1.03	G A/A	1.4	OZ/A	60-70%	A	79.3	ab	80	c	8.3	a	100	a
6	AGRI-DEX	1	% V/V			60-70%	A								
6	ET-751 (ULN) 2.5%	1.03	G A/A	1.4	OZ/A	7DAIT	B								
6	AGRI-DEX	1	% V/V			7DAIT	B								
7	AIM	1	OZ/A	1	OZ/A	60-70%	A	77.3	ab	78.3	c	10	a	100	a
7	CROP OIL CONC	1	% V/V			60-70%	A								
7	AIM	1	OZ/A	1	OZ/A	7DAIT	B								
7	CROP OIL CONC	1	% V/V			7DAIT	B								
8	Control							67.3	b	0	e	0	c	0	c
LSD (P=.05)								16.33		1.79		1.79		5.36	
CV								12.06		1.42		12.89		3.55	

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

Comparison of Three Formulations of ET Herbicide/Defoliant

		TREATMENT INFORMATION						%TERRG		%BASRG	
No.	Name	Rate	Unit	Rate	Unit	Stg	Code	10/24		10/24	
1	ET-751 2.5%	1.03	G A/A	1.4	OZ/A	60-70%	A	6.7	ab	15	bc
1	AGRI-DEX	1	% V/V			60-70%	A				
1	ET-751 2.5%	1.03	G A/A	1.4	OZ/A	7DAIT	B				
1	AGRI-DEX	1	% V/V			7DAIT	B				
2	ET-751 2.5%	1.47	G A/A	2	OZ/A	60-70%	A	3.3	bc	13.3	bc
2	AGRI-DEX	1	% V/V			60-70%	A				
2	ET-751 2.5%	1.47	G A/A	2	OZ/A	7DAIT	B				
2	AGRI-DEX	1	% V/V			7DAIT	B				
3	ET-751 2.5%	2.03	G A/A	2.75	OZ/A	60-70%	A	1.7	bc	15	bc
3	AGRI-DEX	1	% V/V			60-70%	A				
3	ET-751 2.5%	2.03	G A/A	2.75	OZ/A	7DAIT	B				
3	AGRI-DEX	1	% V/V			7DAIT	B				
4	ET-751 10% OD	1.03	G A/A	0.35	OZ/A	60-70%	A	11.7	a	28.3	a
4	AGRI-DEX	1	% V/V			60-70%	A				
4	ET-751 10% OD	1.03	G A/A	0.35	OZ/A	7DAIT	B				
4	AGRI-DEX	1	% V/V			7DAIT	B				
5	ET-751 (ND) 2.5%	1.03	G A/A	1.4	OZ/A	60-70%	A	1.7	bc	10	c
5	AGRI-DEX	1	% V/V			60-70%	A				
5	ET-751 (ND) 2.5%	1.03	G A/A	1.4	OZ/A	7DAIT	B				
5	AGRI-DEX	1	% V/V			7DAIT	B				
6	ET-751 (ULN) 2.5%	1.03	G A/A	1.4	OZ/A	60-70%	A	5	bc	11.7	bc
6	AGRI-DEX	1	% V/V			60-70%	A				
6	ET-751 (ULN) 2.5%	1.03	G A/A	1.4	OZ/A	7DAIT	B				
6	AGRI-DEX	1	% V/V			7DAIT	B				
7	AIM	1	OZ/A	1	OZ/A	60-70%	A	3.3	bc	20	ab
7	CROP OIL CONC	1	% V/V			60-70%	A				
7	AIM	1	OZ/A	1	OZ/A	7DAIT	B				
7	CROP OIL CONC	1	% V/V			7DAIT	B				
8	Control							0	c	0	d
LSD (P=.05)								6.37		9.91	
CV								87.34		39.93	

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

Comparison of Three Formulations of ET Herbicide/Defoliant

APPLICATION DESCRIPTION

	A	B
Application Date:	10/2/2003	10/9/2003
Time of Day:	11:00 AM	2:35 PM
Application Method:	SPRAY	SPRAY
Application Timing:	60-70%OPE	7 DAIT
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	64 F	80 F
% Relative Humidity:	52	58
Wind Velocity, Unit:	4 MPH	5.8 MPH
Soil Temp., Unit:	72 F	78 F
Soil Moisture:	ADEQUATE	ADEQUATE
% Cloud Cover:	95	50
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

Dryland Harvest Aid Strategies for Oklahoma Cotton

Dryland harvest aid strategies generally focus on the most economical products available. The recent registrations of both ET and Aim defoliants provide producers with more options for conditioning dryland cotton. The purpose of this study was to compare these products to the standard program (paraquat). Results are below.

Trial ID: OSUHA0303
Planting Date: May 29
Variety: FM 5024 BXN
Replications: 3
Location: WOSC
Rate: 12 lbs/A
Plot Size: 4r x 50'
Soil Type: Tillman Hollister Clay Loam

	TREATMENT INFORMATION					%DEF		%DES		%DEF	
No.	Name	Rate	Unit	Stg	Code	10/2		10/2		10/9	
1	UNTREATED					0	d	0	d	10	e
2	AIM	1	OZ/A	80%OP	A	33.3	c	13.3	bc	58.3	cd
2	CROP OIL CONC	1	% V/V	80%OP	A						
3	ET	2	OZ/A	80%OP	A	28.3	c	16.7	b	71.7	bc
3	CROP OIL CONC	1	% V/V	80%OP	A						
4	GRAMAXONE MAX	11	OZ/A	80%OP	A	61.7	b	11.7	bc	87.7	a
4	INDUCE	0.5	% V/V	80%OP	A						
5	GRAMAXONE MAX	16	OZ/A	80%OP	A	70	a	15	bc	80	ab
5	INDUCE	0.5	% V/V	80%OP	A						
6	GRAMAXONE MAX	21	OZ/A	80%OP	A	30	c	60	a	55	d
6	INDUCE	0.5	% V/V	80%OP	A						
7	GRAMAXONE MAX	11	OZ/A	80%OP	A	56.7	b	10	c	86.7	a
7	AIM	1	OZ/A	80%OP	A						
7	INDUCE	0.5	% V/V	80%OP	A						
8	GRAMAXONE MAX	16	OZ/A	80%OP	A	68.3	a	16.7	b	68.3	bcd
8	AIM	0.5	OZ/A	80%OP	A						
8	INDUCE	0.5	% V/V	80%OP	A						
LSD (P=.05)						6.3		6.65		14.88	
CV						8.26		21.21		13.13	

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

Dryland Harvest Aid Strategies for Oklahoma Cotton

TREATMENT INFORMATION						%DES		%TRG		%BRG	
No.	Name	Rate	Unit	Stg	Code	10/9		10/16		10/16	
1	UNTREATED					90	a	1.7	bc	21.7	ab
2	AIM	1	OZ/A	80%OP	A	40	c	15	a	21.7	ab
2	CROP OIL CONC	1	% V/V	80%OP	A						
3	ET	2	OZ/A	80%OP	A	28.3	de	18.3	a	13.3	c
3	CROP OIL CONC	1	% V/V	80%OP	A						
4	GRAMAXONE MAX	11	OZ/A	80%OP	A	12.3	f	5	b	25	a
4	INDUCE	0.5	% V/V	80%OP	A						
5	GRAMAXONE MAX	16	OZ/A	80%OP	A	20	ef	3.3	bc	15	bc
5	INDUCE	0.5	% V/V	80%OP	A						
6	GRAMAXONE MAX	21	OZ/A	80%OP	A	61.7	b	0	c	20	abc
6	INDUCE	0.5	% V/V	80%OP	A						
7	GRAMAXONE MAX	11	OZ/A	80%OP	A	13.3	f	3.3	bc	18.3	abc
7	AIM	1	OZ/A	80%OP	A						
7	INDUCE	0.5	% V/V	80%OP	A						
8	GRAMAXONE MAX	16	OZ/A	80%OP	A	31.7	cd	0	c	16.7	bc
8	AIM	0.5	OZ/A	80%OP	A						
8	INDUCE	0.5	% V/V	80%OP	A						
LSD (P=.05)						10.12		4.73		7.12	
CV						15.55		46.29		21.44	

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

Dryland Harvest Aid Strategies for Oklahoma Cotton

APPLICATION DESCRIPTION	A
Application Date:	9/26/2003
Time of Day:	10:40 AM
Application Method:	SPRAY
Application Timing:	80-85%OPEN
Applic. Placement:	BROADCAST
Air Temp., Unit:	80 F
% Relative Humidity:	52
Wind Velocity, Unit:	4.5 MPH
Soil Temp., Unit:	80 F
Soil Moisture:	DRY
% Cloud Cover:	0
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

Tankmixing Alternatives with Finish

Boll opening is an important aspect of effective harvest aid programs. Likewise, for stripper harvesting, defoliation also plays an important role. The recent availability of Aim and ET has increased producer options for defoliation choices. The purpose of this demonstration was to compare defoliation characteristics of these tankmixed applications. The results are presented below.

Trial ID: OSUHA0304
Planting Date: May 24
Variety: DP 5599 B/R
Replications: 1

Location: OSUREC-D
Rate: 12 lbs/A
Plot Size: 8r x 100'
Soil Type: Tillman Hollister Clay Loam

	TREATMENT INFORMATION					%DEF	%DES
No.	Name	Rate	Unit	Stg	Code	10/24/2003	10/24/2003
1	FINISH	1	PT/A	60%OPEN	A	50	40
1	AIM	1	OZ/A	60%OPEN	A		
1	CROP OIL CONC	1	% V/V	60%OPEN	A		
2	FINISH	1	PT/A	60%OPEN	A	30	65
2	GRAMAXONE MAX	6	OZ/A	60%OPEN	A		
2	INDUCE	0.5	% V/V	60%OPEN	A		
3	FINISH	1	PT/A	60%OPEN	A	20	75
3	GRAMAXONE MAX	11	OZ/A	60%OPEN	A		
3	INDUCE	0.5	% V/V	60%OPEN	A		
4	FINISH	1	PT/A	60%OPEN	A	60	30
4	ET	1.5	OZ/A	60%OPEN	A		
4	CROP OIL	1	% V/V	60%OPEN	A		
5	FINISH	1	PT/A	60%OPEN	A	70	25
5	ET	2	OZ/A	60%OPEN	A		
5	INDUCE	1	% V/V	60%OPEN	A		

Tankmixing Alternatives with Finish

APPLICATION DESCRIPTION	A
Application Date:	10/16/2003
Time of Day:	11:30 PM
Application Method:	SPRAY
Application Timing:	60% OPEN
Applic. Placement:	BROADCAST
Air Temp., Unit:	80 F
% Relative Humidity:	48
Wind Velocity, Unit:	7 MPH
Soil Moisture:	ADEQUATE
% 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